

**Highway Managers Meeting Notes 9-26-17**  
**8:30-10:00, AWSMP Office, Shokan, NY**

**Attendees:** Andrew Emrich (Ulster DPW), Brian Burns (T/Olive), Leslie Zucker (CCE Ulster), Chris Tran (NYC DEP), Adam Doan (Ulster SWCD), Aaron Bennett (Ulster DoE), Clyde Russell (T/Hurley), Eric Hofmeister (T/Shandaken), Mike Reynolds (T/Woodstock), Sean Koester (CCE Ulster)

**INTRODUCTIONS AND ANNOUNCEMENTS**

CCE Ulster announced the hiring of Sean Koester to work with AWSMP as a stream educator and on the stream assessment field crew. Sean will work on extending the results of stream management plan recommendations to highway managers and other audiences, plus other outreach.

**SMIP Funding**

AWSMP announced Stream Management Implementation Program (SMIP) funding is available to support stream-related infrastructure improvements. Fall 2017 applications are due by 4:30pm on Friday, October 13.

The application form and new guidance on priorities for infrastructure projects are at:  
<http://ashokanstreams.org/projects-funding/>

Towns and the County were invited to provide Leslie Z. with future project needs to guide development of new contracts between CCE and SWCD and the DEP. New contracts will fund stream projects from 2019-2023.

**PROJECT UPDATES AND IDEAS**

**Ulster County DPW**

Permitting is nearly complete for a project to stabilize the Watson Hollow Rd. slope failure. Design is moving from 60% to 90% completion. DPW plans to bid the project this fall and construct spring 2018.

The County noted a recent decline in construction project bidders.

Removal of the County bridge at Mt. Pleasant is proceeding with funding support from the Catskill Watershed Corporation. Removal is planned for summer 2018. The bridge abutments are not useable for a temporary road crossing considered by DOT during Route 28 bridge replacement. DOT plans to construct a temporary bridge instead.

**Ulster County Dept. of Environment (DoE)**

Updates to Ulster County's Multi-Jurisdictional All-Hazard Mitigation Plan were approved by FEMA. FEMA was complimentary of how the watershed towns identified hazard mitigation projects in the plan.

The County DoE is interested in completing a stream crossing survey in the watershed. The method used in other areas of Ulster County was developed by the North Atlantic Aquatic Connectivity Collaborative (NAACC) and focuses on aquatic organism passage and culvert/crossing condition.

The AWSMP is reviewing the NAACC survey protocol for methods that meet AWSMP goals.

Upon completion of its review, Leslie Z. proposed the AWSMP present survey methods to Highway Managers to get their input and ensure municipal objectives are met. Aaron B. offered County DoE staff could present the NAACC methods.

The Highway Managers were asked if they supported the idea of a watershed-wide culvert/crossing survey. Managers confirmed the survey would be useful for evaluating over-all needs and costs associated with increasing hydraulic capacity.

Shandaken and Ulster County completed culvert assessments in the past. These surveys are now dated and ready for update. Managers anticipate a high need for culvert replacement given the amount of aging metal pipes in the watershed.

**NYS DOT** (no report, not in attendance)

### **Town of Shandaken**

Replacement of the Panther Kill bridge using NY Rising Community Reconstruction funds is near completion. This is the last of Irene-damaged bridges. Next year the first bridge on Peck Hollow will be replaced using Bridge NY funds. The Town is considering replacement of a double culvert in Woodland Valley just past the campground.

A SMIP-funded grade control project near Herdman Road bridge is progressing toward construction. Town Engineer MMI is working on the design.

### **Town of Woodstock**

The Town is working with MMI to replace culverts at end of Reynolds Lane, with possible construction next year, using NY Rising funds.

The Town is waiting on information from NY Rising about the Lane Rd. and Silver Hollow Rd. intersection. This project is a possible SMIP application for design & engineering.

The Mink Hollow Rd. bridge is the other project priority. The Town is working with adjacent landowners.

The Town completed ditch and shoulder seeding in Silver Hollow and at the Van Hoagland drainage. Woodstock is in possession of the AWSMP bale mulcher and will transfer to Shandaken for use.

A high priority culvert, identified in the Beaver Kill Stream Management Plan, in Mink Hollow is still on the Town's future project list.

### **Town of Olive**

Bridge installation on Hillside Drive is nearly complete with stream work ending in September. Had good weather with only one local heavy rain that caused no issues. Entire project will be complete by mid-October. The Town would like to talk with AWSMP about installing grade control to prevent scouring at the bridge.

The Town's next step is the Upper Boiceville Rd. culvert replacement. The Town has a number of small bridges and culverts that have caused trouble, one is at Bostock Rd. where water seems to be getting behind the heavy rock head-walls. Not clear why problem has developed.

Ulster County is partnering with the Town on possible stream and floodplain projects on the Bushkill in West Shokan with NY Rising funding.

Adam D. asked about the condition of Avery Rd. erosion problems. AWSMP has noticed a fine-sediment source there. The Town reports some cleaning and seeding was done and erosion is not currently affecting infrastructure, but sediment could move again in a future heavy rainfall.

Adam D. volunteered to visit upstream Bushkill sites with the Town to review erosion mitigation needs.

The County reports their Maltby Hollow Bridge is likely for replacement in the next 10 years and a future Bushkill project to consider.

### **Town of Hurley**

A lot of road repaving and ditch cleaning efforts this summer.

### **AWSMP**

#### **Stream Restoration Projects**

Ulster County SWCD is managing two large hillslope and associated stream restoration projects above the Van Hoagland Rd. bridge in the Mink Hollow portion of the Beaver Kill. DEC granted a two-week extension to wrap stream work in early October. Contractor will be on-site through October to complete plantings.

The next big construction project is planned for the end of Woodland Creek on Landowner Association property. There is a failing terrace and associated channel instability that meets turbidity reduction deliverables for the City. The project has progress to 60% design. SWCD is trying to work through design and go out to bid this year.

#### **Other Projects**

SWCD completed a Stream Feature Inventory (SFI) of the Little Beaver Kill and its three main tributaries. The watershed is mostly in Woodstock with a small portion in Olive. The Little Beaver Kill is located away from public infrastructure and roads, an interesting contrast to other streams in the watershed. The SFI may not generate a lot of recommendations that impact the highway departments.

Bobby Taylor of SWCD is working on CSBI fall plantings throughout the basin.

SWCD is now identifying stream restoration projects for 2019 so that survey can begin. If the highway managers know of project sites to consider, let Adam D. know.

Adam D. was asked if plantings have grown successfully in primarily clay soils. If heavy clay then no, but if a little mixed soil or topsoil brought in, have had success with willows and other plants that tolerate clay. Without top soil growth is slower but still taking at some project sites.

Willow species have done well in the watershed over the last few years that haven't seen any major flows. Field crews are observing rapid growth. Willows are a relatively low-cost investment and after established, do well holding soil and cobble. Willow roots are dense and fibrous but not strong enough to displace a rock wall.

Adam D. suggested noting potential planting sites and contacting Bobby T., CSBI Coordinator at [bobby.taylor@ashokanstreams.org](mailto:bobby.taylor@ashokanstreams.org) or 845-688-3047, ext 6.

Mike R. reported a site in the upper Mink Hollow with a large slide, in large ravine, that Irene really affected. Adam D. will visit the site.

## **REVIEW AWSMP ACTION PLAN PRIORITIES**

### **Stream Crossing Inventory**

One potential recommendation for addition to the Action Plan is to inventory and assess culverts watershed-wide (discussed above). Could this include basic hydraulic study results at bridges? We could use existing information from the new FEMA FIRM studies to identify where bridges are under-sized. This may be a way to assess capacity without more complex hydraulic modeling, but would be coarse.

Aaron B. has already started a spreadsheet to identify what flows would overtop crossings in the Bushnellsville.

It would help highway managers to inventory bridges that are hydraulic restrictions, they would have a plan in place post-flooding or when a bridge is ready for replacement. Managers could use the inventory to look at problems at the 1:50 and 1:100-year flows to see the universe of costs associated with upsizing bridges.

Anywhere a FEMA detailed study was completed there is a hydrologic analysis on the bridges. We could note crossings that appear to be restrictions. We would need a method for structures outside the detailed study area. Aaron B. volunteered to put more time into creating a database from FEMA studies.

Every bridge owner has access to a state database of public bridges, see <https://www.dot.ny.gov/divisions/engineering/structures/manuals/BDIS>. There is an online interface that lets you look at a map feature, click on a bridge and will tell you inspection history. Need a password to access the database, but any bridge owner can get one.

The County also maintains a bridge spatial database. AWSMP has recorded information on culverts and bridge crossings during Stream Feature Inventories.

### **HEC-RAS Training**

Another recommendation to add is for a training on how to create a HEC-RAS model from start to finish. The vision that Andrew E. and Aaron B. put together was to spend one to two days in field doing cross-section survey. Survey a couple of culverts maybe one on gaged and several on un-gaged streams. Then run HEC-RAS and create a file. As part of the training, cover showing if there is no-rise when putting in a structure.

Would be very helpful. Increasingly County and Towns must do a no-rise certificate. County does a lot of this in-house although Towns work with hired engineers and are less likely to use HEC-RAS in-house. For Towns, their engineer firm's staff could be invited to attend training.

Models are only as good as the information you put into them. Recent HEC-RAS trainings offered by DEP offered good HEC-RAS overview, but were non-specific. This would work with real-world examples from start to finish. For recent trainings, the gages to get flows from were pre-picked – but choosing which gages to use is an important aspect to be trained on that affects results.

Any other additions to the AWSMP Action Plan? None were suggested at this meeting but attendees are invited to send ideas to Leslie Z. or Adam D.

## **2017 DITCH-SEEDING REPORTS**

Olive and Woodstock have numbers to report. Shandaken none or very little. Hurley did some ditch-work. County seeded Samsonville Road from 28A to Sheldon Hill on one side. Leslie Z. will follow up with highway offices.

## **ACTION ITEMS**

Follow-up:

- 1) Adam D. to provide Andrew E. with a construction contractor list AWSMP uses for bid announcements
- 2) Adam D. to review Olive sites with Brian B. (Bushkill bank erosion, Avery Rd, etc.)
- 3) Adam D to look at erosion site in ravine reported by Woodstock
- 4) Next meeting – review longitudinal profiles from FEMA detailed studies, review stream crossing survey methods