

**15A NCAC 02B .0266 JORDAN WATER SUPPLY NUTRIENT STRATEGY: STORMWATER MANAGEMENT FOR EXISTING DEVELOPMENT** *See S.L. 2013-395*

This Rule is the stormwater strategy to control nutrient loading from existing development. The Division shall determine whether nutrient load reduction measures for existing development are necessary in each subwatershed of Jordan Reservoir. The Division shall require implementation of reasonable nutrient load reduction measures for existing development in each subwatershed of the Jordan Reservoir, as provided in this Rule and in accordance with a staged, adaptive management program.

- (1) **PURPOSE.** The purposes of this Rule are as follows:
  - (a) To improve the management of stormwater runoff from existing development in the Jordan Watershed to contribute toward nitrogen and phosphorus loading goals identified in 15A NCAC 02B .0262; and
  - (b) To contribute to the restoration of water quality in the Jordan Reservoir as specified in Rule 15A NCAC 02B .0262.
- (2) **APPLICABILITY.** This Rule shall apply to municipalities and counties located in whole or in part in the Jordan Watershed as identified in Rule 15A NCAC 02B .0262(7).
- (3) **STAGE 1 PROGRAM REQUIREMENTS.** Municipalities and counties located in whole or in part in the Jordan watershed shall continue to implement a Stage 1 adaptive management program to control nutrient loading from existing development in the Jordan watershed as approved by the Commission in May 2010 or subsequent revision their program approved by the Commission or its delegated authority. The Stage 1 adaptive management program met the requirements set out in 40 CFR 122.34 as applied by the Division in the NPDES General Permit for municipal separate storm sewer systems in effect on July 1, 2009. Local governments shall report annually to the Division on implementation progress on the following Stage 1 program elements:
  - (a) Public education 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.
  - (b) Mapping that includes major components of the municipal separate storm sewer system, including the location of major outfalls, as defined in 40 CFR 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.
  - (c) Identification and remove illegal discharges.
  - (d) Identification of opportunities for retrofits and other projects to reduce nutrient loading from existing developed lands.
  - (e) Maintenance of best management practices implemented by the local government.
- (4) **NUTRIENT MONITORING.** The Division shall maintain an ongoing program to monitor water quality in each arm of Jordan Reservoir. The Division 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 Division. On March 1, 2014, the Division shall report the results of monitoring in each arm of Jordan Reservoir to the Environmental Review Commission. The Division shall submit an updated monitoring report under this Item every three years thereafter until such time as the lake is no longer impaired by nutrient pollution.
- (5) **STAGE 2 ADAPTIVE MANAGEMENT.** The Division shall review monitoring described in Item (4) of this Rule to decide whether to implement a Stage 2 adaptive management program to control nutrient loading from existing development to achieve nutrient-related water quality standards in Jordan Lake. The Division shall use the following conditions to identify local governments that need to develop and implement a Stage 2 program:
  - (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 Item (4) of this Rule 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 program within the subwatershed, as provided in this Rule.
  - (b) 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 Item (4) of this Rule 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 program within the subwatershed, as provided in this Rule.

- (c) The Division shall defer development and implementation of Stage 2 programs required in a subwatershed by this Item 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 Division 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 Item (4) of this Rule shows that nutrient-related water quality standards have not been achieved, the Division 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 Rule.
- (6) NOTIFICATION OF STAGE 2 REQUIREMENTS. Based on findings under Item (5) of this Rule, the Division shall notify the local governments in each subwatershed that either:
  - (a) Implementation of a Stage 2 program 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 Rule; or
  - (b) Implementation of a Stage 2 program is not necessary at that time but will be reevaluated in three years based on the most recent water quality monitoring information.
- (7) STAGE 2 LOAD GOALS. The Division shall establish a load reduction goal for existing development for each municipality and county required to implement a Stage 2 program. The load reduction goal shall be designed to achieve, relative to the baseline period 1997 through 2001, an eight percent reduction in nitrogen loading and a five percent 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 estimated using the results of a watershed model recommended in a July 2012 report to the Secretary from the Nutrient Scientific Advisory Board established pursuant to Section 4(a) of S.L. 2009-216, or by using an equivalent or more accurate method acceptable to the Division and recommended by that Board. 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.
- (8) A local government receiving notice of the requirement to develop and implement a Stage 2 program under Item (6) of this Rule shall not be required to submit a program if the local government demonstrates that it has already achieved the reductions in nutrient loadings required under Item (7) of this Rule.
- (9) STAGE 2 PROGRAM DEVELOPMENT. Local governments shall utilize the model program to control nutrient loading from existing development, that was approved by the Commission as of December 2013, to develop their Stage 2 program to control nutrient loading from existing development as described under Item (10) of this Rule. In developing this model program, the Division considered comments from municipalities and counties listed in 15A NCAC 02B .0262(7) and recommendations from the Nutrient Scientific Advisory Board. The model program identifies 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.
- (10) STAGE 2 IMPLEMENTATION. The following process shall be applied for local governments subject to the requirement to develop and implement a Stage 2 adaptive management program.
  - (a) Within six months after receiving notice to develop and implement a Stage 2 program as described in Item (6) of this Rule, each local government that has not received Division approval for having achieved the required reductions as specified in Item (8) of this Rule shall submit to the Commission a program that is designed to achieve the reductions in nutrient loadings established by the Division pursuant to Item (7) of this Rule. A local government program may include nutrient management strategies that are not included in the model program developed pursuant to Item (9) of this Rule in addition to or in place of any

component of the model program. In addition, a local government may satisfy the requirements of this Item 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 Division document Nitrogen and Phosphorus Delivery from Small Watersheds to Jordan Lake, dated June 30, 2002 or an equivalent or more accurate method acceptable to the Division and recommended by the Nutrient Scientific Advisory Board established pursuant to Section 4(a) of S.L. 2009-216.

- (b) Within six months following submission of a local government's Stage 2 adaptive management program to control nutrient loading from existing development, the Division shall recommend that the Commission approve or disapprove the program. The Commission shall approve the program if it meets the requirements of this Item, 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 Division pursuant to Item (7) of this Rule 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 Division 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:
    - (i) Install or require installation of a new stormwater collection system in an area of existing development unless the area is being redeveloped.
    - (ii) Acquire developed private property.
    - (iii) Reduce or require the reduction of impervious surfaces within an area of existing development unless the area is being redeveloped.
  - (c) 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.
- (11) **ADDITIONAL MEASURES TO REDUCE NITROGEN LOADING IN THE UPPER NEW HOPE CREEK SUBWATERSHED.** 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 program shall be designed to achieve a total reduction in nitrogen loading from existing development of 35 percent relative to the baseline period 1997 through 2001. The Division 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 Item (10) of this Rule.
- (12) Each local government implementing a Stage 2 program shall submit an annual report to the Division summarizing its activities in implementing its program.
- (13) If at any time the Division finds, based on water quality monitoring, that an arm of the Jordan Reservoir has achieved compliance with water quality standards, the Division 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.

- (14) The Division shall report annually to the Commission regarding the implementation of adaptive management programs to control nutrient loading from existing development in the Jordan watershed.

*History Note: Authority G.S. 143-214.1; 143-214.5; 143-214.7; 143-214.12; 143-214.21; 143-215.3(a)(1); 143-215.6A; 143-215.6B; 143-215.6C; 143 215.8B; 143B-282(c); 143B-282(d); S.L. 2005-190; S.L. 2006-259; S.L. 2009-216;  
See S.L. 2013-395;  
Eff. July 7, 2014.*