

Local Government Consensus Principles, Other Major Stakeholder Comments, and DWQ Responses on Draft Falls Lake Nutrient Rules

A brief summary is provided below of key comments submitted by stakeholders in response to the Division's January 14, 2010 release of revised draft rules for the Falls Reservoir Nutrient Strategy. Following each comment is an italicized response from the Division indicating how the comment was addressed or the Division's reasoning where no change was made. The first set of comments is a brief paraphrased version of a set of "Consensus Principles" submitted collectively by most of the local governments in the watershed. The full text of that document is appended hereafter. The second set comprises key comments chosen and paraphrased by Division staff. These are by no means a full or comprehensive representation of stakeholders' concerns, but are provided to highlight some of the more significant issues raised.

Local Government Consensus Principles

- **Items# 1-6 of the Consensus Principles document contain background information**
- **#7: Stage 1 management measures should include reductions from all major categories.**

Response: The Strategy accomplishes this. The current strategy calls for reductions from point sources, agriculture, new development, and existing development.

- **#7a: Large Point Sources achieve 20% N / 40% P reductions based on 110% of current flows by 2016. Smaller point sources meet limits of technology.**

Response: Included in current draft rule language.

- **#7b: New Development to implement 2.2 lbs/ac/yr N & .33 lbs/ac/yr P targets within 18 months of rule adoption.**

Response: Included in current draft rule language.

- **#7c: Local governments to implement existing development reductions within 3 years**

Response: Rule language has been revised to require local governments begin the implementation of Stage I reductions within 3 years.

- **#7c: Require program to reduce loading from septic systems as part of Stage 1 existing development program for local governments in subwatersheds where more than 20% of N load was modeled to be coming from septic.**

Response: Rule language has been revised to include this in Sub-Item 4(a) of existing development rule.

- **#7c: Require program to begin and continuously reduce nutrient loading as part of Stage 1 existing development program for local governments in subwatersheds where more chl-a levels have exceeded 40 ug/L in more than 75% of monitoring events.**

Response: Rule language has been revised to include this in Sub-Item 4(b) of existing development rule.

- **Require NCDOT to reduce N & P from new and existing D. to a similar degree and within a similar time schedule as local governments.**

Response: State and federal entity rule has been revised to require implementation within same timeframe with local government new development and existing development requirements. Non-DOT state and federal entities have the same reduction requirements as local governments. The existing development requirements for DOT were originally fashioned after the Jordan requirements but have been revised to require 6 retrofits per year instead of 3. The increase in required retrofits reflects the substantially greater load reduction needs facing the Falls watershed.

- **#8: Compliance date for achieving additional reductions from point sources and agriculture should be no earlier than 2036.**

Response: Included in current draft rule language

- **#8: Additional existing development reductions should begin in 2021 and should be continuously implemented according to timelines proposed by each local government in plans periodically submitted to and approved by EMC.**

Response: OPTION A in Item (3) of the existing development rule is different but the OPTION B in current draft rule language incorporates this suggestion.

- **#8: Stage II Existing Development plans should be subject to the limitations on the EMC's authority regarding ED criteria contained in the Jordan Legislation.**

Response: The last part of Item (5) and Sub-Items(5)(a)(b)(c) of the existing development rule come directly from the Jordan legislation. They prevent the EMC from requiring local governments to require installation of new stormwater collection systems, require reductions in impervious surfaces in existing areas of development unless the area is being redeveloped, or acquire developed private property.

Utilizing the Jordan legislation's EMC program approval standards in part, Item (5) of existing D rule states that "The Commission shall approve a load reduction plan only if it finds that the plan achieves the maximum level of reductions that is technically and economically feasible within the proposed timeframe of implementation based on plan elements identified elsewhere in this Item. Economic feasibility is determined by considering environmental impacts, capital cost of compliance, annual incremental compliance cost, per capita cost of local stormwater programs, cost-effectiveness of available measures, and impacts on local and regional commerce."

The language addressing technical and economic feasibility is drawn from the DAQ Mercury Emission Rules 15A NCAC 02D .2511 and captures the spirit of the Jordan legislation through the use of rule language that has already been approved by the EMC and RRC.

Sub-Item (7)(f) also incorporates Jordan Legislation existing development program criteria to be considered by the EMC.

- **#9: The EMC should begin re-examination of its nutrient management strategy by January 1, 2018 and consider (i) conditions of lake, potential for achieving Stage I objectives by 2021 and feasibility of meeting Stage II objectives, (ii) cost of achieving or attempting to achieve Stage II objectives in the upper lake, (iii) existing uses in upper lake and whether alternative standards would be sufficient to protect those existing uses, (iv) impact of management of Falls lake on water quality in the Upper Lake.**

The SAB should analyze and review the information identified above along with additional monitoring and modeling data and present recommendations for changes in the NMS to DWQ and EMC by January 1, 2019.

Based on the SAB report the EMC should direct DWQ to prepare proposed rule revisions, if any, and an updated Stage II fiscal note by August 1, 2019 with DWQ consulting with local governments and other interested parties in their development.

Local governments should not be required to begin implementing Stage II measures without a determination by the EMC of whether alternative goals and/or standards should be established for the upper lake.

Response: Sub-Item (5)(b) of goals rule strategy achieves the intent of this suggestion without compromising the authority of DWQ and the EMC. It States “A party may develop and submit for Commission approval supplemental nutrient response modeling of Falls Reservoir based on additional data collected” and that “The Commission may review Stage II requirements if a party submits supplemental modeling data, products and results acceptable to the Commission for this purpose.”

The goals rule also already allows for the EMC to adjust the allowable loads based on supplemental modeling under this Sub-Item.

Sub-Item (5)(d) of the goals directs DWQ to report to the EMC starting in 2016 and every five years thereafter to “to address resulting uncertainties including those related to technological advancement, scientific understanding, actions chosen by affected parties, resultant loading effects, and loading effects of other regulations”. These reports will include 1. a review of the state of wastewater & stormwater N & P control technology and technological and economic feasibility, 2. evaluation of available nutrient related lake monitoring data, 3. Recommendations if any, on rule revisions.

- **#10: Annual monitoring funded through collective effort. Local governments should share resources. The UNRBA or some other Association should be considered for expanded duties that the LG’s agree to consistent with this recommendation. The results of the additional monitoring and modeling by the collective efforts of the local**

governments should be shared on a regular basis with DWQ and made available to the SAB and EMC with regard to the review.

Response: Item (5) of goals rule provides the opportunity for any interested party to submit monitoring or modeling plans to DWQ for review and approval. Nothing in the rules prohibits local governments from pooling their resources. Staff was concerned that the language suggested by the local governments is exclusive and narrows the set of parties that can submit such plans/data, thus we included language that is broader and more inclusive.

- **#11: A robust and innovative trading program among all regulated sources is critical to the success of the NMS. LG should be able to use any combination of point and nonpoint control/reduction strategies, including land preservation, to meet their overall obligations under the NMS.**

Response: The Falls Lake strategy includes a trading rule and provisions within individual rules that make trading between sources as well as the purchase of nutrient reduction credits from EEP, private banks, and third party sellers an option to achieve the required reduction objectives. Item (5) of the trading rule also allows for a “jurisdictional approach” in which a local government can combine its reduction needs from point sources and existing development including loads from septic systems and discharging sand filters and meet them jointly. Staff did not include land preservation as an option since preserving a landscape unaltered does not achieve nutrient reductions. We note that preservation being considered under other mitigation rules is proposed in the context of greater than one-to-one ratios, whereas these rules as proposed do not apply ratios to offset requirements.

Other Major Comments from Stakeholders

Goals Rule

- **Include incremental “mileposts” to mark progress towards full compliance with water quality standards.**

Response: This has been incorporated in the Goals Rule in Item (5). The division shall consider use support determination at various locations starting from the lower lake and moving towards the upper lake over time to judge progress on and compliance with the goals of the strategy.

- **The remodeling provision of the goals rule is unnecessary and should be removed.**

Response: The remodeling provision was included after extensive input from stakeholders expressing a desire to see such a provision included as part of the adaptive management approach. While the Division has full confidence in the soundness of the modeling done to support the strategy, and the rules do not require remodeling of the lake, it seems reasonable to recognize within the rules that a party has the option to submit for approval the results of an approved model that is based on a monitoring and modeling plan approved by the EMC.

- **Recommend removing the staged approach or if a Staged approach is used suggest requiring Stage 1 Goals to be achieved in 3 years and Stage 2 objectives achieved within 10 years.**

Response: Staff feels that 10 years for Stage I and an additional twenty years for Stage II is the most reasonable timeframe considering the large reduction needs required given the financial resources required and that in some cases the reductions currently required in Stage II exceed the current limits of technology.

Point Source Rule

- **Point Source Rule should include provision for “off ramp” before expensive stage 2 reductions are required. EMC should be directed to determine whether a point source discharger should be required to meet Stage 2 allocations or some alternative allocation even if new model not developed.**

Response: This “off ramp” option has not been included in the rules because the goals rule has been revised in Item (5) to include adaptive implementation provisions including the option of supplemental modeling to be submitted to the EMC for approval, the results of which can be used for EMC consideration in any possible revisions to allocations in the future. Any changes in the allocation would need to be based on approved monitoring and modeling data.

New Development Stormwater Rule

- **Establish land disturbance threshold in New Development rule at 5,000 square feet (1/10th acre)**

Response: This has been incorporated as an option in the New Development Stormwater Rule for Stakeholder input.

- **Require new development to implement LID and achieve pre/post hydraulic match (90% match)**

Response: While not a requirement, the New Development Stormwater rule has been revised to include the option for developers to meet the requirements of the Rule through implementing Low Impact Development measures.

- **Require each local government to require new construction to not exceed 9% impervious in the Falls Lake critical area**

Response: This would be beyond our most stringent current WS requirements (WS-II ceiling of 24% bua). It would amount to residential lot sizes on the order of 5 acres or greater. We don't believe such extreme limitation on development is necessary.

- **Rules should be written to specifically prevent local governments from requiring overtreatment of new and redevelopment to use as credit towards existing development reduction needs.**

Response: The rules are not written in such a way that would prevent local governments from adopting more stringent requirements. A local government can, if they choose adopt more stringent requirements on new development and weigh the benefit of gaining reduction credit to apply towards their existing development reduction needs against the potential risk of discouraging development in their jurisdiction.

- **New Development roads that meet DOT specs should be allowed to meet the same treatment requirement as DOT road projects (Buffers).**

Response: Residential development projects and their associated roads have the land and design flexibility to implement measures to reduce loading that are not available to NCDOT new development projects due to their unique public linear nature.

- **Require all new development proposing to use onsite wastewater systems install nutrient removing systems.**

Response: While not a requirement in the rule (due to insufficient data quantifying nutrient loading from onsite systems), Item (4) of the draft new development rule includes the provision that once data quantifying nutrient loads from onsite systems is made available, the new development export accounting tool will be revised to require accounting for nutrient loading from onsite wastewater from newly developed lands that use such systems. Item (4) goes on to state that "should research quantify significant loading from onsite wastewater systems, the Division may also make recommendations to the Commission for Public Health to initiate rulemaking to reduce nutrient loading to surface water from these systems. "

Existing Development Rule

- **Stage 1 Goals to be achieved in 3 years and Stage 2 objectives achieved within 10 years and that existing development should be required to meet ¼ of its overall reduction needs within stage 1.**

Response: Staff feels that 10 years for Stage I and different Stage II options provided for in the rule are the most reasonable timeframes considering the large reduction needs, the planning required and the financial resources needed.

- **Incorporate into the rules a timeframe for changing the general permit and stop issuing permits for new sand filter to replace malfunctioning septic systems.**

Response: DWQ staff is in the process of reviewing this issue though any change to the general permit would likely not be directly addressed within the Falls Lake rules. Under the existing development rule, local governments have the option of earning reduction credit tying homes with malfunctioning septic systems and sand filters onto central sewer.

Fertilizer Management Rule

- **Nutrient Management Rule will promote increase in fertilizer application on pasture operations since most pasture in the watershed is under fertilized.**

Response: DWQ will continue to seek additional stakeholder input during the public hearing process on how the fertilizer management rule can be fashioned to address the need to improve nutrient management measures for row crops and the turf industry while avoiding the unintended consequence of increasing fertilizer application to pasture lands.

Agriculture Rule

- **Require buffers on all cropland and buffers and livestock exclusion on all pasture operations in Stage 1.**

Response: The Agriculture rule is patterned after the Jordan, Neuse, and Tar-Pam collective compliance approach for agriculture but also includes provisions that would require buffering of all cropland, and buffering and excluding livestock in pasture operations if the objectives of Stage I are not achieved within 10 years.

- **Increase the animal threshold for horses in the agriculture rule to 20 horse instead of 5**

Response: Staff will continue discussions with the NC Horse council on this issue but feel that given the large reductions required of Agriculture and the fact that the average horse operation in the Falls watershed has 5.8 horses that equine operations represent a significant opportunity to achieve reductions for the Ag community and that an equine threshold of 5 horses is appropriate.