

New York City
Department of Environmental Protection

**Training in Best Practices in
Stream, Floodplain, and Watershed Management
for Municipal Officials:
Plan and Schedule**

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New York State Department of Health Filtration Avoidance Determination*



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**Education and Outreach Plan for Municipal Officials:
Effective Practices and Policies for Stream, Floodplain and Watershed Management**

As a result of their responsibility for maintenance of highway infrastructure in floodplains and at stream crossings, and through oversight of local land use regulations like floodplain ordinances, town and county officials are key stakeholders in a broad-based watershed management strategy. Insofar as key municipal officials are elected, and turnover in these offices not infrequent, a regular, periodic program of educational workshops and outreach presentations is warranted to ensure continuity in the awareness of best practices and policies to protect water quality and quantity.

This Plan represents a strategy, developed by the NYCDEP Stream Management Program and its partner organizations in the WOH Watershed, to offer trainings in stream, floodplain and watershed management techniques specifically for municipal officials. The submission of this Plan represents completion of the revised FAD deliverable , due November 30, 2013:

"Propose a plan and schedule for providing routine, systematic training in stream, floodplain, and watershed management techniques targeted to local officials. Training shall include information on best maintenance practices for roadside ditches."

As it has for the past fifteen years, the NYCDEP Stream Management Program will implement this education and outreach (E&O) strategy with the help of partner organizations at the county Soil and Water Conservation Districts and Cornell Cooperative Extension programs, via contracts that include these program elements as deliverables to be defined in Annual Action Plans. The key information comprising the content of the programming was identified in the Education and Outreach Strategy logic model prepared in 2007 in cooperation with these partner programs.

The four basin programs—Ashokan, Schoharie, Delaware and Rondout/ Neversink—vary significantly in both the number of municipalities in each (from two in Rondout / Neversink to nineteen in Delaware), and the commencement, evolution and timing of each individual program's educational efforts. The amount of turnover in municipal administrative personnel also varies significantly. As a result, it would be neither practical nor effective to standardize the schedule or platform for delivery of many specific technical trainings across the entire watershed, as some content would be repetitive for many audiences. **The basin programs will provide several essential training components in each year following municipal elections, beginning in 2014; these are outlined below.** Each basin will further provide, in their annual Action Plan FAD deliverables, a schedule of the specialized E&O content they will deliver during the year. A description of these additional training topics is also provided below.

Post-election Trainings. Presentations on the following three topics will be provided in each basin, in the year following municipal elections, with newly elected officials specifically invited. Formats for these presentations may range from a series of short, informal meetings over several months with a few new stakeholders, to presentations delivered at board meetings, to coordinated, multi-basin, workshops by either program staff or contracted circuit-riders.

1) **Getting to Know Your Stream Management Plan / Program**

This presentation would bring new officials up to speed on the history of the program, the content and intent of the stream management plans, the activities of stream program components like CSBI and Local Flood Analysis, and the implementation grants program and the MOU prerequisites for grant eligibility and other funding opportunities.

2) **Streams 101**

This presentation would cover the basics of watershed hydrology (including climate change), applied river morphology and hydraulics (how rivers can safely convey water, bedload and large woody debris), and an overview of best practices for pro-active stream and floodplain management (including ditch maintenance), post-flood stream intervention and full channel restoration.

Over the next several years, we expect to break this presentation into multiple, short modules that can be presented (in sequence) in a variety of stakeholder meeting venues.

3) **Introduction to the Floodplain Management and the NFIP**

This presentation would cover the issues involved in floodplain management, including water quality and habitat protection and flood hazard mitigation objectives. It would also include basic information on the National Flood Insurance Program, and how to read FEMA flood maps and use them in the development of local planning and flood hazard mitigation policies.

Other topical workshops, to be scheduled, as determined by local need, in annual basin Action Plans may include:

- 1) "The 10 most common questions from constituents regarding streams and floodplains, and the Right Answers"
- 2) Post Flood Stream Intervention Best Practices
- 3) Roadside ditch design and maintenance
- 4) Vegetation Management Near Streams
- 5) Sizing stream crossings
- 6) Knotweed management
- 7) Emergency Response
- 8) Stream Project Permitting, including new SEQRA EAF
- 9) Intro to GIS, with an emphasis on Floodplain Maps
- 10) Hydrology and Hydraulics 101 for Local Flood Commission members – to provide a basic understanding of what goes into the hydraulics analysis component of Floodplain Maps and the Local Flood Hazard Mitigation Analysis
- 11) Flood Mitigation Case Studies – what practices other communities (in the region and elsewhere) have used to successfully mitigate flood-related risks
- 12) Elevation Certificates
- 13) Stream and Floodplain Habitats
- 14) Reservoir and Tunnel Operations