



North Carolina
Department of Environment
and Natural Resources

Michael F. Easley, Governor
William G. Ross Jr., Secretary



North Carolina
Division of Forest Resources

Stanford M. Adams, Director

Griffith's Forestry Center
2411 Old US 70 West
Clayton, NC 27520-8631

May 30, 2005

Subject: Jordan Lake Watershed Nutrient Limits and Control Strategy

NC Division of Water Quality
Water Quality Planning Branch
Attn: Ms. Michelle Woolfolk
1617 Mail Services Center
Raleigh, NC 27699-1617

Dear Ms. Woolfolk:

The NC Division of Forest Resources (DFR) respectfully submits the following comments on the proposed Jordan Lake Watershed Strategy. Our Division wholly supports the Division of Water Quality's (DWQ) intent to reduce total nitrogen and phosphorous levels within the Upper New Hope and Haw River Arm sub-watersheds of the Jordan Lake watershed. We recognize the Jordan Lake Strategy directly supports Total Maximum Daily Load (TMDL) implementation that drives watershed restoration action strategies mandated in the Federal Clean Water Act and Clean Water Action Plan. We also understand that although forest management operations are a relatively small contributor to the overall Non-Point Source (NPS) pollution budget of a given watershed, forests and associated understory can contribute greatly to the prevention of NPS sources associated with other land management practices. Our specific concern related to your strategy is focused on the proposed mandatory pre-harvest or harvest notification for forestry operations. The comments presented herein summarize why the DFR believes a mandatory notification system is unnecessary. We are also providing an overview of the present tools in our NPS prevention toolbox that ensure forestry operations do not adversely impact our state's surface and ground water resources. Further, we offer several new proposals that could be implemented by DFR in the Jordan Lake Watershed to enhance our NPS pollution prevention specific to this watershed.

FORESTRY IN THE CAPE FEAR RIVER BASIN/JORDAN LAKE WATERSHED

As of 2003 forestry directly and indirectly contributed nearly thirty billion to North Carolina's annual economy; added over six billion to the gross state product; provided over 312,000 jobs; and was the second most important commerce to the State. In addition to being financially important, forestry (and active forest management) is a preferred land use when it comes to protecting water quality. Active forest management involves periodic stand entries for harvest or timber stand improvement work.

Forestry operations are a **very minor** contributor of sediment to our waterways. Forestry activities contribute even less of a percentage of the nitrogen and phosphorous that is being targeted in the Jordan Lake Watershed. Page 8 of the draft 2005 Cape Fear River Basin Plan's own Executive Summary states "In the Cape Fear River basin, there are **no** stream miles impaired by forest harvesting activities. **Most land clearing activities around urban areas are for development and usually not associated with forest harvesting.**" Forestry often gets blamed for degrading water quality when in truth many of the "problem tracts" are for land clearing/conversion and **not** forest management. There is a big difference. Page one of the "Proposed Nonpoint Source Nutrient Strategy for Jordan Lake Nutrient Sensitive Waters" document adds "In addition to natural sources, nutrients stem from many human activities throughout the lake's watershed. These activities include agricultural and residential fertilization; livestock and pet waste deposited on the land; and wastewater treatment plant discharges." Nowhere in the draft 2005 Cape Fear River Basin Plan or the proposed Jordan Lake Nutrient Management Strategy does it state that forestry's activities significantly contribute to the Jordan Lake Watershed impairment. **It is important to remember (but often forgotten in today's society) that forestry and active forest management is beneficial and critical to the long-term protection of our water quality.**

WHY PRE-HARVEST OR HARVEST NOTIFICATION IS NOT NECESSARY

Given that forestry operations contribute such a minor amount of water pollutants to the Jordan Lake Watershed, the DFR believes the direct and indirect costs of a notification system that would be incurred by the DFR, forest landowners, logging contractors, and the forest industry outweigh any perceived benefits. Listed below are some of the reasons why such a regulation is **not** necessary:

Existing Forestry Regulations: The Forest Practices Guidelines Related to Water Quality (FPGs) are the nine North Carolina laws that forestry operations must be in compliance with in order to maintain their exemption from the permitting and plan requirements of the Sedimentation Pollution Control Act (SPCA). All nine FPGs are directly related to water quality protection. The DFR enforces these laws by conducting site inspections on both active and closed out forestry operations. **Compliance with the FPGs is already extremely high.** The DFR's 2003-2004 Total Accomplishment Report (TAR) indicates that 773 water quality inspections were conducted on forestry operations during that year in the ten counties that make up the Jordan Lake Watershed. This area includes Alamance, Caswell, Chatham, Durham, Forsyth, Guilford, Orange, Randolph, Rockingham and Wake Counties. 682 of those 773 sites examined were determined to be in full compliance with the FPGs. Those numbers represent an 88% FPG compliance rate in the Jordan Lake Watershed. A review of the 2002-2003 TAR report revealed a slightly higher FPG compliance rate for that year.

Such a high existing compliance rate supports the stance that additional forestry regulation is not needed. The DFR does not believe a mandatory notification system would increase FPG compliance enough to warrant the costs associated with its implementation. And to truly and effectively implement such a system, there would be sizable direct resource costs (financial and time-wise) that would be incurred. The indirect costs (ex. personnel time that could have otherwise been spent on other DFR programs) could negatively affect forest landowners across the state.

Additional Administrative Costs: The DFR reviewed some of the details of a potential harvest notification system in 2001. Some of the information was gathered by examining the Virginia Department of Forestry's experience with such a system. The findings indicated that effectively implementing a mandatory program would require additional recurring funding for personnel and equipment; a significant time-commitment spent on training and documentation; and compliance issues that could be difficult to enforce without appropriate enforcement language complementing the notification process.

Low Nutrient Input for Forestry: The proposed Jordan Lake Watershed Strategy specifically targets nitrogen and phosphorous. Forestry operations are a very minor contributor of sediment and an even lower contributor of these two specific nutrients. The forestry activity that would have the most to do with nitrogen and phosphorous (timber stand fertilization) is a relatively minor practice when the Jordan Lake watershed's "big picture" is examined. Section .0207 of the FPGs already addresses the use of fertilizers for forestry; in addition, the N.C. Forestry BMP Manual provides cost-effective and practical recommendations on how to protect water quality during fertilization activities. The DFR **does not** believe a notification system will ultimately lower Jordan Lake's nitrogen and phosphorous levels to any appreciable degree.

Inequitable Targeting of Land Use Practices: If forestry (a minor contributor of water pollutants) were to be further regulated by a notification system, it would seem that all land use practices, such as agricultural, horticultural, or livestock operations, would also need such regulation. It is inequitable to require notification of a land-disturbing activity that only occurs on a very limited timescale. Individual forestry practices may only take place on the same location once every 5 to 15 years. Other land use practices occur annually, or multiple times during the year, and have far greater potential to contribute non-point source pollution to the Jordan Lake Watershed.

Uniformity in Regulatory Requirements: Regulating forestry practices at the sub-watershed level will lead to a very confusing legal environment for North Carolinians. It is important to minimize the confusion that grows when very different laws are imposed on businesses (ex. loggers) as they move from county to county and even sub-watershed to sub-watershed. Forest management occurs across the entire state, and is not secluded to a specific area. The consistent and uniform application of guidelines (or rules, as necessary) would be preferable in order to allow efficient intra-state commerce to continue.

FORESTRY'S EFFORTS AT PROTECTING WATER QUALITY

The DFR already has a very active and dedicated water quality program in place; our employees understand the importance of clean water, as do most of the professionals that make up the forestry community. It is not only vital to our jobs but to our high standard of living. Elements of the DFR's current water quality program include:

Water Quality Foresters: The presence of a Water Quality Forester based out of the DFR's Hillsborough District Office. This specialist handles water quality issues on forestry operations located in the upper and sub-basins of the Cape Fear River basin. Water Quality Foresters conduct FPG inspections, survey Best Management Practices (BMP) implementation, develop pre-harvest plans, and provide training opportunities for landowners, loggers and the public regarding water quality issues related to forestry. Much of this training involves discussions of the use of forestry BMPs in order to remain in compliance with the FPGs. In the districts that do not have a Water Quality Forester these efforts at protecting water quality are carried out by the DFR's additional Foresters and Rangers.

FPG Inspection Policy and Procedure: An effective system is already in place for handling forestry operations that are not in compliance with the FPGs. The vast majority of forestry operations stay in compliance with these guidelines, and when violations are discovered the forestry community responds accordingly. The DFR coordinates with sister agencies such as the Division of Water Quality (DWQ) and Division of Land Resources (DLR) to see that water quality violations not corrected under the FPGs are addressed. The DFR is looking forward to strengthening its relationship with these Department of Environment and Natural Resources (DENR) agencies in the coming months.

BMP Study and Periodic Surveys: Best Management Practices (BMPs) Implementation Surveys were conducted during 2000-2003 and will be conducted during 2005 and beyond. These on-the-ground

surveys examine BMP implementation in an effort to further refine the BMP prescription methods the forestry community uses to maintain compliance with the FPGs. In addition, the DFR is partnering with the USDA-Forest Service to conduct a comprehensive 5-year BMP monitoring study funded by the US EPA's NPS 319-Grant Program. This study will quantify the water quality parameters associated with the use of selected BMPs on forest harvest operations within the piedmont region of North Carolina. The information learned from these studies will then be passed on to the rest of the forestry community.

Ongoing Training: Training sessions are carried out in the field and classroom that teach loggers, timber buyers, landowners, etc. the elements of "good forestry". The DFR partners with the North Carolina Forestry Association (NCFA) to conduct "ProLogger" classes throughout the year. The introductory ProLogger program and several of the continuing education seminars focus on the importance of water quality and protecting water quality during forestry operations. Another example of DFR outreach dedicated to protecting water quality is the numerous local presentations given by our Rangers and Foresters. The DFR's Water Quality and Wetlands Staff Forester, Staff Hydrologist and members of the DFR NPS Unit often assist our local personnel. The DFR's 2003-2004 Total Accomplishment Report indicated that 62 DFR water quality programs were delivered statewide with at least 1,487 people in attendance.

Chapter 29 of the draft 2005 Cape Fear River Basin Plan highlights many of forestry's other efforts aimed at protecting water quality in the Cape Fear River Basin/Jordan Lake Watershed.

OTHER IDEAS AT PROTECTING JORDAN LAKE'S WATER (BESIDES NOTIFICATION)

The DFR **does not** believe a mandatory pre-harvest or harvest notification system for forestry would bring about enough overall improvements to the Jordan Lake Watershed to justify the costs of its implementation. That being said, we recognize that all land use components within a watershed should do what they can to positively affect our state's water. Indeed, the DWQ public meeting announcement for the Jordan Lake Watershed Strategy reads "State law requires that responsibility for achieving the nutrient reductions be spread out equally among the various point and non-point sources in the watershed." The DFR does not believe a mandatory notification system and all the costs associated with it is the best way to proceed, but we as an agency do have some ideas on additional water quality efforts in the Jordan Lake Watershed that could be implemented by forestry. Most (but not all) of these efforts could be achieved through the use of our existing water quality program resources. Some of these ideas include:

Targeted Aerial Surveys: As mandated by the 1998 DFR Water Quality Action Plan, DFR personnel already attempt to conduct aerial surveys within their districts on a routine basis to locate active logging sites. Once located, our personnel quickly visit the sites to conduct FPG inspections. Our Hillsborough Water Quality Forester could coordinate these water quality monitoring flights in a way that ensured the Jordan Lake Watershed region was sufficiently surveyed. This closer attention to this specific watershed would likely increase our on-the-ground water quality examinations of forestry activities operating there.

FPG Self-Audit Program: The DFR already has in place the structure for a "Self-Audit" style program for forestry operations. This program does not take the place of DFR personnel conducting FPG exams. Rather, it allows for a (non-DFR) registered forester to proactively review their harvest site and determine whether or not they believe it is in compliance with the FPGs. Paperwork is then turned in to a local DFR office. If the paperwork indicates no FPG violations, the DFR still may examine the site. If the paperwork indicates an FPG violation may be present, DFR personnel will review the site for FPG compliance and outline the required corrective actions if necessary. This program was introduced in 2003, but more training and emphasis on it is needed statewide. The Jordan Lake Watershed could be an excellent region to initially concentrate this training.

Forest Industry Certification: The forestry industry's Sustainable Forestry Initiative (SFI) is a national agreement among signees to "practice good forestry" and meet certain set standards, including the required use of BMPs - note that this requirement is superior to North Carolina's voluntary application of BMPs. The DFR participates with the SFI State Committee and spends a significant amount of time discussing how the forestry community can protect water quality. The DFR (and DWQ) could work with the SFI State Committee to see if there were any action items specific to the Jordan Lake Watershed that could be implemented to ensure that forestry's already low impacts remain low.

Enhanced Information & Education: The Division's Forestry NPS Unit has been very successful at creating effective, field-friendly brochures for use by the forestry community. Another possible outreach effort could involve a handout specifically aimed at forestry operations in the Jordan Lake Watershed. Such a publication could be distributed at County Ranger offices, County Extension Offices, locations where individuals picked up burning permits, inserted into landowner management plans written by DFR personnel, etc. Funding for the creation/printing of such a publication would have to be explored.

Local Stakeholders: A Local Area Committee (LAC) could be formed using our County Rangers and Foresters that already service the counties within the Jordan Lake Watershed. This group could meet on a regular basis and cooperate to ensure that (1.) They fully understand the Jordan Lake Nutrient Management Strategy and its goals and (2.) Ensure that they conduct the necessary water quality outreach efforts to the area's loggers and landowners. This group would not necessarily take on additional regulatory powers, but would enforce the current FPGs on water quality site exams just like DFR personnel have done since 1990. The primary goal of the LAC would be to raise an even higher awareness of forestry's water quality issues throughout these particular sub-watersheds. They would work as a committee to ensure that forestry's already low impacts to this watershed remained low. A DFR Urban Watershed Forester/Specialist (see below for details) would ideally coordinate such a LAC.

Watershed Specific Personnel: The DFR currently has an Urban Watershed Forester/Specialist position already approved but not funded. The Division has responded to the most recent US EPA NPS 319 Grant Program Request for Proposal to obtain monies to fund this position. The intent is to commit this position to the Jordan Lake Watershed to support "enhanced monitoring" of forestry operations. This targeted attention could help strengthen DWQ's restoration strategy in that region. One example of outreach efforts would be to coordinate the proposed LAC outlined in the paragraph above.

SUMMARY

The DFR does not believe a mandatory pre-harvest or harvest notification system is necessary nor the most cost-effective way to ensure that forestry's already low impacts to the Jordan Lake Watershed remain low. We do, however, believe that the forestry community can play a supporting role in helping to achieve water quality improvement in this impaired watershed. We respectfully ask that DWQ review the proposals above and **work with** the DFR and the forestry community rather than simply move toward regulation. We also request that the DWQ engage the DFR earlier in the process when it comes to future development of proposed rulemaking that affects forestry.

We are dedicated to maintaining excellent water quality in and around our forests, and we look forward to partnering with you in the Jordan Lake Watershed. Please contact me at 919-553-6178 Ext. 230 if you have questions regarding our comments.

Sincerely,



Sean Brogan

DFR Water Quality/Wetlands Staff Forester
NC RF #1362, SAF CF #2755

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