

A close-up photograph of clear water being poured from a glass pitcher into a clear glass. The water is captured mid-pour, creating a dynamic splash and bubbles. The background is a blurred wooden surface.

ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2018



Presented By
**Reynoldsburg Water
Department**

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, 2018. Over the years, we have dedicated ourselves to provide 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.

For more information about this report, or for any questions relating to your drinking water, please call Paul Hellman, Superintendent of Water/Wastewater, at (614) 322-4500.

Where Does My Water Come From?

The City of Reynoldsburg purchases its water from the City of Columbus. We receive our water through six master water meters. The water from Columbus entering Reynoldsburg on East Main Street and along East Broad Street is treated at the Hap Cremean Water Plant (HCWP). The Hap Cremean Water Plant utilizes surface water from the Hoover Reservoir on Big Walnut Creek. The water entering Reynoldsburg on SR 256 is treated at the Parsons Avenue Water Plant. The Parsons Avenue Water Plant draws water from a ground water supply. We purchased 1.079 billion gallons of drinking water from Columbus in 2018, an average of 2.956 million gallons per day.

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>.



Information on the Internet

The U.S. EPA (<https://goo.gl/TFAMKc>) and the Centers for Disease Control and Prevention (www.cdc.gov) Web sites provide a substantial amount of information on many issues relating to water resources, water conservation and public health. Also, the Ohio Environmental Protection Agency has a Web site (<https://goo.gl/3Asdj6>) that provides complete and current information on water issues in Ohio, including valuable information about our watershed.

Water Treatment Process

The treatment process consists of a series of steps. First, raw water is drawn from our water source and sent to an aeration tank, which allows for oxidation of the high iron levels that are present in the water. The water then goes to a mixing tank where polyaluminum chloride and soda ash are added. The addition of these substances causes small particles to adhere to one another (called floc), making them heavy enough to settle into a basin from which sediment is removed. Chlorine is then added for disinfection. At this point, the water is filtered through layers of fine coal and silicate sand. As smaller, suspended particles are removed, turbidity disappears and clear water emerges.

Chlorine is added again as a precaution against any bacteria that may still be present. (We carefully monitor the amount of chlorine, adding the lowest quantity necessary to protect the safety of your water without compromising taste.) Finally, soda ash (to adjust the final pH and alkalinity), fluoride (to prevent tooth decay), and a corrosion inhibitor (to protect distribution system pipes) are added before the water is pumped to sanitized, underground reservoirs, water towers, and into your home or business.

Community Participation

Public participation and comments are encouraged at regular meetings of Reynoldsburg City Council, which meets the second and fourth Mondays of each month (except August and holidays) at 7:30 p.m. in the Municipal Building, 7232 East Main Street, Reynoldsburg, Ohio.

About Our Reporting Violation

The City of Reynoldsburg received a violation (OAC Rules 3745-96-01 thru 04 for the 2017 Consumer Confidence Report (CCR). Information on the source water's susceptibility to contamination, and the availability of the source water assessment report, was not presented in the CCR. The CCR should have included a brief summary of the community water system's susceptibility to potential sources of contamination. This oversight has been corrected and this information will appear in all future CCRs.

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.

Source Water Assessment

A high-quality source water supply allows the Columbus Division of Water to provide consumers with high-quality water at a reasonable cost. Protecting our raw water sources requires investments to secure the needs of a growing population, now and in the future. As part of its ongoing efforts to maintain regulatory compliance and monitor our water supply, the Columbus Division of Water has completed a Source Water Assessment process. Below is a synopsis of the results:



The City of Columbus water system uses surface water from the Scioto River and Big Walnut Creek, as well as ground water pumped from sand and gravel deposits of the Scioto River Valley. All three sources of water have a relatively high susceptibility to contamination from spills or releases of chemicals. The ground water pumped at the Parsons Avenue

plant is susceptible (compared to other ground water systems) because there is no significant clay overlying and protecting the aquifer deposits. The Scioto River and Big Walnut Creek are even more susceptible because they are

more accessible and less protected from spills.

The drinking water source protection areas for the City of Columbus' three water sources contain numerous potential contaminant sources, especially the protection area for the Dublin Road Water Treatment Plant (extending along the Scioto River).

The City of Columbus treats the water to meet drinking water quality standards, but no single treatment protocol can address all potential contaminants. The City has been proactive in pursuing measures to further protect its source waters. These include land stewardship programs and incentive-driven programs to reduce erosion and run-off of pesticides and fertilizers into the Scioto River and Big Walnut Creek and their reservoirs. More detailed information is provided in the City of Columbus Drinking Water Source Assessment Report, which can be viewed by calling the Watershed section(at (614) 645-1721. You can also visit www.columbus.gov/watershed/ for more details about watershed management and the land stewardship program.

We remain vigilant in delivering the best-quality drinking water

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> 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. And 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.

We participated in the 4th stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 sampling benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data are available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminant Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

Note that in the year 2018 we had a green unconditioned license to operate (LTO) our water system.

REGULATED SUBSTANCES											
				Reynoldsburg Water Distribution System		Hap Cremean Water Plant		Parsons Avenue Water Plant			
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	VIOLATION	TYPICAL SOURCE
Atrazine (ppb)	2018	3	3	NA	NA	<0.10	<0.10–0.14	ND	NA	No	Runoff from herbicide used on row crops
Barium (ppm)	2018	2	2	NA	NA	0.012	NA	NA	NA	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2018	[4]	[4]	1.23	0.32–2.14	1.42	0.40–2.40	1.05	0.43–1.99	No	Water additive used to control microbes
Fluoride (ppm)	2018	4	4	NA	NA	0.91	0.76–0.97	0.93	0.82–0.99	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2018	60	NA	30.05	8.0–44.2	35.4	21.8–48.2	9.0	4.2–10.1	No	By-product of drinking water disinfection
Nitrate (ppm)	2018	10	10	NA	NA	1.8	<0.5–1.8	ND	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Simazine (ppb)	2018	4	4	NA	NA	<0.10	<0.10–0.15	ND	NA	No	Herbicide runoff
TTHMs [Total Trihalomethanes] (ppb)	2018	80	NA	35.28	18.00–66.9	50.4	17.1–86.5	34.9	17.1–39.6	No	By-product of drinking water disinfection
Total Organic Carbon [TOC] ¹ (% removal)	2018	TT	NA	NA	NA	2.41	2.20–3.01	NA	NA	No	Naturally present in the environment
Turbidity ² (NTU)	2018	TT	NA	NA	NA	0.34	0.02–0.34	NA	NA	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2018	TT = 95% of samples meet the limit	NA	NA	NA	100	NA	NA	NA	No	Soil Runoff

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

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Reynoldsburg Water Distribution System					Hap Cremean Water Plant			Parsons Avenue Water Plant			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)	2017	1.3	1.3	0.087	0.013–0.132	0/30	0.0623	0.0060–0.1966	0/50	0.0623	0.0060–0.1966	0/50	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead ³ (ppb)	2017	15	0	1.96	0.0–25.3	1/30	< 1	<1–3.4	0/50	< 1	< 1–3.4	0/50	No	Corrosion of household plumbing systems; Erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Hap Cremean Water Plant				Parsons Avenue Water Plant		VIOLATION	TYPICAL SOURCE
		SMCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
pH (Units)	2018	6.5–8.5	NA	7.8	7.7–7.9	7.8	7.8–7.9	No	Naturally occurring

UNREGULATED CONTAMINANT MONITORING RULE PART 4 (UCMR4) - REYNOLDSBURG WATER DISTRIBUTION SYSTEM

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	OHIO EPA ADULT THRESHOLD	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Anatoxin-a (ppb)	2018	20	0.027	ND–0.128	Naturally produced by some freshwater cyanobacteria.

UNREGULATED AND OTHER SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Hap Cremean Water Plant		Parsons Avenue Water Plant		TYPICAL SOURCE
		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	
Hardness (ppm)	2018	89	74–111	122	121–124	Naturally occurring
Metolachlor (ppb)	2018	<0.20	<0.20–0.25	ND	NA	Agricultural herbicide runoff
Metribuzin (ppb)	2018	<0.10	<0.10–0.12	ND	NA	Agricultural herbicide runoff
Sodium (ppm)	2018	20.5	15.3–29.3	65.5	59.8–78.0	Naturally occurring; Used in road treatment process

¹The value reported under Amount Detected for TOC is the lowest ratio between the percentage of TOC actually removed to the percentage of TOC required to be removed. A value of greater than 1 indicates that the water system is in compliance with TOC removal requirements. A value of less than 1 indicates a violation of the TOC removal requirements.

²Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of water quality and the effectiveness of disinfectants.

³There was one lead sample that was detected in 2017 above the AL at Site 1: 25.3 ppb, but the 90th percentile was 1.96 ppb.

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 that, if exceeded, triggers treatment or other requirements that 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.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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).

removal ratio: A ratio between the percentage of a substance actually removed to the percentage of the substance required to be removed.

SMCL (Secondary Maximum Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

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