TREBIC
Triad Real Estate and Building Industry Coalition
115 S. Westgate Drive • PO Box 41135 • Greensboro, NC 27404 • 336-855-1453 • Fax 336-855-9488

Memorandum

To: Forrest Westall, Sr.
Dickson Phillips
Tom Ellis
Kevin Martin
Stephen Smith

CC: Rich Gannon, Jason Robinson, DWQ

From: Paula Sloneker, Regulatory Affairs Director, TREBIC

Date: 11/6/2007

Re: Jordan Lake Nutrient Rules

The Triad Real Estate and Building Industry Coalition is an organization of trade associations and businesses formed in 1999 to take collaborative action in issues of concern to their broad membership engaged in real estate sales, building, development, finance, management and leasing. Efforts are directed at promoting a healthy real estate industry by providing direct input into the political, legislative, and administrative public policies that encourages regional economic growth, job creation, and a healthy real estate industry. TREBIC has significant concerns regarding the economic impact and other ramifications of the proposed Jordan Lake Nutrient Strategy Rules. For several months we have been working closely with the Piedmont Triad Council of Governments (Region G), economic development agencies, and local governments in the Haw River watershed to determine the true impact of the Jordan Lake Rules on local government, the development community and the local economy in general.

The Jordan Lake Rules will have a direct and significant impact on the real estate and building industry. In their current form, these proposed rules are the strictest watershed rules to date in North Carolina with the inclusion of measures that will require retrofitting of existing development, stormwater management plan/program development in addition to the newly implemented NPDES Phase II stormwater.

In developing the rules, DWQ divided the Jordan Lake Watershed into three arms (ie., Upper New Hope arm, Lower New Hope arm, and the Haw River arm) for the purpose of applying different load reduction targets for each. The Upper and Lower New Hope Arms behave differently from the Haw River Arm with vast differences in flow, retention time, geographic location and water quality impact on the storage area of the lake. However, apart from different target load reductions, DWQ applied rule requirements universally across the watershed with no consideration or acknowledgement to differences in the Haw River and New Hope River watersheds. These stringent and excessive requirements are unnecessary for the Haw River sub watershed.

In the Jordan Lake Nutrient Strategy Fiscal Analysis (June 10, 2007), DENR estimates New Development costs to be $1,113,000.00 over the first five years for the ***entire*** Jordan Lake Watershed (New Hope and Haw River arms). It is impossible to separate out the costs associated with the Riparian Buffer Protection

and Mitigation Rules when calculating the true costs to New Development. Even if the DWQ estimated costs for Riparian Buffer Protection was entirely assigned to New Development[1], the DWQ cost estimate of $13,963,000 is significantly understated.

*The **true cost** of the Jordan Lake Nutrient Strategy Rules to New Development in Guilford and Alamance County alone (includes commercial and residential development, buffer protection and lost opportunity costs) in excess of NPDES Phase II requirements is approximately **$22,522,358 PER YEAR**.[2] (See Attachment A)*

The unprecedented rule requirement for all previously developed areas to retrofit existing infrastructure for pollutant removal is exceedingly costly and places an undue burden on local governments. All local governments (cities and counties) in the watershed will be required to install retrofit storm water controls on existing developed lands. *Further, the DWQ estimate of $403 million cost to retrofit existing **development only includes one year of actually buying land and installing systems**.*

The cost of compliance for all affected sectors will be far greater than the DWQ estimate *of approximately $750 Billion* in the fiscal analysis. Overall, the Jordan Lake Nutrient Management Strategy is significantly more stringent and costly than the Neuse and the Tar-Pamlico Nutrient Management Strategy rules. As written, the rules will drive development out of the region, drive up the cost of homes and property, limit affordable housing opportunities, increase sprawl and place the region at a considerable economic disadvantage.

We urge the EMC to hold DWQ accountable for the many questionable assumptions used to generate the Jordan Lake Fiscal Analysis document and then consider the rules under an accurate estimate of costs.

Attachment B details a comparison chart of the Jordan Lake Rules, Neuse Rules, the Tar-Pamlico rules, and the recent NPDES Stormwater Phase II rules. A copy of the Jordan Lake Rules is provided with strikethrough text (eg. ~~strikethrough~~) through all measures that are NOT reflected in the Neuse and Tar-Pamlico Rules.

Concerns and comments on the components of the Proposed Jordan Reservoir Water Supply Nutrient Reduction Strategy follow:

General Comments:

***Multiple Stormwater Management Rules**:*

The precedent for the stormwater rules in a nutrient strategy has been one umbrella rule to address all parties. Three separate Stormwater Management Rules are proposed for the Jordan Lake Rules in addition to the NPDES Phase II rules newly implemented among the majority of Local governments in the watershed.

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[1] DWQ cost estimates for Riparian Buffer Protection and Mitigation estimates $12,850,000 in capital costs to ***all*** property owners (includes opportunity costs of unharvested timber, and mitigation costs for developers and NCDOT.

[2] Billups, Jim. (2007). *Narrative And Calculations: Costs Impacts For New Development From The Proposed Jordan Lake Nutrient Management Rules In Guilford And Alamance Counties In The Haw River Arm Of The Jordan Lake Watershed.* Anderson and Associates, Greensboro, NC. Submitted to DWQ September 14, 2007.

- Stormwater Management Existing Development
- Stormwater Management New Development
- Stormwater Management State and Federal Agencies

In the Jordan Lake Rules, local government, the state, NCDOT, and the development community are faced with excessively stringent rules to address nutrient loading in the watershed. The requirements far exceed any previous rules and requirements for the Neuse River and the Tar Pamlico Nutrient Management Strategy. Clearly, G.S. 143-214.7 (a) expresses the intent and purpose of the stormwater management rule that stormwater planning AND application of the plan shall be applied evenhandedly through the state.

> *G.S. 143-214.7 (a) Policy, Purpose and Intent. – The Commission shall undertake a continuing planning process to develop and adopt a **statewide plan** with regard to establishing and enforcing stormwater rules for the purpose of protecting the surface waters of the State….. The plan shall be **applied evenhandedly** throughout the State to address the State's water quality needs.*

Stormwater Management plans and program requirements for new development rules and existing development rules in addition to NPDES stormwater management plans is a duplication of effort and a restating of the NPDES Phase II rule. NPDES Phase II is a federally mandated program to address non-point source pollutant loading and is not yet fully implemented in over 17 governments in the Jordan Lake Watershed.

Additionally, the NPDES Phase II rule (15A NCAC 2H .0126) for stormwater management clearly states under (10) Post-construction stormwater management requirements:

> *(n) For programs with development/redevelopment draining to Nutrient Sensitive Waters, the following additional requirements must be incorporated into their program.*
>
> > *(i) A local ordinance shall be developed, adopted and implemented to ensure that the best management practice for reducing nutrient loading is selected while still meeting the requirements of Sub-Item (10)(h) of this Rule. Where a Department approved NSW Urban Stormwater Management Program is in place, the provisions of that program fulfill this requirement; and*
> >
> > *(ii) A nutrient application (both inorganic fertilizer and organic nutrients) management program shall be developed and included in the stormwater management program.*
>
> *(o) The Department may require more stringent stormwater management measures on a case-by-case basis where it is determined that additional measures are required to protect water quality and maintain existing and anticipated uses of these waters.*

The NPDES Stormwater Rule (10) Post Construction Stormwater Management (o) does call for additional stormwater measures if, on a case by case basis, the department makes a determination of need, however, Phase II rules are only now being implemented and the Nutrient Sensitive Watershed designation has not yet been imposed under this rule. It is excessive and unjustified to further designate the entire watershed as a critical water supply watershed (CWSW) until such time as it is apparent both the Phase II rules and the Nutrient Management Strategy is insufficient.

The science behind the Jordan Lake Rule:

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.

Comments on the individual rules:

Watershed Nutrient Reduction Goals (15A NCAC 02B .0262)

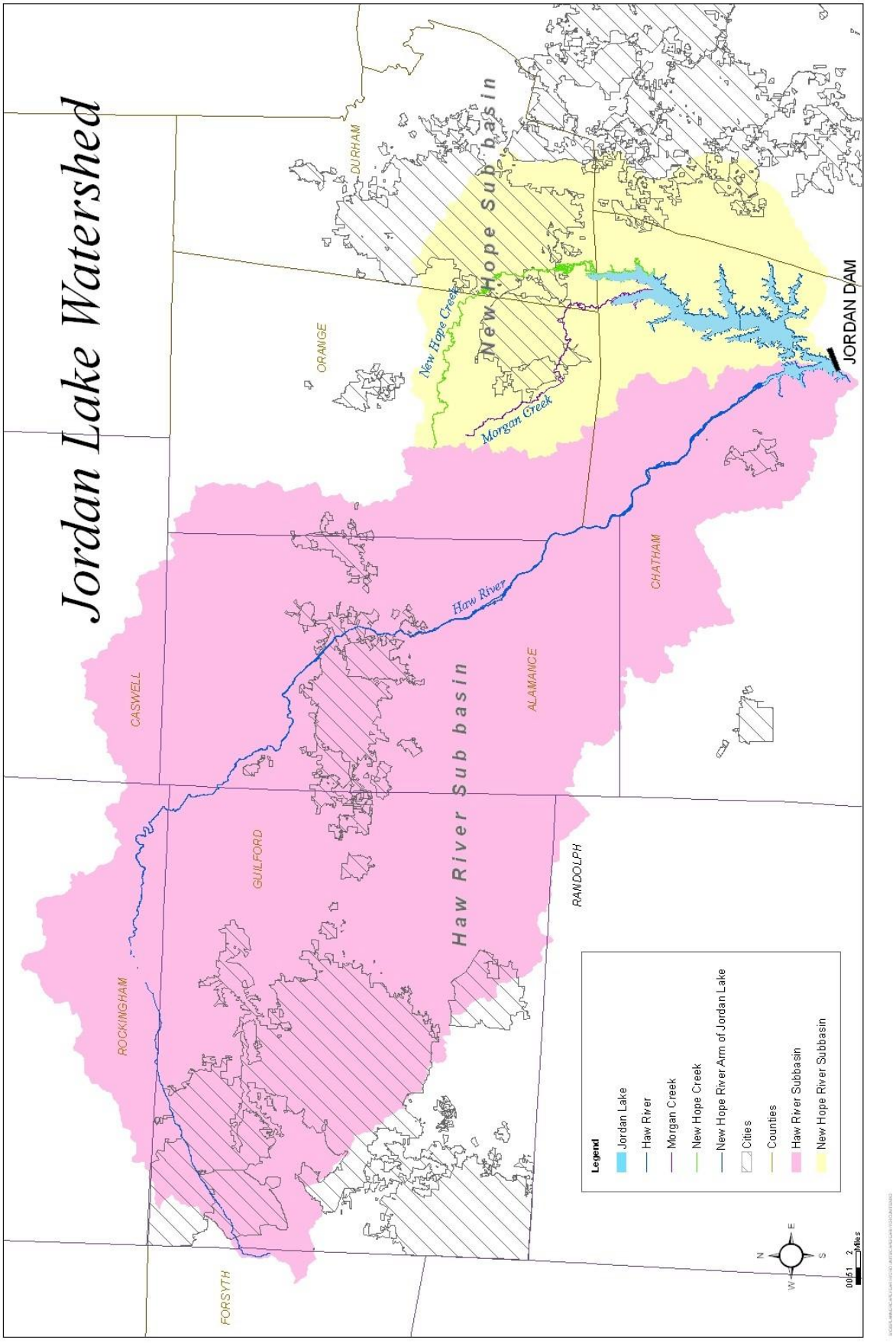
The Haw River watershed and the New Hope watershed have significant differences that should be reflected through out the rule setting and not just in the target load reductions. In addition to the acceptable supplemental designation of Nutrient Sensitive Waters for all waters in the Jordan Lake Watershed, the rules impose an additional designation of entire Jordan Lake basin as a "critical water supply watershed" under GS 143.214.5.

That designation will trigger a host of increased regulation now and in the future that will only further limit the potential economic growth opportunity for this region. Specifically, water and wastewater treatment plant permits will be further scrutinized and any expansion requests will be far more difficult as we are approaching the limits of technology for these facilities. In addition, potential land-use density restrictions may be further regulated in the future. We believe this designation is unwarranted and the potential consequences to our region far outweigh any benefits to be gained.

Such a designation is warranted only when the geographic area is contributing significantly to a water supply. The Haw River Arm of the Jordan Lake Reservoir is located 4 miles north of the Jordan dam. Haw River water has a retention time in the lake of 4-5 days and comprises over 70% of the daily outflow at the dam.

In contrast, lake storage is in the Upper and Lower New Hope arm watershed, which has an average hydraulic retention time of 418 days and travels over 17 miles from point of entrance into the lake to the dam. All water supply intakes and NPDES Discharge outfalls are located within this 17-mile long storage area.

The DWQ may have justification for designation of the New Hope Watershed as a critical water supply watershed, but there is no justification for the CWSW designation of the Haw River Watershed. The additional more stringent CWSW designation is unnecessary since the Nutrient Sensitive Water designation covers the need to reduce nutrients in the Haw River sub watershed. [See map of Jordan Lake Watershed on the next page.]


Jordan Lake Watershed
New Hope Sub basin
Haw River Sub basin
JORDAN DAM
New Hope Creek
Morgan Creek
Haw River
DURHAM
ORANGE
CHATHAM
ALAMANCE
RANDOLPH
CASWELL
GUILFORD
ROCKINGHAM
FORSYTH
Legend
Jordan Lake
Haw River
Morgan Creek
New Hope Creek
New Hope River Arm of Jordan Lake
Cities
Counties
Haw River Subbasin
New Hope River Subbasin
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0 0.25 0.5 1 2 Miles

Stormwater Management for New Development (15A NCAC 2B.0265)

The pollutant reduction targets are not feasible under the New Development Rules and are a substantial disincentive for developers that will force economic development outside of the Haw River Arm region and the entire Jordan Lake Watershed.

Even with unlimited resources, the targets cannot be met. In the Fiscal Note, DWQ assigned target reduction levels, pollutant loading rates for various land uses, as well as credits or pollutant reduction rates for each type of BMP. Using these figures, it will be extremely difficult and costly for commercial/industrial development and non-sewered residential development to meet target reductions. In order to achieve the target reductions, new commercial/industrial development will be required to install a minimum of two BMPS which *might* reduce nutrient loading to the level allowing buy down of the remainder of the nutrient load.

The cost to the development community is significantly underestimated in the Fiscal Note. New development requirements include limits on density, target pollutant reduction levels, and increased BMPs installation, which will drive up the cost of homes and non residential buildings, increase sprawl and place our region at a significant economic disadvantage. Additionally, in the requirements for local government to retrofit existing development, it is suggested that local government restrict density and increase stormwater requirements on new development in order to generate credit and cover costs for existing development retrofits. Costs will be passed on the taxpayer and development community.

Stormwater Management for Existing Development (15A NCAC 2B.0266)

The 15A NCAC 02B .0104 rule outlining the *Considerations, Assigning, Implementing Water Supply Classifications* states that "Existing development is not subject to the requirements of these Rules." [3] *…With good reason*. Retrofitting existing development is extremely costly and has questionable effectiveness at best, of reducing nutrient loading to the lake from the Haw River. This unprecedented rule requirement for all previously developed areas to retrofit existing infrastructure for pollutant removal is exceedingly costly and places an undue burden on local governments. No such rule exists in the Neuse and Tar-Pam Nutrient Management Strategies. Unequivocally, this section of the rule should be eliminated in its entirety.

Watersheds and water bodies cut across multiple jurisdictions. City and County lines mean nothing to a waterbody. A local government's stormwater program and feasibility study does not address water quality at the watershed level and will do little to correct any water quality issues.

Other points under the Stormwater Management for Existing Development rule:

- Expansion of single family residences and minimal expansion to multi-family and non residential buildings should be exempt from the nutrient loading requirements. The DWQ cannot justify

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[3] 15A NCAC 02B .0104 CONSIDERATIONS/ASSIGNING/IMPLEMENTING WATER SUPPLY CLASSIFICATIONS
(b) All local governments that have land use authority within designated water supply watersheds shall adopt and enforce ordinances that at a minimum meet the requirements of G.S. 143-214.5 and this Subchapter
(q) Existing development is not subject to the requirements of these Rules.

excessive requirements and fees for minor, inconsequential additions of imperviousness that have no effect on nutrient loading in Jordan Lake.

- It is impossible for local governments to accurately track nitrogen loading within their jurisdiction, since a significant portion of the loading is from atmospheric sources.

- Section (5)(b): "Local governments that are required to reduce nutrient loading from existing development under Rule 15A NCAC 02B .0266 may require new development to achieve load reductions in excess of those required to meet the unit-area mass loading rate targets described in this Rule and credit the additional reductions toward the loading goals for existing developed areas."

  Given the already excessive costs for development under the new development rule, the discretion for local government to require excess treatment in new development is absurd. The development community could not bear this additional cost and is a strong disincentive to build in the region.

  Further, this discretion given to local government is excessive and could clearly be abused. Like any business, home builders need to know the full costs they must recover in order to decide the price of the product and if doing business makes sense. The above section opens the door to potential abuse because it allows governments to add more stringent load reductions to "selected" builders at any time in the permit process, including just before the permit is granted.

Protection of Existing Riparian Buffers (15A NCAC 2B.0267)

Local Government Riparian Buffer Program requirement:

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. As written in the Jordan Lake Rules, the DWQ is REQUIRING local government to develop and implement riparian buffer programs. Under the Neuse River Nutrient Management Rule and the Tar-Pam rule, local government may ***voluntarily*** choose to develop and implement a local buffer protection program. DWQ does not have the authority to require local government to develop and implement riparian buffer protection or mitigation programs.

Absent this local government request to voluntarily take on the program, it is DWQ's responsibility to implement the Riparian Buffer Protection program in the state of North Carolina, along with the mitigation program and mitigation fee collection. Language requiring local government to do so should be removed from the rule.

Diffuse Flow Requirements:

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 DWQ is acting arbitrarily in requiring diffuse flow for all development projects, but not for any other land uses requiring buffers.

"No Practical Alternatives" (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 DWQ does not define "practically accomplished", which will surely result in arbitrary and capricious application.

Mitigation for Riparian Buffers (15A NCAC 2B .0269)

There is no statutory authority for the DWQ to require local governments that choose to implement the State's riparian buffer requirements to ALSO implement a local riparian buffer mitigation program. The DWQ does not have the authority to ***require*** local governments to enforce the State's riparian buffer requirements or to implement a local mitigation program.

NC General Statutes authorize the use of private mitigation banks. The DWQ should add a provision (d) in this section that allows the purchase of credits from an approved private mitigation bank.

The use of appraised land value does not reflect the "value" of land donated for mitigation purposes. (Section 7)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.

Wastewater Discharge Requirements: (15A NCAC 02B .0270)

The Jordan Lake Nutrient Reduction strategy is excessive in its requirements for wastewater dischargers to lower phosphorus. Under the Jordan rules, local government in the Haw River sub watershed will be required to reduce phosphorus by 66% to .67mg/l. The Neuse Rules and the Tar-Pamlico Rules do not require phosphorus removal beyond the current ***statewide*** quarterly average total phosphorus limit of 2 mg/l. Assigning this significant reduction limit to the entire watershed is unnecessary and excessive given that in 5(d), 6(d), 7 (d), and 9(k), under the rule, the Director can review point source limits *and make them even lower*.

The Jordan Lake Rules will have a direct and significant negative impact on the real estate and building industry and our economy in general. We welcome the opportunity to work with DWQ and the EMC to substantially modify the rules and develop a nutrient management strategy for Jordan Lake that would improve water quality while not placing an undue financial and economic burden on our region.

We urge the EMC to carefully consider these issues and modify the rules accordingly.

- Modify the new development pollutant reduction targets to a more realistic, achievable level.
- Treat the Haw River sub watershed differently than the Upper and Lower New Hope sub watershed based on:
    - Reliable water quality data;
    - Minimal impact on water quality in the lake storage area;
    - Current development density;
    - Character, geography and flow of water through lake;
- Eliminate the existing development retrofit requirements for the following reasons:
    - Unprecedented and excessive requirements;
    - Prohibitively expensive;
    - Difficult & impractical to implement.
- Fully apply Phase II requirements and give them time to work;
- Allow a phase-in and/or trading of the wastewater treatment standards to allow local governments to include in planned plant upgrades;
- Be open to negotiating a compromise in the rules that will accomplish the following:
    - Be based on relevant and accurate scientific data;
    - Follow a true adaptive management strategy;
    - Have potential for a positive outcome;
    - Be fair, equitable and feasible.

If you have any questions or concerns regarding this request, please feel free to contact me at 336-855-1453 or email psloneker@trebic.org

Sincerely,

Paula Sloneker
Regulatory Affairs Director

Enclosures