



STATE OF NORTH CAROLINA, DEPARTMENT  
OF ENVIRONMENT AND NATURAL RESOURCES  
William G. Ross, Jr. Secretary

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

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## Water Quality & Land Quality report on efforts to address turbidity

At the August 6, 2003, meeting of the N.C. Sedimentation Control Commission (SCC), Land Quality Chief Mell Nevils reported on an informal meeting last May of several members of the SCC and the N.C. Environmental Management Commission (EMC). He described staff reports on efforts to address enforcement of the North Carolina turbidity standard.

North Carolina's turbidity standard is 10 NTU in trout waters and 50 NTU in other waters, but the standard provides that compliance can be met by using BMPs recommended by the Division of Land Resources. In October 2000, the EMC upheld a decision by an administrative law judge in a case challenging a 401 Water Quality Certification (Whitesides Estates, Inc. v DENR and Highlands Cove). The decision stated that, in that case, the Division of Water Quality (DWQ) had been wrong to interpret the state's turbidity standard in a manner that allows water quality standards to be violated so long as sedimentation control BMPs are being followed. The decision brought into question how the turbidity standard should be enforced since it was widely acknowledged that standard BMPs currently in use cannot reduce turbidity in construction runoff to the 10 NTU or even the 50 NTU level.

The EMC asked staff of DWQ to study the origin of the State turbidity standard and make recommendations as to whether the standard needed to be modified.

DWQ subsequently reported to both commissions on its study of the turbidity issue. The study concluded that the

standard linking turbidity to erosion and sediment control had been adopted in an effort to improve BMP implementation but that the strategy had not prevented widespread sediment damage to water bodies. DWQ recommended that no changes be made to the turbidity standard but that groundcover requirements in the erosion and sedimentation control plans be strengthened, that enforcement of the erosion and sedimentation control law and rules be strengthened, and that BMPs be improved so that they meet the standard.

At the May meeting of SCC and EMC members, Mr. Nevils reported on efforts to implement the recommendations from DWQ.

He reported that the Division of Land Resources (DLR) is placing strong emphasis on the use of groundcover. Local programs and regional offices have been directed to check erosion and sedimentation control plans closely for specifications for both temporary and permanent groundcover and to look for compliance during inspections. In addition, the division has worked with a stakeholder group and members of the General Assembly on proposed legislation that would reduce the time that developers have to get groundcover in place following a phase of grading from

15 to 10 working days and 30 to 21 calendar days, whichever is shorter. The legislation has not been passed.

Mr. Nevils reported that in the area of enforcement, the division has authorized regional offices to assess initial one-day penalties for noncompliance and is assessing substantially higher civil penalties. The division has assessed three projects more than \$100,000—one nearly \$200,000—this year. In addition, DLR and DWQ have signed a Memorandum of Understanding to strengthen enforcement of erosion and sedimentation control regulations using DWQ's authority under the federal NPDES Stormwater Program. As of March 10, 2003, all construction sites of one acre or more are required to be covered under North Carolina's "General Permit to Discharge Stormwater Under the National Pollutant Discharge Elimination System." This permit requires compliance with N.C. erosion and sedimentation control law and rules and with additional requirements of the federal program. Sites in noncompliance can be fined up to \$10,000 per day under State law (\$25,000 for repeat violations) and up to \$27,500 under the Clean Water Act. Under federal law, repeat or intentional violations are considered criminal acts. Mr. Nevils said that DLR and DWQ

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## August action of the North Carolina Sedimentation Control Commission

At its regular meeting on August 6, 2003, the North Carolina Sedimentation Control Commission took the following action:

- Approved using funds from the 2003-2004 fiscal year appropriation for Local Program Grants to meet obligations of a contract made last year with the City of Monroe local program. Funds committed to the City of Monroe last year, but not spent, were not carried forward. Land Quality Chief Mell Nevils told the Commission that because budget problems make it unlikely that unspent funds will be carried forward in the future, a change will have to be made in the way 18-month contracts with local programs are funded.
- After extensive discussion, approved a resolution introduced by Commissioner Ralph Stout saying that the Commission's approval of an amendment to the ordinance for Charlotte and Mecklenburg County's local program in February should not be taken as an endorsement of the amendment itself since the Commission's role is only to determine if the ordinance meets or exceeds state requirements as presented in the state model ordinance. Some commissioners objected to singling out the Charlotte-Mecklen-

burg ordinance amendment in what was essentially a resolution to clarify the SCC's role. Commissioner Joe Rudek requested that a general resolution of clarification be drafted and be brought to the Commission.

- Heard a presentation by Mr. Mell Nevils on a meeting between the SCC and the N.C. Environmental Management Commission to discuss the issue of turbidity (see article on page 1).
- Heard from Land Resources Director Jim Simons that the Wilmington Regional Office of the Department of Environment and Natural Resources will pilot an "Express Permitting Program" authorized and funded by the General Assembly in the latest budget bill. Applicants may pay an extra fee to have review of their erosion and sediment control, water quality, and coastal management applications expedited. The extra fees collected will fund the position to conduct express plan reviews. Mr. Simons said that he does not expect there will be a great demand for expedited erosion and sedimentation plan review since more than ninety-five percent of erosion and sediment control plans are regularly reviewed in less than 25 days. Nevertheless, the pilot program will be in place by October.

### N.C. Division of Land Resources Land Quality Section Annual Report Total Fiscal Year 2002-2003

#### Erosion and Sedimentation Control Program

Estimated Total Project Sites	7,500
New Projects	2,970
Sedimentation Plan Reviews	4,064
Plan Disapprovals	793
Site Inspections	14,681
Notices of Violation	660
Cases Referred to Enforcement	81

#### Mining Program

Estimated total	930
Mine permits reviewed	337
Mine Inspections	572

#### Dam Safety Program

Estimated total	4,950
Dam Safety Plans reviewed (total)	139
Dam Inspections	1,720



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Send comments to Janet Paith, NCDENR-Land Quality, 1612 Mail Service Center, Raleigh, NC 27699-1612. Email: Janet.Paith@ncmail.net. Send change of address to WRRI, Box 7912, North Carolina State University, Raleigh, NC 27695-7912 (919/515-2815; water\_resources@ncsu.edu). Fifty-nine hundred copies of this newsletter were printed at a cost of \$1,433.80 or 24 cents per copy.

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

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Raleigh, NC 27699-1612 (919) 733-4574

The North Carolina  
Sedimentation Control Commission

The Sedimentation Control Commission (SCC) was created to administer the Sedimentation Control Program pursuant to the N.C. Sedimentation Pollution Control Act of 1973 (SPCA). It 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 three-year 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.

Chairman:  
Kenneth H. Reckhow  
Durham

Director of Water Resources Research Institute

Commissioners:

W. T. "Buzz" Bryson  
Cary  
Rep. N.C. Public Utilities

Hugh J. Franklin  
Marion  
Rep. N.C. Mining Com.

Phillip Ray Gibson  
Cullowhee  
Non-governmental conservation representative

J. Wendell Gilliam  
Raleigh  
Rep. NCSU Dept. of Soil Science

Gregory D. Jennings  
Raleigh  
Rep. N.C. Environmental Management Com.

Grover McPherson  
Winston-Salem  
Rep. N.C. Soil and Water Conservation Com.

Joseph Rudek  
Hillsborough  
Non-governmental conservation representative

Kyle Sonnenberg  
Southern Pines  
Rep. Association of County Commissioners/  
N.C. League of Municipalities

Ralph Stout  
Greensboro  
Rep. Carolinas Associated General Contractors

Mark A. Taylor  
Greensboro  
Rep. Professional Engineers of N.C.

F. Roger Watson  
Asheville  
Rep. N.C. Home Builders Association

## Reports on turbidity enforcement *continued*

will work together to target the worst offenders of erosion and sedimentation control requirements using staff resources and penalty authority under both programs.

Mr. Nevils reported that a Turbidity Subcommittee of the SCC investigated the state of the art of turbidity control and has produced a chart of erosion and sedimentation control options capable of high, medium, and low sediment reduction along with estimates of the cost of implementing each option. He said that several research projects funded by the SCC have produced promising results in turbidity reduction using advanced control technologies, including basin skimmers and polyacrylamide, and that these BMPs will be included in a revision of the *N. C. Erosion and Sediment Control Planning and Design Manual*.

Also at the May meeting, DWQ staff reported significant changes in the 401 Water Quality Certification program in response to the EMC decision on turbidity. In situations similar to the Highlands Cove case, DWQ is requiring advanced erosion and sediment control BMPs and accelerated application of groundcover as a condition of certification.

## Personnel Changes

**Gray Hauser, P.E.** has been named State Sediment Specialist in the Raleigh headquarters. He was formerly Assistant Regional Engineer in the Winston-Salem Region.

**Tracy Davis, P.E.** is the new Chief Engineer in the Land Quality Section. He was formerly State Mining Specialist.

**Floyd Williams, P.G.** is the new Mining Specialist, replacing Tracy Davis. Williams was formerly Washington Regional Engineer.

**Timothy Latham**, formerly with the Davie Soil and Water Conservation District, is the new Environmental Technician V in the Winston-Salem Region.

**Janet Russel**, formerly with the Division of Coastal Management, is the new Environmental Technician V in the Wilmington Region.

## In Memoriam: William E. Mangum

North Carolina's erosion and sedimentation control program has lost another of its founders. William Edward Mangum of Raleigh died July 31, 2003, after an extended illness. Bill Mangum was President and Chairman of the Board of C.C. Mangum Construction Company until 1992. C.C. Mangum performed grading and paving for many of Raleigh's landmark projects, including Carter-Finley Stadium at NC State University. Mangum was a loyal Wolfpack supporter, providing many athletic scholarships. He served on the board of Peace College and, for many years, on the board of the Raleigh Rescue Mission.

Mangum was a founding member of the N.C. Sedimentation Control Commission (SCC), helping to develop and shepherd the Sedimentation Pollution Control Act through the legislature. When the act was passed and the SCC was established, Mangum served on the Commission as representative of the Associated General Contractors of North Carolina. He served for many years on the SCC's Education Committee.

According to commissioner Ralph Stout, "In the early days, the entire education program consisted of Bill and Joe Phillips going around the state putting on a dog and pony show."

The "dog and pony show" was an informational program aimed at spreading the word about the act and at convincing local governments to establish local erosion and sedimentation control programs.

## Clear Water Contractor Training Workshops held on N.C. coast

Clear Water Contractor workshops were held in four locations in Eastern North Carolina in January and February. The Coastal Nonpoint Source Program of the N.C. Division of Coastal Management, in cooperation with the N.C. Division of Water Resources, the N.C. Land Quality Section, the Albemarle-Pamlico National Estuary Program, and the NC State University Cooperative Extension Service carried out workshops in Bolivia, Manteo, Morehead City, and Washington. The workshops were developed to assist businesses involved in land disturbing activities. The workshops help them to better understand the state's erosion and sedimentation control laws and understand techniques they can employ to minimize sediment runoff. Unlike many

other erosion and sedimentation control training programs that focus on the needs of engineers, architects, or other design professionals, the Clear Water Contractor Training Program is designed specifically for operators and contractors conducting earth moving activities on a daily basis: bulldozer operators, grading contractors, pond builders, and excavators.

Staff of the State's Division of Land Resources (DLR) and a member of the Sedimentation Control Commission originally developed the Clear Water Contractor Training Program for contractors located in western North Carolina's mountains. While that program was very successful, there was also a need to reach earth movers along

the North Carolina coast. The free day-long workshops consisted of four modules dealing with North Carolina's Sedimentation Pollution Control Act, erosion and sedimentation control practices, the Army Corps of Engineers and NC Division of Water Quality regulations and buffer requirements, and how to estimate erosion control costs and materials. Workshop participants also received a free copy of the North Carolina Erosion and Sediment Control Field Manual and Clear Water Contractor decals to display. In addition, attendees also received exclusive access to the Clear Water Contractor logo for marketing. Those completing the Clear Water Contractor training are listed below.



**Clear Water Contractor Training Class, Bolivia, NC.** (not in order) **Kevin Alderman**, Alderman Brothers Construction, Inc., Little River SC; **Mike Braddock**, Braddock's Landscape Service, Winnabow NC; **Douglas Richardson**, CBH Construction, Burgaw NC; **Tracy Heath**, Heath Construction Inc., Castle Hayne, NC; **James Russ**, JP Russ and Son, Inc., Ocean Isle Beach, NC; **Don Schopf**, M & D Landscaping, Calabash NC; **Timothy Jones**, Morton Trucking Company, Jacksonville, NC; **Douglas Walton**, Morton Trucking Company, Jacksonville, NC; **James Lee Walton**, Morton Trucking Company, Jacksonville, NC; **Jeff Warner**, Pipeline Utilities of Wilmington Inc, Leland, NC; **Barbara Bach**, Retention Pond Services Inc, Castle Hayne, NC; **Glenn Garrett**, Retention Pond Services Inc, Castle Hayne, NC; **Vida Obieglo**, Retention Pond Services, Inc, Castle Hayne NC; **Michael Ankrum**, Scott Cook Company, Wilmington NC; **Matt Murphy**, SECOF Construction, Carolina Beach, NC; **Richard Lawrence**, Sitework Construction, Spring Hope, NC; **Scott Furr**, South Atlantic Grading, Wrightsville Beach, NC; **Tommy Watters**, Coastal Earth Works Inc., Wilmington, NC; **Anthony Romano**, TMC Taylor Construction, Wilmington, NC; **Lee Whitehead**, Whitehead, Inc, Hampstead, NC; **Sabrina Miller**, Southern Excavating and Land Services Inc, Wrightsville Beach, NC; **Tim Rivenbark**, Rivenbark Construction Co. Inc., Bolivia, NC.

**Clear Water Contractor Training Class, Manteo, NC.** (not in order) **Steve Archibald**, Atlantic Lawn and Landscaping, Kill Devil Hills, NC; **David Barnhill**, Barnhill Contracting Company, Elizabeth City, NC; **Jeff Guill**, Barnhill Contracting Company, Elizabeth City, NC; **Skip Partington**, Barnhill Contracting Company, Kitty Hawk NC;



**Norman Leary**, L & L Waterfront Construction Inc, Elizabeth City, NC; **James Gallagher**, Nature's Design, Manteo, NC.



**Clear Water Contractor Training Class, Washington, NC.** (not in order) **Guy Tutterow**, Atlantic Coast Contractors, Inc, Battleboro, NC; **Mike Alford**, Barnhill Contracting Company, Tarboro, NC; **Stephen Daniel**, Barnhill Contracting Company, Tarboro NC; **James Daniels**, Barnhill Contracting Company, Tarboro, NC; **Johnny Bass**, Bass Construction, Hertford, NC; **Marshall T. Singleton**, BE Singleton & Sons, Washington, NC; **Muzette Kiger**, Custom Contract Services Inc, Littleton, NC; **Neil Hine**, Hine Sitework Inc, Goldsboro, NC; **Bruce Johnston**, Johnston Landscaping and Maintenance, Winterville, NC; **Byron Midyette**, Seaside Construction, Bath, NC; Jerol Selby, Selby Land Concepts, Belhaven, NC; **Brian Colbert**, BCS Contractors, Nashville, NC; Ryan Gardner, BCS Contractors, Nashville, NC.

**Clear Water Contractor Training Class, Morehead City, NC.** (not in order)

**Fran Law**, Broad Creek Construction, Merritt, NC; **Joe Mobley**, D.S. Simmons Inc., Goldsboro, NC; **Dan Foley**, Foley & Foley Contractors, New Bern, NC; **Wendell Comeaux**, JPK Contractors Inc, Leland, NC; **David Medford**, Maritime Partners, New Bern, NC; **Tommy Best**, New Bern Lawn & Landscaping, New Bern, NC; **Bill Blackman**,



**Sunland Builders Inc.**, Swansboro, NC; **Frank Hassinger**, Sunland Builders Inc., Swansboro, NC; **Kenny Rose**, Thomas Simpson Construction Company Inc, Morehead City, NC; **Thomas Simpson**, Thomas Simpson Construction Company, Inc, Morehead City, NC; **Kevin Weston**, Weston's Landscaping, Richlands, NC; **Rich Timm**, Williams Landscape Contractors, Inc, New Bern, NC.

## International Erosion Control Association offers erosion and sedimentation control and stormwater training sessions on CD ROM.

The International Erosion Control Association has videotaped instructors from their latest training sessions, synchronized the oral presentations with the original PowerPoint presentations, and put the entire presentations on CD-ROM. You can run these on your computer using a standard Internet browser. The following CD-ROMs are available:

- How to Select, Install, and Inspect Construction Site Erosion and Sediment Control Best Management Practices for NPDES Storm Water Permit Compliance (about 6 hours)
- How to Write and Implement a Storm Water Pollution Prevention Plan (about 4 hours)
- How to Perform an Analysis of a Streambank Erosion Problem (about 3 hours)
- Monitoring is a Dirty Word (how to protect yourself and your company with water quality monitoring on your construction site).

To view a sample of a training session and order the CD-ROMs go to website  
<http://www.ieca.org/store/> and click on Digital Education  
or call IECA at (970) 879-3010.

A toll-free hotline  
has been  
established  
statewide for  
concerned  
citizens to report  
possible  
violations of the  
North Carolina  
Sedimentation  
Pollution  
Control Act.  
To report  
problems call  
1-866-STOPMUD  
(786-7683)

## Erosion and Sedimentation Control Basic Planning and Design Workshops

October 15 - 16, 2003  
Holiday Inn Select  
Hickory, NC

October 29 - 30, 2003  
Sheraton Grand  
New Bern, NC

**Purpose:** These workshops are presented to familiarize design professionals who develop erosion and sedimentation control plans—including engineers, landscape architects, and surveyors—with erosion and sedimentation control principles and practices. Twelve (12) PDHs are available to professional engineers and land surveyors, and 10 continuing education units are available to landscape architects for completion of both days.

**Fee:** \$125.00. Covers materials, breaks, and lunches.

**Deadline:** Registrations will be taken on a first-come, first-served basis, but no registrations will be taken after October 1, 2003, for the Hickory workshop, and October 15, 2003, for the New Bern workshop.

Details and any changes to the schedule will be posted at the following web address:  
**<http://www2.ncsu.edu/ncsu/CIL/WRRI/erosionseminars.html>**

Sponsored by  
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