ROSEVILLE WATER DEPARTMENT Drinking Water Consumer Confidence Report For the Year 2020

The Village of Roseville Water Department has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts. The Village of Roseville drinking water has met all EPA primary standards for the year 2020.

Source Water Information

The Roseville Water Department obtains its source water from groundwater wells. The Village has a total of five wells. Wells 1, 2, and 3 are located in the immediate area of the water treatment facility at 459 Gordon Street. Wells 4 and 5 are located on the Ransbottom Road at the old Ransbottom Pottery well site. Source changed October 1 2020 to Muskingum County Water System.

What are sources of contamination in drinking water?

The sources of drinking water, both tap and bottled water, includes 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 materials and, in some cases, radioactive material, and can pick up substances resulting from the presence of animal and human activity.

Contaminants that may be present in source water include: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife; (B) Inorganic contaminants, such as salts and metals, which can be naturally occurring or as a result of urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining and farming; (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff and residential use; (D) 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 storm water runoff and septic systems; (E) Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA promulgates regulations which limit the amount of certain contaminants in the 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 at 1-800-426-4791.

Who needs to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals such as people undergoing chemotherapy for cancer, people who have undergone organ transplants, people with HIV/AIDS, lupus, or other immune system disorders, some elderly and infants can be particularly at risk from infection. These people should seek advice about drinking water from their healthcare 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 at 1-800-426-4791.

Lead Educational Information

If present, elevated levels of lead can cause 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. Village of Roseville is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been setting 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 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 State Drinking Water Hotline at 800-426-4791 or at https://www.epa.gov/safewater/lead.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

License to Operate

We have a current, unconditioned license to operate our water system.

About your drinking water

The EPA requires regular sampling and testing to ensure drinking water safety. The Roseville Water Department conducted sampling and testing for bacteria, radiological, inorganic, synthetic organics, nitrate, volatile organic compounds, lead and copper contaminants for the years 2000 through 2020. Samples were collected according to proper sampling protocol for a total of 96 different contaminants, most of which were not detected in the Village of Roseville water supply. The Ohio EPA requires monitoring for some contaminants less than once per year because concentrations of these contaminants do not change frequently. Some of our data, though accurate, are more than one year old.

Monitoring and Reporting Violations for 2020

The Village of Roseville PWS had NO 2020 violations.

Listed below is information on those contaminants that were found in the Village of Roseville drinking water supply.

Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Residual Disinfectar	nts							
Chlorine	2020	3.30	0.23-3.30	MRDL G=4	MRDL =4	ppm	NO	Water additive used to control microbes
Disinfection Byprod	ucts		CALL CHARGE				filmfilled	
Haloacetic Acids (HAA5)*	8/20/20	6.0	0.0-6.0	NA	60	ppb	No	By-product of drinking water chlorination.
Total Trihalomethanes (TTHM)	8/20/20	66.1	49.1-66.1	NA	80	ppb	No	By-product of drinking water chlorination.
Inorganic Contamin	ates							
Barium	6/5/18	0.028	0.028-0.028	2	2	ppm	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.

- 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 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.
- Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a
 water system must follow.
- ppm: milligrams per liter or parts per million or one ounce in 7,350 gallons of water.
- ppb: micrograms per liter or parts per billion or one ounce in 7,350,000 gallons of water.
- MRDL or Maximum residual disinfectant level. The highest level of a disinfectant allowed in your deinking water.
- MRDLG or Maximum residual Disinfectant Level Goal. The level of drinking water disinfectant below which there are no known risk to health.

The Ohio EPA recently completed a study of Roseville Community Water Supply's source of drinking water to identify potential contaminant sources and provide guidance on protecting the drinking water source. According to this study, the producing aquifer which supplies the source water to the Village of Roseville Water Treatment Plant has a high susceptibility to contamination. This determination is based upon the following determinations:

- 1. The lack of a protective layer of clay, shale, sandstone, or other low permeability strata overlying the aquifer;
- 2. The relatively shallow depth to the aquifer;
- 3. The presence of manmade contaminants in treated water; and
- 4. The presence of significant potential contaminant sources in the wellhead protection zone.

This susceptibility means that under currently existing conditions, the likelihood of the aquifer becoming contaminated is high. This likelihood can be reduced by implementing appropriate measures to protect the aquifer. More information about the source water assessment or what consumers and citizens can do to help protect the aquifer is available by calling Tim Adams at 697-7310.

How can you participate in decisions concerning our drinking water?

Public participation and comments are encouraged at regular meetings of the Roseville Village Council, which meets on the third Tuesdays of each month, at 6:30 p.m., at the municipal building at 107 Main Street.

For more information

If you have any questions regarding this report, or any matter regarding our drinking water, please contact Tim Adams, Operator of Record at (740) 697-7310.

Muskingum County Water Department

"This institution is an equal opportunity provider and employer"

2020 Drinking Water Consumer Confidence Report - Southeast System -

The Muskingum County Water Department (MCWD) has prepared the following report to provide information to you, the consumer, on the quality of our drinking water. Included within this report is general health information, water quality test results, and how to participate in decisions concerning your drinking water and water system contacts.

Major water extensions have been completed to areas of North Moose Eye Road, Maplebrook Road and Foxcreek Road which also extends into the Village of New Concord to serve as an emergency water source to the village. MCWD also completed a connection from Cannelville to Roseville, becoming the sole water source for the village. Two wells at the well field were cleaned and maintenance performed on the pump and motor as part of our regular maintenance management program.

What's the Source of Your Drinking Water?

The MCWD water supply is located one mile north of Duncan Falls on State Route 60 along the Muskingum River floodplain. The source water is extracted from a buried valley sand and gravel aquifer (underground source of water) by four self-supporting wells. From there, it is pumped to our treatment plant, which is located at 3830 Wayne Ridge Road. The treatment plant, put into operation in February 1998, utilizes a treatment process that includes filtration for removal of iron & manganese, fluoridation to support dental health, and chlorination for disinfection. The Ohio Environmental Protection Agency has issued to the Muskingum County Water Department a current, unconditional license for the operations of this system.

Protecting our drinking water source from contamination is the responsibility of all area residents. Please dispose of hazardous chemicals in the proper manner and report polluters to the proper authorities. Only by working together can we ensure an adequate safe supply of water for future generations.

The MCWD has implemented a program required by the EPA, called "THE WELLHEAD PROTECTION PLAN". The Ohio EPA has completed a study of Muskingum County's source of drinking water, to identify potential contaminant sources and provide guidance on protecting the drinking water source. According to this study, the aquifer that supplies water to the MCWD has a high susceptibility to contamination. To date, no contamination event has occurred within the MCWD wellhead protection area. This determination is based on the following: (a) the lack of a protective layer of clay/shale/or other impervious materials overlying the aquifer, (b) a shallow depth (less than 20 feet below ground) of the aquifer and the ground surface and any contaminants placed on the ground surface could move downward into the source of drinking water for MCWD. Through this study some potential sources of contamination have been identified; including agricultural, light industrial, septic systems and State Route 60. Because of these potential sources of contamination that exists within the wellhead/source water protection area, and the sensitive nature of the aquifer, the Muskingum County Water Department's wellfield is considered to be susceptible to contamination. Protective strategies have been implemented, and MCWD will work with all agencies to develop a zoning overlay that sets specific standards for chemical storage, handling of waste materials, and other source control strategies to reduce the risk of ground water contamination in the wellhead/source water protection area. For a copy of the source water assessment or for more information please call our office at 740-453-0678. The direct link to the source water assessment for Muskingum County is http://wwwapp.epa.ohio.gov/gis/swpa/OH6000412.pdf.

The MCWD has in place a back-up connection with the City Of Zanesville near Richards Road, Fairview Road and Rehl Road for use in the event of an emergency. This report does not contain information of the water quality that may be received from the City of Zanesville. A copy of their consumer confidence report may be obtained by contacting the City of Zanesville at 740-617-4916, or online at <u>coz.org</u> under Public Service, Water Maintenance.

What Are Sources of Contamination to Drinking Water?

The sources of drinking water both tap water and bottled water includes 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: (A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife: (B) Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming: (C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses: (D) 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 storm water runoff, and septic systems: (E) 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 which 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.

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Who Needs 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 for infection. 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 (1-800-426-4791).

Lead in your Drinking Water

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. Muskingum County Water 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 2 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 at http://www.epa.gov/safewater/lead.

Customers who wish to check their homes for lead exposure:

Lead testing sample kits are available at our main office at a cost of \$15 per test to cover lab fees. Samples will be analyzed by an independent laboratory in Dublin, Ohio. Call our office at 740-453-0678 for more information.

Sampling Requirements and Results

The EPA requires regular sampling to ensure drinking water safety. MCWD conducted sampling for Nitrates, Synthetic Organic Compounds, Lead and Copper, Trihalomethanes and Haloacetic Acid contaminants. Contaminants detected can be found in the chart included in this report. The Ohio EPA requires MCWD to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some data, though accurate, is more than one year old.

The MCWD is required to conduct bacteria samples monthly. A total of 20 regular samples per month are required, totaling a minimum of 240 Total Coliform Bacteria samples for the year. All routine samples collected were negative for bacteria. In addition to the required monthly and annual sampling, the water is tested daily for iron, manganese, fluoride and chlorine at the treatment plant and throughout the distribution system by state certified lab analysts to assure water quality.

Water Monitoring Results (PWS: 6000412)

Contaminants (Units)	MCLG	MCL	Level Found	Range of Detections	Violation	Sample Year	Typical Source of Contaminants
			Inor	ganic Contam	inants		
Fluoride (ppm)	4	4	1.02	0.72 - 1.10	No	2020	Erosion of natural deposits: Water additive which promotes strong teeth: Discharge from fertilizer and aluminum factories
Barium (ppm)	2	2	0.0476	NA	No	2018	Discharge of drilling wastes: Discharge from metal refineries; Erosion of natural deposits
Nitrate (ppm)	10	10	0.508	NA	No	2020	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Lead (ppb)	0	AL=15	<5	NA	No	2020	Corrosion of household plumbing systems; Erosion of natural deposits: Leaching from wood preservatives
		Zero out of 3	30 samples was	s found to have I	ead levels is	excess of the	ne Action Level of 15 ppb
Copper (ppm)	1.3	AL=1.3	0.755	NA	No	2020	Corrosion of household plumbing systems; Erosion of natural deposits: Leaching from wood preservatives
	Z	Zero out of 30	samples was f	ound to have co	oper levels in	excess of	he Action Level of 1.3 ppm
			Volatile	e Organic Conta	aminants		
Trihalomethanes (ppb)	0	80	55.4	23.8 – 68.5	No	2020	By-product of drinking water chlorination
Haloacetic Acids (ppb)	0	60	20.2	9.3 – 27.2	No	2020	By-product of drinking water chlorination
			Dis	sinfectant Resid	luals		
Total Chlorine Residual (ppm)	4	4	1.45	0.95 - 1.64	No	2020	Water additive used to control microbes

In 2020, our Public Water System was sampled by the State of Ohio's Drinking Water Per – and Polyfluoroalkyl Substances (PFAS)Sampling Initiative. Results from this sampling indicated PFAS were detected in our drinking water system well below the action level established by Ohio EPA. Follow up monitoring is being conducted. For more information about PFAS, and to view our latest results, please visit pfas.ohio.gov.

PFBS(Perfluorobutanesulfonic acid) and related substances are short-chain perfluoroalkyl substances mainly used as surfactants and repellents. Additional applications include: flame retardants(firefighting foams), metal plating and pesticides.

Maximum Level Found: 6.5 parts per trillion Minimum Level Found: 5.6 parts per trillion

Ohio EPA established Action Level: 140,000 parts per trillion

Public participation and comments are encouraged. For more information on your drinking water, please contact Don Madden, General Manager or Debbie Ralph, Water Plant Supervisor, at 740-453-0678.

The "<" symbol: A symbol which means less than the detectable level.

ACTION LEVEL (AL): The concentration, which, if exceeded, triggers treatment or other requirements, which a water system must follow.

MAXIMUM CONTAMINANT LEVEL GOAL (MCLG): The level of a contaminant in drinking water below, which is no known or expected risk to health. MCLG's allow for a margin of safety.

MAXIMUM CONTAMINANT LEVEL (MCL): The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best treatment available.

PARTS PER MILLION (ppm) OR MILLIGRAMS PER LITER (mg/L): Unit of measure for the concentration of a contaminant. A part per million corresponds to one second in a little over 11.5 days.

PARTS PER BILLION (ppB) OR MICROGRAMS PER LITER ($\mu g/L$): Unit of measure for the concentration of a contaminant. A part per billion corresponds to 1 second in 37 years.

PARTS PER TRILLION (ppt) OR NANOGRAMS PER LITER (ng/L): Unit of measure for the concentration of a contaminant. A part per trillion corresponds to 30 seconds in 1 Million years.

TTHM: Trihalomethanes, A bi-product of drinking water chlorination.

HAA5: Haloacetic Acids, A by-product of drinking water chlorination.

SDWA = Safe Drinking Water Act