

JLOW Coalition Jordan Rule Concepts Recommendations

8/27/2024 Draft



INTRODUCTION

The Jordan Lake One Water Coalition (JLOW or Coalition) is an incorporated North Carolina non-profit corporation under N.C.G.S. 55A. The primary purposes of JLOW as detailed in its 2021 One Water Vision document and recently adopted Articles of Incorporation and Bylaws are to:

- a. Shape, support, and promote an integrated One Water policy within the watershed of North Carolina's B. Everett Jordan Lake (Jordan Lake Watershed) that will produce watershed-wide environmental, societal, and economic benefits.
- b. Define, develop, and promote a range of systematic management options to meet community needs for managing water and to improve the hydrological and ecological function of the Jordan Lake Watershed, such as flood reduction, stream stabilization, climate vulnerability reduction, asset management, preservation of drinking water quantity and quality, and creation of opportunities for recreational co-benefits.
- c. Facilitate collaboration among local governments, utilities, agriculture, conservation groups, universities, state agencies, developers, private industry, and other stakeholders in realizing benefits and sharing the costs of water quality and quantity improvements.
- d. Collaborate with stakeholders and state agencies in responding to regulatory concerns and in the development and revision of rules related to water management in the Jordan Lake watershed.

As a part of its mission, JLOW is coordinating with the North Carolina Division of Water Resources (DWR) for the state's Jordan Lake Nutrient Strategy rules readoption process that is now underway. Jordan Lake was designated, at the time of its impoundment in 1982, as Nutrient Sensitive Waters by the state's Environmental Management Commission (EMC). The first Nutrient Management Strategy for Jordan Lake was adopted by the EMC in 2008, and multiple revisions were made in 2009 following concerns raised by the North Carolina General Assembly. In 2016, the General Assembly remanded the rules to DWR for readoption following further study by the NC Policy Collaboratory. The readoption process is underway with DWR using the early portion of the stakeholder engagement phase to obtain input on rules concepts for consideration.

During preliminary discussions with JLOW and other stakeholders, DWR has indicated its intent to pursue a similar rules structure to recent Total Maximum Daily Load (TMDL) efforts that focus on long established Clean Water Act endorsed management activities including permitted wastewater discharges, stormwater management for existing and new development, and best management practices for agriculture. In discussions with DWR, agency staff have been open to many of the less established One Water management principles and practices. This document contains JLOW recommendations for regulatory options focused on implementing a One Water approach. Adopting JLOW's proposals would provide for collaborative and integrated efforts of JLOW members and partners across the established source categories as an alternative for complying with the state's readopted nutrient rules for the watershed.

These recommendations are based on months of review and deliberation by a JLOW Jordan Rules Work Group interacting with DWR staff, and subsequent decisions by the JLOW Board of Directors. At the core

of JLOW's recommendations is an integrated investment-based approach that would allow JLOW members to pick from established practices or screen new management practices for their economic, social, and environmental co-benefits relative to life-cycle cost. JLOW members seek to identify investment options that meet multiple objectives where possible, as described below, while also reducing and/or avoiding or mitigating future increases in nutrient loading within the watershed. The ability to collaborate across the broad spectrum of JLOW members and partners will produce more cost-effective solutions that receive greater public support for the comprehensive benefits provided. Examples include water quality, water supply, flood management, soil protection, and overall ecosystem health relevant to DWR's overarching mission.

SECTION A. JLOW GOALS IN ADVANCING NUTRIENT MANAGEMENT

JLOW goals for advancing nutrient management through a watershed approach based on One Water principles represent a customized approach for several of the established source categories as detailed below. In discussions with stakeholders, DWR staff have endorsed having customized goals for the various source categories that will fall under the readopted Jordan rules.

JLOW's primary goal for advancing nutrient management is to provide a framework to link members to leverage knowledge and save individual resources:

Traditional regulatory-based nutrient reduction strategies use individual permit and program requirements which focus on a single entity. Instead of each entity having to do it all on its own, JLOW enables members to work across jurisdictional boundaries and source categories (stormwater, wastewater, and agriculture) to share knowledge, expertise, and to join resources to accomplish outcomes so that there is potential for cost-savings and a bigger impact through a combined effort. New creative possibilities may be available through such means as public-private partnerships.

An equally important goal for JLOW members with nutrient rule compliance requirements is achieving more flexibility to use resources for strategies and projects that reduce nutrients and accomplish other economic, social, and environmental objectives as outlined in the JLOW 2021 One Water Vision document and the introduction above:

Water management objectives include flood reduction, stream stabilization, increasing climate resilience, and water-related infrastructure asset management. JLOW's One Water vision is to accomplish other social and economic objectives with its investments in projects and strategies that support a vibrant community that also reduce nutrients. Watersheds are dynamic and as needs shift those managing activities in the Jordan Lake watershed will benefit from an approach that can readily adapt to those changing needs. Multifunctional projects and strategies that not only address specific needs such as water supply, stormwater and nonpoint source management, and wastewater management but that also address community needs such as open space and farmland preservation, equitable provision of municipal and county services, public health and safety, natural resource protection, recreational opportunities, and visually appealing landscapes will support the greater good for those living and working in the watershed. Valuing protection measures equally with remediation efforts will save money from having to retrofit areas in the future with expensive treatment practices and increase resilience relative to future challenges including rapid population growth and climate change.

An associated goal to flexibility for JLOW members is gaining access to an increased menu of strategies and projects that are more cost-effective than traditional Total Maximum Daily Load (TMDL) implementation rule required actions:

DWR's TMDL-based nutrient strategies have focused on controls over which they have regulatory authority emphasizing NPDES wastewater permit restrictions, MS4 stormwater program requirements, and enhanced nutrient management plans for agricultural operations to receive government funds. Studies, like that conducted for the Chesapeake Bay Program, have shown that these three management types are the most expensive options largely because they reflect "end of pipe" controls. Traditional measures may not allow for members to invest elsewhere in the watershed where a bigger positive impact could be made with recognition going to those members. Additionally, actions taken to accomplish goals for other purposes should still be recognized when they also support nutrient reduction or other One Water goals. The region and JLOW members will benefit if the menu is expanded to include options falling outside of traditional regulatory controls but which help get at the root cause of excessive nutrients in the watershed. Examples include more effort to support circular economies that further food, feed stock, and fertilizers to be produced and used locally, improving soil health and hydrology on developed or working pervious land, using nature-based solutions to protect downstream waters, and capturing and reusing stormwater and wastewater at its source through distributed means. In this manner, a watershed coalition such as JLOW offers DWR an opportunity to build on its regulatory methods for a more successful outcome together.

Finally, a very important goal for JLOW members is to gain greater public connection to the importance of water management and greater support for better use of money for outcomes that the public values:

Collectively investing in One Water projects and strategies brings about a greater outcome for the region and better connects people to water management needs and implementation (the whole is greater than the sum of its parts). JLOW members have expressed the challenge of having the public understand and support spending large sums of money on an abstract concept of nutrient reduction and a crediting program. By finding multi-functional solutions that address economic, social, and environmental aspects that resonate more with the public (for example, jobs, health and safety, food security, recreation, open spaces, art), JLOW members can more directly demonstrate how to build a better more resilient community that our residents and businesses will more likely support.

Therefore, based on the purpose and goals embedded in our Vision, Articles of Incorporation, and Bylaws, the recommendations for rule concepts provided below represent JLOW's strong commitment to implementing a One Water approach for the Jordan Lake watershed that is equally or more protective than the traditional TMDL-based nutrient rules anticipated to be proposed by DWR. By complementing DWR's regulatory mission with resources and actions that reach beyond what DWR can regulate, JLOW's proposed concepts offer a model for collaborative success.

SECTION B. JLOW JORDAN RULE CONCEPTS RECOMMENDATIONS

The JLOW rule concept recommendations provided below are organized by rule categories used by DWR for its Nutrient Rules for the Jordan Lake watershed. JLOW recommends using these concepts to move the Jordan Lake assessment units exceeding criteria for nutrient-related water quality parameters from Integrated Report categories 4i and 4t to 4b with JLOW being the watershed coalition implementing the integrated One Water portion of the strategy.

1. Existing Development – Stormwater

a. Applicability

- i. DWR would have Option 1 be the default approach which it defines for this source category. Option 2 would provide regulated entities that are members of

a watershed coalition (in our case, JLOW) a choice for complying with the nutrient rules through the integrated approach administered by the Coalition.

- ii. Each Coalition member with compliance requirements would be required to notify DWR and the Coalition of their intent to comply under Option 2, as well as notifying both entities if there is a decision to move back to the default Option 1.

b. Performance-based Compliance

- i. Option 2 would be investment-based with minimum annual investments by entity based on a formula with factors potentially including jurisdictional area, drinking water allocation, population, etc. The Coalition would provide its annual investment amounts and rationale to DWR by an established date allowing a sufficient period for program establishment.
- ii. For compliance, members would document investments in projects dating back to the baseline date for the original rule with proof of investments based on receipts or encumbered funds. Investments can be across source categories (i.e., stormwater, wastewater, agriculture) and subwatersheds, and include other options as related to nutrient load reduction and/or avoidance of future load increases within the entire Jordan Lake watershed.
- iii. Coalition members could select projects where investments were made prior to the effective date of the rules to receive credit for actions already taken. Similarly, for large new investments that exceed the annual commitment, the amount in excess can be credited to the next year.
- iv. For investing in projects moving forward, Coalition members can implement established projects without receiving prior approval from DWR or the Coalition. Established projects are those that have already been approved by DWR for the default Option 1 or within the Falls Lake IAIA program, or previously approved by the Coalition based on performance evaluation. Investment in established projects will count towards compliance for Coalition members.
- v. Innovative projects (defined as practices or strategies that go beyond already established approaches) would be screened and evaluated by the Coalition's 2-step method to inform investment decisions as detailed in the JLOW 2021 One Water Vision document. A follow up program to monitor relative success to inform future use or adaptation of innovative practices would be used by the Coalition.

c. Implementation Rollout

- i. The rules should provide for an Option 2 program establishment/planning period to finalize the methods and logistics between the Coalition and DWR.
- ii. Regulated entities shall develop project selection criteria that includes a short narrative of how required regulatory-based project investments contribute to nutrient reduction; the regulated entities may use criteria developed by the Coalition.

d. Reporting

- i. Regulated entities will submit an individual report on their investments (i.e., certification of funds spent or encumbered) annually.
- ii. The Coalition will collect more detailed information from its members and submit a compiled report for the full watershed with co-benefit details annually, timed to be delivered after individual reports for practical purposes. JLOW would provide DWR with the annual reports which summarize the Coalition's One Water management implementation activities and collective progress.

e. Enforcement

- i. Enforcement of rule compliance should be handled by DWR for Options 1 & 2.
- ii. The rule should allow for a period of review and discussion between DWR and JLOW for individual members not in compliance before termination of Option 2 participation to determine if remedial action can be agreed upon and implemented to come into compliance.
- iii. The Coalition will commit to self-governance of members through administrative and technical infrastructure that provides easily shareable data, reports and mechanisms for feedback regarding their commitments for reporting the details on investments and compliance with bylaws.

2. New Development – Stormwater

a. Applicability

- i. DWR would have Option 1 be the default approach which it defines for this source category. Option 2 would provide regulated entities that are members of a watershed coalition (in our case, JLOW) a choice for complying with the nutrient rules through the integrated approach administered by the Coalition.
- ii. Each Coalition member with compliance requirements would be required to notify DWR and the Coalition of their intent to comply under Option 2, as well as notifying both entities if there is a decision to move back to the default Option 1.

b. Performance-based Compliance

- i. Option 2 would involve implementation of a Model One Water Program framework developed by the JLOW Coalition, followed by local governments developing a local One Water Program.
- ii. The JLOW Coalition Model One Water Program framework would outline example development zone types (e.g., PLANWake's five zones ranging from high density urban transit zones to rural protected areas). The model program would include a menu of stormwater management practices for each zone, example incentives for development to use preferred practices (e.g., density bonuses for conserving sensitive stream and soil areas, preserving/planting large trees, use of nature-based and green infrastructure practices to retain stormwater runoff onsite, capture and reuse of stormwater volumes), reporting requirements, and other requirements as needed.

- iii. Coalition local government member One Water Programs would include: defined development zones, defined stormwater management practices appropriate for each zone, defined incentives, defined reporting procedures, etc.

c. Implementation Rollout

- i. JLOW local government members could select Option 2 and have an established period for adopting an ordinance to implement their local One Water Program in alignment with the JLOW Coalition Model One Water Program framework.
- ii. DWR/EMC would approve the JLOW Coalition Model One Water Program framework.
- iii. After approval JLOW members selecting Option 2 would be given a period of time to tailor the program to their community in their local One Water Program.
- iv. Implementation by local governments could begin after submitting a signed certification statement saying the program complies with the JLOW Coalition Model One Water Program framework.

d. Reporting

- i. Jurisdictions will track development activities and provide reports to be incorporated into the larger JLOW database for a comprehensive watershed-scale review. Metrics provided will align with the JLOW Coalition Model One Water Program framework for New Development – Stormwater.
- ii. The Coalition will collect information from its members and submit a compiled report for the full watershed with co-benefit details annually, timed to be delivered after individual reports. JLOW would provide DWR with the annual reports which summarize the Coalition's One Water management implementation activities and collective progress.

e. Enforcement

- i. Enforcement of rule compliance should be handled by DWR for Options 1 & 2.
- ii. The rule should allow for a period of review and discussion between DWR and JLOW for individual members not in compliance before termination of Option 2 participation to determine if remedial action can be agreed upon and implemented to come into compliance.
- iii. The Coalition will commit to self-governance of members through administrative and technical infrastructure that provides easily shareable data, reports and mechanisms for feedback regarding their commitments for reporting the required data on new development practices implemented.

3. Wastewater

a. Applicability

- i. DWR would have Option 1 be the default approach which it defines for this source category. Option 2 would provide regulated entities that are members of a watershed coalition (in our case, JLOW) a choice for complying with the nutrient rules through the integrated approach administered by the Coalition.
- ii. Each Coalition member with compliance requirements would be required to notify DWR and the Coalition of their intent to comply under Option 2, as well as notifying both entities if there is a decision to move back to the default Option 1.

b. Performance-based Compliance

- i. Option 2 would include an alternative investment to treatment option for those meeting minimum nutrient load allocations (i.e., reflecting existing WQBLs). Similar to the Existing Development – Stormwater investment-based approach, members of the Coalition selecting Option 2 would follow the One Water principles of the JLOW bylaws, screening and evaluating options for their triple bottom line co-benefits and cost-effectiveness. Example investments could include some level of additional treatment, wastewater recovery and reuse (particularly for non-potable needs to extend the lifetime of potable water supplies), strategies that limit importation of nutrients into the watershed, conservation, or nonpoint source management strategies.
- ii. Minimum investment could be based on percentage of cost of Option 1 (i.e., to meet state-of-the-art wastewater nutrient treatment levels). Investments tracking would be based on receipts or encumbered funds.
- iii. The Coalition would be given a specified period initially to provide its annual investment amounts and rationale for DWR approval.
- iv. For compliance, members would document investments in projects dating back to the baseline date for the original rule with proof of investments based on receipts or encumbered funds. Investments can be across source categories (i.e., stormwater, wastewater, agriculture) and subwatersheds, and include other options as related to nutrient load reduction and/or avoidance of future load increases within the entire Jordan Lake watershed.
- v. Coalition members could select projects where investments were made prior to the effective date of the rules to receive credit for actions already taken. Similarly, for large new investments that exceed the annual commitment, the amount in excess can be credited to the next year.
- vi. For investing in projects moving forward, Coalition members can implement established projects without receiving prior approval from DWR or the Coalition. Established projects are those that have already been approved by DWR for the default Option 1 or within the Falls Lake IAIA program, or previously approved by the Coalition based on performance evaluation. Investment in established projects will count towards compliance for Coalition members.

- vii. Innovative projects (defined as practices or strategies that go beyond already established approaches) would be screened and evaluated by the Coalition's 2-step method to inform investment decisions as detailed in the 2021 JLOW One Water Vision document. A follow up program to monitor relative success to inform future use or adoption of innovative practices would be used by the Coalition.

c. Implementation Rollout

- i. The rules should provide for an Option 2 program establishment/planning period to finalize the methods and logistics between the Coalition and DWR.
- ii. Regulated entities shall develop project selection criteria that includes a narrative of how required regulatory-based project investments contribute to nutrient reduction; the regulated entities may use criteria developed by the Coalition.

d. Reporting

- i. Regulated entities will submit an individual report on their investments (i.e., certification of funds spent or encumbered) annually in addition to their standard NPDES wastewater discharge monitoring reports.
- ii. The Coalition will collect more detailed information from its members and submit a compiled report for the full watershed with co-benefit details annually, timed to be delivered after individual reports for practical purposes. JLOW would provide DWR with the annual reports which summarize the Coalition's One Water management implementation activities and collective progress using metrics agreed to in a memorandum of agreement (MOA) between JLOW and DWR or a similar mechanism that both parties agree to use.

e. Enforcement

- i. Enforcement of rule compliance should be handled by DWR for Options 1 & 2.
- ii. The rule should allow for a period of review and discussion between DWR and JLOW for individual members not in compliance before termination of Option 2 participation to determine if remedial action can be agreed upon and implemented to come into compliance.
- iii. The Coalition will commit to self-governance of members through administrative and technical infrastructure that provides easily shareable data, reports and mechanisms for feedback regarding their commitments for reporting required information and compliance with Coalition bylaws.

4. Agriculture

a. Applicability

- i. JLOW is recommending continuation of the collective compliance approach for Agriculture and thus an Option 2 would not be needed. However, a mixed approach recommendation may be needed if individual mandates are required.

b. Performance-based Compliance

- i. JLOW recommends a collective compliance approach like the existing rules.
- ii. If the default Option 1 includes collective compliance, then JLOW recommends that an Option 2 for Agriculture would not be necessary.
- iii. Allowance for multi-party 'credit' is essential, i.e. compliance credit for the investor and compliance credit towards the agriculture collective compliance approach. This will provide for greater implementation of preferred practices that may be hard for farmers to implement without additional resources.

c. Implementation Rollout

- i. Allow for an implementation period to facilitate the development of administration procedures to coordinate with existing Soil & Water programs for others in JLOW to invest in practices on agriculture land:
 - 1) Allow JLOW investors to cover the agricultural entity's cost share portion of a subsidized project supported by voluntary state or federal programs such as the Agricultural Cost Share Program or the Environmental Quality Incentives Program.
 - 2) Allow for investment in long-term maintenance of agricultural BMPs to ensure the sustained benefit of the practice.
 - 3) Allow for investments to include supporting Soil & Water positions (salaries) to ensure and sustain a successful collective compliance approach for agriculture.

d. Reporting

- i. The DWR Agriculture Technical Advisory Group (TAG) is exploring updated reporting requirements compared to existing processes. JLOW's intent would be to recommend Agriculture-related JLOW reporting requirements which complement the proposed new Agriculture requirements.
- ii. Project descriptions implemented by agricultural stakeholders receiving JLOW investments will be captured in JLOW's database for inclusion in the Coalition's annual reports to support a watershed-scale evaluation of progress to date.

e. Enforcement

- i. Enforcement of rule compliance should be handled by DWR for Option 1 and Option 2 if the latter is needed to address alternatives to individual mandates.
- ii. If an Option 2 is established, the rule should allow for a period of review and discussion between DWR and JLOW for individual members not in compliance before termination of Option 2 participation to determine if remedial action can be agreed upon and implemented to come into compliance.
- iii. The Coalition will commit to self-governance of members through administrative and technical infrastructure that provides easily shareable data,

reports and mechanisms for feedback regarding their commitments for reporting the details on investments related to agricultural best management practices in the watershed.

SECTION C. JLOW'S ROLE FOR RULES IMPLEMENTATION

To support implementation of Option 2, JLOW would commit to:

1. Providing the platform for informing investment options, compiling implementation data, and reporting more comprehensively on JLOW One Water management efforts within a time-period specified by the rules or agreement with DWR. The platform would include the following items:
 - a. A model program framework for New Development – Stormwater, and other implementation strategy guidelines as appropriate.
 - b. Project screening and evaluation tools like those detailed in the appendices of the 2021 JLOW One Water Vision document or as further developed by the Coalition.
 - c. Monitoring and reporting workflows and database development and analytical tools for post-processing data for One Water progress reporting.
2. Working with members to establish and commit to a level of investments in One Water management strategies and projects that are reasonable to ensure desired progress equal to or better than traditional rules implementation.
3. Obtaining the data from members regarding One Water management strategies and projects to feed into the reporting process. Annual compliance reporting deadlines for the Coalition should lag deadlines for the Coalition members' individual annual reports.