The last few years have proven difficult for farmers due to the higher than usual rainfall amounts. It has taken a toll on pastures that were not able to get relief during the growing season when conditions were wet – it was always wet. This leads to pastures getting trampled by animal foot traffic, and more so in places where the animals congregate such as feeding, watering, and shade areas. Winter can make those pastures even worse since grass is no longer growing and there is nothing there to protect the soil.

Farmers can help protect their pastures going into winter by moving animals into a barn, onto a concrete lot, or fencing off a small sacrifice lot in a pasture to minimize damage to the entire pasture. Keep in mind the location of these areas in relation to streams, areas of concentrated flow, and wells so water quality is not negatively impacted. Implementing any of these practices can allow pastures to have some relief in the late fall, winter, and early spring to possibly eliminate the need for reseeding or repairing pastures. Make sure to update your Manure Management Plan with any management changes from previous years, and you can also use this resource to ensure you are locating any animal heavy use area (ACA) to the best possible location. Of course you can also call the Conservation District at 610-925-4920 to discuss your individual situation, and inquire about any funding opportunities that may be available to help alleviate water quality issues on your operation.
If you live in southeastern Pennsylvania you have probably heard about the spotted lanternfly by now. They are an invasive insect from China that arrived in Berks County in September 2014 and have spread throughout the region. They are colorful, hopping insects that feed on the sap of host trees and excrete a substance called “honey dew” which creates an ideal environment for black sooty mold to grow. Black sooty mold develops an unpleasant odor and can kill the vegetation it grows on. The spotted lanternfly threatens several Pennsylvania industries, such as wine grapes, juice grapes, apples, peaches, and hardwoods - representing over $18 billion of Pennsylvania income.

Penn State Extension has taken the lead on educating the public about the spotted lanternfly. If you want to report a siting, read more about spotted lanternfly, print informational flyers, or contact someone to speak about the spotted lanternfly at your community event, call your local Penn State Extension office or visit their website.

Penn State Extension Chester County
(610) 696-3500
https://extension.psu.edu/spotted-lanternfly

Adult Spotted Lanternfly
Here are a few common questions:

“The spotted lanternflies that I have seen seem to prefer some trees over others. What trees do they prefer?”

Spotted lanternflies prefer their native host, the ailanthus tree, commonly known as the “tree of heaven.” These trees are also invasive from China and are common in areas of unmanaged woods, along highways, in towns, behind stores, and popping up between sidewalks.

“I have spotted lanternflies all over my property, and I want to manage this problem without paying a professional to help. What can I do?”

Tree banding is an option. Tree banding is wrapping an affected tree with an adhesive tape so that any bug crawling up the tree will be caught. It works best in May-July to catch the nymphs. The benefit of this strategy is that it is very effective at catching the spotted lanternfly. The drawback is that it is also effective at catching mammals, birds, and beneficial insects. To prevent tree banding from catching larger animals, cover the bands with chicken wire. Also, if you only use this technique on the spotted lanternfly host, ailanthus, you will avoid catching other insects because the ailanthus is not a primary host for any native species. For more information, visit Penn State Extension’s website.

Scraping egg masses in October through April, and placing them in a bag with rubbing alcohol, then into the trash, is another great way you can prevent the proliferation of this insect.

“I have spotted lanternflies all over my property, and I want professional help managing the problem. What should I do?”

Call your local arborist and ask if they have experience dealing with the spotted lanternfly. They will remove female ailanthus trees to keep the species from reproducing (which produce up 325,000 seeds per year) and keep the males as “trap trees.” They will either band the trap trees or treat them with a systemic insecticide, killing the bugs which feed on their sap. They will also scrape egg masses from trees and other surfaces.

Please help prevent the spread of this invasive species! By slowing the spread, we are buying time for our local universities to find a viable solution before the spotted lanternfly does even more damage.

Remember: if you see them, squish them!
Biosecurity and Disease Control

African Swine Fever (ASF) is a highly contagious, viral disease that affects both wild and domestic swine. It is spread through contact between healthy and contaminated swine, as well as through contact with disease carrying objects. These objects include: contaminated feed, shoes, clothing, equipment, etc. Anything an infected swine (dead or alive) has come into contact with can transmit the disease. There is currently no vaccine or cure, and it is spreading quickly throughout Asia and Europe. Originating from Africa, it has since spread to China, Mongolia, Vietnam, and 10 member states of the EU.

Although this disease has fortunately not reached the states, it serves as a good reminder to practice proper biosecurity on all farms. Introduction of ASF into the commercial swine herds of Pennsylvania would result in severe economic losses for herd owners, as well as lost opportunities for National and International trade for all of Pennsylvania’s pork producers. It is best to be prepared for any potentially harmful situation, and utilizing biosecurity protocols is a good practice for the health of livestock in general.

As a herd owner, there are many things you can do to prevent the introduction and/or spread of this deadly disease:

- Routinely assess and update/improve your biosecurity protocols
- Any farm visitor (worker, friend, or stranger) should be made aware and follow the written protocols
- Ask visitors if they have traveled internationally recently. It is important to be aware if they’ve traveled to an infected country. It is recommended to not allow them on the farm within 5 days of their arrival back into the US
- Provide biosecurity training to new employees, and brush up on trainings with existing employees
- Know who and what is on your farm at all times
- Keep track of visitors, vehicles, and equipment that travels to and from your farm
- Clean and disinfect all vehicles, equipment, clothing, etc. before entering or leaving the site
- Isolate sick pigs from the herd and visitors

Help keep the US free of this deadly disease!

Report sick pigs: 1-866-536-7593

Go to www.aphis.usda.gov for more information.

The Alliance for the Chesapeake Bay was awarded two grants from the National Fish and Wildlife Foundation (NFWF) to support farmers making improvements on their operations that help to reduce nitrate pollution in Lancaster and Chester Counties, Pennsylvania. This is a multi-year grant ending May 2021 that is available to farmers residing in the Octoraro Watershed. The grant can pay for 100% of the cost of conservation, manure management, and nutrient management plans, as well as 50% of the cost of conservation practice installation. For more information please contact Pennsylvania Agriculture Program Manager, Leslie Weller at 717-824-7088.
Plans – A Tool or a Piece of Paper?

Whether or not a plan is a useful tool or just a piece of paper can depend on many factors. Plans document a landowner or operators’ interests and intentions and whether those goals are short term or long term. They reflect the time planners spend on the farm viewing the operation objectively with the farmer, communicate requirements, identify concerns, and seek solutions. They also demonstrate the needs of the farmer, while ensuring that the farm is in compliance with state law. Overall, a plan helps make the most sustainable and productive use of the land by determining appropriate management tools and resources.

Planning is not always cheap. However, if a plan is unusually cheap compared to other sources, this can be a sign that you may be receiving an inadequate plan, or “just a piece of paper.” If the reason you are getting a plan is because someone said so, or because it is required, you may also be receiving a piece of paper. If you are getting a plan because you need it soon, or need it now, it is probably a piece of paper. If the planner has never been to your farm, or never discussed or reviewed your plan with you, it is a piece of paper. If you do not understand your plan, the purpose of it, or what is in it, it is definitely just a piece of paper.

Any time you need to spend a significant amount of money on something, you’d like it to be useful and serve as much purpose as possible. If you get a plan to help you farm more responsibly and long term, while promoting soil health and protecting water quality, you’ve got a “tool.” If you’ve met with your planner, and spent time with your planner to help develop and understand your plan, what is in it and why, and understand how soil health and water quality affect your crops, yields, animal health, production, and ultimately bottom line— you have a tool. If you use your plan to guide you through the process of doing what’s best for the whole farm system by using the information provided, in combination with the resources available through agencies such as the NRCS, you have a tool.

What does a plan as a “tool” do as opposed to an ineffective “piece of paper?”

<table>
<thead>
<tr>
<th>TOOL</th>
<th>PAPER</th>
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<tbody>
<tr>
<td>➔ Reduced erosion</td>
<td>➔ Satisfies Chapter 102 and 91 requirement to have a piece of paper</td>
</tr>
<tr>
<td>➔ Improved local and regional water quality</td>
<td>➔ Complaints will mean more trouble</td>
</tr>
<tr>
<td>➔ Improved soil quality</td>
<td>➔ Cost with no long-term benefit</td>
</tr>
<tr>
<td>➔ Satisfaction of Chapter 102 and 91 requirements</td>
<td></td>
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<tr>
<td>➔ Happier neighbors/reduced complaints</td>
<td></td>
</tr>
<tr>
<td>➔ Increased productivity from efficiency</td>
<td></td>
</tr>
<tr>
<td>➔ Technical/financial assistance from NRCS/DEP</td>
<td></td>
</tr>
<tr>
<td>➔ Proof you are headed in the right direction</td>
<td></td>
</tr>
<tr>
<td>➔ Happier/healthier animals</td>
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Reasons for developing a plan, properly identifying your current and future goals for your operation, along with quality communication and time with your planner really makes the difference in whether you have spent your hard earned money on a tool to help you and your land or just on a piece of paper.
HORSE PEOPLE:
How can the Chester County Conservation District help you?

Horse People, Horse People, Horse People. Such a generic term, but it encompasses one of Chester County’s largest and most diverse populations within agriculture. A question we are often asked by horse people is, “what does the Conservation District have to offer me?” The answer has a lot to do with what is happening on your land, what your priorities are, and what services the District is able to provide.

For instance, do you...
- have questions about land use
- see water-caused issues in new places
- need advice about manure management and conservation plans
- want to construct a new building (barn, indoor riding ring, etc.) and don’t know where to start
- want to buy less hay by maximizing forage from your pastures with rotational grazing
- have a stream in need of a stabilized crossing, streambank fencing, and/or a riparian buffer
- need a Manure Management Plan
- need a Conservation Plan
- need a no-till drill to reseed your pasture
- have dark water running out of your manure pile
- have gully erosion in your pasture where animal traffic doesn’t allow grass to grow

Fortunately, equine operations are eligible for financial and technical assistance under many local, state, and federal programs. The Conservation District answers questions, addresses complaints, provides technical assistance, offers financial assistance, and consults on compliance requirements. Call the District with your questions, attend one of our winter Manure Management Plan writing trainings, or attend our winter Producers’ Meeting to learn how we can help you protect your farm and property’s natural resources for years to come!
How Burning Plastics Affects the Environment and your Health...

Why it is bad to burn plastics?

- The open burning of Ag plastics releases high levels of volatile organic carbon compounds and particulates into the air, many of which are known carcinogens that can potentially cause cancer and emphysema.

- The toxins released pollute the air and can fall onto the soil and in the water, then finding their way into the food chain.

- The smoke and soot particulate can irritate eyes and lungs. Children and adults with asthma or heart disease are especially vulnerable.

Alternatives to Burning:

- The best way for disposing of used agricultural plastic is to **RECYCLE** it!

- To learn about opportunities for the recycling of Ag plastics in your local area - Contact Jeff Griffiths, CCCD Ag Resource Conservationist, at 610-925-4920 ext. 116 or contact your local municipality.

Guidelines for recycling of Ag plastics:

- Keep plastic clean and dry as possible
- Shake out pebbles & clumps of soil
- Roll or fold into pillow-sized bundles
- Store off ground, out of mud, grit & gravel
- Separate plastic by color and type

Agricultural plastics include:

- Dairy silage bags
- Bunker silo covers
- Bale wrap, net & twine
- Maple tubing
- Irrigation tubes
- Hoop house covers
- High tunnels
- Nursery pots & plug trays
- Tarps
- Chemical containers
- Seed & fertilizer bags
- Low tunnels
- Row covers
- Aquaculture supplies
Examining the quality of a stream or waterway can be done in many ways and with different levels of technicality. However, you don’t necessarily need high end, precision sensors, or a warehouse full of expensive equipment to know how healthy a stream in your own backyard might be. A glimpse into the biodiversity of the critters that inhabit a fresh water ecosystem can reveal abundant information about the quality of the water and the overall status of the stream.

Streams in Chester County and across the globe are teeming with life. Some of that life is seen clear as day, while some hides under rocks or might even be too small to see with the naked eye. Groups of organisms that we can see and use as indicators of water quality include amphibians, macroinvertebrates, and fishes. While not true for every ecosystem, generally if you find a stream to be inhabited by many different types of species, chances are it’s in fairly good health. Certain groups of animals can tell you more than others based on their living requirements and tolerances. For example, salamanders and other amphibians are unique in that they have the novel ability to breathe through their skin. This is known as cutaneous respiration. While cutaneous respiration allows them to thrive in specialized environments, it also makes them very susceptible to absorbing toxins through their skin. It would not be uncommon to find an absence of salamanders or even deceased ones in heavily polluted streams or immediately following a toxic spill event.

On another note, certain species of mayflies have specific tolerances for dissolved oxygen. They can only be found in pristine streams where persistently high levels of dissolved oxygen readily flows over their featherlike gills. Individual indicators such as these provide a glimpse into the overall quality of stream.

When water quality professionals examine biological indicators, often the community as a whole is assessed. Different species are assigned certain categories or weights based on their tolerances, or special living parameters. Many metrics are measured to determine a score that correlates with a certain degree of water quality. But you do not need fancy metrics or calculations to learn about your stream’s health. Anyone with a few good identification books and an interest to explore can research the biodiversity in a nearby stream. So next time you are out and about on a hike, or walking your dog by a stream, take a second and flip over a rock or peer into a clear shallow pool. You may be surprised by what you discover.
The Dirt and Gravel Low Volume Road Program’s purpose is to provide funding to municipalities for the improvement and maintenance of unpaved roads, as well as roads that have a traffic volume of 500 cars or less - with the goal of protecting water quality.

Below you will find a snapshot of four of our most recently contracted projects that will improve water quality across the county. Please visit our website at http://www.chesco.org/1992/Dirt-GravelLow-Volume-Road for more detailed information on our ever growing program.

- West Marlborough Township – Tapeworm Road: A dirt and gravel road project adjacent the Brandywine that will feature two stream crossings, improved road base, and stormwater improvements. Grant allowance - $185,792.00
- Newlin Township – Kelsall Road: A dirt and gravel road project adjacent the Brandywine that will feature stream crossing improvements, improved road base, stormwater improvements, and improved road banks and ditches. Grant allowance - $202,803.10
- West Brandywine Township – Germany Hollow Road: A low volume road project adjacent to an unnamed tributary of Indian Run. This project features a new road base, new stream crossing, and several stormwater improvements. Grant allowance - $51,047.25
- West Chester Borough – Greenview Alley: A low volume road project adjacent to Goose Creek. This project features new underdrains, inlets, bioswales, and infiltration trenches. Grant allowance - $120,270.00
Self-Reporting - The Forgotten NPDES Permit Condition

As time and projects go by we are often caught up in the “here and now” of what the current pressing topic is, whatever that work may be. The NPDES permit is a self-policing permit where the responsible parties are required, by permit condition, to self-report any deficiencies on the permitted site that could cause pollution to receiving surface waters. Along with the required self-reporting, adjustments or repairs need to be implemented to help prevent a similar instance from occurring again. In Chester County, CCCD is the party to self-report to and the Resource Conservationist you meet at the pre-construction meeting is your point of contact. See the below excerpt from the General NPDES permit for reference:

C. Noncompliance Reporting

Where E&S, PCSM or PPC BMPs are found to be inoperative or ineffective during an inspection or any other time the permittee becomes aware of any incident causing or threatening pollution as described in 25 Pa. Code § 91.33 (relating to incidents causing or threatening pollution), as required by 25 Pa. Code § 92a.41(b) (relating to conditions applicable to all permits), the permittee and co-permittee(s) shall, within 24 hours, contact DEP or the authorized conservation district, by phone or personal contact, followed by the submission of a written report within five (5) days of the initial contact. Noncompliance reports shall include the following information:

1. Any condition on the project site which may endanger public health, safety, or the environment, or involve incidents which cause or threaten pollution;

2. The period of noncompliance, including exact dates and times and/or anticipated time when the activity will return to compliance;

3. Steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance; and

4. The date or schedule of dates, and identifying remedies for correcting noncompliance conditions.

The pictures above are examples of E&SC BMP failures that should be self-reported to your local CD and repaired.
Gaye Lynn Criswell, Urban Team Leader, will be assuming a new role as the Outreach Coordinator. This position was created so that the district could better serve the people of the county, especially producers. She will be reaching out to those that have installed best management practices on their farming operations to follow up on what practices worked and what could be improved. We’re hoping to learn from the experiences in ways that will help us make farms more sustainable with further solutions. Gaye Lynn will be starting her site visits later in the year; until then, have a great harvest! Once she transitions, Gordon Roscovich will be taking over as the Urban Team Leader. Gordon has been a Resource Conservationist on the Urban Team for the last 8 years.

Congratulations Gaye Lynn and Gordon!
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