

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

Vol 10 No 1

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

January-March 2003

Program results from proactive effort of Gaston Soil and Water Conservation District

## Gaston County receives local program delegation

At the February 5, 2003, meeting of the N.C. Sedimentation Control Commission, the body voted to delegate authority to implement the Sedimentation Pollution Control Act to Gaston County.

Located east of and adjacent to Mecklenburg County, Gaston County is the nation's leading yarn and thread producing county. Separated from the booming Charlotte area by the Catawba River, the county is nevertheless experiencing significant spill-over from growth in Charlotte.

Members of the Board of Supervisors of the Gaston Soil and Water Conservation District became concerned about the area's streams when they saw farms being sold for residential subdivisions. According to Mr. Dean Parker, District Conservationist, the supervisors saw water quality issues shifting from agriculture to development and expressed their concerns to the Gaston County Commissioners. The County Commission charged a broad-based group called the **Quality Natural Resources Commission** with studying water quality issues in the county and making recommendations to address issues. The committee determined that land disturbance was the primary water quality issue and recommended that a local soil erosion and sediment control ordinance be adopted and implemented.

On November 14, 2002, the Gaston Board of Commissioners adopted an ordinance that is identical to the state model ordinance in all respects except the buffer zone requirement, for which a minimum width is set. Pending some fine-tuning of the Gaston County ordinance, it is scheduled to become effective April 1, 2003.

The Gaston County Soil Erosion and Sediment Control Program will be administered by the Gaston County Department of Natural Resources, which also carries out programs of the Gaston Soil and Water Conservation District. The relationship between Gaston County government and the Gaston Soil and Water Conservation District is unique in North Carolina. In other counties, Soil and Water Conservation Districts have programs and staffs that are independent of county government.

Ms. Glenda Jones, Gaston Natural Resources Department Director, said, "We take pride in addressing the natural resources needs and implementing local, state, and federal programs through our Gaston Conservation District." Gaston County Natural Resources plans to implement the Soil Erosion and Sediment Control Program in the county's 15 towns and cities. Interlocal agreements with all municipalities are now being pursued so that there will be one ordinance and set of practices throughout the county.

#### Gaston County Soil Erosion and Sediment Control Program

#### Staff

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#### IN THIS ISSUE

February action of the N.C. Sedimentation Control Commission

Decision in contested case could illuminate Environmental Management Commission's intention on turbidity standard

Holly Springs and Durham win Local Program Awards

3

2

# February action of the North Carolina Sedimentation Control Commission

At its regular meeting on February 5, 2003, the N.C. Sedimentation Control Commission took the following action:

- Delegated to Gaston County authority to implement the Sedimentation Pollution Control Act within its jurisdiction. See page 1.
- Approved a Local Program Assistance Grant of \$59,758 over 18 months to Gaston County for program startup.
- Approved a Local Program Assistance Grant of \$2,244 to the City of Raleigh to provide education in the latest erosion and sediment control technology to 20 designers and contractors that submit the most plans to the city's stormwater department.
- Approved a Local Program Assistance Grant of \$2,000 to the Town of Kill

Devil Hills for a digital camera to document violations and for CAD software to create a standard library of details for the local program. The Commission approved the motion to approve the grant with the requirement that Kill Devil Hills provide a copy of the standard details it develops to the Land Quality Section.

■ Approved a Local Program Assistance Grant of \$600 to the City of Rocky Mount to purchase personal data assistants and portable printers for three inspectors. The PDA's are compatible with the city's networked computer system and will be used to document inspections and note areas that need correction. Printers will allow inspectors to give reports to contractors onsite.

N.C. Division of Land Resources Land Quality Section Selected Activities (All Regions) July 2002 to November 2002 **Erosion and Sedimentation Control Program** New Sedimentation Control Projects 1291 Sedimentation Plan Reviews 1864 Plan Disapprovals 331 Site Inspections 7104 Notices of Violation 273 Cases Referred to Enforcement 40 Mining Program Mine permits reviewed 164 Mine Inspections 246 Dam Safety Program Dam Safety Plans reviewed (total) 74 **Dam Inspections** 341



SEDIMENTS Vol 10, No 1 January - March 2003

SEDIMENTS is published quarterly 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.

Send change of address to WRRI, Box 7912, North Carolina State University, Raleigh, NC 27695-7912 (919/515-2815; water\_resources @ncsu.edu). Fiftynine hundred copies of this newsletter were printed at a cost of \$861.12 or 15 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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#### 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:

John R. Bratton Knightdale Rep. N.C. Mining Com.

Donnie W. Brewer Greenville Rep. Professional Engineers of N.C.

James Ferguson Clyde Rep. N.C. Soil and Water Conservation 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.

> Ray B. Killough Matthews Rep. N.C. public utilities

Joseph A. Phillips Raleigh 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

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

## Decision in contested case could illuminate Environmental Management Commission's intention on turbidity standard

At the Local Programs workshop on February 4, an N.C. Division of Water Quality (DWQ) official said that a Contested Case now in the State Office of Administrative Hearings may give the N.C. Environmental Management Commission an opportunity to clarify how it expects the State's turbidity standard to be implemented. John Dorney, Supervisor of DWQ's Wetlands/ 401 Unit, said that challenges to a 401 Water Quality Certification for Mountain Air Country Club in Yancey County could help resolve a regulatory quandary that arose more than two years ago.

#### Background: Highlands Cove and the turbidity standard

Highlands Cove is a golf-course and residential development in Jackson County. When it was being developed, the developer was required to obtain a 404 permit from the Army Corps of Engineers for activities in wetlands and streams. In order for a 404 permit to be issued, DWQ must issue "401 Water Quality Certification" certifying that the activity proposed will not violate water quality standards. DWQ can condition

### Personnel changes

**Gerald Lee**, formerly acting Regional Engineer in the Fayetteville Region, has been appointed to that position permanently.

Janet Paith, Environmental Technician V in the Wilmington Region, has been named the new Sediment Education Specialist in the Raleigh Central Office.

Kevin Rowland is the new Environmental Technician in the Wilmington Region. the certification with site-specific requirements to protect water quality.

DWQ issued the 401 certification with the condition that the developer comply with the state's turbidity standard by implementing the erosion and sedimentation control BMPs that the Division of Land Resources requires for trout streams, since the stream to be affected was home to Brook trout.

Although the Land Quality Section determined as a result of repeated site visits during construction that Highlands Cove was in compliance with its erosion and sedimentation control plan, a downstream lake owned by Whiteside Estates was affected by high turbidity. Whiteside Estates filed a petition for a Contested Case Hearing challenging the 401 Water Quality Certification.

Contested Cases are petitions filed in the Office of Administrative Hearings to resolve a dispute with a state agency involving a person's rights, duties or privileges. An Administrative Law Judge (ALJ) hears arguments about the dispute and recommends a resolution to the agency's policy-making board—the N.C. Environmental Management Commission in this case.

In the administrative hearing, Highlands Cove moved to dismiss the challenge because it had complied with BMP requirements, which it said was all DENR required it to do. The ALJ refused to dismiss and ruled in favor of the petitioners, saying that DENR had erroneously interpreted the state's turbidity rule in a manner that allows water quality standards to be violated so long as sedimentation control BMPs are being followed.

In October 2000, the Environmental Management Commission adopted the

## Holly Springs and Durham win Local Program Awards

The Local Erosion and Sedimentation Control Programs Awards luncheon was held February 5, 2003, at the Holiday Inn- Brownstone in Raleigh in conjunction with the annual Local Programs Workshop and the February meeting of the N.C. Sedimentation Control Commission.

The Town of Holly Springs received the Local Program Award of Excellence for a program with a staff of fewer than three people. The program was nominated by Raleigh Regional Engineer Mr. John Holley and Assistant Regional Engineer Mr. Bill Denton. Holly Springs is located in western Wake County and is known as the fastest growing town in North Carolina. The Holly Springs local program is young, having been delegated by the Sedimentation Control Commission in 2000. The program was started by Ms. Stephanie Sudano, P.E., then Town Engineer, now Director of Engineering. The program is now staffed by Ms. Heather Keefer, Environmental Inspector.

According to the nomination, "Development has exploded in this part of Wake County, and the Holly Springs staff has performed very effectively under significant public scrutiny. Ms. Keefer has brought their program to the appropriate level of expertise very quickly."

Durham County received the Local Program Award of Excellence for a program with three or more staff members. The program serves both Durham County and the county's only city, the City of Durham. The Durham Program was also nominated by Mr. John Holley and Mr. Bill Denton. In the nomination they say, "Significant upgrades in their program have occurred over the past few years under the leadership of Mr. Glen Whisler, P.E. County Engineer. He reworked their organization from the ground up during a time when they were losing experienced staff and were under serious pressure due to the explosive

development around Durham and the Research Triangle Park. He worked hard to gain management and local political support for upgrading their positions to be more competitive at retaining competent staff. He assembled an experienced staff of engineers and technicians. The level of inspections and follow-up work has risen dramatically, and Durham County is actively using the very best technological innovations available at this time."



The Town of Holly Springs won the Local Program Award for a program with fewer than three staff members. Heather Keefer (front row, fourth from left) is the town's Environmental Inspector. She was joined at the awards luncheon by elected and appointed officials from Holly Springs. Left to right, first row: Kenneth H. Reckhow, Chairman of the N.C. Sedimentation Control Commission; Dick Sears, Mayor of the Town of Holly Springs; Stephanie Sudano, Director of Engineering and first manager of the town's Erosion and Sedimentation Control Program; Heather Keefer, Environmental Inspector; Rodney Campbell, Lead Development Inspector/Plans Reviewer. Second row: Chuck Simmons, Assistant Town Manager; Chet VanFossen, Town Commissioner; Steve Tedder, Town Commissioner; and Carl Dean, Town Manager.



Durham County won the award for a local program with more than three staff members. The Durham local program staff were joined at the awards luncheon by a number of elected and appointed county officials. Left to right first row: Rebecca Heron, Durham County Commissioner and former member of the N.C. Sedimentation Control Commission; Vickie Jones, Administrative Assistant in the local program; Bill Noyes, Erosion Control Officer; Kenneth H. Reckhow, Chairman of the N.C. Sedimentation Control Commission; Wendell Davis, Deputy County Manager. Second row: Bob Sokolowski, Erosion Control Technician; Chuck Armbrust, Erosion Control Technician; Curtis Massey, Assistant County Attorney; Glen Whisler, County Engineer; and Tim Holland, Erosion Control Technician.

## Turbidity standard continued

ALJ's recommended decision and required that the numeric turbidity standard be met. Although there is room for interpretation in the EMC's decision, it became clear that the Division of Water Quality must look at the turbidity standard from a different perspective.

## Mountain Air and BMP requirements

The case that may give the EMC the opportunity to clarify what it intended in the Highlands Cove case also involves construction of a golf course community, this one as an expansion of the Mountain Air Country Club perched atop a mountain in Yancey County. The expansion will involve both filling of

#### Know the Law

What are the four mandatory erosion and sedimentation control standards applicable to land disturbing activities established by the Sedimentation Pollution Control Act ?

- Provide a buffer zone along any watercourse that is sufficient to control visible siltation within the first 25% of the buffer zone closest to the land disturbing activity.
- Obtain an approved erosion and sedimentation control plan for land disturbing activities of one acre or more prior to beginning disturbance.
- Stabilize exposed slopes within 15 working days or 30 calendar days (whichever is shorter) after completion of any phase of grading.
- On tracts larger than one acre, install erosion and sedimentation control devices and practices sufficient to retain sediment on site and provide permanent ground cover within 15 working days or 90 calendar days, whichever is shorter, after completion of construction.

wetlands and piping of a trout stream, which the developer has proposed to mitigate.

According to Mr. John Dorney, in developing the 401 certification conditions, DWQ worked with Land Quality to design an advanced system of BMPs to protect the turbidity water quality. In general, the conditions are:

- Meet 10 NTUs (the standard for trout streams) at all times.
- Have all stabilization materials onsite before beginning disturbance.
- Phase construction.
- Establish ground cover within 7 days of completion of any phase of construction.
- Size sediment basins larger than Land Quality's current recommendations and employ skimmers in the basins.
- Size sediment traps larger than Land Quality's current recommendations, remove sediment when 25% of the trap volume is filled, use polyacrylamide (PAM) logs in traps, and use baffles in traps.
- Stabilize disturbed stream buffers within 48 hours of completion of disturbance.
- Provide diffuse flow through buffer strips.
- Have a tree removal plan along fairway crossings.
- Monitor downstream (at edge of property) for streambank stability.
- Train staff in maintenance of erosion and sediment control BMPs and require them to keep maintenance logs.

Mountain Air has challenged the 401 certification as being too stringent. A group of residents who oppose the golf course and environmental groups have challenged issuance of the certification as not protecting water quality. The administrative hearing is currently expected to be scheduled for the week of April 7. The hearing will be held in Asheville.

Following the hearing the ALJ's recommended decision will be presented

to the EMC along with arguments by petitioners and the department. According to Mr. Dorney, the underlying question will be whether DWQ followed the EMC ruling from the Highlands Cove case in the Mountain Air case. If the answer is "yes," then conditions similar to those set for 401 certification in the Mountain Air case will start appearing in similar 401 certifications.

Mr. Dorney also said that DWQ and DLR are working on a list of advanced erosion and sedimentation control BMPs that would be used to set 401 certification conditions. He said that the list will be noticed to the 401 mailing list and subject to public review before they are implemented. Eventually, the advanced BMPs will be integrated into the N.C. Erosion and Sedimentation Control Planning and Design Manual, which will soon undergo revision.

Commenting on Mr. Dorney's presentation, Mr. Mell Nevils, Chief of the Land Quality Section, said "Big changes are coming in erosion and sedimentation control as a result of this case [Highlands Cove]. We'll never return to where we were."

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) Enhance your professional credibility and improve your career opportunities by pursuing professional certification.

## Certified Professional in Erosion and Sediment Control (CPESC) Certified Professional in Storm Water Quality (CPSWQ)

Phase II of the National Pollutant Discharge Elimination System (NPDES) now mandates local storm water management programs for thousands of municipalities throughout the United States. Local governments must incorporate information and education components as well as construction site erosion control and post-construction storm water management into their programs. The need for certified professionals in erosion and sediment control and storm water control continues to grow rapidly.

A CPESC or CPSWQ designation establishes and expands your credibility in these specialties. It sets you apart as a certified professional who can be utilized to design and evaluate erosion and sediment control and/or storm water control plans, to influence public policy and land-use planning decisions, and to educate others in sound approaches for preventing off-site impacts from development activities.

CPESC and CPSWQ are sponsored by the International Erosion Control Association and the Soil and Water Conservation Society. They are endorsed by the U.S. Department of Agriculture Natural Resources Conservation Service and the US EPA. The certification process involves three steps:

- 1. You must complete an application that documents your educational and work experience.

- 2. You must submit a fee of \$150 (US) with your application.

- 3. You must pass a two-part exam.

For additional information contact the International Erosion Control Association (www.ieca.org) or North Carolina's CPESC/ CPSWQ representative David Ward at 828-756-4484 or david@cpesc.net, or visit website: http://www.cpesc.net.

### **VDDKESS SERVICE REQUESTED**

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