

# **Susquehanna Chapter Trout Unlimited (SCTU)**

## **Annual Watershed Summit January 13, 2021**

### **Virtual Zoom Meeting**

#### **Summary Notes**

Attendees: About 40 logged in.

SCTU President Charlie Knowlden convened the sixteenth annual Watershed Summit at 7:00 PM and welcomed the attendees. Due to the Coronavirus pandemic, the meeting was held online on Zoom rather than in-person. He introduced Rachel Kester, PATU Program Director, and thanked her for facilitating the Zoom event.

Rachel Kester then explained the Zoom meeting procedures, including the Chat function that enables the participants to type in questions during presentations. She also announced that the Cold Water Heritage Partnership Grant is open for applications until February 15<sup>th</sup>, and encouraged participants to apply.

SCTU Vice- President Walt Nicholson stated that the purpose of the meeting was to learn about the volunteer efforts and accomplishments of our area's watershed groups, conservation organizations and agencies during 2020 and their upcoming plans to help preserve, protect and enhance our area streams and watersheds. Walt introduced the State/local officials in attendance, including State representative Joe Hamm and also John Clune of USGS. John Clune stated that the USGS has established two new stream gauges in Columbia County, is helping jurisdictions with their Watershed Improvement Plans (WIP), is compiling stream temperatures, and is working on two groundwater studies in Clinton and Potter Counties and a geomorphic study of Turtle Creek in Union Co.

Following are highlights from each presentation. The slide presentations for each may be found on the SCTU website at <https://susquehannatu.com>.

#### **Dr. Jonathan Niles, Susquehanna University Fresh Water Research Institute**

- The Susquehanna University Fresh Water Research Institute was able to complete field research under COVID guidelines, including working in collaboration with NPC, DEP, PFBC, and Conservation Districts to monitor BMP's and bank stabilization structures at 30+ sites. Preliminary findings are that stream deflectors result in increase in minnow populations that need clean gravel to spawn.

- Unassessed Waters Initiative – sampled 88 sites for wild trout as requested by PFBC. The “low lying fruit” wild trout populations have already been identified and the research team has been surveying streams that are farther away and marginal for wild trout. Wild trout were only found at 15 of the 88 sample sites. No trout were found on the South Branch of Towanda Creek in Bradford County despite extensive sampling. Six sites had wild rainbow trout, including Lititz Run in Lancaster County; eight sites had only wild Brook Trout (Shermans Creek), and one site had only wild Brown Trout (Cocolamus Creek) .
- Evaluated existing conditions for trout on Plunketts Creek at SGL 134 as part of the Plunketts Creek berm removal study. Found that the stretch provided good young of the year brown trout habitat, although it dried up later in the summer. They also established a baseline for sediment sizes and habitat prior to the berm removal.
- Continued long-term Brook Trout population studies in the Loyalsock Creek Watershed. Major flood events have had a significant impact on trout populations, with the October 2016 event resulting in the loss of all eggs in the redds and a depression/slow recovery of all age classes of the trout population in Dry Run. The summer 2011 floods, on the other hand, temporarily reduced the adult class but resulted in a substantial increase in young of the year and subsequent adult populations. Weed Creek had the same population trends as Dry Run but not as extreme – the hypothesis is that it is not as incised and may have better access to its floodplain.

### **Lycoming College Clean Water Institute (CWI)**

Dr. Robert Smith, Research Associate, introduced the other staff of the Institute. Dr. Mel Zimmerman, Director; Dr. Peter Petokas, Research Associate; Emily Bohlin, M.S. Postdoc; and Dr. Leslie Rieck, Postdoc.

- CWI field work was limited because of the COVID-19 pandemic. Waterdale Environmental Center and Hiawatha floating classrooms were cancelled.
- Completed 15<sup>th</sup> year trophic study of Rose Valley Lake
- Continued to participate in the PFBC unassessed waters initiative – completed 39 assessments.
- Continued to monitor the LCCD Wolf Run streambank stabilization and non point ag runoff reduction project including water chemistry, macro-invertebrate and fish surveys. Found a good population of large adult brown trout.
- As part of their Urban stream ecology & College-Community stormwater partnership, convened the 5<sup>th</sup> symposium on Urbanization and Stream Ecology. Urban water quality monitoring started. Developed a manuscript about MS4 misunderstandings and moving toward effective stormwater management for small municipalities. Developing a predictive model for potential MS4 stormwater projects.

- Researching the use of forest stream canopies and riparian forests by adult stream insects.
- Dr. Petokas gave a Hellbender research update. Conducted physical and DNA surveys of Sinnemahoning Creek but found no Hellbenders. Crayfish food supply is good in the First Fork. Bennett Branch is impaired. Installed artificial concrete habitat structures and will stock with 156 3 ½ year old Hellbenders raised at the Bronx Zoo. New technology enables tags to be read even when the Hellbenders are under rocks – they found one that was 30 years old!

### **Richard Glinski, PA DCNR Loyalsock State Forest District**

Rich Glinski, District Forester for the Loyalsock State Forest District, gave an update on the forest road repairs from the extensive damage caused by the Oct 2106 and summer of 2011 flood events.

- DCNR has acquired a railroad grade along Pleasant Stream and 2.5 miles of the road will be relocated – project has been contracted out. Expected to be completed by July 30, 2021.
- A new road has also been constructed along Mill Creek.
- A number of roads will be renamed to match up with their destinations. For example, the new Pleasant Stream Road will be called the “Masten Road.”

### **Northcentral PA Conservancy (NCPC)**

The Northcentral PA Conservancy is a land trust devoted to conserving the working farm and forest lands and watersheds in Northcentral PA.

- Renee Carey, Director, stated that 2020 was the 30<sup>th</sup> anniversary of the Conservancy but a very different year due to the Coronavirus. For example, the Turtle Creek project had to be temporarily shut down due to the lockdown in March.
- Renee summarized progress on the floodplain restoration project on SGL 134 near Camp Mountain Road north of Barbours. The Susquehanna University Fresh Water Research Institute completed baseline stream studies. Approximately 500’ of stream bank was stabilized, including log work and tree plantings, with the tree roots serving as “rebar”. The final phase will be to reconnect Plunkett’s Creek to its floodplain by removing an 1840’ long 16,000 cubic yard earthen berm that was installed in 1950.
- Maintenance work was done on the Wallis Run project that was impacted by the 2016 flood. Additional erosion occurred after the project design, so more maintenance will be needed.

- Improvements were made to the Avis canoe launch, including geo-cell stabilization, using funding from Clinton County Tourism/Recreation Grant Program and the Western Pennsylvania Conservancy Canoe Access fund. The property was transferred from a private property owner through the Conservancy to the Bureau of Forestry.
- The Conservancy works with property owners, PAFBC, DEP, the County Conservation Districts and others on stream improvement projects by administering a Growing Greener grant program; including stream bank stabilization, riparian fencing, manure management, farm conservation plans, and other projects. The Northcentral Stream Partnership impacted over 10,740 feet of stream bank in 2020. Over 415 log/rock structures were installed. Two stream crossings were built, and fencing was installed at one farm. Four buffers were planted.
- The Conservancy purchased the Bar Bottom Hollow Tract on Loyalsock Creek, a 112 acre inholding adjacent to the Loyalsock State Forest, on June 20, 2020, and has conveyed it to the Bureau of Forestry. Bar Bottom Hollow is an exceptional value stream with a number of beautiful waterfalls, and the parcel has significant ecological and scenic values.

### **Shawn Rummel, PA Trout Unlimited, Eastern Brook Trout**

SCTU received a PATU Technical Assistance Grant (TAG) that involves the TU Lock Haven office gathering data and creating a plan for potential AMD related conservation projects in the upper Loyalsock Creek watershed, in cooperation with a number of partners. The goal is to improve the water quality in order to achieve consistent wild trout status for this section of the Loyalsock.

- Shawn Rummel presented preliminary results of the fish surveys. Trout were found at the intersection of the Loyalsock and Rt 220 but not enough to qualify for wild trout status. No trout were found below the White Ash B discharge, a limited number of trout were found at an upstream sampling site below White Ash A.
- Macroinvertebrates, an indicator of long term stream ecological status, have been surveyed but the samples are still being analyzed.
- There is an aquatic organism passage barrier at the mouth of Birch Creek tributary. Birch creek has a wild trout level population near its junction with the Loyalsock (well downstream of the Lewis treatment facility).
- Low tunnel discharge made AMD assessment difficult, and heavy localized rain before sampling masked AMD impacts. One sampling event cannot capture a dynamic system.
- Mine discharges are less severe than when the systems were built due to natural attenuation. White Ash B should be the priority for improvements as it is maintainable (not buried) and expandable.

## **Loyalsock Creek Watershed Association**

President Marc Lewis summarized activities undertaken or supported by the Association:

- He was appreciative of the high level of expertise and work of his board members.
- The LCWA funded work from EPCAMR (Eastern PA Coalition for Abandoned Mine Reclamation) to monitor upper Loyalsock Creek water quality and the effluent from 2 abandoned mine discharge treatment systems,
- Monitored the SRBC-approved gas industry water withdrawals for compliance and potential impact on Loyalsock Ck,
- Sponsored the Memorial Day Rose Valley Lake Cane Pole Derby,
- Helped support and facilitate the Bar Bottom property acquisition for the NPC & PA DCNR,
- Supported and used provisions of state legislation which facilitates removal of old coal refuse culm piles near Mildred which have caused water quality impairment,
- Set up an endowment fund to support conservation education camp scholarships,
- Continued working on two potential public canoe/kayak access areas on Loyalsock Ck.
- Encouraged work to improve the reliability of the Lycoming County Flood Warning system gages on Loyalsock Creek.

## **Lycoming Creek Watershed Association (LCWA)**

- President Mike Ditchfield stated that meetings have been lightly attended but he hopes that attendance will increase at COVID compliant outdoor meetings as the weather warms. He joked that “we need a good flood” to spur interest.
- A multi log vane replacement at the Sheshequin Campground was completed using mitigation funding from the Duke Energy windmill project.
- They are working with Larry Brannaka of USGS on the large Midway streambank stabilization/flood damage reduction/sediment reduction project. Unfortunately, they didn’t get a Growing Greener grant. Coordination is needed with Union Township officials who are anxious to spend their grant money.
- LCWA is participating in the Lower Lycoming Hazard Mitigation Team, MS4, and Watershed Implementation Plan/Countywide Action Plan
- Working with the LCCD on the Mill Creek fish habitat projects in Hepburn Twp.
- Lycoming Creek anglers have recovered from the flood damage to the hatchery and are doing well with their stocked trout.

## **Lycoming County Conservation District**

Walt Nicholson congratulated District Manager Mark Davidson on his retirement after 30+ years of service, and introduced the new District Manager, Greg Bonsall. Greg previously worked at Union County Conservation District. Carey Entz-Rine, Watershed Specialist, summarized projects completed this year:

- Hepburn Twp. Mill Creek Fish Habitat Projects
- Plunketts Creek Fish Habitat Project at Proctor Game Farm
- Wolf Run – Artley Farm County Farm Best Management Practices (BMPs)

The District is currently working on the following projects:

- Hughesville Well House Riprap Repairs
- Loyalsock Creek Restoration Project (Keebler Farm Road Area)
- Midway Project on Lycoming Creek
- Wolf Run Farm BMPs
- Pine Run Restoration Project
- Keystone 10 Million Tree Partnership
- Dirt and Gravel Road Program – they received \$1.8 million in requests and were able to allocate \$500K for projects

## **Sullivan County Conservation District**

Walt Nicholson introduced Gloria Norcross, the new Watershed Specialist. He said that we all appreciated the work of her predecessor, the late Corey Richmond, and looked forward to working with her.

- Gloria reported that there were no in-person events this year due to the Coronavirus. She has been attending local watershed Association, Northcentral PA Conservancy, and EPCAMR meetings.
- There is interest in the community in watershed and stream projects, many in relation to flooding involving private property.
- The Conservation District partnered with the Eagles Mere Conservancy to give presentations about the geology, ecology, and preservation of the lake.
- Made use of the Envirothon kit and Enviroscape model at the Conservancy and in a presentation about the environment and careers with the Trehab Center in Dushore.
- Conducted a bridge building contest using popsicle sticks and rocks to educate students about the potential impact bridges have on a stream
- Reinstated partnerships with EPCAMR and various organizations involved with AMD sites and conducted tours of the systems.

## **Wrap Up and Thank You**

Several questions came up about stream gauges on Lycoming and Loyalsock that failed to work properly during the Christmas Eve event. Nobody had an answer; follow up is needed.

Walt Nicholson invited the participants to the next SCTU virtual Zoom meeting on February 10, 2021, with the PA Fish & Boat Commission. Speakers will include Tim Schaeffer, Executive Director; Eric Hussar, President, of the Commission; and Chad Lauer, Waterways Conservation Officer. There will also be a more detailed presentation about the results and recommendations of the Upper Loyalsock AMD remediation project at a future meeting.

Walt thanked the presenters and attendees for participating. He said that it was an unprecedented year due to the Coronavirus pandemic, but that it was gratifying that the agencies and groups continued to forge ahead and do beneficial work.

Regrettably, due to the virtual Zoom meeting format there was no after meeting camaraderie and cookies.

The Watershed Summit concluded at 9 PM

Respectfully submitted,

Kevin McJunkin, Secretary