



Upper Neuse River Basin Association (UNRBA) Board of Directors (BOD) Meeting Agenda
May 21, 2025, 9:30 AM to Noon
In Person Meeting at Butner Town Hall, Camp Butner Room
[Remote Access Option \(see page 6 for instructions\)](#)

Materials related to this BOD Meeting have been placed on the UNRBA website unless noted otherwise on the [Meeting Page](#). See items under the May 21, 2025, meeting date.

I. Opening—Wendy Jacobs, Chair

- A. Introductions and Announcements**
- B. Roll Call for Quorum**
- C. Identification of any Conflicts**
- D. Review and Approval of Agenda**

II. Action Items

- A. Approval of [March 19, 2025, Draft Board Minutes](#)**
- B. Approval of the [Treasurer's Report](#)**
- C. Review Informational Item A and Authorize the Chair to Submit a Letter of Clarification to the Environmental Management Commission (EMC), Department of Environmental Quality (DEQ), and the Division of Water Resources (DWR)**

Item Summary (Forrest Westall): The Division of Water Resources provided a status update on the UNRBA's rules readoption process to the EMC on May 8, 2025. Statements made during this brief update that warrant clarification to provide accurate information to the EMC, the decision-making body for the Falls Rules Readoption. [The Board will vote to authorize the Chair to execute a letter on behalf of the UNRBA to clarify the UNRBA's efforts and intentions with the rule development process.](#)

III. Status Reports and Informational Items

A. Status of the Falls Lake Rules Readoption Process and Extension of IAIA Program

Item Summary (Forrest Westall): The UNRBA submitted the [UNRBA Concepts and Principles for Reexamination](#) and [Consensus Principles II](#) to DWR and the EMC on November 22, 2023. The NC Collaboratory submitted their final report in December 2023. These submittals trigger the initiation of the Falls Lake Rules Readoption Process. The UNRBA is engaging on every aspect of this process and how management options or proposals may impact our efforts to achieve a balanced, realistic, technologically feasible, and effective set of new rules. The UNRBA will continue to reference the scientific basis for appropriate rules as reflected in our 10-year evaluation and the work of the Collaboratory. The following activities are ongoing:

- The UNRBA has completed the workgroup stage of developing very preliminary draft Falls Rules ("draft-draft-draft") to support the Falls rule readoption process. The workgroups included representatives from local governments, agriculture, environmental interests, land conservation organizations, developers, DOT, and DWR. The work products from these efforts were distributed to the UNRBA Path Forward Committee (PFC) and additional stakeholders and discussed during the May 6, 2025, PFC meeting. Because the meeting discussed the four rule sections, there was not sufficient time for detailed discussion. We have requested that participants provide written comments by May 20, 2025, to allow time to prepare a summary before the June 3, 2025, PFC meeting. We will also set up additional discussions as needed to hear from

stakeholders and address their comments. Our goal is to bring draft rules for the Board to discuss and consider at the September 18, 2025, meeting.

- During the May 8, 2025, EMC meeting, DWR provided a status update on the Falls Rules readoption process.
 - DWR indicated to the Commission that they were moving forward drafting their own rules for Falls. DWR indicated after the EMC meeting that they intend to share their drafts with the UNRBA.
 - DWR also indicated to the Commission that the UNRBA is proposing to eliminate evaluation of chlorophyll-a for the 303(d)-assessment process and replace it with a vague, undefined evaluation of trophic status. **Please understand this is not accurate and was corrected during the EMC meeting.**
 - DWR made other statements that we would have liked to have clarified during the EMC meeting, but the UNRBA was only asked to clarify the statement about the chlorophyll-a standard. We are drafting a letter for submittal by the UNRBA Chair to clarify points and ensure the EMC has accurate information. Additional information on the UNRBA's draft-draft-draft proposal, which had been distributed to DWR and 90 other stakeholders ahead of our May 6th meeting, follows in the next bullet.
- The UNRBA continues its efforts to engage DWR on the Rules Readoption Process. While their participation has decreased in the past two months, and they have missed key meetings, we attempted to determine the reasons for this and received the above information. After the EMC and our communication with them and the DWR leadership, we discussed with them on May 13, 2025, how to move forward efficiently. Our goal remains to develop a joint set of rules to submit to the EMC. We have clearly noted and discussed in detail in the workgroup process several key issues that we may not be able to resolve ahead of the Board's consideration of draft rules in September 2025. However, we will work to see if we can reach some level of consensus on these issues. The UNRBA and DWR will continue to discuss these items and our approach for submitting either individual or joint Falls Rules to the EMC. Because so much work has gone into the current rule drafts developed, we have encouraged DWR to use this draft as the basis of continued discussions. This way we can avoid unnecessary confusion and difficulty in correlation of any competing drafts. DWR can use the current draft to note their concerns, and this will allow us to identify differences and frame up our discussions of areas of disagreement. The primary areas of disagreement are summarized below:
 - **Addressing the discrepancy in the wastewater treatment plant (WWTP) permits** that include permitted flow rates and nutrient load allocations that are supposed to just address reductions under Stage I. Stage I load allocations were calculated by DWR and are presented in the rules by assuming a flow rate from around 2008/2009 for each facility, with only a 10% increase in those flows. The current rules and NPDES permits for these facilities will not allow the Town of Hillsborough, City of Durham, or the South Granville Water and Sewer Authority to utilize their permitted capacity without the design, permitting, and installation of unproven and extremely expensive technology. Specifically, to meet the Stage I allocations at permitted flow, the facilities would be required to upgrade to reverse osmosis which is an unproven technology for application to wastewater treatment to reduce nutrients. These upgrades would require investment of financial resources never anticipated or expected under Stage I. In practical terms, the Stage I requirements in the current rules require the same technology required under Stage II. DWR acknowledged during our workgroup meetings and stated at the EMC meeting, that Stage II limits are not achievable. DWR failed to note during the EMC meeting that Stage I limits are also not achievable at

- the permitted capacity for these three facilities and that the current rules limit these facilities from using their permitted flow capacity using the technology they have in place. The UNRBA's draft wastewater rule addresses this issue with a multi-faceted approach:
- Establish treatment performance (effluent concentrations) based on best achievable technology for biological nutrient removal, which has been implemented at the three major WWTPs to comply with Stage I (this is the requirement level DWR set for the recently revised Tar-Pamlico point source rule—no other WWTP in NC is equipped or operated to meet the levels required in the Falls Lake Rules)
 - Allow the WWTPs to utilize their permitted flows
 - Require continued tracking of emerging technologies and optimization of facilities
 - Require investment of a combined \$500,000 each year in watershed-health projects (this is in addition to the current proposed investment-based approach included in the draft rules for the management of existing lands in the watershed)
 - DWR to conduct monthly monitoring of water quality in receiving streams and Falls Lake to determine if additional actions or revised rules are needed as WWTP discharges incrementally increase (adaptive management)
 - Note: the UNRBA is using predictive modeling to evaluate the simulated changes in chlorophyll-a concentration associated with this proposal
- **Developing a Falls Specific 303(d) assessment methodology (determining the status of compliance with the chlorophyll-a standard)** – The UNRBA is proposing a streamlined methodology in the Purpose and Scope Rule based on NC's current 303(d) assessment methodology but refined to consider the vast amount of water quality data collected in Falls Lake compared to most other NC water bodies. Our proposal removes the provision that triggers "not meeting" the standard due to three or four samples exceeding the standard which results in listing waters regardless of the number of samples collected. A regulatory trigger using number of samples makes some sense for a waterbody with very limited data collection, but it is not an appropriate assessment for a lake like Falls that currently has 30 stations sampled monthly every year. Also, the nature, variability, and distribution of chlorophyll-a sampling and analytical analysis is not well correlated to using a low number of exceedances to trigger listing. Another difference in our proposal would remove the use of a station-by-station assessment of comparing measurements to the standard. Our proposal combines data from all applicable stations within each of the three segments we have identified. This proposal is more scientifically valid for reservoirs and other large bodies of water where water moves back and forth and algae moves up or down in the water column or is moved around by wind. This proposal also better aligns with EPA guidance on setting assessment units based on the physical characteristics of the reservoir. We have worked with Dr. Marty Lebo (High Rock Lake Scientific Advisory Council) and Dr. Nathan Hall (NC Collaboratory) to support development of our proposal. DWR has issues with this proposal but the draft, draft, draft has been vetted through the workgroup.
 - **Providing a more comprehensive evaluation of trophic status and attainment of designated uses** – Our draft Purpose and Scope Rule seeks to look beyond chlorophyll-a in the evaluation of trophic status. The true ecological impact of changes in algal levels in Falls Lake must include additional

- water quality measurements and ecological information. Chlorophyll-a alone is not an adequate measure of trophic condition or ecological conditions in the lake. Our draft includes a trophic status assessment using chlorophyll-a, pH and dissolved oxygen as well as algae species, algal biovolume, algal toxins, water treatability, wildlife and aquatic life information, and observational recreational use data to provide a more complete and holistic understanding of Falls Lake. This more comprehensive evaluation provides a better tracking tool for identifying changes in water quality and designated uses over time as revised rules are implemented. The UNRBA has bench-marked these datasets in our [reporting](#) that can be used for these comparisons moving forward. Because our scientific studies of the lake show stability in water quality related to algal levels and trophic status, the UNRBA's proposal establishes a goal to maintain this stability in Falls Lake. We believe all of these proposed data evaluations are important in the determination of stability and ecological health.
- **Not capping the investment in land conservation** – Land conservation has been established and supported broadly as a critical component of maintaining and promoting an overall watershed-health strategy. The EMC-approved Stage I Existing Development Interim Alternative Implementation Approach ([IAIA](#)) has resulted in millions of dollars invested in land conservation in the Falls watershed over the past three years and additional millions in other watershed improvement actions. So far, land conservation comprises approximately ½ of the total IAIA watershed investment. Under the IAIA, investment credits are only eligible if the land has been identified as high priority by an appropriate evaluation resource, e.g., land conservation organizations that rank water quality aspects of available preservation sites. Land conservation is self-limiting in that it is expensive, difficult to negotiate with landowners, and available areas are quickly being developed. DWR has proposed a 15 percent investment cap on land conservation in the draft rules for the Jordan Lake watershed as a part of the watershed improvement program in those draft rules. DWR indicated to us during a recent [Jordan Lake](#) workgroup meeting that they would be proposing something similar for the Falls Rules. We address land conservation in our draft Existing Managed Lands Rule and recommend that no cap be placed on its use.
 - The IAIA was developed as a five-year program with an option to extend the program until the Falls Rules are readopted. The five-year period ends June 2026, and the schedule for Falls Rules readoption targets March 2027 as the adoption date. Thus, the IAIA program will need to be extended. During the November 19, 2025, UNRBA Board meeting, we will include a Compliance Group Committee (CGC) meeting, and they will consider submitting a request to the EMC to approve an extension of the IAIA program for five additional years or until the Falls Rules are readopted and an updated watershed protection plan is developed and approved by the Commission (i.e., an updated [Program Document](#)).
 - The UNRBA continues to consider the need for a legislative change to [§ 77-141](#) (legislation that created the Falls Lake Watershed Association which the UNRBA is doing business as) that would explicitly support the concept of a watershed organization like the UNRBA developing and implementing a water quality protection plan (under [§ 143-214.14](#)). The Legal group, PFC and Board have previously reviewed and supported this change. Staff from DWR and American Rivers have also indicated support for this specific change. The proposal is still under consideration by the Legislators and discussions continue about the need for this revision. We are seeking confirmation from Legislative Staff on the need for this revision and to

confirm, if a change is not sought that current law protects the option for the UNRBA to develop a watershed protection plan for submission to the EMC. The Executive Director and support team met with representatives from the Home Builders Association to discuss this legislative change and how it would benefit both the local governments and the developers. These meetings have led to better engagement of the Home Builders in the rules readoption process.

B. Continued Rule Development for Jordan Lake and High Rock Lake Watersheds

Item Summary (Forrest Westall): We continue to monitor DWR's draft proposal for changes to new development (ND) requirements (post-construction stormwater controls) for the High Rock Lake Watershed and the rules readoption process for the Jordan Lake Watershed. We remain concerned that these processes could negatively impact the Falls Lake rules readoption process, both in timing and in trying to "set" an approach for nutrient management that could be inconsistent with the recommendations of the UNRBA. For example, during a recent Jordan Lake meeting, DWR again indicated they would propose a cap on land conservation at 15 percent for investment credit under the Jordan Lake Rules and that they would be proposing something similar in the Falls Rules as described in Item A. The UNRBA seeks to ensure that productive programs continue in Falls and are not put at risk by seeking new and potentially more restrictive requirements which could generate considerable push back by stakeholders.

C. Discussion of House Bill 382 and Impacts to Local Government Zoning Authority

Item Summary (Forrest Westall): Subpart III-K. of [Senate Bill 382](#) prohibits a local government to initiate down-zoning without the consent of all affected property owners. This bill applies to any ordinance or zoning change within 180 days of the day of adoption and any passed after the day of adoption. The Governor's veto of the bill was overridden on December 11, 2024, and the bill was passed. During the March meeting, the UNRBA Board discussed that clarifying bills are likely to be forthcoming.

D. Modeling and Regulatory Support Status and Evaluating a Falls Lake Assessment Methodology and Site-Specific Chlorophyll-a Water Quality Standard

Item Summary (Alix Matos): Modeling files and reports for the WARMF watershed model, WARMF lake model, EFDC lake model, and statistical/Bayesian lake model have been submitted to the Division of Water Resources (DWR) for review and approval. Modeling reports and summaries of key findings are available at <https://unrba.org/resource-library>. Email communications from DWR staff indicate the agency has no additional comments on these reports and accepts them as the final submittals. The Executive Director has requested a formal statement from DWR as specified in Section (5)(f)(iii) of the [Falls Lake Rules](#) which require that "the Division shall assure that the supplemental modeling is conducted in accordance with the quality assurance requirements of the Division." The UNRBA submitted and the Division approved the [UNRBA Quality Assurance Project Plan](#) for this purpose. This submittal completes the documentation of the work completed before the UNRBA developed its recommendations which were made based on the conclusions reached in the modeling evaluation. No issues with the formal review step are expected. The UNRBA's re-examination effort form the basis of our proposed revisions to the Falls Lake Rules.

The UNRBA continues to focus on our primary priority: coordination with DWR and stakeholders in the development of a revised management strategy through the rules readoption process. Timing is important in assessing the current "use-support" processes used by DWR, and the Purpose and Scope workgroup decided to address 303(d) assessment in the draft rule. We continue to keep development of a site-specific chlorophyll-a standard as an important long-term goal, but we do not want to deter moving forward with revised rules and a

Falls specific 303(d) assessment methodology. Dr. Martin Lebo is coordinating with the statistical modeling effort on his continued evaluation of a Falls Lake-specific assessment methodology and site-specific chlorophyll-a. We greatly appreciate that the NC Collaboratory is provided additional funding to Dr. Nathan Hall to provide input on some of the ecological processes in Falls Lake (including algal species and edibility of higher trophic level organisms) related to development of a Falls Lake-specific assessment methodology and site-specific chlorophyll-a.

E. Status of FY2026 Modeling and Regulatory and Communications Support Contract Development

Item Summary (Forrest Westall): The UNRBA Board of Directors approved the UNRBA budget for FY2026 during the March 19, 2025, meeting. The contractor and Executive Director are developing the Modeling, Regulatory, and Communications Support Contract and Scope of Work for FY2026. The PFC will review the scope of work for this contract during the June 3, 2025, meeting. The Board of Directors will review and consider approval of the contract and scope of work during the June 18, 2025, meeting.

F. Communications Support

Item Summary (Forrest Westall): The work with DWR on the revised Falls Lake Rules continues and will be even more important in FY2026. Consistent with our expanding stakeholder process as outlined, we will have additional meetings to gather input from NC Collaboratory staff, researchers, and representatives of NGOs. As we have continued to do, we encourage our jurisdictions to identify additional communication needs and to request support from the UNRBA team as needed. Recent, ongoing, or upcoming activities are noted below:

- Delivered a Falls Lake Presentation at the Water Resources Research Institute Annual Conference on March 20, 2025.
- Distribution of draft-draft-draft rules to 90 PFC members and stakeholders for discussion at the May 6, 2025, PFC meeting; additional stakeholders will be included when the draft goes to the Board by September 2025
- Status updates to the EMC
- The UNRBA has posted YouTube [videos](#) of the Falls Lakes water quality simulations to the website
- Planning a meeting with the new Secretary of DEQ
- Planning a meeting with staff from the NC Office of State Budget Management

The “open” nature of all UNRBA meetings remains a key component of a transparent communications approach. We encourage member representatives and interested individuals to speak up about ideas and opportunities to communicate our work and the importance of our recommendations on a revised strategy and a site-specific standard. We also continue to look to our engaged membership representatives to use materials developed to help with communication within their jurisdictions. We remain available to assist with any presentations/meetings that are set up to discuss Falls Lake and the status of our work and the rules readoption process.



G. Ongoing Discussions/Issues:

Item Summary (Forrest Westall):

- Ongoing NC State University UNRBA and Jordan Lake One Water research study
- Impacts on implementation of nutrient requirements in light of PFAS/PFOS and other emerging requirements on wastewater management costs to local governments

H. Closing Comments—Board Members and Chair

Next PFC Meeting: June 3, 2025, 9:30 AM to Noon

Next Board Meeting: June 18, 2025, 9:30 AM to Noon

This schedule may be revised, and notices will be provided about any change.

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- If you dial in through your phone, mute your computer microphone and turn down your speakers to **avoid feedback**
- Unless you are speaking, please mute your computer/device microphone or phone microphone to **minimize background noise**
- UNRBA meetings are open meetings; however, please **limit the discussion to UNRBA Board Members** to facilitate moving through action items