

Brief Summary of Written Comments

In June 2007, the Division of Water Quality (DWQ) published the Jordan Lake Nutrient Management Strategy Rules in the State Register and opened a 60-day public comment period with three scheduled public hearings in July. The Jordan Lake Nutrient Management Strategy Rules detail an unprecedented plan to implement uniform non point source measures across multiple sub watersheds in a wide geographic area targeting existing development, new development, agriculture and state and federal agencies to control and treat stormwater runoff, as well as stringent measures targeting point source discharges. All or a portion of four counties and sixteen cities will be impacted by these rules in the PTCOG region. The Division of Water Quality estimates the cost of implementation to be approximately \$750 million dollars over the first five years to local governments.

The following is a general summary of 43 local government comments, 19 local government resolutions and 33 business and professional organizations submitted to DWQ during the public comment period and posted on the DWQ website. A more detailed summary with references to specific written comments is available at www.trebic.org

- **Overarching concerns:** The Jordan Lake Nutrient Management Strategy is unprecedented in its scope, extremely costly and burdensome, and will not result in improvements in water quality in Jordan Lake. 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, storm water management plan/program development in addition to the newly implemented NPDES Phase II storm water.
- Three (3) resolutions support the 2011 deadline to meet Wastewater treatment plant nitrogen reduction requirements submitted during the public comment period.
- Sixteen (16) resolutions oppose the Jordan Lake Nutrient Management Strategy Rules in the current form submitted to DWQ during the public comment period.
- 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. The impoundment area is part of the upper and lower New Hope Arm watershed and the 150-mile shoreline is almost entirely within Chatham County. However, DWQ applied rule requirements universally across the entire Jordan Lake watershed without adapting the rules to the needs and conditions in the different sub watersheds. Rule alternatives, such as examining the feasibility of modifying road crosses and physical barriers in the impoundment have not been modeled or considered. The stringent and excessive requirements are unnecessary for the Haw River sub watershed.
- **The Critical Water Supply Watershed (CWSW) designation** is unnecessary since the Nutrient Sensitive Water designation is sufficient to give authority to develop and implement nutrient strategy rules. The Nutrient Sensitive Watershed designation is sufficient to achieve the purpose of developing a Nutrient Management Strategy. The CWSW designation gives the Director full authority to change the rules without a public hearing if he/she feels the current proposed rule is not aggressive enough.
- **The Existing Development Rule** is universally opposed by local government. All local government written comments express concern and opposition to the existing development rule as unprecedented, burdensome, infeasible, technically difficult/impossible, overwhelmingly expensive to implement, with the least assurance of any tangible results. DWQ fiscal note substantially underestimates costs to local government. Existing development rules will create an onerous and unfair burden to existing residents, businesses, public institutions, and the environment if enacted as currently drafted.
- **New Development Rule** escalates the costs to developers and requires excessive BMP installation. Impacts will include negative impacts on the economy and growth in the region, escalation of housing prices, and barriers to affordable housing. New Development cost impacts from the Jordan Lake Rules, in excess of those required by Phase II and/or existing watershed development rules will exceed \$22,000,000 per year for Alamance and Guilford Counties

Summary of Written Comments, cont.

alone. Nitrogen export limits are even more stringent for the rapidly developing upper New Hope Arm of the Jordan Lake Basin, so overall impacts to new development from the proposed Jordan Lake Rules will be well in excess of \$50,000,000 per year, as opposed to the estimates presented in the Fiscal Analysis of approximately just under \$500,000 per year. This does not account for the costs of secondary impacts of increased infrastructure costs associated with the encouragement of urban sprawl.

- **Scientific Basis for Rules:** The discussion of the issues surrounding the science used as a basis for model development and now the Jordan rules is to point out that the body of the rules may not be supported by good science. Throughout the process of Jordan Lake Nutrient Response Modeling development, TMDL development and the Jordan Lake Nutrient Strategy development, local government and stakeholders clearly expressed a profound lack of confidence in the data and science used as the basis for the Nutrient Response Model, assignment of impairment, and strategies to address nutrient loading. Tetra Tech, the consulting firm who developed the model, and provided modeling services for the Jordan Lake watershed local governments and NCDENR/DWQ, questioned the data quality and quantity.

Using the best available data is a widely accepted practice. Generally, when best available data is used it is used with a strong degree of confidence with an acknowledgement that we are at the limits of what is currently known. However, it is widely known that the data used to develop the model and used as the basis of the Jordan Lake Rules, as the best available data is insufficient, compromised, and not reliable. Local governments, experts, consulting firms specializing in data analysis and modeling have no confidence in the data. Should it be used at all? Can we justify spending millions, or billions based on faulty data?

- **Wastewater Treatment Plant Nutrient Reduction Requirements** are excessive. Jordan Rules reduce Phosphorus limits to below the current statewide NPDES permit limit and the Neuse/Tar-Pamlico WWTPs limit of 2.0 mg/l. Phosphorus limits should be applied evenhandedly across the state. A 5% reduction in nutrients at the lake does not equate to a 5% reduction in nutrients at the end of pipe at a treatment plant. (E.g. The 8% total nitrogen reduction target at the lake = 70% reduction in total nitrogen required at end of pipe at the WWTP at design capacity.) (See document [16] Greensboro, Water Reclamation)
- **Existing state programs with nutrient reduction components (NPDES Phase I & II, DWQ, DAQ, DEH, DWM and DLR programs)** already address nutrient source control and reduction. In numerous instances, the rule duplicates or increases requirements currently covered by these various programs. DWQ fails to acknowledge, credit or propose modifications to these existing programs and instead, unnecessarily creates new and more stringent requirements. More thorough and multi faceted assessment of all sources of nitrogen and phosphorus in Jordan reservoirs basin needs to be conducted by DWQ, DAQ, DEH, DWM and the DLR. More information and better techniques and options must be made available in order to better target management tactics to nutrient sources.
- **No Clear Compliance Strategy:** Jurisdictions cannot determine contributions to nutrient loading since existing locations of monitoring stations does not allow accurate projection of loading rates by jurisdiction, and does not account for the very different land use patterns and non point source loading between jurisdictions. The rules do not indicate how, when, or where compliance with the overall Jordan Lake nutrient management strategy will be measured.
- **Buffer Rules** are implemented by the DWQ under the Neuse and Tar-Pamlico rules, however, under the Jordan Lake Rules, DWQ has attempted to shift the burden of development and implementation of buffer programs on to local governments and the taxpayers at the local level. The state has already developed trained staff to determine where streams begin and end, to determine what activities are allowed or not allowed, what mitigation would be required if an activity is “allowed with mitigation,” etc. 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. 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.