

Public Works

WATER

The major improvement project at the Water Treatment Plant was delayed by the pandemic, but the new treatment basin, bulk water station, and disinfection system were brought on late in the year. The addition of fluoride to the drinking water and the improved security and computer systems are now expected to be complete before the end of February 2021.

The four-inch water main that was changed to a six-inch water main on Grant Street is almost complete and will be brought online in January. The project is using a federally-funded grant facilitated by the CDBG. Four-inch lines do not provide adequate flow for customers or firefighting. Similarly-sized, 100-plus-year-old lines remain in service on portions of more than 30 streets in town. Undersized lines are scheduled to be replaced on portions of Rombach Avenue and Mulberry Street in 2021. The Public Works Department is developing a systematic plan to replace remaining four-inch water mains in the coming years.

Ohio EPA endorsed the City's newly-developed Source Water Protection Plan, which lists ways to prevent pollution of the City's drinking water sources – Caesar Creek Lake and Cowan Creek. The endorsement will make the City eligible for funding of projects to protect water quality.

The interior re-coating of the City of Wilmington's water tower located at the Clinton County Fairgrounds occurred in the spring. The work was part of a six-year plan that runs through 2023 to rehabilitate both the interior and exterior of the city's four water towers. A properly maintained water tower both preserves water quality and protects the investment the City and its residents have made in the water system. With regular maintenance, a water tower can remain in operation for 100 years or longer.

In September, the Water Department learned that very low levels of per and polyfluoroalkyl substances chemicals (PFAS) can be found in our Cowan Creek source water. These chemical compounds have been used in many consumer products, but where water is contaminated it is often caused by firefighting foams used at military installations, airports and fire training facilities. Even though the levels were well below Ohio EPA criteria for concern, water plant personnel immediately made adjustments in treatment to reduce the levels in the drinking water and is committed to further reducing them below detectable levels.

The new treatment basin at the water plant was designed for algal toxin removal but is also useful in PFAS removal -- though much higher chemical addition will be necessary. The City has hired a group of law firms with expertise in this area to recoup the additional treatment costs from chemical manufacturers.

The State of Ohio joined the City's battle with the U.S. Army Corps of Engineers over improper charges related to the City's use of water from Caesar Creek Lake. The Attorney General's Office filed a lawsuit against the Corps seeking to stop charges for things like birdseed, bathroom fixtures, heating and cooling equipment at the visitor's center, travel expenses, cedar chip bedding for duck boxes, nature trails, parking lots, pedestrian bridges, aquarium and a Bobber the Water Safety Dog costume. The Corps continues to charge the City for these types of items, along with large, unwarranted labor costs, even though they have no connection to supplying water to the City.



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UTILITY BILLING

After the firm hired to modernize the water meter and utility billing operation defaulted on its contract, City personnel took up the task. The automated meter reading system is working as designed and only a few hundred meters have yet to be replaced. Concurrently, new software is being implemented to allow customers to monitor their water usage and more easily pay bills online.

Ohio EPA congratulated the City for its intensified administration of a Back-flow Prevention Program. The program ensures the proper devices are in place to prevent potentially contaminated water from flowing backward from the plumbing inside a building back into the City water main. This program helps preserve the health and safety of all residents.

WASTEWATER

A master plan for Wastewater Department was endorsed by City Council in August. The backbone of the plan is the construction of a new treatment plant to replace the existing one, originally built in 1937 and last updated in 1988. The new plant will be located on the former Textron property, directly across Nelson Avenue from the current plant. To save money, portions of the existing plant will continue to be used for sludge handling and storage.

The new plant will be designed to treat an average of 50 percent more wastewater than the current plant. It will also be better equipped to handle high-flow episodes and can be expanded relatively easily. The Public Works Department is in negotiations with a team of engineers to begin the design process.

A collaborative process called Design-Build will be used where an engineer and construction firm will work together to design and construct the plant. This process should avoid conflicts and result in the plant being in operation sooner, hopefully by 2024.

An expedited completion plan for the new treatment plant is important because the current plant is reaching/nearing end of life. The plant staff is continually repairing and reconfiguring plant components. Because of their efforts, the aging plant is still able to meet current regulations. Another reason for a new plant is the EPA will be implementing more stringent limits that the existing plant would struggle to meet.

In an effort to assist with coronavirus data gathering, the Wastewater Department became part of a statewide program administered by the Ohio Department of Health and Ohio State University to monitor the sewage entering the treatment plant for coronavirus. In operation since October, the testing looks for genes of the coronavirus in the wastewater. The results were meant to give the local Health Department an early warning of the disease's spread in Wilmington and tracked the surge experienced in the area late in the year.



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Early in 2020, a new street sweeper was purchased, replacing a 30-year-old machine that barely worked. The new unit allows personnel to more efficiently keep the streets looking better and reduce the volume of debris entering and disrupting the storm sewer system.

STORMWATER

City Council approved the formation of a Stormwater Utility in September. Removing stormwater management operations from the Wastewater Department has been under study for many years and follows the lead of more than 100 other municipalities across Ohio.

The Stormwater Utility will begin collecting fees from residents and businesses in July 2021. The fee will be on the same utility bill as the other city services, and will be calculated on the amount of impervious surface; like buildings, asphalt, and concrete -- the property contains.

An average residential property will be charged approximately \$6.00 a month. An online database is being developed so residents and businesses can soon learn exactly how much their property will be charged.

An incredible amount of stormwater is entering the sanitary sewer system. If the problem is not addressed a much larger, more expensive wastewater treatment plant would be needed and a vast array of tunnels would have to be constructed throughout town.

The stormwater fee will be used to support both the sanitary sewer and stormwater piping systems, identify improper connections to the sanitary system and complete other EPA-mandated activities. The stormwater efforts, in combination with the new wastewater plant, will position the City for industrial and residential growth. Removing the rainwater from the sanitary sewer piping system has the effect of increasing the capacity of that system.

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