



Visit us on the web at
conewagoinitiative.net

The Conewago Creek Initiative is a locally-led, collaborative partnership effort in the Conewago Creek watershed in Dauphin, Lancaster, and Lebanon Counties. We seek to work with local residents and stakeholders to increase awareness and adoption of land management practices that will improve water quality of local streams and ensure healthy farms and communities, implementing the vision of the Conewago Creek Watershed Community: *a restored Conewago as a centerpiece of pride and a treasured asset in a rural landscape.*

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This is a one time, print version of our free quarterly e-newsletter, made possible by a grant from the National Fish and Wildlife Foundation. To receive this newsletter in the future, email us at conewagocreekinitiative@gmail.com.

Conewago Currents

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The Coordinator's Report

It is hard to believe it has been five years. Then again, maybe you've never heard of us.

The Conewago Creek Initiative is a partnership—a group of organizations and individuals working together for healthy streams, farms and communities.

The article below tells our story. In 2009-10, with a grant from the National Fish and Wildlife Foundation and USDA's designation as a "Showcase Watershed," new resources infused existing work of Conewago watershed partners and landowners. A larger partnership was formed.

Over the last several years, the Initiative has allowed us to reach more Conewago landowners. More conservation practices were implemented than ever before. And recent monitoring results show the creek is improving.

But it is Conewago landowners who are the true

heroes of this story. They agree to undertake conservation projects on their properties, often spending their own dollars. Without them, the Conewago Initiative would not be a success.

Even though our NFWF grant is winding down, the Initiative will continue. The partners have agreed to continue to meet and work together. Penn State will continue to facilitate the partnership.

And we will continue to produce this free quarterly newsletter, which is distributed electronically. This is a onetime print version which we have mailed to all watershed residents. We hope you find this newsletter interesting and informative. If you

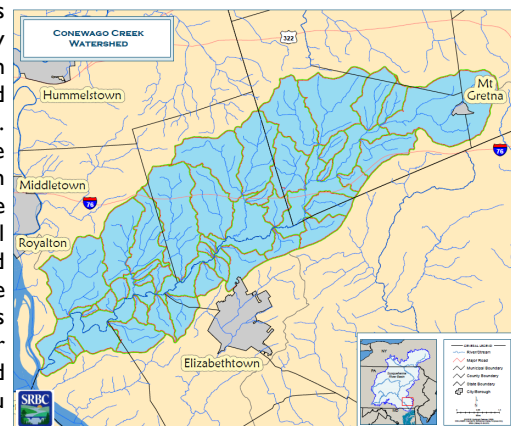
wish to receive it in the future, email:

conewagocreekinitiative@gmail.com.

Best wishes to everyone in the Conewago watershed for a safe and happy holiday season.

Matt Royer

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The Conewago Initiative: Working Together for a Restored Conewago

For the last five years, an exciting partnership has been at work in the Conewago Creek Watershed. And it is producing some exciting results.

For years, groups like the local watershed group, the Tri-County Conewago Creek Association, and County Conservation Districts were working with willing landowners in the Conewago to improve the health of the watershed. Progress was being made, but these local groups soon realized the need to build bigger partnerships.

Others were thinking the same thing. In 2009, The Penn State Agriculture and Environment Center received a grant from the National Fish and Wildlife Foundation to facilitate a larger partnership for clean water and healthy farms and communities. One year later, the U.S. Department of Agriculture announced the selection of the Conewago Creek as its "Showcase Watershed" to demonstrate how cooperative, voluntary efforts by farmers could improve water quality in the Chesapeake Bay. The

Conewago Initiative was born.

This partnership includes local groups like TCCCA and Conservation Districts, along with federal, state and regional partners like Penn State, USDA Natural Resources Conservation Service, Chesapeake Bay Foundation, PA Department of Environmental Protection, municipalities, and many others.

The partnership has worked to increase outreach and education in the watershed. The Conservation Districts

(Continued on page 2)



Volunteers helping to plant trees.



A good turn out of farmers and partners for the 2013 Winter Farmers Meeting.



Kids learning about aquatic bugs during the 2013 Earth Day Celebration at Aberdeen Mills.

The Conewago Initiative Continued

(Continued from page 1)

contacted all farmers in the watershed, conducting farm surveys and holding meetings. Working with the Conewago community, a "Vision for the Conewago" was created. The Initiative has hosted breakfasts, watershed tours, workshops on stormwater, rain barrels, and forest stewardship to name a few. An annual winter farmers meeting is held for all watershed farmers.

This quarterly newsletter is distributed free electronically to watershed partners and residents. A website was created, www.conewagoinitiative.net, as well as a Facebook page.

A landowner survey revealed that 90% of Conewago landowners feel they have a responsibility to ensure clean water for all. Their actions bear that out; nearly 100% of Conewago farmers now have conservation plans for their farms, up from 70% when the Initiative began.

Over 7,000 trees

were planted along streams to improve water quality. Implementation rates for many priority practices (including riparian buffers, fencing, cover crops, no till, stream bank restoration, terraces and diversions) have increased, some dramatically so. For example, installation of terraces to control erosion from croplands increased from around 450 feet per year to over 6,000!

The Initiative has also helped residential and municipal landowners implement practices like rain gardens, native meadows and backyard buffers to improve water quality in the watershed.

Results from recent water quality monitoring are beginning to tell an exciting story—aquatic life in the stream is rebounding. (See article on page 3 for more details). In many project areas, you can see the difference in trees growing along streams less erosion from stream banks, and less sediment on stream bottoms.

While this is the last year of the NFWF grant, the

work of the Initiative and the momentum built will continue. But we need your help. The most important partners are you—the farmers, homeowners and businesses that live and work in the watershed.

You can get involved in many ways. You can sign up for this newsletter, which is distributed quarterly by email, by sending us your email at conewagocreekinitiative@gmail.com. You can join TCCCA, your local watershed group. Email conewagocreek@yahoo.com. You can keep an eye on our website,

www.conewagoinitiative.net, and join us for volunteer opportunities. Finally, if you own land in the watershed and are interested learning what you can do, contact our local project coordinator, Kristen Kyler, at (717) 948-6609, klk343@psu.edu.

Don't Forget to "Like" us on Facebook!

The Conewago Creek Initiative joined Facebook this past fall. Photos from events and around the watershed can be viewed on our page. Event details, news related to the Conewago Creek, Susquehanna River and the Chesapeake Bay will be shared, and Facebook provides an easy way for you to ask questions and be involved.



Wild Brook Trout Found in Conewago Creek

Fish sampling conducted by PA Department of Environmental Protection biologists in August has officially documented wild brook trout in the headwaters of the Conewago.

The sampling was conducted in partnership with the PA Fish and Boat Commission as part of its unassessed wild trout waters program. The trout were found in a tributary of the Conewago that flows through State Game Lands 145 in South Londonderry Township, Lebanon County.

While brook trout were once native throughout many streams in Pennsylvania, centuries of land use changes have diminished much of their

historic range. Native brook trout need cold, clean water to survive. Today they are generally found in small, forested streams where there is minimal land disturbance.

The Initiative is looking to put together a partnership discuss protecting

and enhancing brook trout habitat in the Conewago. Interested individuals and organizations should contact Kristen Kyler at (717)-948-6609, or at klk343@psu.edu.



The Critters Tell the Tale: Fish, Aquatic Insects Rebounding

After years of effort, it looks like the hard work of Conewago farmers, residents and partners is paying off.

Recent results from the Conewago Initiative's monitoring team tell a promising tale: Diversity of the stream's aquatic life—the fish and the aquatic insects they rely upon for food—is increasing, and many more pollution sensitive species are found in the creek.

Conewago fish sampling was conducted in 2012 with the help of Penn State,

Elizabethtown College, and Milton Hershey School students, and community volunteers. Thirty-three fish species were identified. At the Hershey Meadows Restoration site, the number of species doubled, from 12 to 24, since the stream was restored. Three of the 24 are classified as intolerant of pollution and poor habitat conditions.

Aquatic insects were sampled in spring 2013. The results show an exciting trend: 9 of 10 sampling sites improved since the last sampling round in 2009-10. More pollution sensitive species such as mayflies were found at many sites.

"The sampling results are certainly encouraging," said Megan Blackmon, Watershed Specialist for the

Dauphin County Conservation District and one of the biologists leading the Conewago monitoring program. "While more

sampling will have to occur to see if this is a long term trend, we are excited to see results trending upward.

Seeing more pollution sensitive species is a positive sign."

"The sampling results are certainly encouraging. Seeing more pollution sensitive species is a positive sign."

**Megan Blackmon,
Watershed Specialist,
Dauphin County
Conservation District**



Conewago Partner Spotlight: Penn State Public Media

Penn State Public Media has been working alongside the Initiative since the beginning. Five years ago, Penn State Public Media created a video that captured the vision that watershed residents have for the future of the Conewago Creek and the surrounding land. That video and other watershed videos can be viewed on the Conewago Initiative's website.

Once the vision was created and specific goals were determined for the

work of the Initiative, Penn State Public Media began filming the projects that were being completed, the partnerships that were being formed, and monitoring the progress being made. By the end of this year, the story of the Conewago Initiative will be portrayed in a 10-15 minute video that will help spread awareness of the successes that the Initiative has had and encourage other partnerships to develop in other watersheds.

Penn State Public Media has a mission to connect people through the power of film, video, and interactive stories. The Initiative is excited to see the final product and to have a new method for sharing the success that is being created through the formation of a diverse

partnership. The new video, *For the Next Watershed: A Conewago Creek Story*, coming in December to the Conewago Initiative's website and also on YouTube.



Practice Spotlights

On The Farm: Crop Rotation

Crop rotation is a simple concept that can become a win-win situation for both farmers and the environment. By changing where and when crops are grown, farmers can control insects, prevent nutrient depletion, and reduce weed pressure. In the long run it will even save money because fewer resources are spent adding

additional nutrients or pesticides to the land. This minimizes inputs and maximizes yields without requiring extra resources. It just needs a little planning.



Around The Home: Disposal of Chemicals

Improper disposal of hazardous components such as cleaners, pesticides, paints, and automotive fluids can pose a physical threat to the environment, water treatment plants, and us if agricultural areas or drinking water sources become contaminated. When you need to dispose of products like these, look for permanent collection or exchange facilities that can

reuse these substances. You can also try using alternative, environmental friendly products like the ones shared on this website: http://www.lcswma.org/lcswma_hazardous_waste.html



Conewago Photo Gallery



This issue's gallery features: photos from Londonderry Township's Swatara Creek Rd planting, fall scenes from the watershed, and a Spicebush Swallowtail caterpillar.

Forging New Partnerships: Londonderry Township

In the past year Londonderry Township has become a dedicated partner in the mission to improve the water quality in the Conewago watershed and beyond.

This summer, the Initiative completed a "Conservation Toolbox for Municipalities." This toolbox highlights several tools that municipalities can use to meet land and water conservation goals. Copies of the Toolbox were provided to all municipalities in the watershed. An invitation was extended to meet and talk about creating a customized toolbox.

Londonderry Township was the first watershed municipality to interested in developing its own toolbox. Initiative representatives met with the township manager and

engineer to select priority tools and a timeline for implementation. The Township then dove right in, pursuing several projects.

In August, the Township hosted a rain barrel workshop. The Dauphin County Conservation District gave a presentation on rain barrels and other things homeowners can do to manage stormwater. Each participant took home a free rain barrel, compliments of the Initiative's NFWF grant. The Township will continue to hold workshops that are of interest to residents. Check their website regularly to learn about different opportunities.

The Township has also taken steps to implement practices on their own property. On September 21, almost 100 volunteers came out to help the Township



plant around 900 trees on their newly acquired properties along Swatara Creek Rd. These properties were flooded during the 2011 flood and purchased by the Township under a FEMA buyout program. The Township received several grants to fund the planting of a riparian buffer for Swatara Creek. The trees will help to absorb rain water and do their small part to prevent future flooding downstream.

Start looking for signs around the watershed

The Conewago Initiative will be finishing two sign projects this fall to draw attention to the Conewago Creek Watershed and the importance of clean water.

Signs will be placed at two trailheads of the Conewago/Lebanon Valley Rail Trail (off Route 230 and in the Village of Colebrook). These signs will explain what a watershed is, explore how the Conewago Creek played a role in the history of the area, and describe some of the conservation projects that have been completed in the area. These signs will also include a bulletin board where the Initiative can advertise events and

opportunities for local residents. Make sure to check these signs out when you take a bike ride or hike this fall and winter.

Signs are also going up along roadways at the boundaries of the watershed, announcing "You are now entering the Conewago watershed." These signs will help people recognize what a watershed is and the impact they have on streams, even when they are not directly next to one. One of these signs has already been installed along Mount Wilson Rd in South Londonderry Township.

About 10 other signs will be erected on willing landowners' property.

If you live near the watershed boundary and would be willing to host a sign, please email conewagocreekinitiative@gmail.com.



Calendar of Events

TCCCA

Monthly Meetings

Conewago Township Bldg
Old Hershey Rd, Elizabethtown
November 27 7:00 – 9:00 pm

Conewago Initiative Project Advisory Team meeting

Penn State Harrisburg
Church Hall
November 20 1:00 pm - 3:00 pm

DCNR Establishing Native

Meadows Webinar

Register at www.dcnr.state.pa.us
December 18 10:30 am-12:00 pm

No-Till Tune Up Workshop

The Farm and Home Center
1383 Arcadia Rd, Lancaster
December 22 9:00 am-12:00 pm
<http://extension.psu.edu/lancaster/events/no-till-tune-up>

Master Well Owners Network

Training

Londonderry Township Building
783 S Geyers Church Rd
February 22 9:00 am– 3:30 pm
<http://extension.psu.edu/natural-resources/water/mwon/about>



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Community working together for a restored Conewago.

The Conewago Watershed Community has envisioned a future that establishes the restored Conewago and its tributaries as a centerpiece of pride and a treasured asset in a rural landscape.

This vision includes a strong agricultural community and productive farmland, community recreation areas and vibrant, well planned communities. Pristine landscapes will be protected while providing sustainable uses of natural resources, clean water and streams, and educational opportunities for generations to come.

Conewago Creek Initiative Partners

Dauphin County Conservation District • Lancaster County Conservation District • Lebanon County Conservation District • Tri-County Conewago Creek Association • South Londonderry Township • Elizabethtown College • Penn State University • PA Department of Environmental Protection • PA Department of Conservation and Natural Resources • PA Fish and Boat Commission • PA Department of Agriculture • USDA Natural Resources Conservation Service • USDA Agriculture Research Service • U.S. Geologic Service • U.S. Fish and Wildlife Service • U.S. Environmental Protection Agency • Chesapeake Bay Foundation • ZedX, Inc. • American Farmland Trust • Capital Area RC&D • LandStudies, Inc. • Wild Resources, Inc. • Tetra Tech, Inc. • Aquatic Resources Restoration Co. • RGS Associates, Inc.

The Conewago Creek Initiative is a project of Penn State Cooperative Extension made possible through funding by the National Fish and Wildlife Foundation and the Foundation for Pennsylvania Watersheds