

1 15A NCAC 02B .0266 is adopted with changes as published in 21:24 NCR 2273-2276 as follows:

2
3 15A NCAC 02B .0266 JORDAN WATER SUPPLY NUTRIENT STRATEGY: STORMWATER
4 MANAGEMENT FOR EXISTING DEVELOPMENT

5 This Rule establishes an adaptive approach by which municipalities and counties are to contribute to achieving the
6 nonpoint source loading goals of the Jordan nutrient strategy by reducing or otherwise offsetting nutrient
7 contributions from ~~existing development~~existing developed lands. It provides local governments three and one-half
8 years to ~~conduct feasibility studies from which they shall~~develop plans that propose the pace and nature of
9 implementation actions ~~in plans~~ to the Division, which they shall initiate within four and one-half years after the
10 effective date of this Rule as specified in Sub-Item (4). The following is the watershed stormwater strategy for
11 existing development in the Jordan watershed, as prefaced in Rule 15A NCAC 02B .0262:

12 (1) PURPOSE. The purposes of this Rule are as follows:

13 (a) To ~~contribute to achieving~~achieve and ~~maintaining~~maintain the nonpoint source
14 nitrogen and phosphorus percentage reduction goals established for Jordan Reservoir in
15 Rule 15A NCAC 2B .0262 on nutrient loading from existing development in the Jordan
16 watershed relative to the baseline period defined in that ~~Rule~~Rule by reducing loading
17 ~~from existing development in the Jordan watershed~~. Existing development ~~is~~
18 ~~development that exists~~is defined in Rule 15A NCAC 2B .0263; and as of the effective
19 ~~date of local stormwater management programs established under Rule 15A NCAC 02B~~
20 ~~.0265, or development that occurs after the effective date of those programs but is not~~
21 ~~subject to the requirements of those programs, such as vested projects and redevelopment~~
22 ~~that does not yield a net increase in built-upon area.~~

23 (b) To protect the water supply uses of Jordan Reservoir and of designated water supplies
24 throughout the Jordan watershed.

25 (2) APPLICABILITY. This Rule shall apply to municipalities and counties in the Jordan watershed
26 as identified in Rule 15A NCAC 02B ~~.0262~~.0262(7). A local government's load reduction need
27 shall be based on the developed lands that fall within its general police powers and within the
28 Jordan watershed. The load reduction need shall not include lands under state or federal control,
29 and a county shall not include lands within its jurisdictional boundaries that are under municipal
30 police powers.

31 (3) REQUIREMENTS. All local governments subject to this Rule shall develop stormwater
32 ~~management~~ programs for submission to and approval by the Commission that include the
33 following elements and meet according to the following associated minimum standards:

34 (a) A load reduction program for achieving ~~sustained and maintaining~~ nutrient loading
35 reductions from existing development. This program shall meet the following criteria:

36 (i) The long-term objective of this load reduction program shall be for a local
37 government to achieve the percentage nutrient ~~loading~~load reduction goals in

1 Item (35) of Rule 15A NCAC 02B .0262 relative to annual mass-loading- load,
2 in pounds per year, representative of the baseline period defined in that Rule and
3 as applied to reaching Jordan Reservoir from existing development-developed
4 lands under the local government's land-use-authority-police powers within each
5 of the three subwatersheds, defined in that rule, that fallsfall within its
6 jurisdiction. The load reduction need shall not include lands under state or
7 federal control, and a county shall not include lands within its jurisdictional
8 boundaries that are under municipal police powers. Loading shall be calculated
9 by applying the Tar-Pamlico Nutrient Export Calculation Worksheet, Piedmont
10 Version, dated October 2004, or an equivalent or more accurate method
11 acceptable to the Division, to acreages of different types of existing
12 development. To provide local governments spatial latitude to obtain reductions
13 in different locations, loads thus calculated shall be converted to delivered loads
14 to Jordan Reservoir using transport factors established in the Division document,
15 Nitrogen and Phosphorus Delivery from Small Watersheds to Jordan Lake,
16 dated June 30, 2002. In addressing this long-term objective, a local
17 government shall include estimates of, and plans for offsetting, nutrient loading
18 increases from lands developed subsequent to the baseline period but prior to
19 implementation of new development programs. For these post-baseline
20 developed lands, the new loading rate shall be compared to the applicable
21 loading rate target in Sub-Item (3)(a)(i) of Rule 15A NCAC 02B .0265 for the
22 subwatershed and acres involved, and the difference shall constitute the load
23 reduction need. Should percentage reduction goals be adjusted pursuant to
24 Section (7) of Rule 15A NCAC 02B .0262, then the annual loading goals
25 established in this Sub-Section shall be adjusted accordingly. Note: A local
26 government may seek supplemental funding for implementation of load-
27 reducing activities through grant sources such as the North Carolina Clean
28 Water Management Trust Fund, the North Carolina Clean Water Act Section
29 319 Grant Program Program, or other funding programs for nonpoint sources;

- 30 (ii) The load reduction program shall include a plan and supporting technical
31 analysis for achieving half of each load reduction goal within 10 years after the
32 effective date of this Rule. A load reduction program may propose an
33 alternative compliance timeframe provided it includes a technical analysis that
34 demonstrates the need for that timeframe. At 10 years after the effective date of
35 this Rule, the local government shall submit a revised load reduction program
36 that shall include a plan and timeframes for achieving the remainder of each
37 load reduction goal based on additional technical analysis. A program technical

1 analysis shall examine the feasibility of achieving stated goals and shall consider
2 factors such as magnitude of reduction need relative to area within a
3 subwatershed, the potential for utilizing the range of load-reducing activities
4 listed in Sub-Item (3)(a)(iv), and relative costs and efficiencies of each activity
5 to the extent information is available. The load reduction program shall propose
6 implementation rates and timeframes for each activity. ~~The results of a~~
7 ~~feasibility study to determine the extent to which the loading goals referenced in~~
8 ~~this Rule may be achieved from existing development within a local~~
9 ~~government's jurisdiction through reducing activities. The local government~~
10 ~~shall develop a proposed implementation rate and compliance schedule for~~
11 ~~reducing activities.~~ This schedule shall provide for reasonable and
12 steady proportionate annual progress toward reduction goals throughout the
13 proposed compliance period; the reduction goals as practicable, that is, capable
14 of being put into practice, done, or accomplished.

15 (iii) The load reduction program shall identify specific load-reducing practices
16 implemented to date subsequent to the baseline period and for which the local
17 government is seeking credit. It shall estimate load reductions for these
18 practices using methods provided for in Sub-Item ~~(4)(a),(4)(b)~~, and their
19 anticipated duration;

20 (iv) The load reduction program shall identify the types of activities the local
21 government intends to implement and types of existing development affected,
22 relative proportions or a prioritization of practices, and the relative magnitude of
23 reductions it expects to achieve from each. A local government may earn
24 reduction credit toward the requirements of this Item for any nitrogen or
25 phosphorus load reductions in excess of those required by other rules in this
26 Chapter. The program shall identify the duration of anticipated loading
27 reductions, and should may seek activities that provide sustained, long-term
28 reductions. The load reduction program shall meet the requirements of Rule
29 15A NCAC 02B .0273. Potential load-reducing activities may include but
30 would not be limited to stormwater activities such as street sweeping, sweeping;
31 improvement of existing ponds and stormwater structures; removal of existing
32 built-upon area, area; retrofitting of existing development with engineered best
33 management practices (BMPs),(BMPs); requiring treatment of runoff in
34 redevelopment projects, projects; requiring over-treatment of runoff in new
35 development projects, projects; source control activities such as pet waste
36 reduction and fertilization reduction; alternative stormwater practices such as
37 rain barrels, cisterns, downspout disconnections, and stormwater capture and

1 reuse; restoration of ecological communities such as streams and riparian
2 buffers; and adoption of fertilizer management ordinances or fertilizer education
3 programs, and wastewater activities such as overtreatment at creation of surplus
4 allocation through advanced treatment at publicly owned treatment works
5 (POTW), expansion of surplus allocation through regionalization, collection
6 system improvements, removal of illegal discharges, and connection of onsite
7 wastewater systems and discharging sand filter systems to central sewer;

8 (v) The load reduction program shall identify anticipated funding mechanisms or
9 sources and discuss steps taken or planned to secure such funding; ~~and~~

10 (vi) A municipality shall have the option of working with the county or counties in
11 which it falls, or with another municipality or municipalities within the same
12 subwatershed, to jointly meet the loading targets from all lands within their
13 combined jurisdictions within a subwatershed. A local government may utilize
14 private or third party sellers. All reductions shall meet the requirements of Rule
15 15A NCAC 02B .0273; and

16 (vii) A local government may choose to conduct monitoring of stream flows and
17 runoff from catchments to quantify disproportionately high loading rates relative
18 to those used in the accounting methods stipulated under Sub-Item (4)(b), and to
19 subsequently target load-reducing activities to demonstrated high-loading source
20 areas within such catchments for proportionately greater load reduction. A local
21 government may propose such actions in its initial load reduction program
22 submittal or at any time subsequent, and shall obtain Division approval of the
23 monitoring design. It shall obtain Division approval of any resulting load
24 reduction benefits based on the standards set out in this Rule. As set out in Item
25 (4) of this Rule, a local government that chooses such monitoring initially may
26 delay submittal of its load reduction program by one year for the purpose of
27 incorporating monitoring findings into its program design provided it submits to
28 the Division within six months of the effective date of this Rule a satisfactory
29 monitoring proposal involving at least one year of up-front monitoring, executes
30 the monitoring, and provides the results to the Division as part of its load
31 reduction program submittal.

32 (b) An existing development administrative program that includes the following components
33 and meets the applicable standards set out in 40 CFR 122.34 and the most recent version
34 of NC NPDES General Permit NCG 230000:

35 (i) A component to ensure maintenance of load reductions achieved as a result of
36 the provisions in Sub-Item (3)(a) of this Rule for the life of the development;

1 ~~(e)(ii)~~ A public education ~~program-component~~ to inform citizens, business, and
2 industry of how to reduce nutrient ~~pollution, pollution~~ including education on
3 home fertilization practices;

4 ~~(d)(iii)~~ A mapping ~~program-component~~ that includes major components of the
5 municipal separate storm sewer system, waters of the State, land use types, and
6 location of sanitary sewers; and

7 ~~(b)(iv)~~ A ~~program-component~~ to identify and remove illegal discharges.

8 (4) RULE IMPLEMENTATION. This Rule shall be implemented as follows:

9 ~~(a)~~ Within six months after the effective date of this Rule, any local government that intends
10 to use water quality monitoring to guide the initial design of its load reduction program
11 shall provide a monitoring design to the Division. The Division shall notify any such
12 local government of the adequacy of its design within three months of submittal. If a
13 local government's monitoring design is deemed adequate, it may delay submittal of its
14 load reduction program by up to one year from the timeframe given in Sub-Item (4)(f) of
15 this Rule, whereupon the same time interval would be added to the approval and
16 implementation timeframes given in Sub-Items (4)(g) – (4)(i) of this Rule;

17 ~~(a)(b)~~ Within 12-18 months after the effective date of this Rule, the Division shall submit a
18 model local stormwater program, in conjunction with similar requirements in Rule 15A
19 NCAC 02B .0265, that embodies the criteria described in Item (3) of this Rule, including
20 model local ordinances as applicable, and including methods to quantify loading
21 reduction requirements, requirements and resulting loading reduction assignments for
22 individual local governments, and methods to account for loading reductions-reduction
23 credits from various activities, to the Commission for approval. The Division shall work
24 in cooperation with subject local governments and other watershed interests in
25 developing this model program;

26 ~~(b)(c)~~ Within six months after the Commission's approval of the model local stormwater
27 program, program and model ordinance, subject local governments shall submit
28 stormwater management existing development administrative programs programs, in
29 conjunction with similar requirements in Rule 15A NCAC 02B .0265, that meet or
30 exceed the requirements of Sub-Item (3)(b) of this Rule to the Division for review and
31 preliminary approval; approval. Except for the requirements in Sub-Item (3)(a) of this
32 Rule, local programs shall address and meet or exceed the requirements in Item (3) of this
33 Rule and ensuing minimum criteria established in the model;

34 ~~(e)(d)~~ Within 15-12 months of the Commission's approval of the model local stormwater
35 program, the Division shall request the Commission's approval of the local stormwater
36 management programs addressing the requirements of Item 3 except those in Sub-Item
37 (3)(a); provide recommendations to the Commission on existing development

1 administrative programs. The Commission shall either approve the programs or require
2 changes based on the standards set out in Sub-Item (3)(b) of this Rule. Should the
3 Commission require changes, the applicable local government shall have two months to
4 submit revisions, and the Division shall provide follow-up recommendations to the
5 Commission within two months after receiving revisions;

6 (d)(e) Within 18-15 months of the Commission's approval of the model local stormwater
7 program, three months after the Commission's approval of a local existing development
8 administrative program, or upon the Division's first renewal of a local government's
9 NPDES stormwater permit, whichever occurs later, subject the affected local
10 governmentsgovernment shall complete adoption of and begin implementation of local
11 stormwater managementits existing development administrative program; programs
12 addressing the requirements of Item 3 except those in Sub-Item (3)(a); and

13 (e)(f) Within 36-24 months after the effective date of this RuleCommission's approval of the
14 model local program, subject local governments shall submit loading
15 addressing that meet or exceed the requirements of Sub-Item (3)(a) of this Rule Rule, to
16 the Division for review and preliminary approval;including the following regarding Sub-
17 Item (3)(a)(i) of this Rule:

18 (i)The results of feasibility studies that determine the extent to which the loading goals
19 referenced in this Rule may be achieved from existing development lands within their
20 jurisdictions.

21 (ii)A proposed implementation schedule for load reduction projects.

22 (f)(g) Within 46-34 months of the effective date of this Ruleafter the Commission's approval of
23 the model local program, the Division shall request the Commission's approval ofprovide
24 recommendations to the Commission on local load reduction programs.programs
25 submitted under Sub-Item (4)(e) of this Rule. The Commission shall either approve the
26 programs or require changeschanges based on the standards set out in Sub-Item (3)(a) of
27 this Rule. Should the Commission require changes, the applicable local government shall
28 have two months to submit revisions, and the Division shall address those changes and
29 seek provide follow-up recommendations to the Commission approval at the earliest
30 feasible date subsequent to the original request.within two months after receiving
31 revisions;

32 (g)(h) Within 48 months of the effective date of this Rule, or within two-three months following
33 Commission approval of a load reduction program, whichever is later, subject local
34 governments shall complete adoption of and begin to implement local-load reduction
35 programs;programs on the timeframe established under the feasibility study.

36 (h)(i) Upon implementation of the programs required under Item (3) of this Rule, local
37 governments shall provide annual reports to the Division documenting their progress in

1 implementing ~~the~~ those requirements within three months following each anniversary of
2 program implementation date; requirements of Item (3) of this Rule, including changes to
3 nutrient loading due to implementation of Sub Item (3)(a) of this Rule.

4 (j) With the annual report following the tenth year after the effective date of this rule, local
5 governments shall submit revised load reduction programs that include a plan and
6 timeframes for achieving the remainder of each load reduction goal to the Division for
7 preliminary approval. Within nine months after submittal, the Division shall make
8 recommendations to the Commission on approval of these revised load reduction
9 programs. The Commission shall either approve the programs or require changes based
10 on the standards set out in this rule. Should the Commission require changes, the
11 applicable local governments shall submit revisions within two months, and the Division
12 shall provide follow-up recommendations to the Commission within three months after
13 receiving revisions. Local governments shall continue to implement load reduction
14 programs during review and approval of revisions.

15 (k) A local government may, at any time after commencing implementation of its load
16 reduction program, submit program revisions to the Division for approval based on
17 identification of more cost-effective strategies or other factors not originally recognized;
18 and

19 (l) At least every 10 years after the effective date, the Division shall review the accounting
20 methods stipulated under Sub-Item (4)(b) to determine the need for revisions to those
21 methods and to loading reductions assigned using those methods. Its review shall include
22 values subject to change over time independent of changes resulting from implementation
23 of this rule, such as untreated export rates that may change with changes in atmospheric
24 deposition. It shall also review values subject to refinement, such as nutrient removal
25 efficiencies.

26 (5) RELATIONSHIP TO OTHER REQUIREMENTS. A local government may in its program
27 submittal under ~~Sub Item (4)(b)~~ Item (4)(c) of this Rule request that the Division accept the local
28 government's implementation of another stormwater program or programs, such as NPDES
29 municipal stormwater requirements, as satisfying one or more of the requirements set forth in Item
30 (3) of this Rule. The Division will provide determination on acceptability of any such alternatives
31 prior to requesting Commission approval of local programs ~~as required in Sub Items (3)(a) and~~
32 ~~(3)(b)~~ under Item (4) of this Rule. The local government shall include in its program submittal
33 technical information demonstrating the adequacy of the alternative requirements. Where
34 requirements of this Rule exceed those in a NPDES permit, a local government shall meet the
35 requirements of this Rule upon the first renewal of its NPDES permit.
36

1 *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-
2 215.6A; 143-215.6B; 143-215.6C; ~~143-282(d)~~; [143-215.8B](#); ~~143-215.8B(b)~~; 143B-282(c); [143B-](#)
3 [282\(d\)](#); S.L. 2005-190; [S.L. 2006-259](#);
4 *Eff. July 1, 2008.*