A high-speed photograph of water splashing, creating a dynamic and energetic background. The water is captured in mid-air, with numerous droplets and splashes, giving a sense of movement and freshness. The color palette is dominated by various shades of blue and white, emphasizing the purity and clarity of the water.

ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2019

Presented By
**Tuscarawas County
Metropolitan Sewer District**

Our Mission Continues

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2019. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

We serve customers in three separate public water systems:

AREA SERVED	
Dundee Water System	Dundee Community and surrounding areas of Wayne Township
Wainwright Water System	Wainwright community and surrounding areas of Warwick Township
Wiltshire Hills Water System	Wiltshire Hills, Village of Zoar, Village of Mineral City, Zoarville, unincorporated areas of Lawrence and Sandy Townships

Please remember that we are always available should you ever have any questions or concerns about your water.

Source Water Assessment

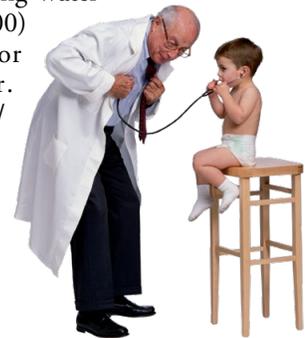
The State has completed a Source Water Assessment for each of our systems. The purpose of these assessments is to determine the susceptibility of each drinking water source to potential contaminant sources. The report includes background information and a relative susceptibility rating of High, Moderate, or Low. It is important to understand that a susceptibility rating of High does not imply poor water quality, only the system's potential to become contaminated within the assessment area. The assessment findings are summarized in the table:

SUSCEPTIBILITY OF SOURCES TO POTENTIAL CONTAMINANT SOURCES		
SOURCE NAME	SUSCEPTIBILITY RATING	SWAP REPORT DATE
Dundee Groundwater Supply	Low	2017
Wiltshire Hills Groundwater Supply	High	2002
Village of Tuscarawas (Wholesaler) Groundwater Supply	High	2002

If you would like a copy of the assessment for any of these sources, please feel free to contact our office during regular business hours at (330) 874-3262. Note: Our Water Quality Report for 2018 did not include information regarding how to obtain a copy of the assessment. The 2018 Report has been revised and is available on our Web site at <https://www.tcmsd.org/documents/1018/WQR18-Revised.pdf>.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) 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 <http://water.epa.gov/drink/hotline>.



Community Participation

Public participation and comments are encouraged at regular meetings of the Tuscarawas County Board of Commissioners, which meets weekly on Monday at 9:00 a.m. and Wednesday at 1:00 p.m. in the William Winters Room at 125 East High Avenue, New Philadelphia, Ohio 44663. If you would like more information regarding these meetings, you may contact Adam Stilgenbauer at (330) 365-3240.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Michael Jones, P.E., Director, or Justin Angel, Superintendent, at (330) 874-3262.

Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water that 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 these contaminants does not necessarily indicate that the water poses a health risk.

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, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring 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 may also come from gas stations, urban stormwater runoff, and septic systems;

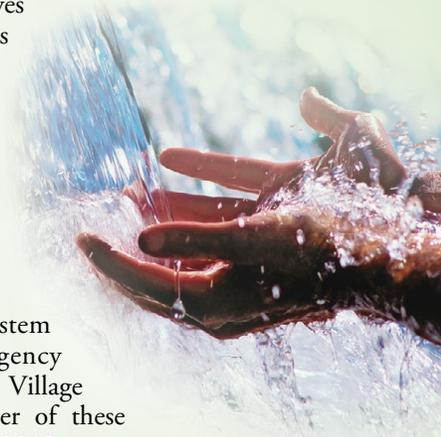
Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Where Does My Water Come From?

Customers in our Dundee Water System are served by a groundwater source, which includes three groundwater wells located near the Dundee Water Treatment Plant. The County purchases water from the Village of Tuscarawas to supply water to the Wainwright Water System. The Village of Tuscarawas receives its water from two wells located near the Village Park along Cherry Street. Our Wilkshire Hills Water System receives its water from two groundwater wells located near the Wilkshire Hills Water Treatment Facility.

The Wilkshire Hills system also has two emergency interconnections with the Village of Bolivar; however, neither of these connections was utilized in 2019.



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 in your water, you may wish to have your water tested. A list of laboratories certified in the State of Ohio to test for lead may be found at <http://www.epa.ohio.gov/ddagw/labcert> 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 at www.epa.gov/safewater/lead.



Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. Also, the water we deliver must meet specific health standards. Here, we show only 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.

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

Note that we have current, unconditioned licenses to operate each of our three water systems.

REGULATED SUBSTANCES													
				Dundee		Wainwright		Wiltshire Hills		Tuscarawas (Wholesaler)			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Alpha Emitters (pCi/L)	2019	15	0	NA	NA	NA	NA	0.102 ¹	NA	4.25 ²	NA	No	Erosion of natural deposits
Barium (ppm)	2019	2	2	0.081	NA	NA	NA	0.11	NA	ND	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2019	[4]	[4]	0.9	0.67–1.10	0.79	0.34–1.07	0.97	0.53–1.03	NA	NA	No	Water additive used to control microbes
Combined Radium (pCi/L)	2019	5	0	NA	NA	NA	NA	0.505 ³	NA	NA	NA	No	Erosion of natural deposits
Fluoride (ppm)	2019	4	4	ND	NA	NA	NA	1.13	0.96–1.21	ND	NA	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2019	60	NA	6.28	NA	1.9	NA	6.69	1.14–6.69	NA	NA	No	By-product of drinking water disinfection
Nitrate (ppm)	2019	10	10	ND	NA	NA	NA	ND	NA	0.384	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	2019	50	50	1.47	NA	NA	NA	4.55	NA	ND	NA	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
TTHMs [Total Trihalomethanes] (ppb)	2019	80	NA	31.3	NA	14.9	NA	12.80	6.17–12.80	NA	NA	No	By-product of drinking water disinfection

REGULATED SUBSTANCES

Tap water samples were collected for lead and copper analyses from sample sites throughout the community.

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Dundee					Wainwright			Wiltshire Hills			VIOLATION	TYPICAL SOURCE
		AL	MCLG	AMOUNT DETECTED (90TH %ILE)	RANGE LOW- HIGH	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/TOTAL SITES	AMOUNT DETECTED (90TH %ILE)	RANGE LOW-HIGH	SITES ABOVE AL/ TOTAL SITES		
Copper (ppm)	2019	1.3	1.3	0.16	0.0218- 0.1625	0/5	0.29	0.0573- 0.2945	0/5	0.61	0.0482- 0.637	0/20	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2019	15	0	2.37	ND-2.365	0/5	ND	ND	0/5	1.16	ND-1.74	0/20	No	Lead services lines, corrosion of household plumbing systems including fittings and fixtures; erosion of natural deposits

UNREGULATED SUBSTANCES

Samples were taken at the Entry Point.

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Dundee		Wiltshire Hills		TYPICAL SOURCE
		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	
Bromoform (ppb)	2019	0.66	NA	NA	NA	By-product of drinking water disinfection
Dibromochloromethane (ppb)	2019	0.76	NA	0.65	NA	By-product of drinking water disinfection
Nickel (ppb)	2019	2.24	NA	3.16	NA	Natural element of the Earth's crust, so small amounts found in food, water, soil, and air

¹ Sampled for Gross Alpha.

² Village of Tuscarawas sampled for Gross Alpha including radon, in 2016.

³ Sampled for Radium-228.

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 which a water system must follow.

LRAA (Locational Running Annual Average): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as the highest LRAAs.

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.

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.

pCi/L (picocuries per liter): A measure of radioactivity.

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).

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