



**Caswell F. Holloway**  
**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

December 30, 2010

Pamela Young, Ph.D.  
New York State Department of Health  
Bureau of Public Water Supply Protection  
Flanigan Square – 547 River Street  
Troy, NY 12180-2216

Dear Dr. Young,

I am writing to update you on the status of three Stream Management Program (SMP) FAD deliverables: the Rondout Stream Restoration Demonstration Project (due February 2011); the Neversink River Demonstration Project (due February 2012); and the five restoration projects (due by May 2012).

#### Rondout Demonstration Project

The 2007 FAD required DEP to complete the stream management plan for the Rondout Creek by February 28, 2010 and requires construction of a demonstration stream restoration project by February 28, 2011. In 2009, DEP chose the Rondout at Van Aken project as the basin's demonstration restoration project. Landowner agreements for the project proved difficult to secure and as a result, the second priority restoration project was chosen and presented to DOH, EPA and DEC in July 2010, at our semi-annual status meeting. This second project is the structurally bioengineered remediation of a failing stream bank at the Ulster County Highway Garage in the hamlet of Sundown. A live log crib wall was proposed, complemented by training for West of Hudson stream management staff and contractors in the siting, design and installation of the live crib wall. The project was to be built in fall 2010.

DEP's partner, Sullivan County Soil and Water Conservation District (SCSWCD), was unable to secure the project beyond the preliminary design stage this fall owing principally to the late start in contracting the project (resulting from shifting projects) followed by design submissions (in late August 2010) that fell short of DEP standards for the project. The project was re-assigned to a new engineering sub-contractor in November and work is proceeding now towards a January 2011 final design and a summer 2011 installation. We continue to pursue a potential project at the Van Aken site.

#### Neversink Demonstration Project

Under the 2007 FAD, DEP must secure DOH approval of restoration projects proposed for FAD compliance. DEP is seeking your approval of the Neversink Demonstration Project described below.

The SCSWCD and DEP have completed the comprehensive stream feature inventory of 33+ miles of the East and West Branches and main stem

of the Neversink River upstream of the Neversink Reservoir. On the basis of that inventory, DEP is proposing a demonstration restoration project located on the West Branch of the Neversink River in Claryville at the approach to the Sullivan County Route 157 bridge. This stream reach is part of a highly visible five-mile stretch of the Neversink River famed for its trout fishing and owned by Winton Waters, which provides fishing memberships to anglers from all over the country.

This project will improve water quality by improving both the stream sediment transport capacity and the riparian buffer. Currently, the River approaches the bridge at an oblique angle, having to turn almost 90 degrees to pass through the aperture. This results in backwatering and aggradation upstream of the bridge. A large point bar has developed on this bend, making the radius of curvature going through the bridge even tighter. The project will involve partnering with Sullivan County DPW to re-align the channel, transplant clumps of willows from the vegetated bar and construct a bankfull-stage floodplain bench at the foot of the existing rip rap embankment.

In addition to water quality benefits, the project will serve as a demonstration of the following SMP goals:

- collaboration with public works; fostering interagency cooperation among DEC, Ulster and Sullivan counties;
- introduce innovative practices not currently in use in the basin;
- potentially provide a bioengineering training site for other highway personnel within Rondout and Neversink basins

In addition, DEP is seeking to include in the project retrofit of the existing rip rap with vegetation. Approximately 700 feet of road embankment has been rip-rapped on the approach from the north, and there is no vegetated buffer between the road and stream to mitigate contaminants such as road salt and hydrocarbons. The project will seek to demonstrate the ability to retrofit rip-rap with vegetation by inter-planting the rip rap and if successful will serve as a model with potential application throughout the West of Hudson Watershed. Upon approval by Sullivan County DPW to pilot inter-planting the rip rap, the project team will oversee construction of a "Stinger," equipment that is used by bioengineers within the NRCS to drill voids in already placed rip-rap. The voids would be filled with soil, mulch and fertilizer and planted with the appropriate riparian vegetation. If successful, the Stinger would be made available throughout the West of Hudson Watershed Stream Management and CSBI programs for use in retrofitting rip-rap where possible to create riparian buffer improvements.

#### Five Stream Restoration Projects

Attached are tables which provide updates on the status of the five stream restoration projects that are to be completed by the Stream Management Program during the first five years of the 2007 FAD.

DEP has updated DOH, DEC and EPA on the status of these projects at each of its semi-annual progress meetings. The attached tables describe the projects that have been completed to date and those that have been approved by DOH, DEC and EPA for their eligibility to serve as

one of the set of five restoration projects. Table 1 describes projects completed to date and Table 2 lists the projects in process by basin. Three projects have been added to Table 2 since we last met in July 2010: Warner Creek, Esopus Creek at Brown Road, and Rondout Creek at Van Aken. You have previously reviewed and approved Warner Creek and Rondout Creek at Van Aken. The Brown Road project is new but it has been a priority of the Ashokan Watershed Stream Management Program that has elevated in importance since the October 1, 2010 flood event and is now formally presented for your approval. Our next semi-annual progress meeting in January 2011 will give us an opportunity to review these tables with you.

Please contact me if you wish to discuss any of these deliverables.

Sincerely,

A handwritten signature in black ink, appearing to read "D. S. Warne", written over a horizontal line.

David S. Warne  
Assistant Commissioner

cc: J. Graf  
E. Reichheld  
M. Vian

December 1, 2010

Table 1 presents a summary of restoration projects that have been substantially completed in meeting compliance with the Stream Management Program's 2007 FAD Requirement to ***“Design and complete construction of five stream restoration projects on a basin priority basis, no later than 5/15/12. These restoration projects and associated schedules shall be subject to review and approval by EPA, NYSDOH and NYSDEC.”***

Table 1. Projects Completed.

Basin	Project Name	Description	Completion Date
Schoharie Basin	West Kill at Long Road	A geomorphically designed full channel restoration project aimed at restoring 3,000' of a deeply incised reach of the West Kill. The project addressed a persistent source of turbidity and improved habitat suitability while providing enhanced infrastructure stability.	2009
Delaware Basin	Emergency Flood Intervention Training and Demonstration	Trained 133 contractors and highway managers in stream sensitive flood response techniques and demonstrated the protocol at 3 sites as part of training program	2009 and 2010
	East Brook at County Route 22 – Phase I and Phase II	Phase I: Stabilization of bank along county highway post 2006 flood damage and reconnection of channel to floodplain bench. Demonstration of J-hook vane structures and riparian buffer planting. Phase II: Streambank stabilization at lower end of reach in area devastated by 2006 flood. Creation of floodplain bench at toe of high eroding terrace slope to stabilize bank and prevent the introduction of woody debris from the slope.	Phase I: Construction completed September 2010. Planting completed November 2010. Phase II: Construction planned 2011.
	The Village of Walton Floodplain Restoration Project along West Brook	Phase I: The Open Space Institute (OSI) purchased a 3.5 acre parcel within the Village of Walton along West Brook where the floodplain had been filled by the previous owner. Phase II: OSI is working with the DCSWCD and the Village to remove the fill to the bankfull elevation to provide floodwater storage. The property will be transferred to the Village for future use as green space and a recreational area. The riparian buffer will be enhanced as part of the project.	Phase I: Acquisition completed in 2009. Phase II: Floodplain restoration expected in 2011.

Table 2. Additional SMP FAD Restoration Projects that are in process and may serve as one of the FAD mandated five restoration projects completed by May 2012.

Basin	Project Name	Description	Project Status
<b>Schoharie Basin</b>	Batavia Kill at Holden and DEP in Ashland	A geomorphically designed full channel restoration of ~ 3,000' of a highly unstable reach of the Batavia Kill in Ashland (Holden). Adding ~ 1,500' of stream owned by DEP, the Town of Ashland and one additional private landowner. The project is intended to address major sources of turbidity, protect infrastructure and enhance habitat complexity along a NYSDEC public fishing easement.	Construction planned for 2011.
	East Kill at Vista Ridge in Jewett	Project will restore approximately 1000' of an unstable reach of the East Kill in Jewett. The reach-level instability was caused by poorly planned infrastructure (road and bridge) and includes ~ 150' of actively eroding streambank and two frequently flooded roads - Vista Ridge (private) and Colgate Rd (County). The project would demonstrate the use of NCD, and possibly floodplain drains, to reduce flooding, provide reach level stability, reduce erosion, improve habitat, increase sediment transport and reduce risk and damage to the public and infrastructure.	Construction planned for 2011 but may push back to 2012.
<b>Ashokan Basin</b>	Stony Clove at Chichester Reach: Projects 1 – 3;	Three distinct hillslope/streambank failures on Stony Clove Creek encompassing nearly 1km of stream length. This reach is a chronic, long term source of turbidity at a range of flows.	Field and feasibility assessments ongoing. Phased construction anticipated with partial construction possible by May 2012
	Warner Creek	Approximately 6,000' of Warner Creek (tributary to Stony Clove) is currently being evaluated for remedial measures to address systemic headcuts into glacial lake silt and clay deposits, a channel avulsion that cuts into the glacial lake deposits, and at least two locations where stream contact with rotational failures in the glacial lake deposits results in chronic suspended sediment loading.	Clear Creeks Consulting Inc. is under contract to survey, assess and diagnose the area and to propose conceptual designs for restoring stability. Phased treatments are anticipated if feasible and if the sites remain a priority, potentially beginning in 2011.
<b>Rondout Basin</b>	Rondout Creek at Van Aken	This 3,000' reach is severely compromised in its sediment transport capacity, braided, contributes to suspended sediment loading, and threatens Sullivan County Route 153 (Sundown Road). The reach holds promise for demonstration of new bioengineering techniques and training opportunities in channel dimensioning and bioengineering, and entails collaboration with Sullivan County DPW.	Construction is planned for 2011. Permitting challenges may push construction to 2012.

