



Mid-Atlantic Chapter Summer 2009 Newsletter



International Erosion Control Association

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**See You In
Baltimore
Sept. 22-24, 2009**

President's Message

"PARTNERING FOR A BETTER ENVIRONMENT"

By: Roy Van Houten, CPESC



It is hard to believe that the summer is already half way over and the 16th Annual MAC IECA Conference is right around the corner. This year's conference will be held From September 22 – 24, 2009 at the Crowne Plaza in Timonium, Maryland.

We have all learned over the past year, as the economy struggles it is now more important then ever, that as professionals, we join together and be as efficient and as effective organization as possible. In keeping with this ideology I am happy to say that this year MAC is "**Partnering for a Better Environment**" with EnviroCert International, Inc. and the Maryland Association of Soil Conservations Districts, Inc.

As always, we will be kicking off the conference with a friendly game of golf. We will be teeing off at 10 am on September 22, 2009 at the Diamond Ridge Golf Course. The golf tournament offers participants an excellent opportunity to network with professionals involved in all aspects of the erosion and sediment control and stormwater management fields. If your calendar and budget allow, I would highly recommend playing in the golf tournament! This year's keynote speaker is Russ Adsit, the IECA Executive Director.

The conference will offer attendees a wide array of case studies, stormwater management and low impact development options courses. This years speakers will be providing information about rain gardens, Low Impact Development Techniques (LID), MDE standards and updates, stream restoration and a host of other topics. The exhibitor hall will provide attendees with the opportunity to talk with vendors and see the latest erosion and stormwater management technologies and products.

The CPESC, CPSWQ and CESSWI review courses and exams are all being made available to attendees. You must be pre-approved by the Certification Committee before you will be allowed to sit for any of the exams. Space is limited so reserve your spot now!

For more information on the conference schedule, course and exhibitor registration, and sponsorship please go to <http://www.macieca.org/> . If you have any questions please feel free to contact me at (703) 679-5631 or by e-mail at rvanhouten@wetlandstudies.com or are conference Chairman Butch Wilson at cwilson@siteresourcesinc.com .

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“Fall Festivities at the MAC-IECA”

by: John B. Gonzalez, PE, CPSWQ



You know it's fall in Baltimore when:

The Baltimore Ravens take the field at M&T Bank Stadium with high hopes of playing in the Super Bowl when February rolls around.

The Baltimore Orioles take the field at Camden Yards with high hopes of watching the World Series on the big screen at Cal Ripken's house when October rolls around.

Fells Point, Patterson Park, and other places around the city provide appropriate venues for the various fall festivals.

The Crowne Plaza in Timonium provides the appropriate venue for the 16th Annual MAC-IECA Fall Conference.

Considered by many to be a fall festival of our profession, the Conference provides great opportunities for networking, education, socializing, and for reminding ourselves of the important roles we all play in protecting our environment. Our daily performances at our jobs require us to be equipped with the latest technologies to safeguard that which we are committed to protect. Although we do not have to worry about blocking the onslaught of defensive linemen committed to mauling the quarterback, or about making leaping grabs for the many baseballs that seem to have a knack of caroming off everyone's bats but the O's, we do have to worry about the onslaught of forces far more deadly, those forces driven to maul Mother Nature. And unlike football or baseball, we cannot afford to let one lineman through or let one ball sail over the fence at any time.

Now, don't get me wrong- I am an Orioles fan. It just seems like the days of Jim Palmer, Boog and the gang are not coming back soon. I have been waiting over ten years for the so-called youth movement in the organization to grow. Youth eventually grow into adults who can play the game. It seems the Camden Yards youth are stuck in an eternal youth movement of T-ball.

I am also a fan of my profession, much like all of you. Over the years, we have developed through our youth movement to achieve stature that requires us to perform better on a daily basis, not become complacent. The annual Conference is THE PLACE to continue development. Our profession continues to grow, to evolve into an entity that becomes more in harmony with nature. We are truly partnering for a better environment.

This conference is THE PLACE to be in the fall. Do you want to see case studies on projects such as stream restoration and emergency erosion repairs at a bridge? Do you want to learn about low impact development and elements such as raingardens and porous concrete? Perhaps new design techniques such as coastal plain outfalls will help you in working through a difficult conveyance problem at work. We are all aware of the regulatory impacts to our profession, and we will have speakers present a glimpse into upcoming regulatory changes at the EPA and the State of Maryland (see the article titled “A Day at the Maryland Department of the Environment”, written by Paul Clement). You can learn more about interpreting geotechnical reports and how this can help you make better design decisions for stormwater management and sediment control. We will also have presentations on the hydrology and hydraulics of sediment basins and stormwater management ponds. A field trip to Lafarge Quarry is offered.

A key component to our conference is the networking through our various social events, and displays at the Exhibitors' Hall. Our exhibitors will display a wide range of tools with which you can find the solution to your erosion problems. You are also encouraged to join us for our golf tournament, the PGA of MAC-IECA.

As our teammate on the line and in the outfield, you will find the latest technologies available to help us protect the environment. We can stop the blitzes and the grand slams if we equip ourselves with the best technologies around. We can do this by partnering for a better environment.

See you at the Crowne Plaza.

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“A Day at the Maryland Department of the Environment”

by: *Paul F. Clement, P.E., CPESC*

Come join us for “A Day at the Maryland Department of the Environment” at the Mid-Atlantic Chapter of the International Erosion Control Association’s 16th Annual Conference at the Crowne Plaza in Timonium, Maryland on Thursday, September 24, 2009. As part of this year’s conference we have set aside a special track to discuss specific Maryland Department of the Environment (MDE) issues.

Mr. Kenneth Pensyl, Program Administrator with the Water Management Administration will start the day by giving an overview and update of current MDE policies including such topics as: “The Maryland Stormwater Management Act of 2007”, including Environmental Site Design (ESD); Total Maximum Daily Loads (TMDLs) Implementation Plans for the Chesapeake Bay, Chesapeake Bay Restoration Goals and Water Quality Trading; Non-tidal Wetlands and Waterways Permits Updates; FEMA Floodplain Mapping Updates; National Pollution Discharge Elimination Systems (NPDES) Municipal Separate Storm Sewer System (MS4) Overview, MDE General Permit for Construction Activities Update; Erosion and Sediment Control and Stormwater Management Inspection / Compliance Updates and Erosion and Sediment Control Updates.

Ms. Amanda Malcolm, P.E., Water Resources Engineer with the MDE Plan Review Division, will provide the first “peek” at the “2010 Maryland Standards and Specification for Erosion and Sediment Control” manual. The new manual will address the needs for meeting the EPA turbidity requirements, applying ESD to erosion and sediment control (ESC) design, and updating the manual to include innovative ESC practices that are not part of the current manual. The new manual is anticipated to be required for all projects submitted for ESC approval beginning in May 2010.

Mr. Stewart Comstock, P.E., Water Resources Engineer with the MDE Program Review Division, will provide an in-depth explanation of how to use ESD to provide not only water quality management, but to also meet the requirements for channel protection volume, overbank flood protection volume and extreme flood volume for stormwater quantity management. Mr. Comstock will present “real world” examples of where the ESD practices have been used to meet water quantity management and explain how designers can apply these practices to their projects.

The “Day” will conclude with a Panel Discussion of the Major Challenges facing the industry with the implementation of ESD. The panel will consist of state and local representatives and representatives of the engineering community. Scheduled to appear are : Stewart Comstock ~ Maryland Department of the Environment; Karuna Pujara ~ Maryland State Highway Administration, Al Wirth ~ Baltimore County, Department of Environmental Protection and Resource Management (DEPRM), Brian Noll ~ Whitney, Bailey, Cox, and Magnani, and George Twigg ~ Site Resources, Inc. Please come prepared to ask the panel your questions with regard to the implementation of the Maryland Stormwater Management Act of 2007.

We hope to see all of you at this “must attend” session at the 16th Annual Conference at the Crowne Plaza in Timonium, Maryland.



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Tee Time!

by: Dan Fisk, CPESC



With another year of the Annual MAC Conference quickly approaching, that means that the Annual MAC/IECA Golf Tournament is also right around the corner. So polish up that putter, and get your plaid pants ironed!

This year's venue is Diamond Ridge Golf Course in Windsor Mill, MD. A favorite golfing locale to area golfers for more than 30 years, the lush fairways and rolling terrain best characterize this beautiful course. The front and back nines are distinctly different. The former is open in nature, while the latter is tighter and outlined by mature trees. Both nines have numerous fairway and greenside bunkers to keep you honest.

Whether you are a golfing legend or just a hacker trying not to break any windows, all are welcomed to join us on Tuesday September 22nd. The guys from Wetland Studies will be defending their hard earned crown - so let's try to knock them off that pedestal! The first tee time will be at 10:04am with lunch available at the end of nine. The outing will be a 4 person Captains Choice Scramble. For more information on the golf course (including directions), please visit www.baltimoregolfing.com.

And remember, real golfers don't miss putts, they get robbed.



New Jersey Has a New State Representative



On April 18, 2009 at a Board of Directors' meeting in Timonium, MD, Craig Metzgar was appointed to the board. Craig is a graduate of SUNY Cobleskill and is currently employed by Amy S. Green Environmental Consultants of Flemington, New Jersey. Join us in Timonium to welcome him to the MAC-IECA and congratulate him on his appointment. For more information about the 16th Annual Conference, Workshop and Trade Show in Timonium, MD., please visit www.macieca.org.

MAC-IECA is operated by dedicated professionals who volunteer their time to insure the latest erosion and sediment control technologies are available to those in the profession. If you are interested in volunteering with MAC, contact your state representative. To find a list of all MAC state representatives please visit the Executive Committee link on the MAC-IECA webpage.

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Mid-Atlantic Chapter
International Erosion Control Association



EnviroCert
International, Inc.

“Partnering For A Better Environment”

16th Annual Conference, Workshop & Trade Exposition

Sept. 22 ~ 24, 2009

**Crowne Plaza ~ Baltimore
Timonium, MD**



Photos from 15th Annual Conference ~ Pittsburgh, PA

The conference agenda and schedule is available on the web pages listed below.

Continuing Educations Units will be provided for all technical sessions.

Reserve the dates of September 22~24, 2009 on your calendar for the Mid-Atlantic's 16th Annual Conference, Workshop & Trade Exposition.

Golf Outing ~ Diamond Ridge GC ~ September 22, 2009

**Go to www.macieca.org or www.wvca.us/wwwrc/mac/
for registration and conference information**

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Been to the MAC/IECA Website Lately?

by: Robert Connelly, CPESC

If you haven't been to the website lately, please find some time to do so. Hopefully you will be on your way to the conference registration forms anyway. You will see a new lay-out, a few new pictures and some recent changes we made to keep you up-to-date with what's going on with the chapter. A new feature called "Meet the MAC Member" will allow you to learn more about some of your fellow chapter members. The first one features board member Jason Beeler of Wetland Solutions. It's a great article. There is a form on the link that would allow you to complete the "Meet the MAC Member" questionnaire. Let us hear more about you; or better yet, send an email off and ask someone else to complete the form. As always comments and suggestions for the website are always welcome. See you in Baltimore!

www.macieca.org

WV CONSERVATION AGENCY

by: Charlie Riling

Once again the West Virginia Conservation Agency (WVCA) is handling the registration for the MAC's 16th Annual Conference to be held at the Crowne Plaza in Timonium, MD. The MAC cannot begin to thank the WVCA for all the work and effort that they have provided us over the years.

Truman Wolfe, Executive Director, has a lot to be proud of with the professionalism and friendliness that his staff has offer over the years. Pam Russell, Jami Thompson and Andy Carney have gone above and beyond for the MAC. When you see Pam and Jami at the conference, be sure to thank them for their hard work. To register on-line or print out forms for mail in registration for the conference, please go to the following link: <http://www.wvca.us/wvwrc/mac/>. In addition, you can go the <http://www.macieca.org> to print out forms and mail in to the WV Conservation Agency. Registration forms **will not** be mailed out as in past years.



“MAC Member Running for IECA Board of Directors”

By: Roy Van Houten, CPESC

It gives me great pleasure to announce that one of MAC's own, Mr. Charles Riling is running for a seat on the IECA Board of Directors. Charlie has been an active member of MAC for a longer period of time than I have been out of high school! He has been on the MAC Board of Directors representing West Virginia since 1997 and was chapter president from 2006-2008. Currently, Charlie is the Chairman of the IECA Chapter Advisory Committee. His dedication to MAC and to IECA is second to none and I know he would make an excellent addition to the IECA Board of Directors.

Now I don't want to get all emotional and sappy about this, but without Charlie I would not be writing this article to you today. I first met Charlie at the MAC conference down in Norfolk, Virginia four years ago. I, along with the rest of the Wetland Studies and Solutions gang, were brand new to IECA and to MAC. Charlie went out of his way to come up and personally welcome us to MAC. He made us feel as though we had been a part of the MAC family for years. Charlie has been a peer and a mentor that I continually turn to when I am in need of advice and consultation. Charlie left some big shoes for me to fill when he stepped down as president. I would consider it a great accomplishment if I could fill just one of those shoes!

I hope each and every one of you will take a few minutes to go online and show your support for Charlie! He is someone that we can all rely on to insure that the IECA Board of Directors hears each MAC member's ideas, concerns and comments!

To vote for Charlie, please go to www.ieca.org and look for the Vote for IECA Board icon.

A study of Physical Performance of Selected Rain Gardens in Fairfax County

by: *John Peterson, CPESC*

The Northern Virginia Soil and Water Conservation District (NVSWCD) was awarded a grant to assess the physical characteristics of soils in a selected number of operating rain gardens to determine what changes may have occurred over the years of operation that would affect their efficiency and might indicate recommendations for design and maintenance. The two NVSWCD scientists, who conducted this study, soil scientist Dan Schwartz and conservation engineer Dr. Asad Rouhi, will be presenting their results at the Mid Atlantic Chapter's 16th annual conference and exposition in Timonium, MD on Wednesday, Sept. 23rd, 2009. With all the interest in low impact development, rain gardens, LEED buildings, and other water management practices that can be used in urban areas, this session should be of interest to conference attendees.

Twenty rain gardens throughout Fairfax County have been studied. Nineteen of the rain gardens have a minimum age of three to five years, while the twentieth rain garden was installed in late 2006 but has failed to function properly. Some of the rain gardens are publicly maintained and some are privately maintained. As part of the assessment on each site, soil infiltration capacity, soil texture, soil bulk density, soil nutritional value, and soil toxicity have been measured. Furthermore, each site has been surveyed and the results have been analyzed to ensure that the operational facility is compatible with the original design for the same facility.

Many of the rain gardens are built according to the original plans. In several cases, however, the rain gardens differed in one or more ways from the original design. These differences often resulted in poorer performance of the facility. In all but the worst cases, the rain gardens were still functional, but the design errors prevented them from functioning at their optimal levels.

The most serious problem encountered with the examined rain gardens was a failure to infiltrate water. Poor infiltration is directly related to another problem encountered at some of the sites; poor texture of the rain garden soil mix. Another problem encountered at several sites was inadequate ponding depths. Even with sandy-textured soil featuring high rates of infiltration, some temporary surface ponding will be inevitable after large storms, and a well designed rain garden should allow for this.

From their findings, we can begin to make conclusions about the physical functioning and condition of rain gardens several years after installation.

1. A number of rain gardens are compatible with the original design and perform adequately.
2. A number of rain gardens are sub standard due to the following causes:
 - a. Inadequate infiltration capacity, mostly due to the lack of unsuitable soil mixture
 - b. Lack of an under drain system that has resulted in water logging inside the facility
 - c. Lack of an adequate ponding area allows significant under performance by the facility
 - d. Miscellaneous problems—such as poor grading of inlets, perforations on monitoring wells, and erosion inside rain gardens—that prevent the facility from performing to capacity

Many of these problems are the result of rain garden design deviating from the original approved plans. This points to the need for a more thorough and strict inspection during rain garden construction and more education of contractors who construct rain gardens. A knowledgeable contractor, backed up by a knowledgeable inspector, would likely catch problems such as the unsuitable soil mixes and the poor ponding depths, and fix them before the rain garden is approved.

A study of Physical Performance of Selected Rain Gardens in Fairfax County

(Continued from Page 7)

Additionally, continuing monitoring—and if need be, maintenance—by the site owners could eliminate many of the problems that occur after installation. Privately maintained rain gardens, in general, had more problems than publicly maintained rain gardens. At the non-functioning private sites, some owners were not aware of the fact that the rain gardens were not performing properly. At the public sites, the problems were well known and being addressed. Education of rain garden owners would impart knowledge of the proper functioning of rain gardens and would allow owners to identify and correct problems that arise. In several cases, simple fixes could have greatly improved rain garden function. Most people believe that rain gardens are nearly maintenance free. From their observations, this is not the case. However, many of the maintenance problems that were observed in the assessed rain gardens could have been avoided had the sites been properly constructed in the first place.

This short article only scratches the surface of this important study. Stop in at the conference and talk with Dan and Asad about their work.



Urban Area Rain Garden

**See You In
Baltimore**