

Susquehanna Chapter Trout Unlimited (SCTU)

Annual Watershed Summit January 10, 2018

Covenant Central Presbyterian Church
807 W. 4th St., Williamsport, PA

Summary Notes

Attendees: About 65 in attendance. See attendance sign-in sheet.

SCTU President Walt Nicholson convened the meeting at 7:00 PM. Walt said that the mission of the Susquehanna Chapter of Trout Unlimited is to preserve and protect coldwater resources. SCTU recently completed a Coldwater Heritage Plan for the Rock Run watershed, a tributary of Lycoming Creek. This Plan identified a number of potential activities and projects to maintain and improve the water quality of Rock Run.

Walt 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 2017 and their upcoming plans to help preserve, protect and enhance our area streams and watersheds. Tonight's focus is on the Loyalsock Creek – just announced by DCNR as the River of the Year.

Each group was given 5-8 minutes for a presentation. Following are highlights of the presentations. The complete presentations may be found on the SCTU website at <https://susquehannatu.com>

Middle Susquehanna Riverkeeper Association (MSRA)

Walt introduced Carol Parenzan, Riverkeeper for the Middle Susquehanna Riverkeeper Assoc., Inc, who shepherded the Loyalsock initiative. Carol stated that the MSRA will manage a \$10,000 grant to help fund year-long River of the Year activities.

MSRA has a new office in Sunbury at the "Gateway to the headwaters of the Susquehanna." They are developing their Board and are self funded. MSRA conducts various educational and environmental awareness programs, and has a Bridge Over Troubled Waters program to connect incarcerated people with the river. One of the inmates said "A healthy river is like freedom – easy to lose and hard to get back."

Carol has been appointed to the DEP Environmental Justice Advisory Board and will represent our rural region. She wants to expand art and economic development programs. Volunteers are needed.

2017 programs included Sunrise Sunset Susquehanna paddle and play and Dumplings at Dusk outings, youth environmental education and Citizen Scientist programs, Conservation Canine sewage sniffer training, and Poop to Power project.

Loyalsock Creek Watershed Association

Carol Cafer summarized activities undertaken or supported by the Association:

- Dr. John Niles of Susquehanna University and students conducted 16 more unassessed waters surveys, finding trout in 5 more streams near Worlds End.
- Brook trout research on trout behavior by Shannon White of Penn State.
- Jerry Zeidler 12th Memorial Cane Pole Derby at Rose Valley Lake – very successful event with family fishing, environmental education from the Lycoming Clean Water Institute (CWI), and great prizes
- Kayak/fishing/ecology field day on the Loyalsock with students from Schick Elementary School Kids on the Creek program with assistance from CWI and SCTU.
- Little Bear stream bank stabilization, on public land, with the Loyalsock Mens Club
- Worlds End State Park (Sullivan County) stream bank stabilization
- Elk Creek log vane repair and mud sill construction project (see SCCD presentation).
- DCNR clean up of Sandy Bottom and Mill Creek
- Studies by Dr. John Niles of Susquehanna University of rejuvenation of stream trout populations on Dry Run (Hoagland tributary) following the 1000 year frequency October, 2016 flood.
- Flow monitoring by Lycoming College CWI near water withdrawal sites.

Lycoming College Clean Water Institute (CWI)

Dr Mel Zimmerman said that he is “semi-retired” and that Bob Smith is his teaching replacement. He stated that CWI coordinates with The Susquehanna River Heartland Coalition for Environmental Studies, which includes a number of local colleges and environmental organizations. Staff also includes Dr. Peter Petokas and Emily Bohlin. Mel summarized 2017/2018 CWI initiatives:

- Collected flow data to corroborate stream flow near a water withdrawal on the Loyalsock, and also monitoring along Mill Creek, Elk Creek, Wolf Run, Muncy Creek, and Wallis Run; deployed data loggers on Loyalsock Creek.
- Continued to provide Environmental Programs with the Williamsport Municipal Water Authority Waterdale Environmental Education Center.
- Continued to participate in the Unassessed Streams Initiative. CWI has performed about 10% of the 7,500 assessments, which can lead to Special Protection water quality status for streams.
- Participated in Loyalsock River Conservation Plan meetings.
- MS4 (Municipal Separate Storm Water System) - Interns have assisted the Lycoming County MS4 municipalities with monitoring of 250 storm water outfalls.

- Hellbender Research - Dr. Peter Petokas is continuing his Hellbender research. No Hellbenders were found on the Loyalsock last year. Senator Yaw introduced a bill to make the Hellbender the PA State Amphibian.
- Dr Petokas also designed the new “Petokas Preserve” wetlands at Camp Victory near Millville.
- Performed macroinvertebrate investigations of several urban streams, including Miller’s Run.

Sullivan County Conservation District

Corey Richmond, Watershed Specialist, noted that Sullivan County is the headwaters for Loyalsock and Muncy Creeks in Lycoming County. He summarized some of the events and activities:

- Continued the Dirt and Gravel Program, which benefits local watersheds by reducing erosion and sedimentation.
- Replaced six culverts to enhance aquatic organism passage.
- Nine of 12 multi-log vane structures on Elk Creek were lost in the Oct 21, 2016 flash flood, although the 430’ long mud sill performed flawlessly. The structures were repaired by re-installing log vanes further back into the bank.
- The Conservation District partnered with Chief Oil & Gas (and other organizations) on the Elk Creek project, which not only provided funding but also volunteers. Corey suggests that other organizations consider public/private partnerships.
- Revamped a limestone bed acid mine drainage system, which resulted in an increase of treated flows from 100 gpm to 600 gpm. Funds were provided by Southwest Energy.

Lycoming County Conservation District

Walt introduced Carey Entz-Rine, Watershed Specialist, as a very valuable environmental education resource.

- Continued the Dirt and Gravel Road Program
- Assisted Lycoming Creek Anglers with a habitat restoration project to rebuild their trout nursery.
- 1800 feet of stream bank stabilization projects for five homes in danger of being damaged by floods.
- Trout in the Classroom educational initiatives with three school districts.
- Assisted with removal of post flood debris in areas not covered by PEMA/FEMA.
- Landon Farm project improved stormwater runoff quality.
- Continued to provide environmental education programs at the WMWA Waterdale Environmental Education Center.

Loyalsock District State Forest

Nathan Fice, Assistant District Forester, showed photos and maps of the extensive damage from the flash flood on Oct 21, 2016. Loyalsock State Forest was in the epicenter of the event with the area receiving 8"-9" of rain in a 4-6 hour period. There was severe damage on State and Forest roads along Pleasant Stream and Mill Creek flowing into Hillsgrove, much greater than from Tropical Storm Lee in 2011. Repairs had just been completed from the 2011 event and now municipalities and the State face tough decisions about whether to repair or relocate bridges and roads.

Some of the 53 miles of roads that were affected are still closed, including 8 miles of Pleasant Stream road. They are investigating a bypass of Pleasant Stream road to follow an old railroad grade, which would move the road away from the stream to prevent damage in the future. Repairs to five box culverts on Mill Creek Road have been undertaken and part of the road will be closed permanently. The slide area on Pleasant Stream will be stabilized. The Big Hollow Road bridge will be extended 60' to cross the new stream channel.

Pennsylvania Fish & Boat Commission (PAFBC)

Walt introduced John Arway, Executive Director, and Eric Hussar, Fish Commissioner. Andy Shields, Director of the Bureau of Fisheries for 32 years, gave the presentation. He discussed the Limestone Run project in Northumberland and Montour Counties, which was undertaken with many partners, including DEP (Jason Fellon), the Northcentral PA Conservancy (Renee Carey), Montour and Northumberland Counties, and Susquehanna University. The project included riparian buffers, stream bank fencing, stream crossings, and in-stream habitat improvements. Native brook trout were relocated from nearby streams into Limestone Run for the first time by the PAFBC. Over 10% were recaptured in 2017 showing good survival and growth rates. A similar project on Turtle Creek in Union County is also underway.

The PAFBC is focusing on Class A potential inventories which provides the highest protection of streams. Fifty-two new Class A and 26 Wild Trout streams were classified in north central PA in 2017. "Wild Trout" designation on Babb Creek will now extend all the way to the mouth as a result of stream surveys which found wild trout throughout the stream. Babb Creek is a good example of many partners (16) working together to bring back a stream impaired from acid mine degradation.

Lake Nessmuk in Tioga Co. has been drained and rebuilt with major habitat work. The lake has been stocked and Andy said that fishing should be very good in 2-3 years. Smallmouth bass numbers are good in the lower W. Branch Susquehanna. Five muskies were tagged last summer from the Cannon Hole at the mouth of the Loyalsock (which contributes cold water flow), all greater than 46" long. Videos of musky tagging were shown.

Lycoming County Planning

Joshua Billings, Environmental Planner, stated that the County Comprehensive Plan Update serves as a policy guide for the physical, social, and economic development of the County. Six regional County Comprehensive Plans have been adopted, including a number of water resources related projects such as the Susquehanna Riverwalk extension, Source Water Protection, Urban Forestry initiatives, storm water mitigation, levee recertification, nutrient credit trading program, and hazard mitigation planning, including the Greater Muncy Resiliency Plan as a model. New projects include the Sylvan Dell Conservation Project and resumption of the Loyalsock Creek River Conservation Plan development.

Endless Mountains Resource Conservation and Development Council (EMRCD)

EMRCD is a six county regional natural resources conservation 501c3 nonprofit organization. Joshua Billing, EMRCD Chairman, reported that EMRCD has secured funding from DCNR for a Riparian Buffer program, and will be meeting soon to discuss project implementation.

PA Trout Unlimited (PATU)

Kathleen Lavelle, the Field Coordinator for the PA Coldwater Habitat Restoration Program, gave the presentation.

- Kathleen stated that TU is undertaking a repeat of the 2009 Susquehanna River Benchmark in order to evaluate progress in meeting water quality goals as a result of AMD remediation efforts on a watershed scale.
- Last year PATU assessed 760 streams. Forty two streams were in the Upper West Branch – of these 19 contained trout.
- PATU has also assessed over 1100 culverts for Aquatic Organism Passage (AOP) in the Pine Creek, Young Woman's, & Kettle Creek watersheds, and have identified priority areas for reconnecting trout populations. Kathleen showed some examples of successful AOP projects, including replacing a small culvert on Little Lyman Run with a wide open arch.
- PATU also documented trout movement on stocked and wild trout stretches of Little Bear Creek to assess AOP effectiveness. The work research included trout population estimates, angler surveys, and placement of water monitoring loggers.
- PATU provides free technical assistance for design, permit, and construction of stream bank stabilization and other projects. Over 6 streams were included in 2017.
- 2018 work will include technical assistance on AMD mitigation, non-point pollution reduction, and bank stabilization projects, placement of water wash stations, and habitat projects on 7+ streams.

Northcentral PA Conservancy (NPC)

Renee Carey, Director, stated that the Northcentral PA Conservancy is a land trust devoted to conserving the working farm and forest lands and watersheds in Northcentral PA.

The Conservancy works with property owners, PAFBC, DEP, and the County Conservation Districts 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. Projects included Limestone Run (see PAFBC notes) and Turtle Creek, which entailed 1.5 miles of stream, 283 structures, 3 buffers, 4 stream bank fences, and 8 stream crossings.

The Conservancy maintains 47 Conservation Easements. The Homer Webster property (130 acres) along 1 mile of Marsh Creek has been recently acquired. The Cavanaugh Access property near Wellsboro, with over 100 acres of wetlands and 1.5 miles along Marsh Creek was recently conveyed to the Game Commission.

The Conservancy also acquired a River Simulator Model, an environmental education tool that shows the affects of runoff and the importance of streambank stabilization. The Simulator has been used at the Waterdale Environmental Education Center and has been viewed by nearly 1000 people.

United States Geologic Survey (USGS)

John Clune, Hydrologist with the Williamsport regional office of the USGS, stated that his office performs hydrological monitoring and research in Northern PA. USGS provides unbiased scientific data and research which may have direct application for watershed and conservation agencies. Data is available on the National Water Information System (NWIS) website. Some of the data, resources, and research reports available from the USGS include:

- Hydrologic monitoring including real time and periodic stream, reservoir, observation well, precipitation gages and water quality and temperature analysis instrumentation;
- Hydrologic research including County groundwater studies (Lycoming County study recently completed and other north central PA counties) which fill data gaps prior to 2011 at the beginning of the Marcellus gas play;
- Comparison of PA gas drilling counties with non drilling counties in New York;
- Methane in streams research;
- Conservation effectiveness studies, such as determination of watershed sediment and nutrient sources, e.g. fertilizer or manure utilizing ion ratio analyses;
- Lycoming Creek synoptic for Williamsport Municipal Water Authority;
- Stream stage dimension studies;
- Water alerts to the public through an automatic notification system.

Pine Creek Watershed Council

Jim Weaver stated that the Pine Creek Watershed Council is a group of many organizations from Lycoming, Tioga, and Potter Counties that is working together to protect the Pine Creek watershed by implementing the Pine Creek River Conservation Plan. Jim discussed the Pine Creek headwaters protection project. The Woolly Adelgid parasite has moved up into the Pine Creek watershed and is threatening the hemlock forest (15% of the Pine Creek watershed), which could result in a trophic cascade of environmental impacts, including an increase in water temperatures. The Council has identified priority riparian buffer protection areas for planting of underlying replacement trees to maintain the riparian buffer functions. Ongoing work includes installing water temperature data loggers, developing a replacement species selection matrix and planting protocols. Volunteers are needed to help with the plantings.

Pine Creek Preservation Association (PCPA)

Paul Hoffmaster, President, stated that the PCPA has 1,100 members which provide a unified voice for protection of Pine Creek Valley environmental quality. PCPA supports and participates with seven other organizations. Recent activities include providing input into the 2017 Forest Resource Management Plan and support for Pennsylvania Environmental Defense Foundation litigation. The recent PA Supreme Court decision suggests that money from oil and gas sales from State Forest Lands fund is part of a public trust and is supposed to be used for preservation of State Lands consistent with the Environmental Rights Amendment to the PA Constitution, adopted in 1971:

“The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania’s public natural resources are the common property of all the people, including generations yet to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefit of all the people.”

The PA General Assembly has shifted money from the oil and gas fund into the General Fund. PEDF is suing to prevent this diversion of funds.

Susquehanna Greenway Partnership (SGP)

Corey BeVier, Director of Outreach Programs introduced Jerry Wall, Chairman of the Board. Corey said that the SGP’s mission is to create a Greenway along the Susquehanna River. The Greenway has three components – a Trail System, River Water Trails, and River Towns.

Following are some of the activities of the SGP:

- The SGP was one of the partners for the North Branch Canal Trail and the Susquehanna Riverwalk in Williamsport, and is supporting extensions of these

systems. The walkable and bikeable trails are intended to reconnect communities to the river.

- SGP published and distributed a Water Trail map to promote use of the river.
- SGP assists River Towns to identify projects and funding sources. Williamsport recently received SGP's River Town designation. The Heart of Williamsport movie will premier on February 9th. There are ten other SGP River Towns and several more are in process.
- SGP also supports asset based Entrepreneur Development, and conducts education and outreach activities such as the Annual Susquehanna Sojourn and photo contests.
- SGP provides river community programs which promote economic, job creation, and environmental benefits, outreach, and river trail signage.

Lycoming Creek Watershed Association (LCWA)

Mike Ditchfield said that he wants to revitalize and mobilize the Association. They are having a reorganizational meeting on Tuesday, Jan 16th at 7:00 PM at the Trout Run Fire. Attendees will learn about the Lycoming Creek Watershed Association and it's history and find out about future projects, meetings, and activities. Future meetings will be held the third Tuesday of the month at the same time and location.

Mike said that LCWA received \$1 million in grants and did a number of projects, some which need maintenance, and much still remains to be done. He mentioned potential projects on Pleasant Stream and Slacks Run and working with PADOT to incorporate AMD treatment into bridge projects. He would like to partner with municipal officials from Lewis Township and others on projects.

McIntyre Wild Area Bog Research

Harvey Katz presented some of his findings from his field research about bogs in the Loyalsock State Forest between Ralston & Hillsgrove. Bogs are important for water quality and storage – they release water slowly to help streams maintain flows. He found 122 bogs in the area, including early successional, fens, and vernal ponds. He showed incredibly impressive fall color drone videos taken by Dr. Peter Petokas of several of the bogs.

Closing

Walt Nicholson thanked the presenters and attendees and said that he hopes this event will help promote synergies between the participants and continuation of the impressive leveraging of scarce resources by volunteers and conservation organizations for creation of valuable watershed conservation benefits.

He announced that the next Trout Unlimited meeting will be held on February 21, 2017 and the Program will be "What's New at the PAFBC – new regulations, special areas, and other

PFBC news.” Emmett Kyler and Chad Lauer, Waterway Conservation Officers, and Eric Hussar, Vice Chairman of the PA Fish & Boat Commission, have been invited to speak. SCTU will hold fly tying classes, starting on February 6th and running through March 27th. The classes are free and open to the public, and will be held weekly from 6:30 PM to 8:30 PM Tuesday evenings at Covenant Central Presbyterian Church, 807 W. 4th Street, Williamsport (parking and entrance are off Campbell Street behind the Church).

Mel Zimmerman announced that there will be a Wild Trout Summit with the PFBC on March 17 at Lycoming College. Also, on Feb. 8-9, the Fisheries Society will be holding meetings at Lycoming College.

Walt invited the attendees to stay after the meeting for refreshments and discussion.

The Watershed Summit concluded at 9:20 PM

Respectfully submitted,

Kevin McJunkin, Secretary