



**Upper Neuse River Basin Association (UNRBA) Board of Directors (BOD) Meeting Agenda
June 21, 2023, 9:30 AM to Noon
Butner Town Hall
remote access option (see last page)**

Materials related to this BOD Meeting have been placed on the UNRBA website unless noted otherwise on the [Meeting page](#). See items under the June 21, 2023, meeting date. The meeting presentation is posted on the meetings page of the website by selecting it for the meeting date.

- I. **Opening—Sig Hutchinson, Chair**
 - A. **Introductions, Note Board Member Changes and Announcements**
 - B. **Roll Call for Quorum**
 - C. **Identification of any Conflicts**
 - D. **Review and Approval of Agenda**

II. **Action Items of UNRBA Board of Directors**

- A. **Approval of [UNRBA BOD Draft Minutes for May 17 2023](#)**
- B. **Approval of the [June 2023 Treasurer's Report](#)**
- C. **Set Potential Meeting Date for December 2023**

Item Summary (Forrest Westall): In order for the UNRBA to finalize its recommendations for submittal to DWR by December 2023, it may be necessary for the Board to hold a special meeting for final approvals of the recommendations and Consensus Principles II. The Executive Director recommends that the Board set a meeting for December that will be cancelled later if unnecessary.

D. **Approval of FY2024 Contracts**

Item Summary (Forrest Westall): The Executive Director and contractors have developed draft scopes of work, contracts, or letters of engagement for FY2024 to continue providing Modeling and Regulatory Support and Communications Support, Executive Director Services, and Legal Support to the UNRBA. The PFC reviewed the main tasks and summary of the tasks and budgets at their June meeting prior to the Board meeting today. No issues were identified. The final draft contracts and letters of engagement were provided to the Board ahead of today's meeting. The following contracts need Board approval today: Brown and Caldwell for the Modeling, Regulatory, and Communications Support project for FY2024, Executive Director Services for FY2024, and Legal Support for FY2024. The Executive Director will present these contracts and request approval and Board authorization to the Chair to sign on behalf of the UNRBA.

III. **Status Reports and Informational Items**

A. **Developing Recommendations for a Revised Nutrient Management Strategy and a Petition for a Site-Specific Chlorophyll-a Water Quality Standard**

- The full distribution list of the PFC has been provided a draft concepts and principals document for the revised nutrient management strategy; revisions to incorporate feedback have been incorporated
- A public-facing summary of the document is being developed for distribution to the general public and other interested parties; the summary will include a link to the latest draft with an invitation to provide feedback
- A meeting is planned with DWR leadership on June 22, 2023 to discuss these activities

Item Summary (Forrest Westall): Since November 2002, the PFC has been discussing concepts and principles under consideration for inclusion in the UNRBA's recommendations for a revised Falls Lake Strategy/Revised

Falls Lake Rules. These discussions were used to develop a preliminary draft document that describes the concepts and principles. This document was provided to the PFC for review and a revised draft was provided to the full PFC distribution list for discussion at the June 6th PFC meeting. Expanded outreach to other stakeholders including the general public, interest groups, regulated entities will continue and the document will be revised to address this feedback over the next few months. The UNRBA recommendations are due in December 2023, and this document represents an important submittal.

As a reminder, the UNRBA has met with DEQ and DWR leadership to discuss coordination efforts to finalize the models, develop a revised nutrient management strategy, and develop a petition for site specific criteria. A follow up meeting with DWR is scheduled for June 22, 2023. We have continued to remind DWR that they would identify a contact for site-specific chlorophyll-a standard development, and they have filled their vacant standards management position, but have not yet identified a specific staff member as the main point of contact. John Huisman remains the primary DWR contact for work on an updated strategy. Forrest has discussed this with John recently and offered to meet with the leadership of the Water Planning Section to emphasize the importance of engaging the DWR standards program in the work of the UNRBA. This ongoing engagement will allow DWR staff responsible for the review of a request for a revision to the standard to better understand the work of the UNRBA and how it relates to the need for a revised standard. The UNRBA will continue to identify opportunities to work with other stakeholders as we move through this development process. On March 9th we met with EPA staff from Headquarters and Region 4 to introduce the work of the UNRBA and potential options for moving forward. The subject matter experts continue to evaluate other State's site-specific standards for chlorophyll-a and nutrient-related standards. The UNRBA continues to work with Dr. Marty Lebo to complete his work and integrate his results into the site-specific standard evaluation, statistical modeling, and regulatory support efforts.

We have reached out to other regulated stakeholders, specifically agriculture, DOT and forestry, to provide input and participate in these discussions. We will expand this outreach to include stakeholders impacted by all aspects of the current rules, including other state and federal facilities, the development community (new development rule), and landholders.

B. Schedule for the Reexamination:

Item Summary (Forrest Westall): The UNRBA draft recommendations for a revised nutrient management strategy for Falls Lake are due in December 2023. We will review the schedule and activities for the next several months including development and approval of Consensus Principals 2 by the governing bodies of our members with final endorsement by the Board at the November 2023 meeting. The process must include meetings with the Director of the Division of Water Resources (DWR), DEQ leadership, and the Chairs of the Environmental Management Commission (EMC) and its Water Quality Committee. Securing approval of the recommendations in principle is essential to providing a final package of recommendations to DEQ, EMC, and General Assembly.

C. UNRBA Comments on the DWR 20-year Status Report for the Neuse and Tar-Pamlico Estuaries

Item Summary (Forrest Westall): On May 16, 2023, DWR released its 20-year Neuse and Tar-Pamlico Nutrient Management Strategy Retrospective, An Analysis of Implementation and Recommendations for Adaptive Management. DWR set a 30-day comment period for the draft report. The UNRBA drafted comments on the report, and these were reviewed by the Co-Chairs of the PFC and the Executive Committee of the Board prior to submittal to DWR. The full Board and PFC have also received a copy of the UNRBA comments on this draft report. The Executive Director will summarize the UNRBA comments for the Board.

D. Modeling and Regulatory Support (MRS) Status:

- Watershed modeling report has been revised and is undergoing internal review
- Two lake models have been calibrated and evaluated for scenarios (EFDC and WARMF Lake); models indicate that changing the operation of the lake from a flood control reservoir would not significantly affect compliance with the chlorophyll-a standard at Interstate 85. The modeling also indicates that achieving compliance with the standard 90 percent of the time at this location would require an additional 50 percent reduction in nutrient loading. Since the standard cannot be met even if human inputs are removed (discussed at the May Board meeting), there is no way feasible way to comply with the standard as currently assessed. A simplified cost benefit analysis of meeting 50 percent additional reduction will be discussed in part E of the meeting agenda.
- Statistical/Bayesian model finalization is proceeding

Item Summary (Alix Matos): The Watershed Analysis Risk Management Framework (WARMF) model for the Falls Lake watershed has been calibrated for stream flows and water quality and is currently being evaluated for scenarios. The results of the model scenarios for the watershed and WARMF Lake model have been presented to the Path Forward Committee (PFC). These results are also being incorporated into the watershed model and lake model reports along with responses to the Modeling and Regulatory Support Workgroup (MRSW) review of the initial draft report. Once the updated watershed model report has been reviewed by the Executive Director and the Chair of the MRSW, the MRSW, PFC, and DWR will review the revised draft report. Once finalized, the report will be formally submitted to DWR.

The three lake water quality models (WARMF Lake, Environmental Fluid Dynamics Code (EFDC), and a Statistical/Bayesian model) are being developed considering the information generated by the watershed model (stream flows, nutrient concentrations, and delivered loads to Falls Lake). Both WARMF Lake and EFDC have been calibrated for water quality in Falls Lake with approval by the MRSW. Lake model reporting and scenario evaluation are under development.

The datasets for the statistical model have been compiled and are being evaluated to address questions about the relationships among precipitation, nutrient loading, chlorophyll-a, and satisfaction with designated uses. This model will inform the proposed revised nutrient management strategy and the petition for a site-specific chlorophyll-a standard. The modeling team has engaged the third-party model reviewers for the statistical modeling and will continue to reach out to Collaboratory-funded researchers to consider and supplement the extensive database developed by the UNRBA, our members, and DWR. The modeling effort has included extensive vetting through identified SMEs, third-party reviewers, our membership representatives, and DWR.

E. Gathering Data from Local Governments and Utilities to Support the Cost Benefit Analysis and Example Costs to Reduce Nitrogen Loading by 50 Percent

- The PFC is gathering data to support this component of the reexamination
- A simplistic example has been incorporated into the draft concepts and principles document

Item Summary (Forrest Westall): An important component of the re-examination is understanding the costs of past and possible future actions in the watershed as well as the benefits in terms of nutrient load reductions and improvements in lake water quality. To support this cost-benefit analysis, we have requested information from the PFC as described during the [February PFC meeting](#). Structured data requests will follow after existing data and reports have been reviewed and compiled.

The draft concepts and principles document includes an simplified example cost benefit analysis for achieving

the chlorophyll-a standard in Falls Lake at Interstate 85. Lake modeling indicates that total nitrogen loads to the lake would have to be reduced by 50 percent beyond what has already been achieved to comply with the standard at least 90 percent of the time. This would require reducing delivered loading by 825,000 pounds each year. Based on the City of Durham Algal Floway study, this would require siting, designing, and permitting 130 full-scale systems. These systems would need to treat 1.3 billion gallons of water per day which is several times more water than flows into Falls Lake even in the wettest year. Over 260,000 tons of algae would have to be harvested, transported, and composted each year. These systems would cost over \$8 billion to construct (not including the cost of land) and more than \$22 million per year to operate.

F. Communications

- Planning is underway for an EFDC model training with DWR, a UNRBA Technical Stakeholder Workshop, and regulatory forum in the spring of 2024.
- The Executive Director will continue scheduling presentations at the local government’s Board, Council, and other meetings to discuss the recommendations for a revised nutrient management strategy over the next several months.

Item Summary (Forrest Westall): As previously summarized, there are several efforts of outreach underway, including ongoing engagement with DWR and development of a draft concepts and principles document for review by a broad group of stakeholders. Following discussion with communications staff at the City of Durham, the communications team is developing a high-level, public-facing document to describe the challenges for the Falls Lake watershed and the concepts and principles under consideration by the UNRBA to maintain and improve water quality in Falls Lake. This electronic document can be distributed by the local governments and utilities to their contact lists and social media accounts to provide information about the effort and how the general public and other organizations can be involved in review of the draft documents in preparation for submittal in December 2023.

The UNRBA is planning a workshop with DWR, NC Collaboratory staff and researchers, and NGOs to discuss stakeholder feedback on the concepts for a revised nutrient management strategy. A Technical Stakeholder Workshop is planned for late summer/early fall 2023 that will provide a more in-depth review of the materials presented at the March WRRRI Annual Conference and the April Symposium and discuss updated recommendations for the revised nutrient management strategy based on feedback from WRRRI, the Symposium, and the workshop with DWR, NC Collaboratory staff and researchers, and NGOs.

We have discussed expansion of outreach efforts through our Board Directors, PFC members and their elected and leadership representatives remains a priority. We continue to seek input from our membership, including the locally elected officials, on opportunities to reach out to important local stakeholders, including the public living in the jurisdictions. The Executive Director will continue scheduling presentations at the local government’s Board, Council, and other meetings to discuss the recommendations for a revised nutrient management strategy over the next several months. He presented to the City of Durham Environmental Affairs Board on April 12, 2023 and plans to present to the City of Creedmoor on July 17, 2023; Wake County Growth & Sustainability Committee on September 18, 2023; and the Durham County Board of Commissioners on October 2, 2023. The Executive Director will continue to reach out to local government staff to identify needs and support staff with implementation of the IAIA Program and participation in developing the revised nutrient management strategy.

A regulatory forum is planned for spring 2024 to discuss the next steps in the rules readoption process. Following submittal of the UNRBA and NC Collaboratory reports and recommendations in December 2023, we anticipate that DWR will begin to formulate a plan for readoption of the rules. We hope to engage with DWR on that process and, as already mentioned to DWR, work cooperatively with them as the new rules are drafted. American Rivers is planning a “Neuse River of the Year” event for the upper part of the basin. The UNRBA is planning a press release to coincide with the timing of the event. This press release will also reference the successes of the IAIA. Plans to develop videos and messaging for UNRBA members to distribute on their social media accounts is being planned to coincide with this event to streamline videography.

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.

G. Ongoing Discussions/Issues:

Item Summary (Forrest Westall):

- Intensive workgroup activity and management of expectations and resources—A lot to do between now and recommendations at the end of 2023
- Ongoing DEQ/DWR Items—MOA, Neuse Watershed Model Information Session / Delivery Factors for WWTP, etc.—we plan to address in our follow-up meetings with DEQ/DWR

H. Closing Comments—Board Members and Chair

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This meeting will open 30 minutes prior to the official meeting start time to allow for users to test equipment and ensure communication methods are functioning.

Equipment Type	Access Information	Notes
Computers with microphones and speakers	Join Microsoft Teams Meeting Please mute your microphone unless you want to provide input.	Press control and click on this link to bring up Microsoft Teams through the internet. You can view the screen share and communicate through your computer’s speakers and microphone.
Computers without audio capabilities, or audio that is not working	Join Microsoft Teams Meeting (888) 404-2493 Passcode: TBD Please mute your phone unless you want to provide input.	Follow instructions above. Turn down your computer speakers, mute your computer microphone, dial the number through your phone and enter the passcode. See note below on pass code
Phone only	(888) 404-2493 Passcode: TBD Please mute your phone unless you want to provide input.	Dial the toll-free number and enter the passcode. The system continues to update the passcode because these meetings do not occur on a routine schedule. We will check the passcode the morning of the meeting and resend via email.

Remote Access Guidelines

- If you dial in through your phone, mute your 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, for this remote access meeting, please **limit the discussion to UNRBA Board Members** to facilitate moving through action items