

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2009

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HOUSE BILL 239
Committee Substitute Favorable 5/5/09
PROPOSED COMMITTEE SUBSTITUTE H239-PCS50687-SB-30

Short Title: Restore Water Quality in Jordan Reservoir. (Public)

Sponsors:

Referred to:

February 23, 2009

1 A BILL TO BE ENTITLED
2 AN ACT TO PROVIDE FOR IMPROVEMENTS IN THE MANAGEMENT OF THE
3 JORDAN WATERSHED IN ORDER TO RESTORE WATER QUALITY IN THE
4 JORDAN RESERVOIR.

5 The General Assembly of North Carolina enacts:

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

- 8 (1) The definitions set out in G.S. 143-212 and G.S. 143-213.
9 (2) The definitions set out in 15A NCAC 02B .0262 (Jordan Water Supply
10 Nutrient Strategy: Purpose and Scope) and 15A NCAC 02B .0263 (Jordan
11 Water Supply Nutrient Strategy: Definitions).
12 (3) "Division" means the Division of Water Quality in the Department of
13 Environment and Natural Resources.
14 (4) "Existing Development Rule 15A NCAC 02B .0266" means 15A NCAC
15 02B .0266 (Jordan Water Supply Nutrient Strategy: Stormwater
16 Management for Existing Development), adopted by the Commission on
17 May 8, 2008, and approved by the Rules Review Commission on November
18 20, 2008.
19 (5) "Wastewater Discharge Rule 15A NCAC 02B .0270" means 15A NCAC
20 02B .0270 (Jordan Water Supply Nutrient Strategy: Wastewater Discharge
21 Requirements) adopted by the Commission on May 8, 2008, and approved
22 by the Rules Review Commission on October 16, 2008.

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

27 **SECTION 2.(b)** Implementation. – Notwithstanding sub-subdivision (c) of
28 subdivision (6) of Wastewater Discharge Rule 15A NCAC 02B .0270, each existing discharger
29 with a permitted flow greater than or equal to 0.1 million gallons per day (MGD) shall limit its
30 total nitrogen discharge to its active individual discharge allocation as defined or modified
31 pursuant to Wastewater Discharge Rule 15A NCAC 02B .0270 no later than calendar year
32 2016.



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

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

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

14 **SECTION 3.(c)** Nutrient Monitoring. – The Department shall maintain an ongoing
15 program to monitor water quality in each arm of Jordan Reservoir. The Department shall also
16 accept water quality sampling data from a monitoring program implemented by a local
17 government or nonprofit organization if the data meets quality assurance standards established
18 by the Department. On March 1, 2014, the Department shall report the results of monitoring in
19 each arm of Jordan Reservoir to the Environmental Review Commission. The Department shall
20 submit an updated monitoring report under this section every three years thereafter until such
21 time as the lake is no longer impaired by nutrient pollution.

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

- 29 (1) Stage 1 Adaptive Management Program to Control Nutrient Loading From
30 Existing Development. –
31 a. Municipalities and counties located in whole or in part in the Jordan
32 watershed shall implement a Stage 1 adaptive management program
33 to control nutrient loading from existing development in the Jordan
34 watershed. The Stage 1 adaptive management program shall meet the
35 requirements set out in 40 C.F.R. § 122.34 as applied by the
36 Department in the NPDES General Permit for municipal separate
37 storm sewer systems in effect on July 1, 2009. The Stage 1 adaptive
38 management program shall include all of the following measures:
39 1. A public education program to inform the public of the
40 impacts of nutrient loading and measures that can be
41 implemented to reduce nutrient loading from stormwater
42 runoff from existing development.
43 2. A mapping program that includes major components of the
44 municipal separate storm sewer system, including the location
45 of major outfalls, as defined in 40 Code of Federal
46 Regulations §122.26(b)(5) (July 1, 2008) and the names and
47 location of all waters of the United States that receive
48 discharges from those outfalls, land use types, and location of
49 sanitary sewers.
50 3. A program to identify and remove illegal discharges.

- 1 4. A program to identify opportunities for retrofits and other
- 2 projects to reduce nutrient loading from existing developed
- 3 lands.
- 4 5. A program to ensure maintenance of best management
- 5 practices implemented by the local government.
- 6 b. The Department shall accept local government implementation of
- 7 another stormwater program or programs meeting the standards set
- 8 out in this section as satisfying one or more of the requirements set
- 9 forth in sub-subdivision a. of this subdivision. The local government
- 10 shall provide technical information sufficient to demonstrate the
- 11 adequacy of the alternative program or program elements.
- 12 c. A Stage 1 adaptive management program to control nutrient loading
- 13 from existing development shall be implemented as follows:
- 14 1. No later than December 31, 2009, each local government
- 15 shall submit its Stage 1 adaptive management program to the
- 16 Commission for review and approval.
- 17 2. Within six months following submission of a Stage 1
- 18 adaptive management program, the Division shall
- 19 recommend that the Commission approve or disapprove the
- 20 program. The Commission shall either approve the program
- 21 or require changes based on the standards set out in
- 22 sub-subdivision a. of this subdivision. If the Commission
- 23 requires changes, the local government shall submit revisions
- 24 responding to the required changes within two months and
- 25 the Department shall provide follow-up recommendations to
- 26 the Commission within two months after receiving revisions.
- 27 3. Within three months following Commission approval of a
- 28 Stage 1 adaptive management program, the local government
- 29 shall begin implementation of the program. Each local
- 30 government shall report annually to the Department on
- 31 implementation of its program.
- 32 (2) Stage 2 Adaptive Management Program to Control Nutrient Loading From
- 33 Existing Development. –
- 34 a. If the March 1, 2014 monitoring report or any subsequent monitoring
- 35 report for the Upper New Hope Creek Arm of Jordan Reservoir
- 36 required under Section 3(c) of this act shows that nutrient-related
- 37 water quality standards are not being achieved, a municipality or
- 38 county located in whole or in part in the subwatershed of that arm of
- 39 Jordan Reservoir shall develop and implement a Stage 2 adaptive
- 40 management program to control nutrient loading from existing
- 41 development within the subwatershed, as provided in this act. If the
- 42 March 1, 2017 monitoring report or any subsequent monitoring
- 43 report for the Haw River Arm or the Lower New Hope Creek Arm of
- 44 Jordan Reservoir required under Section 3(c) of this act shows that
- 45 nutrient-related water quality standards are not being achieved, a
- 46 municipality or county located in whole or in part in the
- 47 subwatershed of that arm of Jordan Reservoir shall develop and
- 48 implement a Stage 2 adaptive management program to control
- 49 nutrient loading from existing development within the subwatershed,
- 50 as provided in this act. The Department shall defer development and
- 51 implementation of Stage 2 adaptive management programs to control

1 nutrient loading from existing development required in an arm of
2 Jordan Reservoir by this subdivision if it determines that additional
3 reductions in nutrient loading from existing development in that arm
4 will not be necessary to achieve nutrient-related water quality
5 standards. In making this determination, the Department shall
6 consider the anticipated effect of measures implemented or scheduled
7 to be implemented to reduce nutrient loading from sources in the arm
8 other than existing development. If any subsequent monitoring report
9 for an arm of Jordan Reservoir required under Section 3(c) of this act
10 shows that nutrient-related water quality standards have not been
11 achieved, the Department shall notify the municipalities and counties
12 located in whole or in part in the subwatershed of that arm of Jordan
13 Reservoir and the municipalities and counties shall develop and
14 implement a Stage 2 adaptive management program as provided in
15 this subdivision.

16 b. The Department shall establish a load reduction goal for existing
17 development for each municipality and county required to implement
18 a Stage 2 adaptive management program to control nutrient loading
19 from existing development. The load reduction goal shall be
20 designed to achieve an eight percent (8%) reduction in nitrogen
21 loading of surface water from existing development and a five
22 percent (5%) reduction in phosphorus loading of surface water from
23 existing development relative to the baseline period 1997 through
24 2001 and reaching Jordan Reservoir from existing developed lands
25 within the municipal limits or county boundary. The baseline load
26 shall be calculated by applying the Tar-Pamlico Nutrient Export
27 Calculation Worksheet, Piedmont Version, dated October 2004, to
28 acreages of different types of existing development within the local
29 government planning jurisdiction during the baseline period. The
30 baseline load may also be calculated using an equivalent or more
31 accurate method acceptable to the Division and recommended by the
32 Scientific Advisory Board established pursuant to Section 4(a) of this
33 act. The baseline load for a municipality or county shall not include
34 nutrient loading from lands under State or federal control or lands in
35 agriculture or forestry. The load reduction goal shall be adjusted to
36 account for nutrient loading increases from lands developed
37 subsequent to the baseline period but prior to implementation of new
38 development stormwater programs.

39 c. Based on findings under sub-subdivisions a. and b. of this
40 subdivision, the Department shall notify the local governments in
41 each subwatershed that either:

- 42 1. Implementation of a Stage 2 adaptive management program
43 to control nutrient loading from existing development will be
44 necessary to achieve water quality standards in an arm of the
45 reservoir and direct the municipalities and counties in the
46 subwatershed to develop a load reduction program in
47 compliance with this section.
- 48 2. Implementation of a Stage 2 adaptive management program
49 to control nutrient loading from existing development is not
50 necessary at that time but will be reevaluated in three years

- 1 based on the most recent water quality monitoring
2 information.
- 3 d. A local government receiving notice of the requirement to develop
4 and implement a Stage 2 adaptive management program to control
5 nutrient loading from existing development under this section shall
6 not be required to submit a program if the local government
7 demonstrates that it has already achieved the reductions in nutrient
8 loadings required by sub-subdivision b. of this subdivision.
- 9 e. Within six months after receiving notice to develop and implement a
10 Stage 2 adaptive management program to control nutrient loading
11 from existing development, each local government shall submit to
12 the Commission a program that is designed to achieve the reductions
13 in nutrient loadings established by the Division pursuant to
14 sub-subdivision b. of this subdivision. A local government program
15 may include nutrient management strategies that are not included in
16 the model program developed pursuant to Section 3(c) of this act in
17 addition to or in place of any component of the model program. In
18 addition, a local government may satisfy the requirements of this
19 subdivision through reductions in nutrient loadings from other
20 sources in the same subwatershed to the extent those reductions go
21 beyond measures otherwise required by statute or rule. A local
22 government may also work with other local governments within the
23 same subwatershed to collectively meet the required reductions in
24 nutrient loadings from existing development within their combined
25 jurisdictions. Any credit for reductions achieved or obtained outside
26 of a local government's planning jurisdiction shall be adjusted based
27 on transport factors established by the Department document
28 Nitrogen and Phosphorus Delivery from Small Watersheds to Jordan
29 Lake, dated June 30, 2002.
- 30 f. Within six months following submission of a local government's
31 Stage 2 adaptive management program to control nutrient loading
32 from existing development, the Department shall recommend that the
33 Commission approve or disapprove the program. The Commission
34 shall approve the program if it meets the requirements of this
35 subdivision, unless the Commission finds that the local government
36 can, through the implementation of reasonable and cost-effective
37 measures not included in the proposed program, meet the reductions
38 in nutrient loading established by the Department pursuant to
39 sub-subdivision b. of this subdivision by a date earlier than that
40 proposed by the local government. If the Commission finds that there
41 are additional or alternative reasonable and cost-effective measures,
42 the Commission may require the local government to modify its
43 proposed program to include such measures to achieve the required
44 reductions by the earlier date. If the Commission requires such
45 modifications, the local government shall submit a modified program
46 within two months. The Department shall recommend that the
47 Commission approve or disapprove the modified program within
48 three months after receiving the local government's modified
49 program. In determining whether additional or alternative load
50 reduction measures are reasonable and cost effective, the
51 Commission shall consider factors including, but not limited to, the

1 increase in the per capita cost of a local government's stormwater
2 management program that would be required to implement such
3 measures and the cost per pound of nitrogen and phosphorus
4 removed by such measures. The Commission shall not require
5 additional or alternative measures that would require a local
6 government to:

- 7 1. Install or require installation of a new stormwater collection
8 system in an area of existing development unless the area is
9 being redeveloped.
- 10 2. Acquire developed private property.
- 11 3. Reduce or require the reduction of impervious surfaces within
12 an area of existing development unless the area is being
13 redeveloped.

14 g. Within three months after the Commission's approval of a Stage 2
15 adaptive management program to control nutrient loading from
16 existing development, the local government shall complete adoption
17 and begin implementation of its program.

18 h. Each local government implementing a Stage 2 adaptive
19 management program to control nutrient loading from existing
20 development shall submit an annual report to the Division
21 summarizing its activities in implementing its program.

22 i. If at any time the Department finds, based on water quality
23 monitoring, that an arm of the Jordan Reservoir has achieved
24 compliance with water quality standards, the Department shall notify
25 the local governments in the subwatershed. Subject to the approval of
26 the Commission, a local government may modify its Stage 2 adaptive
27 management program to control nutrient loading from existing
28 development to maintain only those measures necessary to prevent
29 increases in nutrient loading from existing development.

30 **SECTION 3.(e)** Model Stage 2 Adaptive Management Program to Control
31 Nutrient Loading From Existing Development. – No later than July 1, 2013, the Department
32 shall submit a model Stage 2 adaptive management program to control nutrient loading from
33 existing development to the Commission for approval. The model program shall identify
34 specific load reduction practices and programs and reduction credits associated with each
35 practice or program. In developing the model program, the Department shall consider the
36 findings and recommendations of the Scientific Advisory Board established pursuant to Section
37 4(a) of this act and comments submitted by municipalities and counties identified in 15A
38 NCAC 02B .0262(7) (Jordan Water Supply Nutrient Strategy: Purpose and Scope). The
39 Commission shall review the model program and either approve the program or return it to the
40 Department with requested changes. The Department shall revise the model program to address
41 changes requested by the Commission. The Commission shall approve a final model program
42 no later than December 31, 2013.

43 **SECTION 3.(f)** Additional Measures to Reduce Nitrogen Loading From Existing
44 Development in the Upper New Hope Creek Arm of the Jordan Reservoir. – If the March 1,
45 2023, monitoring report or any subsequent monitoring report for the Upper New Hope Creek
46 Arm of Jordan Reservoir shows that nutrient-related water quality standards are not being
47 achieved, a municipality or county located in whole or in part in the Upper New Hope Creek
48 Subwatershed shall modify its Stage 2 adaptive management program to control nutrient
49 loading from existing development to achieve additional reductions in nitrogen loading from
50 existing development. The modified Stage 2 adaptive management program shall be designed
51 to achieve a total reduction in nitrogen loading from existing development of thirty-five percent

1 (35%) relative to the baseline period 1997 through 2001. The Department shall notify local
2 governments of the requirement to submit a modified Stage 2 adaptive management program.
3 Submission, review and approval, and implementation of a modified Stage 2 adaptive
4 management program shall follow the process, timeline, and standards set out in
5 sub-subdivisions e. through g. of subdivision (2) of Section 3(d) of this act.

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

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

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

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

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

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

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

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

- 49 (1) Identify management strategies that can be used by local governments to
50 reduce nutrient loading from existing development.

- 1 (2) Evaluate the feasibility, costs, and benefits of implementing the identified
- 2 management strategies.
- 3 (3) Develop an accounting system for assignment of nutrient reduction credits
- 4 for the identified management strategies.
- 5 (4) Identify the need for any improvements or refinements to modeling and
- 6 other analytical tools used to evaluate water quality in nutrient-impaired
- 7 waters and nutrient management strategies.

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

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

21 **SECTION 6.** Construction of Act. –

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

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

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