



**Environmental  
Protection**

*Emily Lloyd  
Commissioner*

**Paul V. Rush, P.E.**  
Deputy Commissioner  
Bureau of Water Supply  
prush@dep.nyc.gov

465 Columbus Avenue  
Valhalla, NY 10595  
T: (914) 742-2001  
F: (914) 742-2027

November 13, 2015

Pamela Young, Ph.D.  
New York State Department of Health  
Bureau of Public Water Supply Protection  
Empire State Plaza – Corning Tower 11<sup>th</sup> Floor  
Albany, NY 12237

Phil Sweeney  
United States Environmental Protection Agency - Region II  
290 Broadway - 24<sup>th</sup> Floor  
New York, NY 10007-1866

Dear Dr. Young and Mr. Sweeney:

Enclosed is the DEP Response to the NYSDOH/USEPA Comments on Revised 2007 FAD Deliverables submitted through June 2015.

As always, if you have any questions about these comment responses or other aspects of the City's watershed protection efforts, please do not hesitate to contact me.

Sincerely,

*Kimberly Kane*

David S. Warne  
Assistant Commissioner

*for DSW*

**DEP Response to NYSDOH/EPA Comments on the FAD Deliverable Reports  
Submitted June 30, 2015  
Response Date November 13, 2015**

**3.3 Community Wastewater Management Program**

The Revised 2007 FAD required the study phase for Shandaken and West Conesville to be completed by June 30, 2015. Agreements between the participating communities and the Catskill Watershed Corporation have been signed, though the timeframe for completion is now anticipated to be December 31, 2015.

**DEP Response:**

**Comment noted.**

**4.9 East of Hudson Non-point Source Pollution Control Program**

The Revised 2007 FAD required the West Branch/Boyd Corners Septic Repair Program to commence implementation by June 30, 2015. NYSDOH/USEPA acknowledge that the due date for this activity has been met.

The Revised 2007 FAD required DEP by June 30, 2015 to submit to NYSDOH/USEPA and NYSDEC a proposal to expand the Septic Repair Program (SRP) to the Croton Falls and Cross River Reservoir basins. The document submitted by DEP on June 29, 2015 suggests that existing programs and other mitigating conditions obviate the need to expand the East-of-Hudson SRP to these basins. DEP proposes instead to continue to monitor septic system failures and water quality to assess potential issues with septic system failures as they may occur. This proposal fails to satisfy the FAD requirement. By September 30, 2015, please submit a proposal to expand the Septic Repair Program to the Croton Falls and Cross River Reservoir basins. In keeping with DEP's other septic system repair and rehabilitation programs, this expansion should help ensure that failing septic systems are repaired or replaced in a timely manner so that risks to water quality from these potential sources of human pathogens are minimized.

**DEP Response:**

**DEP has reviewed NYSDOH/USEPA's comments. Based on conversations, the date for submission of a revised proposal was extended to November 13, 2015. Attached is DEP's revised proposal.**

***NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF WATER SUPPLY***

**Septic System Rehabilitation Reimbursement Program  
for the Croton Falls and Cross River Reservoir Basins**

November 2015

*Prepared in accordance with Section 4.9 of the NYSDOH  
Revised 2007 Filtration Avoidance Determination*



Prepared by: DEP, Bureau of Water Supply

## **Summary**

The New York City Department of Environmental Protection (“DEP”) has established programs for the Croton Falls and Cross River Reservoir Watersheds that provide a variety of water quality protection measures. In accordance with Section 4.9 of the NYSDOH Revised 2007 Filtration Avoidance Determination (“FAD”), DEP is expanding these programs to include a septic rehabilitation reimbursement program. The Croton Falls and Cross River Septic System Rehabilitation Reimbursement Program (“Program”) will be based on similar successful programs located East of Hudson and will supplement the existing septic programs already in place.

## **Croton Falls and Cross River Basin Description**

### Croton Falls

Croton Falls Reservoir is located in Putnam County in the towns of Carmel and Southeast. The reservoir has a drainage basin of 16 square miles. The reservoir is split into three portions by Putnam County Routes 35 and 38, which cross it with causeways and bridges. The reservoir is part of the Croton Water Supply system and typically discharges to the Muscoot Watershed. The outlet works for the Croton Falls Dam is equipped with a pumping station to permit pumping of water from the reservoir into the Delaware Aqueduct downstream of Croton Falls Dam.

### Cross River

Cross River Reservoir is located in northern Westchester County situated within the towns of Bedford, Lewisboro, and Pound Ridge. The reservoir has a drainage basin of 30 square miles. The reservoir is part of the Croton Water Supply system and typically discharges to the Muscoot Watershed. The Cross River Dam includes a pump station which can pump water into the Delaware Aqueduct.

## **Existing Septic Repair Programs within Croton Falls and Cross River Basins**

Starting in May 2011, Towns began to implement and enforce a program for the inspection, maintenance, and rehabilitation of septic systems as part of their MS4 Permit compliance (Part IX.3.b of NYSDEC General Permit GP-0-10-002). Specifically, the municipalities within Croton Falls and Cross River “Develop[ed], implement[ed] and enforce[d] a program that ensures that on-site sanitary systems...are inspected at a minimum frequency of once every five years and, where necessary, maintained or rehabilitated.”

The septic inspection requirements in Croton Falls and Cross River were implemented through a two-step process. Local laws required that owners of septic systems pump out their septic system not less than once every five years. Then County laws (in Westchester) or local laws (in Putnam) required that haulers complete an inspection form during the septic hauling process. In the event that the hauler identifies a potential concern at the site, the County Health Department is notified and a complete inspection is done. Any septic system that does not pass inspection is rehabilitated as part of MS4 permit compliance.

As of May 2016, all septic systems in Croton Falls and Cross River will have been pumped and inspected. Repairs of failing septic systems have been occurring and will continue to occur under the existing State and local regulatory requirements. This MS4 septic inspection and repair program is an effective way for local enforcement agencies to address septic issues as they arise.

Westchester County and several communities within Westchester County are developing programs to reimburse homeowners for a portion of the cost of septic repairs under the East of Hudson Water Quality Investment Program (“WQIP”) established in Section 140 of the MOA. Rehabilitation of septic systems are a listed use of WQIP funds in the MOA. DEP has provided information and program documents from DEP’s existing septic reimbursement programs to the communities that have or are considering the establishment of septic reimbursement programs.

The Town of Bedford has established such a program. In their program, parcels with failing septic systems receive 50% of the cost of the repair. The portion of the Cross River watershed closest to the dam and intakes lies entirely within the Town of Bedford. Other communities are exploring the development of programs of their own or whether to partner with Westchester County to implement a program on a regional scale.

### **Croton Falls and Cross River System Rehabilitation Reimbursement Program**

The Croton Falls and Cross River Septic System Rehabilitation Reimbursement Program (“Program”) will be a voluntary program for eligible residential homeowners with failing septic systems. DEP will provide funding to residences that have a demonstrated financial need to reimburse a portion of the costs to rehabilitate eligible failing septic systems or connect those systems to an existing sewage collection system.

DEP will contract with the New York State Environmental Facilities Corporation (“EFC”) to implement a Program to include the eligible portions of the Croton Falls and Cross River Reservoir Watersheds that are not covered by another reimbursement program. DEP will direct EFC to notify residents of the availability of the Program through a mailing to residential properties within the priority areas. The mailing will include information about the Program as well as contact information if they have questions about the Program. DEP will directly communicate with municipal officials and the respective County Health Departments to notify them of the Program.

Homeowners whose primary residence has a failing septic system or system that is likely to fail in the near future and has a demonstrated financial need would contact EFC to receive Program participation materials. EFC would also provide available lists of licensed contractors that might perform the work needed to repair the septic system. Residents would be able to secure the contractor of their choice and be able to work with their contractor to develop a solution that satisfies the homeowner as well as the regulatory agencies.

The Program would apply to property owners that establish financial hardship limits as follow:

1. Eligibility is limited to primary residence;
2. Assessed property value of the residence is below the median assessed value of residential homes in the municipality; and

3. Annual household income of 400% or less of the poverty guidelines updated periodically in the Federal Register by the U.S. Department of Health and Human Services under the authority of 42 U.S.C. 9902(2).

Participating homeowners that meet this criteria would be able to submit documentation of their septic system repair to EFC and receive 50% cost share for the cost of the rehabilitation based on the components and amounts listed in a pre-established schedule of values. The Program rules include a provision whereby residents with *additional* financial hardship may have the homeowner’s share of the project cost reduced to 25% of the total repair cost. These homeowners would demonstrate an annual household income of 200% or less of the poverty guidelines updated periodically in the Federal Register by the U.S. Department of Health and Human Services under the authority of 42 U.S.C. 9902(2). In sum, residential properties with annual household income between 200% and 400% of the poverty guidelines would receive up to 50% reimbursement while residential properties with annual household income below 200% of the poverty guidelines would receive up to 75% reimbursement.

In order to demonstrate financial hardship, the property owner would submit, at a minimum, documentation of assessed value as noted on an annual property tax bill from the local municipality and copies of federal income tax returns for the previous two years.

### **Implementation**

The Program will be implemented based on the potential risk that a failing septic system might have on reservoir water quality. Not all septic systems in the Croton Falls and Cross River Watersheds will be covered under the Program due to minimal risk to water quality. The area covered under the Program includes systems within 200 feet of a watercourse and covers approximately one-third of all the septic systems located within Croton Falls and Cross River Watersheds.

DEP and EFC will complete the mailing to all potentially eligible residents by September 30, 2016. The estimated number of residential properties eligible to participate in the Program is found in Table 1.

**Table 1. Estimate of Residential Septic Systems in Croton Falls and Cross River Watersheds**

Distance from Watercourse (ft)	Croton Falls	Cross River
0-50	416	938
50-100	134	155
100-150	125	182
150-200	124	188

To avoid duplicative programs, eligibility is targeted to only those properties not eligible for other reimbursement programs. Residential properties with annual household income below 200% of the poverty guidelines and located in an area where there is another reimbursement programs would still be eligible to have the homeowner share reduced to 25% after participation in that other program.