THE CONSERVATION REPORT

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ENVIRONMENTAL REGULATION CHANGES FOR EARTH DISTURBANCE & AGRICULTURAL ACTIVITIES

One of the goals of the Cumberland County Conservation District is the protection of water resources from the impacts of accelerated erosion and the sedimentation that results during an earthmoving activity. The District has been given the authority to administer the erosion and sedimentation control and the National Pollutant Discharge Elimination System (NPDES) programs by the Department of Environmental Protection (DEP) though a delegation agreement. On November 19, 2010, revisions to Chapter 102, relating to erosion and sediment control and stormwater management, became effective.

NPDES PERMITS AND FEES - A major change to the regulations is that the federal NPDES program now requires permits to be obtained to allow the discharge of stormwater from earthmoving activities disturbing **one acre** of land or greater over the life of the project. A General NPDES permit is required for projects in non-special protection watersheds with an associated filing fee of $500. Individual NPDES permits are required for projects located in special protection watersheds (high quality or exceptional value). The application filing fee for an Individual permit has been increased from $500 to $1500. There is also a new $100 per disturbed acre fee payable to DEP. Riparian buffers are a new requirement for projects located in special protection watersheds. The post construction stormwater management plan must now include long-term operation and maintenance deeding restrictions. A licensed professional must be on site for critical stages of construction and must sign-off on the Notice of Termination.

AGRICULTURE - The changes to the Chapter 102 regulations have also affected agricultural operations. All farms are required to develop and implement a written plan to reduce erosion when plowing and tilling. Animal heavy use areas disturbing more than 5,000 sq. ft. are required to implement agricultural best management practices (BMP's). Agricultural plowing and tilling activities within 100 ft. of a stream must maintain a minimum 25% plant cover or crop residue or implement additional BMP's. The Natural Resources Conservation Service (NRCS) conservation plan can be used to comply with the new Chapter 102 regulations if it meets all of the new requirements.

NPDES permits are not required for agricultural plowing or tilling or animal heavy use areas. They are required for agricultural construction activities which will disturb 1 acre or more such as manure storage facilities, barn expansions or new animal housing. BMP's such as terraces, waterways and diversions are not required to have a NPDES permit if the BMP is installed as part of a conservation plan or agricultural erosion and sedimentation (E&S) plan. A NPDES permit is also not required for land clearing that expands an agricultural operation's agricultural plowing and tilling activities or animal heavy use areas. However, a farmer must implement and maintain E&S BMP's. If the area exceeds 5,000 sq. ft., a written E&S plan is required. The existing conservation plan or agricultural E&S plan must be revised to incorporate the new acreage.

NEW COUNTY CONSERVATION DISTRICT SECRETARY

In June, the Cumberland County Conservation District welcomed Jessica O'Toole as the District Secretary.

Jessica grew up in the Newville area and graduated from Big Spring High School in 2002. Jessica worked as an administrative assistant for a national insurance broker for 7 years prior to accepting a position with the District.

When Jessica is not at work, she enjoys spending time with family & friends. Not only does her 3 year old son keep her on her toes, but she and her finance are also busy planning their December wedding. Jessica looks forward to working with and learning about the farmers and landowners in Pennsylvania. She has enjoyed her time with the District so far and looks forward to a successful career. Jessica can be reached at 717-240-6184 or jotoole@ccpa.net.

CUMBERLAND COUNTY CONSERVATION DISTRICT HOLDS ANNUAL ENVIROTHON

Students from eight area high schools competed in the annual Cumberland County Envirothon on Tuesday, May 3, at Pine Grove Furnace State Park, Gardners, Cumberland County. The Catadromous Bums from Cumberland Valley took first place with a score of 384; second place went to The Fish Squad from Cedar Cliff High School with a score of 363; and third place went to The Wiley Coyotes from Cumberland Valley High School with a score of 349. The Catadromous Bums represented Cumberland County at the 2011 Pennsylvania Envirothon at Susquehanna University, Selinsgrove, PA, on May 24 and 25. They placed 20th out of 65 teams that participated in the competition.

Pictured is the winning team, The Catadromous Bums from Cumberland Valley.

The Cumberland County Envirothon, presented by the Cumberland County Conservation District, is a fun academic event that provides high school students hands-on field experience dealing with environmental issues. Students complete five exams that present problems focusing on aquatics, forestry, soils, wildlife, and a current issue, which was Salt and Freshwater Estuaries this year. 91 students participated this year and enjoyed the wonderful weather. Schools participating in the competition include Big Spring, Camp Hill, Carlisle, Cedar Cliff, Cumberland Valley, East Pennsboro, Mechanicsburg and Shippensburg.

Representatives from the PA Department of Conservation and Natural Resources, PA Game Commission, PA Fish and Boat Commission, Cumberland County Conservation District, Cumberland County Planning Department and Natural Resources Conservation Service administered the tests.

The students enjoyed a picnic lunch before the awards ceremony and Adams Electric Cooperative sponsored the Envirothon t-shirts which all participants received.

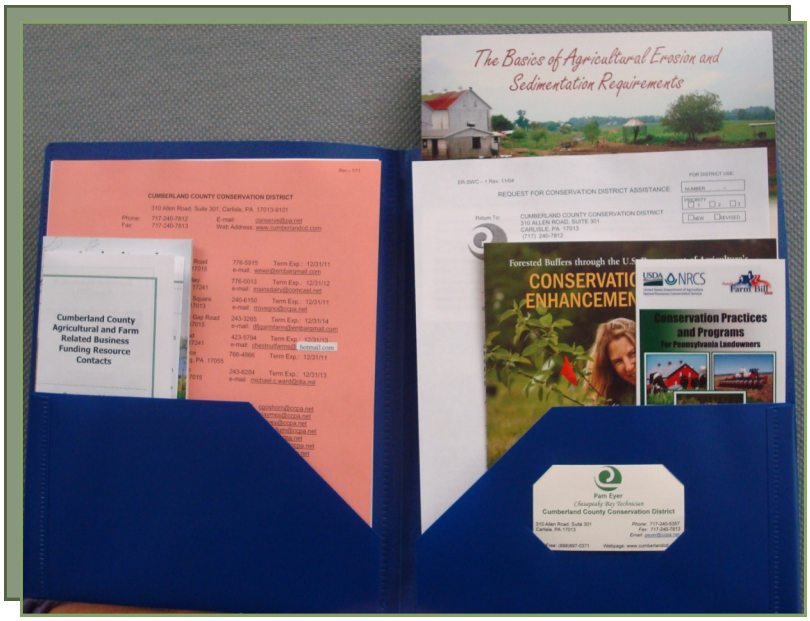
CHESAPEAKE BAY PROGRAM FARM OUTREACH

Dear Farmer; Are you ready if the Environmental Protection Agency (EPA) comes knocking on your door?

There has been a lot of information printed and discussed in the last year or two about the increased effort to clean up the Chesapeake Bay. Lawsuits were filed and too much finger pointing and blame were passed around. The EPA established a deadline for Pennsylvania to come up with a plan to reduce the amount of nutrients and sediment entering the waters of the Commonwealth. Many people worked long and hard to come up with a plan to meet EPA's requirements, and that plan - The Pennsylvania Chesapeake Watershed Implementation Plan (WIP), is now "on the books".

The farming industry has been recognized as a contributor of nitrogen, phosphorus and sediment that can reduce the water quality of the Chesapeake Bay. The Cumberland County Conservation District has partnered with producers for many years to implement Conservation Best Management Practices (BMP's) on local farms, and great strides have been made to reduce those negative impacts. However, there is much more work to be done to improve the quality of our local waters as well as the Chesapeake Bay.

The Conservation District has launched an initiative to help Cumberland County farmers know what state laws and regulations affect their farming operations. A Conservation District Technician will be making visits to 100 Cumberland County farms in the next year to discuss Chapter 102 Agricultural Erosion and Sedimentation and Chapter 91.36 Manure Management Planning. These visits are strictly educational and not an inspection or a follow up to a complaint. It is simply a contact to clearly communicate agricultural owners/operators obligation to comply with appropriate DEP regulations.



Informational Packet to be distributed during farm outreach

If you have any questions concerning the Chesapeake Bay educational outreach, or if you would like a visit from the Conservation District to see if you are in compliance with state law, please contact Pam Eyer at (717) 240-7812. Making an effort to understand what is needed for your operation will help you be ready if the knock on the door happens to you.

Pam Eyer
Chesapeake Bay Technician
Cumberland County Conservation District
310 Allen Road, Suite 301, Carlisle, PA 17013
(717) 240-7812
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CHESAPEAKE BAY PROGRAM FUNDING OPPORTUNITIES

Have you considered planting a small grain winter cover crop but wondered if the benefit would outweigh the cost? Do you think that fencing your animals out of the stream would be better for their health and the environment? Do you know if you have a Conservation Plan that meets state requirements? The Cumberland County Conservation District has obtained funding through the Chesapeake Bay Special Projects Funding Program to help you find the answers to these questions.

The Conservation District currently has funding for operators who do not have a history of planting winter cover crops or who want to experiment with planting after a different row crop than usual. Funding is also available for stream bank fencing and Conservation Plan development. Funding is limited, and certain time limits apply, so if you are interested in further information, please contact Pam Eyer at (717) 240-7812 or peyer@ccpa.net without delay.

MANAGING FLOOD DAMAGED CROPS

Corn for Grain

- Harvesting for grain is likely a better option than for silage where flooding has occurred.
- Combine air filters will likely need to be changed more frequently. Operators should take steps to avoid breathing the dust.
- Harvest when the fodder is dry to help limit the dirt in the grain. Monitor the dirt in the corn coming into the bin and avoid the worst sections of fields.
- Harvesting high-moisture corn at the drier range of acceptable levels could improve the ability to clean dirt from the corn.
- The expected quality of grain is uncertain and should be monitored. The potential for crop contamination by flood waters could affect the marketability of grain and silage. Check with grain brokers for more information on marketability as it becomes available.
- Monitor for sprouting. Some river bottom fields are prone to bird damage and often have some sprouting risk. The flood may exacerbate the problem. Try to adjust the combine to remove most of the sprouted grain.
- Monitor for molds. Corn from flood-damaged fields should be evaluated for grain quality and kept separate if there are indications of molds. Mold and mycotoxin levels can be determined by most feed testing laboratories and used as guidance in marketing.
- The risk of molds and sprouting is likely a function of the exposure to the water and stage of growth. Corn that was under water will have an increased risk for molds and bacterial rotting. This may be more pronounced in corn that was already drying down (<40% grain moisture) and then took on moisture during the flood.
- Monitor for bacterial stalk rots. Fields that remained flooded for more than 12 hours are most at risk for stalk rots.
- The crop may mature more rapidly under these conditions, since corn that has been stressed when near maturity often seems to dry down fast.
- If the grain is deemed unfit for animal use, then it will be necessary to pursue crop insurance claims. If producers expect a claim, they should consult with an adjuster prior to harvest.

Other Crops

- Soybean crops likely will experience increased harvest losses and increased machinery problems during harvest. Many soybeans may be impossible to harvest due to lodging and debris. Monitor grain quality prior to harvest.

In summary, flood-damaged crops are at risk for quality and harvest losses, but by monitoring and managing carefully, we may be able to salvage some of them, reduce losses and obtain resources for recovering from the situation.

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PENNSTATE
Cooperative Extension
College of Agricultural Sciences

An OUTREACH program of the College of Agricultural Sciences

MANURE MANAGEMENT REGULATIONS FOR FARMS PRODUCING/USING MANURE

These days there is much talk of proper management of manure which is either generated on your own operation or being imported for use on your farm as a supplement to fertilizer. Properly handled, livestock manure is beneficial for plant growth, improving soil structure, and increasing soil fertility. However, over application and mis-handling of manure can result in elevated levels of nitrogen and phosphorus from runoff in streams and groundwater. The runoff can cause pathogen contamination, fish kills, and odor and taste problems.
Not only is managing your nutrients a sound environmental practice, it is regulated by the PA Department of Environmental Protection under Chapters 91 and 102 of the Clean Streams Law for farms which produce or utilize manure. Under DEP regulations ALL farms which ***produce or utilize*** manure are required to develop and maintain a manure management plan.

What is a Manure Management Plan?

A manure management plan is a *written plan* addressing the use of manure on the operation in accordance with the most recent edition of the DEP Manure Management Manual. The plan in its basic form takes into account existing soil nutrient levels, nutrient needs throughout the crop rotation, expected crop yields, liming requirements, and the timing, placement, and amounts of additional nutrients applied to the soil. In addition, site limitations based on potential environmental impacts are considered. To determine and develop these plans the following background information may be needed: crop acreage, crop field histories, measured harvest or crop yield checks, livestock or poultry numbers and average weights, amount and kind of manure applied per acre, amount of purchased fertilizer applied per acre, soil analysis, manure analysis, and manure spreader calibration. In addition, information on Best Management Practices implemented on the operation and heavy use areas would be incorporated into the plans.

Manure Management Plan Workshops

This winter, the Conservation District will be hosting workshops to assist producers develop their own Manure Management Plans. The workshops are currently being planned but if you are interested in receiving additional information as it becomes available, please contact Kristen Kitchen at 717-240-5360 or by emailing kkitchen@ccpa.net.

RESTORING RIPARIAN HABITAT ALONG CUMBERLAND COUNTY STREAMS

The Conservation District is partnering with Cumberland Valley Trout Unlimited and the Conodoguinet Creek Watershed Association in an effort to restore riparian habitat along streams in Southcentral Pennsylvania's Cumberland Valley. The initial phase of this coordinated effort will involve identifying and documenting areas of streams degraded by the introduction of the exotic invasive weed, Japanese Knotweed. The highly invasive plant has established itself at several areas in the Cumberland Valley and is spreading. Japanese Knotweed multiplies quickly in dense thickets, crowds out natural riparian vegetation and alters the native ecosystem. Waterways included in this effort are the Yellow Breeches Creek, the Conodoguinet Creek, the Letort Spring Run and the Big Spring Run. While spending time on or near the streams of Cumberland County, be vigilant for riparian areas degraded by Japanese Knotweed. If you locate any areas with Japanese Knotweed, please contact the Conservation District at 717-240-7812. The Conservation District is creating a database that will be used as a tool for organizing eradication efforts of the invasive plant. The degraded areas will be reviewed and prioritized for treatment. Ultimately, the goal of this effort is to remove Japanese Knotweed from these watersheds and replace the invasives with native plantings.

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