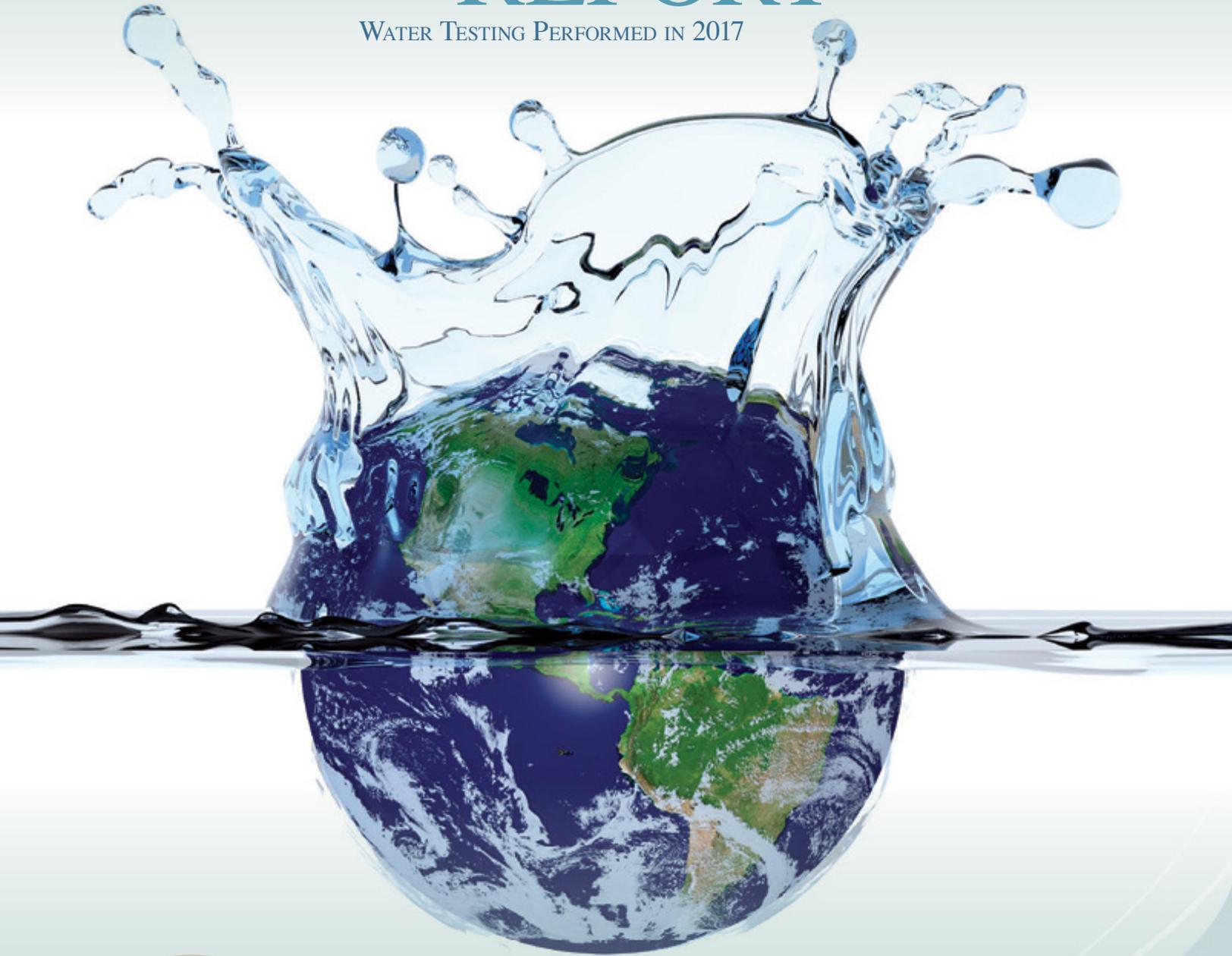


ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2017



Presented By
Reynoldsburg Water Department

Quality First

Once again we are proud to present our annual water quality report covering the period between January 1 and December 31, 2017. As in years past, we are committed to delivering the best-quality drinking water possible. In a matter of only a few decades, drinking water has become exponentially safer and more reliable than at any other point in human history. To that end, our staff remains vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all of our water customers. Thank you for allowing us the opportunity to provide quality H₂O to you and your families.

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 at 7:30 p.m. (except August and holidays) at the Municipal Building, 7232 East Main Street, Reynoldsburg, Ohio.

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>.



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 cause 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 (used to adjust the final pH and alkalinity), fluoride (used to prevent tooth decay), and a corrosion inhibitor (used to protect distribution system pipes) are added before the water is pumped to sanitized, underground reservoirs, water towers, and into your home or business.

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.

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 storm-water 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 storm-water 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 storm-water 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.



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 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 or at www.epa.gov/lead.

Water Main Flushing

Distribution mains (pipes) convey water to homes, businesses, and hydrants in your neighborhood. The water entering distribution mains is of high quality; however, water quality can deteriorate in areas of the distribution mains over time. Water main flushing is the process of cleaning the interior of water distribution mains by sending a rapid flow of water through the mains.

Flushing maintains quality in several ways. For example, flushing removes sediments such as iron and manganese. Although iron and manganese do not pose health concerns, they can affect the taste, clarity, and color of the water. Additionally, sediments can shield microorganisms from the disinfecting power of chlorine, contributing to the growth of microorganisms within distribution mains. Flushing helps remove stale water and ensures the presence of fresh water with sufficient dissolved oxygen, disinfectant levels, and an acceptable taste and smell.

During flushing operations in your neighborhood, some short-term deterioration of water quality, though uncommon, is possible. You should avoid tap water for household uses at that time. If you do use the tap, allow your cold water to run for a few minutes at full velocity before use, and avoid using hot water to prevent sediment accumulation in your hot water tank.

Please contact us if you have any questions or if you would like more information on our water main flushing schedule.



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 groundwater supply. We purchased 1.047 billion gallons of drinking water from Columbus in 2017, an average 2.868 million gallons per day.

Testing For *Cryptosporidium*

Cryptosporidium ("Crypto"), for example, is a microscopic organism that, when ingested, can result in diarrhea, fever, and other gastrointestinal symptoms. It is important to note not all Crypto species are human pathogens and may not cause any adverse affects in humans. Crypto comes from animal waste in the watershed and may be found in our source water; it is found in surface water throughout the U.S. Crypto is eliminated by using a multibarrier water treatment process, including coagulation, sedimentation, softening, filtration, and disinfection; however, the most commonly used filtration methods can not guarantee 100 percent removal.

Columbus's water is regularly tested for organisms that could be harmful to people—including Crypto . Crypto was detected 6 out of 24 times in the Scioto River and 7 out of 24 times in Big Walnut Creek. Also, Crypto was not detected in the HCWP tap water. It should be noted that the presence in tap water was minimal, and current testing methods do not enable us to determine if the organisms are dead or if they are capable of causing disease.

EPA/CDC guidelines on appropriate means to lessen the risk of infection by Crypto and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791. For additional information or questions about Columbus water quality, please call the Water Quality Assurance Lab at (614) 645-7691.



QUESTIONS?

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.

Test Results

Our water is monitored for many different kinds of contaminants on a very strict sampling schedule. The information in the data tables represents only those substances that were detected between January 1 and December 31, 2017. Remember that detecting a substance does not necessarily mean the water is unsafe to drink. Our goal is to keep all detects below their respective maximum allowed levels. The state allows us to monitor for certain substances less often than once per year because the concentrations 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 completed the 3rd stage of the EPA's Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 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 EPA needs to introduce new regulatory standards to improve drinking water quality. Contact us for more information on this program.

Note that we have a current, unconditioned license to operate 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
Alachlor (ppb)	2017	2	0	NA	NA	<0.20	<0.20–0.37	ND	ND	No	Agricultural herbicide runoff
Atrazine (ppb)	2017	3	3	NA	NA	0.11	<0.10–0.25	ND	NA	No	Runoff from herbicide used on row crops
Barium (ppm)	2017	2.0	2.0	NA	NA	.017	.011–.017	.011	.011–.017	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chlorine (ppm)	2017	[4]	[4]	1.00	0.32–1.87	1.47	0.29–2.40	1.05	0.37–1.86	No	Water additive used to control microbes
Fluoride (ppm)	2017	4	4	NA	NA	0.88	0.81–0.94	0.90	0.75–0.99	No	Erosion of natural deposits; Water additive, which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA] (ppb)	2017	60	NA	27.7	6.1–45.0	45.3	16.8–55.5	8.4	6.0–10.1	No	By-product of drinking water disinfection
Nitrate (ppm)	2017	10	10	NA	NA	1.9	<0.5–1.9	ND	NA	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Simazine (ppb)	2017	4	4	NA	NA	0.11	<0.10–0.28	ND	NA	No	Herbicide runoff
Total Organic Carbon [TOC] ¹ (removal ratio)	2017	TT	NA	NA	NA	1.78	1.43–2.17	NA	NA	No	Naturally present in the environment
TTHMs [Total Trihalomethanes] ² (ppb)	2017	80	NA	54.5	32.6–88.4	53.0	19.8–86.5	34.1	15.9–39.6	No	By-product of drinking water disinfection
Turbidity (NTU)	2017	TT	NA	NA	NA	0.53 ³	0.03–0.53 ³	NA	NA	No	Soil runoff
Turbidity ⁴ (lowest monthly percent of samples meeting limit)	2017	TT = 95% of samples meet the limit	NA	NA	NA	99.8	NA	NA	NA	No	Soil runoff

Tap Water Samples Collected for Lead and Copper Analyses from Sample Sites throughout the Community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH% TILE)	RANGE LOW-HIGH	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2017	1.3	1.3	0.087	0.013–0.132	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead (ppb)	2017	15	0	1.96	0.0–25.3	1/30 ⁵	No	Corrosion of household plumbing systems; Erosion of natural deposits

OTHER SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Reynoldsburg Water Distribution System		Hap Cremean Water Plant		Parsons Avenue Water Plant		TYPICAL SOURCE
		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	
Hardness (ppm)	2017	NA	NA	103	91–117	122	121–124	Naturally occurring

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

²Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

³Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

⁴The turbidity limit set by the EPA is 0.3 NTU in 95% of the samples analyzed each month and shall not exceed 1 NTU at any time. As reported above, the **Hap Cremean Water Plant** highest recorded turbidity result for **2017** was 0.53 NTU and lowest monthly percentage of samples meeting the turbidity limits was **99.8% okay**.

⁵There was 1 lead sample result over the AL at Site One, out of 30 samples collected.

Definitions

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.

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.

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