ANNUAL WATER OUALITY REPORT

Reporting Year 2022





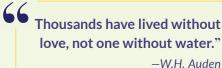
Our Mission Continues

V/e are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2022. 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. Please remember that we are always available should you ever have any questions or concerns about your water.

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, 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 these contaminants does not necessarily indicate that the water poses a health risk.



Thousands have lived without love, not one without water."

Where Does My Water Come From?

ustomers of the Dundee water system are served by 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 Village Park along Cherry Street. The 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. Neither of these connections were utilized in 2022.

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.

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 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.



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.

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 two 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 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.

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 below:

SUSCEPTIBILITY OF SOURCES TO POTENTIAL CONTAMINANT SOURCES											
SOURCE NAME	SUSCEPTIBILITY RATING	SWAP REPORT DATE									
Dundee Groundwater Supply	Low	2017									
Wilkshire Hills	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.



Community Participation

Public participation and comments are encouraged at regular meetings of the Tuscarawas County Board of Commissioners, which meets Mondays at 2:00 p.m. and Wednesdays at 9:00 a.m. in the William Winters Room, 125 East High Avenue, New Philadelphia. If you would like more information regarding these meetings, you may contact Rhonda Jordan at (330) 365-3240.



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.

The Tuscarawas County Metropolitan Sewer District conducted sampling for bacteria, inorganic, radiological, and volatile organic contaminants during 2022. Samples were collected for a total of 23 different contaminants, most of which were not detected in our water systems.

Note that we have a current, unconditioned license to operate each of our water systems.

The Ohio EPA requires 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, though accurate, are more than a year old.

REGULATED SUBSTANCES													
				Dun	Dundee		Wainwright Wilkshire Hills		ire Hills	Tuscar (Whole			
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)	2022	15	0	1.471	NA	NA	NA	-1.04 ²	NA	NA	NA	No	Erosion of natural deposits
Barium (ppm)	2022	2	2	0.0798	NA	NA	NA	0.0715	NA	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2022	[4]	[4]	1.02	0.68– 1.26	0.80	0.48– 1.36	0.96	0.86– 1.14	NA	NA	No	Water additive used to control microbes
Combined Radium (pCi/L)	2022	5	0	0.914^{3}	NA	NA	NA	0.2324	NA	NA	NA	No	Erosion of natural deposits
Fluoride (ppm)	2022	4	4	1.03	NA	NA	NA	1.14	0.23– 1.17	NA	NA	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs]– Stage 2 (ppb)	2022	60	NA	8.41	NA	5.74	NA	6.14	5.82- 6.14	NA	NA	No	By-product of drinking water disinfection
Nitrate (ppm)	2022	10	10	ND	NA	NA	NA	2.8	NA	0.2	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Selenium (ppb)	2022	50	50	2.44	NA	NA	NA	ND	NA	NA	NA	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
TTHMs [total trihalomethanes]-Stage 2 (ppb)	2022	80	NA	14.1	NA	11.4	NA	22.9	21.9– 22.9	NA	NA	No	By-product of drinking water disinfection

	Tap water samples wer	e collected for lead and	copper analyses from sam	ple sites throughout the commu	nitv
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					Dundee			Wainwright			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	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	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2020	1.3	1.3	0.46	0.016–0.853	0/5	0.4585	0.0384-0.7105	0/55	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2020	15	0	0.65	ND-1.29	0/5	0.9855	ND-1.97 ⁵	0/55	No	Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

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

					Wilkshire Hills		Tı	uscarawas (Wholesaler)			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	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	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2020	1.3	1.3	1.045	0.010–1.245	0/205	NA	NA	NA	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2020	15	0	ND ⁵	ND-1.43 ⁵	0/205	NA	NA	NA	No	Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits

UNREGULATED SUBSTANCES

		Dunc	dee	Wainw	right right	Wilksh	ire Hills	Tuscarawas (Wholesaler)		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppb)	2022	4.55	NA	6.11	NA	8.47	8.45-8.47	NA	NA	NA
Chloroform (ppb)	2022	6.11	NA	2.89	NA	9.91	7.11–9.91	NA	NA	NA
Dibromochloromethane (ppb)	2022	3.44	NA	2.44	NA	6.31	4.51-6.31	NA	NA	NA
Nickel (ppb)	2022	1.71	NA	NA	NA	4.33	NA	NA	NA	Nickel is a natural element of the Earth's crust; therefore, small amounts are found in food, water, soil, and air

¹Laboratory reported uncertainty of (±)-0.995.

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.

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

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).

²Laboratory reported uncertainty of (±)-0.870.

 $^{^3}$ Laboratory reported uncertainty of (±)0.321.

⁴Laboratory reported uncertainty of (±)0.328.

⁵ Sampled in 2022.