



July 27, 2015

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Dear Dr. Young and Mr. Sweeney:

Enclosed is the DEP Response to the NYSDOH/EPA Comments on Revised 2007 FAD Deliverables submitted through May 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,

David S. Warne
Assistant Commissioner

**DEP Response to NYSDOH/EPA Comments on the FAD Deliverable Reports
Submitted May 31, 2015
Response Date July, 27, 2015**

4.6 Stream Management Program

The Revised 2007 FAD requires that, each year, a rolling two-year Action Plan be submitted for each of the West of Hudson basins. The 2015 – 2017 plans outline the upcoming projects in the program areas (Stream Projects, CSBI, SMIP, Education/Outreach/Training, and LFHMP). NYSDOH/USEPA have the following comments:

Ashokan 2015 – 2017 Action Plan

In the Background section (page 4), the fourth paragraph should read “Filtration Avoidance *Determination*” not Declaration.

DEP Response:

**The typo has been corrected and the new version is available at:
<http://catskillstreams.org/major-streams/esopus-creek/>.**

Please clarify whether the funding amount of \$209,750 shown in the table for USGS proposal AWSMP-2011-27 (page 6) is for the entire study, or just for the Action Plan period.

DEP Response:

This amount is the current cumulative award.

Please provide more information on the Chichester Reach Hillslope Bioengineering and Channel Structure Modification (page 7).

DEP Response:

UCSWCD has retained Milone & MacBroom, Inc (MMI) to provide engineering services to design a restoration of woody vegetation to the Chichester Site 2 hill slope that was stabilized as part of the 2013 construction project. Now that the slope has reached a level of stability that will allow for successful planting, UCSWCD intends to plant hundreds of trees and shrubs suitable for the various conditions present on the slope and to provide additional bioengineering treatments to help stabilize some of the ongoing surficial slumping in the steeper slopes. Some minor modification of the constructed channels preventing surface water from infiltrating into the subsurface is required following two adjustment seasons. This work is expected to be installed in fall 2015.

MMI has prepared a design to modify the downstream in-stream structure on Chichester site 3 to lower the sill rock height to mitigate an overly large hydraulic drop. This work is expected to be constructed in late summer 2015.

Regarding the documentary film on the Ashokan Watershed fishery and its history (page 9), please provide more information on how this project encourages stream stewardship and promotes the goals of the Ashokan Watershed Stream Management Program.

DEP Response:

The AWSMP grant committee believes that the angling community are important stewards in the conservation of this valuable fresh water resource. This project, which will introduce the story of fishing in the Ashokan Watershed streams and reservoir, directly addresses two programmatic goals of the AWSMP: (1) enhancing stream access and recreation; and (2) increasing knowledge, skills and information in the community related to stream stewardship.

The grants to the Town of Olive (AWSMP-2013-69) and the Town of Shandaken Highway Department (AWSMP-2013-78) have the same listed purpose (page 13). Based on DEP's response to this comment last year, the purpose of the Town of Olive grant should read: "Engineering to determine appropriate sizing and design of a culvert replacement for the Hillside Drive crossing."

DEP Response:

Noted and text will be modified and included in the updated action plan available at: <http://catskillstreams.org/major-streams/esopus-creek/>

In Section E, Item 9 refers a report by the New York Natural Heritage Program (page 15). Please provide a reference or link to the report.

DEP Response:

The report is now available at: <http://catskillstreams.org/major-streams/esopus-creek/> and www.ashokanstreams.org website, and a reference to this will be added to the Action Plan.

The 2014-2016 action plan in Item 6 (page 17) referred to organizing a "Stream Integrity Research & Assessment science forum" with 1-2 meetings per year, or as needed. This activity is not included in the 2015-2017 action plan. Has it been dropped as an activity, or was it folded into the Stream Ecosystem Working Group?

DEP Response:

This activity was folded into the objectives of the reconvened Stream Ecosystem Working Group. The Working Group will be consulting with technical experts to update the Aquatic Ecosystem Research & Assessment Strategy in 2015 and as needed in future years.

The 2014-2016 action plan noted a pending project (AWSMP-2013-74) titled "Assessing the Impact of Groundwater and Heterogeneous Glacial Deposits on Streambank Erosion in the Stony Clove Creek Watershed" (page 18). However, it does not appear to be included in the 2015-2017 action plan. What was the outcome of that proposal?

DEP Response:

SUNY New Paltz Professors, John Rayburn and Shafiu Chowdhury supervised the work of two Geology Department students in an "independent study" project that included topographic surveying, geologic mapping and piezometer installation monitoring of two hill slope failures. The students presented their study findings in a poster at the 2014 Catskill Environmental Research and Monitoring Conference. The findings were basically that hydrostatic pressure in shallow groundwater flow

through complex stratified glacial deposits is a key factor in keeping stream toe erosion-triggered mass failures active once failure occurs.

Additional student work in summer 2015 will be summarized in a final report before 12/31/15.

Delaware 2015 – 2017 Action Plan (East and West Branch Delaware River)

The table on page 5 would benefit from the inclusion of the funding awarded for the listed SMIP grants.

DEP Response:

A table of the SMIP grants is attached.

Item 4.B.3 (page 11) discusses utilization of the gravel management protocol. NYSDOH/USEPA would be interested in receiving the most recent version of this protocol.

DEP Response:

The latest version of the protocol has been uploaded to <http://catskillstreams.org/major-streams/east-branch-delaware-river/>.

Under Item 4.D (page 12), three demonstration construction projects are listed for 2015 and 2016. Please provide a brief description for each project.

DEP Response:

1. More Stream Restoration Project, WBDR Hamden

This project consists of repairing the eroding stream banks and addressing excess sediment deposition along the West Branch Delaware River at the More property. To protect the stream banks from further erosion into agricultural fields, the proposed project will realign the stream channel to a more appropriate alignment for the valley setting. It will also resize the channel to the proper stream channel dimensions. Additional treatments include: Installation of riprap along the toe of the left and right streambank to a height of bankfull elevation (same elevation as the ordinary high water mark), installation of two hardened riffles to protect the stream from future downcutting and the old stream channel will be filled in to floodplain elevation. Stone fill mix will be placed on top of the rip rap to allow for vegetation to establish with willow live stakes planted in the rip rap joints. The floodplain will be planted with riparian vegetation along both sides of the entire length of the project at a width of 100 feet.

2. Water Street Floodplain Restoration, WBDR Walton

This proposed project is a recommendation from the Local Flood Analysis for the West Branch Delaware River main stem. The project consists of reclaiming 9 1/2 acres of floodplain along Water Street and then revegetating the floodplain with grass and riparian shrubs. The LFA report was written by a consultant, Milone and MacBroom Inc., for the Walton Flood Commission.

3. Mill Street Floodplain Restoration, EBDR Fleischmanns

This project is to complete Phase 2 of the Natural Resource Conservation Service's Emergency Watershed Protection project in Fleischmanns. Phase 1 was built in

2013. Reclaiming the floodplain along the right streambank, and the removal of Mill Street bridge, was put on hold until the property completed the flood buyout process. Phase 2 will consist of regrading a bankfull bench that is 3 foot higher than the streambed with a minimum 2% slope towards Vly Creek. The bench will be covered with topsoil and vegetated with grass and riparian shrubs. Willow stakes will be placed into the joints of the riprap. Riprap will also be placed upstream and downstream of the project to match the existing top of bank.

Item 6.K.8 (page 18) states that the DCSWCD website will be maintained with updated project statuses and education outreach information. Currently, it appears that only projects from 2007 and 2008 are described on the website.

DEP Response:

DEP currently reports the status of all on-going projects and makes final reports of projects available through Catskillstreams.org. DCSWCD is working to update its website to also provide the most current information on its activities. Until this is completed, DCSWCD will create a link to the project section on the Catskillstreams web page for visitors to their site to obtain more information about their projects.

Rondout/Neversink 2015 – 2017 Action Plan

NYSDOH appreciates the inclusion of the planning calendar, as well as the “Year 1” and “Year 2” breakout for each category of the current contract scope of work. However, the references to the Stream Management Plan (SMP) “General Recommendations” are slightly confusing. Since this action plan covers SMPs for the Rondout Creek, Chestnut Creek, East Branch Neversink River, West Branch Neversink River, and Main Branch Neversink River, it is not clear which section numbers relate to which SMPs.

DEP Response:

The Neversink, Rondout and Chestnut Creek Management Plans each contain General Recommendations that appear as the same numbered items in each of the Stream Management Plans. The general recommendations include best practices in watershed protection (e.g. Education and Outreach). They appear in the Action Plans for the benefit of the reader to illustrate the progression of these standard best practices on an annual and biennial basis. These activities are coordinated throughout the three basins simultaneously on an ongoing basis to reach each Town and their corresponding local residents. Detailed site-specific recommendations that guide intervention levels and implementation of specific stream restoration projects are available at <http://catskillstreams.org>.

Please revise the fourth paragraph on page 2 to include the numbers of: projects completed; area in acres; miles of linear buffer; and trees and shrubs installed.

DEP Response:

The Action Plan has been updated and is available at:

http://catskillstreams.org/wp-content/uploads/2013/09/RonNev_AP_2017.pdf

Last year’s action plan anticipated that the Claryville LFHMA would be completed and the Sundown flood analysis would be initiated in the “Year 2: 2015-2016” period. The current plan

(page 3) appears to push these items back again into Year 2, now 2016-2017. In addition, a research subcommittee was expected to be initiated, but that also appears to be delayed. Please clarify the anticipated time frame for these activities.

DEP Response:

Claryville’s Local Flood Analysis (LFA) is scheduled to be completed in 2015-2016. Sundown’s LFA will also be initiated during this period.

Outreach for identifying members of the Research Committee is ongoing through two annual events that engage these stakeholders, who are a combination of “next generation” landowner/decision makers managing their private lands in the basins, natural resource managers serving the region (DEP, CRISP, NYSDEC) and anglers (TU local chapters). These events are the spring Hemlock Woolly Adelgid Summit in 2014 and 2015, and the fall Angler Symposium 2015 scheduled for October 2015. The Research Committee of 10-15* will start meeting in November 2015 and convene regularly in coordination with SMIP grant schedule.

***Some members of this Committee will require attendance remotely as not all landowners are residents.**

NYSDOH/USEPA note the growth of the outreach and education components in this action plan (page 6), including the Hemlock Woolly Adelgid Summit and the Anglers Symposium, as well as Rosgen training.

DEP Response:

Comment noted.

Schoharie 2015 – 2017 Action Plan

Under Section VI (page 15), the second sentence reads: “The GCSWCD already has a number of these projects underway, and between 2011 and 2013 will continue to move forward with these projects.” Should these years be 2015 and 2017?

DEP Response:

The text should read: “The GCSWCD already has a number on these projects underway, and between 2015 and 2017 will continue to move forward with these projects.” The action plan has been edited and reposted to catskillstreams.org.

Consider changing the formatting and content of this plan to make it similar to the action plans for other basins. While the wealth of information provided in the plan is appreciated, it would be beneficial to include a summary table of projects similar to Appendix A of the Ashokan plan.

DEP Response:

DEP and GCSWCD plan to modify the future Schoharie Basin action plans and simplify the formatting and content. We will be reviewing the formats of the other basin action plans, to help guide the development of an effective action plan that is concise and conveys the essential information to support each action plan item. In previous years, we have included an Executive Summary and a summary of completed projects (similar to Appendix A of the Ashokan plan). While we have continued to update those documents, we did not submit them with our 2015-2017

Action Plan in an attempt at brevity. We will upload the Executive Summary and Action Plan – Completed Items May 2007 through May 1, 2015 to <http://catskillstreams.org/major-streams/schoharie-creek/>.

With a few exceptions, the majority of activities/projects will be conducted or installed in 2015. NYSDOH/USEPA request that the next action plan submitted also include anticipated activities for the latter portion of the two-year planning period.

DEP Response:

We recognize the limited number of projects for the latter portion of the two-year planning period. We continue to work with municipalities, organizations and community members to develop partnerships in proposing and developing potential projects within the watershed. For the current action plan, many of the project schedules are in part defined by the timing of the prime contract between DEP and the GCSWCD, which expires 12/31/15. Currently, we are transitioning to a new prime contract, which will allow for improved multi-year project planning.

Please include a definition for the “SMP Recommendation” category and the numbering system used. This will make it clear that, as discussed in the first paragraph on page 2, the activities in the Action Plan are being referenced directly to specific recommendations found in stream management plans.

DEP Response:

The Schoharie Creek Management Plan, and each sub-basin management plan, includes a section with General Recommendations (Section 6). The recommendations are given a number based on the section, sub-section, and (in some cases) the recommendation number of the stream management plan. This will be addressed in the new action plan format.

5.1 Watershed Monitoring Program

The Revised 2007 FAD requires DEP to coordinate a technical Pathogen Working Group Meeting by May 31 of each year. This meeting was held on May 29, 2015.

DEP Response:

Comment noted.

Education and Outreach			
<u>Project Title</u>	<u>Applicant</u>	<u>Scheduled for Completion</u>	<u>Funding Awarded</u>
Walton School Gravel Study	Village of Walton	November 2015	\$9,000
Recreation and Habitat Improvements			
<u>Project Title</u>	<u>Applicant</u>	<u>Scheduled for Completion</u>	<u>Funding Awarded</u>
East Branch Recreation Access Plan	Water Discovery Center	November 2015	\$55,750
Town of Walton River Access Boat Launch Hamden, Boat Launch Hoyt's Park	Catskill Development Foundation, Towns of Walton & Hamden	November 2015	\$62,000
Village of Delhi River Walk Design	Village of Delhi	November 2015	\$39,750
Highway/Infrastructure			
<u>Project Title</u>	<u>Applicant</u>	<u>Scheduled for Completion</u>	<u>Funding Awarded</u>
Little Delaware Streambank stabilization	Town of Bovina	September 2015	\$138,672.50
Medium Hydraulic Structure Study	DCDPW	November 2015	\$197,996
Holiday Brook Stream bank stabilization	Town of Andes	September 2015	\$37,742
Gulf Brook Stream bank stabilization	Town of Andes	September 2015	\$62,664
Planning and Assessment			
<u>Project Title</u>	<u>Applicant</u>	<u>Scheduled for Completion</u>	<u>Funding Awarded</u>
Ballantine Park Master Plan	Town of Andes	November 2015	\$24,800
Flood Hazard Mitigation			
<u>Project Title</u>	<u>Applicant</u>	<u>Scheduled for Completion</u>	<u>Funding Awarded</u>
Local Flood Hazard Mitigation Analysis	Village of Fleischmanns	December 2015	\$77,250
Local Flood Hazard Mitigation Analysis	Town of Middletown	2016	\$92,500
Walton Rt. 206 Study	Walton Flood Commission	April 2015	\$194,840