
**Stakeholder Council 2021
Membership**

The Ashokan Stakeholder Council is comprised of:

The Executive Council:

2 representatives from each of the active AWSMP working groups.

Both representatives of a working group should not come from the same organization or agency.

Representatives should be chosen annually by the working group.

No person can represent more than one working group on the Stakeholder Council.

Staff: (CCE Ulster County, Ulster County SWCD, DEP SMP Contract Manager for Ashokan Watershed)

Regular Members: Membership in the Stakeholder Council is open to any interested and knowledgeable stakeholder.



**ASHOKAN WATERSHED STREAM MANAGEMENT PROGRAM
STAKEHOLDER COUNCIL MEETING NOTES**

Webinar Meeting

November 10, 2021 from 1:30pm-4:00pm

In Attendance via Webinar: Allison Lent, Dave Burns, Adam Doan, Mike Flaherty, Drew Boggess, Sierra Smith, Brent Gotsch, Andrew Emrich, Kevin Vanblarcum, Robert Adams, Laura Gust, Tim Koch, Aaron Bennett; **Executive Council members present:** Barry Baldigo, Amanda LaValle, Chet Karwatowski, Burt Samuelson, Mark Loete

Next scheduled meeting: April 13, 2022

Announcements

The AWSMP announced several staffing changes. Laura Gust joined the program as Education Program Administrative Coordinator and Dani White as AWSMP Administrative Assistant. Both were hired by Cornell Cooperative Extension (CCE) of Ulster County. Former Student Conservation Association (SCA) intern and watershed technician Mark Tollefson was hired temporarily by the Ulster County Soil and Water Conservation District (SWCD) and will SCA intern again in 2022.

The Ulster County Department of Environment is hiring a backfill for an Environmental Planner position stationed at the AWSMP field office. The position opened when Aaron Bennett left to become Deputy Chief in the Bureau of Water Supply, Watershed Lands & Community Planning with NYC Department of Environmental Protection. Aaron now works out of the Catskill Watershed Corporation office in Arkville, but is still available to consult with AWSMP on flood mitigation measures. Ulster County hopes to refill the Environmental Planner position in early 2022. Applications are being accepted at:

<https://www.indeed.com/jobs?q=environmental%20planner&l=Kingston,%20NY&vjk=8b874852280aa4b2>

The Ashokan-Pepacton Watershed Chapter of Trout Unlimited presented the Silver Trout Award to Leslie Zucker, AWSMP Program Leader for CCE of Ulster County. The award is presented to resource professionals who support TU's mission by advancing the conservation, protection and restoration of cold-water fisheries and habitat.

AWSMP Advances in 2021

The AWSMP staff updated the Stakeholder Council on key advances in methods, findings, and policies in 2021.

Use of Bioengineering for Stream Restoration, Adam Doan, Ulster County SWCD:

The SWCD advanced use and application of bioengineering techniques to the completed Warner Creek stream restoration projects off Silver Hollow Rd. in Shandaken. The projects were typical in their use of instream features such as bank work

and channel grading, but featured additional bioengineering approaches or “soft” engineering to green up the sites more quickly after restoration compared to traditional methods. Bioengineering included brush mattresses, seeding and mulching with native seed mixes, and fascines installed perpendicular to the channel flow to increase roughness on floodplain benches. This encourages fine sediment deposition once willows are established on the structures. SWCD also increased the size of tree and shrub materials to mature more quickly and better resist deer herbivory. Traditional rock toes were planted with willow and dogwood cuttings in soil lifts to quickly provide permanent resistance to erosion.

Bank Erosion Assessment in One Steep, Narrow Tributary to the Esopus Creek, Allison Lent, Ulster County SWCD:

The Panther Kill tributary to the Woodland Creek is a known source of turbidity. The AWSMP stream assessment crew characterized the nature of Panther Kill’s channel and valley and mapped out management units (MUs). SWCD mapped the stream bed and bank erosion and found 22 headcuts in the Panther Kill stream bed, along with hydraulic erosion of stream banks and associated hillslope failures. The majority of erosion was concentrated in the lower reaches. Some areas showed mass wasting with consequences for sediment loading, largely into glacial lacustrine sediments. The most active MU (#2C) had a trifecta of issues - channel incision, bank erosion, and mass wasting. Streambank erosion was assessed in more detail to predict and quantify the supply of sediment from erosion. One hillslope considered a “hot spot” was predicted to generate 7,800 cubic feet of fine sediment year from hydraulic processes alone. This location will be targeted for a stream restoration project in 2022 or 2023 that will potentially reduce sediment supply reaching downstream water bodies.

Hydrology of the Christmas 2020 Flood, Tim Koch, CCE Ulster County:

2020 did not end as quickly as we would like and was punctuated by a 1 in 5-year return frequency (or 20% annual chance) flood in the southern portion of the watershed on December 25 (the “Christmas flood”). In the Stony Clove Creek the flood was larger and had closer to a 1 in 10-year return frequency. Since then, a precipitation event in October 2021 hit the Esopus Creek headwaters above Big Indian causing damage to County Route 47. The October flows were a 1 in 2-year event at Coldbrook, but a 1 in 6-year event in Oliverea. An almost 10-year hydrologically quiet period in the watershed may have ended in 2021. Will storms now become more frequent? A review of the hydrologic record from the USGS stream gage in Coldbrook suggests new trend in flood magnitudes and probabilities over the past 20 years compared to the previous 80 years. If these trends continue, what we might consider a 10-year event could, for example, become a 5-year event in the future. Because of geomorphic processes, flows we see today might end up delivering more sediment per unit discharge to the reservoir if they become more frequent in the future. Can stream management interrupt this trend or change the discharge-sediment rating curve? We’re still learning what the geomorphic response of streams might be to more frequent, heavy precipitation events in the Catskills. One scenario we might see is heavy rain paired with drought that affects vegetation, perhaps leading to more bank erosion and sediment. But there are a lot of factors in play. Normally 40-50% of precipitation is taken up by vegetation through evapotranspiration, and during drought periods the soil acts as a massive sponge and takes up water before seeing a response in the channel.

Preparing for the Next Wave of Flooding, Brent Gotsch, CCE Ulster County:

The storms observed in 2021, even though generally small (and more frequent) were disruptive. AWSMP staff are working on educational trainings next year on how to read and use stream gage information during flood response. Recent floods tested municipal staff new to their positions who might benefit from training. The AWSMP is working on updating and improving its flood response plan and engaging with municipalities about their needs. A new and encouraging project is to develop a flood response table-top exercise working with Ulster County Emergency Management and make it available to watershed towns. The Ulster County Division of Emergency Management is now led by Mike Madison who previously worked with the NYS Division of Homeland Security & Emergency Services and Office and on disaster preparedness logistics. Other data development and planning projects focused on resilience are underway at the county to assist local town boards with addressing development in floodplains and communicating flood risks to residents.

Stream Management Implementation Program (SMIP) Update:

The AWSMP completed three SMIP funding rounds in 2021 and made the following awards:

Ulster County Dept. of Public Works	Bridge Street Bridge Design and Analysis	\$150,000
Ulster County Dept. of Public Works	Plank Road Culvert Replacements	\$95,350
Town of Woodstock Highway Dept.	Mink Hollow Bridge Up-Sizing Construction	\$174,800
Town of Olive	Construction Phase Engineering Services for Burgher Road	\$84,740
U.S. Geological Survey	Monitoring and Evaluation of Changes in Suspended-Sediment Concentration and Turbidity Resulting from the Panther Kill and Wilmot Way Stream Projects in the Woodland Creek Watershed	\$123,554
Town of Shandaken	Local Flood Analysis for Pine Hill	\$112,980

The total amount awarded between 2019-2021 so far is \$1,703,167 in the regular SMIP categories (education, planning, research, infrastructure, and restoration) and \$1,817,849 for Local Flood Analysis (LFA) implementation. A total \$776,833 remains to award in the regular SMIP fund and \$682,151 in the LFA fund during the current five-year cycle. Project work and spending with these funds must be completed by September 2024.

Despite frequent high flows, global pandemic, and supply chain issues, watershed partners completed work with nearly \$780,000 of SMIP-funding in 2021. This includes a Mink Hollow Bridge Enlargement and Channel Stabilization (Woodstock), Peck Hollow Bridge Enlargement (Shandaken), Watson Hollow Rd. Culvert Replacements (Ulster County), and Construction Inspection of the Maltby Hollow Bridge Enlargement (Ulster County). Past sediment and turbidity monitoring projects in Woodland Creek also ended, as new monitoring began (USGS). A pilot of methods for sampling bedload sediment and physical survey of bedload completed (USGS).

Three SMIP funding rounds will be held in 2022. The first round will occur in March with an application deadline of March 23.

Discussion of 2022 Community Priorities for Stream and Floodplain Management

Representatives from watershed communities and stakeholder organizations were invited to present their ideas and needs for stream and floodplain management priorities from 2022-2023.

- Golden opportunities for recreational development exist at several locations where floodplain buyouts have occurred and parcels are now in town ownership. Most notable is at the former site of Rock Cut Cottages in Mt. Tremper. The pool just above the new Route 28 bridge would be easy to access for angling and might be an opportunity to develop handicap access. Another site is the location of buyouts near the bridge over Fox Hollow Creek. Both sites would benefit from smart planning. Discuss opportunities with the new Town of Shandaken administration in 2022.
- A few projects in Olive are moving forward. The town is looking forward to replacing undersized crossings on Bostock Rd and Red Maple Rd in Shokan. The town currently owns two former buyout properties along the Esopus Creek in Boiceville and another streamside property is moving through the process. A small grant to examine what could be done with those properties (e.g., recreational development) would be useful to the community. The NYC Department of Environmental Protection (DEP) will begin work on the Five Arch bridge replacement in Boiceville in 2022, which should result in a better road intersection once complete.

- The best way to engage with local recreation committee's about acquisition and recreational uses is not clear. The pandemic has made it hard to meet with local committee and board members. A return to meeting in person will facilitate richer discussion. The Stakeholder Council's Stream Access & Recreation Working Group may not entirely meet a need for dialogue with stream users and managers. AWSMP staff and stakeholders may need to attend local town and county committee meetings.
- Ulster County is seeking funding for additional rail trail development in the UC&D corridor from Belleayre Beach to Highmount. An active, engaged county wide trails committee is looking at access and recreation opportunities on rail trails and funding sources.
- Watershed towns are embarking on creating or updating Natural Resource Inventories and Open Space Plans. Streams and wetlands are important components. Every town is working on their own approach and the Hudson River Estuary Program is a funding source. It would be good if Ulster County could serve or host completed town maps and data, and eventually serve a county wide data coverage. The county might link to data that is maintained and hosted by other organizations. Dutchess County's transportation plan on ArcHub is a model. AWSMP maintains watershed data on stream recommendations and road-stream crossing conditions that could be linked to.
- Education on use of GIS software, with that use facilitating environmental planning and management is needed at the local/town level.

Recognition of Town of Shandaken Supervisor Rob Stanley

The AWSMP staff and Stakeholder Council recognized Town of Shandaken Supervisor Rob Stanley for his years of dedicated service to the town and in particular, his successful and dogged efforts to advance flood hazard mitigation policies and on-the-ground projects during his tenure. The Council presented Supervisor Stanley with a professionally shot photo of the Woodland Creek. Supervisor Stanley's tenure was marked by frequent flooding and the watershed's flood of record in August 2011. Rob engaged in a close and productive partnership with the AWMSP to develop projects like a Town of Shandaken Flood Mitigation Plan, and then detailed Local Flood Analysis for the hamlets of Phoenicia, Mt. Tremper, Shandaken and Allaben. Most recently he initiated a Local Flood Analysis for Pine Hill.

Rob worked with the AWSMP to complete construction of a flood mitigation project at the Phoenicia Main Street Bridge that is used today as a demonstration model. Rob founded the Town of Shandaken's flood advisory committee in 2010 (aka "SAFARI") and finished the town-wide flood mitigation plan in 2013. Rob created a permanent page on the town's website for flood hazard mitigation and initiated town use of the Swift Reach emergency notification system. When FEMA FIRM maps were updated, Rob identified about 20 buildings erroneously included in the SFHA and had them removed. He spearheaded work on the NY Rising Community Reconstruction Program and accessed state funding for several flood mitigation projects.

Rob became a Certified Floodplain Manager leading the way in Ulster County and encouraging other officials to do the same. He renewed his CFM education annually by attending the NYS Floodplain and Stormwater Manager's Conference. A culmination of many years of effort was the town's entry into the NFIP Community Rating System (CRS) in 2021. The Town of Shandaken is so far the only community in Ulster County to enter CRS and one of only 35 communities across New York State. The staff also noted Rob's ability to eloquently explain stream management practices at public meetings, and on a lighter note, the meaning of "BFR" to the Ulster County Executive during a flood emergency.

The meeting was adjourned.