

**15A NCAC 02B .0264 JORDAN WATER SUPPLY NUTRIENT STRATEGY: AGRICULTURE**

(See S.L. 2013-395)

This Rule sets forth a process by which agricultural operations in the Jordan watershed will collectively limit their nitrogen and phosphorus loading to the Jordan Reservoir, as prefaced in Rule 15A NCAC 02B .0262. This process is as follows:

- (1) **PURPOSE.** The purposes of this Rule are to achieve and maintain the percentage reduction goals defined in Rule 15A NCAC 02B .0262 for the collective agricultural loading of nitrogen and phosphorus from their respective 1997-2001 baseline levels, to the extent that best available accounting practices will allow. This Rule aims to achieve the goals set out in 15A NCAC 02B .0262 within six to nine years, as set out in Sub-Item (5)(b) of this Rule. Additionally this Rule will protect the water supply uses of Jordan Reservoir and of designated water supplies throughout the Jordan watershed.
- (2) **PROCESS.** This Rule requires accounting for agricultural land management practices at the county and subwatershed levels in the Jordan watershed, and implementation of practices by farmers in these areas to collectively achieve the nutrient reduction goals on a county and subwatershed basis. Producers may be eligible to obtain cost share and technical assistance from the NC Agriculture Cost Share Program and similar federal programs to contribute to their counties' nutrient reductions. A Watershed Oversight Committee, and if needed Local Advisory Committees, will develop strategies, coordinate activities, and account for progress.
- (3) **LIMITATION.** This Rule may not fully address significant nutrient sources relative to agriculture in that it does not directly address atmospheric sources of nitrogen to the Jordan watershed from agricultural operations located both within and outside of the Jordan watershed. As better information becomes available from ongoing research on atmospheric nitrogen loading to the Jordan watershed from these sources, and on measures to control this loading, the Commission may undertake separate rule-making to require such measures it deems necessary from these sources to support the goals of the Jordan Reservoir Nutrient Sensitive Waters Strategy.
- (4) **APPLICABILITY.** This Rule shall apply to all persons engaging in agricultural operations in the Jordan watershed, including those related to crops, horticulture, livestock, and poultry. This Rule applies to livestock and poultry operations above the size thresholds in this Item in addition to requirements for animal operations set forth in general permits issued pursuant to G.S. 143-215.10C. Nothing in this Rule shall be deemed to allow the violation of any assigned surface water, groundwater, or air quality standard by any agricultural operation, including any livestock or poultry operation below the size thresholds in this Item. This Rule does not require specific actions by any individual person or operation if the county or counties in which they conduct operations can collectively achieve their nutrient reduction targets, in the manner described in Item (5) of this Rule, within six years of the effective date of this Rule. For the purposes of this Rule, agricultural operations are activities that relate to any of the following pursuits:
  - (a) The commercial production of crops or horticultural products other than trees. As used in this Rule, commercial shall mean activities conducted primarily for financial profit.
  - (b) Research activities in support of such commercial production.
  - (c) The production or management of any of the following number of livestock or poultry at any time, excluding nursing young:
    - (i) 5 or more horses;
    - (ii) 20 or more cattle;
    - (iii) 20 or more swine not kept in a feedlot, or 150 or more swine kept in a feedlot;
    - (iv) 120 or more sheep;
    - (v) 130 or more goats;
    - (vi) 650 or more turkeys;
    - (vii) 3,500 or more chickens; or
    - (viii) Any single species of any other livestock or poultry, or any combination of species of livestock or poultry, that exceeds 20,000 pounds of live weight at any time.
- (5) **METHOD FOR RULE IMPLEMENTATION.** This Rule shall be implemented initially by a Watershed Oversight Committee and, if needed, through a cooperative effort between the Watershed Oversight Committee and Local Advisory Committees in each county. The membership, roles and

responsibilities of these committees are set forth in Items (7) and (8) of this Rule. Committees' activities shall be guided by the following constraints:

- (a) Within three years after the effective date of this Rule, the Watershed Oversight Committee shall provide the Commission with an initial assessment of the extent to which agricultural operations in each subwatershed have achieved the nitrogen goals identified in Item (1) of this Rule through activities conducted since the baseline period. The Watershed Oversight Committee shall use the accounting process described in Items (7) and (8) of this Rule to make its assessment. Should the Commission determine at that time that a subwatershed nitrogen goal has not been achieved, then Local Advisory Committees shall be formed in that subwatershed according to Item (8) of this Rule to further progress toward the goal by developing local strategies to guide implementation.
  - (b) For any subwatershed identified in Sub-Item (5)(a) of this Rule as not having achieved its nitrogen goal within three years, the Commission shall within six years after the effective date of this Rule again determine, with input from the Watershed Oversight Committee, whether the subwatershed has achieved its nitrogen goal. Should the Commission determine at that time that a subwatershed has not achieved its goal, then it shall require additional best management practice (BMP) implementation as needed to ensure that the goal is met within nine years after the effective date of this Rule. The Commission may also consider alternative recommendations from the Watershed Oversight Committee based on its assessment of the practicability of agricultural operations meeting the subwatershed goal. Should the Commission require some form of individual compliance, then it shall also subsequently approve a framework proposed by the Watershed Oversight Committee for allowing producers to obtain credit through offsite measures. Such offsite measures shall meet the requirements of 15A NCAC 02B .0273(2) – (4). The Commission shall review compliance with the phosphorus goals within six years of the effective date and shall require additional BMP implementation within any subwatershed as needed to meet its goal within an additional three years from that date.
  - (c) Should a committee called for under Sub-Item (5)(a) of this Rule not form nor follow through on its responsibilities such that a local strategy is not implemented in keeping with Item (8) of this Rule, the Commission shall require all persons subject to this Rule in the affected area to implement BMPs as needed to meet the goals of this Rule.
- (6) **RULE REQUIREMENTS FOR INDIVIDUAL OPERATIONS.** Persons subject to this Rule shall adhere to the following requirements:
- (a) If the initial accounting required under Sub-Item (5)(a) of this Rule determines that agricultural operations have not already collectively met the nitrogen reduction goals, persons subject to this Rule shall register their operations with their Local Advisory Committee according to the requirements of Item (8) of this Rule within four years after the effective date of this Rule. Within six years after the effective date of this Rule, such persons are not required to implement any specific BMPs but may elect to contribute to the collective local nutrient strategy by implementing any BMPs they choose that are recognized by the Watershed Oversight Committee as nitrogen-reducing or phosphorus-reducing BMPs.
  - (b) Should a local strategy not achieve its goal after six years, operations within that local area may face specific implementation requirements, as described under Sub-Item (5)(b) of this Rule.
  - (c) Producers may generate nitrogen loading reduction credit for sale to parties subject to or operating under other nutrient strategy rules in the Jordan watershed under either of the following circumstances and only pursuant to the conditions of Sub-Item (7)(b)(vii) of this Rule and 15A NCAC 02B .0273:
    - (i) If the subwatershed in which they implement nitrogen-reducing practices has achieved its nitrogen goal.
    - (ii) At any point during the implementation of this Rule, a pasture-based livestock operation that implements an excluded buffer BMP on part or all of its operation may sell that portion of the nitrogen reduction credit attributed to the buffer restoration aspect of the practice, while the credit attributed to the exclusion aspect shall accrue to the achievement or maintenance of the goals of this Rule.

- (7) **WATERSHED OVERSIGHT COMMITTEE.** The Watershed Oversight Committee shall have the following membership, role and responsibilities:
- (a) **MEMBERSHIP.** The Director shall be responsible for forming a Watershed Oversight Committee within two months of the effective date of this Rule. Until such time as the Commission determines that long-term maintenance of the nutrient loads is assured, the Director shall either reappoint members or replace members at least every six years. The Director shall solicit nominations for membership on this Committee to represent each of the following interests, and shall appoint one nominee to represent each interest except where a greater number is noted. The Director may appoint a replacement at any time for an interest in Sub-Items (7)(a)(vi) through (7)(a)(x) of this Rule upon request of representatives of that interest:
- (i) Division of Soil and Water Conservation;
  - (ii) United States Department of Agriculture-Natural Resources Conservation Service (shall serve in an "ex-officio" non-voting capacity and shall function as a technical program advisor to the Committee);
  - (iii) North Carolina Department of Agriculture and Consumer Services;
  - (iv) North Carolina Cooperative Extension Service;
  - (v) Division of Water Quality;
  - (vi) Three environmental interests, at least two of which are residents of the Jordan watershed;
  - (vii) General farming interests;
  - (viii) Pasture-based livestock interests;
  - (ix) Equine livestock interests;
  - (x) Cropland farming interests; and
  - (xi) The scientific community with experience related to water quality problems in the Jordan watershed.
- (b) **ROLE.** The Watershed Oversight Committee shall:
- (i) Develop tracking and accounting methods for nitrogen and phosphorus loss. Submit methods to the Water Quality Committee of the Commission for approval based on the standards set out in Sub-Item (7)(c) of this Rule within two years after the effective date of this Rule;
  - (ii) Identify and implement future refinements to the accounting methods as needed to reflect advances in scientific understanding, including establishment or refinement of nutrient reduction efficiencies for BMPs;
  - (iii) Within three years after the effective date of this Rule, collect data needed to conduct initial nutrient loss accounting for the baseline period and the most current year feasible, perform this accounting, and determine the extent to which agricultural operations have achieved the nitrogen loss goal and phosphorus loss trend indicators for each subwatershed. Present findings to the Water Quality Committee of the Commission;
  - (iv) Review, approve, and summarize local nutrient strategies if required pursuant to Sub-Item (5)(a) of this Rule and according to the timeframe identified in Sub-Item (8)(c)(ii) of this Rule. Provide these strategies to the Division;
  - (v) Establish requirements for, review, approve and summarize local nitrogen and phosphorus loss annual reports as described under Sub-Item (8)(e) of this Rule, and present these reports to the Division annually, until such time as the Commission determines that annual reports are no longer needed to fulfill the purposes of this Rule. Present the annual report six years after the effective date to the Commission. Should that annual report find that a subwatershed has not met its nitrogen goal, include an assessment in that report of the practicability of producers achieving the goal within nine years after the effective date, and recommendations to the Commission as deemed appropriate;
  - (vi) Obtain nutrient reduction efficiencies for BMPs from the scientific community associated with design criteria identified in rules adopted by the Soil and Water

Conservation Commission, including 15A NCAC 06E .0104 and 15A NCAC 06F .0104; and

- (vii) Investigate and, if feasible, develop an accounting method to equate implementation of specific nitrogen-reducing practices on cropland or pastureland to reductions in nitrogen loading delivered to streams. Quantify the nitrogen credit generated by such practices for purposes of selling or buying credits. Establish criteria and a process as needed for the exchange of nitrogen credits between parties meeting the criteria of either Sub-Item (5)(b) or Sub-Item (6)(c) of this Rule with parties subject to or operating under other nutrient strategy rules in the Jordan watershed pursuant to the requirements of 15A NCAC 02B .0273. Approve eligible trades, and ensure that such practices are accounted for and tracked separately from those contributing to the goals of this Rule.
- (c) ACCOUNTING METHODS. Success in meeting this Rule's purpose will be gauged by estimating percentage changes in nitrogen loss from agricultural lands in the Jordan watershed and by evaluating broader trends in indicators of phosphorus loss from agricultural lands in the Jordan watershed. The Watershed Oversight Committee shall develop accounting methods that meet the following requirements:
- (i) The nitrogen method shall quantify baseline and annual total nitrogen losses from agricultural operations in each county, each subwatershed, and for the entire Jordan watershed;
  - (ii) The nitrogen and phosphorus methods shall include a means of tracking implementation of BMPs, including number, type, and area affected;
  - (iii) The nitrogen method shall include a means of estimating incremental nitrogen loss reductions from actual BMP implementation and of evaluating progress toward and maintenance of the nutrient goals from changes in BMP implementation, fertilization, individual crop acres, and agricultural land use acres;
  - (iv) The nitrogen and phosphorus methods shall be refined as research and technical advances allow;
  - (v) The phosphorus method shall quantify baseline values for and annual changes in factors affecting agricultural phosphorus loss as identified by the phosphorus technical advisory committee established under 15A NCAC 02B .0256(f)(2)(C). The method shall provide for periodic qualitative assessment of likely trends in agricultural phosphorus loss from the Jordan watershed relative to baseline conditions;
  - (vi) Phosphorus accounting may also include a scientifically valid, survey-based sampling of farms in the Jordan watershed for the purpose of conducting field-scale phosphorus loss assessments and extrapolating phosphorus losses for the Jordan watershed for the baseline period and at periodic intervals; and
  - (vii) Aspects of pasture-based livestock operations that potentially affect nutrient loss and are not captured by the accounting methods described above shall be accounted for in annual reporting by quantifying changes in the extent of livestock-related nutrient controlling BMPs. Progress may be judged based on percent change in the extent of implementation relative to subwatershed percentage goals identified in Rule .0262 of this Section.
- (8) LOCAL ADVISORY COMMITTEES. Local Advisory Committees required by Sub-Item (5)(a) of this Rule shall be formed for each county within the applicable subwatershed within three years and three months after the effective date of this Rule, and shall have the following membership, roles, and responsibilities:
- (a) MEMBERSHIP. A Local Advisory Committee shall be appointed as provided for in this Item. It shall terminate upon a finding by the Commission that it is no longer needed to fulfill the purposes of this Rule. Each Local Advisory Committee shall consist of:
    - (i) One representative of the county Soil and Water Conservation District;
    - (ii) One representative of the county office of the United States Department of Agriculture Natural Resources Conservation Service;

- (iii) One representative of the North Carolina Department of Agriculture and Consumer Services whose regional assignment includes the county;
  - (iv) One representative of the county office of the North Carolina Cooperative Extension Service;
  - (v) One representative of the North Carolina Division of Soil and Water Conservation whose regional assignment includes the county; and
  - (vi) At least two farmers who reside in the county.
- (b) **APPOINTMENT OF MEMBERS.** The Director of the Division of Water Quality and the Director of the Division of Soil and Water Conservation of the Department of Environment and Natural Resources shall appoint members described in Sub-Items (8)(a)(i), (8)(a)(ii), (8)(a)(iv), and (8)(a)(v) of this Rule. The Director of the Division of Water Quality, with recommendations from the Director of the Division of Soil and Water Conservation and the Commissioner of Agriculture, shall appoint the members described in Sub-Items (8)(a)(iii) and (8)(a)(vi) of this Rule from persons nominated by nongovernmental organizations whose members produce or manage agricultural commodities in each county. Members of the Local Advisory Committees shall serve at the pleasure of their appointing authority.
- (c) **ROLE.** The Local Advisory Committees shall:
- (i) Conduct a registration process for persons subject to this Rule. This registration process shall be completed within 48 months after the effective date of this Rule. The registration process shall request the type and acreage of agricultural operations. It shall provide persons with information on requirements and options under this Rule, and on available technical assistance and cost share options;
  - (ii) Develop local nutrient control strategies for agricultural operations, pursuant to Sub-Item (8)(d) of this Rule, to meet the nitrogen and phosphorus goals of this Rule. Strategies shall be submitted to the Watershed Oversight Committee no later than 46 months after the effective date of this Rule;
  - (iii) Ensure that any changes to the design of the local strategy will continue to meet the nutrient goals of this Rule; and
  - (iv) Submit reports to the Watershed Oversight Committee, pursuant to Sub-Item (8)(e) of this Rule, annually until such time as the Commission determines that annual reports are no longer needed to fulfill the purposes of this Rule.
- (d) **LOCAL NUTRIENT CONTROL STRATEGIES.** Local Advisory Committees shall develop county nutrient control strategies that meet the following requirements. If a Local Advisory Committee fails to submit a nutrient control strategy required in Sub-Item (8)(c)(ii) of this Rule, the Commission may develop one based on the accounting methods that it approves pursuant to Sub-Item (7)(b)(i) of this Rule. Local strategies shall meet the following requirements:
- (i) Local nutrient control strategies shall be designed to achieve the required nitrogen loss reduction goals and qualitative trends in indicators of agricultural phosphorus loss within six years after the effective date of this Rule, and to maintain those reductions in perpetuity or until such time as this Rule is revised to modify this requirement.
  - (ii) Local nutrient control strategies shall specify the numbers, acres, and types of all agricultural operations within their areas, numbers of BMPs that will be implemented by enrolled operations and acres to be affected by those BMPs, estimated nitrogen and phosphorus loss reductions, schedule for BMP implementation, and operation and maintenance requirements.
- (e) **ANNUAL REPORTS.** The Local Advisory Committees shall be responsible for submitting annual reports for their counties to the Watershed Oversight Committee until such time as the Commission determines that annual reports are no longer needed to fulfill the purposes of this Rule. The Watershed Oversight Committee shall determine reporting requirements to meet these objectives. Those requirements may include information on BMPs implemented by individual farms, proper BMP operation and maintenance, BMPs discontinued, changes in agricultural land use or activity, and resultant net nitrogen loss and phosphorus trend indicator changes.

*History Note:* Authority G.S. 143-214.1; 143-214.5; 143-214.7; 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. 2001-355; S.L. 2005-190; S.L. 2006-259; Eff. August 11, 2009; See S.L. 2013-395.