

## Who Owns the Stormwater?

by Chrystal Bartlett, Stormwater Awareness & Outreach Coordinator, NC DENR

Stormwater runoff, the rain or snowmelt that ‘runs off’ ground and other hard surfaces, is as old as the first rainfall. What’s new is the impact human progress makes on this formerly ‘natural’ event. The coming collision between runoff and humans may soon be playing at a courthouse near you.

The issue is hardly novel. Ownership conflicts make up much of the court’s business. But who owns stormwater? Much less, who cares? Usually, the people who care are the ones awash in stormwater. Their numbers are growing.

Consider this scenario enacted at least once a hurricane season. A neighbor’s tree falls into your yard, but their insurance agent (even your insurance agent!) say it’s your job to clean it up because an act of nature put it on your property.

Let’s apply that same premise to stormwater. If my neighbor builds a deck that then sends runoff cascading into my basement, whose job is it to clean up the water? Much less prevent a repeat flood? Rain is an act of nature, but what about that deck?

How about public property? Your town built a big new school complete with a one-acre parking lot. The parking lot sheds 16 times more water than the one-acre meadow it replaced and now the runoff overwhelms the closest storm drain. Now the road floods in front of the largest, hotly recruited, new employer in town. Who owns that stormwater? The school board? The school contractor? The public works department? Or the business that owns the

property it floods?

Stormwater quantity is just half the equation, though. Runoff quality is often poor given all the oil, brake dust, dog poop and pesticides it gathers en route to the storm drain. The untreated water goes to creeks, streams, sounds and bays full of living creatures.

Imagine you harvest shellfish for a living. The state closes shellfish beds as a precaution after every major rainfall. Why? The shellfish, which eat by straining water for nutrients, also pick up the pollutants. People get sick if they eat these shellfish, but you lose money when they can’t be harvested. Who owns the stormwater that put you out of work? People living upstream? The local government? You?

While fictional, these scenarios represent questions being asked more frequently. If the primary source of water pollution is stormwater, and the primary source of stormwater

pollution is people, do we all own the stormwater? We all benefit from clean water, but stormwater impacts are more local. Given the pace of development, they’ll be more frequent, too.

I don’t know who owns the stormwater, but I’m not sure anyone else has a clear handle on it either. That’s usually where our legal system enters the picture (Note to budding barristers: this looks to be a growing practice area.) What the court decides is still a mystery, but I’m watching and waiting. I’ll bet I’ve lots of company, too.

More information is available at:  
<http://www.ncstormwater.org/>

### In this issue

March–April 2006  
Page

Director's Forum: How Prepared is North Carolina if a Natural or Manmade Disaster Occurs?	2
Moreau and Luettich Appointed to Committee on New Orleans Regional Hurricane Protection Projects	3
People	3
October, November, January, March Action of the NC Environmental Management Commission	4
October, November, January, March Action of the EMC Water Quality Committee	6
Upcoming Events	8

## Director's Forum

# How Prepared is North Carolina if a Natural or Manmade Disaster Occurs?

by David H. Moreau, WRRRI Director

Given the national attention to issues of homeland security, experiences in North Carolina over the past decade with devastating hurricanes, and recent disasters in Louisiana and Florida, it is logical to ask how well prepared are we in North Carolina to respond to various types of threats. One particular area of concern is protection of our water supplies and how we would respond to a variety of natural disasters, accidents, or deliberate contamination. For some types of events, we appear to be well-prepared. For others, the response appears to be less certain and less well-coordinated.

Water supplies are exposed to a wide range of potential disruptions:

- Extremely large floods could cause several types of disruptions. Dams could fail. A more likely effect of flooding is inundation of pumping and treatment plants as experienced in Hurricanes Fran and Floyd.
- Breaks in major links in water distribution systems are not uncommon. Operations of distribution systems are increasingly dependent on electronic Supervisory Control and Data Acquisition (SCADA) systems. Disruptions to SCADA systems could leave operators with limited information about how to manage them.
- Water treatment plants, with their heavy reliance on electro-mechanical equipment, are subject to failures that could shut down a facility.
- A not so rare event is the loss of electricity due to flooding and ice storms.
- Accidents, including highway accidents near water sources, could result in spills of hazardous materials into the supply.

Although the time-to-recovery from events of this type may be in the order of days or even a few weeks, North Carolina



seems to be reasonably well-prepared to respond to them. Most events of this type do not pose an immediate threat to public health, and most large water utilities have emergency response plans in place and have had them for many years. The North Carolina Division of Emergency Management (NCDEM) is prepared to deliver bottled water to affected areas from storage facilities located throughout the state. NCDEM is also prepared to activate an extensive communication network to advise the public about steps that should be taken in the event an emergency is declared.

In the wake of 9/11, Congress passed the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (commonly referred to as the Bioterrorism Act). One of its provisions required all community water systems serving more than 3,300 people to prepare vulnerability assessments. Deadlines for doing so varied by size of the supply, but all were to be completed by the end

*continued on page 3*

# WRRRI

ISSN 0549-799X  
 Number 354  
 March–April 2006  
 Published bimonthly

*This newsletter is financed in part by the Department of the Interior, U.S. Geological Survey, as authorized by the Water Resources Research Act of 1984. Forty-three hundred copies of this newsletter were printed at a cost of \$1,142 or 27 cents per copy.*

*WRRRI offices are located at 1131 Jordan Hall on the North Carolina State University campus. Mailing address: Box 7912, NCSU, Raleigh, NC 27695-7912*

*Telephone: (919) 515-2815  
 Email: [water\\_resources@ncsu.edu](mailto:water_resources@ncsu.edu)  
 URL: <http://www.ncsu.edu/wrrri>*

### WRRRI STAFF

*David H. Moreau ([David\\_Moreau@ncsu.edu](mailto:David_Moreau@ncsu.edu))  
 Director*

*Kelly Porter ([Kelly\\_Porter@ncsu.edu](mailto:Kelly_Porter@ncsu.edu))  
 Environmental Ed. & Comm. Coordinator  
 Lynne Bridger ([Lynne\\_Bridger@ncsu.edu](mailto:Lynne_Bridger@ncsu.edu))*

*Business and Administrative Officer  
 Gerry Cheney ([Gerry\\_Cheney@ncsu.edu](mailto:Gerry_Cheney@ncsu.edu))*

*Accounting Technician  
 Jennifer Jones ([Jennifer\\_Jones@ncsu.edu](mailto:Jennifer_Jones@ncsu.edu))*

*Program Coordinator  
 Diane Fudge ([Diane\\_Fudge@ncsu.edu](mailto:Diane_Fudge@ncsu.edu))  
 Office Assistant*

### SUBSCRIPTIONS TO WRRRI-NEWS LIST

*Anyone with email can subscribe to the WRRRI-News electronic list. This service is used to announce posting of the WRRRI News to the web site and to disseminate information about WRRRI seminars, workshops, conferences, NCWRA forums, and other pertinent information. To subscribe, send an email to [mj2@lists.ncsu.edu](mailto:mj2@lists.ncsu.edu). The subject line should be blank and in the body section, type: subscribe WRRRI-News. Please send correspondence regarding the WRRRI News or the WRRRI-News electronic list to [Kelly\\_Porter@ncsu.edu](mailto:Kelly_Porter@ncsu.edu).*

## Water Resources continued

of 2004. In addition to their own emergency response plans, suppliers were required:

- to identify and put priorities on vulnerable areas of their operations;
- to assess both the likelihood of events that could make systems vulnerable and the consequences of those events; and
- to use that information to prepare a plan to reduce the likelihood that such events could occur and reduce consequences if they did occur.

The most disturbing type of event would be a discovery of a significant contaminant in a water distribution system, regardless of how the contaminant got there. Although the travel time from one end to the other in some of our larger distribution systems may be as long as 10 to 12 hours, the threat to those near the point of discovery would be immediate. By the time a contaminant is discovered, consumers may already have been exposed. In the most recent widespread outbreak of disease associated with contaminated water in a large urban system, the problem wasn't identified until after people started getting sick and reporting to hospitals. Even if an alarm is sounded about a potential contaminant, there may be precious little time to run necessary chemical or biological tests to confirm or deny the presence of potentially harmful substances.

There appears to be something of a gap in our policies for addressing this type of event where contaminants are detected in a distribution system after the water has left a treatment plant. Operators of these systems might have very little time to make decisions. Simply shutting down a distribution system is neither simple nor free of serious consequences to firefighting and other uses. Effectively warning customers not to drink the water could be very problematic in a very short period of time. We can assume that

each operator has already established its own protocol when it prepared its vulnerability assessment and risk reduction plan. For obvious reasons, those assessments and plans are protected from public disclosure by the Bioterrorism Act. However, there was no requirement in the Act that policies and response protocols be developed cooperatively with state agencies that are charged with protection of public health. Without cooperative policies and protocols, each water supply is left to its own plan and judgments about how the plan is to be implemented. Given the potential liabilities, public concerns, and inevitable finger pointing that would follow the aftermath of such an event, shouldn't we have a higher level of coordination among water suppliers and regulatory agencies? Shouldn't there be policies and procedures to follow in case a contamination event is suddenly discovered?

You may view the Bioterrorism Act of 2002 at <http://www.fda.gov/oc/bioterrorism/bioact.html>.

## People

**D. Will Autry**, CPESC, formerly an erosion control officer for the Orange County Planning & Inspections Department, now serves as the environmental planner for the Town of Carrboro. Autry currently serves as a member-at-large of the NC Water Resources Association.

**J. Todd Kennedy**, formerly a water quality modeler with the State of North Carolina, has joined Stantec Consulting in Raleigh. Kennedy currently serves as president of the NC Water Resources Association.

**Janet Paith**, CPESC, CPSWQ, formerly the State Sediment Education Specialist for the NC Division of Land Resources Land Quality Section, has joined Wal-Mart Stores, Inc., in Bentonville, Arkansas, as manager of storm water compliance.

**Fred Royal**, PE, CFM, has joined Carter & Burgess as manager of the Water Resources Group, Transportation Unit, Raleigh, North Carolina. Royal, served formerly as stormwater management engineer with the Town of Chapel Hill.

**Sandra Weitzel**, is now the area coordinator for region 3 of the Division of Soil and Water Conservation in the DENR Raleigh Regional Office. Weitzel formerly served as area coordinator for region 6 in the DENR Wilmington Regional Office.

## Moreau and Luetlich Appointed to Committee on New Orleans Regional Hurricane Protection Projects

Dr. David H. Moreau, director of WRI and professor at UNC, and Dr. Richard A. Luetlich, director of the UNC Institute of Marine Sciences and professor at UNC, are both serving as members of the Committee on New Orleans Regional Hurricane Protection Projects. This committee is under the National Academy of Engineering.

The Committee is reviewing data gathered by the U.S. Army Corps of Engineers and the American Society of Civil Engineers. As committee members, Drs. Moreau and Luetlich are investigating three primary topics: a) design capacity of the hurricane protection system, b) forces exerted against the system and system response, and c) factors that resulted in overtopping, breaching, or failure of levees and floodwalls.

## October, November, January and March Action of the Environmental Management Commission

At its rescheduled meeting on October 13, 2005, the Environmental Management Committee (EMC) took the following actions:

- Adopted the new regulations to the banking and trading of emission reduction credits rules and amendments to the air toxic rules as presented in Chapter II of the public hearing record. On June 22, 2005, Dr. Delilah Blanks held a public hearing on proposed new regulations on banking and trading of emission reduction credits and an amendment to an air toxic rule. A new section of rules (15A NCAC 2D .2300) was proposed to establish a system to bank emission reduction credits for use as offsets in nonattainment areas. The rules describe the types of emission reduction credits that may be banked and how they may be used. They describe the procedures used for managing the banking systems. The air toxic modification rule (15A NCAC 2Q .0706) was proposed to be amended to clarify when emissions of unmodified sources at an affected facility needs to be reduced to achieve compliance with the air toxic rules.
- Adopted the 19 air quality regulation amendments and new exclusionary rule (15A NCAC 2Q .0810) for air curtain burners as presented in Chapter 2 of the hearing record. On June 22, 2005, Dr. Delilah Blanks held a public hearing on amendments to 19 air quality regulations and a proposed new regulation. The 19 air quality regulation include amendments to two definition rules (15A NCAC 2A .0101 and 2Q .0103); three rules (15A NCAC 2D .0103 and .1905 and 2Q .0105); an incinerator rule (15A NCAC 2D .1201); the nitrogen oxide rule on record keeping, reporting, and monitoring (15A NCAC 2D .1404); the open burning rules (15A NCAC 2D .1902, .1903, 1904, and .1906); the applicability rule (15A NCAC 2D .2001) of the transportation conformity rules; permitting rules (15A NCAC 2Q .0101, .0103, .0301, .0304 and .0305); the Title V permit content rule (15A NCAC 2Q .0508); the Title V permitting rule (15A NCAC 2Q .0523); and the exclusionary rule for peak shaving generators (15A NCAC 2Q .0808).
- Approved to proceed to public hearing on the clean air interstate rules. On May 12, 2005, the EPA promulgated the requirement for States to adopt rules limiting the emissions of nitrogen oxides (NO<sub>x</sub>) and sulfur dioxide (SO<sub>2</sub>) and guideline rules for the states to use in developing their rules. The purpose of these rules are to reduce interstate transport of precursors to fine particulate and ozone.
- Approved to take draft water conservation rules to public hearing. The Commission is responsible for developing and implementing rules governing water conservation and water reuse during drought and water emergency situations according to HB1215, Session Law 2002-167. The rules shall establish minimum standards and practices for water conservation and water reuse for all of the following classes of water users: publicly owned and privately owned water supply systems, state agencies local governments, business and industrial water users, and agricultural and horticultural water users.
- Approved the final Cape Fear River Basinwide Water Quality Plan. The Cape Fear River Basinwide Water Quality Plan is in its third cycle of basinwide water quality plans that the Division of Water Quality is preparing for all 17 river basins across the state. In March 2005, the draft basinwide plan was approved by the Water Quality Committee (WQC) to be released for public review and comment. One public information session was held during the public review process. The Division of Water Quality received written and verbal comments from both state and local agencies, as well as comments from private landowners. Revisions were made and information was added to or clarified in the draft plan. This Basinwide Water Quality Plan is a planning document that will guide the Division's actions in this river basin over the next five years and beyond. The management actions are based on existing rules and policies.
- Approved the final New River Basinwide Water Quality Plan. In July 2005, the draft basinwide plan was approved by the WQC to be released for public review and comment. The draft plan included language developed during an in-depth interim review process, which involved NCDENR agencies, the Soil and Water Conservation Districts, representatives of the Natural Resources Conservation Service, the regional council of governments, and several local watershed groups. One public information session was held during the public review process. The Division of Water Quality received written and verbal comments from both state and local agencies, as well as comments from private landowners. Revisions were made and information was added to or clarified in the draft plan. This Basinwide Water Quality Plan is a planning document that will guide the Division's actions in this river basin over the next five years and beyond. The management actions are based on existing rules and policies.
- Approved amendments to rules to modify the testing requirements set out in 15A NCAC 2L .0115 (Risk-Based Assessment and Corrective Action for Petroleum Underground Storage Tanks). On June 22, 2005 the UST Section held a public hearing on amendments to rules to modify the testing requirements. This change affects 15A NCAC 2L .0115(c), (n) and (o). Part (c) is modified to only require the installation of 3 monitoring wells at registered tank facilities, meeting the high risk classification in 15A NCAC 2L .0115 (d)(1), where a release has caused the groundwater contamination in excess of the 2L standards by a factor of 10. Currently parts (n) and (o) require the referenced analyses to be conducted on each and every sample obtained and only allow the substitution of other methods in limited circumstances. The Section proposes to modify these parts to require these analyses of soil and groundwater samples for the samples used to achieve site closure. This will allow assessment and monitor-

## EMC Action *continued*

ing stages of remediation to use screening procedures. Screening procedures are generally cheaper and faster than laboratory procedures. The Section also expects to modify and reduce the number of constituent specific and MADEP analyses necessary to assess the release and to monitor the corrective action. Together these changes are expected to produce a more completely delineated contaminant plume at a reduced cost. This strategy will allow the Section to address more sites with the given amount of funding that is available.

- Approved the WQC to propose language for amending the classification of a portion of the Catawba River to supplemental trout (Tr). The Table Rock Chapter of Trout Unlimited and the Catawba Riverkeeper Foundation petitioned for judicial review of the Commission's denial of the petition for rulemaking seeking the reclassification of eleven miles of the Catawba River below Lake James to Trout Waters. Duke Energy was allowed to intervene in the matter. Arguments were presented to the Court in January and the Judgment was filed July 19, 2005. The Court, in rejecting the reasons given by the Commission for not deciding on initiating rulemaking until after the studies associated with the relicensing of Duke's dams on the Catawba River are completed, concluded that waiting for the relicensing and additional information from such studies was not needed in order for the Commission to consider the petition. In finding the Commission acted erroneously, arbitrarily and capriciously, the Court reversed the final decision denying the petition for rulemaking and remanded the matter for further proceedings consistent with the judgment.

At its regularly scheduled meeting on November 10, 2005, the EMC took the following action:

- Approved to proceed to public hearing with the proposed reclassification of the entire watersheds of all creeks that drain to the north shore of Fontana Lake between Eagle and Forney Creeks (including Eagle and Forney Creeks) in Swain County (Little Tennessee River Basin) and request for waiver of the EMC's 30-day by-laws rule.
- Approved four local advisory committees that met the nitrogen strategies under the Tar-Pamlico agriculture rule. These include Beaufort and Hyde, Martin and Washington counties. The remaining local advisory committee, Halifax county, should receive a complete strategy within the next year.
- Approved the Phosphorus Technical Advisory Committee report that gives indirect measures for phosphorus accounting and requires the committee to continue to look for better ways to account for phosphorus.
- Approved to proceed to public notice and hearing with proposed rules for the Universal Stormwater Management Program (USMP) (15A NCAC 2H .1020). The USMP is an optional program for local governments that will provide them with the opportunity to replace the post construction stormwater requirements of 14 different stormwater programs

with a single, simplified set of requirements.

At an *ad hoc* meeting on January 11, 2006, the EMC took the following action:

- Recommended to refer the water quality data issues for the B. Everett Jordan Reservoir to the WQC for further discussion and consideration. The water quality data issues were brought before the EMC that were raised by a group of municipal wastewater dischargers on the Haw River arm of the reservoir. The meeting provided an opportunity for the dischargers, the environmental community and Division of Water Quality to present their views on the data for the benefit of the Commission as they decide the future of the rules that address nutrient loading to the Jordan Reservoir.

At its regularly scheduled meeting on January 12, 2006, the EMC took the following action:

- Approved to proceed to public hearing on the Best Available Retrofit Technology (BART) rule. This proposed rule would establish best available retrofit technology requirements for certain, older sources of emissions of impairing pollutants impacting visibility in federal parks and wilderness Class I areas as part of efforts required region-wide to address the regional haze problem. The requirements are proposed for adoption in response to federal requirements that states address these emissions in their state implementation plan for regional haze.
- Adopted the hearing officers' recommendations for amendments to 15A NCAC 2B .0240, the nutrient offset payments rule. The proposed changes to the rule will go through the Rules Review Commission and onto the short legislative session beginning May 9, 2006. The hearing officers specifically solicited from the public and the regulation community any data that would demonstrate that this proposed rate increase of \$57.00 per pound of nitrogen was in error. They did not receive any data that the rate increase was too high so they left the proposed rate increase in the final rule.
- Approved to proceed to public hearing with the proposed reclassifications for the North Fork First Broad River in Rutherford County (Broad River Basin) to Class Outstanding Resource Waters (ORW), and two segments of the Broad River in Cleveland, Polk and Rutherford Counties (Broad River Basin) to Class Water Supply IV (WS-IV) and WS-IV Critical Area.
- Approved the amended Special Order by Consent Hearing Officers Report to allow the City of High Point to continue its collection system rehabilitation to reduce sanitary sewer overflows (SSO) and to allow limited new flows based on meeting milestones. The City of High Point has a history of SSOs due to failure of parts of its aging sewage collection system. The City has undertaken a dynamic program to repair and replace this failing infrastructure.

*continued on page 6*

## EMC Action *continued*

- Adopted to uphold the Administrative Law Judge's decision in the A.J. Lancaster, Jr. versus NC Department of Environment and Natural Resources, 04 ENR 1151, UST 04-023C, Nash County. The civil penalty and investigation cost assessment of \$7, 563.38 was upheld.
- Rescinded Administrative Law Judge's decision in the Don R. McGee and McGee Brother's Company versus, NC Department of Environment and Natural Resources, Division of Air Quality, 05 EHR 0509, DAQ 04-270. Instead the EMC adopted its own final agency decision based upon the undisputed facts and concluded that there was no genuine issue of material fact that the violation occurred as alleged. The civil penalty was reduced by \$1,000. Investigative costs of \$212.00 were incurred.

At its regularly scheduled meeting on March 9, 2006, the EMC took the following action:

- Approved to proceed to public hearing on amendments to various air quality rules: new source performance standards (15A NCAC 2D .0524); maximum achievable control technology (15A NCAC 2D .0932); gasoline torch tank and vapor collection rule (15A NCAC 2D .0932); general record keeping and reporting requirement rule (15A NCAC 2D .0605); gasoline bulk terminal rule (15A NCAC 2D .0927); sales and service of analyzers used to test automobile emission under the inspection/maintenance (I/M) program (15A NCAC 2D .1006); permits requiring public participation (15A NCAC 2Q .0306); Title V permitting definition rule (15A NCAC 2Q .0503); Title V permit content rule (15A NCAC 2Q .0508); and Title V administrative permit amendment rule (15A NCAC 2Q .0514).
- Approved to proceed to public hearing on the clean air mercury rules. On May 29, 2005, the EPA promulgated the emission guidelines to limit the emission of mercury from coal fired electrical generation units. The State plan is due November 17, 2006.
- Approved to send reports to the Environmental Review Commission in accordance with Senate Bill 981. A report on the progress in developing and implementing nutrient management strategies for drinking water supply reservoirs with impaired water quality.
- Approved to proceed to public hearing with proposed amendments to surface water standards in accordance with the Clean Water Act 2004-2006 Triennial Review.
- Approved to proceed to public hearing with proposed reclassification of a segment of the Catawba River to trout (Tr) supplemental classification. The trout have been enabled by stocking practices and cold water releases from the Linville Dam entering the river. Since the trout environment is an artificially created system, the proposed rule language includes additional provision to account for natural conditions.
- Approved the EMC interpretation that the pervious pavement credit should be allowed in Phase II areas and in other areas

regulated by the EMC stormwater rules.

- Confirmed recommendation to reappoint Mr. John Boykin, Mr. Karl Shaffer, Mr. Troy Perkins, and Mr. C.L. Gobble as members of the Water Pollution Control System Operators Certification Commission (WPCSOCC). Confirmed recommendation to appoint Mr. Paul Rawls as Chairman of the WPCSOCC.

More information is available at the EMC web site:

<http://h2o.enr.state.nc.us/admin/emc/>

---

## October, November, January and March Action of the EMC Water Quality Committee

At its rescheduled meeting on October 12, 2005, the Water Quality Committee (WQC) of the EMC took the following actions:

- Approved to send the final draft of the New River Basinwide Water Quality Plan to the EMC.
- Approved to send the final draft of the Cape Fear Basinwide Water Quality Plan to the EMC.
- Approved the 10/70 development transfers from Wilkes County to the Town of North Wilkesboro. For water supply watersheds, the EMC rules allow local governments that have not opted for the use of "high density" development to develop up to 10 percent of their watershed jurisdiction at 70 percent impervious level. The rules also specify that when there are two or more local governments in a watershed, one local government can transfer some of its 10 percent allocation to another local government in the watershed as long as there is not net increase in allocation.
- Approved to send the Universal Stormwater Management Program draft rules to the EMC in November for permission to proceed to public hearing. These rules will allow local governments the option of adopting a single set of post-construction stormwater requirements to replace many existing post-construction requirements within their jurisdiction.
- Approved to send the Nutrient Management Draft Rules for the B. Everett Jordan Reservoir to the EMC in November for permission to proceed to public hearing. The EMC mentioned that riparian buffers should be addressed. The rules address both point and nonpoint sources of nitrogen and phosphorus. The rules implement the conceptual nutrient management strategy plan for the B. Everett Jordan Reservoir that was presented to the WQC in March 2005. Public comments were solicited on the concept plan in April and May 2005. (The Jordan Lake Stakeholder Project may be viewed at <http://www.tjcog.dst.nc.us/jorlak/jlsp.htm>.)
- Approved renewal and revision of the general variance from the Neuse and Tar-Pamlico Riparian Buffer Rules for residential structures on existing lots within NC coastal communities. The

## Water Quality Committee *continued*

WQC originally approved this “Coastal General Variance” on May 10, 2001.

- Approved proposed changes to the Village of Pinehurst’s water supply watershed ordinance.
- Approved to proceed with the proposed reclassification of the entire watersheds of all creeks that drain to the north shore of Fontana Lake (between Eagle and Forney Creeks in Swain County) within the Little Tennessee River Basin to Class Outstanding Resource Waters (ORW). Additional language will be presented at the November EMC meeting.

At its regularly scheduled meeting on November 9, 2005, the WQC of the EMC took the following actions:

- Approved annual progress report for Neuse agriculture rules. The Basin Oversight Committee (BOC) for the Neuse Basin is required to report to the EMC each year on annual progress in implementation of the Neuse agriculture rules (15A NCAC 2B .0238). For crop year 2004, the BOC received and approved annual reports from 17 Local Advisory Committees (LACs) in the Neuse Basin. The Neuse Basin report showed a cumulative nitrogen loss reduction of 44 percent, from baseline through 2004.
- Approved annual progress report for the Tar-Pamlico agriculture rules and four local strategies moving from conditional to full approval for Beaufort, Hyde, Martin and Washington Counties with Halifax County remaining at conditional status. The BOC for the Tar-Pamlico Basin is required to report to the EMC each year on annual progress in implementation of the Tar-Pamlico agriculture rules (15A NCAC 2b .0256).
- Approved variance request for the City of High Point on water supply watershed buffer requirements. A High Point nursing home, under the ownership of the Catholic Church, has been planning for years for a major expansion of their facility. The facility is located in the Deep River watershed upstream of High Point Lake and is in the Randleman Lake watershed protection area. Therefore, a 50-foot buffer is required to be maintained on each side of the intermittent and perennial stream that transects the site. The EMC rules require that the water supply watershed buffer protection program be implemented by the local government in this case, the City of High Point.
- Approved to proceed to EMC with proposed reclassification of the North Fork First Broad River in Rutherford County (Broad River Basin) to Class Outstanding Resource Waters (ORW).
- Approved to proceed to EMC with proposed reclassification of the Broad River in Cleveland, Polk and Rutherford Counties (Broad River Basin) to Class Water Supply IV (WS-IV) and WS-IV Critical Area (Critical Area) contingent that water supplies are installed.
- Approved to proceed to EMC with request to send to public hearing the proposed reclassification of the entire watersheds of

all creeks that drain to the north shore of Fontana Lake between Eagle and Forney Creeks (including Eagle and Foney Creeks) in Swain County (Little Tennessee River Basin). Also recommended a 30-day waiver from the EMC in order for staff to proceed to the EMC meeting on November 10, 2005.

At its regularly scheduled meeting on January 11, 2006, the WQC of the EMC took the following action:

- Approved to send to the EMC for permission to send to public hearings the proposed amendments to water quality standards that is part of the 2004-2006 Triennial Review mandated by the EPA.
- Approved to send to the EMC the trout waters reclassification for a segment of the Catawba River.
- Approved a major variance to the Neuse River buffer requirements for Sky Sail Condominium temporary construction activities in zone 1 of the riparian corridor. New Bern Riverfront Development, LLC proposed to use zone 1 of the riparian corridor for temporary installation of stormwater management equipment for the site and for temporary placement of scaffolding and other construction equipment because the condominium project occupies virtually all of the 2.8-acre property. The temporary timeframe is 12 to 14 months.
- Approved to send to the EMC the Coastal Habitat Protection Plan (CHPP) Annual Report to the Environmental Review Commission and the Joint Legislative Commission on Seafood and Aquaculture.

At its regularly scheduled meeting on March 8, 2006, the WQC of the EMC took the following action:

- Approved to defer action until May 2006 EMC meeting on the request for major variance from the Tar-Pamlico riparian protection rules (15A NCAC 2B .0259 and .0260) for buffer mitigation for the PCS Phosphate Company, Inc. The Committee decided the request was premature given that 401 and 404 permit approval process needs to take place. An Environmental Impact Statement was being prepared that would present more information on the full extent of impacts and also the alternatives that might exist to the preferred option for buffer mitigation.
- Approved course of action to deal with water quality data issues and nutrient management rules for Jordan Lake Reservoir. Division of Water Quality staff presented the plan to work with interested parties from March to June 2006. Staff would return to the July or September 2006 Water Quality Committee meeting with draft rules. The rules could then be adopted in July 2007. The EMC had concerns that need to be dealt with for both federal reasons and in response to the EPA, the Clean Water Act and North Carolina legislation.
- Approved to send to EMC reports that will go before the ERC in accordance with Senate Bill 981 (Session Law 2005-190). These reports meet the initial report requirements of SB 981.

# Upcoming Events

## June 5-8, 2006

Workshop on Agricultural Air Quality: State of the Science  
Bolger Conference Center  
Potomac, Maryland (near Washington, DC)  
Web: <http://www.esa.org/AirWorkshop/>

## July 18-20, 2006

2006 UCOWR/NIWR Annual Conference: Increasing Freshwater Supplies  
Santa Fe, New Mexico  
Web: <http://www.ucowr.siu.edu/>

## August 2-4, 2006

2006 Annual Southeast Watershed Roundtable and North Carolina Statewide Roundtable  
Crown Plaza Resort  
Asheville, NC  
Web: <http://www.bae.ncsu.edu/programs/wqg/roundtable/>

## September 11, 2006, 11:30 am

NC Water Resources Association Forum:  
McKimmon Center, Raleigh, NC  
NC Water Resources Association Forum:  
North Carolina Nutrient Criteria and the Reservoir Protection Act  
Coleen Sullins, NC Division of Water Quality  
Melissa Kenney, Duke University  
Web: <http://www.ncsu.edu/ncwra/>

## September 24-28, 2006

14th National Nonpoint Source Monitoring Workshop: Measuring Project and Program Effectiveness  
Minneapolis, MN  
Web: <http://www.ctic.purdue.edu/NPSWorkshop/NPSWorkshop.html>

## October 2-5, 2006

Stream Restoration in the Southeast: Accomplishments and Opportunities  
The Westin Charlotte  
Charlotte, North Carolina  
Web: <http://www.ncsu.edu/sri/2006conference/>

## November 12-15, 2006

2006 NC AWWA/WEA Annual Conference  
Sheraton Four Seasons & Koury Convention Center  
Greensboro, NC  
Web: <http://www.ncawwa-wea.org/>

## December 4, 2006, 11:30 am

NC Water Resources Association Forum:  
McKimmon Center, Raleigh, NC  
Web: <http://www.ncsu.edu/ncwra/>

## March 27-28, 2007

WRI Annual Conference  
McKimmon Center, Raleigh, NC

WATER RESOURCES RESEARCH INSTITUTE  
OF THE UNIVERSITY OF NORTH CAROLINA  
BOX 7912  
NORTH CAROLINA STATE UNIVERSITY  
RALEIGH NC 27695-7912

NONPROFIT ORG  
U S POSTAGE  
PAID  
RALEIGH NC  
PERMIT NO. 549

ADDRESS SERVICE REQUESTED