

First Annual Report of the Nutrient Scientific Advisory Board
as Required by SL 2009-216
July 1, 2011

Summary

Under Session Law 2009-216, which replaced the Existing Development Stormwater Rule of the Jordan Nutrient Strategy, the Secretary established a Scientific Advisory Board for nutrient-impaired waters (NSAB) in July 2010. The NSAB is to submit certain products to the Secretary by July 2012, as well as reports "concerning its activities, findings, and recommendations" annually no later than July 1 beginning in 2011. This document serves as the NSAB's first annual report.

In its first year, the Board has addressed necessary foundational issues and has put significant effort toward fashioning recommendations on its first priority, a method for allocating existing development nutrient load reduction assignments to local governments in the Jordan watershed. Members recognize the precedent-setting nature of existing development stormwater requirements in this state and the role of this body in providing direction for local programs in Jordan and Falls Lake watersheds and possibly beyond. As a body whose membership is comprised largely of stormwater professionals from local governments in the Jordan watershed, the Board has recognized the importance of defining the relationship between existing development load assignments and other elements of the Jordan nutrient strategy, and has sought to do so. The group is working to reconcile the complex and uncertain nature of watershed modeling with the need for regulatory compliance tools that provide predictability and accuracy. A subcommittee will bring watershed modeling recommendations for purposes of assigning load allocations to the July meeting, which will guide a contract scope for Jordan watershed. This will allow the Board to resume focus on identifying available, accountable load reduction measures and to prioritize measures for which better science or accounting information is required.

Background

In part, Session Law 2009-216 established staged, adaptive existing development stormwater requirements for local governments in the Jordan Lake watershed. In addition, given the precedent-setting nature of the requirements in this evolving area of technology, the drafters of the session law felt it was important to include a process for evaluating current practice and providing guidance to local governments in Jordan and other watersheds that may face similar requirements in the future. Therefore, the Session Law also established a Scientific Advisory Board for nutrient-impaired waters and specified its composition (see Attachment A). Six of the Board's ten members are representatives of local governments in the Jordan Lake watershed, while the remainder represent DOT, the conservation community, water quality science and stormwater engineering.

The Board is charged with completing certain tasks by July 2012 that will facilitate stormwater management on existing development anywhere in the state:

- (1) Identify management strategies that can be used by local governments to reduce nutrient loading from existing development.*
- (2) Evaluate the feasibility, costs, and benefits of implementing the identified management strategies.*
- (3) Develop an accounting system for assignment of nutrient reduction credits for the identified management strategies.*
- (4) Identify the need for any improvements or refinements to modeling and other analytical tools used to evaluate water quality in nutrient-impaired waters and nutrient management strategies.*

In addition to these four duties, the Session Law provides for one Jordan-specific action. It states that the NSAB may recommend an alternative method to the Department to calculate baseline nutrient loads from the existing developed lands of jurisdictions in the Jordan watershed. These loads are the basis for assigning load reduction goals to the jurisdictions.

In the Jordan watershed, the products of these tasks will be used by the Department to develop a model program by mid-2013 and by local governments to develop and implement their programs as early as 2014 in the Upper New Hope subwatershed and 2017 in the Haw and Lower New Hope subwatersheds.

Progress Highlights

- The Board has met nine times since September 2010, and a watershed modeling subcommittee has met five times.
- The Board used the first several meetings to establish a common level of understanding on the requirements of the Session Law and the nature of the NSAB's charge, and to prioritize their activities.
- The members of the NSAB recognized the importance of their charge within the context of the diversity of its membership, and therefore felt it important to establish defensible explicit operating protocols. Over the course of several meetings, it established a set of ground rules (see Attachment C), including quorum requirements and a consensus approach to decision-making. The Board decided not to appoint a chairperson, but to instead hire a facilitator.
- Several presentations were given to inform the Board on available methods that could potentially be used to calculate baseline loads and account for load reduction credit, and to evaluate whether these two tasks could be accomplished using the same method.
 - Board member Bill Hunt of NCSU gave a presentation on the Jordan/Falls New Development Accounting Tool that was completed in 2010 to meet the requirements of the Jordan New Development Stormwater Rule.
 - UNC Stormwater Engineer Sally Hoyt presented a comparison of the Jordan New Development Tool to the loading tool used under the Tar-Pamlico stormwater rule.

- The consulting firm Tetra Tech, which has expertise in watershed modeling, was invited to give a presentation on other site-scale nutrient export calculators.
 - Tetra Tech discussed the available data and methodology used to develop the original watershed model for Jordan Lake.
 - To inform the Board on methods for calculating jurisdictional baseline loads, presentations were given by Tetra Tech and Board member Dr. Larry Band of UNC.
- The Board obtained input from Division staff to help it better understand the relationship of its decisions to nutrient strategy elements including the adaptive implementation process.
- A list of fundamental issues emerged to guide selection of methods for estimating baseline loads and for credit accounting. As one result, the Board determined that new watershed modeling would be required to set baseline load allocations for each jurisdiction, because the aggregated nature of the existing watershed model does not support this.
- To help establish a set of criteria for estimating baseline loads and credit accounting, the Board established a subcommittee of several Board members and other experts. The sub-committee has met five times and will present options and recommendations to the full Board in July 2011.
- In June, the Board began focusing on nutrient-reducing strategies and associated accounting methods. The Board reviewed and began compiling an initial list of strategies that local governments can use to reduce nutrient loading from existing developed land.

Next Steps

- The group will continue to hold monthly, facilitated meetings and to use subcommittees as needed to meet its session law charges by July 2012, and to provide a method for setting nutrient load reduction goals for Jordan local government jurisdictions by July 2013.
- The Board will receive recommendations from the watershed model subcommittee in July and seek agreement on a scope of work for a contract to begin late in the summer of 2011, to develop a method to estimate baseline nutrient loads from jurisdictions by mid to late 2013. Section 319 grant funds will be utilized to fund the contract.
- While the watershed model is developed to estimate the baseline and jurisdictional reduction goals, the Board will continue to discuss the list of nutrient-reducing strategies and look at the feasibility, cost, and benefits of these strategies, and accounting methods for these strategies.
- While the Board is tasked with developing a list of nutrient-reducing practices and associated nutrient accounting methods by July 1, 2012, the Board recognizes that there may be additional cost-effective practices that either have not been identified or have not been quantified. As science and technology improves, the Board expects to continue building on the set of cost-effective practices that local governments can employ to reduce loading from developed lands.

Supporting Attachments:

- (A) NSAB Member List
- (B) SL 2009-216
- (C) NSAB Ground Rules

In addition, the following website has links to meeting agendas, minutes, and other relevant information: <http://portal.ncdenr.org/web/wq/nutrient-scientific-advisory-board>.

NSAB Member List

	NSAB Position	Member	Organization
1	Local Government Representative ¹	John Cox	City of Durham
2	Local Government Representative ¹	Trish D'Arconte	City of Chapel Hill
3	Local Government Representative ¹	Michael Layne	City of Burlington
4	Local Government Representative ¹	David Phlegar	City of Greensboro
5	Local Government Representative ¹	Fred Royal	Chatham County
6	Local Government Representative ¹	Matt Flynn	City of Cary
7	Professional or Academic Representative ²	Lawrence Band	UNC
8	Professional Engineer ³	Bill Hunt	NCSU BAE
9	NC DOT Representative ⁴	Matt Lauffer	NC DOT
10	Conservation Organization Representative ⁵	Grady McCallie	NC Conservation Network

¹ Representatives of one more local government in the Jordan Reservoir watershed. Local government representatives shall have experience in stormwater management, flood control, or management of a water or wastewater utility.

² One member with at least 10 years of professional or academic experience relevant to the management of nutrients in impaired water bodies and possessing a graduate degree in a related scientific discipline, such as aquatic science, biology, chemistry, geology, hydrology, environmental science, engineering, economics, or limnology.

³ One professional engineer with expertise in stormwater management, hydrology, or flood control.

⁴ One representative of the Department of Transportation with expertise in stormwater management.

⁵ One representative of a conservation organization with expertise in stormwater management, urban landscape design, nutrient reduction, or water quality.

(1-5 from Section 4.(a) of Session Law 2009-216)

**GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2009**

**SESSION LAW 2009-216
HOUSE BILL 239**

AN ACT TO PROVIDE FOR IMPROVEMENTS IN THE MANAGEMENT OF THE
JORDAN WATERSHED IN ORDER TO RESTORE WATER QUALITY IN THE
JORDAN RESERVOIR.

The General Assembly of North Carolina enacts:

SECTION 1. Definitions. – The following definitions apply to this act and its implementation:

- (1) The definitions set out in G.S. 143-212 and G.S. 143-213.
- (2) The definitions set out in 15A NCAC 02B .0262 (Jordan Water Supply Nutrient Strategy: Purpose and Scope) and 15A NCAC 02B .0263 (Jordan Water Supply Nutrient Strategy: Definitions).
- (3) "Existing Development Rule 15A NCAC 02B .0266" means 15A NCAC 02B .0266 (Jordan Water Supply Nutrient Strategy: Stormwater Management for Existing Development), adopted by the Commission on May 8, 2008, and approved by the Rules Review Commission on November 20, 2008.
- (4) "Wastewater Discharge Rule 15A NCAC 02B .0270" means 15A NCAC 02B .0270 (Jordan Water Supply Nutrient Strategy: Wastewater Discharge Requirements) adopted by the Commission on May 8, 2008, and approved by the Rules Review Commission on October 16, 2008.

SECTION 2.(a) Wastewater Discharge Rule 15A NCAC 02B .0270. – Until the effective date of the revised permanent rule that the Commission is required to adopt pursuant to Section 2(c) of this act, the Commission and the Department shall implement the Wastewater Discharge Rule 15A NCAC 02B .0270, as provided in Section 2(b) of this act.

SECTION 2.(b) Implementation. – Notwithstanding sub-subdivision (c) of subdivision (6) of Wastewater Discharge Rule 15A NCAC 02B .0270, each existing discharger with a permitted flow greater than or equal to 0.1 million gallons per day (MGD) shall limit its total nitrogen discharge to its active individual discharge allocation as defined or modified pursuant to Wastewater Discharge Rule 15A NCAC 02B .0270 no later than calendar year 2016.

SECTION 2.(c) Additional Rule-Making Authority. – The Commission shall adopt a rule to replace Wastewater Discharge Rule 15A NCAC 02B .0270. Notwithstanding G.S. 150B-19(4), the rule adopted by the Commission pursuant to this section shall be substantively identical to the provisions of Section 2(b) of this act. Rules adopted pursuant to this section are not subject to G.S. 150B-21.9 through G.S. 150B-21.14. Rules adopted pursuant to this section shall become effective as provided in G.S. 150B-21.3(b1) as though 10 or more written objections had been received as provided by G.S. 150B-21.3(b2).

SECTION 3.(a) Existing Development Rule 15A NCAC 02B .0266 Disapproved. – Pursuant to G.S. 150B-21.3(b1), Existing Development Rule 15A NCAC 02B .0266, as adopted by the Environmental Management Commission on May 8, 2008, and approved by the Rules Review Commission on November 20, 2008, is disapproved.

SECTION 3.(b) References in the North Carolina Administrative Code to the rule cited in Section 3(a) of this act shall be deemed to refer to the equivalent provisions of this act.

SECTION 3.(c) Nutrient Monitoring. – The Department shall maintain an ongoing program to monitor water quality in each arm of Jordan Reservoir. The Department shall also accept water quality sampling data from a monitoring program implemented by a local government or nonprofit organization if the data meets quality assurance standards established by the Department. On March 1, 2014, the Department shall report the results of monitoring in



each arm of Jordan Reservoir to the Environmental Review Commission. The Department shall submit an updated monitoring report under this section every three years thereafter until such time as the lake is no longer impaired by nutrient pollution.

SECTION 3.(d) Control of Nutrient Loading From Existing Development. – The Department shall require implementation of reasonable nutrient load reduction measures for existing development in each subwatershed of the Jordan Reservoir, as provided in this act. The Department shall determine whether nutrient load reduction measures for existing development are necessary in each subwatershed of Jordan Reservoir and require implementation of reasonable nutrient reduction measures in accordance with an adaptive management program as follows:

- (1) Stage 1 Adaptive Management Program to Control Nutrient Loading From Existing Development. –
 - a. Municipalities and counties located in whole or in part in the Jordan watershed shall implement a Stage 1 adaptive management program to control nutrient loading from existing development in the Jordan watershed. The Stage 1 adaptive management program shall meet the requirements set out in 40 C.F.R. § 122.34 as applied by the Department in the NPDES General Permit for municipal separate storm sewer systems in effect on July 1, 2009. The Stage 1 adaptive management program shall include all of the following measures:
 1. A public education program to inform the public of the impacts of nutrient loading and measures that can be implemented to reduce nutrient loading from stormwater runoff from existing development.
 2. A mapping program that includes major components of the municipal separate storm sewer system, including the location of major outfalls, as defined in 40 Code of Federal Regulations §122.26(b)(5) (July 1, 2008) and the names and location of all waters of the United States that receive discharges from those outfalls, land use types, and location of sanitary sewers.
 3. A program to identify and remove illegal discharges.
 4. A program to identify opportunities for retrofits and other projects to reduce nutrient loading from existing developed lands.
 5. A program to ensure maintenance of best management practices implemented by the local government.
 - b. The Department shall accept local government implementation of another stormwater program or programs meeting the standards set out in this section as satisfying one or more of the requirements set forth in sub-subdivision a. of this subdivision. The local government shall provide technical information sufficient to demonstrate the adequacy of the alternative program or program elements.
 - c. A Stage 1 adaptive management program to control nutrient loading from existing development shall be implemented as follows:
 1. No later than December 31, 2009, each local government shall submit its Stage 1 adaptive management program to the Commission for review and approval.
 2. Within six months following submission of a Stage 1 adaptive management program, the Department shall recommend that the Commission approve or disapprove the program. The Commission shall either approve the program or require changes based on the standards set out in sub-subdivision a. of this subdivision. If the Commission requires changes, the local government shall submit revisions responding to the required changes within two months and the Department shall provide follow-up recommendations to the Commission within two months after receiving revisions.

3. Within three months following Commission approval of a Stage 1 adaptive management program, the local government shall begin implementation of the program. Each local government shall report annually to the Department on implementation of its program.
- (2) Stage 2 Adaptive Management Program to Control Nutrient Loading From Existing Development. –
- a. If the March 1, 2014 monitoring report or any subsequent monitoring report for the Upper New Hope Creek Arm of Jordan Reservoir required under Section 3(c) of this act shows that nutrient-related water quality standards are not being achieved, a municipality or county located in whole or in part in the subwatershed of that arm of Jordan Reservoir shall develop and implement a Stage 2 adaptive management program to control nutrient loading from existing development within the subwatershed, as provided in this act. If the March 1, 2017 monitoring report or any subsequent monitoring report for the Haw River Arm or the Lower New Hope Creek Arm of Jordan Reservoir required under Section 3(c) of this act shows that nutrient-related water quality standards are not being achieved, a municipality or county located in whole or in part in the subwatershed of that arm of Jordan Reservoir shall develop and implement a Stage 2 adaptive management program to control nutrient loading from existing development within the subwatershed, as provided in this act. The Department shall defer development and implementation of Stage 2 adaptive management programs to control nutrient loading from existing development required in a subwatershed by this subdivision if it determines that additional reductions in nutrient loading from existing development in that subwatershed will not be necessary to achieve nutrient-related water quality standards. In making this determination, the Department shall consider the anticipated effect of measures implemented or scheduled to be implemented to reduce nutrient loading from sources in the subwatershed other than existing development. If any subsequent monitoring report for an arm of Jordan Reservoir required under Section 3(c) of this act shows that nutrient-related water quality standards have not been achieved, the Department shall notify the municipalities and counties located in whole or in part in the subwatershed of that arm of Jordan Reservoir and the municipalities and counties shall develop and implement a Stage 2 adaptive management program as provided in this subdivision.
 - b. The Department shall establish a load reduction goal for existing development for each municipality and county required to implement a Stage 2 adaptive management program to control nutrient loading from existing development. The load reduction goal shall be designed to achieve, relative to the baseline period 1997 through 2001, an eight percent (8%) reduction in nitrogen loading and a five percent (5%) reduction in phosphorus loading reaching Jordan Reservoir from existing developed lands within the police power jurisdiction of the local government. The baseline load shall be calculated by applying the Tar-Pamlico Nutrient Export Calculation Worksheet, Piedmont Version, dated October 2004, to acreages of different types of existing development within the police power jurisdiction of the local government during the baseline period. The baseline load may also be calculated using an equivalent or more accurate method acceptable to the Department and recommended by the Scientific Advisory Board established pursuant to Section 4(a) of this act. The baseline load for a municipality or county shall not include nutrient loading from lands under State or federal control or lands in agriculture or forestry. The load reduction goal shall be

- adjusted to account for nutrient loading increases from lands developed subsequent to the baseline period but prior to implementation of new development stormwater programs.
- c. Based on findings under sub-subdivision a. of this subdivision, the Department shall notify the local governments in each subwatershed that either:
 - 1. Implementation of a Stage 2 adaptive management program to control nutrient loading from existing development will be necessary to achieve water quality standards in an arm of the reservoir and direct the municipalities and counties in the subwatershed to develop a load reduction program in compliance with this section.
 - 2. Implementation of a Stage 2 adaptive management program to control nutrient loading from existing development is not necessary at that time but will be reevaluated in three years based on the most recent water quality monitoring information.
 - d. A local government receiving notice of the requirement to develop and implement a Stage 2 adaptive management program to control nutrient loading from existing development under this section shall not be required to submit a program if the local government demonstrates that it has already achieved the reductions in nutrient loadings required by sub-subdivision b. of this subdivision.
 - e. Within six months after receiving notice to develop and implement a Stage 2 adaptive management program to control nutrient loading from existing development, each local government shall submit to the Commission a program that is designed to achieve the reductions in nutrient loadings established by the Department pursuant to sub-subdivision b. of this subdivision. A local government program may include nutrient management strategies that are not included in the model program developed pursuant to Section 3(e) of this act in addition to or in place of any component of the model program. In addition, a local government may satisfy the requirements of this subdivision through reductions in nutrient loadings from other sources in the same subwatershed to the extent those reductions go beyond measures otherwise required by statute or rule. A local government may also work with other local governments within the same subwatershed to collectively meet the required reductions in nutrient loadings from existing development within their combined jurisdictions. Any credit for reductions achieved or obtained outside of the police power jurisdiction of a local government shall be adjusted based on transport factors established by the Department document Nitrogen and Phosphorus Delivery from Small Watersheds to Jordan Lake, dated June 30, 2002.
 - f. Within six months following submission of a local government's Stage 2 adaptive management program to control nutrient loading from existing development, the Department shall recommend that the Commission approve or disapprove the program. The Commission shall approve the program if it meets the requirements of this subdivision, unless the Commission finds that the local government can, through the implementation of reasonable and cost-effective measures not included in the proposed program, meet the reductions in nutrient loading established by the Department pursuant to sub-subdivision b. of this subdivision by a date earlier than that proposed by the local government. If the Commission finds that there are additional or alternative reasonable and cost-effective measures, the Commission may require the local government to modify its proposed program to include such measures to achieve the required reductions by the earlier date. If the Commission requires such

modifications, the local government shall submit a modified program within two months. The Department shall recommend that the Commission approve or disapprove the modified program within three months after receiving the local government's modified program. In determining whether additional or alternative load reduction measures are reasonable and cost effective, the Commission shall consider factors including, but not limited to, the increase in the per capita cost of a local government's stormwater management program that would be required to implement such measures and the cost per pound of nitrogen and phosphorus removed by such measures. The Commission shall not require additional or alternative measures that would require a local government to:

1. Install or require installation of a new stormwater collection system in an area of existing development unless the area is being redeveloped.
 2. Acquire developed private property.
 3. Reduce or require the reduction of impervious surfaces within an area of existing development unless the area is being redeveloped.
- g. Within three months after the Commission's approval of a Stage 2 adaptive management program to control nutrient loading from existing development, the local government shall complete adoption and begin implementation of its program.
- h. Each local government implementing a Stage 2 adaptive management program to control nutrient loading from existing development shall submit an annual report to the Department summarizing its activities in implementing its program.
- i. If at any time the Department finds, based on water quality monitoring, that an arm of the Jordan Reservoir has achieved compliance with water quality standards, the Department shall notify the local governments in the subwatershed. Subject to the approval of the Commission, a local government may modify its Stage 2 adaptive management program to control nutrient loading from existing development to maintain only those measures necessary to prevent increases in nutrient loading from existing development.

SECTION 3.(e) Model Stage 2 Adaptive Management Program to Control Nutrient Loading From Existing Development. – No later than July 1, 2013, the Department shall submit a model Stage 2 adaptive management program to control nutrient loading from existing development to the Commission for approval. The model program shall identify specific load reduction practices and programs and reduction credits associated with each practice or program and shall provide that a local government may obtain additional or alternative load-reduction credits based on site-specific monitoring data. In developing the model program, the Department shall consider the findings and recommendations of the Scientific Advisory Board established pursuant to Section 4(a) of this act and comments submitted by municipalities and counties identified in 15A NCAC 02B .0262(7) (Jordan Water Supply Nutrient Strategy: Purpose and Scope). The Commission shall review the model program and either approve the program or return it to the Department with requested changes. The Department shall revise the model program to address changes requested by the Commission. The Commission shall approve a final model program no later than December 31, 2013.

SECTION 3.(f) Additional Measures to Reduce Nitrogen Loading From Existing Development in the Upper New Hope Creek Arm of the Jordan Reservoir. – If the March 1, 2023, monitoring report or any subsequent monitoring report for the Upper New Hope Creek Arm of Jordan Reservoir shows that nutrient-related water quality standards are not being achieved, a municipality or county located in whole or in part in the Upper New Hope Creek Subwatershed shall modify its Stage 2 adaptive management program to control nutrient loading from existing development to achieve additional reductions in nitrogen loading from existing development. The modified Stage 2 adaptive management program shall be designed

to achieve a total reduction in nitrogen loading from existing development of thirty-five percent (35%) relative to the baseline period 1997 through 2001. The Department shall notify local governments of the requirement to submit a modified Stage 2 adaptive management program. Submission, review and approval, and implementation of a modified Stage 2 adaptive management program shall follow the process, timeline, and standards set out in sub-subdivisions e. through g. of subdivision (2) of Section 3(d) of this act.

SECTION 3.(g) Enforcement. – The Department shall enforce the provisions of this act as provided in G.S. 143-215.6A, 143-215.6B, and 143-215.6C.

SECTION 3.(h) Collective Compliance. – Local governments that are subject to regulation under this act may establish collective programs to comply with the requirements of this act.

SECTION 3.(i) Report. – The Department shall report annually to the Commission regarding the implementation of adaptive management programs to control nutrient loading from existing development in the Jordan watershed.

SECTION 3.(j) Additional Rule-Making Authority. – The Commission shall adopt a rule to replace Sections 3(c) through 3(i) of this act. Notwithstanding G.S. 150B-19(4), the rule adopted by the Commission pursuant to this section shall be substantively identical to the provisions of Sections 3(c) through 3(f) of this act. Rules adopted pursuant to this section are not subject to G.S. 150B-21.9 through G.S. 150B-21.14. Rules adopted pursuant to this section shall become effective as provided in G.S. 150B-21.3(b1) as though 10 or more written objections had been received as provided by G.S. 150B-21.3(b2).

SECTION 3.(k) No Change to Existing Regulatory Authority. – Nothing in this act shall be construed to limit, expand, or modify the authority of the Commission to undertake alternative regulatory actions otherwise authorized by State or federal law, including, but not limited to, the reclassification of waters of the State pursuant to G.S. 143-214.1, the revision of water quality standards pursuant to G.S. 143-214.3, and the granting of variances pursuant to G.S. 143-215.3.

SECTION 4.(a) Scientific Advisory Board for Nutrient-Impaired Waters Established. – No later than July 1, 2010, the Secretary shall establish a Nutrient Sensitive Waters Scientific Advisory Board. The Scientific Advisory Board shall consist of no fewer than five and no more than 10 members with the following expertise or experience:

- (1) Representatives of one or more local governments in the Jordan Reservoir watershed. Local government representatives shall have experience in stormwater management, flood control, or management of a water or wastewater utility.
- (2) One member with at least 10 years of professional or academic experience relevant to the management of nutrients in impaired water bodies and possessing a graduate degree in a related scientific discipline, such as aquatic science, biology, chemistry, geology, hydrology, environmental science, engineering, economics, or limnology.
- (3) One professional engineer with expertise in stormwater management, hydrology, or flood control.
- (4) One representative of the Department of Transportation with expertise in stormwater management.
- (5) One representative of a conservation organization with expertise in stormwater management, urban landscape design, nutrient reduction, or water quality.

SECTION 4.(b) Duties. – No later than July 1, 2012, the Scientific Advisory Board shall do all of the following:

- (1) Identify management strategies that can be used by local governments to reduce nutrient loading from existing development.
- (2) Evaluate the feasibility, costs, and benefits of implementing the identified management strategies.
- (3) Develop an accounting system for assignment of nutrient reduction credits for the identified management strategies.
- (4) Identify the need for any improvements or refinements to modeling and other analytical tools used to evaluate water quality in nutrient-impaired waters and nutrient management strategies.

SECTION 4.(c) Report; Miscellaneous Provisions. – The Scientific Advisory Board shall also advise the Secretary on any other issue related to management and restoration of nutrient-impaired water bodies. The Scientific Advisory Board shall submit an annual report to the Secretary no later than July 1 of each year concerning its activities, findings, and recommendations. Members of the Scientific Advisory Board shall be reimbursed for reasonable travel expenses to attend meetings convened by the Department for the purposes set out in this section.

SECTION 5. No Preemption. – A local government may adopt and implement a stormwater management program that contains provisions that are more restrictive than the standards set forth in Sections 2 and 3 of this act or in any rules concerning stormwater management in the Jordan watershed adopted by the Commission. This section shall not be construed to authorize a local government to impose stormwater management requirements on lands in agriculture or forestry.

SECTION 6. Construction of Act. –

- (1) Except as specifically provided in Sections 2(c) and 3(j) of this act, nothing in this act shall be construed to limit, expand, or otherwise alter the authority of the Commission or any unit of local government.
- (2) This act shall not be construed to affect any delegation of any power or duty by the Commission to the Department or subunit of the Department.

SECTION 7. Note to Revisor of Statutes. – Notwithstanding G.S. 164-10, the Revisor of Statutes shall not codify any of the provisions of this act. The Revisor of Statutes shall set out the text of Section 2 of this act as a note to G.S. 143-215.1 and may make notes concerning this act to other sections of the General Statutes as the Revisor of Statutes deems appropriate. The Revisor of Statutes shall set out the text of Section 3 of this act as a note to G.S. 143-214.7 and may make notes concerning this act to other sections of the General Statutes as the Revisor of Statutes deems appropriate.

SECTION 8. Effective Date. – This act is effective when it becomes law.

In the General Assembly read three times and ratified this the 23rd day of June, 2009.

s/ Walter H. Dalton
President of the Senate

s/ Joe Hackney
Speaker of the House of Representatives

s/ Beverly E. Perdue
Governor

Approved 5:30 p.m. this 30th day of June, 2009

Ground Rules for the Nutrient Scientific Advisory Board

1. Stick to the agenda topics and keep discussion focused on one subject at a time
2. Discuss all relevant information and issues, even difficult ones.
3. Keep discussion open and balanced.
4. Speak for yourself, not for others in the room.
5. Contribute to the discussion.
6. Listen actively.
7. Avoid repetition.
8. Be respectful of others.
9. Disagree openly, but try not to be disagreeable.
10. Try to get beyond positions to interests and look for mutually beneficial solutions.
11. Follow through on commitments.
12. Primary members shall make an effort to attend all meetings. Primary members shall designate an alternate member to serve in their absence. If both members attend, only the primary member may speak.
13. Seven members, at least five of them primary members, are needed to form a quorum and to make decisions.
14. DWQ members Jason Robinson and Rich Gannon, while not actual Board members, will serve as regular participants in the Board's discussions. Other DWQ members may attend if invited by DWQ's regular participants or other members of the Board, but may not speak unless asked by Board members.
15. Other visitors are welcome as observers only. Guests who are invited by the Board shall be given the opportunity to speak as indicated on the agenda.
16. Ground Rules can be added or modified by consensus of the Board.