



# OPERATION Ripple Effect™

## SIMPLE STEPS: BIG BENEFITS FOR THE MOHAWK RIVER

### PROJECT BULLETIN

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: deteriorated and damaged public sanitary sewers; and private property connections, such as roof leaders and sump pumps.

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.

## MAKING PROGRESS:

### WATER POLLUTION CONTROL PLANT UPGRADES TO BENEFIT TOWNS, VILLAGES AND CITY OF UTICA

The Water Pollution Control Plant (WPCP) is nearly 45 years old. Despite regular, ongoing maintenance, the facility is in need of major upgrades to continue the safe and efficient treatment of wastewater, as well as meet federal and state mandates.

Significant progress has been made to advance these critical designs, and construction of the major upgrades is expected to begin in the first quarter of 2016. Once complete, the county will benefit from a Water Resource Recovery Facility that will perform at the level needed to meet needs well into the future. This will include increased capacity for expansion and growth, as well as the treatment of the city of Utica's combined sewage-overflows, helping the city meet its Long-Term Control Plan goals.

Newly-enacted state and federal regulations will require incinerator upgrades to begin this fall. Other upgrades will replace facilities and equipment that have exceeded their useful life.

#### Aging Infrastructure Repair Designs

These designs include upgrades to critical treatment systems that have deteriorated beyond repair due to age.

This new technology is driven by long-term reliability and is integral to mandated upgrades. Designs include:

- Existing check valve HPU
- Major electrical system upgrades
- Physical condition upgrades: HVAC, electrical, structural, roofing, doors, windows, architectural improvements
- Treatment process improvements
  - Upgrades to the existing raw waste pump station: pumps, controls, screens, gates, valves
  - Grit removal system replacement
  - Secondary treatment upgrades: Aeration and final settling tank improvements



Deteriorated concrete at the final settling tanks.



Corrosion at the raw waste pump station.

#### Biosolids Handling/Incinerator Upgrades Designs

New incinerator upgrades will address immediate EPA regulations and compliance concerns. In addition, future plans for the implementation of anaerobic technology will combat the extensive long-term capital and operating costs associated with continued incineration. There is also an additional benefit, which includes the potential to accept outside waste sources as a means of revenue generation.

#### Split Flow Designs for WPCP

Split flow designs allow for two wastewater treatment paths, depending on the volume of water that needs to be treated. During normal conditions, all wastewater will travel along the same route for treatment. During times of heavy rainfall or snow melt, flows from the city of Utica's combined sewers will be diverted along another route, enabling increased capacity for sanitary sewer treatment. Designs include:

- New sanitary pump station
  - Dedicated sanitary flow
- New grit facilities
- New rectangular primary settling tanks
- High-rate disinfection system



## LET'S TALK ABOUT IT

Do you have an opportunity to display Operation Ripple Effect materials at an upcoming event? Want to sponsor an informational presentation? Contact the public information team via Cat Manion at [cmanion@paigegroup.com](mailto:cmanion@paigegroup.com).



Contact [cmanion@paigegroup.com](mailto:cmanion@paigegroup.com) to schedule a briefing. For more news and reports, visit [www.sewerrehabocsd.org](http://www.sewerrehabocsd.org).  
An Initiative of the Oneida County Sewer District

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