City of Gahanna | Department of Public Service and Engineering
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CITY OF GAHANNA 2019 DRINKING WATER CONSUMER CONFIDENCE REPORT

C C R

The mission of the Department of Public Service and Engineering is to continually strive to improve service to residents through open, honest communication, top-notch infrastructure, building and equipment maintenance, and the refusal to allow the department to settle into complacency.

OVERVIEW

The goal of the Department of Public Service and Engineering is to ensure that any contaminants in your drinking water are restricted below a level at which there is no known health risk and properly distribute quality water in a manner that is consistent with the Environmental Protection Agency (EPA). The Safe Drinking Water Act (SDWA) requires that drinking water quality information be made available to the public. The City of Gahanna Department of Public Service and Engineering has prepared the following report to provide information to you, the consumer, on the quality of the drinking water. Included within this report is general health information, water quality test results, how to participate in decisions concerning your drinking water and water system contacts.

SOURCE WATER INFORMATION

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. Each home, school and business in the greater Columbus area receives water from one of the following three water plants:

Dublin Road Water Plant (DRWP): This water plant serves northwestern and southwestern residents. The water source is the Griggs Reservoir and O'Shaughnessy Reservoir.

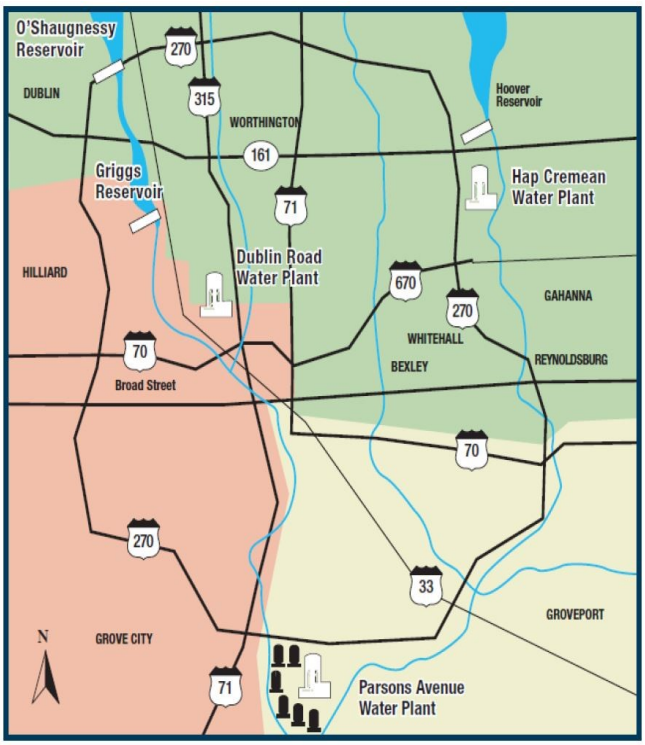
Hap Cremean Water Plant (HCWP): This water plant serves Ohio State University and northern residents. The water source is the Hoover Reservoir via the Big Walnut Creek.

Parsons Avenue Water Plant (PAWP): This water plant serves southeastern residents. The water source is water wells.

The City of Gahanna is a "master meter" community. This means that the City purchases its water from the City of Columbus. As indicated above, the City of Gahanna receives its drinking water from the City of Columbus' Hap Cremean Water Plant (HCWP) located on Morse Road. The water source for the HCWP is the Hoover Reservoir via the Big Walnut Creek.

As part of its ongoing efforts to maintain regulatory compliance and monitor the water supply, the City of Columbus Division of Water has completed two Source Water Assessment Plans, one for groundwater and one for surface water. Both plans are endorsed by the Ohio EPA as an effective source water protection strategy. 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). These include industrial activities, stormwater runoff from developing areas and heavily traveled transportation network running alongside and over the water bodies. Runoff from agricultural fields is a concern in both the Scioto River and Big Walnut Creek watersheds.

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 of Columbus 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 runoff 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. A copy of the report is available by contacting the City of Columbus Watershed Section at 614-645-1721. Visit www.columbus.gov/watershed for more details about watershed management and the land stewardship program.

Source: City of Columbus Department of Public Utilities, www.columbus.gov/publicutilities

WHAT ARE SOURCES OF CONTAMINATION TO DRINKING WATER?

The sources of drinking water (both tap 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 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 stormwater 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 stormwater 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 stormwater 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, the U.S. Environmental Protection Agency (USEPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (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 USEPA'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. 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 can be particularly at risk from infection. These people should seek advice about drinking water from their health care providers. EPA and Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline at 1-800-426-4791.

WATER QUALITY MONITORING

The EPA establish the regulations that limit the amount of contaminants allowed in drinking water and require regular sampling to ensure drinking water safety. The Ohio EPA requires some contaminants to be monitored less than once per year due to the fact that the concentrations of these contaminants do not change frequently. Therefore some of the data, though accurate, may be more than one year old. The table below shows the sampling results performed by the City of Columbus at the Hap Cremean Water Plant and the City of Gahanna. It illustrates the concentrations of detected contaminants in comparison to the regulatory limits.

TABLE OF DETECTED CONTAMINANTS FOR REGULATED CONTAMINANTS

Contaminant	Sample Year	What's Allowed? Maximum Contaminant Level (MCL)	What's the Goal? Maximum Contaminant Level Goal (MCLG)	Level Found	Range of Detection	Violation	Where Did It Come From? (Typical Source of Contaminant)
CITY OF COLUMBUS HAP CREMEAN WATER PLANT (HCWP)							
INORGANIC CONTAMINANTS							
Barium (ppm)	2019	2	2	0.011	n/a	No	Discharge of drilling wastes, discharge from metal refineries, erosion of natural deposits
Fluoride (ppm)	2019	4	4	0.96	0.82 - 1.02	No	Erosion of natural deposits, water additive which promotes strong teeth, discharge from fertilizer and aluminum factories
Nitrate (ppm)	2019	10	10	1.3	< 0.5 - 1.3	No	Runoff from fertilizer use, leaching from septic tanks, erosion of natural deposits
MICROBIOLOGICAL CONTAMINANTS							
Total Organic Carbon	2019	removal ratio > 1 (TT)	No goal set	2.58	2.39 - 2.85	No	Naturally present in the environment
Turbidity (NTU)	2019	< 1 NTU (TT)	No goal set	0.04	0.02 - 0.42	No	Soil runoff
Turbidity (% meeting standard)	2019	> 95% (TT)	No goal set	99.9%	99.9%	No	Soil runoff
SYNTHETIC ORGANIC CONTAMINANTS							
Atrazine (ppb)	2019	3	3	< 0.10	< 0.10 - 0.16	No	Runoff from herbicide used on row crops
Simazine (ppb)	2019	4	4	ND	ND	No	Herbicide runoff
UNREGULATED CONTAMINANTS							
Metribuzin (ppb)	2019	No set level	No goal set	< 0.10	< 0.10 - 0.12	No	Herbicide runoff
CITY OF GAHANNA							
INORGANIC CONTAMINANTS[1]							
Copper (ppm)	2018	1.3 (AL)	1.3	0.063	< 0.050 - 0.124 (0 of 34 sites above AL)	No	Corrosion of household plumbing systems and erosion of natural deposits
Lead (ppb)	2018	15 (AL)	0	< 5.0	< 5.0 - 92.0 (1 of 34 sites above AL)	No	Corrosion of household plumbing systems and erosion of natural deposits
MICROBIOLOGICAL CONTAMINANTS							
Total Coliform Bacteria[2]	2019	present in < 5% of monthly samples (TT)	No goal set	2.3%	0.0% - 2.3%	No	Naturally present in the environment
RESIDUAL DISINFECTANTS							
Total Chlorine (ppm)	2019	4 (MRDL)	4 (MRDLG)	1.67	1.40 - 2.00	No	Water additive used to control microbes
VOLATILE ORGANIC CONTAMINANTS							
Haloacetic Acids, HAA5 (ppb)	2019	60	No goal set	31.5	14.0 - 30.7	No	Byproduct of drinking water chlorination
Total Trihalomethanes, TTHM (ppb)	2019	80	No goal set	43.6	14.7 - 78.7	No	Byproduct of drinking water chlorination

1. The next lead and copper testing is scheduled for 2021. Asbestos testing has been scheduled for 2020.
2. The City had one (1) positive sample in September 2019 out of 528 annual samples. All subsequent check samples were negative.

UNREGULATED CONTAMINANT MONITORING RULE (UCMR) SAMPLING

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. Through 2018-2019 the City of Gahanna Department of Public Service and Engineering participated in the fourth round of the Unregulated Contaminant Monitoring Rule (UCMR 4). For a copy of the results contact the City of Gahanna Water Resources Engineer, Jeff Feltz, at 614-342-4005.

TABLE OF UNREGULATED CONTAMINANTS

Contaminant	Sample Year	Average Level Found	Range of Detection
CITY OF GAHANNA			
Haloacetic Acids, HAA5 (ppb)	2018-2019	30.47	14.33 - 51.59
Haloacetic Acids, HAA6Br (ppb)	2018-2019	6.16	3.45 - 9.55
Haloacetic Acids, HAA9(ppb)	2018-2019	36.21	18.38 - 58.87

DEFINITIONS

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Greater Than Symbol (>): A symbol which means greater than.

Less Than Symbol (<): A symbol which means less than. A result of < 5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.

Maximum Contaminant Level (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.

Maximum Contaminant Level Goal (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 Residual Disinfectant Level (MRDL): 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.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of 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.

MFL: Million fibers per liter

ND: Not detected

Nephelometric Turbidity Unit (NTU): Unit of measure for water clarity and particles held in suspension in water.

Parts per Billion (ppb) or Micrograms per Liter (µg/L): Unit of measure for concentration of a contaminant. A part per billion corresponds to one second in approximately 31.7 years.

Parts per Million (ppm) or Milligrams per Liter (mg/L): Unit of measure for concentration of a contaminant. A part per million corresponds to one second in approximately 11.5 days.

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

TOTAL ORGANIC CARBON

The value reported under "Level Found" in the table of detected contaminants for total organic carbon (TOC) is the lowest running annual average ratio between the percentage of TOC actually removed to the percentage of TOC required to be removed. A value greater than one indicates that the water system is in compliance with TOC removal requirements. A value less than one indicates a violation of the TOC removal requirements. The value reported under "Range of Detection" is the lowest monthly ratio to the highest monthly ratio.

TURBIDITY

Turbidity is a measure of the cloudiness of water and is an indication of the effectiveness of the filtration system. The 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 in the table of detected contaminants, the highest recorded turbidity result for 2019 for water supplied to Gahanna (by Columbus' Hap Cremean Water Plant) was 0.42 NTU and the lowest monthly percentage of samples meeting the turbidity standard was 99.9%.

NITRATE

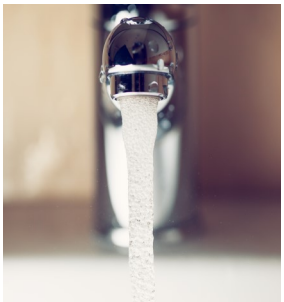
Nitrate in drinking water at levels above 10 ppm is a health risk for infants less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. Local television, radio and print media will be notified within 24 hours if the level of nitrate rises above 10 ppm. The media will similarly be notified once the level decreases. If you are caring for an infant, you should ask advice from your health care provider.

LEAD

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. The City of Gahanna Department of Public Service and Engineering 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 USEPA's Safe Drinking Water Hotline at 1-800-426-4791 or online at www.epa.gov/safewater/lead.

CRYPTOSPORIDIUM

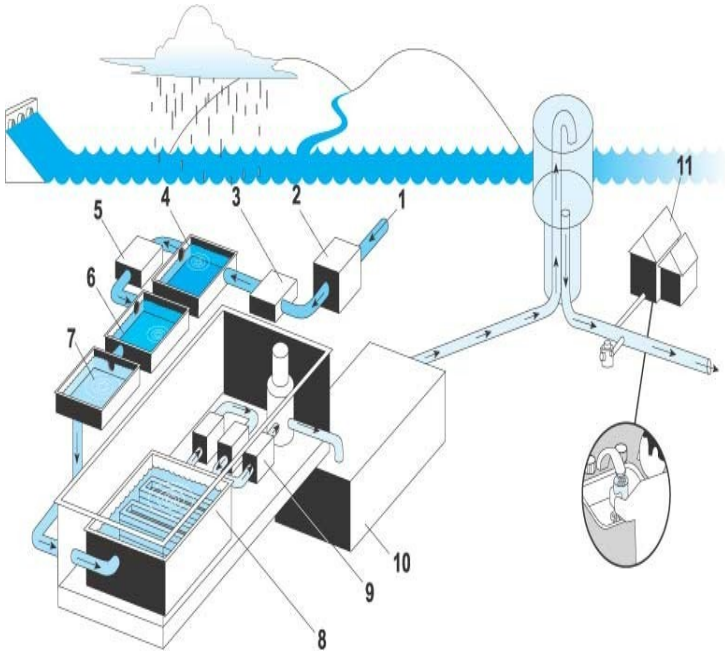
Cryptosporidium is a microbial pathogen found in surface water throughout the United States. It must be ingested to cause disease and it may be spread through means other than drinking water. Symptoms of infection include nausea, diarrhea and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immunocompromised people are at greater risk of developing a life threatening illness. We encourage immunocompromised individuals to consult their doctor regarding appropriate precautions to avoid infection.



Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100% removal. Monitoring of source water and/or finished water indicates the presence of these organisms; however, current test methods cannot determine if the organisms are dead or if they are capable of causing disease. The City of Columbus monitored for Cryptosporidium in the source water and finished water during 2019. It was detected in 10 of 24 raw water samples collected from the source water, Big Walnut Creek. Cryptosporidium was not detected in the finished water at the Hap Cremean Water Plant.

WATER TREATMENT PROCESS

1. Water flows from the reservoir or stream to the treatment plant.
2. It passes through rotating screens that remove large debris.
3. Water is then pumped into the plant where alum is added to cause coagulation.
4. After rapid mixing, the water remains in a settling basin while sedimentation of floc (residual matter) occurs. This process takes 2-4 hours. The settled floc is pumped from the bottom of the basins and stored in holding lagoons to dry.
5. The water is softened by adding sodium carbonate (soda ash) or caustic soda and hydrated lime. This removes calcium and magnesium ions that are responsible for water hardness. This process takes an additional 2-4 hours. For each pound of chemical used in the treatment process, two pounds are removed.
6. After an additional sedimentation process, carbon dioxide is added to lower the pH level to approximately 7.8.
7. Ozone is then added to the water to reduce dissolved organic matter.
8. Water then flows through large biologically active filters made up of granular activated carbon. This removes any remaining particles and further reduces dissolved organic matter.
9. Chlorine is added to the water to disinfect. Fluoride to protect teeth and a corrosion inhibitor are added afterward.
10. Water is held in large underground clearwells until it is needed by the community.
11. Water is delivered to the customer as needed.



Please Note: Steps 2-4 and 7 are not needed when ground water is used.

Source: City of Columbus Department of Public Utilities, www.columbus.gov/publicutilities

WATER QUALITY ASSURANCE

The City of Columbus' Water Quality Assurance Laboratory (WQAL) is a large modern water lab with a long history of distinguished public service starting under the noted water quality chemist Charles Hoover. The lab continues to maintain that tradition of excellence and technical innovation in the ongoing use of state-of-the-art equipment for water analysis, while continuing to research the latest advancements in water treatment techniques.

The WQAL performs water quality monitoring and treatment research to ensure that Columbus' drinking water meets or is better than all federally mandated Safe Drinking Water Act (SDWA) standards. The WQAL also provides water quality information to the water treatment plants (along with master meter communities such as Gahanna) and addresses customer complaints and inquiries regarding water quality. In 2019, the WQAL's EPA licensed and certified laboratory staff completed over 80,000 analyses relating to 33 different organic, inorganic and microbiological water quality parameters.

To maintain compliance with current SDWA regulations, WQAL activities in 2019 were again directed at the National Primary Drinking Regulations, Interim Enhanced Surface Water Treatment Rule, Lead and Copper Rule, Unregulated Contaminant Monitoring Rule (UCMR), Stage 2 of the Disinfectant/Disinfection Byproducts Rule (D/DBP) and the Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR). Additionally, the lab has been closely involved in planning the improvement of watershed and water distribution system surveillance and detection measures for security concerns in the wake of the 9/11 attacks and the associated heightened security protocols.

As with the WQAL staff, the State of Ohio licenses and certifies the water plant operators who are charged with running and maintaining each of the three water treatment plants. These operators also perform the critical task of treatment and process monitoring to insure the water leaving the plant is of the highest quality. In order to stay current in the ever-changing technical field of water purification, these operators spend many hours of continuing education in the classroom every year.

Source: City of Columbus Department of Public Utilities, www.columbus.gov/publicutilities

UNIDIRECTIONAL WATERLINE FLUSHING

The City of Gahanna Department of Public Service and Engineering completed another year of unidirectional waterline flushing. This is a systematic and controlled procedure that uses water at a high velocity to remove sedimentation, improve water quality and increase the flow efficiency within the waterlines of the distribution system. Specific valves on each waterline are closed to allow the water to flow quickly through the pipes and exit a specified hydrant. The fast moving water removes sediment and stale water out of the waterlines. This preventative maintenance technique is endorsed and encouraged by the Ohio EPA. Waterline flushing occurred in the north central and northeast quadrant of Gahanna in 2019.

COMMON WATER QUALITY CONCERNS

BRINY OR SALTY TASTE

The use of large quantities of deicing salts applied to surface roads and walkways during winter storms may lead to an increased concentration of sodium in the water. Currently there is no treatment alternative to remove increased sodium concentrations. Therefore, this may result in a slightly briny or salty taste in the water. Fortunately, due to the higher flow rates of our river systems, such occurrences spike and then quickly subside after the snow melts and the melt water is carried away past the treatment plant. It is important to note this taste poses no health concern but one of aesthetic quality.

CHLORINOUS TASTE OR ODOR

Chlorine is a water additive used to control microbes. Levels of chlorine in the water are regularly monitored. The taste of chlorine in your water can be eliminated by setting an open pitcher in your refrigerator overnight.

CLOUDY WATER

Cloudy water is usually caused by temperature change and the presence of dissolved air in the water. When water appears to have a milky white, gray or carbonated appearance a simple test may suffice to indicate its origin. Fill a clear glass with tap water and observe it over a minute or so. If the glass clears from bottom to top, then it is dissolved air escaping into the atmosphere. There is no health risk associated with this situation. Cloudy water is very common in the winter and can last for quite a long time.

DISCOLORED OR FOUL TASTING WATER

If the water looks or smells bad, do not drink, cook, clean or bathe with it. Contact the Department of Public Service and Engineering, Utility Billing Division at 614-342-4440, Monday through Friday, 8:00am – 5:00pm.After 5:00pm and on weekends and holidays, call 614-342-4240. The Utility Billing Division will dispatch a utility crew to investigate the situation and assess the issue.

FLUORIDATION

Fluoride is added to drinking water as required by the State of Ohio since the early 1970's. It is added during the water treatment process in accordance with the American Dental Association's findings and recommendations regarding significant cavity reduction in the population.

MUSTY TASTE AND ODOR

Occasionally the water may have an earthy, musty or fishy taste and odor. These seasonal phenomena can be caused by the bi-annual turnover of reservoirs, or with the presence of varied algal blooms in reservoirs or rivers. It is important to note this taste and odor poses no health concern. Advanced treatment techniques involving powder activated carbon and remote real-time sensors are used to help mitigate this problem.

Source: City of Columbus Department of Public Utilities, www.columbus.gov/publicutilities

PINK OR DARK STAINS IN THE TOILET OR ON FIXTURES
Airborne organisms are usually the cause of pink or dark stains in a toilet or on plumbing fixtures. You will see grey, black or sometimes pink film on surfaces that are regularly moist, including toilet bowls, showerheads, sink drains, dishwashers and shower tiles. These organisms are controlled with normal drinking water disinfectants; therefore, they are not found in the water but can come from dust or dirt that is airborne. Regular cleaning and ventilation should reduce these nuisance organisms.

RUSTY WATER
It is important to note that when rusty water is experienced it is normally not a health concern but one of aesthetic quality. Rusty-brown, orange or light yellow water can be caused by a variety of reasons including: water main breaks, firefighting operations, hydrant flushing or broken hydrants, construction work or damage, system depressurizations and corroding iron pipes. Normally rusty water events dissipate in 4-6 hours but could last longer depending on water usage in the area. If the event lasts more than 24 hours, please call the Utility Billing Division at 614-342-4440.

During such an event, it is of little to no value for you to run your water until it turns clear. This is wasteful and costly to you as a consumer. During such events, use of hot water should be kept to a minimum, as it will draw cold rusty water into your hot water tank. If your hot water tank does have rust in it, use caution and please follow the manufacturer's directions for shutting down, draining and re-starting your hot water tank.

Clothing washed in rusty water can become stained. Should this occur, it is important not to dry the clothing. Instead, leave the wet clothing in the washer and apply an iron removal product as soon as possible to prevent the iron stain from setting and follow the manufacturer's instructions.

SULFUROUS (ROTTEN EGG) TASTE AND ODOR
The most likely cause of a sulfurous or rotten egg like odor is from either the water trap below the sink (the 'P-trap') or from within the faucet itself. As organic material settles in the water trap beneath the sink, a sulfurous or rotten egg smell is often mistakenly perceived as coming from the water. The best way to test this theory is by filling a glass of water at the sink and then smelling it in a different room away from the sink. If the smell disappears, then the problem is most likely in the sink itself. Pouring a ¼ cup of bleach down the drain and allowing it to sit overnight should help relieve the problem. Cleaning the aerator is also recommended. It is important to note that this odor is typically not a health concern, but one of aesthetic quality.

WATER HARDNESS
Hardness is a measure of the presence of the minerals calcium and magnesium in water. As water moves through or over the earth, it picks up these minerals and causes the water to become "hard." The usage of the word "hard" in this case refers to the difficulty with which the water produces soapsuds, with successively harder water requiring more and more soap. Water is typically softened to a moderately hard level which is optimal for corrosion control. Very soft water can be corrosive to home plumbing.

WHITE PARTICLES
White or grayish particles in your water can often be attributed to two different sources, both of which pertain to the condition of the hot water tank. There is no health risk associated with either situation. The characteristics of the particles will help determine the source. If you have white, gray or dark gray particles that give off bubbles when submerged in white vinegar, you most likely have calcium carbonate particles. These particles are often formed from the hardness of the water when it is heated over 140 degrees Fahrenheit (60 degrees Celsius) in your hot water tank. To help prevent it, you should turn the temperature down on the tank. If your hot water tank has calcium carbonate deposited in it, use caution and follow the manufacturer's directions for shutting down, draining and re-starting your hot water tank.

If you have white particles that reduce water flow by clogging the aerators on your faucets, and that do not give off bubbles when submerged in white vinegar, you most likely have a disintegrating dip-tube. These particles are formed when the plastic dip-tube from the hot water heater degrades and disintegrates in the tank. Please consult with your tank's manufacturer. You will need to have the dip-tube replaced either by the manufacturer, or a qualified technician.

Source: City of Columbus Department of Public Utilities, www.columbus.gov/publicutilities

BACKYARD CONSERVATION

Impervious surfaces are areas that impede the infiltration of water into the soil (rooftops, driveways, parking lots, roads, severely compacted soil, etc). When it rains, water flows over impervious surfaces and is directed to a waterway or into a stormwater drain/inlet. As the water travels, it picks up debris, dirt, pesticides, excess nutrients from fertilizers, litter, pet waste, fluids from leaking cars and other pollutants. Stormwater drains are connected to a series of underground pipes that lead to streams or rivers. These systems are not designed to capture debris or treat the water as in a sanitary system that leads to a wastewater treatment plant. Thus once the runoff enters the stormwater system, it travels unfiltered and untreated directly to local waterways. This pollutant load is harmful to the aquatic environment and degrades the stream's water quality. In addition, the sudden surge and velocity of runoff during a storm event causes stream erosion, floodplain degradation and possible flooding.

RAIN GARDENS

Another alternative approach to stormwater management is a rain garden. A rain garden is a shallow depression located near a source of runoff that is planted with deep-rooted native vegetation. Native plants slow the flow of stormwater from impervious surfaces and allow the runoff to slowly infiltrate the ground. Rain gardens are designed to withstand high concentrations of nutrients, specifically nitrogen and phosphorous, that are common in stormwater runoff. Prime locations for rain gardens are near downspouts, driveways, sump pump outlets or in the path of stormwater flow through a yard.

Gahanna residents are eligible to participate in Franklin Soil and Water Conservation District's rain garden cost-share program. Reimbursement up to $250 for plants, mulch or compost used in in the rain garden will be provided after an on-site visit from a FSWCD representative to verify that the rain garden has been completed. A limited number of grants are typically available each year. Contact FSWCD at 614-486-9613 to see if funds are available and to review an application for Gahanna.

GREENSPOT BACKYARD CONSERVATION PROGRAM

The GreenSpot Community Backyard Conservation Program promotes rainwater harvesting and infiltration through the use of rain barrels and rain gardens, while introducing residents to backyard conservation practices (including composting, using native plants and trees in landscapes and maintaining lawns responsibly). Keeping rain where it falls and using it as a resource keeps watersheds healthy and safe. This program is available to City of Columbus residents, participating municipalities (such as Gahanna) and Franklin County residents who register to be a City of Columbus GreenSpot member.

The GreenSpot Program offers rebates to eligible residents for the purchase of a rain barrel, compost bin or native plants and trees after they participate in an in-person workshop or an online course and quiz. The rebate program re-starts each year. Therefore, residents that participated and received a rebate the previous year can participate again in the current year to receive another rebate. The low-cost rain barrel that is available to Gahanna residents through the program is an attractive, terracotta colored barrel with a lid that can be reversed to hold summer flowers. The barrel has a diverter that installs easily in a downspout and eliminates overflow problems.

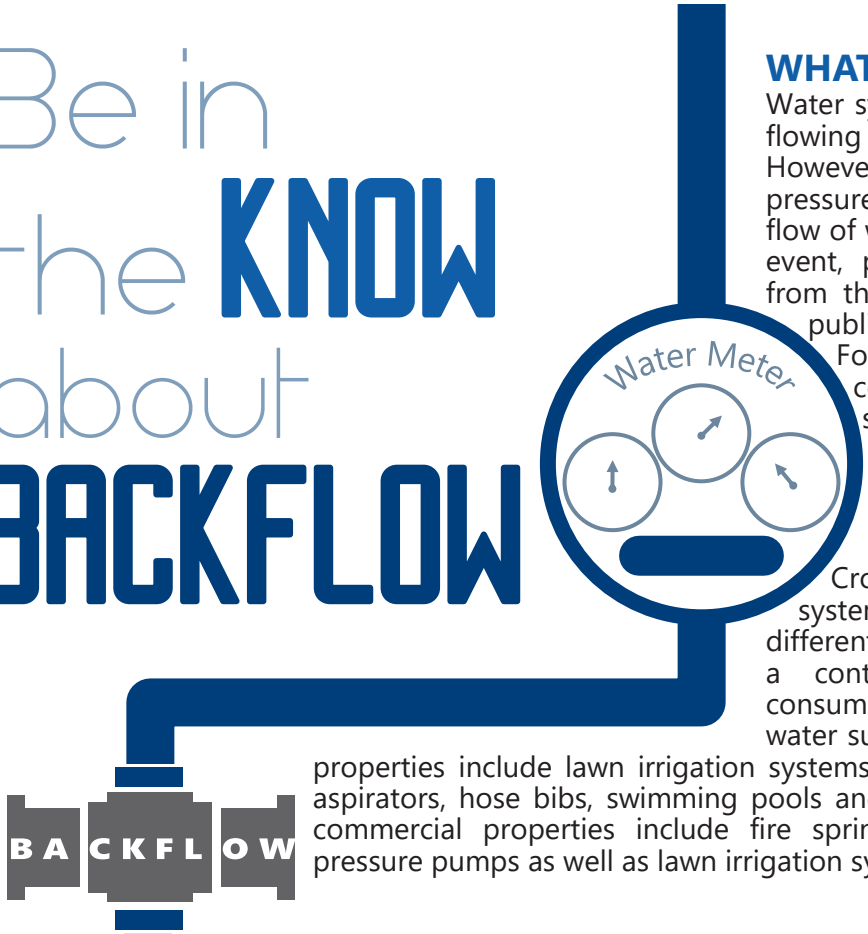
HOW YOU CAN HELP PROTECT OUR WATERWAYS

The following are guidelines for preventing stormwater pollution:

- Compost or mulch yard waste. Don't leave it in the street or sweep into storm drains or streams.
- Use lawn care products (ie: fertilizer, herbicides, and pesticides) sparingly.
- Plant trees and vegetation. The root system stabilized the ground and thus slowing runoff and erosion.
- Properly dispose of household hazardous waste (ie: paints, pesticides, etc), yard waste, pet waste and kitchen grease.
- Never dump anything into storm drains and sewers (it is illegal).
- Keep drainage ditch and swales free of debris, litter and obstructions.
- Wash cars at a commercial wash or over areas of gravel or grass.
- Sweep debris from sidewalks and driveways rather than washing debris away.
- Report hazardous spills, illegal dumping, blockages, and unusual odors.

For more tips on preventing stormwater pollution go to Project Clean Rivers.

Be in the KNOW about BACKFLOW



WHAT IS BACKFLOW?

Water systems depend on water pressure to keep water flowing in the proper direction through the pipes. However, a sudden or unexpected change in water pressure can cause an undesirable reversal in the normal flow of water. This is called backflow. During a backflow event, potentially non-potable water flows backwards from the consumer's water system and returns to the public water supply, creating a possible health risk. For example, soapy water or other cleaning compounds can backflow through a hose submerged in a laundry basin.

WHAT IS A CROSS CONNECTION?

Cross connections are locations within the piping system where possible backflow can occur if a pressure differential exists. It is a point in the water system where a contaminant or non-potable water from the consumer's water system can potentially enter the public water supply. Common cross connections for residential properties include lawn irrigation systems, garden hose connections to chemical solution aspirators, hose bibs, swimming pools and private wells. Common cross connections for commercial properties include fire sprinklers, boilers, chillers, chemical mixing tanks, pressure pumps as well as lawn irrigation systems.

WHAT IS A BACKFLOW PREVENTION DEVICE?

A backflow prevention device is a mechanical assembly installed in the water line to prevent backflow from occurring at cross connections. It ensures that a one-way system of flow is maintained and thus protects the public water supply. Backflow prevention devices are installed between the consumer's water meter and the first branch line in their private plumbing.

DOs

- Keep the end of hoses off the ground and clear of all possible contaminants
- Install hose bib vacuum breakers on all spigots (both indoor and outdoor)
- Hire a licensed plumber or contractor to install an approved backflow device on an underground lawn irrigation system
- Have each backflow device tested annually by a certified backflow tester
- Make sure toilets have anti-siphon ballcock assemblies
- Have your plumbing system surveyed for cross connections
- Contact the City if you see any suspicious or unauthorized use of a fire hydrant

DON'Ts

- Submerge hoses in buckets, sinks, tubs, swimming pools, ponds or standing water
- Use spray attachments (such as chemical solution aspirators to fertilize lawn and shrubs) without a backflow prevention device such as a hose bib vacuum breaker
- Create a cross connection between an auxiliary water system (well, cistern, body of water, etc) and your water system
- Use a hose to unplug blocked toilets or sewer pipes

LICENSE TO OPERATE (LTO)

In 2019, the City of Gahanna had an unconditioned license to operate its water system.

PUBLIC PARTICIPATION

Public participation and comment are encouraged for customers that would like to get involved in decisions concerning their drinking water. While the City does not hold regular meetings, customers may participate by contacting the City of Gahanna Water Resources Engineer, Jeff Feltz, at 614-342-4005.

CONTACT

For more information on your drinking water or if you have questions regarding any of the information contained in this report, contact the City of Gahanna Water Resources Engineer, Jeff Feltz, at 614-342-4005. You may also visit the Department of Public Service and Engineering located at City Hall, 200 S Hamilton Rd, Gahanna, OH 43230.

This report can also be found on the City's website at: www.gahanna.gov/ccr-2019

Gahanna

Public Service & Engineering