



WAKE COUNTY SEDIMENTATION AND EROSION CONTROL NEWS

Volume 3

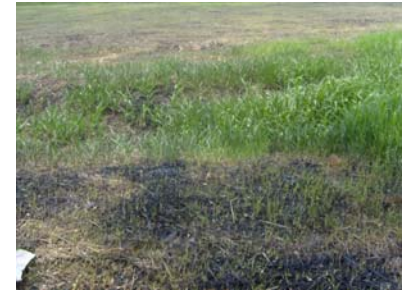
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VEGETATIVE STABILIZATION

Under the *North Carolina Sedimentation Pollution Control Act*, a permanent groundcover sufficient to withstand erosion must be provided within 21 calendar days upon completion of any phase of grading.

While erosion control measures are an important temporary tool to control sediment on a construction site, the most important solution for preventing erosion is stabilization. Establishing vegetation is crucial for achieving stabilization. Whether you use matting, sod, and/or seed and straw, preparation of the soil is key to getting germination of the seed. Weather is unpredictable. Providing a high-quality seedbed to prepare for advantageous weather conditions is the best offense.



Millet seed, straw and asphalt tac



Netted wood mulch with biodegradable sock check dams



Lovegrass hydroseed and matted pipe crossing



Bermuda grass seed, straw and asphalt tac

Wake County's Sedimentation & Erosion Control Program

The Wake County Sedimentation & Erosion Control Program is a part of the Division of Water Quality in the Department of Environmental Services. The staff consists of seven full-time Environmental Engineers/Consultants and manages over 550 active projects. In addition to the unincorporated areas of Wake County, the program also administers the Erosion and Sedimentation Control Programs in **Research Triangle Park** and the towns of **Fuquay-Varina, Garner, Knightdale, Morrisville, Rolesville, Wendell and Zebulon.**

Erosion & Sedimentation Control ENews



EROSION & SEDIMENTATION CONTROL SPOTLIGHT



Making Basins More Efficient

Published by the Wake County Sedimentation & Erosion Control Section, Division of Water Quality, Department of Environmental Services

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Whether it be a riser basin, a skimmer basin, or Wake County's Custom Basin, basins are a well-established practice to retain sediment. Here are some ways that improve sediment basin efficiency:

- **Stabilization of inside slopes:** Unstable slopes add to the sediment load in a basin. 2:1 slopes are recommended to promote slope stabilization. If slopes must be steeper, matting and sodding should be used.
- **Porous Baffles:** Porous baffles are now required on all types of sediment basins, traps, skimmer basins, etc. Porous baffles reduce turbulence and increase sediment trapping efficiency by promoting linear flow within the basin.
- **Inlet Stabilization:** Inlets into basins often exhibit erosion problems including scouring and increased sediment loss into the basin. Basin inlets can be protected with linings or slope drains.
- **Use of Polyacrylamides (PAMS):** Flocculants are used to treat water by settling out clays and fine silts. The "North Carolina Sediment and Erosion Control Planning and Design Manual" provides guidance for safe and effective use of flocculants.
- **STABILIZE, STABILIZE, STABILIZE!** The less sediment transported into the basin, the more efficient the basin will be.

Note: Not only do these guidelines promote basin efficiency but also the amount of time and money spent on basin maintenance can be drastically reduced.



Custom Basin with Porous Baffles and Seeded Inside Slopes



Custom Basin with Porous Baffles and Vegetated Inside Slopes



Skimmer Sediment Basin with Porous Baffles



Inlet Protection into Custom Basin

WAKE COUNTY ANNOUNCEMENTS!

*Wake County E&S would like to
Congratulate Mike Coughlin on his retirement!*



Mike with his wife Kay in 2007



Mike and Kay in 1976

Mike Coughlin, CFM, CPESC worked in the local government system since 1978. He worked for a short time with Orange County Planning Department and then joined Wake County Development Services in 1980. While still a restless youth, he left and worked for the City of Raleigh in 1985 for a short stint until he came back 'home' to Wake County a year later.

Throughout his years with Wake County, Mike wore many hats, beginning as an Environmental Inspector and concluding his career as Environmental Engineer/Consultant. Mike's job duties included Sedimentation and Erosion Control Plan Review, Stormwater Management, Site Inspection and review and preparation of Flood Studies. He is renowned by his colleagues as one of the most thorough plan reviewers they have ever met.

Mike also supervised and trained many employees during his 25 years with the County. He is a charter member of the NC Association of Floodplain Managers and served as chairman in 1992-93. He is particularly proud of receiving the County's "Caring, Serving, and Respecting Customers Award" in 1993. He also received the N.C. State Government State Coordinator's Award for Reducing Potential Flood Losses Through Community Service in Floodplain Management on April 30, 2003.

Mike graduated from NCSU with a Bachelors Degree in Environmental Design. He is married to Kay Eddins Coughlin and they have a son, Christopher. He enjoys fishing, horticulture/landscaping and is known as the "tomato man" for sharing the fruits of his labor with fellow employees. His coworkers will miss his technical expertise and his positive attitude. Generous to a fault with his time, Mike is definitely a man of the people, and Wake County will surely miss his daily presence.

RECOGNITION BY WAKE COUNTY COMMISSIONERS



Mike Coughlin was recognized for 25 years of service at the Wake County Commissioner's Meeting held on August 20, 2007. County Manager David Cooke presented Mike with a plaque honoring his years of service.

WAKE COUNTY ANNOUNCEMENTS!

*Wake County E&S is pleased to welcome two new additions,
Jennifer Sjaardema and Kathryn Hobby!*



Jennifer Sjaardema has worked in private consulting as well as the mining industry for the past eight years. She is leaving an Environmental Engineer position with Martin Marietta Materials and we look forward to working with her in Erosion and Sediment Control. Jennifer graduated from North Carolina State University with a BS in Environmental Science and Geology in 1999. She is originally from Newton, North Carolina.



Kathryn Hobby is an Environmental Health Specialist and has worked with Wake County for seven years. Kathryn is leaving a Team Leader position with the Wastewater Division and we look forward to working with her in Erosion and Sediment Control. Kathryn graduated from Western Carolina with a BS in Environmental Health in 2000. She is originally from Winston-Salem, North Carolina.

WAKE COUNTY UNIFIED DEVELOPMENT ORDINANCE REVISIONS

The Wake County Board of Commissioners approved revisions to Article 10, Erosion and Sedimentation Control of the Unified Development Ordinance on 11-19-07. Revisions to the ordinance went into effect immediately. The ordinance was revised to incorporate new regulations to comply with the North Carolina Administrative Code and to enhance user friendliness. Listed below are some of the highlights of revisions to Article 10 (Erosion and Sediment Control). All revisions are available online at:

<http://www.wakegov.com/NR/rdonlyres/65C664B2-E913-4EC4-96B6-32CCE730C33E/0/0A0207ExhibitA111907.pdf>

- **Section 10-30-1(A):** Clarified that erosions and sedimentation control plan and permit requirements apply to land disturbances of greater than one (1) acre.
- **Section 10-32-1:** Streamlined the local appeal process to one level versus three for disapproval or modification of plans.
- **Section 10-30-2(C)(3):** Clarified that no further processing of incomplete plans will occur until deficiencies are corrected.
- **Section 10-30-9(B):** Provided options for permit renewals, either a single two-year extension or two one-year extensions with a maximum permit validity of four (4) years.

COMING SOON...

Look for enhancements to our website in the near future with additional information for engineers and developers.