

NC STATE UNIVERSITY
College of Natural Resources
Forestry Educational Outreach Program
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Intermittent and Perennial Stream Identification for Riparian Buffer Rule Applications

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



October 26-29, 2003
Lenoir, NC

Sponsored by
Forestry Educational Outreach Program,
NC State University Department of Forestry
401/Wetlands Unit,
North Carolina Division of Water Quality
NC Association of Environmental Professionals

About the Course

This training course is designed to 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 in North Carolina. Topics include: (1) stream networks and hydrologic functions of streams and riparian zones, (2) stream ecology, (3) map accuracy for stream networks, (4) the NC Division of Water Quality stream identification and classification methodologies, (5) applying the riparian buffer rules, and (6) wetland versus stream regulatory issues. Extensive field training will focus on streams and water bodies in the Western Piedmont and Mountain 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 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/401 Unit.

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 and stream issues. Though the applications are specific to North Carolina conditions, this course will also be useful for professionals whose work is focused in other states. Enrollment in this course will be limited, but an additional course will be scheduled if demand warrants. Continuing education credits have been requested for foresters (SAF, CFE), engineers (NCBES, PDH), and landscape architects (NCBLA, CEC).

Location and Lodging

The workshop will be held at the Comfort Inn in Lenoir, NC. A block of rooms has been reserved under "NCSU Forestry, Group #1310"; call before October 10th at 828-754-2090 for reservations. A map and directions will be sent with your confirmation letter. If you will be traveling from the Raleigh area, you will have the option of vanpooling to and from Lenoir. Please note on the registration form if you are interested in riding in the vanpool, and we will send you the details. **Lodging is not included in the registration fee.**

Instructors

Dr. James D. Gregory is a Professor of Forestry at NC State University and has 28 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. Ongoing cooperative research on headwaters streams with the NC Division of Water Quality (NCDWQ) will add to the knowledge base about the hydrologic, biologic, and geomorphologic characters and functions of headwaters streams.

John Dorney has for 14 years served as the Supervisor of the Wetlands/401 Unit 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

Preregistration is required. The registration fee is \$495 and includes course materials, three lunches, refreshment breaks, and transportation to the field sites. **Registration deadline is October 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 of October 17, the registrant will receive a full refund less a \$20 service charge. Refunds will not be given for cancellations after October 17 - in this case it is recommended you send a substitute.

For upcoming workshops and more information on the Forestry Educational Outreach Program visit the FEOP home page at www.ncsu.edu/feop or contact Becky Bowers at 919-515-9563, fax 919-515-6883 or becky_bowers@ncsu.edu

Intermittent and Perennial Stream Identification for Riparian Buffer Rule Applications

October 26-29, 2003

Topics To Be Covered

Sunday, October 26

6:30 p.m. - 7:00 p.m. Registration

7:00 p.m. - 8:15 p.m. Classroom Session

- Riparian buffer rule development and administration

Monday, October 27

7:30 a.m. - 12:15 p.m. Classroom Session

- Stream networks, stream maps, and stream geomorphology and riparian areas
- Science behind the rules: hydrologic functions of streams and riparian areas
- Stream biology: role of aquatic animals in stream identification
- Stream biology: role of microbes and plants in stream identification
- NCDWQ stream identification methods

1:00 p.m. - 2:30 p.m. Classroom Session

- USACE stream evaluation methods
- Modified and urban streams: issues in origin identification

2:30 p.m. - 5:00 p.m. Field trip: Learn and apply stream identification methodology

8:00 p.m. Evening Session: Procedures for field identification of macrobenthos

Tuesday, October 28

7:30 - 9:00 a.m. Classroom Session

- Riparian buffer rules overview

9:00 a.m. - 5:30 p.m. Field trip: Identification of Natural Streams, Western Piedmont and Mountain

8:00 p.m. - Exam Review

Wednesday, October 29

7:30 a.m. - 9:00 a.m. Exam

9:00 a.m. - 4:00 p.m. Field trip: Identification of Modified and Urban Streams

Registration Form **Intermittent and Perennial Stream Identification for Riparian Buffer Rule Applications**

Registration Deadline is October 17, 2003

Name _____

Organization _____

Address _____

City _____ State _____ Zip _____

Daytime Phone _____

Fax _____

E-Mail _____

• Vegetarian meal? Yes No

• I am interested in the vanpool from Raleigh. Yes No

• I wish to receive: CFEs for foresters
 CECs for landscape architects
 PDHs for engineers/surveyors

Method of Payment

\$495

Check _____ make payable to NC State University

Credit Card: MasterCard Visa **ONLY**

Card #: _____ - _____ - _____ - _____

Expiration Date: _____

Name of Cardholder: _____

Address of Cardholder: _____

I agree to allow NC State University to charge this credit card for the workshop registration.

Signature of Cardholder: _____

Send payment to FEOP, NC State University, Campus Box 8003, Raleigh, NC 27695 or fax with credit card information to 919-515-6883.