

Advantages of Pre-construction meetings

The advantages of holding pre-construction meetings cannot be underestimated. A pre-construction meeting provides the opportunity for all parties involved to sit down, together, and discuss each other's involvement with an approved project. I prefer to hold these meetings at the respective municipal building with the municipal engineer, or their representative, present, as well as the owner of the project and any awarded earthmoving contractor(s). Pre-construction meetings can also be held on-site, however; I prefer the Municipal Building where there is ample room to spread out plans and paperwork. Not only is it easier to hold everyone's attention while sitting in a room, the weather is also not a factor.

Depending on the municipality, some pre-construction meetings are more formal than others; some have a written agenda, others do not. These meetings can last from one-half to one hour.

The pre-construction meetings that I conduct are specific to Erosion & Sediment Control. We begin with a brief discussion of the importance of erosion control, why there is an erosion control plan and the importance of implementing the plan. Specific erosion controls are noted with emphasis on the construction sequence. Start dates and proposed completion dates are discussed, and a date is selected for an initial walk through.

In Bucks County we use the "Pre-construction Meeting Notes" form. This form lists the meeting participants, special concerns, comments etc. associated with the project. This form is placed in the file and can be an invaluable reference months later when the project is underway.

Another important aspect that I address is the NPDES Permit program; specifically, self inspection logs, PPC plan requirements, permittee and co-permittee requirements and the level 3 delegation agreement. Other DEP permits can also be discussed such as Chapter 105, Army Corps etc.

Owners and contractors often have questions and concerns. Pre-construction meetings are the ideal time to discuss these, especially with the municipal engineer present. Having discussions up front, before the project is underway, is invaluable in heading off issues that may otherwise arise later. Establishing good communications at the beginning of the job is the key to preventing problems and potential violations.

*Lisa Ishimuro
Bucks County CD*

Design problems with emergency spillways

During recent Erosion and Sediment Control Program evaluations of Conservation Districts in the region it was discovered that a large percentage of engineering firms were submitting incorrect design calculations for vegetated emergency spillways. The problem is associated with the use of the weir equation $Q=CLH^{1.5}$. The "C" value used was always 2.8, regardless of the design characteristics of the spillway. This error may be from a mis-interpretation of the state's Erosion and Sediment Control Design Manual. On page 55 the manual reads "an acceptable alternative is the use of the weir equation: $Q=CLH^{1.5}$. When this option is used, the maximum values of "C" should be 2.8".

The weir equation was an alternative to using NRCS' Engineering Field Manual - Chapter 11. Unfortunately, this alternative required you to use another section in this same manual. In order to design an emergency spillway without a copy of Chapter 11, the Department of Environmental Protection staff has developed a table to assist you in selecting the proper "C" value. The Delaware County Conservation District will post this newly developed table on their web site at www.delcocd.org.

We encourage all plan designers to correct this issue on their projects. The undersizing was explained to us as being significant.

I welcome your comments on this issue. Please feel free to contact Ed Magargee at (610) 892-9484.

*Ed Magargee, District Manager
Delaware County CD*

Did You Know?

If EPA Chooses to enforce a stormwater violation, that penalty can be assessed at \$11,000.00 per day.

Rob Davidson, Esquire, PA Dept. of Agriculture

Experiencing the devastation

NACD's Chief Executive Officer Krysta Harden recall his experience after a spring visit to New Orleans.

"I attended a budget planning meeting with the NACD officers in New Orleans. We spent several days working on numbers and ideas for the upcoming fiscal year.

Mid week, we were joined by members of the Conservation Partnership for a tour of the damaged areas and work session along the Mississippi coastline and then yet another day of meetings back in New Orleans.

While I do have other activities that rounded out my week, I think I will just give all of you my personal observations of what I saw this week. Please forgive me if I sound mushy or sentimental ...but I admit I am both.

Like all of you I have watched countless news reports and read many stories re the devastation brought by Hurricane Katrina. I sent my dollars to several relief funds including the Conservation Foundation, kept the victims on my prayer list for weeks, and have been hopeful that relief and recovery were happening.

While there were true signs of a re-bound in the beautiful and historical sections of New Orleans and we enjoyed wonderful Cajun food and enjoyed top rate service, the pain and loss are still evident in the eyes of the citizens. We saw a weariness that comes from months of trying to put your life back together and from trying to find a "new" normal mixed with hope that the "new" normal will be something you recognize and even enjoy again.

But, the damage from the storm did not stop in the city and we did not either. We drove through surrounding neighborhoods that are empty, sad and lifeless. The people are gone somewhere safe, we hope, but their homes and lives remain on those water stained streets now void of people, animals and happiness.

And, while the situation in the suburbs was terrible, the biggest impact hit me in the rural areas of the Mississippi coast. Maybe it is because I am a country girl and kept wondering how my small community would deal with such terrific challenges. Not sure why, but I know I will never forget the miles and miles of loss...homes, schools, churches, hospitals, stores, trees...people. It was just overwhelming.

Our group spent the day with the staff and leaders of Hancock County Soil and Water Conservation District. A hearty, hardworking group of people that are caring for others and doing their job to help restore the natural resources in their ravaged region. They work side by side with dedicated and talented members from the conservation partnership and are just proving as one person put it "the spirit of the conservation partnership is alive and well in Hancock County".

The folks in that conservation district humbled me. They are dealing with some of the worse challenges and problems a district will ever encounter. Yet, they do not complain or grip instead they tease, laugh and are getting results.

I spent only a few hours contributing my time and effort to helping clean up a small wetland. Not enough to even be noticed when taking into account the magnitude of the problems. However, I did receive a lot more in those few hours. I learned what being a conservation district is really about...bringing local leaders together to help solve the natural resources of a community. In this case, the problems are significant to point of being almost unbelievable, yet the same principles that drive supervisors all over the country to volunteer and employees to work for less then they can earn else where...still applies. No problem is too great, no need too small. A district at work....Hancock County District has raised the bar for us all!

My eyes were filled with sadness and loss but my heart was filled with appreciation and pride. It was a good week."

Krysta Harden
Chief Executive Officer
National Association of Conservation Districts
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Polymer storm pipe mixing methods can enhance water quality

In the May/June 2006 issue of *Land and Water Magazine* an article on page 23 authored by Steven R. Iwinski explains and details the use of flocculants for stormwater, erosion, and nutrient treatments. A flocculent treatment uses coagulants and polymers and has been extensively used in the mining industry where their effectiveness has been proven.

Flocculants such as Anionic Polyacrylamide PAM polymers have become the most common materials used for water clarification and erosion control on construction sites and in storm water treatment. PAMs must be developed for a specific site based on the characterization of the soils present. One PAM fits all methods is not effective. Improperly applied or incorrect PAMS will detach and escape from the soil surface and move into the receiving waters, sometimes causing greater water quality issues than that of elevated turbidity of stormwater alone. Cationic PAM and chitosan have very limited use due to the highly toxic potentials to aquatic organisms. Cationic PAMs or biopolymers derived from chitin have shown significant toxicity potential to aquatic organisms. (Orme and Kegley (2004). These polymers are not to be used in most situations and are regulated by many states. This makes it even more important that a professional is used to develop the right PAM for your site.

In Chester County, correctly formulated PAM has been used on several construction sites with good results. The most common form of treatment has been the use of PAM blocks or log formulas. Other methods have been direct broadcast on disturbed land or on standing water in basins. Unfortunately, most of the use of PAMs in Chester County was for a remedial type action as the result of major erosion problems and sediment discharges. PAMs have not been used or designed in plan preparation or in general use on a site as a BMP control, which does limit their potential. PAMs used properly and typically can reduce TSS or NTUs by two orders of magnitude (Price and Company, 2004, 2005, Applied Polymer Systems, 2006).

The article details other types of polymer pipe systems that can be used such as split pipe mixing systems and closed pipe mixing systems.

Permission or approval from your local conservation district who, in consultation with the regional PADEP office, is required prior to the use of a flocculent device on a site. PAMs and other flocculants can be effective BMPs for sediment and other soil pollutants on site if properly formulated and applied. The Chester County Conservation District is encouraging the use of PAM because half of the county is in a Special Protection Watershed and many of the soils are classified as highly erodible.

Please review the article in *Land and Water*. I have only provided a short description of the article in both the words of the writer with local observations. *Land and Water* has a Website at www.landandwater.com. The magazine is a valuable resource for anyone who is designing or responsible for implementing erosion, sedimentation and stormwater management BMPs.

Dan Greig
Chester County CD

FREE Rain Barrel / Rain Garden Workshops in Delaware County



Radnor Township
September 28, 2006, 6:30 p.m.
Pennsylvania Resources Council,
3606 Providence Rd,
Call 610-353-1555 extension 232 to register.

The first 25 folks from Radnor Township, Delaware County (homeowners or business owners) to register and attend this workshop will receive a free rain barrel. Barrel provided from grant funding from the Water Resources Education Network (WREN).


Upper Providence Township
Nov. 2, 2006, 6:30 p.m.
Pennsylvania Resources Council
3606 Providence Rd.
Call 610-353-1555 extension 232 to register.

First 25 folks from Upper Providence Township, Delaware County (homeowners or business owners) to register and attend program receive a free barrel. Barrel provided from grant funds from WREN.

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Students plant buffer at Lake Luxembourg

The students of Neshaminy Middle School proved to be tougher than anyone expected, as they set to planting approximately 450 feet of shoreline riparian buffer on Lake Luxembourg at the Core Creek County Park June 7, 2006.

The day was cold, dark, and extremely wet. But, students got right to work without complaint on the buffer planting. Students and Teachers planted from 10am until a lunch break at 12:30pm. They enjoyed a box lunch from Heavenly Ham, and entertained each other with an impromptu talent competition! Then it was back to work until 2:30.

Even when the weather was at its worst, these students kept at it, planting until the entire site was filled with new native trees and shrubs. They were constantly motivated by the sight of the first Neshaminy Middle School planting in 2001 that has filled in dramatically. All of the students discussed how excited they would be in 5 years if their planting survived as well as the class of 2001's.

The Bucks County Conservation District gives its thanks and congratulations to the students of Neshaminy Middle School for a job well done! Keep up the good work, kids!

*Gretchen Schatschneider,
Bucks County CD*



Students planting directly into a coir fiber log along the shoreline of Lake Luxembourg.



Completed planting along the shoreline of Lake Luxembourg.




View of 2001 Neshaminy Middle School buffer planting after 5 years growth.



Neshaminy Middle School Students show off their muddy hands after completing a 450ft. buffer planting, 6/7/06.

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2006 Delaware County Envirothon

The 14th Annual Delaware County Envirothon was held on April 25, 2006. This year's winner was Penncrest High School's Gold Team, followed by Penncrest Red in second place and Haverford High School's Aware I team in third. This year a new category of prizes was awarded — Combined Team Score. Penncrest HS, Haverford HS and Strath Haven HS placed first, second, and third, respectively. The following schools also participated in this year's event: Academy of Notre Dame de Namur, Glen Mills Schools, Garnet Valley, & Sun Valley. Penncrest Gold went on to compete in the statewide Envirothon competition, which took place at Penn State Mont Alto campus in May, where they once again took first place.



*Members of the Penncrest High School's Gold Team: Teresa Slifer, Vic Janmey, Michelle Henry, Emily Moberg, Aimee Davis
Team advisors: Mark Samilenko and Chrissa Kuntz*

The statewide competition involves over 60 teams from across Pennsylvania, with one entry from each county. Next stop for the Penncrest's students is Winnipeg, Manitoba, for the Canon International Envirothon at the end of July. Last year, Penncrest HS placed first at both the local and state competitions. They then went on to place first at the International Competition held at Southwest Missouri State University.

The Envirothon is an environmental competition in which teams of five students, grades 9 through 12, compete against other Delaware County high school teams in five subject areas: Soils, Aquatics, Wildlife, Forestry, and a current issue topic which is updated each year. This year's current issue topic is "Water Stewardship in a Changing Climate". Each high school is permitted to send two teams of five to the event. Professionals in each area of expertise develop the tests: PA Fish & Boat Commission, PA Game Commission, DCNR - Forestry, and the U.S.D.A. Natural Resource Conservation Service.

For more information regarding the Envirothon and a complete listing of this year's results, check the Delaware County Conservation District's website at www.delcocd.org.



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Worksheets aid in Stormwater Management planning

The Pennsylvania Stormwater Best Management Practices Manual contains helpful worksheets and flow charts to aid in the preparation and review of Post Construction Stormwater Management (PCSM) plans. They are located in Chapter 8 in the April 2006 release of the Manual. While the use of the worksheets is not mandatory, they are a good starting point for you as the design engineer to determine the volume requirements and how your plan will address them. The District will also be able to more easily tell whether the volume requirements are being met or not, which will lead to a more timely review for everyone. The worksheets and flowcharts relate to the two Control Guidelines: CG-1 and CG-2 which are detailed in Chapter 3 of the Manual. The information in the worksheets will also aid in the completion and review of Section E of the Notice of Intent (NOI).

To get to the latest draft of the Pennsylvania Stormwater Best Management Practices Manual online, visit the following website: <http://www.dep.state.pa.us/dep/subject/advcoun/stormwater/stormwatercomm.htm>.

DEP finished the review and comment period for the BMP Manual on July 14, 2006, and is currently drafting a "response to comments" document from responses throughout the state. A final draft of the Manual can be expected later this year. For now, the Districts have been advised to refer to the BMP Manual but to not require its use. Keep in mind, however, that the volume requirements must still be met in order to be in compliance with the General or Individual NPDES Permits.

*Jeffrey McKenna
Montgomery CountyCD*

Christopher S. Andes
Environmental Scientist



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State recognizes achievements of District director

Malcolm P. Crooks, Vice Chairman of the Bucks County Conservation District (BCCD), has been awarded the Ann Rudd Saxman Conservation Award for 2006 by the Pennsylvania Association of Conservation Districts (PACD). The award is given annually to individuals who demonstrate an exceptional commitment to the conservation of Pennsylvania's natural resources.

Mr. Crooks was cited for his accomplishments at the local, state and national level where he maintains near perfect attendance at District meetings, coordinates numerous interest groups, enlists the support of agencies, organizations, elected officials and individuals for conservation activities, secures financial support for special endeavors such as preservation programs, commits significant volunteer time, despite managing the family tree farm, and attends state and national meetings on behalf of conservation. He is retired from a professional career in the field of conservation, and at 83 years of age is showing no sign of slowing down.

The BCCD and PACD are obviously very proud of Malcolm's dedication and are honored to have him on the team!

John Thomas, Bucks County CD



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New Assignments in Bucks

As part of the Delegation Agreement with PaDEP, conservation district programs are evaluated on a bi-annual basis. Following Bucks County's 2005 evaluation, it was recommended that the district's technical staff perform field reviews on project sites which they are also inspecting. As this was the only reported deficiency, the Board directed the District Manager to meet with the staff and establish a procedure for complying with this recommendation.

Following several staff meetings and a review of existing assignments, it was determined that the county would be divided into four separate areas, with staff assigned to review projects in the same area where they are assigned as the inspector.

This change became effective on June 1, 2006, and letters were sent to each municipality in Bucks County (and their engineers) to make them aware of the changes. If you have not received information on these new assignments and would like to know which staff member is assigned a specific Bucks County municipality, please contact us at 215-345-7577 – ask for Camille Peters at Ext. 100.


*John Thomas
Bucks County CD*

Enforcement actions in Bucks

Since the Spring issue of *CONSERVATION & YOU*, the Bucks District has, unfortunately, had to conduct additional administrative meetings at which penalties were assessed. Those projects and associated penalties for erosion control violations were:

Earthbourne, Inc.	\$1,800.00
Marvoudis Subdivision	3,000.00
Orleans/Belmont Ridge	4,000.00
Auerbach/Urban	250.00
J.D. Eckman, Inc	6,000.00
Sean O'Neill	750.00
Valley Square, WVS Assoc.	21,000.00
Heritage Creek/Mignatti	1,500.00
First Order of Saint Paul/Czestochowa	5,000.00
Walter Rybas	3,000.00
Timothy Northrup	150.00
The Piper Group	33,750.00

*John Thomas
Bucks County CD*




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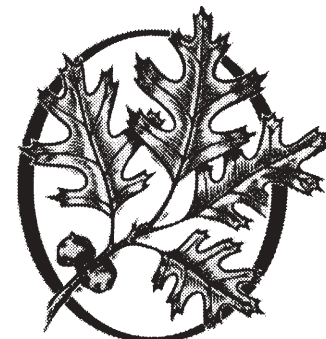
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Two size ads are offered: **Business card size** (2" x 3 1/2") \$75/issue **Quarter Page** (3 1/2" x 4 1/2" – vertical) \$125/issue
 A 10% discount is offered for inserting an ad in two or more issues. Ad deadline for the Fall issue is September 15, 2006. Send your check payable to the Delaware County Conservation District and camera-ready copy to Ed Magargee, Delaware County Conservation District, Rose Tree Park - Hunt Club, 1521 N. Providence Road, Media, PA 19063; Phone (610) 892-9484.

CONSERVATION & YOU is published by the Bucks, Chester, Delaware and Montgomery County Conservation Districts in cooperation with the PaDEP, Bureau of Waterways, Wetlands and Erosion Control. For advertising information, call (610)892-9484.

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