Newsletter of the North Carolina Sedimentation Control Commission

Town of Southern Pines and City of Raleigh Win Awards for Excellence in Erosion and **Sediment Control**

By Evangelyn Lowery-Jacobs, Land Quality Section, Raleigh, NC

he annual Local Programs Workshop and Awards Banquet was held at the Village Inn Hotel and Conference Center in Clemmons, NC on February 1-2, 2012. This annual workshop brings together delegates from each of the 52 local programs throughout the state and specializes in training and discussion of erosion and sediment control issues in North Carolina. Support for the Awards Program is provided by the North Carolina Sedimentation Control Commission, NC Department of Environment and Natural Resources-Division of Land Resources-Land Quality Section, and the Water Resources Research Institute of the University of North Carolina.

Local erosion and sediment control programs have the ability to exercise greater control over erosion and sediment control in their respective jurisdictions and may often inspect sites more frequently than the state erosion and sediment control program. Furthermore, local erosion and sediment control program ordinances may be more restrictive than state law, giving additional control over the development occurring within their respective jurisdictions. The North Carolina Sedimentation Control Commission recognizes the importance and the value of local erosion and sediment control programs in controlling pollution by sedimentation to the waters of North Carolina. In addition to training, the workshop seeks to recognize outstanding local programs. Each year awards of excellence are presented to programs in two categories:

Small program – program providing 0-3 man-years or full-time equivalents supporting erosion and sediment control

Large program – program providing 3+ man-years or full-time equivalents supporting erosion and sediment control

This year, the Town of Southern Pines received the Local Program Award of Excellence for a small program. This local program for soil erosion and sediment control is located within the Town of Southern Pines Engineering Department.

The Town of Southern Pines has a steady workload. In 2010 the staff approved 10 plans and disapproved 14 plans and conducted 798 inspections on 10 active projects.

The Town of Southern Pines provides an "Erosion and Sedimentation Control Plan - Preliminary Review Checklist" which is required to be incorporated in erosion and sediment control plans, in addition to specific site conditions that may also apply. The components of the checklist include: location information, general site features, stormwater calculations, erosion control measures, site drainage features, vegetation stabilization. financial responsibility/ ownership, and a narrative and construction sequence. The Town of Southern Pines Local Program can issue Notices of Noncompliance to get noncompliant sites into compliance and has the ability to stop all inspections until sites are in compliance.

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State of North Carolina, Department of Environment & Natural Resources Dee Freeman, Secretary

Land Quality Section, Division of Land Resources James D. Simons, Director and State Geologist

To report possible violations of the NC Sedimentation Pollution Control Act. call

> 1-866-STOPMUD 786-7683

News from Land Quality Section

Land Quality Section Summary Statistics:

Plan Approvals, Inspections, and Enforcement Activities - Regional LQS Offices for the last ten years (Not included are the erosion and sediment control plans approved by local government sedimentation programs or land disturbed by NCDOT)

FY 2001-2002

24,407 Disturbed Areas per Year

4,098 E&S Plan Reviews

16,070 Site Inspections

3,060 New Permitted Sites

39 Notices of Violations

80 Enforcement Case Referrals

FY 2002-2003

24,438 Disturbed Areas per Year

14,681 Site Inspections

2.970 New Permitted Sites

FY 2003-2004

33,758 Disturbed Areas per Year

14,725 Site Inspections

3,023 New Permitted Sites

FY 2004-2005

35,818 Disturbed Areas per Year

4,870 E&S Plan Reviews

16,050 Site Inspections

3.394 New Permitted Sites

758 Notices of Violations

64 Enforcement Case Referrals

FY 2005-2006

40,110 Disturbed Areas per Year

4,870 E&S Plan Reviews

16,516 Site Inspections

3.374 New Permitted Sites

731 Notices of Violations

77 Enforcement Case Referrals

FY 2006-2007

35,441 Disturbed Areas per Year

5,270 E&S Plan Reviews

13,189 Site Inspections

3,546 New Permitted Sites

658 Notices of Violations

67 Enforcement Case Referrals

FY 2007-2008

31,569 Disturbed Areas per Year

4,611 E&S Plan Reviews

15,806 Site Inspections

2,972 New Permitted Sites

492 Notices of Violations

88 Enforcement Case Referrals

FY 2008-2009

61 FTE in LSQ*

24,838 Disturbed Areas per Year

3,260 E&S Plan Reviews

19,884 Site Inspections

2,542 New Permitted Sites

557 Notices of Violations

60 Enforcement Case Referrals

FY 2009-2010

52 FTE in LSQ*

23,477 Disturbed Areas per Year

3,272 E&S Plan Reviews

437 Express Permit Reviews

24,745 Site Inspections

2,106 New Permitted Sites

560 Notices of Violations

69 Enforcement Case Referrals

FY 2010-2011

48 FTE in LSO*

19,200 Disturbed Areas per Year

3,121 E&S Plan Reviews

475 Express Permit Reviews

20,152 Site Inspections

2,118 New Permitted Sites

363 Notices of Violations

29 Enforcement Case Referrals

*FTE is number of full time equivalent positions in Land Quality Section for erosion and sedimentation control program. The recent reduction in inspections is directly attributed to the reduction in force of seven inspector positions in September 2010.



Matthew Poling – New Assistant State Sediment Specialist

Matthew Poling, PE, was promoted in February to the Assistant State Sediment Specialist in the Raleigh Central Office. Mr. Poling will assist the Regional Offices and Local Programs with their oversight of their sediment and erosion control programs and reviews. He was an Assistant Regional Engineer in the Winston Salem Regional Office since February 2007. In that capacity he performed technical evaluations of submitted materials for the permitting of erosion and sediment control; conducted routine field evaluations of regulated water impoundment structures; prepared enforcement packages for legal cases; managed two

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SEDIMENTS is published by the NC Sedimentation Control Commission to provide information and assistance to the regulated community and to facilitate communication among personnel of state and local erosion and sedimentation control programs. Past issues are on the Land Quality Section website: http://portal.ncdenr.org/web/lr/newsletters.

Send comments to Evangelyn Lowery-Jacobs, NCDENR-Land Quality, 1612 Mail Service Center, Raleigh, NC 27699-1612. Email: evangelyn.lowery-jacobs@ncdenr.gov.

To receive an email notice of *Sediments* issues, please see page 1 for list service instructions.

Personnel of the Land Quality Section of the NC Department of Environment and Natural Resources provide information and assistance for implementation of the NC Erosion and Sedimentation Control Program. For assistance, please contact the Regional Engineer or the Raleigh headquarters listed below:

Laura Herbert, PE 2090 US Hwy 70 Swannanoa, NC 28778 (828)296-4500

Brad Cole, PE 225 Green Street, Suite 714 Fayetteville, NC 28301 (910) 433-3300

Zahid Khan 610 East Center Ave., Suite 301 Mooresville, NC 28115 (704) 663-1699

John Holley, PE 3800 Barrett Drive, Suite 101 Raleigh, NC 27609 (919) 791-4200

Pat McClain, PE 943 Washington Sq. Mall Washington, NC 27889 (252) 946-6481

Dan Sams, PE 127 Cardinal Dr. Ext. Wilmington, NC 28405-3845 (910) 796-7215

Matt Gantt, PE 585 Waughtown St. Winston-Salem, NC 27107 (336) 771-5000

Gray Hauser, PE Raleigh Central Office 512 N. Salisbury St., 1612 MSC Raleigh, NC 27699-1612 (919) 707-9220

The North Carolina **Sedimentation Control** Commission

The Sedimentation Control Commission (SCC) was created to administer the Sedimentation Control Program pursuant to the NC Sedimentation Pollution Control Act of 1973 (SPCA). It oped inundation studies from design storms is charged with adopting rules, setting standards, and providing guidance for implementation of the Act. The composition of the Commission is set by statute to encompass a broad range of perspectives and expertise in areas related to construction, industry, government, and natural resource conservation and quality. All members are appointed by the Governor and serve threeyear terms, except for the Director of the Water Resources Research Institute of the University of North Carolina, who serves as long as he remains Director. The chairman of the SCC is named by the Governor. The following is a list of current members with the organizations they represent:

Chair:

Robin Smith Burnsville Non-governmental Conservation

Commissioners:

Heather E. Jacobs Deck Washington Non-governmental Conservation

Mr. Tommy C. Anderson NC League of Municipalities "

Joseph E. Glass Fayetteville Professional Engineers of NC

> Kevin Martin Franklinton

NC Environmental Management Commission

Rich McLaughlin Raleigh NC State University, Dept. of Soil Science

> Vacant **NC Mining Commission**

> > Randy Veltri Charlotte NC Public Utilities

Jonathan K. Bivens Goldsboro Carolinas Associated General Contractors

Michael P. Voiland Raleigh Water Resources Research Institute of The University of North Carolina

Rob Weintraub Wake Forest NC Home Builders Association

> Manly West Movock

NC Soil and Water Conservation Commission

Matthew Poling - Con't from page 2

Environmental Specialists; surveyed water impoundment structures using laser level technology; reviewed Emergency Action Plans, conducted hydraulic and hydrologic training modules for Regional and Central office staff; and analyzed floods, and develand breach models using TR-55, HEC-1, HEC-RAS, and HEC-GEORAS. Prior to his work with DENR-Land Quality Section, Mr. Poling has experience with consulting firms on dam design, field evaluations, hydraulic and hydrologic, roadway construction, and developing sediment and erosion control plans. He received his B.S. in Civil Engineering in 2005 from North Carolina A&T State University.

Mr. Poling may be reached at 919-707-9209 or matt.poling@ncdenr.gov.

*

LQS Personnel Changes

Matthew Poling, PE, formerly an Assistant State Dam Safety Engineer, is now the Assistant State Sediment Specialist in the Raleigh Central Office.

Brad Cole, PE, formerly an Assistant Regional Engineer at the Raleigh Regional Office and an Assistant Dam Safety Engineer in the Raleigh Central Office, is now the Fayetteville Land Quality Section Regional Engineer.

Bill Beck, Environmental Senior Specialist in the Asheville Regional Office, retired effective June 1, 2011.

Rick Allred, Environmental Specialist in the Asheville Regional Office, retired effective July 1, 2011.

Scott Harrell, Assistant Regional Engineer in the Mooresville Regional Office, left the Section effective June 1, 2011 to accept a position with the City of Statesville's Public Works Department.

Charlie Whaley, Environmental Senior Specialist in the Mooresville Regional Office, retired on January 1, 2012.

Steve Cook, CPESC, Regional Engineer in the Fayetteville Regional Office, retired on February 1, 2012

NC Sedimentation Control Commission: February Actions

At its meeting on February 28, 2012, the NC Sedimentation Control Commission (SCC) took the following actions:

Delegated Local programs:

- Orange County: Approved the continuation of Local Delegation of erosion and sediment control (ES&C) programs.
- City of Greenville: Placed the City on probation with a follow-up review and report back to the SCC.
- City of Charlotte: Approved the continuation of Local Delegation.

SCC 2012 Meeting Dates

10am, Ground Floor Meeting Room, Archdale Building

- Thursday, May 24
- Thursday, August 23
- Wednesday, November 14

New MOU's Between Land Resources and NC Forest Service and NC Division of Water Quality

Two new Memorandums of Understanding (MOU's) were recently signed between the NC Department of Environment and Natural Resources (NCDENR)-Division of Land Resources-Land Quality Section and the NC Department of Agricultural and Consumer Services-NC Forest Service (NCFS) as well as with the NCDENR-Division of Water Quality (DWQ)-Surface Water Protection Section.

The agreements clarify the roles of each agency in sediment and erosion control and to coordinate their respective regulatory and compliance programs, as well as ensuring communications and sharing of information between the agencies.

Copies of these agreements can be found within Information Items on the February 28, 2012 NC Sedimentation Control Commission agenda at http://portal.ncdenr. org/web/lr/environmental-management.

Awards....(continued from page 1)



2012 Small Local Program Winner: Town of Southern Pines. (L-R): Barry Hinson, Brent Lockamy, Owen Herbert, Rodney Mitchell



Town of Southern Pines accepting Local Program Award of Excellence for Small Programs. L-R: Robin K. Smith (SCC), Dr. Rich McLaughlin (SCC), Brent Lockamy (Town of Southern Pines), Gray Hauser (LQS), Evangelyn Lowery-Jacobs (LQS)



2012 Large Local Program Winner: City of Raleigh. Back Row (L-R): Roy Conoly, Danny Bowden, Stephen Leischner, Ben Brown, Carl Dawson, Kevin Watson, Chris Bridgers, Kevin Kidd. Front Row (L-R): Rebecca Ferres, Nathan Burdick, Susan Locklear, Jessica Meyer, Lisa Booze, Eric Christopher, Gary Morton
Not Pictured: Jeanette Powell

The Town of Southern Pines has a staff of four contributing to two full-time equivalents to sediment and erosion control.

The Town of Southern Pines' staff receiving the award are: Barry Hinson, Construction Inspector; Rodney Mitchell, Construction Inspector; Brent Lockamy, Civil Engineer; and Owen Herbert, Engineering Technician.

More information on the Town of Southern Pines' Erosion and Sediment Control program may be found on their website at: http://www.southernpines.net/publicworks/engineering.aspx

The Erosion & Sedimentation Control Program for the City of Raleigh received the Local Program Award of Excellence for a large program. The Public Works Department, Stormwater Development Inspections Section is responsible for enforcement of Raleigh's local program for erosion and sediment control, flood prone area program, and watercourse buffer and reservoir watershed protection regulations.

The Stormwater Development Engineers review plans for all development within the City of Raleigh. All plans must be in compliance with City, State, and Federal regulations as they apply to Flood Hazard Areas, Neuse River Buffers, Watershed Protection Overlay Districts, erosion control during construction, stormwater quality, and stormwater peak runoff control.

The Development Plan Engineers review preliminary subdivision and site plans, infrastructure construction plans, recorded maps, as well as plans submitted for permit issuance. The section also reviews all As-Built Plans and certifications, and manages the annual inspection reports that are required for all stormwater devices permitted within the City. The Development Plan Review Engineering Section responds to inquiries from citizens, property owners, realtors, lenders, and developers requesting determinations as to whether a specific property is affected by the Floodplain.

Raleigh's Stormwater Development Inspections section consists of three teams of inspectors to serve subregions within the City's jurisdiction. The Northwest Team serves the area from Chatham Street to Six Forks Road outside the beltline. The Northeast Team serves the area from Six Forks Road to Poole Road outside the



City of Raleigh accepting Local Program Award of Excellence for Large Programs. L-R: Robin K. Smith (SCC), Dr. Rich McLaughlin (SCC), Jeanette Powell and Ben Brown (City of Raleigh), Gray Hauser (LQS), Evangelyn Lowery-Jacobs (LQS)

beltline. The Southern Team serves the area from Poole Road to Chatham Street inside the beltline and southward.

- The city code requires any land-disturbing activity over 12,000 square feet in size to have a Land Disturbing Permit prior to any land disturbing activity beginning. A permitted project will typically follow this sequence of events once a plan is approved and a permit is acquired:
- A pre-construction meeting is held on site with the grading contractor and/or the developer to review the permitted requirements;
- The erosion control devices, as shown on the approved erosion and sedimentation control plans, are installed by the grading contractor;
- A site inspection is performed by the stormwater control inspector to insure the required devices are installed correctly before work begins;
- Once the site inspection is approved, the site clearing and grading begins;
- The stormwater control inspector inspects the site periodically throughout the construction process to insure the erosion control devices are in proper working order;
- Periodic inspections of the site continue until all work is complete and the site is stabilized;
- A final inspection is performed by the stormwater control inspector and, when approved, the project is considered complete and the permit is closed.

The City of Raleigh's staff receiving the award are: Carl Dawson, Public Works Director; Danny Bowden, Stormwater Program Manager; Ben Brown, Stormwater Development Supervisor; Jeanette Powell, Stormwater Development Supervisor; Chris Bridgers, Stormwater Inspection Coordinator; Rebecca Ferres, Stormwater Inspection Coordinator; Stephen Leischner, Stormwater Inspection Coordinator; Roy Conoly, Senior Stormwater Inspector; Eric Christopher, Senior Stormwater Inspector; Jessica Meyer, Stormwater Inspector; Kevin Watson, Stormwater Inspector; Lisa Booze, Senior Stormwater Engineer; Susan Locklear, Senior Stormwater Engineer; Gary Morton, Senior Stormwater Engineer; Nathan Burdick, Stormwater Engineer; and Kevin Kidd, Stormwater Engineer.

More information on the City of Raleigh's Erosion and Sediment Control program may be found on their website at http://www.raleighnc.gov/home/content/PWksStormwater/Articles/ESCMainPage.html

Congratulations to these two well-deserving programs in recognition of their excellence in erosion and sediment control.

Falls Lake Design Standard

The "Falls Lake Rule" which specifies design standards for erosion and sedimentation control measures and time limits for provisions of ground cover in the Upper Neuse River Basin (Falls Lake watershed) was approved by the Rules Review Commission with an effective date

of February 1, 2012. These rules are the same as the Session Law 2009-486 that have been in effect since January 1, 2010.

The permanent standards for erosion and sedimentation control in the Falls Lake watershed keep the current requirements for the design storm, sediment basin efficiency, the slope of channels and time limits for ground cover. For land disturbing activity where grading is not yet complete temporary ground cover will be provided within 7, 10, or 14 days on steep, moderate or no (flat) slopes, respectively. For land-disturbing activities where grading is complete, temporary or permanent ground cover will be provided within 7 days.

The term "provided" is a term used in the Sediment Pollution Control Act (SPCA) and has been interpreted to mean seeding, mulching, and tacking according to the seeding specifications.

The permanent rules are:

CHAPTER 04- SEDIMENTATION CONTROL

SUBCHAPTER 04B - EROSION AND SEDIMENT CONTROL

15A NCAC 04B .0132 DESIGN STANDARDS FOR THE UPPER NEUSE RIVER BASIN (FALLS LAKE WATERSHED)

In addition to any other requirements of State, federal, and local law, land-disturbing activity in the watershed of the drinking water supply reservoir that meets the applicability requirements of Session law 2009-486, Section 3.(a), shall meet all of the following design standards for sedimentation and erosion control:

- (1) Erosion and sedimentation control measures, structures, and devices shall be planned, designed, and constructed to provide protection from the runoff of the 25-year storm that produces the maximum peak rate of runoff as calculated according to procedures set out in the United States Department of Agriculture Soil Conservation Service's "National Engineering Field Manual for Conservation Practices" or according to procedures adopted by any other agency of the State or the United States.
- (2) Sediment basins shall be planned, designed, and constructed so that the basin will have a settling efficiency of at least 70 percent for the 40-micron size

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Falls Lake Design cont'd from page 5

soil particle transported into the basin by the runoff of the two-year storm that produces the maximum peak rate of runoff as calculated according to procedures in the United States Department of Agriculture Soil Conservation Service's "National Engineering Field Manual for Conservation Practices" or according to procedures adopted by any other agency of the State or the United States.

- (3) Newly constructed open channels shall be planned, designed, and constructed with side slopes no steeper than two horizontal to one vertical if the vegetative cover is used for stabilization unless soil conditions permit steeper side slopes or where the side slopes are stabilized by using mechanical devices, structural devices, or other acceptable ditch liners sufficient to restrain accelerated erosion. The angle for side slopes shall be sufficient to restrain accelerated erosion.
- (4) For an area of land-disturbing activity where grading activities have been completed, temporary or permanent ground cover sufficient to restrain erosion shall be provided as soon as practicable, but in no case later than seven days after completion of grading. For an area of land-disturbing activity where grading activities have not been completed, temporary ground cover shall be provided as follows:
- (a) For an area with no slope, temporary ground cover shall be provided for the area if it has not been disturbed for a period of 14 days.
- (b) For an area of moderate slope, temporary ground cover shall be provided for the area if it has not been disturbed for a period of 10 days. For purposes of this Item, "moderate slope" means an inclined area, the inclination of which is less than or equal to three units of horizontal distance to one unit of vertical distance.
- (c) For an area of steep slope, temporary ground cover shall be provided for the area if it has not yet been disturbed for a period of seven days. For purposes of this item, "steep slopes" means an inclined area, the inclination of which is greater than three units of horizontal distance to one unit of vertical distance.

Neuse River Basin and Jordan Lake Management Strategies

Special protections apply in other subwatersheds in NC for maintaining and protecting existing riparian buffers. For example, the Neuse Buffer Rules have applied in the Neuse River basin since 1997 and the Jordon Lake Nutrient Management Strategy has been in place since 2009. For both watersheds, a 50 foot buffer (measured from top of bank) on each side of a surface water course (e.g., stream or lake) is protected. In the first 30 feet closest to the water, vegetation is to remain undisturbed with few erosion and sediment control (ES&C) devices allowed. In this inner Zone 1, a DWQ 401 permit is needed for any S&EC disturbance and even then, only silt fences, temporary silt checks, special sediment fences, special stilling basins (silt bags) are allowed. In the outer 20 feet of the buffer (Zone 2), vegetation can be managed and storm water management is allowed with no permit. In the Jordan Lake watershed an additional restriction allows a one time application of fertilizer. These rules can be found at http://portal.ncdenr. org/web/wq/swp/ws/401/riparianbuffers/ rules.

Report from the Transportation Research Board Annual Conference, Washington, DC, January 22-25, 2012

By Dr. Rich McLaughlin, NC State University, Department of Soil Science

There were over 4,500 papers presented at the world's largest transportation-related meeting, but there were only three papers dealing with construction site stormwater. These were part of a session to discuss the EPA's Effluent Limit Guideline (ELG) for construction site runoff, which has been discussed in earlier issues. Briefly, this is a new rule that EPA is phasing in which requires a number of approaches to minimizing water quality impacts of construction site runoff. The most controversial part of this rule was the requirement that turbidity be maintained below 280 nephelometric turbidity units (NTUs).. After a lawsuit was initiated and a federal agency objected, this number was subsequently withdrawn by EPA until more data is collected and a more robust analysis

completed. This session was intended to provide an update on the regulatory situation and research into compliance methods.

The first speakers were two of the EPA staff who are working on this issue, Erika Larsen and Jesse Pritts. They reviewed the history of the ELG including the withdrawal of the turbidity target and call for additional data, which was accepted until early March. At this point they said that "every option is on the table" regarding the target turbidity level, including even discarding it altogether. Some in the audience suggested that they consider either different numbers for different areas of the country or tying it into background turbidity levels. should be remembered that their first draft included a somewhat complicated formula that included soil and rainfall factors, but it was discarded because the comments sent in were mostly against such complexity.

The next speaker was myself, with the usual array of field and laboratory data demonstrating how passive, or gravity-driven systems can work well to reduce turbidity when properly managed. Several case studies were also presented illustrating the factors involved in successful installation and maintenance of passive treatment systems, as well as the factors in failures. The key factor in system failure was usually poor runoff water management that allowed runoff to reach the basin without passing through a treatment ditch.

The final speaker was Dr. Michael Barrett of the University of Texas - Austin, who is part of a team of researchers investigating the use of flocculants on highway projects in Texas. They are currently conducting laboratory studies on a variety of soils from around the state and flocculants with a range of molecular weights and charges. They have been testing mostly anionic and neutral polyacrylamides. One of the unique aspects of their studies is their measurement of water hardness changes during the flocculation process. Hardness is mostly made up of calcium and magnesium in water, and it is thought that these cations "bridge" between anionic PAMs and the negatively-charged surface of clays. They did find a drop in hardness when soils were flocculated, suggesting that some of the cations were removed during the bridging process. Overall, they have concluded that neutral PAMs and the proprietary mixed anionic PAM worked better at reducing turbidity than the single anionic PAMs.





International Erosion Control Association's "Environmental Connection 2012"

International Erosion Control Association

By Melanie M. McCaleb, CPESC- NC State University Soil Science Department

Environmental Connection (EC) is a premier educational event for the erosion, sediment control and the stormwater industry. EC combines intense, full and half day training courses with topic-focused technical sessions to cover a wide range of subjects.

The International Erosion Control Associations (IECA) EC12 Conference and Expo was held in Las Vegas, Nevada on February 25-March 1, 2012 celebrating its 40th birthday! This year, unlike years in the recent past being hit by the declining economy, the conference was teeming with activity and registration numbers reaching nearly 2000 attendees from 30 countries. There were 90 technical sessions and 17 training courses presented during the five-day conference. An Expo hall was filled to capacity with over 150 exhibits of innovative erosion and sediment control technology.



Fig. 1 Pre-conference full day training on turbidity and polyacrylamide and its uses.

The Effluent Limitation Guidelines (ELG) issued on December 1, 2009 by the United States Environmental Protection Agency (EPA) continues to generate much interest within the industry in various approaches to treating turbidity in construction site runoff. The pre-conference workshops on controlling turbidity included people from all regions of the country plus Australia, Canada, and Malaysia attending. While the focus of the workshop was on passive treatment systems using polyacrylamide (PAM), other approaches were also discussed including the full portable treatment plants currently used on some sites. There was a great deal of discussion among the attendees about what would be allowable in their states.

Greg Schaner, Attorney Adviser, U.S. EPA Office of Wastewater Management, gave EC12's keynote address. Schaner discussed changes and updates to the Effluent Limitations Guidelines and what they mean for IECA members, including the indefinite stay to the 280 NTU rule and new buffer rules. On February 16, 2012 the EPA issued their construction general permit (CGP). The 2012 CGP includes a number of modifications to the 2008 CGP, many of which are necessary to implement the new Effluent Limitations Guidelines and New Source Performance Standards for Construction and Development point sources, known as the "C&D rule." For more information and the full CGP visit: http://cfpub.epa.gov/npdes/stormwater/cgp.cfm

Environmental Connections photo contest winner of 1st and 2nd places for the "Impacts of Erosion" Category. Pictures taken by Melanie McCaleb, NCSU Soil Science Department



Fig. 2 First place. Massive erosion exposing main water pipe to fire hydrant.



Fig. 3 Second place. Overload of sediment causes silt fence failure and fill in stream.

IECA's Environmental Connection The World's Largest Soil & Water Event!

February 10-13, 2013

Town and Country Resort and Conference Center San Diego, California, USA



Call for Abstracts Deadline: June 1, 2012

The premier educational event for the erosion and sediment control industry. Environmental Connection has more erosion, sediment control, and stormwater focused training, technology and networking events than any other event. Over 4 days, Environmental Connection provides peer–reviewed education, products and technology which address eight technology sections:

- Slope Stabilization
- Stream Restoration
- Vegetative Establishment
- Stormwater Management
- Wetlands Technology
- Erosion and Sediment Control
- Beach and Shoreline Stabilization
- Wind Erosion Technology

Types of presentations will include technical papers, case studies, workshops, forum/panel discussions, full and half-day courses, posters, and product practicum. Please refer questions to Natalie Bollinger – natalie@ieca.org, 303-640-7554 or 800-455-4322. Information: http://www.ieca.org/conference/annual/ec.asp

New Construction Site Sediment and Erosion Control Requirements in NC

Effective August 3, 2011, all development projects in North Carolina that disturb an acre or greater of land require a local- or state-approved Erosion and Sedimentation Control (E&SC) plan. The project will be automatically covered by an NPDES Stormwater General Permit NCG010000 for construction-related activities, provided that the ground stabilization and basin design requirements in that permit are included in the E&SC Plan.

Construction Site Sediment and Erosion Control Requirements for North Carolina, include:

- 1. Ground stabilization in 7 days on perimeter areas and slopes greater than 3:1,
- 2. Ground stabilization in 14 days on other areas,
- 3. Surface outlets and baffles are required for all sediment basins, and
- 4. Basin outlet structures withdraw water from the surface unless drainage area is less than 1 acre.

EPA has decided **NOT** to implement the proposed numeric effluent limits and monitoring requirements in their February 16, 2012 issuance of their Construction General Permit (CGP). It is likely that EPA will wait until 2017 before updating the CGP.

Helpful resources, including major requirements for NC are available at: http://portal.ncdenr.org/web/wq/ws/su/construction/

Revisions to the Design Manual

The Sedimentation Control Commission approved revisions to the Erosion and Sedimentation Planning and Design Manual in August, 2008. Revisions include sections on vegetative stabilization to include native species, skimmer dewatering calculations, streambank stabilization based upon NRCS practices, and estimating runoff (Chapters 3, 6, and 8 and Appendix 8.03). The manual is available as PDF files at:

http://portal.ncdenr.org/web/lr/erosion

Erosion and Sedimentation Control Planning and Design Workshop

When: April 17-18, 2012

Where: Doubletree by Hilton (formerly the Brownstone Holiday Inn), Raleigh, NC Registration deadline: April 9, 2012

More info and register ONLINE at:

http://www.ncsu.edu/wrri/code/events/upcomingevents2.htm

Credits: Landscape architects will receive 10 CEUs and Professional Engineers will receive 12 PDHs (subject to board approval) for completion of each 2-day workshop.

Purpose: These workshops are structured to educate and familiarize design professionals with the NC Sedimentation Pollution Control Act (SPCA), the rules implementing the Act, design standards for erosion and sedimentation control BMPs and elements that are necessary to submit an erosion control plan.

Registration Fee: \$175 includes materials, breaks, and two lunches

Questions? Contact WRRI at (919) 515-2815 or water resources@ncsu.edu.

GET SEDIMENTS On-line

SEDIMENTS is a newsletter published by the N.C. Sedimentation Control Commission to provide information and assistance to the regulated community and to facilitate communication among personnel of state and local erosion and sedimentation control programs. SEDIMENTS is available in electronic form at: http://portal.ncdenr.org/web/lr/newsletters

To subscribe to the listsery:

- 1. In the "To:" field, type: mj2@lists.ncsu.edu
- 2. Leave the "Subject:" blank.
- 3. To subscribe, type "subscribe sediments" in the body of the message.

OR send an e-mail to: jean spooner@ncsu.edu





Newsletter of the North Carolina Sedimentation Control Commission c/o NCSU Water Quality Group Campus Box 7637 Raleigh, NC 27695-7637

Calendar of Events

4/11/2012	Level I & II Recertification: Erosion & Sediment Control/Stormwater, Mills River, NC http://go.ncsu.edu/ESCLevel1-2	7/22-25/12	67th Annual Int'l Conference for the Soil and Water Conservation Society (SWCS), Fort Worth, TX. http://www.swcs.org/12ac
4/12/2012	Level II: Erosion & Sediment Control/Stormwater Site Management, Mill River, NC http://go.ncsu.edu/ESCLevel1-2	7/29-8/1/12	2012 American Society of Agricultural & Biological Engineers (ASABE) Annual Int'l Meeting, Dallas, TX http://www.asabemeetings.org
4/13/2012	Level I: Erosion & Sediment Control/Stormwater Inspector/Installer, Mills River, NC http://go.ncsu.edu/ESCLevel1-2	8/8-9/12	Low Impact Development Summit, Asheville, NC http://www.bae.ncsu.edu/stormwater/training. htm
4/17-18/12	Erosion & Sediment Control Planning and Design Workshop, Raleigh NC http://www.ncsu.edu/wrri/	8/14/2012	Level I & II Recertification: Erosion & Sediment Control/Stormwater, New Bern, NC http://go.ncsu.edu/ESCLevel1-2
4/18/2012	Installation of Construction Site Erosion & Sediment Control Devices, Raleigh NC http://www.soil.ncsu.edu/training/training.php	8/15/2012	Level II: Erosion & Sediment Control/ Stormwater Site Management, New Bern, NC http://go.ncsu.edu/ESCLevel1-2
5/9/2012	Installation of Construction Site Erosion & Sediment Control Devices, Raleigh NC http://www.soil.ncsu.edu/training/training.php	8/16/2012	Level I: Erosion & Sediment Control/ Stormwater Inspector/Installer, New Bern, NC http://go.ncsu.edu/ESCLevel1-2
5/10-11/12	Advanced Construction Site Turbidity Control, Raleigh NC http://www.soil.ncsu.edu/training/training.php	10/15-18/12	2012 Stream Restoration Conference, Abstracts due June 30, Wilmington, NC http://www.ncsu.edu/srp/
5/20-24/12	2012 Land Grant and Sea Grant National Water Conference, Portland, OR http://www.usawaterquality.org/conferences/2012	10/16-18/12	Annual Onsite Water Protection Conference, Hickory, NC http://www.soil.ncsu.edu/training/training.php
6/12/2012	Level III: Design of Erosion & Sediment Control Plans, Raleigh, NC http://www.bae.ncsu.edu/workshops/dot/	2/10-13/13	IECA Environmental Connection 2013 - Abstracts due June 1, San Diego, CA http://www.ieca.org/membership/getinvolved/ submittals/opportunities.asp/