

Information Item 16-02 **2016 Status Report: Falls Lake Nutrient Strategy**

Explanation:

The Falls Lake nutrient management strategy (15A NCAC 2B .0275 through .0282) is a comprehensive set of rules that went into effect in 2011 to address excess nutrient inputs to Falls Lake. The Falls Lake Purpose and Scope Rule (.0275) requires the Division of Water Resources to report to the Commission on specific aspects of progress in the Falls Lake watershed beginning in ~~January~~ 2016 and every five years thereafter. The attached report provides an update on the implementation status of rules, evaluates changes in nutrient loading to the lake, details progress towards achieving nutrient-related water quality standards, and addresses advancements in scientific understanding and treatment technology. Staff from several programs in the Division, other divisions, and the EPA contributed to the information provided in this comprehensive report.

The unprecedented nutrient reductions required by the Falls rules and the adaptive design of the rules prompted the inclusion of these 5-year check-ins to evaluate implementation progress and inform potential adjustments. The rules require all major sources of nutrients to reduce their nitrogen and phosphorus loads to Falls Lake by 40 and 77 percent, respectively, from a 2006 baseline condition. The strategy was thus designed as a staged, adaptive approach. Stage I requires presently achievable controls and approximately half of the full reduction targets, 20 and 40 percent nitrogen and phosphorus, respectively by regulated sources to meet the chlorophyll *a* standard in the lower lake by 2021. Stage II calls for additional reductions in the upper watershed with the overall goal of achieving all reductions and meeting nutrient standards throughout the lake by 2041.