NORTH CAROLINA HOME BUILDERS ASSOCIATION

10 September 2007

Dr. David Moreau, Chairman
NC Environmental Management Commission
1617 Mail Service Center
Raleigh, NC 27699-1617

Mr. Rich Gannon
NC DENR – Division of Water Quality
Planning Section
1617 Mail Service Center
Raleigh, NC 27699-1617

Dear Dr. Moreau and Mr. Gannon,

On behalf of the North Carolina Home Builders Association, I appreciate the opportunity to comment on the proposed Jordan Water Supply Nutrient Strategy as published in Volume 21, Issue 24 of the North Carolina Register.

As you know, various stakeholders have raised concerns over the validity of the nutrient response model since 2003. The selected means of monitoring Jordan Reservoir using the chlorophyll a testing procedure is flawed and biased toward failure of the 40 ug/L limit imposed by the rule. The Tetra Tech report commissioned by DWQ admits that the test is extremely imprecise, and the EPA study quoted in that report would seem to indicate that the test has a high bias of as much as 100%.

Division of Water Quality staff has already estimated that the rule will cost more than $900,000,000 over the next five years, but true costs will likely be at least twice that and costs will extend for many years beyond this arbitrary point in time. The concerns raised during the 2006 stakeholder process and presented at the public hearings held in July 2007, indicate that much needs to be done to ensure that the regulations imposed will truly protect the reservoir and do so without damaging the region's economy.

Please carefully consider the following comments:

15A NCAC 02B .0262 Jordan Water Supply Nutrient Strategy Watershed Nutrient Reduction Goals

- The nutrient control requirements for new development are excessive and will substantially increase the cost of homes, particularly for low and moderate income homebuyers. The flawed model upon which the rules are based does not account for the proper implementation water supply watershed protection program requirements, NPDES Phase II requirements, existing state and local sedimentation/erosion control

requirements, or any other local government programs established for nutrient or stormwater control, or both. In fact, the proposed Jordan Lake rules PUNISH local governments that are currently implementing programs which exceed existing water quality rules and requirements by giving them no credit for any nutrient reductions in place after the 2001 baseline period.

- Required percent reductions are different for each watershed. The problem for non-point sources is that the models are simply not accurate enough (probability 50-200% range) to determine what actually constitutes a qualifying reduction. All of these reductions, and certainly the 5 percent reductions, are well within the uncertainty range of the baseline model. Therefore, for non-point sources, monitoring requirements are subjective and really can not be differentiated from the modeled baseline values.
- Air emissions falling on the Jordan Reservoir are an important source of nitrogen. As an example, according to recent reports, as much as 30% of the nitrogen enrichment in the Chesapeake Bay comes from air sources, with the largest sources being onroad and offroad vehicles, locomotives and marine engines, and electric power plants. Nitrogen from each of these emission sources will be significantly reduced due to a number of new federal rules now being implemented. Those emissions reductions are not cheap. They will come about utilizing taxpayer money and all the environmental benefits expected from those expenditures must similarly be taken into account in the Jordan Reservoir nutrient reduction strategy if it is to reflect the true reality of nitrogen inputs in the reservoir. Airborne deposition of nutrients can take place throughout the entire Jordan Reservoir watershed, not just the water surface of the reservoir itself. As much as three quarters of the air deposition likely takes place on land with a significant portion then carried by water flows into the reservoir. Also of note is that the airshed for the Jordan Reservoir may be hundreds of thousands of square miles in size, much larger than the size of the watershed. Air emissions from the Midwest and from other eastern states contribute to the nutrient over-enrichment. All of the vehicle and power plant emissions from those states in the airshed as well as emissions from within the watershed will be steadily reduced under the new federal rules and will therefore be decreasing their nutrient contributions over time to the reservoir. Because the environmental benefits that will result from these EPA rules were not taken into account during the modeling for the nutrient reduction strategy, home builders and other stakeholders will be saddled with unnecessarily large reductions for nitrogen.

15A NCAC 2B.0265 Jordan Water Supply Nutrient Strategy: Stormwater Management for New Development

- The rules and required fiscal analysis contains no cost estimate for lost development opportunity (i.e. lost use of land), only direct cost of the land required for the additional BMPs. However, other sections of the rules pertaining to agriculture and timber harvesting do allow for lost opportunity recovery.
- A 28-acre single family detached subdivision in the Haw River arm containing quarter-acre lots would require an additional 11 acres of land (including the 50 foot buffers) to

accommodate the BMP series necessary to meet the nitrogen loading limit. Those 11 acres represent 44 lots of lost opportunity. Lost opportunity extends beyond land cost and includes jobs and income, sales and property tax base. At least some of this loss should have been factored into the fiscal note.

- DWQ estimates that 646 additional BMPs (Page 35, Table 4.3 of the June 11, 2007 Fiscal Note) would be required to be built in the watershed over the 2.5 year "new development" implementation period (starting in 2011) based on projected growth rates. However, by applying DWQ's own growth estimates, the next five year period, which will not contain 2.5 years of inactive enforcement, should require twice the number of BMPs, or1292 additional BMPs to be built. Each subsequent five year capital cost would be at least double the estimate for the first five years, but none of this is accounted for in the total cost summary.
- The NCDNR estimate of capital expenditures only allowed $1314 dollars for each of the 646 additional BMPs built during the first five years ($848,000 total capital expenditures divided by 646). However, the Fiscal Note shows that the average per BMP capital cost based on a proportional estimate of the BMPs likely to be used (pages 42-43, Table 4.9 of the Fiscal report) is $44,953 per BMP. Total direct capital costs would appear to be 646 times this value, or over $29,000,000 for the first five years. Possibly, the State capital cost estimate for the BMPs has been amortized over 30 years (this is unclear in the Fiscal Note), but even then, a $1314 per BMP allotment over each five year period will not come close to recovering the principle outlay of $44,913 per BMP within 30 years, let alone interest payments. Also, while amortization of capital costs postpones payment, it does not reduce the total costs incurred. Amortization would cause costs to increase drastically for each five year period over the next 30 years, as continuing payments for old BMPs cumulatively accrue on top of new BMP construction. DWQ must explain why the cost per BMP allotted for this rule is so far below the standard estimates in Table 4.9 of the Fiscal Note.
- Since this initial five years really only contains costs for 2.5 years and 646 BMPs, the capital costs for each subsequent five years would be about twice as high for 1292 BMPs, or about $58,000,000 for stormwater control for new development, and this still would not include lost opportunity costs. Even fractional values of the lost opportunity costs could easily add tens of millions of dollars to this estimate.
- (1) (a) No exemption is provided for development projects that commenced prior to the local government effective date of the rules. Projects that are "exempt" from Rule .0265 are subject to development requirements under Rule .0266 Stormwater Management for Existing Development. In Rule .0266, the EMC mandates that local governments, in their *(unauthorized)* offsetting program, account for development which occurred between the baseline period and the local program effective date. Developers and landowners can not anticipate the EMC's actions years before they occur. Consideration must be given for projects that have been applied for and been permitted in good faith reliance on the local and state regulations in place at the time.
- (3) There is no authority for the EMC to mandate that local governments create and implement stormwater management programs. Specifically, under G.S. 143-214.7, the

EMC is authorized to develop a model stormwater management program that may be implemented by units of local government. Local governments may choose not to implement the stormwater management requirements.

- (3)(a)(i) The nitrogen and phosphorus loading targets are based upon a flawed model. It is irresponsible for the Environmental Management Commission to force compliance with rules based upon a flawed model and fabricated results. Concerns raised by stakeholders in 2004 and 2005 regarding the model were never addressed. The model is based upon unreliable nutrient and chlorophyll *a* data. The flawed and inconclusive Jordan Lake Nutrient Response Model does not justify the nutrient targets or the requirements forced upon landowners and local governments.
- (3)(a)(ii) The EMC is not authorized to require compliance with the density based provisions of the Water Supply Watershed Protection Program (WSWP) and also require nutrient controls. If the EMC is using WSWP authority to regulate development, then it must comply with only those regulations. The EMC must also show that the existing WSWP requirements are not working!
- (3)(a)(iv) Expansion to single-family residences should be exempt from the nutrient loading requirements. If the EMC is ignoring the 30 percent deposition of Nitrogen from atmospheric sources, they can not justify excessive requirements and fees for minor, inconsequential additions of imperviousness that have no effect on nutrient loading in the reservoir.
- (3)(a)(vi) Local governments do not have the statutory authority to create offsetting programs. Local governments do not have statutory authority to collect the fees to establish a local nutrient offsetting program.
- (4)(e) It is impossible for local governments to accurately track nitrogen loading within their jurisdiction, since a significant portion of the loading (as much as 30 percent) is from atmospheric sources.
- (5)(a) The EMC can not justify requiring additional stormwater measures until it proves that the existing stormwater management measures (Water Supply Watershed Protection, NPDES Phase II, local government requirements) are not adequately protecting water quality.
- (5)(a) How can the EMC require local governments to submit technical information demonstrating the adequacy of the "alternative" requirements when the EMC has failed to provide any clear, substantiated data showing the adequacy (or inadequacy) of existing state programs or of programs, like NPDES Phase II, that have not been fully implemented? It is not local governments' responsibility to evaluate the adequacy of state programs or of state program implementation.
- (5)(b) Local governments do not have the authority to require developers to pay to "supersize" buffers, ponds or any other stormwater management device in order to reduce nitrogen coming from existing, off-site sources. Local governments can not and will not pay homeowner's associations to maintain the oversized devices. Neither local governments nor homeowner's associations can bear the liability that goes with "supersize" devices.

15A NCAC 2B.0266 Jordan Water Supply Nutrient Strategy: Stormwater Management for Existing Development

- The nutrient reduction requirements for existing development are not feasible! What logic was used in requiring local governments to complete a feasibility study AFTER the rules go into effect? Neither local governments nor the private sector can be expected to accommodate nutrient loads that occurred years ahead of the technology necessary to control runoff.
- (1)(a) and (3)(a)(i) These provisions are inconsistent with Rule .0265 in that the EMC is attempting to force local governments to comply with the provisions of these rules before the effective date. Rule .0265 exempts "existing development", including projects that are initiated and/or completed after the baseline period, but prior to the proposed effective date. The EMC then mandates, under this Rule, that local governments account for in their *(unauthorized)* offsetting program that development which occurred between the baseline period and the local program effective date. In other words, ALL DEVELOPMENT THAT OCCURRED AFTER THE ARBITRARY 2001 BASELINE PERIOD IS SUBJECT TO THE PROVISIONS OF THIS RULE. The EMC does not have the authority to require retroactive development requirements.
- (3)(iv) Local governments do not have the authority to require developers to pay to "supersize" buffers, ponds or any other stormwater management device in order to reduce nitrogen coming from existing, off-site sources. Local governments can not and will not pay homeowner's associations to maintain the oversized devices. Neither local governments nor homeowner's associations can bear the liability that goes with "supersize" devices.
- (5) How can the EMC require local governments to submit technical information demonstrating the adequacy of the "alternative" requirements when the EMC has failed to provide any clear, substantiated data showing the adequacy (or inadequacy) of existing state programs or of programs, like NPDES Phase II, that have not been fully implemented? It is not local governments' responsibility to evaluate the adequacy of state programs or of state program implementation.

15A NCAC 2B.0267 Jordan Water Supply Nutrient Strategy: Protection of Existing Riparian Buffers

- (1) The EMC has failed to prove that stream buffers currently required under the Water Supply Watershed Protection program, NPDES Phase II and other state and local programs are not functioning as mandated.
- (1) N.C. Gen. Stat. §143-214.23 states that local governments may request that responsibility for the implementation and enforcement of the State's riparian buffer protection requirements be delegated by the EMC. To that end, local governments that have the riparian buffer protection requirements delegated <u>may</u> adopt ordinances and regulations necessary to establish and enforce those requirements. <u>The EMC does not have the authority to require local governments to enforce buffer requirements</u>.
- (1) As affirmed by the NC Court of Appeals in Hashemi v Town of Cary, [(04-128) 09/20/2005], N.C. Gen. Stat. §143-214.23(a) does not allow local governments to impose

greater riparian buffer restrictions than those required by the State. As such, local governments do not have the authority to implement more stringent riparian buffer requirements in the Jordan Lake Watershed.

- (2)(r) Define "dynamic equilibrium".
- (2)(r) The definition of 'stream restoration' includes a definition of stream. Does this definition differ from any existing definition? Why is 'stream' not defined on its own?
- (2)(u) Does the definition of temporary road apply to temporary roads used for any other purpose?
- (4) N.C. Gen. Stat. §143-214.23 states that local governments may request that responsibility for the implementation and enforcement of the State's riparian buffer protection requirements be delegated by the EMC. To that end, local governments that have the riparian buffer protection requirements delegated may adopt ordinances and regulations necessary to establish and enforce those requirements. The EMC does not have the authority to require local governments to enforce buffer requirements.
- (4)(a)(iii) The term 'other more accurate maps' is ambiguous. What maps does this refer to? Since the EMC does not have the authority to force local governments to implement riparian buffer protection requirements, the EMC can not require local governments to produce stream maps. Even if a local government creates stream maps for their jurisdiction, these can not be used by the state to implement the EMC's riparian buffer requirements.
- (4)(b) Reference is made to a document on the Division of Water Quality website entitled "Identification Methods for the Origins of Intermittent and Perennial Streams". As stated in Section 1.8(b) of Session Law 1998-221, neither the Commission nor the Department may develop or use any guidance document or other statement that directly or substantially affects the procedural or substantive rights or duties of any person not employed by the Commission or the Department unless those documents are set out in rules adopted in accordance with the provisions of Article 2A of Chapter 150B of the General Statutes. If the referenced document has not been properly adopted through the rulemaking process, it can not be used to make a stream determination that would require riparian buffers.
- (5) The EMC does not have the authority to require local governments to implement riparian buffer requirements. Thus, local governments can not be forced to make on-site determinations unless they have voluntarily assumed responsibility for the riparian buffer program.
- (8) The requirements for maintaining diffuse flow are equal to "buffering the buffers". This requirement is unjustly applied. Under the proposed 15A NCAC 2B .0264(7), agricultural uses may use BMPs and combinations of BMPs to achieve nutrient removal. One of the approved methods is a 20-foot forested buffer strip and nutrient management. Agricultural uses are not required to maintain diffuse flow through this buffer. In limited circumstances, there may be a need to maintain diffuse flow based upon topography and other site factors. There is no scientific evidence to prove that every buffer in the Jordan Lake watershed needs additional diffuse flow measures. Even though the Division of Water Quality has, without authority and without rulemaking, been implementing diffuse

flow requirements in the Neuse and Tar-Pamlico River Basins, the EMC is acting arbitrarily in requiring diffuse flow for all development projects, but not for any other land uses requiring buffers.

- (11)(a) The requirements for a determination of "No Practical Alternatives" allow the local government or the Director to review the entire project in order to make a finding of fact. Local governments that voluntarily implement the riparian buffer requirements and the Director are ill equipped to determine whether the "project purpose can be practically accomplished in a manner that would better minimize disturbance" and whether the use "can be practically reduced in size or density, reconfigured or redesigned to better minimize disturbance". Further, the requirements pertain only to riparian buffers. If such determinations are to be made, local governments and the Director are only justified in making the determination as it pertains to the riparian buffer – not the entire project. The EMC does not define "practically accomplished", which will surely result in arbitrary and capricious application.
- (11)(c) What sort of conditions can the local government or the Director attach to the Authorization Certificate? This provision is arbitrary and could result in what amounts to an additional permit! The EMC must specify under what circumstances additional conditions may be imposed and must specifically state the conditions that may be added.
- (12) Only local governments that voluntarily implement the riparian buffer requirements may grant minor variances. Local governments can not be forced to grant variances if they choose not to implement the State's riparian buffer requirements.
- (12)(a)(i) This provision tasks DENR and local governments to make judgments as to whether an applicant for a variance can "secure a reasonable return or make reasonable use of the property". The terms "reasonable return" and "reasonable use" are ambiguous and the EMC provides no standards by which "reasonable" is determined. As it stands, this provision allows DENR and local governments absolute and arbitrary discretion to determine what constitutes a "reasonable" return and/or "reasonable" use of property.
- (12)(a)(v) Variances should be granted based on the specific and unique characteristics of the land and not on the purchase date of the property. If a previous landowner would have been entitled to a variance, then any subsequent purchaser of that property is likewise entitled to the variance. The EMC has no statutory authority to bar a landowner from securing a variance based on the land purchase date.
- (12)(b) Variances must not only meet "hardship" and "reasonable use" tests, the proposed rules also provide that a variance cannot be granted unless it "is in harmony with the general purpose and intent of the State's riparian buffer requirements and preserves its spirit" and unless "the public safety and welfare have been assured, water quality has been protected, and substantial justice has been done". With the possible exception of "water quality" and "public safety", these provisions are ambiguous. Who decides which property uses will or will not "preserve substantial justice" or whether such uses comport with the EMC's vision of what constitutes the "spirit" of the State's riparian buffer requirements? By what statutory authority does the EMC use the preservation of "substantial justice" as a factor in protecting water quality?

- (17)(b) The EMC does not have the authority to require local governments to enforce the State's riparian buffer requirements. Thus, local governments do not have to submit their ordinances to the Division of Water Quality for review.
- (17)(b) Reference is made to a document on the Division of Water Quality website entitled "Identification Methods for the Origins of Intermittent and Perennial Streams". As stated in Section 1.8(b) of Session Law 1998-221, neither the Commission nor the Department may develop or use any guidance document or other statement that directly or substantially affects the procedural or substantive rights or duties of any person not employed by the Commission or the Department unless those documents are set out in rules adopted in accordance with the provisions of Article 2A of Chapter 150B of the General Statutes. If the referenced document has not been properly adopted through the rulemaking process, it can not be used by DENR or by local governments who voluntarily implement the State's riparian buffer requirements to make a stream determinations.

15A NCAC 2B .0269 Jordan Water Supply Nutrient Strategy: Mitigation for Riparian Buffers

- (1) N.C. Gen. Stat. §143-214.23 states that local governments may request that responsibility for the implementation and enforcement of the State's riparian buffer protection requirements be delegated by the EMC. To that end, local governments that have the riparian buffer protection requirements delegated may adopt a riparian buffer mitigation program. There is no statutory authority for the EMC to require local governments that DO implement the State's riparian buffer requirements to ALSO implement a local riparian buffer mitigation program. The EMC does not have the authority to require local governments to enforce the State's riparian buffer requirements or to implement a local mitigation program.
- (3)(b) Neither Session Law 1999-448, nor NC Gen. Stat. §143-214.23, nor any other statute gives the EMC the authority to apply multipliers to riparian buffer impacts to determine the area of mitigation. There is no authority for the EMC to arbitrarily expand the mitigation area in order to extort more money from developers and landowners.
- (4) Neither Session Law 1999-448, nor NC Gen. Stat. §143-214.23, nor any other statute gives the EMC the authority to specify the distance from the impact in which mitigation must occur. Both NC Gen. Stat. §143-214.20 and §143-214.21 state that donations of real property or moneys shall be used in the same river basin as the buffer that was lost. The EMC may suggest that mitigation take place relative to the riparian buffer impact, but does not have the authority to require that mitigation be located in the same watershed, much less a specific distance from the reservoir.
- (6) NC General Statutes authorize the use of private mitigation banks. The EMC should add a provision (d) in this section that allows the purchase of credits from an approved private mitigation bank.
- (7) The use of appraised land value does not reflect the "value" of land donated for mitigation purposes. Land placed in permanent conservation easements will discharge only the baseline amount of nutrients into perpetuity and meets avoidance and

minimization goals. The mitigation formula must reflect this benefit and those required to mitigate must get credit for removing land from production and permanently reducing the nutrient load.

- (8)(a)(ii) Neither Session Law 1999-448, nor NC Gen. Stat. §143-214.23, nor any other statute gives the EMC the authority to apply multipliers to riparian buffer impacts to determine the area of restoration.

15A NCAC 2B .0269 Jordan Water Supply Nutrient Strategy: Options for Offsetting Nutrient Loads

- (1) The EMC must specify that sellers that received any state or federal funds to establish or maintain certain land uses or buffers that produce excess load reduction, can not sell those credits to buyers.
- (2) The criteria established by the EMC must apply to ALL sellers, including the Ecosystem Enhancement Program.

15A NCAC 2B .0272 Riparian Buffer Mitigation Fees

- (1)(a) The EMC is attempting to increase fees paid to the Ecosystem Enhancement Program on an annual basis using the Civil Works Construction Cost Index System. No statutory authority exists for an "automatic" fee increase.

Thank you again for the opportunity to comment. If you have any questions regarding our position, please do not hesitate to contact me.

Sincerely,

Lisa D. Martin, AICP
Director of Regulatory Affairs