

**AWSMP Stream Access and Recreation Working Group**  
Meeting Minutes for October 9, 2014

*In attendance:*

Brent Gotsch, CCEUC  
Kathy Nolan, Catskill Mountainkeeper  
Aaron Bennett, UC Dept. of Environment  
Harry Jameson, Town Tinker Tube Rental/Catskill Mtn. RR  
Marc Hollander, ACA/KCCNY/AMC  
Mark Loete, Trout Unlimited  
Tony Coccozza, Trout Unlimited  
Mike Flaherty, NYSDEC

**Pine Hill Trail Update**

Martie Gales (Shandaken Parks and Recreation Committee) was unable to attend the meeting and provide a project update. The Town of Shandaken tasked engineering firm MMI with evaluating the feasibility of a walking trail linking the Pine Hill Community Center to the park. Regular updates will be made as they become available.

**AWSMP Action Plan Update**

Due to time constraints there was limited discussion of the required action plan updates. Kathy N. suggested language be added that says any stream access and recreation activities will not degrade or harm the environment and the greater ecology of the stream system.

***Brent G. suggested that everyone on the committee read the current section of the action plan (provided at the meeting, also available through initial meeting email) and provide any comments to him as soon as possible.*** Additions, subtractions, and modifications of items are welcome.

**Whitewater Report and Related Discussion (Marc Hollander)**

Marc H. gave a retrospective report on this year's whitewater events and a synopsis of their successes and failures. In 2014, Marc H. requested that DEC make recreational releases from the Shandaken Tunnel. All requests were granted. He reported that communication with Brenan Terrier of DEC was excellent and that any potential caveats or concerns were communicated clearly and expectations managed well.

Participation in whitewater events this year was excellent. AMC had upwards of 40 participants per event and KCCNY typically had 10. Boaters primarily were from the NY/NJ area with some participants from MA and other areas further afield. Most of the participants who came for whitewater events stayed for the weekend.

Marc H., who led some trips, reported on conversations he had with recreationalists on the creek. Participants commented on how much they enjoyed the river. Those returning to the Esopus after years of absence were happy with the experience they had. Many commented their Esopus experience was better than on the Lehigh River (near Jim Thorpe, PA), which is a similar river and a popular spot for whitewater recreationalists.

Anglers had mixed opinions about the Esopus. Some reported turbidity was making the fishing worse, that it was killing the fish and preventing them from breeding and breathing. Others said they had positive experiences and caught fish with relative ease.

When speaking to some community members about the general condition of the creek, the comments mostly related to flooding and flood problems. Some called for dredging, as it was done in the past, and believed dredging would stop flooding. Others complained about property erosion and that land they lost was still being assessed at its original value. Others commented that the stream channel near Route 42 should be widened to prevent flooding. In summary, opinions varied depending on which part of the community you belonged to (whitewater, angler, general resident).

Marc H. discussed possibilities for increased stream signage to explain stream etiquette for whitewater enthusiasts and anglers and to notify of possible dangers in the stream. A topic to address is liability issues associated with posting signage about hazards, since it could be argued that whoever knows of the hazard has a duty to remove it. This topic was taken up again later in the discussion.

### **Turbidity in the Esopus Creek and Schoharie Reservoir**

Following Marc's presentation, there was discussion about the Shandaken Portal, turbidity of portal discharges and the effects that it is having on the stream. The main course of discussion was centered on why there is so much turbid flow in recent years coming through the Shandaken Portal.

Restoration and rehabilitation of the Shandaken Tunnel Intake Chamber (at Schoharie Reservoir) is planned to begin mid 2015 and will be completed by June 2018. Mike F. reported that DEP plans to work over a timeframe that doesn't require the Portal (outlet of the Shandaken Tunnel) to be open. This would potentially limit the amount of sediment entering the Tunnel and Esopus Creek. Rehabilitation work would cease if releases were to be made.

Tony C., who attended the most recent SPDES Permit meeting and read the Catskill Turbidity Control Study Phases I (2004) and II (2006), said DEP researched the possibility of moving the intake, but ultimately decided it would be most cost effective to use the Operation Support Tool in coordination with and modified operational management to limit turbidity. DEP deemed other studied alternatives not cost effective and said resulting reductions in turbidity would be negligible.

DEP's explanation for recently elevated turbidity levels at the Portal is a seiche stirring sediment in the Schoharie Reservoir resulting in turbidity. A seiche is a standing wave in the reservoir that

causes an oscillation or shifting of the various water layers of differing temperature and density. However, many members of the working group were skeptical, and thought a seiche would not cause the observed amount of turbidity in the system.

Mike F. said that existing studies are inconclusive in showing the seiche is creating turbidity from scouring and re-suspension in the reservoir.

NYSDEC thinks it's likely that seiches have occurred since the reservoir was initially constructed. Once the reservoir stratifies into different temperature (and thus water density) layers during the summer, very little mixing of the water column occurs until the temperature layers breakdown in the late fall. Some of these layers may be more turbid than others and remain that way through the summer. It is hypothesized that the rocking back and forth of the seiche shifts the location of these layers, and their associated turbidity above and below the intake, resulting in variations in water temperature and turbidity coming through the Portal. Although DEC believes there is a correlation between the different layers of temperature and levels of turbidity, the sources of turbidity to these layers is still unclear.

The group hypothesized there could be new sources of turbidity coming into the reservoir related to recent major floods or poor management practices.

Was monitoring done to see if a turbid thermocline was located near the level of the intake? The group discussed comparing temperature, precipitation and turbidity data, where available, to determine if there's an identifiable pattern that causes particulate suspension. It was stated that research has shown that fine clay particulates resist settling for long periods due to their small size and electrical charges between these particles.

The group raised questions and concerns about the Gilboa Dam restoration project and the forthcoming rehabilitation of the intake chamber to the Shandaken Tunnel. Tony C. commented that Trout Unlimited and others have lobbied DEP for years to create a multistage vertical intake chamber that would be able to draw water from different levels and perhaps limit the amount of turbidity entering the system. DEP has consistently said this idea is not feasible.

Tony C. shared that during the most recent SPDES Permit General Meeting, DEP's engineers reported they need to install a valve at the bottom of the reservoir that releases water into the Schoharie Creek for emergency drawdown purposes. This is required to meet state dam safety requirements.

Some members of the group proposed that DEP maintain the two remaining siphons (of the four originally installed) on the Gilboa Dam, in perpetuity, to mitigate flooding by discharging warmer water at the surface to the lower Schoharie Creek, instead of cold water from the bottom of the reservoir. The cold water reserve at the bottom of the reservoir is likely more beneficial to the Esopus Creek (particularly in the summer months) than to the lower Schoharie Creek, which is a warmwater fishery. Stakeholders downstream have stated publicly they just want "water", not "cold water".

Mike F. said that it would be favorable to have an additional mechanism (such as the siphons) to allow water to be drawn from a higher level to spill into the Schoharie Creek. This option would help to preserve cold water.

Kathy N. suggested a good exercise would be to map the upper Schoharie Creek stream corridor and locate unstable areas and water quality issues (such as large stands of knotweed, undercut and exposed clay banks, input of chemicals/pharmaceuticals from wastewater plants, etc.) to identify patterns that emerge. This could make it easier to determine what's causing turbidity (if not the seiche).

In summary, the group concluded the turbidity problem in the Schoharie Reservoir impacting the Esopus Creek via the Shandaken Tunnel. However, there is no clear explanation for why it is worse now than the past (anecdotal observations are that suspended sediment is taking longer to settle out than in years past). Mike F. said the SPDES permit, along with creel surveys since 1996, show that turbidity has worsened and particles stay in suspension longer. DEP may have data from earlier years (such as from the 1987 flood) that show a trend. For now, it seems that the best explanation is the seiche, however, as noted previously, some of the group members do not think the seiche phenomenon adequately explains all of the turbidity issues.

*The discussion ended with a call to have a seminar/information session in the spring on this topic (the seiche/sources of turbidity in the Schoharie Reservoir) similar to the one that was held on the topic of Shandaken Tunnel discharges in the spring of 2015.*

### **Debris Management Along the Creek**

There was also a discussion about debris jams that pose a danger to recreational users of the creek. One example given was a LWD jam on DEC property at the Allaben cemetery access point. There is a DEC angler access and tuber put-in just above the cemetery. There are other strainers at various locations along the stream that may pose a lesser hazard.

Individuals have been given permission to remove hazards by DEC, however, they are reluctant to do so because of liability concerns. They are afraid that removing hazards will open them to lawsuits, with or without the hazard present. It can be difficult (though not impossible) to do work on state land since it is generally designated as forever wild. Harry J. had the idea that DEC should create a special "High Use" designation for the Esopus and perhaps similar streams so that it gives the state authority to clear out hazards, but not be required to do it along every stream or river in the state.

Marc H. stated his opinion that continued accumulation of trees in the flow of the river is detrimental to recreational use and the safety of those that use it. He related an experience where a member of his trip had a close call with a debris jam near the Allaben cemetery. He related that in the late 1970s and early 1980s whitewater use was unconstrained from the Portal to well below Phoenicia. His concern is that without removal of the obstructions, a significant section of the river remains unavailable and unsafe, and an unacceptable precedent has been set to accept loss of a precious recreational resource.

There was concern among some that while it's important to clear known hazards, it is equally important to leave some wood in the stream (particularly the rootballs) in the banks to add stability. Some in the angling community are worried that too much activity in the stream (even if properly permitted) would create an environment of permissibility for those who do not obtain permits to work in the stream. That unpermitted work may create more harm than good.

It was proposed to use the material (trees) to mitigate bank erosion in other areas with a secondary benefit of addressing safety and recreational use. This proposal would need to be tested for viability.

The major concern of the group was liability and who is responsible for maintenance activity along the creek. There were no clear answers to any of these questions. All agreed that public safety was in issue.

### **New Office Location**

Brent G. announced that AWSMP is moving its offices from the current location near Phoenicia to a new location in Shokan, NY. Its address will be PO 667, 3130 State Route 28, Shokan, NY. The move was planned for the end of October.

### **Other Announcements**

Aaron B. accepted a new position within the Ulster County Department of the Environment. He will be coordinating floodplain management activities primarily within the watershed towns. His duties will include researching and securing funding for flood mitigation and relief, assisting municipal officials with flood hazard mitigation planning, and working with AWSMP and partners to implement flood hazard mitigation. His new office is located at the AWSMP office, where he'll work three days a week and be in Kingston two days a week.

Aaron B. shared information from Olive Town Supervisor Sylvia Rozzelle. DEP will present plans for the redesign and construction of the Route 28 Five Arches Bridge at an information meeting on October 23 at the Olive Town Meeting Hall from 10am to 12pm. The public is encouraged to attend. Construction on the new bridge is expected to begin in either 2018 or 2019.

A meeting about Local Flood Analysis for the hamlet of Phoenicia is planned for October 14 at Parish Hall in Phoenicia. A second meeting for Local Flood Analysis in Mount Tremper is planned for October 20 at the Emerson. Both meetings begin at 6:30pm.

### **Next Meeting**

No meeting has been scheduled for this time. The next meeting will likely be held March 2015 at the new AWSMP office. A doodle poll will be sent out with more information closer to March.