Centre County Senior Environmental Corps
Newsletter September 2017

Special Edition

Ann Donovan

Watershed Specialist, Centre County Conservation District

Ann announced her retirement as Watershed Specialist from the Centre County Conservation District.

"I want to thank all of you for your support. Your commitment to the environment is crucial and admirable. I am grateful that we were able to work together to improve our county's land and water and to teach members of the next generation to respect and value our environment.

My life is richer because of the friends that I have made over the years. When I think of you and your organizations, both the nonprofits and the government agencies, Margaret Mead's words ring true. **"*Never doubt that a small group of thoughtful, committed citizens can change the world: indeed it's the only thing that ever has.*"**

Know that your unique and individual contributions have made and will continue to make an impact both locally and even globally. You make a better world for us and for those who follow in our footsteps". Many thanks/ Ann

Our fondness for Ann

Ann, you are an inspiration to all of us in the Centre County Senior Environmental Corps. You have our fond and best wishes for a long and happy retirement.

PaSec Picnic

Many Senior Corps volunteers enjoyed the informal collegiality and a wonderful pot luck offerings Wednesday August 9, at the Black Moshannon State Park. Our guests included Ann Donovan, Watershed Specialist from the Centre County Conservation District. Two of Dr. K's Lock Haven University students, Autumn Hanley and Scott Wolf, who answered questions on their latest lab results; they attribute a change in pH as likely being caused not by the fracking drilling but by the exposure of pyrite from new road construction and improvements.

Melinda Hughes, president of Nature Abounds, assured us of continued support and supplies,

Fish & Boat Commission Authorities Question Team 13

Marcellus Team 13 was approached by F&B officers concerned that they were illegally fishing. It was obvious the new officers were completely unaware of PASEC. After much discussion the officers finally accepted the team's explanation (No warrants were issued nor prisoners taken). It may have gone better with Team 14, one half of which retired from Fish & Boat.

Dr K. volunteered to draft a letter to the Fish and Boat Commission's local Waterways Conservation Officers to inform them of the presence and activities of PASEC volunteers in Centre County.

Importance of small stream

Jack Williams is the senior scientist for Trout Unlimited

As the Trump Administration continues its roll-back of rules and regulations that protect our water quality it might be wise to remember where our big rivers come from and what makes them so important.

Ironically, the importance of these small streams seems lost in the debate about proposed changes to the Clean Water Act. Why worry about protecting small streams? It's all about the inputs**.**

Tributary streams are primary sources of cold water for trout and salmon bearing streams. Ephemeral or intermittent streams can provide important sources of cold, subsurface flows that support spawning areas for coldwater fishes in downstream rivers.

Tributary streams provide essential ecosystem services to rivers and nearby human communities. These ecosystem services include sediment storage, pollution control, nutrient recycling, flood control, water storage, and groundwater recharge of aquifers. Tributary streams have been found to store fine sediments for decades and prevent these fine sediments from choking downstream spawning and rearing habitats. Headwater tributaries process and retain excess nutrients, such as phosphorus and nitrogen, and help buffer impacts from activities occurring in terrestrial, upslope areas.

Tributary streams are important sources of biological diversity, especially for amphibians and aquatic insects. Small streams can provide 25 to100 percent of emerging insects consumed by organisms such as bats, birds, and salamanders.

The condition of tributary streams determines their ability to provide the benefits described above.

Habitat complexity – especially in channel complexity provided by large wood, boulders and gravels -- is very important to maintaining values in tributary streams. So are clean water and healthy riparian habitats.

Other concerns

Eastern Brook Trout of Pennsylvania:
Roadmap to Restoration:

Global Climate Change is likely to increase average global temperature. This will favor the expansion of brown trout, smallmouth bass and other invasive fish species into waters dominated by native brook trout.

Chesapeake Bay Watershed

Interim Evaluation of Pennsylvania's 2016-2017 Milestones Progress June 30, 2017

Pennsylvania is on track for pollutants in the wastewater sector but is off track for its statewide targets for nitrogen, phosphorus, and sediment and the agriculture and urban & suburban storm water sectors.

To join us: Please call the Centre Counter RSVP (Retired and Senior Volunteer Program)
Monday – Friday 8:30 am - 5:00 pm
Phone **(814) 355-6816**

The CCPaSEC newsletter is **discontinued** except for special events. To contribute news articles, please Contact Ken Johnson via our CCPaSEC WEB site.

"The frequency of good news varies inversely with age." Arlo & Janis cartoon