

# ***2024 Annual Drinking Water Quality Report***

## ***Fluvanna County Zion Crossroads PWSID# 2065265***

### **INTRODUCTION**

This Annual Drinking Water Quality Report for calendar year 2024 is designed to inform you about your drinking water quality. Our goal is to provide you with a safe and dependable supply of drinking water, and we want you to understand the efforts we make to protect your water supply. The quality of your drinking water must meet state and federal requirements administered by the Virginia Department of Health (VDH).

If you have questions about this report, or want additional information about any aspect of your drinking water or want to know how to participate in decisions that may affect the quality of your drinking water, please contact: Mr. Robert Popowicz, Director of Public Utilities, (434) 591-1925.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

### **GENERAL INFORMATION**

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: (i) microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; (ii) 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; (iii) pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses; (iv) organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems; (v) 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. 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 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 Safe Drinking Water Hotline (800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer who are 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 guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

### **SOURCE(S) and TREATMENT OF YOUR DRINKING WATER**

Your drinking water is surface water obtained from the Fluvanna Correctional Center for Women water treatment plant.

The Virginia Department of Health conducted a source water assessment of our system during 2019. The assessment report consists of maps showing the source water assessment area, an inventory of known land use activities of concern, and documentation of any known contamination within a 1-mile radius of the source(s). The report is available by contacting the system representative at the phone number or address given elsewhere in this drinking water quality report.

## **DEFINITIONS**

Contaminants in your drinking water are routinely monitored according to Federal and State regulations. The table on the next page shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2024. In the table and elsewhere in this report you will find many terms and abbreviations you might not be familiar with. The following definitions are provided to help you better understand these terms:

*Maximum Contaminant Level, or MCL* - 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.

*Maximum Contaminant Level Goal, or MCLG* - 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.

*Maximum Residual Disinfectant Level Goal or MRDLG*: the level of 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.

*Maximum Residual Disinfectant Level or MRDL*: 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.

*Non-detects (ND)* - lab analysis indicates that the contaminant is not present

*Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or a single penny in \$10,000.

*Parts per billion (ppb) or Micrograms per liter* - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

*Parts per trillion (ppt) or Nanograms per liter (nanograms/l)* – one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

*Picocuries per liter (pCi/L)* - picocuries per liter is a measure of the radioactivity in water.

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

*Treatment Technique (TT)* - a required process intended to reduce the level of a contaminant in drinking water.

*Level 1 Assessment* - a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

*Level 2 Assessment* - a very detailed study of the waterworks to identify potential problems and determine (if possible) why an *E. coli* PMCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

*Nephelometric Turbidity Unit (NTU)* - nephelometric turbidity unit is a measure of the clarity, or cloudiness, of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity is monitored because it is a good indicator of the effectiveness of our filtration system.

*Variances and exemptions* – state or EPA permission not to meet an MCL or a treatment technique under certain conditions.

## QUALITY OF YOUR DRINKING WATER

Your drinking water is routinely monitored according to Federal and State Regulations for a variety of contaminants. The tables below show the results of any detected regulated contaminants during the period of January 1st to December 31st, 2024. If the result of an analysis was less than the detection threshold, the analysis may not be reported in the tables below.

The state allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data presented in the tables, though accurate, are more than one year old.

The U.S. Environmental Protection Agency sets MCL's at very stringent levels. In developing the standards, EPA assumes that the average adult drinks 2 liters of water each day throughout a 70-year life span. EPA generally sets MCLs at levels that will result in no adverse health effects for some contaminants or a one-in-ten-thousand to one-in-a-million chance of having the described health effect for other contaminants.

## WATER QUALITY RESULTS

### Regulated Contaminants

Contaminant (units)	MCLG	MCL	Level Detected	Violation (Y/N)	Sampling Year	Typical Source of Contamination
Fluoride	4.0	4.0	ND	NA	2024	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (mg/l)	10	10	ND	N	2024	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Barium (mg/l)	2	2	0.012	N	2024	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits
Sodium (mg/l)	NA	NA	18.1	N	2024	Erosion of natural deposits; de-icing salt runoff; water softeners

*Gross Alpha Particle Activity (Excluding Radon and Uranium) (pCi/l)	0	15	0.5	N	2023	Erosion of natural deposits
**Beta Particle and Photon Radioactivity (pCi/l)**	0	50	1.7	N	2023	Decay of natural and man-made deposits
*Combined Radium (pCi/l)	0	5	0.7	N	2020	Erosion of natural deposits

\*Analysis frequency for radiological contaminants is every six years.

\*\*The PMCL for beta particles is 4 mrem/year. EPA considers 50 pCi/l to be the level of concern for beta particles.

Contaminant (units)	MCLG	MCL OR TT	90 <sup>th</sup> Percentile and Range of results	AL Exceeded	Samples >AL	Sampling Year	Typical Source of Contamination
Lead (ppb)	0	AL = 15	0.4 Range:	No	0	2023	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	1.3	AL = 1.3	0.34 Range:	No	0	2023	Corrosion of household plumbing systems; Erosion of natural deposits

#### Disinfectant Residual

Contaminant (units)	MRDLG	MRDL	Level Found Average & Range	Violation (Y/N)	Sampling Year	Typical Source of Contamination
Chlorine (mg/l)	4	4	0.7 Range: 0.23 – 1.9	N	2024	Water additive used to control microbes

Many other contaminants were analyzed for but were either not detected or are non-regulated contaminants and are excluded from the tables above. If you want additional information on the other contaminants analyzed please contact: Mr. Robert Popowicz, Director of Public Utilities, (434) 591-1925.

#### SERVICE LINE INVENTORY

A service line inventory has been prepared as required by the US EPA Lead & Copper Rule Revisions. To access the inventory, please contact us at (434) 591-1925.

#### VIOLATION INFORMATION

**Failure to Monitor for Disinfection Byproducts:** In the 2<sup>nd</sup> quarter, 2024 monitoring period, we failed to monitor for disinfection byproducts. We have provided the required public notification and will monitor as required by the *Waterworks Regulations*. We provide more detailed information in the notice below.

**Failure to Monitor for Disinfection Byproducts:** In the 3<sup>rd</sup> quarter, 2024 monitoring period, we failed to monitor for disinfection byproducts. We have provided the required public notification and will monitor as required by the *Waterworks Regulations*. We provide more detailed information in the notice below.

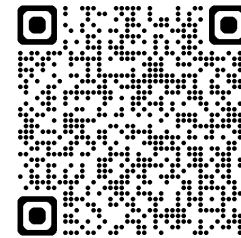
**Failure to Monitor for Disinfection Byproducts:** In the 4<sup>th</sup> quarter, 2024 monitoring period, we failed to monitor for disinfection byproducts. We have provided the required public notification and will monitor as required by the *Waterworks Regulations*. We provide more detailed information in the notice below.

**Failure to Conduct the Lead and Copper Initial tap Sampling under Lead and Copper rule (LCR):** In the July – December 2024 monitoring period we failed to complete initial tap sampling. We provide more detailed information in the notice below.

## ADDITIONAL HEALTH INFORMATION

### LEAD INFORMATION

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. Skyline Apartments 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 Skyline Apartments, Eric Lamb (434) 985-7504. 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>.



This Drinking Water Quality Report was prepared by the Fluvanna County Public Utilities with the assistance and approval of the Virginia Department of Health. Please call if you have questions.

**NOTICE TO CONSUMERS**  
**of the FLUVANNA COUNTY ZION CROSSROADS WATERWORKS**  
**IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER**

**Major Failure to Monitor for Disinfection Byproducts**

On **August 19, 2024**, we became aware that our system recently failed to collect the required number of routine drinking water samples. Although this incident was not an emergency, as our customers, you have a right to know what happened and what we did (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 our drinking water meets health standards. During the 2<sup>nd</sup> Quarter 2024 monitoring period, we did not collect any routine samples for disinfection byproducts 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 taking the samples immediately and having them analyzed for disinfection byproducts at a certified lab.

For more information, please contact Robert Popowicz at (434) 591-1925 or [rpopowicz@fluvannacounty.org](mailto:rpopowicz@fluvannacounty.org).

*\*Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.\**

This notice is being sent to you by Fluvanna County Zion Crossroads.

Public Water Supply ID#: 2065265

**NOTICE TO CONSUMERS  
of the FLUVANNA COUNTY ZION CROSSROADS WATERWORKS  
IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER**

**Major Failure to Monitor for Disinfection Byproducts**

On **December 20, 2024**, we became aware that our system recently failed to collect the required number of routine drinking water samples. Although this incident was not an emergency, as our customers, you have a right to know what happened 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 our drinking water meets health standards. During the 3rd Quarter 2024 monitoring period, we did not collect any routine samples for disinfection byproducts 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 taking the samples immediately and having them analyzed for disinfection byproducts at a certified lab.

For more information, please contact Robert Popowicz at (434) 591-1925 or [rpopowicz@fluvannacounty.org](mailto:rpopowicz@fluvannacounty.org).

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**NOTICE TO CONSUMERS**  
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**IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER**

**Major Failure to Monitor for Disinfection Byproducts**

On **January 29, 2025**, we became aware that our system recently failed to collect the required number of routine drinking water samples. Although this incident was not an emergency, as our customers, you have a right to know what happened 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 our drinking water meets health standards. During the 4th Quarter 2024 monitoring period, we did not collect any routine samples for disinfection byproducts 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 taking the samples immediately and having them analyzed for disinfection byproducts at a certified lab.

For more information, please contact Robert Popowicz at [rpopowicz@fluvannacounty.org](mailto:rpopowicz@fluvannacounty.org) or (434) 591-1925 Ext. 1051.

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**NOTICE TO CONSUMERS**  
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**IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER**

**Failure to Conduct the Pb and Cu Initial Tap Sampling under LCR**

Our water system recently failed to comply with the requirement to conduct the initial tap sampling for lead and copper under the Lead and Copper Rule (LCR). 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 did (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 our drinking water meets health standards. During the July 1 – December 31, 2024, monitoring period, we did not collect any of the required samples, and therefore we 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 Initial Samples for lead and copper as required by the Office of Drinking Water on schedule.

For more information, please contact Robert Popowicz at 434-591-1925 or 15704 West River Road, Bremo Bluff, VA 23022.

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This notice is being sent to you by Fluvanna County Zion Crossroads waterworks.

State Water System ID#: 2065265