

**TE-04**  
**Investigate Non-CSO Bacteria Sources along Mill Creek,  
 Poesten Kill, & Wynants Kill**  
**Rensselaer and Troy, NY**

**Project Description:**

Inspect condition of sewers running parallel and crossing the Poesten Kill, Wynantskill, Mill and Mill Creek to identify repairs that could reduce infiltration and exfiltration.

**Purpose:**

Potential repairs will reduce infiltration to the CSS, thereby reducing the frequency and volume of CSOs during wet-weather conditions. The project will also reduce exfiltration and associated risks of bacterial contamination during dry-weather conditions.

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Consent Order Milestones	Date Milestone Met
Task Start Date: 4/1/16	11/16/2015
Task Completion Date: 12/15/17	12/15/17

SPDES Permit #	NY-009 9309, NY-002 6026
LTCP Projected Project Cost (Millions)	\$.15
Total Construction Cost (minus in-kind)	\$8,242
Owned By	N/A
Affected Waterbodies	Mill Creek, Poesten Kill, Wynants Kill, & Hudson River
Grant Funding or other sources	None
Annual Volume Captured (Mgal)	N/A
Annual Percent CSO Reduction (%) (Pool-Wide)	N/A

## **Project Status:**

**4/1/16:** In November, 2015, the Rensselaer Land Trust applied for grant funding for a water quality sampling program. The proposed sampling program will help the communities identify sources of bacteria in these Hudson River tributaries. The application was supported by the Pool. The communities are optimistic that, if funded, this sampling program will provide data to help the communities identify sources and causes of bacteria in the tributaries, provide new sources for lab support, and raise awareness of potential programs to improve water quality in these tributaries.

**7/14/16:** The Rensselaer Land Trust application to the EPA Small Waters program was not funded, but the RLT is applying to this year's Estuary program. In the meantime, the City is to start some in house sampling in August for bacteria and Coliform to get a baseline where the streams enter the city and just before they terminate at the Hudson.

**3/1/17:** The Rensselaer Land Trust held a kick-off meeting on Monday, January 23rd. In attendance were representatives of the City of Troy, City of Rensselaer, USGS, DEC, Riverkeeper, the Watered Alliance, and CDRPC. The sampling program project will recruit and train citizen scientists to collect water samples from 18 sites along 5 tributaries of the Hudson River for enterococcus levels. The 18 sample sites were selected for one of more of the following reasons: within EJ area, within MS4 area, previously sampled as part of Albany Pool, or previously sampled as part of Priority Waterbody List. Data will be analyzed by qualified labs and an assessment will be communicated to the general public, municipal decision makers and other stakeholders. Report cards will be prepared for each site. Other outputs include creation of a baseline of water quality and fact sheets. Expected outcomes will be an increased level of awareness and knowledge of community residents and others about water quality conditions that can lead to a reduction of pollutants and improvement in water quality by introducing measures to reduce contamination sources. The sampling data will help inform the city of Troy as to sources and locations of bacterial contamination.

**7/13/17:** The Rensselaer Land Trust has completed several rounds of bacteria and emerging compound sampling program. A preliminary report was distributed to project stakeholders and the city of Troy. This data will help support findings from sewer inspections, help determine potential sources of bacterial contamination. The City of Troy purchased a camera truck which will be utilized to inspect the conditions of sewers running parallel and crossing the Poesten Kill, Wynantskill, Mill and Mill Creek to identify repairs that could reduce infiltration and exfiltration. Staff is currently being trained on using this new equipment and inspections will be scheduled.

**9/15/17:** The Rensselaer Land Trust continues to sample for bacteria in these tributaries. This data is helping the City identify potential sources of bacteria. The City will be scheduling inspections with the new camera truck and its operators. **(continued next page)**

**1/11/18:** In accordance with their Asset Management and Inspection Plans, the City of Troy and City of Rensselaer strategically deployed resources to visually inspect sections of sanitary and combined sewer pipes running directly adjacent to, and across to three tributaries. The pipes were inspected for cracks, debris, structural defects, root intrusion and other issues likely to contribute to problems such as exfiltration, infiltration or structural failure. The report enclosed summarizes the findings of the inspections. The two cities strategically identified and inspected sections of their sewer system that they deemed were could be likely sources of bacterial contamination in these three tributaries. Some sections were deemed too far from the tributaries to be likely causes of contamination. Other sections were characterized as being in good condition because of recent installation or repairs. Complimentary to the investigations, the Rensselaer Land Trust, together with the USGS, kicked off a tributary sampling program in January of. The team collected water samples from 18 sites along 5 tributaries of the Hudson River. The samples were analyzed for enterococcus and Emerging contaminants. The bacteria data was also included with the inspection report submitted to the Department on 12/15/17. The Emerging Compound Data is pending. During the inspections, the cities did discover areas that need repair or replacement. These areas have been identified in the report.

**3/1/18:** The communities have received the NYSDEC Comment Letter, dated January 19, 2018. They are working to provide supplemental data for the report along with a prioritization and repair schedule for sections of sewer lines identified in the report.

**9/10/18:** On March 20<sup>th</sup> the City of Rensselaer and City of Troy submitted to the Department a response letter to their January 19<sup>th</sup> comments. The report addressed the Department questions and pledged the commitment of the communities to incorporate certain system repairs into each City's Asset Management Plan. The report dated December 15, 2017 summarizing the investigation, including the March 20, 2018 response to the Department's comments dated January 19, 2018, has been approved.

**This project is complete.**