January - March 2000

Vol 7 No 1

Three communities establish new local erosion and sediment control programs

At its regular meeting on February 17, 2000, the N.C. Sedimentation Control Commission delegated implementation of the Sedimentation Pollution Control Act to three new local programs: Banner Elk and Grandfather Village in Avery County and Holly Springs in Wake County. These three delegations bring to 42 the number of local erosion and sediment control programs in North Carolina.

Each local government awarded delegation has adopted a local erosion and sediment control ordinance deemed equal to or more restrictive than the State's model ordinance and each has demonstrated a commitment of resources to implement its ordinance. Because local erosion and sediment control ordinances vary in content and scope, those contemplating land-disturbing activities should be familiar with local ordinances.

Banner Elk and Holly Springs applied for and received Local Program Grants to help initiate their programs. Funds for cost-sharing for local program start-up were provided by the N.C. General Assembly in the 1999-2001 State government budget. Local governments may receive 40% of the cost of operating a new local erosion and sediment control program for up to 18 months.

Banner Elk's Local Program is headed by Shannon Baldwin, Town Manager and Planning Director. The program's phone number is (828) 898-5398. The fax is (828) 898-4565. In addition to requirements of the state's model ordinance, the Banner Elk local ordinance requires erosion and sediment control plans for commercial sites disturbing 3,000 square feet or more and for residential sites, including singlefamily homes, disturbing one-quarter acre or more. For single-family sites disturbing less than one-quarter acre, a simple site sketch is required. It is anticipated that the ordinance will be amended in the next two months to require a site sketch for commercial sites

disturbing less than 3,000 square feet.

Grandfather Village's Local Program will be headed by Don Fulkerson, Zoning Administrator. The Grandfather Village phone number is (828) 989-4531. However, Fulkerson's office is in Beech Mountain, and the phone number there is (828) 387-4236. The Grandfather Village local ordinance requires erosion and sediment control plans for single-family home sites disturbing 40,000 square feet or more.

Holly Springs' Director of Engineering, Stephanie Sudano, P.E., will head the Holly Springs local erosion and sediment control program. Sudano's phone number is (919) 557-3935.

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February action of the N.C. Sedimentation Control Commission

At its regular meeting on February 17, 2000, the N.C. Sedimentation Control Commission (SCC) took the following action:

- Delegated authority to implement the Sedimentation Pollution Control Act to the municipalities of Grandfather Village, Holly Springs, and Banner Elk.
- Awarded Local Program grants to Banner Elk and Holly Springs for new local program start-up and to Pitt County, Winston-Salem, and Greensboro for program enhancement.
- Received a draft report on the storm water forum held by the N.C. Division of Land Resources, Land Quality Section, and the N.C. Division of Water Quality November 3, 1999, to explore storm water issues in North Carolina and ideas for addressing issues. The draft report, "Urban Storm Water Management: Preparing for the 21st Century" is now available for public review and comment. It may be downloaded in portable document format (pdf) from the web at http://www2.ncsu.edu/ncsu/CIL/WRRI/stormforumsum.pdf. A

paper copy may be obtained from Jeri Gray at the UNC Water Resources Research Institute at (919) 515-2815. Following comment by participants and the public, a subcommittee of the SCC will consider whether the Commission should take any action regarding the report.

■ Voted to send a letter to Secretary of Environment and Natural Resources Bill Holman and to Governor James B. Hunt, Jr. expressing concern about problems in recruiting and retaining qualified employees for the Land Quality Section's programs. The vote followed a report by Section Chief Mell Nevils that 10 positions remain vacant in Land Quality.

Call for Presentations

The International Erosion Control
Association invites you to submit
abstracts for the 32nd Annual
Conference and Expo
February 5-9, 2001
Las Vegas, Nevada
Deadline April 3, 2000
For details visit website
http://www.ieca.org
or call (970) 879-3010

Plan review fee goes up

Upon approval by the N.C. General Assembly, the fee that the N.C. Land Quality Section charges for reviewing erosion and sediment control plans will increase to \$40 per acre or part of an acre of disturbed land. The increased plan review fee was approved by the N.C. Sedimentation Control Commission in a conference call on January 18, following publication of the proposed change in the *N.C. Register* and a public hearing and comment period.

This fee increase applies only to plans reviewed by Land Quality staff of

Department of Environment and Natural Resources Regional Offices. Local erosion and sediment control programs set their own plan review fees.

The rule increasing the fee has been approved by the N.C. Rules Review Commission. If no bill to disapprove the increase is filed during the first 30 days of the next session of the General Assembly, it will become effective on the 31st day. The General Assembly will convene May 8, 2000.



SEDIMENTS Vol 7, No 1 January - March 2000

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 sediment control programs.

Send comments to Caroline Medlin, NCDENR-Land Quality, 1612 Mail Service Center, Raleigh, NC 27699-1612. Send change of address to WRRI, Box 7912, North Carolina State University, Raleigh, NC 27695-7912 (919/515-2815). Fifty-six hundred copies of this newsletter were printed at a cost of \$716.76 or 13 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 Sediment Control Program. For assistance, please contact the Regional Engineer or the Raleigh headquarters listed below:

Richard Phillips, P.E. Interchange Bldg, 59 Woodfin Place Asheville, NC 28801 (828) 251-6208

William (Toby) Vinson, E.I.T. 225 Green Street, Suite 714 Fayetteville, NC 28301 (910) 486-1541

Doug Miller, P.E. 919 N. Main Street Mooresville, NC 27115 (704) 663-1699

John Holley, P.E. 3800 Barrett Drive, Suite 101 Raleigh, NC 27609 (919) 571-4700

Floyd Williams, P.G. 943 Washington Sq. Mall Washington, NC 27889 (252) 946-6481

Dan Sams, P.E 127 Cardinal Dr, Ext Wilmington, NC 28405-3845 (910) 395-3900

Matt Gantt, P.E. 585 Waughtown St. Winston-Salem, NC 27107 (336) 771-4600

Raleigh Headquarters 512 N. Salisbury St., 1612 Mail Service Center Raleigh, NC 27699-1612

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: John R. Bratton Wake Stone Corp., Knightdale Rep. N.C. Mining Commission

Commissioners:
J. Allen Barnhill, Jr.
Barnhill Contracting Company, Tarboro
Rep. Associated General Contractors of N.C.

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

William T. "Buzz" Bryson CP&L, Raleigh Rep. Non-governmental Conservationist

Rebecca M. Heron
Durham
Rep. Association of County Commissioners/
N.C. League of Municipalities

Kenneth H. Reckhow Durham Director of Water Resources Research Institute

Joseph A. Phillips Raleigh Rep. Non-governmental Conservationist

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

Ray B. Killough Piedmont Natural Gas Co., Matthews Rep. N.C. public utilities

Donnie W. Brewer Rivers & Associates Inc., Greenville Rep. Professional Engineers of N.C.

Daniel V. Besse Winston-Salem Rep. N.C. Environmental Management Commission

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



Ralph Stout (left), former Chairman of the Sedimentation Control Commission and current Education Committee member, presented the Local Program Award for programs with three or more people to Mecklenburg County. From left to right Mecklenburg erosion control personnel are Richard Farmer, Kia Whittlesey, P.E., and Mack Cox.

Local Program Awards go to Cabarrus and Mecklenburg

At the local Programs workshop in Greensboro in February, awards for outstanding performance were presented to Cabarrus County and Mecklenburg County.

Cabarrus County
received the Local Program
Award for programs with
fewer than three staff
members. The Cabarrus
County program, which is
only two years old, was
nominated by Mooresville Regional

Engineer Doug Miller. Miller said that Cabarrus County's emphasis on single-family home construction has helped area home builders recognize the need for sediment control.

The Mecklenburg County program received the award for three or more staff members. Mecklenburg was also nominated by Doug Miller. Miller cited Mecklenburg for its emphasis on contractor education and training and for



Tony Johnson (left) and Tom Smith (right) staff the Cabarrus County Local Program, which won the Local Program Award for programs with fewer than three people.

monitoring sediment control on singlefamily home construction. He also praised the program for contributing articles to local papers to highlight the need for sediment control and for its "Green Builder" programs Erosion and sedimentation control plans must conform

Riparian buffers must be protected in Tar-Pamlico Basin

In December 1999, the N.C. Environmental Management Commission (EMC) adopted a rule requiring the preservation of vegetated buffer areas along intermittent and perennial streams, lakes, ponds, and estuarine waters throughout the Tar-Pamlico River Basin. The requirements went into effect as a temporary rule January 1, 2000. They will become permanent in August following review by the N.C. Rules Review Commission and General Assembly.

The Tar-Pamlico buffer rules are identical to riparian buffer rules adopted for the Neuse Basin. They require that a total of 50 feet of vegetated area be maintained on each side of waterbodies. Thirty feet bordering the water must

remain undisturbed except for specific exempted activities. The next 20 feet must be vegetated, but activities such as grading and landscaping are allowed.

Because House Bill 1098, passed by the 1999 Session of the N.C. General Assembly, requires that erosion and sediment control plans must comply with all riparian buffer protection rules, the Tar-Pamlico buffer rules automatically affect erosion and sediment control planning in the Tar-Pamlico Basin.

When Division of Land Resources personnel in Regional Offices in the Tar-Pamlico Basin review erosion and sediment control plans, they will check to see that required buffers are shown on the plan. If a required buffer is not shown on the plan, the plan must be disapproved

unless the applicant revises it before completion or suspension of the review process. If Land Resources staff cannot determine whether a buffer is required, the application will be considered incomplete and the applicant will be notified. The applicant must then apply to the N.C. Division of Water Quality (DWQ) for a determination of whether a buffer is required and submit written documentation to Land Resources staff before plan review can proceed.

Local erosion and sediment control programs in the Tar-Pamlico Basin must also disapprove plans that do not comply with buffer requirements.

At its December meeting the EMC also approved moving forward with development of riparian buffer requirements for the Catawba River Basin. Buffer requirements for the Catawba could be adopted as early as July.

Center for Watershed Protection suggests ways to make local erosion and sedimentation control programs more effective

The Center for Watershed Protection (CWP) has recently published on its website a copyrighted critique of erosion and sediment control plans titled "Muddy Water In - Muddy Water Out?" Written by Whitney Brown and Deborah Caraco, the paper is based on a number of surveys and investigations of erosion and sediment control programs across the country.

According to the paper, erosion and sediment control plans are often ineffective in protecting water quality, largely because local erosion and sediment control programs, in general, do not live up to the promises of their ordinances.

Nationwide, 90% of erosion and sediment control programs are administered locally, with 60% being mandated by state law. However, states do not provide funding for local programs, which must compete for funding with

other local priorities and often lose. Lacking dedicated funding sources, local erosion and sediment control programs are "chronically strapped for funds" and "operate on shoestring budgets," according to the CWP critique.

However, CWP suggests that resource-poor local programs can improve the performance of the plans they oversee by improving the management of their program resources. CWP suggests "ten modest management tips to get more results with less resources:"

■ Develop effective leadership for the program. Effective leadership involves a commitment to educating designers, contractors, and the public about the need for better erosion and sediment control and a willingness to try new approaches to improve the program.

- Redeploy existing staff from the office to the field or the training room. Plan reviewers should spend time at construction sites seeing how the plans they have approved are working, and they should spend at least 10% of their time helping train and educate contractors and the public.
- Cross-train local development review and inspection staff. Employees of other development review and inspection staffs should be able to spot and refer erosion and sediment control problems.
- Amend the development review process to require early review of the erosion prevention elements of

continued

erosion and sediment control plans (minimize clearing and grading, protect waterways, and construction phasing). The local planning agency could be responsible for this review.

- Prioritize inspections based on erosion risk. Schedule more frequent inspections of sites most vulnerable to erosion (based on factors such as site area, slope, erodible soils, proximity to waterways, etc.).
- Require the designer to certify initial installation of erosion and sediment control practices. Since a survey in North Carolina showed that 16% of practices shown on plans were never installed, this requirement would be a useful enforcement mechanism.
- Invest in contractor certification and private inspector programs. This quickly multiplies the erosion and sediment control workforce.
- Use public-sector construction projects to demonstrate effective erosion and sediment controls for contractor training.
- Enlist the talents of developers and engineering consultants in the program. A local program advisory group could provide valuable input on how to apply practices more costeffectively or streamlining the plan review process.
- Reinvent the local erosion and sediment control manual. A local program advisory group composed of developers and engineers could also provide valuable input for improving design and installation instructions and training materials.

The entire paper "Muddy Water In -Muddy Water Out" can be read at the Center for Watershed Protection website at the following address:

> http://www.cwp.org/Articles/ muddy_water.htm

Orders being taken for soil conservation-water quality license plates

In 1997, the N.C. General Assembly passed legislation allowing the creation of a special vehicle license plate to promote soil conservation and water quality. Revenue from the sale of the special tags is to be credited to the Soil and Water Conservation Account within the N.C. Department of Environment and Natural Resources (DENR) and used to



PROTECT OUR WATER

fund environmental education and water quality education in North Carolina.

A DENR committee has recently adopted a graphic that will be incorporated into the license plate, and the N.C. Division of Soil and Water Conservation (DSWC) is now taking orders for the special plate. A minimum of 300 orders must be received in order for the N.C. Division of Motor Vehicles to produce the tags.

Special North Carolina vehicle license plates cost \$20 annually in addition to the regular \$20 license fee. Ten dollars of the special fee will go to the N.C. DOT roadside beautification (wildflower) program and \$10.00 will go to the Soil and Water Conservation Account for grants to schools for water quality projects.

The final plate design has not been completed; however, it will incorporate the graphic on the right and will use three colors.

If you would like to have a special North Carolina soil and water conservation license plate, you should complete an application form (available from N.C. DSWC at 919-733-2302 or at the web address below) and send it with your check for \$20 made payable to the N.C. Association of Soil and Water Conservation Districts to:

N.C. Division of Soil and Water Conservation1614 Mail Service Center Raleigh, NC 27699-1614

When DSWC has received 300 applications, it will forward the applications and fees to the Division of Motor Vehicles, which will then produce the tags. When your vehicle registration comes due, DMV will send you your special plate.

The application form for the special water quality license plate is available in pdf format at website:http://www2.ncsu.edu/ncsu/CIL/WRRI/wqtagform.pdf

If you have questions about the soil and water conservation license plate program, please contact Steve Bennett with DSWC Raleigh Regional Office at (919) 571-4700.

Erosion and Sedimentation Control Resources available from the N.C. Land Quality Section

- North Carolina Erosion and Sediment Control Planning and Design Manual. A complete design manual which will enhance your productivity and allow you to comply easily with the regulations established by the N.C. Sedimentation Control Commission. \$65 in-state/\$75 out-of-state
- North Carolina Erosion and Sediment Control Field Manual. A complement to the larger design manual intended as a field reference in the construction process. \$20.

To order send letter and check or money order payable to N.C. Department of Environment and Natural Resources Land Quality Section 1612 Mail Service Center Raleigh, NC 27699-1612

The Ecology of Urban Soils: Designing and Managing Soils for the Living Landscape

June 11-13, 2000 Radisson Hotel, St. Paul, MN

This three-day conference will focus on the importance of the soil in sustaining a healthy, living landscape. Sessions include: Designing and Engineering Urban Developments for Zero Runoff; Compacted Soils and Plant Health; Correcting Compacted Soils; Soil Drainage, Using Designed Soils in the Development of Large Scale Landscapes; Restoration Soil Science; Engineered Soils and more.

The conference will be useful to anyone working in the planning, design, construction and/or maintenance of urban infrastructure and outdoor areas, including engineers, architects, designers, contractors, developers, builders, city planners, arborists and others.

Continuing Education Units are being requested for several professional certifications.

For additional conference information and registration information visit website: http://www.scisoc.org/opae/shortcourse/UrbanSoil/top.htm

or call the American Phytopathological Society at (615) 454-7250

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Newsletter of the North Carolina Sedimentation Control Commission c/o Water Resources Research Institute of The University of North Carolina Box 7912, North Carolina State University Raleigh, NC 27695-7912

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