



Michael F. Easley, Governor
William G. Ross Jr., Secretary
North Carolina Department of Environment and Natural Resources
Alan W. Klimek, P.E. Director
Division of Water Quality

March 12, 2007

MEMO

TO: Interested Parties

FROM: John Dorney

RE: Recent Changes and Clarifications to the 401 Water Quality Certification, Riparian Buffer and Isolated Wetland Programs and Policies

1. Proposed Guidance for Stream Mitigation for FERC-related 401 Certifications
2. Stream origins in the outer coastal plain at PCS Phosphate
3. Examination of the relationship between riparian zone quality and stream biology in coastal plain streams
4. Approved policy interpretation for Riparian Buffer Rules
5. Buffer clarification memoranda
6. Future changes in General 401 Water Quality Certifications and Nationwide Permits
7. Level spreader guidance changes
8. Delegation of buffer authority to Pitt County

The following information will be posted on our website beginning later during the week of March 12, 2007 at <http://h2o.enr.state.nc.us/ncwetlands>. Some items are for information only, while others are available for comment by the public. Referenced documents will be posted throughout the comment period for each item, or indefinitely, as appropriate. This information is presented in an ongoing attempt to improve the efficiency and effectiveness of the Division's wetland, stream and buffer permitting programs. Hard copies of these items can be obtained by calling Marion Davis at 919-733-1786 and requesting them. Comments on these items should be made in writing to the contact persons named by the referenced dates listed within each item described below:

1. **Proposed Guidance for Stream Mitigation for FERC-related 401 Certifications:**
DWQ is required to issue 401 Water Quality Certifications for licenses issued by the Federal Energy Regulatory Commission (FERC). One of the main issues for these Certifications has been the release of minimal flow into bypass or main river reaches. In some instances, release of a preferred minimal flow is not practical due to cost, technology or logistics. In these cases, applicants have often proposed stream mitigation (usually preservation) to compensate for the reduced flow. The proposed guidance (dated January 9, 2007, Version 1.4) addresses DWQ's preferred approach to deal with this mitigation requirement. This report is available on our website at h2o.enr.state.nc.us/ncwetlands. Comments should be sent to John Dorney, NC Division of Water Quality, Wetlands Program Development Unit, 2321 Crabtree Blvd., Raleigh, NC 27604 by 5 pm on April 13, 2007.

2. **Stream origins in the outer coastal plain at PCS Phosphate:** DWQ is involved in several projects concerning the mapping of stream origins across the state. This report (the first in an ongoing series) presents an analysis of data for this ecoregion. DWQ plans to prepare similar reports on other ecoregions as data become available. Therefore, we are interested in the format and type of analysis done for this report as well as the results of the analysis.

The Division of Water Quality (DWQ) and North Carolina State University (NCSU), in association with a North Carolina Department of Transportation (NCDOT) initiated a project in early 2004 to map intermittent and perennial streams and origins (IPSO) across the state. The project consists of gathering detailed field sample data with respect to stream origins and generating predictive models to estimate landscape controls on origin locations. As part of an effort to gain additional knowledge about stream origins, effort beyond the official stream project is continually conducted as stream origin data becomes available from various sources in North Carolina. In 2005, CZR Incorporated, by request from PCS Phosphate Company, field mapped intermittent and perennial streams in the South Creek region of PCS Phosphate Company land on the outer coast plain as part of the 404 permitting process. These data were used to assess stream origin characteristics in the South Creek area. This report is available on our website at h2o.enr.state.nc.us/ncwetlands.

Please send any comments to Periann Russell, NC Division of Water Quality, Wetlands Program Development Unit, 2321 Crabtree Blvd., Raleigh, NC 27604 by 5 pm on April 13, 2007.

3. **Examination of the relationship between riparian zone quality and stream biology in coastal plain streams:** A two-year study was undertaken to examine relationships between riparian zone quality and stream biology. Primary emphasis was on coastal plain streams for which the riparian assessment technique was developed. A secondary goal was to determine if the coastal plain technique could be modified slightly for use in the piedmont and mountains. Metrics measuring either riparian zone quality or stream habitat quality correlated poorly with water quality as reflected by bottom-dwelling organisms living in the streams. Riparian assessments provide a valid, general description of environmental conditions existing within a large watershed but do not pinpoint specific problems originating in a small watershed or an individual catchment and should not be used for this purpose. The modified version of the coastal plain riparian assessment examined in this study should not be used until all metrics have been clearly shown to be appropriate and have been calibrated against a full range of reference conditions from poorest to highest quality for low and high order streams in both rural and urban watersheds in the piedmont and mountains. A copy of the complete study is available on our website at h2o.enr.state.nc.us/ncwetlands. Please send any comments to Stratford Kay, NC Division of Water Quality, Wetlands Program Development Unit, 2321 Crabtree Blvd., Raleigh, NC 27604 by 5 pm on April 13, 2007.

4. **Approved policy interpretation for Riparian Buffer Rules:**

Decision by the Environmental Management Commission regarding web-based soils maps. On January 11, 2007, the NC Environmental Management Commission (EMC) heard and decided the contested case of Carpenter versus DENR. This case involved the question whether the NRCS' web-based map of soil series which has a

subset of streams (rather than all of the streams shown on the paper copies of the maps) was “the most current version of the county soil survey” as required in 15A NCAC 2H .0233(3). The EMC agreed with DWQ staff, NRCS staff and the Administrative Law Judge that the web-based map only contained a subset of the streams shown on the paper copies and therefore, this was not the most recent version of the county soil survey. Therefore, this decision by the EMC is now officially policy guidance that DWQ staff and the regulated community must follow.

5. **Buffer clarification memoranda:** Two memoranda regarding clarification of interpretation of the Buffer Rules are posted on the DWQ website. These are Buffer Interpretation/Clarification #004, Clarification Regarding Stream Restoration and Buffer Mitigation, and Buffer Interpretation/Clarification #2007-005, regarding Beaver Impoundments. These items are for informational purposes only.

6. **Future changes in General Certifications and Nationwide Permits:** The Nationwide Permits administered by the U.S. Army Corps of Engineers are due to expire as of March 18, 2007. The new Nationwide Permits were published March 9, 2007, and become effective March 19, 2007, or ten (10) days following publication. The time constraints involved in this cycle of the Nationwide Permit reissuance process have prevented DWQ from publishing substantial revisions proposed for the General Certifications (GCs). DWQ was advised by Corps staff in Washington D.C. that GC revisions could not be published until the final Nationwide Permits were published. DWQ proposes substantial modifications to the GC's, but this 10-day period would not allow for sufficient public input. Therefore, we intend to renew and extend the existing GC's for a period of six months, until September 7, 2007, while simultaneously accepting and reviewing comments on the draft proposed revisions within the GC's. During the 6-month extension period, the existing GC's will be modified only as required to incorporate revisions absolutely required due to Nationwide Permit revisions. For example, the six new Nationwide Permits will be captured as appropriate within the existing GC's. As for the long-term proposed revisions to the GC's, substantial changes in format and content are proposed. The existing GC's contain numerous administrative flaws, such as references to obsolete documents and committees, confusing sentences, typographical errors that imply incorrect guidance, and duplicate conditions. Many items that should more appropriately be categorized as application thresholds or directions are included as conditions. Historical notes are difficult to follow. Therefore, all GC's have been comprehensively updated, edited and re-formatted. As for the content of the conditions, specific revisions are described within boxed notes following each draft revised GC. Particular attention has been given to making the intent and specific requirements of the conditions clearer, in order to avoid confusion over the applicability of conditions. The draft revisions will be available on our web site by March 23, 2007. DWQ will accept public comments on these draft revisions until May 18, 2007. All comments are to be forwarded in legible written form via regular mail or email to Cyndi Karoly, 2321 Crabtree Blvd, Suite 250, Raleigh, NC, 27604, or Cyndi.Karoly@ncmail.net. Faxes (919-733-6893) are acceptable but not recommended due to unreliable transmittal quality. DWQ appreciates your active involvement in this review and revision process.

7. **Level spreader guidance clarifications:** Level spreader guidance clarifications. DWQ began implementing new level spreader guidance on January 1, 2007 and offered level spreader training on February 20 and 21, 2007 to inform the regulated

community about the changes to the old policy. As a result of questions raised during the training sessions and during plan reviews, the DWQ has reorganized and clarified the level spreader guidance that became effective on January 1, 2007. Additional diagrams were added to illustrate the correct designs for a flow splitter box and a forebay. One topic of particular concern that was clarified was how to determine the appropriate length of the level spreader if the vegetation in the filter strip consists of a mixture of grass, thick ground cover and forest. In addition, DWQ has provided the regulated community with an additional option for designing the level spreader whereby the level spreader may be designed to diffuse flow from the one inch per hour storm with a high flow bypass system or otherwise to diffuse the ten-year storm with no high flow bypass system. The updated Level Spreader Design Guidelines (January, 2007), along with the updated level spreader worksheet and a sample Operation and Maintenance Agreement, are available on our web site at <http://h2o.enr.state.nc.us/ncwetlands/regcert.html> .

8. **Delegation of buffer authority to Pitt County:** The Environmental Management Commission (EMC) has approved delegation of the Neuse and Tar-Pamlico Buffer Rules to Pitt County. This delegation applies to all unincorporated areas within Pitt County, but not to municipalities such as the city of Greenville. Therefore, all inquiries related to the Neuse and Tar-Pamlico Buffer Rules within Pitt County should be directed to staff of the Pitt County Planning Department, rather than staff of the NC Division of Water Quality. The Riparian Buffer administrator for Pitt County is Mr. Jonas Hill, who may be contacted at (252) 902-3250. The Pitt County Riparian Buffer Ordinance is available on the Pitt County web site at <http://www.pittcountync.gov> . Please note that Pitt County will be responsible for jurisdictional stream calls for the purposes of the Buffer Rules (but not for 401 Certification purposes), and will review and approve applications for buffer impacts, including Minor Variances. Where Major Variances are required, applicants will work with Pitt County staff to take such requests to the Water Quality Committee of the EMC.

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