PROJECT BULLETIN

SIMPLE STEPS: BIG BENEFITS FOR THE MOHAWK RIVER

FALL 2020

Project Spotlight: Major Flood Repair Progress

Ripple Effect™

PERATION



Sauquoit Creek as it nears the bridge on Clinton Street in New York Mills. [DAVE DUDAJEK / OBSERVER-DISPATCH]

On October 31, 2019, an intense rainfall event caused widespread flash flooding throughout the Mohawk Valley damaging numerous roads and structures, as well as necessitating water rescues.

The flood event was particularly intense at the Oneida County Water Pollution Control Plant (WPCP), the Sauquoit Creek drainage basin and Sauquoit Creek Pumping Station (SCPS). During the flood, the WPCP recorded 3.75 inches of rain with a peak intensity of over 3 inches per hour.



The lower two levels of the WPCP's Sanitary Influent Building were flooded after an inflatable plug gave way due to the storm. Major equipment impacted included submersible pumps, manually operated slide gates, an overhead crane motor, magnetic flowmeters, HVAC ductwork, lighting and electrical conduits. The Sanitary Influent Building was not active at the time of the flood.

The flood event was intense within the Sauquoit Creek drainage basin, leading to extensive flooding along the creek. Damage included stream bank failures that resulted in pipe exposures within the creek, and in some cases causing debris and creek water to enter the sewer. Nine interceptor sewer locations were damaged as a result of the storm.

At the SCPS, flooding of the sewer system carried gravel, rocks and debris through the interceptor sewers into the screening building. Debris became lodged in the screening/ wash-press equipment or settled in the influent channel, which resulted in significant labor to clean and repair. The SCPS flooded upward of 12 to 14 feet of water on the drywell side, damaging pump instrumentation mounted at the pumps, as well as heating and electrical equipment. The SCPS has been able to operate throughout the repairs.

Consumer Education Makes Positive Impact on Proper Disposal of So-Called 'Flushable' Wipes

The nation's perceived scarcity of toilet paper saw a marked increase in the use of so-called 'flushable' wipes, causing major system maintenance problems.



At the Oneida County

Water Pollution Control Plant, this resulted in the need for almost daily cleaning of filter screens that capture these types of materials. Thanks to a positive response from our community to the Operation Ripple Effect education campaign, the amount of filter screen cleaning needed has returned to nearnormal levels.

Consumers should remain alert on how they dispose of similar types of household trash. Like 'flushable' wipes, improperly disposed materials can clog pipes and damage critical wastewater infrastructure.

Other materials that should be disposed of properly in the trash include:

- Diapers
- Baby wipes
- Disinfectant wipes
- Personal hygiene products
- Any paper products other than toilet paper (e.g., paper towels, facial tissue, paper napkins)

For more information on best practices and household impacts on the sewer system, visit **RippleEffectOCSD.org**



Repair Progress





Water Pollution Control Plant Influent Building

- The on-site engineering team worked with the contractors, equipment suppliers, and the county to ensure all damage was corrected prior to official start-up and commissioning activities.
- The pumps did not require major rehabilitation as they are designed to operate under submerged conditions.
- A new sluice gate was installed at the 42-inch diameter opening, thereby eliminating the need for the temporary inflatable plug and providing a more permanent means of preventing flooding into the Influent Building.
- The identified corrective actions and repairs are now complete. Startup of the four pumps and all three screens is complete. Additionally, the Combined Influent Building bypass is complete and the Combined Influent Building is online.

Sauquoit Creek Drainage Basin

- Out of the nine interceptor sewer locations damaged, the three most critical have been repaired (Griffiths Place and Mill Street in the Town of Paris and Oneida Street in Chadwicks/ Town of New Hartford).
- The remaining six locations are in various stages of design and permitting with the total cost of repairs to the interceptor sewers estimated to cost between \$750,000 and \$1 million. Oneida County continues to coordinate with the FEMA disaster recovery assistance program to offset the cost.

Sauquoit Creek Pump Station

- Damaged by significant flooding, the pumping station has continued to operate while the county replaced parts or submitted them to FEMA disaster recovery assistance program for reimbursement.
- The County continues to explore options for further flood mitigation of pumping station equipment and the facility itself in coordination with the FEMA disaster recovery assistance program. Repairs to the Pumping Station (buildings and site) are estimated to cost between \$700,000 and \$1 million.

Our Mission

Normally, our sanitary sewer system has enough capacity to operate properly. But when we get heavy rains or sudden snow melts, stormwater overwhelms the system and causes overflows into the Mohawk River. That stormwater runoff enters the sanitary sewer system from multiple sources, including deteriorated and damaged public sanitary sewers and private property connections, such as roof leaders and sump pumps.



Anthony J. Picente Jr., County Executive Steven P. Devan, P.E., Commissioner Department of Water Quality Control and Water Pollution Contact **info@paigegroup.com** to schedule a briefing. For more news and reports, visit <u>www.RippleEffectOCSD.org</u>. *An Initiative of the Oneida County Sewer District*

Operation Ripple Effect is a program of the Oneida County Sewer District that asks residents, businesses, and municipalities to do their part to reduce overflows. Together, we can help keep the Mohawk River clean.