

# PENN'S WATERS

CBF Staff

News & Notes from the Pennsylvania Office of the Chesapeake Bay Foundation

Summer 2017

## Progress, But More Must Be Done

More farms in Pennsylvania are being inspected and more pollution reduction measures installed voluntarily by farmers are being counted. Municipalities are pursuing ways to better manage stormwater and reduce the harmful effects of polluted urban and suburban runoff.

But CBF's latest milestone assessment of progress toward achieving the Clean Water Blueprint makes it clear that the Commonwealth must step up its commitment and efforts to get back on track toward meeting its goals.

Pennsylvania and the other Bay states committed to implementing practices

necessary to reduce pollution by 60 percent by 2017, and 100 percent by 2025. The state Department of Environmental Protection has acknowledged that the Commonwealth will not meet its 2017 benchmarks.

Pennsylvania is significantly off track for meeting its overall commitments to reduce nitrogen, but it's also significantly off track for reducing nitrogen and phosphorous pollution from agriculture and urban and suburban runoff. Efforts to reduce phosphorus and sediment pollution are only slightly off track.

*Continued on page 2*

**From the Desk of Harry Campbell**

**Pennsylvania Director**

We are proud of the efforts reflected in this summer newsletter and thank our partners who helped. But there is still much more to do.



Harry Campbell

We will continue to promote soil health and the importance of keeping it on the land instead of in the water.

We will educate young people about their roles in creating drinkable and swimmable waters.

We will work with legislators and others to get Pennsylvania back on track toward its Clean Water Blueprint goals.

We hope to save the Eastern hellbender and make it the state's official amphibian.

In the future, you will be hearing more about the value of trees as cost-effective tools to improve Pennsylvania waters.

Stay tuned!



## Saving a Salamander and Clean Water

*See page 3 for details*

Mike Pinder



**CHESAPEAKE BAY FOUNDATION**  
*Saving a National Treasure*

*Progress, from page 1*

Urban and suburban polluted runoff of nitrogen, phosphorus, and sediment is the only sector to be off-track by more than 10 percent for all three pollutants.

Starting next year, municipalities will be required to meet specific pollution-reduction goals for their separate storm sewer systems.

Nature-based solutions like street trees and rain gardens can help reduce polluted runoff while also serving to beautify communities.

Agriculture continues to be a leading source of pollution to Pennsylvania rivers and streams. Renewed emphasis on planting streamside buffers, which are among the most cost-effective measures for improving stream health, will go a long way toward progress.

As part of its rebooted effort, the Commonwealth committed to inspecting 10 percent of its farms annually for manure management and erosion and sediment control plans.

While the overall number was less than 10 percent, the rate of inspections

continued to increase and roughly 70 percent of the farms were found to have the required plans.

The state also committed to counting and reporting on agricultural practices that are voluntarily funded by the farmers themselves. A Penn State study reported many practices that had not counted.

The state Department of Conservation and Natural Resources has made a commitment to plant 95,000 acres of streamside forested buffers and it's a goal that CBF shares.

The Commonwealth is in the process of developing the next steps to carry it toward achieving its 2025 Clean Water Blueprint goals.

The assessment of milestone commitments in 2016 found that Maryland and Virginia are largely on track to meeting their goals for reducing pollution.

Pennsylvania continues to face a myriad of budget challenges including yet another state budget that could fall well short of providing the investments necessary for Blueprint

success. The Commonwealth will only be successful with sustained investments in the right places and on the right practices.

The possibility that federal investments to the Chesapeake Bay Program, Environmental Protection Agency, and the federal Farm Bill might be reduced deepens the challenge Pennsylvania faces in cleaning and protecting the water we all deserve.

“While there is significant room for improvement in all the states, it is important to note that reduced pollution is benefitting the Bay. Over time, the dead zone is getting smaller, Bay grasses are at record levels, and oysters are rebounding,” CBF President William C. Baker said. “The success all three states have had in reducing pollution from sewage treatment plants is important, but it also masks shortfalls in each of the states’ efforts to reduce pollution from agriculture and urban and suburban runoff. Continued federal and state investments will be key to success on the state level, and we know the payoff will be significant.”

## PA Developing a New Plan to Clean its Waterways



CBF Pennsylvania's Agriculture Policy Analyst Kelly O'Neill leads a discussion on agricultural enforcement and compliance, and promoting greater stewardship, at the Pennsylvania clean water planning meeting.

About 250 Pennsylvanians representing local governments, the farming community, and other stakeholders gathered earlier in the summer to provide input into development of the next phase in the Commonwealth's clean-up plan.

Breakout groups discussed agriculture, forestry, funding, local planning, stormwater, and wastewater aspects of improving the health of local streams, rivers, and lakes.

The state departments of Environmental Protection, Agriculture, and Conservation and Natural Resources are spearheading the effort.

Pennsylvania has fallen considerably short of meeting its 2010 goal, as well as its 2012 goal.

The Commonwealth's next plan is due to the Environmental Protection Agency by March of 2019.



# CBF Student Leaders Spearheading Campaign to Save Hellbenders and Clean Water in PA

A campaign on behalf of North America's largest salamander is the brainchild of the CBF's Student Leadership Council in Pennsylvania. This group of dedicated students studied the hellbender extensively and wrote the first draft of Senate Bill 658 that will designate the Eastern hellbender as Pennsylvania's official state amphibian.

The bill was introduced by State Senators Gene Yaw, Mike Regan, and Richard Alloway.

Student Leadership Council President Anna Pauletta said, "It's about all species that rely on clean water, which essentially encompasses all wildlife in Pennsylvania, including us, and being able to speak up for something that doesn't necessarily have a voice and making an impact on their survivorship through legislation." Anna recently graduated from Cumberland Valley High School.

Hellbenders survive where there is cold, clear, swift-running water. They prefer rocky streambeds. Their spongelike bodies allow them to squeeze into crevices, which they use for protection and for nesting. Folds of wrinkled skin of these salamanders provide a large surface through which they draw most of their oxygen.

"They are a natural barometer of water quality and they live where the water is clean," Senator Yaw said,



Lane Whigham/CBF Staff

CBF Student Leadership members Anna Pauletta, center, and John Miller, assist Dr. Peter Petokas, left, installing hellbender nesting boxes in the Upper Susquehanna River.

recalling days as a youngster catching hellbenders in the local creek. "If they are surviving in the streams in this area, that is a good sign for the water quality. Here is nature's own testing kit for good water quality."

The benefits of streamside trees are key to hellbender survival.

A lack of trees along Commonwealth waterways means warming waters, polluted runoff making its way into rivers and streams, and sediment building up in streambeds. As a

result, habitat has been degraded and hellbender numbers were decimated in streams where they were plentiful as recently as 1990.

The student effort on behalf of the hellbender began last summer. CBF student leaders have installed hellbender nesting boxes in the upper Susquehanna, and sampled streams for the presence of hellbender DNA.

For more information about the campaign for the Eastern hellbender, go to [cbf.org/hellbender](http://cbf.org/hellbender).



Dr. Peter Petokas

CBF PA student leaders want Eastern hellbenders to be designated as the state's official amphibian.



B.J. Small/CBF Staff

Members of the CBF Student Leadership Council with Senator Gene Yaw are, from left, Anna Pauletta, Abby Heberton, Emma Stone, River Sferlazza, and Andrew Waldman.

# CBF Will Use Grant to Educate PA Communities About Causes and Cures of Polluted Runoff

Residents in Harrisburg, Lancaster, and York will be able to learn about the problems caused by polluted runoff and have a say in how it is addressed, thanks to a state environmental education grant from the Department of Environmental Protection to be matched and administered by CBF. Capital Region Water is a key partner.

DEP Secretary Patrick McDonnell defined environmental justice as “empowering low-income minority communities with better environmental information so they can more fully participate in the kinds of processes we at the department engage in every day; connecting people with their environment and their government to get better outcomes.”

“This project will empower and educate people in urban areas of Harrisburg, Lancaster, and York on how they can improve and protect the water quality in their communities,” said Renee Reber, CBF’s staff scientist in Pennsylvania. Reber worked on the grant. “We look forward to working with community members who will be able to help guide how project activities such as rain barrel workshops and watershed discovery



B.J. Small/CBF Staff

The rain garden at the PA Farm Show Complex in Harrisburg, has features that may be included in the rain garden to be installed in the city in spring of 2018 as part of an environmental justice project administered by CBF.

trips are tailored to work best for their interests and needs.”

CBF’s environmental justice project will also include a demonstration rain garden in the City of Harrisburg in the spring of 2018.

“Prioritizing education about water quality, especially in our

disadvantaged communities, builds a stronger community overall,” said CBF’s Pennsylvania Executive Director Harry Campbell. “We all have a stake in clean water. Our health, way of life, and economic wellbeing depend on it. That’s why we all should have the knowledge and opportunity to be part of the solution.”

## New Grant Allows Municipalities to Pay for Success

CBF will receive an innovative federal grant designed to put conservation practices on farms that will allow municipalities to satisfy stormwater pollution reduction requirements and return profits to capital investors.

The Conservation Innovation Grant from the Natural Resources Conservation Service of the U.S. Department of Agriculture is to be matched by CBF and multiple partners for the three-year project.

With the innovative grant, CBF and partners will apply an innovative Pay for Success approach.

Under Pay for Success, select municipalities contract to pay a

financial intermediary, if specific pollution reductions are achieved.

With capital from private investors, the intermediary contracts with service providers for the installation of pollution-reduction measures on farms. If the desired pollution reductions are achieved, the municipality can apply the results to satisfy its urban and suburban stormwater compliance requirements. The municipality will then pay the intermediary, which in turn repays investors, with interest.

“There is a big cost differential between doing stormwater controls in urban and suburban areas versus doing pollution controls on agricultural

land. It can be 10- to 100-fold more expensive in urban areas,” said Dr. Beth McGee, CBF’s Director of Science and Agricultural Policy.

“With this project, we get practices in the ground sooner because a big investor might be able to invest quickly and get paid back over a longer period of time,” Dr. McGee added.

“The municipality is only going to pay if the project is performing as it was designed. The investors expect to make money because of the large cost differential,” Dr. McGee said.

The Pay for Success project hopes to be able to contract with municipalities in York or Lancaster.



# Stewardship Event Emphasized Partnerships and Conservation Efforts From Farmers' Perspective

In early August, farmers along with local, state, and federal representatives attended a farm stewardship event in Juniata County.

The focus of the day's activities was agricultural conservation efforts and the power of partnerships.

David and Marie Graybill hosted the event at Red Sunset Farm, a 400-acre dairy operation in Mifflintown. They rent the land from conservation-minded owners Jay and Alice Olephant of Washington, D.C. Representative Tom Marino (R-PA-10th) was also on hand for tours of the dairy operation, grazing practices, and other efforts on the farm.

The final tour of the day was of a Regional Conservation Partnership Program (RCPP) buffer project, funded by a National Fish and Wildlife Foundation grant, which also supports CBF's Farmer Advisory Council in Pennsylvania. The council sponsored the event in order to emphasize conservation practices from the farmers' perspective.



B.J. Small/CBF Staff

Dairy farmer David Graybill addresses visitors at the farm stewardship event.

David Graybill is a council member and serving his second term on the Pennsylvania Farm Bureau state board, representing Juniata, Mifflin, Perry and Huntingdon Counties.

The Graybills' dairy operation has 60 registered Holsteins and 70 replacement heifers. They produce 100 acres of corn, 100 acres soybeans,

70 acres hay, some small grains, and 20 acres of sunflowers. The property straddles the Schweyer Run and Lost Creek Watersheds.

"You have to control the good things in your environment," David Graybill said. "It's about being good stewards of the land, within the economics of that stewardship."

# A Great Day for Celebrating Heroes on the Water

Just as enjoying waterways like the mighty Susquehanna River is one of the many privileges protected by our military heroes, the river itself can provide a therapeutic, healing experience for those who gave so much.

The Third Annual Veterans on the Susquehanna event, at Shank's Mare Outfitters in Wrightsville in August, was an opportunity for CBF and Heroes on the Water to celebrate those who served our country.

The day also served to remind folks about the importance of enjoying and protecting local rivers and streams.



B.J. Small/CBF Staff

The Susquehanna River can be a therapeutic, healing experience for those who gave so much during their time as members of the armed services.

# Field Notes: Reports From the Restoration Staff



Fish habitat improvement on this stream included trees and shrubs on the bank.

Spring planting season has come and gone but the benefits will continue for decades. Through CBF's tree giveaway, 30 local landowners in my area planted 3,600 trees and shrubs in existing streamside forested buffers.

Also, finishing touches were put on a fish habitat installation project by planting trees and shrubs on the streambank after last fall's structure installation. You can literally throw a stone into Potter County and almost see New York State from the project. It's just north of Westfield, on the North Fork stream.

—**Steve Smith, Northern PA**



Decision makers enjoyed a paddling trip.

This past spring I provided technical assistance for five new streamside buffer plantings (four Conservation Reserve Enhancement Program (CREP) and one Environmental

Quality Incentives Program. In addition, two more CREP contracts will be signed in the next few months. I finished an eligibility determination for over 20 acres of forest buffer in Dauphin County! I hope that will move into the contracting process very soon and I will be working on that plan in the next few months.

I also organized and participated in a decision-maker canoe trip with the Natural Resources Conservation Service of the U.S. Department of Agriculture staff from Cumberland and Franklin Counties in May.

—**Kristen Hoke, South Central PA**



Fish populations were assessed using electroshocking at several sites.

Through the National Fish and Wildlife Foundation grant, CBF, Chesapeake Conservancy, and Susquehanna University are collaborating on a project (primarily in Centre and Clinton Counties) using newly available high-resolution GIS datasets and tools to focus restoration efforts and best management practices "in the right places, at the right time, and at the right scale."

The partners conducted workshops with partners and landowners, a ranking of the top 200 restoration opportunities, and pre-construction stream monitoring on several sites that included electroshocking by the Pennsylvania Fish & Boat Commission to assess fish populations.

Habitat structures will be built and a buffer installed to improve the stream.

—**Frank Rohrer, Central PA**



The East Branch of the Octoraro needed various improvements.

A total of nine streamside buffers were installed this spring bringing the total to 52 acres of native trees and shrubs planted with 12,145 feet of fence.

One Plain Sect landowner located in the Octoraro watershed, worked for over two years partnering with Lancaster watershed specialist Matt Kofroth and others to install 12 acres of buffer and fence, as well as 2,582 linear feet of muddills, boulder clusters, and log vanes.

The landowner shared his concerns about the stream and flooding from the East Branch of the Octoraro. Matt looked at the site as two separate phases. The first phase was completed in the winter of 2016. The trees and shrubs were planted spring 2017.

—**Ashley Spotts, Southeastern PA**

Mother Nature was her usual unpredictable self this year. Field visits in February, due to unseasonably warm weather, were followed by a blizzard in March, which dropped three feet of snow. Despite the weather, many field visits were done, in anticipation for CREP streamside forested buffer re-enrollments.

It has been a goal of the CBF Pennsylvania Restoration Program to provide landowners with resources,



including technical assistance, free tree seedlings, and tree stakes. These resources improve the success of buffers and put landowners in a better position for re-enrollment, to keep these vital practices working.

In April, landowners in Bradford, Sullivan, Susquehanna, and Wyoming Counties took advantage of our free tree giveaway. I provided 46 CREP



Jennifer Johns/CBF Staff

Successful buffers produce clean water.

landowners with 2,500 tree seedlings and 2,000 tree stakes in order to improve the survivability and success of their buffers.

This has been the fifth year restoration staff has provided this opportunity to our CREP landowners.

I also directly assisted with implementing almost 23 acres of riparian forested buffers this spring, as well as assisting other CREP projects.

—**Jennifer Johns, Northern PA**

I have replanted 641 trees and 245 shrubs to existing buffers through a Growing Greener grant with help from the East Juniata FFA and CBF Pennsylvania Student Leadership Coordinator Emily Thorpe.

A total of six participants in the Buffer Bonus program had buffers planted this past spring. About 40 acres were added in Juniata County and more than 3 acres in Mifflin County.

Two new Buffer Bonus program participants in Mifflin County signed their agreements this spring as well.

—**Brent Nice, Central PA**



Lane Whigham/CBF Staff

Molly Cheatum

CBF welcomes Molly Cheatum to the position of Watershed Restoration Program Manager.

She will manage CBF's restoration field staff in Pennsylvania, collaborate with stakeholders, and develop and provide overall management of restoration projects that reduce pollution to Commonwealth waterways and ultimately, the Bay.

Cheatum is a native of the Wyoming Valley area in Northeast Pennsylvania.

As legislators in Harrisburg continue to consider how to generate revenue to pay for the spending in Pennsylvania's fiscal year 2017-18 budget, there are concerns about both sides of the ledger.

The Commonwealth is significantly behind in meeting its Clean Water Blueprint commitments, yet the spending plan passed by the legislature in the summer continues a pattern of chronically underfunding pollution-reduction efforts in the Keystone State.

The state Senate narrowly passed a payment plan. It is a revenue package that contains several important administrative measures. This revenue plan awaits review and action by the state House. As proposed, we have reservations about sections of it.

## Budget update



Myranda Kleckner

The bill includes a severance tax on Pennsylvania's gas and oil industry to go into the General Fund. As a member of the Growing Greener

Coalition, we strongly believe that if a severance tax is adopted, a portion of the proceeds should be allocated for watershed restoration and other conservation efforts in the Commonwealth. This revenue bill does not earmark any proceeds from the tax for the environment.

This legislation also requires the Department of Environmental Protection to establish a third-party permitting process for all environmental impact permits. This measure does not provide details on how possible legal and technical issues like conflict-of-interest, ethics, public participation, appeal processes, and other elements would be addressed.

As the budget process continues, we will continue fighting for clean water and urging legislators to do the same.



# SWEEP Students Take to the Water and Learn Outside

CBF's renowned Susquehanna Watershed Environmental Education Program (SWEEP) has launched its fall season, providing hands-on learning for 27 years.

New educators Ryan McGrady and Elizabeth Fulton joined the SWEEP team this past spring.

During the months of March through May, CBF Pennsylvania's education team worked with about 25 regional groups in 13 counties to get students out onto the water.

Local students in grades 6 through 12 learned about the importance of water quality and how stream systems work. For many of the young people, SWEEP was their first experience paddling in a canoe.

They investigated the health of local waterways through a variety of hands-on activities like up-close studies of the bugs and other species living in the waterway; studied the physical characteristics of the waterway, the shoreline, and the adjoining lands; tested water quality with chemistry;



CBF's Susquehanna Watershed Environmental Education Program (SWEEP) is gearing up for another fall season of providing hands-on learning.

and used maps to orient students with their specific watershed.

Unlike other educators, the SWEEP education team doesn't get to enjoy a traditional summer vacation. They spent those months preparing educational opportunities for teachers and other adults.

CBF and SWEEP appreciate the support the program receives in part from The Harley-Davidson Foundation, The Hershey Company, The August Heid Trust, The Caroline Fredricka Holdship Charitable Trust through The PNC Charitable Trust Grant Review Committee, and Powder Mill Foundation.



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CBF Staff

**One person can have a lasting impact**, helping ensure clean water in Pennsylvania and a healthy Bay for current and future generations. Through a planned gift to CBF, you can plant trees along miles of streams; educate thousands of children about environmental stewardship; protect habitat for oysters, crabs, fish, and birds; and so much more. Contact Heather Smith, Director of Major Giving, Pennsylvania, at 717-875-3151 or [hsmith@cbf.org](mailto:hsmith@cbf.org) for further information.



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