

# Conservation Horizons

Since 1948 \* 70 Years of Conservation, Education & Stewardship \*



## Our Annual Conservation Awards



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## Ag Plan Writing Workshop Page 8



Come Write Your Own  
Ag E&S Plan  
using PAOneStop.  
Registration is required  
for this free workshop.  
See all details inside!

## Concerned About Flooding?

We are too. See what's being proposed. Page 15



## York County Conservation District

**Our purpose is to promote wise use and management of soil, water, air, plants, wildlife** and other natural resources through four program areas: Agricultural Resources, Education, Erosion & Sediment Control and Watersheds

We have served York County since 1938, when a group of 554 farmers from 18 townships signed a petition to form the York County Conservation District. This petition was approved by the state Soil Conservation Commission in 1948. Like all Conservation Districts, we are a legal subdivision of state government like townships or school districts. Our budget is supplied by county, state and federal programs, as well as foundation grants & fees for services. And we are managed by a board of environmentally aware York County citizen volunteers.

**We have traditionally assisted agricultural producers and other landowners** in protecting soils & reducing erosion in our waterways. Today, the District also works with non-agricultural landowners, developers and local government officials to protect our natural resources.

We do this by coupling technical & financial assistance with conservation planning and permitting requirements.

Education is a cornerstone of the District and we target a wide audience about effective pollution-prevention techniques to farmers, landowners, local officials, watershed associations, conservation organizations, civic groups, churches, schools, teachers and youth.

**Our Vision** - We are committed to the improvement & protection of our environment and the wise use of our County's diverse natural resources.

**Our Mission** - To achieve that vision we will be proactive providing conservation education, technical services and financial assistance, to enable the citizens of York County be good stewards of our natural resources.



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Gary R Peacock	Watershed Specialist
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Phone: 717-840-7430 / Fax: 717-755-0301 / Email: [yorkccd@yorkccd.org](mailto:yorkccd@yorkccd.org) / Website: [www.yorkccd.org](http://www.yorkccd.org)





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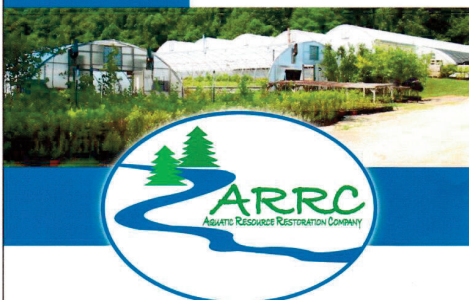
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# Ag Resources

A Look at Pastures, Part II, by Joe Rebert

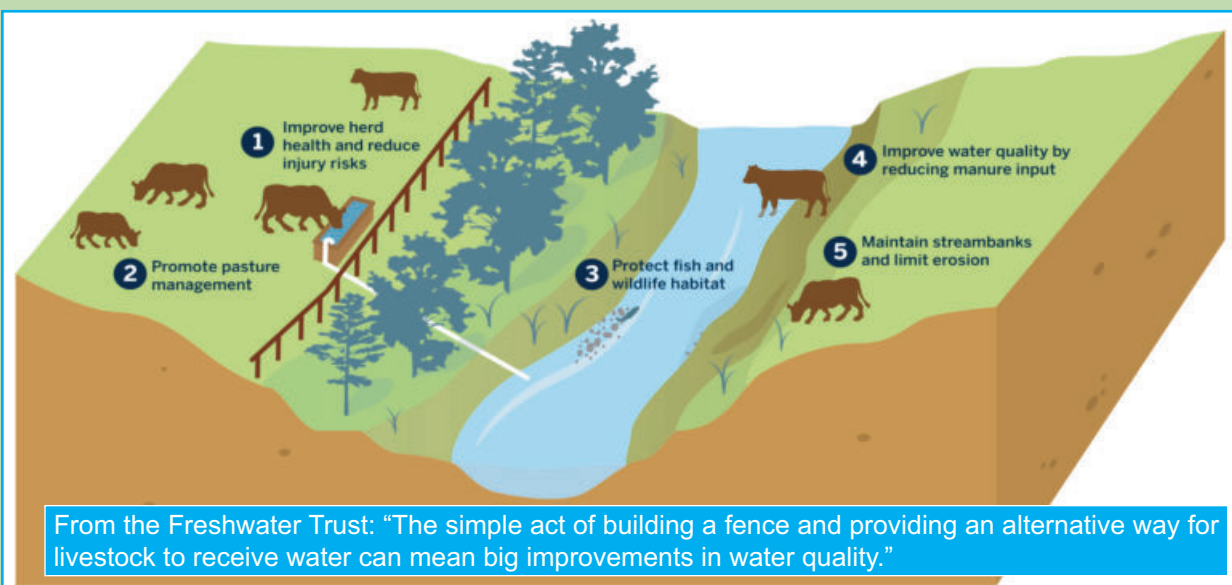
In part two of our series on pastures we will be looking at structural practices associated with grazing systems. We will begin by discussing perhaps the most important structural part of a pasture system: fencing. **There are two main fence types associated with pastures: exterior and interior.** Exterior fence is what creates the perimeter. Interior fence, on the other hand, is the fence used to divide a pasture into smaller areas, known as paddocks. The difference between the two types is that exterior fence should be stronger and/or have more strands of wire to better contain livestock.

Some common varieties of fences are high tensile, coated high tensile, box or woven wire, barb wire, board fence, etc. Each variety has its advantages and specific uses, so deciding which to use comes down to the animal type, the cost, and personal preference. Temporary fencing is another type of fence sometimes used in pastures. Temporary fence is often times used in a similar manner to interior fence, but in situations where permanent fence isn't required. An example of a use for temporary fence would be to further subdivide paddocks in a rotational grazing system.

Fences can also be used to exclude livestock from a stream within a pasture. **While you are not required to fence off streams within your pasture in Pennsylvania, doing so can have benefits to both animal health and water quality.** Stream exclusion benefits animal health because livestock have less chance of contact with waterborne pathogens, and it also reduces injury risk to the animals walking on eroded banks or in rocky or muddy streambeds. Water quality benefits come in the form of reduced erosion from the streambed and bank, and reduced nutrients entering the stream as manure.



**Streambank fencing** can vary in the distance from a stream. Generally fences are placed at least 15' from the stream bank, which allows for more nutrients to be filtered out by the vegetated buffer that is created inside the streambank fencing. Buffers can either be grass and other riparian vegetation to create an herbaceous buffer or trees can be planted to create a forested buffer. A forested buffer offers the same benefits as an herbaceous buffer, but can maximize the amount of nutrient filtering that occurs due to the greater nutrient uptake of the trees.



*A Look at Pastures, continued.*

**Forested buffers** can also do a better job of trapping nutrients and sediment than an herbaceous buffer and the deeper roots also do a better job of holding banks in place. All buffers can also provide wildlife habitat, but a forested buffer has the added benefits of shading, which lowers stream temperatures, and providing food to aquatic organisms in the form of leaf litter. Forested buffers are not without drawbacks as it takes time to establish the trees compared to grasses, and they are usually wider than an herbaceous buffer to allow enough room for the trees.

Sometimes streams flow right through the middle of a pasture. Therefore, **if the stream is fenced out, livestock still need access to the pasture on the far side of the stream.** For this, a stabilized stream crossing may be warranted. **A stream crossing is a hard, stable area where livestock or equipment can cross a stream without damaging it.** Generally, stream crossings involve grading back the stream banks to create a manageable approach to the stream and then stabilizing the crossing with stone or hog slats. Hog slats are concrete floor panels used in swine production barns. They make excellent crossings because of the solid footing they provide, and generally require less maintenance than a stone crossing.



**Stream crossings can be beneficial even in a pasture where the streams are not fenced out.** Crossings can still improve water quality and decrease the chance of animal injury while crossing the stream. Another benefit of a stream crossing is to provide a great place for livestock to get a drink of water. In an all-fenced - scenario, even with no need for livestock to cross the stream, a limited access point could be installed to provide water. A limited access point is basically just half of a stream crossing with fence around it. These access points can also be used on a lake or pond. **Be sure to obtain any necessary permits before constructing a stream crossing or limited access point.**



**Watering systems:** There are many other ways to water livestock in pasture systems in addition to stream access. The easiest is to run a hose or waterline from an existing source to troughs located in the pasture; unfortunately this isn't always feasible. Pumps can be used to pull water from a stream to water livestock. **There are many pump styles available and some don't even require electricity to operate. Hydraulic ram pumps, sling pumps, and nose pumps** are examples of pumps that can operate without electricity. A hydraulic ram pump is laid in a stream and uses the force of flowing water to move water to a trough or other collection tank.

A sling pump is similar to the hydraulic ram pump, except it spins like a propeller and needs a deeper stream to function properly. Both these pumps provide a continuous flow of water which would require an overflow on the trough. **Disadvantages of these systems is that they cannot be used in freezing weather.** Another type of pump which can be used in conjunction with a stream is a nose pump. A nose pump is made up of a small dish and a lever. The pump is operated by livestock pressing their nose to the lever to fill the bowl with water. With each pump, the animal receives fresh water. A disadvantage of this system is that it can take some time for the livestock to learn to operate the pump. Nose pumps are available in a cow/calf option which has a second, smaller bowl attached to the side of the contraption. When the mother pumps water for herself it also provides water for the calf. A nose pump is dissimilar from a ram pump or a sling pump in that they don't need flowing water to operate, and can be used with a well or a spring development.



*A Look at Pastures, continued.*

**Wells and spring developments are usually connected to a more permanent type of watering system** because of the up front cost in constructing them. In case you don't know, a spring development consists of underground pipes which collect ground water and carry it to a collection box. The water can then be pumped out of the collection box using pumps, such as the nose pump. Other methods of extracting water from a well or spring development includes solar or wind powered systems. A solar pumping system uses a solar array to capture sunlight which powers the pump.

The water can then be pumped directly to the trough or can be caught in a collection tank. After the water is stored in the collection it can be gravity-flowed to frost free hydrants which are used to fill water troughs. **The advantage of collecting the water rather than going directly to a trough is that the collection can store enough water to supply the livestock with water for several days or longer in the event of inadequate sunshine to power the pump.** A wind powered system often operates in a similar manner as a solar powered system, but relies on wind for a power source. These are not used as commonly here, because of the amount of wind required to consistently work the pump. Using any of the pump systems provides water quality benefits because of the livestock not being in the stream. **Pump systems also provide health benefits to your livestock because they provide fresh, clean water to the livestock.** Studies have shown that providing clean water to cattle results in better weight gain and milk production because they will consume more water if it is clean rather than dirty. **Studies also show that, if given the choice, livestock prefer to drink from a trough over a stream.** Often times, no matter what your water source is, it is a good practice to stabilize the area around the trough because it is a high traffic area. If not stabilized the area around a trough can become denuded, which can lead to erosion or a muddy mess neither of which is beneficial to livestock health or water quality. In the end, choosing a watering system comes down to several factors; cost, power source, water source, volume needed, layout of pastures, reliability, and preference. Many of the systems discussed have limitations on when and where they can be used, so be sure to consult a professional before installing one of these systems.

In conclusion, structural practices can play a vital role in protecting resources and improving livestock health in pastures. There are other structural practices used in pastures which could not be covered in this article. In Part III of this series we will be covering some agronomic practices which are important in maintaining a productive pasture, as well as planting and renovating a pasture.

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## Come Write Your Own Ag E&S Plan Using PAOneStop!

### PAOneStop Workshop

December 11 & December 18

1:00 - 4:00 pm

*Attendance required at both sessions*

*York County Annex, room #1, 118 Pleasant Acres Road, York PA 17402*

PAOneStop provides online tools to help farmers meet regulatory requirements for Conservation and Nutrient Management Planning during the **FREE** workshop. The focus of these hands-on sessions will be the development of state-required Ag E&S Plans. Laptops are provided for participants and District staff will be available to assist participants. **Registration is required & space is limited.** For more information or **to register please call 717-840-7430.** Funding for this workshop is provided by the Center for Dairy Excellence, PA Agricultural Ombudsman Program.

### Free Manure Management Planning Workshop - date TBA

The District will host a 1-day Manure Management Plan Writing Workshop this winter. To be placed on a mailing list for details contact Michele Grove at [mgrove@yorkccd.org](mailto:mgrove@yorkccd.org) or 717-755-2966 ext 107

### Agricultural Planning Reimbursement Program Funding is Available to Develop Soil Conservation and Nutrient Management Plans

Funding is available again for farmers to have soil conservation and nutrient management plans written. Soil conservation (Ag E&S) and nutrient (manure) management plans are required documents for PA farmers. These plans help the farmer protect local water quality and enhance their farm's soil health as well as productivity.

The PA Department of Environmental Protection (DEP) has re-opened the "Agricultural Planning Reimbursement Program" for PA farms within the Chesapeake Bay watershed due to the strong response from the state's agricultural community. The program assists farmers with their agricultural planning needs. Funds will be available on a first-come, first-served basis through May 30, 2019.

Application forms and additional information can be obtained from your local Conservation District, NRCS or our area program administrator: Jed Moncavage/TeamAg, Inc. at 717-721-6795.

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# SPOTTED LANTERNFLY



ACTUAL SIZE: 1"

Adult (with wings closed) can be found July–December



ACTUAL SIZE: 1/4"

Nymph (early stage) can be found late April–July



Egg mass (fresh) can be found October–December



Adult (with wings open) can be found July–December



ACTUAL SIZE: 1/2"

Nymph (late stage) can be found July–September



Egg mass (older) can be found January–June

**The Invasive Spotted Lanternfly** has been confirmed in 13 counties in Pennsylvania, including neighboring Lancaster County. It is native to China, India and Vietnam. This insect has the potential to greatly impact the grape, tree fruit and logging industries. **Early detection is vital for the protection of Pennsylvania businesses, agriculture and wooded areas.** Please help keep an eye out for these harmful insects. **What Can You Do?** If you see egg masses, scrape them off, double bag them and throw them away. You can also place the eggs into alcohol or hand sanitizer to kill them. Please report all destroyed egg masses on this website:

**Collect a specimen:** Specimens of any life stage can be turned in to the Pennsylvania Department of Agriculture's Entomology lab for verification. Submit samples with the Entomology Program Sample Submission Form.

**Take a picture:** A photograph of any life stage (including egg masses) can be submitted to [Badbug@pa.gov](mailto:Badbug@pa.gov).

**Report a site:** If you can't take a specimen or photograph, call the Automated Invasive Species Report Line at 1-866-253-7189 and leave a message detailing your sighting & contact information.

## Our 2019 Annual Seedling Sale is coming soon!

Sponsored by the York County Conservation District & hosted by the York County Parks  
Newsletter subscribers will receive their order form by mail mid-late January

**Order Deadline: March 18, 2019 / Pick up Orders on Thursday, April 11, 2019  
10:00 am - 6:00 pm @ Rocky Ridge Park (off Mount Zion Road)**

We plan to offer a variety of 2-3 year-old bare-root seedlings between 8-24 inches tall.

Our cherry & apple trees run about 4-6 feet tall.

In addition we offer blueberry & raspberry bushes, and deciduous seedlings like redbud, white ash, dogwood, pachysandra ground cover, and much more.

**Please note we do not offer mature trees as sometimes pictured.**





## Erosion & Sediment Control

E&S Program Accomplishments for May - August 2018

Preconstruction meetings	23	General NPDES Issued	37
New Plan Reviews	81	Complaints Investigated	94
Revised Plan Reviews	35	Total site inspections	205
Total Project Acres	2,171	Sites in compliance	66
Total Disturbed Acres	666		



## Education & Communication



**Our 2019 Envirothon Season is upon us.** As we begin our 34th year of environmental education competitions, it is worth noting that right now over half a million high school students across North America and China are getting ready to form school teams, receive their new study resources, and prepare to represent their schools in our end-of-the-year contests.

**Our Annual Coaches Meetings - a requirement for all participating school coaches** - are coming up in November. All returning coaches will soon be receiving their registration packet by mail and email. If you are interested in coaching a team at your school please contact the York County Conservation District for more details.

The **Annual Coaches Meetings** are scheduled for the following dates:

Wednesday, November 14, 2018- Senior High Round Table @ the Pleasant Acres Annex

Thursday, November 15, 2018 - Open House for 3rd - 8th Grades @ Nixon Park\*

Thursday, November 29, 2018 - Open House for 3rd - 8th Grades @ Nixon Park\*

**\*NEW this year - Coaches Mini Training Sessions included at Open Houses**

**Our 2019 Envirothon Competitions** at John Rudy County Park are scheduled for the following dates:

Senior High - Tuesday, April 23

Middle School - Tuesday, April 30

5th & 6th Grades - Wednesday, May 1

3rd & 4th Grades - Tuesday, May 7

The **Annual Envirothon Sponsorship Drive** officially began with our September 21st Clay Shoot at Central Penn Sporting Clays. *See details on next page.* It was a great start to our new season. Our Sponsorship Drive is fully underway. **If you - or your business - would like to become an Envirothon Sponsor** please contact us. We offer sponsorships of every level. Your contributions help over 1,000 York County students and nearly 120 coaches participate in the Envirothon each year for free.



The York County Conservation District held their **11th Annual Clay Shoot Envirothon Fundraiser** on Friday, September 21st at Central Penn Sporting Clays in Wellsville. The day included a catered barbecue lunch, an afternoon shoot, door prizes, awards and gun raffle. All proceeds will benefit the York County Envirothon. Trophies were awarded to **the five top-scoring individual shooters**: Dale "Chip" Wertz (1st), Rick Myers (2nd), Patrick Byrnes (3rd), Joe Rebert (4th) and Scott Wertz (5th).

The **North Mountain** team, pictured below, **took the High Score Trophy for the fourth year in a row**. The **High Score Youth Trophy** was presented to **Hunter Jordan** and our gun raffle was won by Phil Rhorbaugh. Certificates were also awarded to the shooters in 6th – 10th place and a **novice trophy** was presented to **Michelle Madzelan**.



**High Score Youth  
Awarded  
to Hunter Jordan**



**High Score Team Awarded  
to North Mountain (l-r):  
Andrew Allbeck, Scott Wertz, Dale (Chip) Wertz,  
Reece Lynn and Nathan Wertz**



**A Good Shot!**

The **Annual Clay Shoot** officially kicks off the fundraising efforts for the upcoming **2019 Envirothon season**. The Envirothon is a celebrated environmental educational program and competition teaching students how to become informed stewards of our natural resources.

**Thank you to our Gun Raffle Sponsors:** Senator Mike Regan and Representatives Keith Gillespie, Seth Grove, Kristin Phillips-Hill, Dawn Keefer, Kate Klunk, Stan Saylor

**Thanks to our Clay Shoot Sponsors** we have raised \$8,500.00 to begin our 34th season! We appreciate the continued support and hope to see you all again next September.

**Event Sponsors** \$2,000.00: Aquatic Resource Restoration Company & Resource Environmental Solutions

**Event Partners** \$1,000.00: Herbert, Rowland & Grubic, Inc. and Mr. & Mrs. Randy Barnes

**Station Sponsor** \$500.00: Keystruck

**Station Partner** \$100-\$250.00: Warehaus, ELA Group, Inc., JMT, Mark Flaharty, Commissioner Doug Hoke, Izaak Walton League Chapter #67, Irvin W. Allot  
We also would like to thank Wolf Farms, Ellis Crowl  
East Prospect Fish & Game, Brown's Orchards and Walmart



# The YCCD Annual Conservation Awards

The District held its **Annual Conservation Awards Picnic** on Thursday, August 9th at Rocky Ridge Park to present their 2018 Conservation Awards. Each year a committee selects individuals and businesses in York County for recognition of their stewardship and commitment to local conservation efforts. Award recipients were presented with a signed, limited edition framed print by Millicent Neill Decker, while guests enjoyed a catered picnic dinner. This year's recipients were:



**Outstanding Watershed Stewardship Award: Dover Township Wastewater Treatment Plant staff.** Plant Manager **Sophie Simon** & her staff are committed to promoting the importance of wastewater treatment with a proactive approach that includes educational programs for Dover School District, work with municipalities throughout York County, and the importance of well management and regular pumping of sewage systems.

**Dirt, Gravel and Low Volume Roads Cooperator Gerald Shue**, Roadmaster, Manheim Township. Manheim Township has been actively involved in the Dirt, Gravel and Low Volume Road Program (DGLVR) since its beginnings in 1999. Their Roadmaster, Gerald Shue is certified through Environmentally Sensitive Maintenance training and regularly applies the techniques he learned using ESM practices. Gerald and the Public Works Department of Manheim Twp. provide a valuable community service operating and maintaining better and safer roads. Improving water quality and saving the township's limited road maintenance dollars. *L-R: Carrie Nace (for Rep. Kate Klunk), Gerald Shue, Asst. Treasurer Gordon Brown*



## In Special Recognition of the 50th Anniversary of the York County Parks

One of the Districts most successful long-term partnerships has been with the York County Parks System. In addition to sharing goals, purposes, and even occasionally staff, the Parks provides a unique setting for our Envirothon study sessions for nearly 1,000 of our students each spring at Nixon Park. And in 2009 John Rudy County Park became the official "Home of the Envirothons."

In all, the parks oversees 11 separate parks on 4,500 acres, two museums, a nature center and numerous historic sites, in addition to maintaining 29 pavilions, 37 parking lots, 21 sports fields & playgrounds, and more than 400 picnic tables for our use and enjoyment. *L-R: Assoc. Director Rochelle Black, Parks Director Tammy Klunk, Commissioners Susan Byrnes and Doug Hoke.*





**Outstanding Environmental Educator: Mindy Waltemyer** of York County Solid Waste Authority. Mindy has also served on our Envirothon Committee for a number of years, helping with Current Issues, the lower grades Scavenger Hunt, providing Energy & Recycling Programs during our competitions and helping with some of the administrative tasks in preparation for the events. As a Community Services Specialist at YCSWA, she has spent years conducting school and civic group programs on Waste-to-Energy Technology, Landfill Construction, Recycling and Composting, and various other environmental topics. *L-R: Commissioner Susan Byrnes, Representative Keith Gillespie, Mindy Waltemyer, Commissioner Doug Hoke*



**Outstanding Environmental Educator: Lindsay Gerner** of the York County Planning Commission. A 10-year member of our Envirothon Committee, Lindsay has a degree in Environmental Regional Planning, and for the past 16 years has worked as a municipal planner, instrumental in implementing the county's MS4 Permitting and assisting municipalities with their storm water control. As an Envirothon committee member, Lindsay is actively involved in creating the Current Issue resources each year for 5th – 8th Grades. She also does a tremendous amount of outreach and education to York County School Districts on a variety of topics related to planning and environmental protection. *L-r: Assoc. Director Beth Lucabaugh, Lindsay Gerner, Commissioner Susan Byrnes*

**Outstanding Conservation Farmers: Brook Run Farms, Keith & Ryan Hoover.** Located in Chanceford Township the Hoovers have a 75,000 bird cage-free layer facility and farm 105 acres of corn and 13 acres of hay on two tracts. With Federal EQIP funds they have installed grass waterways, diversions, terraces, a rock chute to control runoff from the poultry facilities and more. The Hoovers have two conservation plans on the their two farms. They are in compliance with state rules and are committed to improving water quality and management of their farm operation. *L-R: Commissioner Doug Hoke, Treasurer Michael Flinchbaugh, the Hoover family, and in back, Representative Stan Saylor.*



**York County Clean Water Farm Award: Belview Valley Farm LLC, Eric Gemmill.** Mr Gemmill and his family operate a hog and cash grain farm in Peach Bottom Township with 5,000 animals. He farms approximately 700 acres in corn, soybeans and wheat using no-till. The hog operation is a CAFO and permitted by DEP. He has approved Act 38 Nutrient Management Plan. Grass waterways are maintained as needed and planned. He has an excellent record of maintaining crop and manure records and positive reports from NMP status reviews and has a CREP contract with FSA. *The Gemmill family pictured at left and on our front cover.*

The York County Government is an Equal Opportunity Employer and shall in no way discriminate against employees or applicants for employment on account of age, religion, color, national origin, sex, ancestry, disability, and/or any political or union affiliation.



# Watershed Specialist

Gary Peacock

## Guidelines for Maintaining Streams in Your Community

DEP wants to help Pennsylvania communities complete all necessary stream work in a way that is environmentally-responsible, reduces the likelihood of future flooding problems, and complies with regulations. When in doubt, contact PA DEP for assistance before you start stream work projects.



### Green Light—Go!

Proceed—These actions do not require DEP notification, pre-approval, or additional permits:

- Removing woody debris and manmade debris materials from the stream, banks, and riparian areas by hand or using handheld equipment
- Removing above items using heavy equipment from the bank; equipment should not enter the stream or dig into the streambed
- Removing gravel and debris in and close to bridges and culverts (Note: review permit conditions first)
- Crossing a flooded stream for emergency access to your property, if conditions are safe



### Yellow Light—Slow Down!

Call DEP first—Notification, pre-approval, or emergency permits may be required:

- Rebuilding roads and bridges across streams
- Streambank stabilization projects, including riprap
- Removing gravel bars from the stream channel using heavy equipment
- Repairing a bridge or culvert, or removing one in danger of failure

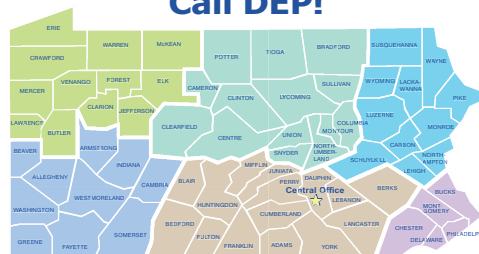


### Red Light—Stop!

These actions require permits from DEP, and possibly from the U.S. Army Corps of Engineers or other agencies:

- Redirecting the flow of a stream by reshaping gravel bars, or moving gravel to the streambank
- Moving/relocating a stream
- Dredging or damming streams, or creating dikes
- Building a new bridge or culvert

### Remember: When in Doubt, Call DEP!



#### DEP Regional Offices

- **Northwest (Meadville) Regional Office**  
230 Chestnut St.  
Meadville, PA 16335-3481  
Telephone: 814.332.6945
- **North-central (Williamsport) Regional Office**  
208 W. 3rd St., Suite 101  
Williamsport, PA 17701-6448  
Telephone: 570.327.3636
- **North-east (Wilkes-Barre) Regional Office**  
2 Public Square  
Wilkes-Barre, PA 18701-1915  
Telephone: 570.826.2511
- **Southwest (Pittsburgh) Regional Office**  
400 Waterfront Dr.  
Pittsburgh, PA 15222-4745  
Telephone: 412.442.4000
- **South-central (Harrisburg) Regional Office**  
909 Elmerston Ave.  
Harrisburg, PA 17110-6200  
Telephone: 717.705.4700
- **Southeast (Norristown) Regional Office**  
2 East Main St.  
Norristown, PA 19401  
Telephone: 484.250.5900



**pennsylvania**  
DEPARTMENT OF ENVIRONMENTAL  
PROTECTION

Visit the DEP website at <http://www.dep.pa.gov>  
for more information about relevant permits and programs.





## **York County Stormwater Authority:** **A proposal for York County to improve our streams, reduce flooding and meet Federal water quality requirements**

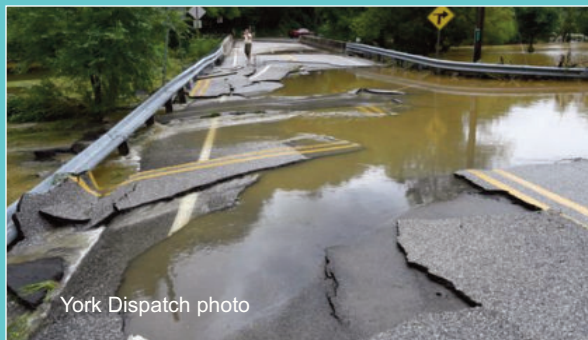
**This past summer many of our communities in York County experienced flooding from high intensity storm events.** These events are becoming more frequent and cause expensive damage to an increasing number of properties. In addition, the stormwater runoff from these events pollutes our streams with sediment from our stream banks and chemicals & nutrients from our fields, yards and roadways. Community impacts from flooding and water pollution are a direct result of how we manage our land. **Decades of development in York County occurred before stormwater management was required.** In the 1970s & 1980s, our 72 municipalities began to adopt ordinances to guide development including the volume and rate of stormwater runoff. It's only within the past decade that municipalities were also required to address water quality as part of their stormwater management ordinances. We also do not have an inventory of how many farming operations have an Agricultural Erosion Control and/or Conservation Plan currently being implemented. We cannot determine the impact, or accomplishments, from suburban stormwater runoff as opposed to agricultural runoff. But **we do know that we have degraded water quality in many of our streams across all of York County** that we are mandated to clean up.



### **Where do water pollution requirements come from?**

The federal Clean Water Act (CWA) of 1972 establishes the basic framework to regulate pollutants discharged into our waterways, streams, and rivers. The CWA is administered through the United States Environmental Protection Agency (EPA). Many of the federal water regulations are carried out through state environmental agencies, which in our case is the Pennsylvania Department of Environmental Protection (DEP). **In addition to federal water pollution requirements, Pennsylvania is required to meet additional requirements as part of a special water pollution plan to clean up the Chesapeake Bay called a Total Maximum Daily Load or TMDL Plan.**

The TMDL Plan limits the amount of pollution that can be discharged by each of the contributing states and still ensure the health of the Chesapeake Bay is maintained. In order for PA to meet their Chesapeake Bay TMDL Plan requirements, DEP has identified the type and amount of pollutants each County is contributing. In turn, **DEP is requesting that each County develop a County-based Action Plan for Clean Water also known as a Watershed Implementation Plan (WIP) to clean up their share of the problem in a way that fits their local resources and capabilities.** The goal is to reduce our water pollution to acceptable limits by 2025.



York Dispatch photo

### How is York County doing?

Through the development of the PA TMDL Plan for the Chesapeake Bay, York County has been identified as the second highest water polluting county, second only to Lancaster County. Our share of the problem has been identified as 4 million pounds of Nitrogen annually from agriculture practices and suburban stormwater runoff. In addition, DEP has also identified sediment runoff as a local source of pollution that needs to be reduced.

### What happens if York County doesn't clean up our share of the problem by 2025?

EPA and DEP are the government agencies required to implement compliance with the federal Clean Water Act and the PA Clean Streams Law. However, those agencies aren't enabled to take the actions needed on the landscape for compliance. They impose regulations on other entities to ensure compliance. In this case, if York County doesn't clean up our share of the problem, DEP could impose further requirements on our municipalities and farmers to clean up local waterways. In addition, if Pennsylvania doesn't meet the federal requirements, EPA could impose penalties on the state which would be passed down to the local municipalities and farmers. Penalties could include: increasing the number of municipalities required to have a federal stormwater permit for Municipal Separate Storm Sewer Systems (MS4), reducing the number of animals required for a Concentrated Animal Feeding Operation (CAFO) permit, requiring York County municipalities to complete local TMDL plans for the four watersheds that are already identified for this requirement, as well as other penalties.

#### What are we doing about it?

The York County Coalition for Clean Waters (YCC4CW) is a local stakeholder group that is developing the **York County Watershed Implementation Plan (WIP)**. The intent of the **York County WIP** is to do the following:

- 1) Identify the needed reporting methods to get us credit we deserve for existing efforts.
- 2) Identify the projects and programs still needed to reduce 4 million pounds of Nitrogen on an annual basis to clean up our share of pollution going to the Chesapeake Bay by 2025. Although the plan is still under development, it is clear that additional resources are needed to meet these requirement, as well as maintain them into the future.

### How could it be funded?

The York County Planning Commission has been tasked to explore proactive alternatives to help York County, its municipalities and agricultural community to meet these requirements, and avoid additional costly regulations. Through a grant secured from the National Fish and Wildlife Foundation, a team of consultants has been working with local stakeholders to identify funding options. A countywide stormwater authority offers one option to fund the needed projects and programs, as well as improve the reporting of our existing accomplishments. Most importantly, an authority can address the issues on a regional scale which is how our watersheds and streams function. The efforts of one municipality or one farmer will not meet the requirements for all of York County.

*Continued on next page.*



**The current proposal is to create a countywide authority that would be funded through a fee assessed on each parcel in the tax assessment database.** The fee would be based on the classification of the parcel: residential, commercial or agricultural. The fee could only be used to fund the programs and projects to meet water quality requirements though flooding and stormwater improvements. This is different than funding it through a property tax increase, which would not include tax exempt properties and would be general fund revenue that can be used for a broad array of service depending on the priorities in the annual budget.

Credits to reduce the fee are also being considered for commercial and agricultural parcels that implement Best Management Practice (BMP) projects on their property. Due to the high number of residential parcels (161,000), credits for residential parcels are not being considered at the onset due to the administrative burden it would create. They could be considered at a later date.

### **What would be accomplished?**

The majority of the **fees generated through the authority are proposed for projects and programs that will reduce flooding, improve water quality from stormwater runoff, and develop local data to measure our improvement.**

Approximately 80% of the budget is proposed for capital needs including the construction of suburban and agricultural BMP projects, stream restoration, stream buffers, emergency response funds and 25 water quality monitoring locations throughout the County, in order to determine pollution sources to ensure implementation of effective solutions. Further, the intent is to leverage the funds generated to obtain matching grants in order to further extend financial resources.

The remaining budget is for technical staffing and administration. Three of the technical staff are proposed to be dedicated to the York County Conservation District to assist with the backlog of farmers on the waiting list to receive technical assistance for Ag E&S/Conservation Plan development.

This approach provides for developing and administering the program at the County and local level rather than it being dictated by DEP or EPA.

### **Where can I learn more?**

The details of how this would work are under development. **It is very much a work in progress, and your ideas and constructive input are welcome.** Feasible alternatives for funding the work that must be completed are welcomed and appreciated. To learn more, please **visit our website: [www.york-stormwater.com](http://www.york-stormwater.com).** Also, mark your calendar for the third **public meeting on November 8th at the York Learning Center, 300 E. 7th Ave, York PA 17404.**

*Article and photographs (unless otherwise credited) courtesy of the York County Stormwater Authority Implementation Plan Steering Committee. Chart below courtesy of Bay Journal, Chesapeake By Watershed Nutrient Trends and Goals, Summer 2018 issue.*

State/District	Sector	Nitrogen Loads in Pounds				Phosphorus Loads in Pounds			
		1985	2009	2017	2025 Target	1985	2009	2017	2025 Target
New York	Agriculture	10,357,285	7,328,276	6,601,411		404,233	187,396	171,451	
New York	Developed	1,540,050	1,942,730	2,001,316		64,970	73,448	73,032	
New York	Wastewater	3,319,407	1,955,512	2,437,084		363,036	214,472	139,308	
New York	Septic	161,079	177,207	176,314		0	0	0	
New York	Natural	3,294,822	3,102,523	3,101,558		358,247	261,955	248,580	
<b>New York</b>	<b>All Sources</b>	<b>18,672,643</b>	<b>14,506,247</b>	<b>14,317,683</b>	<b>11,533,018</b>	<b>1,190,486</b>	<b>737,271</b>	<b>632,372</b>	<b>587,326</b>
Pennsylvania	Agriculture	76,587,104	62,876,782	63,292,073		2,465,652	1,737,423	1,579,945	
Pennsylvania	Developed	11,240,175	14,760,447	15,374,611		314,632	431,691	435,714	
Pennsylvania	Wastewater	13,329,342	14,417,809	8,114,705		1,849,085	1,109,266	689,811	
Pennsylvania	Septic	1,526,442	1,870,763	1,941,243		0	0	0	
Pennsylvania	Natural	19,336,192	18,783,705	18,591,328		1,416,281	1,184,266	1,095,373	
<b>Pennsylvania</b>	<b>All Sources</b>	<b>122,019,256</b>	<b>112,709,507</b>	<b>107,313,961</b>	<b>73,175,692</b>	<b>6,045,650</b>	<b>4,462,646</b>	<b>3,800,842</b>	<b>3,043,906</b>
Maryland	Agriculture	34,272,099	22,978,436	22,376,859		1,890,831	701,705	645,859	
Maryland	Developed	6,590,782	9,009,369	9,351,599		604,031	685,732	673,835	
Maryland	Wastewater	32,218,029	14,396,666	11,306,504		2,639,701	784,040	512,229	
Maryland	Septic	2,123,636	3,046,890	3,090,474		123	651	664	
Maryland	Natural	8,867,000	8,081,054	8,098,301		2,287,295	1,875,517	1,832,490	
<b>Maryland</b>	<b>All Sources</b>	<b>84,071,546</b>	<b>57,512,415</b>	<b>54,223,737</b>	<b>45,783,540</b>	<b>7,421,981</b>	<b>4,047,644</b>	<b>3,665,077</b>	<b>3,679,925</b>



## How would a stormwater authority reduce pollution and floods?

The stormwater authority would invest in erosion control measures, stream bank restoration along waterways, and nature-based solutions to pollution and flooding. The projects might look like these:

Before



After



Two chronic problems with stormwater are Flooding and Water Pollution.



One of the most effective ways to battle these issues is by restoring vegetation to the soil. Plant roots help hold soil in place.



Plants can physically help hold back some of the water flow, as well as some of the pollutants suspended in the water. Plants can also absorb many pollutants and slowly dilute them - lessening their impact..



## The York County Ag Preservation Program

Patty McCandless, Program Director  
118 Pleasant Acres Road, Suite F  
York PA 17402

717-840-7400 / Monday-Friday 8:00 am to 4:30 pm



The YCALPB is pleased to announce new Directors Dolores Krick of Airville and Edwin Livingston of Dover. Appointed by the York County Commissioners, Dolores and Ed will assist with the County's Ag Land Preservation Program guidance during their three year term. When not working on her family farm or with their family business, S.J. Krick Construction, Dolores and her family love to ride their horses. When not working on his farm, Ed loves traveling and spending quality time with his family.

On August 9, 2018, the PA Farmland Preservation Board reviewed and approved, for recertification, the York County Agricultural Conservation Easement Purchase Program. Each county preservation program must be reauthorized every seven years to ensure they are consistent with current regulation. The York County program has been certified and reauthorized to operate every seven years since August 15, 1990. Preservation activity in York County, includes 284 farms preserved through an ag conservation easement purchase, or a conservation easement donation, and covers 42,399 acres. One cluster of contiguous preserved farms totals 5,140 acres and is located in Chanceford and Lower Chanceford Townships. York's second cluster totals 2,905 acres, and is located in Fawn and East Hopewell Townships. York County has seven clusters of over 1000 acres of preserved farmland. The York County Ag Conservation Easement Purchase Program continues to rank third in the state and ninth in the Nation for acres of farmland preserved. York County's Farm and Natural Lands Trust has also preserved over 10,000 acres to date. Preserved lands shall be used for agricultural production. Customary rural, and part time enterprises may be permitted following County Board review.

In 2017, the York County Commissioners allocated \$284,707 for 2018 Agricultural Conservation Easement Purchases. A state match of \$1,493,652 was received, resulting in \$1,778,359 available for farmland preservation in 2018. The York County Ag Land Preservation Board selected three farms, totaling 618 acres thus far this year.

A public informational meeting has been scheduled for December 13, 2018 to provide farm owners information relating to the requirements and the process of preserving a farm. Professionals will discuss the easement purchase program and also conservation easement donation options. Conservation professionals will talk about the PA Clean Streams Law and conservation planning. Agrarian Associates, Inc., YCALPB appraiser, will share expertise on appraising the farm for easement purchase or donation.

A reminder to farmers, all farms - preserved or non-preserved - require a conservation plan to operate as required by the PA Clean Streams Law. Whether you till, or no-till, spread or generate manure you must have a conservation plan and a manure management plan. The law was first passed in 1972, and last amended in 2010 to add Animal Heavy use Areas, and in 2011 to add Manure Management Requirements. If you do not have the required plans, please contact the YCCD or USDA-NRCS, or a private planner. These professionals can assist you develop the right plan for your farm and comply with current law. Farmers should know that DEP now has funding to reimburse landowners for the cost of conservation plans and manure management plan writing. Please contact Jedd Moncavage, Team Ag, for more information on the Agricultural Planning Reimbursement Program, call (717) 721-6795. Plans must be submitted to Team Ag no later than May 30, 2019 for reimbursement. The County Ag Land Preservation Program has become somewhat of a catalyst for farms to get a conservation plan. In 2018, of the 41 farms evaluated for preservation, 33 were found to have a current conservation plan.

Landowners interested in preserving their farmland may contact the agency at (717) 840-7400, or find our information at [www.YorkCountyPA.gov](http://www.YorkCountyPA.gov). Useful Links and a Preservation Map now show all preserved farms within the county. See if any preserved farms are near you. YCALPB Office Hours are 8 AM to 4:30 PM Monday through Friday. We are located in the County Annex Building at 118 Pleasant Acres Road, York, PA 17402.



**Conservation Horizons**  
York County  
Conservation District  
118 Pleasant Acres Road  
York PA 17402

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"It's the inspired student that continues to learn on their own.

That's what separates the real achievers in the world from those who pedal along, finishing assignments."

— Neil DeGrasse Tyson

#### **Would you like to be on our mailing list?**

Our newsletter, *Conservation Horizons*, is published three times each year - free - to over 8,000 homes & businesses. To be put on our mailing list call 717-840-7430 or email [yorkccd@yorkccd.org](mailto:yorkccd@yorkccd.org).

If you would rather **"Go Green"** and save paper, send us an email request and put "electronic newsletter" in the subject line.

Need to change your address or your status on our mailing list? Just let us know. **And by the way - we never share our mailing list with anyone!**

#### **YCCD District Calendar**

##### **November 2018**

- Nov 6 Office Closed - Election Day
- Nov 8 YCCD Board Mtg – 7:00 pm Annex
- Nov 12 Veterans Day - Office Closed
- Nov 14 Sr High Envirothon Coaches Meeting
- Nov 15, 29 3rd - 8th Grades Envirothon
- Coaches Open House (Nixon Park)
- Nov 22, 23 Thanksgiving Holiday - Office Closed

##### **December 2018**

- Dec 11 & 18 Ag Planning Two-Part Workshops
- Dec 14 YCCD Board Mtg - 11:00 am Annex
- Dec 25 Christmas Holiday - Office Closed

##### **January 2019**

- Jan 1 New Year's Day - Office Closed
- Jan 11 YCCD Board Mtg. 11:00 am Annex
- Jan 21 Martin Luther King Day - Office Closed
- Jan 30, 31 PACD/SCC Winter Mtg. Toftrees Resort State College

##### **February 2019**

- Feb 2-6 NACD 2019 Annual Meeting, San Antonio, Texas
- Feb 8 YCCD Board Mtg, 11:00 am Annex
- Feb 18 Presidents Day - Office Closed