

Nonprofit Org.
U.S. Postage
PAID
Permit No. 2353
Raleigh, NC

Intermittent and Perennial Stream Identification for Riparian Buffer Rules

*A Training Course for Environmental and
Engineering Consultants, Foresters,
and Landscape Architects*

**March 27-30, 2006
Raleigh and New Bern, NC**

Sponsored by

Forestry and Environmental Outreach Program
Department of Forestry and Environmental Resources,
North Carolina State University

&

Wetlands and Stormwater Branch
North Carolina Division of Water Quality

About the Course

This training course will equip natural resource professionals with the knowledge and field skills necessary to identify intermittent and perennial stream origins and to correctly apply various riparian buffer regulations. Topics include: (1) stream networks, stream maps, and hydrologic functions of streams and riparian zones, (2) applications of stream ecology in stream identification, (3) the NC Division of Water Quality stream identification methodologies, (4) USACE jurisdictional stream identification, (5) NC riparian buffer rules, and (6) stream identification methods approved by VADCR Chesapeake Bay Local Assistance for determinations of water bodies with perennial flow. Extensive field training will focus on streams in the Piedmont and Coastal Plain regions of North Carolina. A rigorous written exam will be administered and a certificate of training will be issued by the NCSU Department of Forestry and Environmental Resources for all participants who successfully pass the exam. The course is very similar to the certification course provided for state agency regulatory personnel and is endorsed by the NC Division of Water Quality, Wetlands and Stormwater Branch.

For more FEOP workshops,
visit our website at
www.ncsu.edu/feop



Who Should Attend?

This course will be valuable to environmental and forestry consultants, engineering consultants, landscape architects, and regulatory professionals whose work involves riparian zone rules and stream issues in North Carolina and the Chesapeake Bay Preservation Act, Resource Protection Area program in Virginia. Though the field trips are specific to North Carolina conditions, this course will also be useful for professionals whose work is focused in other nearby states where headwaters streams are quite similar to those in NC. We have requested continuing education credits from the SAF for foresters (CFEs) - hours will be posted on our website once approved: www.ncsu.edu/feop. The course will offer 28.5 PDHs from the NCBES for engineers/surveyors. We will also pursue continuing education credits for landscape architects and appraisers if requested (indicate on registration form). Wetland scientists may self-report.

Instructors

Dr. James D. Gregory is a Professor of Forestry at NC State University and Principal of Watershed Hydrology Consultants LLC. He has 30 years experience in teaching and research in watershed and wetlands hydrology. A co-chairman of the NC Stream Technical Advisory Committee with John Dorney, Dr. Gregory has assisted in the development of the stream definitions, riparian buffer rules, and the methods for classifying and identifying stream origins in NC and has conducted several perennial stream identification classes in Virginia.

John Dorney has for 15 years served as the Supervisor of the Planning and Programs section of the Wetlands and Stormwater Branch in NCDWQ where he has staff responsibility for managing the NC riparian buffer rules program and all the stream classification and identification issues related to those rules. As co-chairman of the NC Stream Technical Advisory Committee established in 1998, John has led the efforts by NCDWQ to develop consistent, science-based methods to define and identify stream origins for buffer rule applications.

Other Instructors: This course is a collaborative effort between NC State University and the NC Division of Water Quality. Principal instructors from those two organizations, Dr. James Gregory and John Dorney will be assisted by professionals from NCDWQ and other agencies who have much experience in the stream and riparian buffer programs.

Registration and Fees

Pre-registration is required. The registration fee is \$645 and includes course materials, lunches, refreshment breaks, and transportation to the field sites. **Registration deadline is March 17.** Enrollment in the workshop is limited to the first 36 registrants - early registration is strongly encouraged. **NOTE: You will receive your registration confirmation by E-mail or fax - please be sure to enter this information on your registration form.**

Cancellation Policy

If cancellations are made before the registration deadline, the registrant will receive a full refund less a \$50 service charge. Refunds will not be given for cancellations after the registration deadline - in this case it is recommended you send a substitute.

Topics To Be Covered

Mon, March 27: Hampton Inn-RBC Center, Raleigh, NC

7:30 am – Registration

8:00 am - 12:00 pm Classroom Session

- NC riparian buffer rule development and administration
- Stream networks, stream maps, and hydrologic functions of streams
- Types of first order streams, effects of physiography and land use
- Stream biology - Role of aquatic animals in stream identification

1:00 – 4:00 pm Classroom Session

- Field identification of first order streams and stream origins – the NC method
- Field identification of perennial stream origins – the NC methods
- Virginia methods to determine water bodies with perennial flow
- USACE stream evaluation methods

4:00 – 5:00 pm Procedures for field identification of macrobenthos

Location and Lodging

The workshop will be held at the Hampton Inn - RBC Center in Raleigh, NC and the Hampton Inn in New Bern, NC. For the nights of March 26, 27, and 28 a block of rooms is being held at the Hampton Inn – RBC Center under “Stream ID Class”; call before March 20 at 919-233-1798 for reservations. For the night of March 29, a block of rooms is being held at the Hampton Inn – New Bern under the group name “Stream ID Workshop” (group code: STR); call before March 22 at 252-637-2111 for reservations. A map and directions will be sent with your confirmation letter. For travel from Raleigh to New Bern, you will have the option of vanpooling to and from New Bern. Please note on the registration form if you are interested in riding in the vanpool. **Lodging is not included in the registration fee, and you must make your own reservations.**

Tues, March 28: Hampton Inn-RBC Center, Raleigh, NC

8:00 – 10:00 am Classroom Session

- NC – riparian buffer rules overview
- NC – CAMA and coastal zone buffer rule applications
- Methods for digital input/processing of stream identification data

10:00 am – 5:00 pm Field Trip: Identification of Piedmont rural streams

Wed, March 29: Hampton Inn-RBC Center, Raleigh, NC

7:30 am – 4:00 pm Field trip: Identification of Piedmont rural and urban streams, demo of GPS and field computer digital data collection

Travel to New Bern, NC

8:00 pm Classroom session: Hampton Inn, New Bern, NC

- Question and answer session
- Exam review

Thurs, March 30: Hampton Inn, New Bern, NC

7:30 – 9:00 am Written exam

9:00 am – 3:30 pm Field trip: Coastal Plain rural streams, modified streams, and ditches

For upcoming workshops and more information on the Forestry and Environmental Outreach Program

visit the FEOP home page at www.ncsu.edu/feop or contact

Becky Townsend at 919-515-9563, fax 919-515-6883 or becky_townsend@ncsu.edu

Registration Form

Intermittent and Perennial Stream Identification
Registration Deadline is March 17, 2006.

Name _____
Organization _____
Address _____
City _____ State _____ Zip _____
Daytime Phone _____
Fax _____
E-Mail _____
Vegetarian Meal Required? <input type="checkbox"/> Yes <input type="checkbox"/> No
I wish to ride in the vanpool: <input type="checkbox"/> Yes <input type="checkbox"/> No
Continuing Education Credits needed: <input type="checkbox"/> Foresters <input type="checkbox"/> Landscape Architects <input type="checkbox"/> Engineers/Surveyors <input type="checkbox"/> Appraisers
Method of Payment Registration Fee: \$645 <input type="checkbox"/> Check (<i>make payable to NC State University</i>) <input type="checkbox"/> Credit Card (<i>MasterCard or Visa ONLY</i>) Card #: _____ - _____ - _____ - _____ Expiration Date: _____ Name of Cardholder: _____ Address of Cardholder: _____
<i>I agree to allow NC State University to charge this credit card for the workshop registration.</i> Cardholder Signature: _____
Send payment to FEOP, NC State University, Campus Box 8003, Raleigh, NC 27695; or FAX: 919-515-6883
FOR OFFICE USE date rec'd _____ amt. _____ ck# _____ V/MC chgd _____ conf. sent _____ dep. date _____