



UNRBA PFC Meeting

January 6, 2025

9:30 AM to 12:00 PM

**Butner Town Hall with
Remote Option**

(see agenda for remote access instructions)



Agenda

- Opening comments, agenda review/revisions
- Status and timeline for Falls rules readoption
- Discuss Budget for FY2027
- Planning PFC Workshop on Best Practices for Implementing Falls Rules
- Communications
- Other Items
- Closing comments

Opening Comments, Agenda Review/Revisions

Status and Timeline for Falls Rules Readoption

Status of Rule Development Process

- The latest draft rules were distributed and discussed by the UNRBA Board at their meeting on October 21, 2025 and the PFC on November 4, 2025
 - Developed following discussion with DWR Leadership and the Chair of the EMC on October 7th
- DWR has not provided feedback on the October drafts
- DWR indicated they were considering our drafts in their drafts
- UNRBA provided an evaluation of annual nitrogen load reduction to Falls Lake of nearly 400,000 pounds per year
- We met with DWR Leadership and the EMC Chair on December 2nd to continue discussions on wastewater allocations
- DWR requested a document to justify why additional load allocation would be needed over the next ten-year cycle
- We are working with the WWTP operators on this document and will provide it to the PFC when available.

Status of Rule Development Process

- Meetings with DWR to discuss two rules were held during the week of December 15th
 - New Development and Existing Managed Lands
 - DWR is refining their drafts based on these discussions and we will work to finalize drafts for PFC review in January and discussion in February
- Meetings on the other rules are targeted for the first couple of weeks in January
 - Purpose and Scope
 - Wastewater
 - We hope to provide these to the PFC in January as well
- We will review the outcomes with the PFC and discuss how we plan to move forward with the rules

Status of Rule Development Process

- On November 12, 2025, the UNRBA provided an information item to the EMC Water Quality Committee regarding approval of the UNRBA Models.
- The EMC requested a summary of the re-examination efforts with respect to the requirements listed in the adaptive management provision of the Falls Rules.
- The UNRBA developed this summary and provided a copy to the PFC ahead of this meeting
- **The contents are summarized on the following slides**
- We do not plan to ask the EMC to approve our models at the January WQC meeting. We will discuss the reasons for this approach at this meeting of the PFC

Rules Requirements for Re-examination and UNRBA Submittals to Meet these Requirements

Obtain Division review & approval of any monitoring study plan & description of the modeling framework

- [DWR-Approved UNRBA Monitoring Plan](#) (2014)
- [DWR-Approved UNRBA Monitoring Quality Assurance Project Plan](#) (2014)
- [DWR-Approved UNRBA Description of the Modeling Framework](#) (2014)

Modeling conducted in accordance with the quality assurance requirements of the Division

- [DWR-Approved UNRBA Modeling Quality Assurance Project Plan](#) (2018)

Supplemental modeling shall include a minimum of three years of lake water quality data

- [UNRBA 2019 Monitoring Report](#) (4+ years of data)

Submittal of supplemental modeling data, products, and results

- [UNRBA Watershed Modeling Report](#) (2023)
- [UNRBA Lake Modeling Report](#) (2024)
- Submittal of modeling files to DWR (2023)

Supporting Tables and Attachments

- **Table 1.** - requirements under Item (5)(f) of the Rule and UNRBA's re-examination work products
 - Efforts are identified as “required” or “additional”
 - Spans work from 2012 to 2025
- **Table 2.** - key findings of re-examination effort and implications for revised rules (summarized on later slide)
- **Attachment A** - summary of studies and evaluations applied to the UNRBA watershed and lake models
- **Attachment B** - UNRBA's letters to the EMC and DWR requesting review and approval of reports and models
 - UNRBA watershed model and report, December 20, 2023
 - UNRBA lake model and report, December 10, 2024
- **Attachment C** - DWR's email responses stating that the models were developed in accordance with the Modeling QAPP
 - Karen Higgins, DWR, July 31, 2024, watershed model and reporting
 - John Huisman, DWR, February 12, 2025, lakes models and report

Multiple Organizations Provided Information for Model Development

UNRBA members	<ul style="list-style-type: none">• Land use, onsite wastewater treatment systems, lake water movement, lake sediment depth and quality, lake bathymetry, wastewater treatment plant (WWTPs) discharges, atmospheric deposition data
NC Dept. of Agriculture and Consumer Services	<ul style="list-style-type: none">• Crop data, nutrient application rates including manure, crop and pasture acres
NC Dept. of Transportation	<ul style="list-style-type: none">• Rights of way and impervious percentages
NC Division of Water Resources	<ul style="list-style-type: none">• Watershed and lake monitoring data
NC Collaboratory	<ul style="list-style-type: none">• Model reviews, loading from onsite wastewater treatment systems and streambank erosion, lake water movement and stratification, algal toxins, nitrogen and carbon cycling, zooplankton/chlorophyll-a relationships
US Geologic Survey	<ul style="list-style-type: none">• Stream flow, water quality, land use data
US Dept. of Agriculture	<ul style="list-style-type: none">• Soils data, pasture data
US Forest Service	<ul style="list-style-type: none">• Nutrient loading rates from forested areas in the Falls Watershed
National Atmospheric Deposition Program	<ul style="list-style-type: none">• Nitrogen deposition data

DWR's Responsibilities Under the Rules

- Five-year report with list of required elements
- July 2025 report with additional required elements
 - Some of these have been or are being developed by UNRBA
 - These elements support UNRBA's long-term strategy of developing a site-specific chlorophyll-a standard:
 - (i) The physical, chemical, and biological conditions of the Upper Falls Reservoir including nutrient loading impacts;
 - (ii) Whether alternative regulatory action pursuant to Sub-Item (5)(g) would be sufficient to protect existing uses as required under the Clean Water Act;
 - (iii) The impact of management of the Falls Reservoir on water quality in the Upper Falls Reservoir;
 - (iv) The methodology used to establish compliance with nutrient-related water quality standards in Falls Reservoir and the potential for using alternative methods;
 - (v) The feasibility of achieving the Stage II objective; and
 - (vi) The estimated costs and benefits of achieving the Stage II objective;

Example Key Findings and Implications for Revised Rules

- Key findings
 - Reductions in nutrient loading to the lake are unlikely on the scale that has been seen since the 1980s
 - Lake water quality is stable
 - Exceedances of the chlorophyll-a standard are due to hydrologic modification caused by the dam
 - Nutrient loading to Falls Lake is driven by rainfall
 - WWTPs contribute 5 to 10% of loading based on hydrology
- Proposed framework for revised rules
 - Refine and continue the new development rule
 - Apply an integrated watershed management approach
 - Require largest WWTPs to continue to treat at highest achievable levels (five-stage biological nutrient removal) and provide an allocation to cover at least 10 years
 - Propose development of a site-specific water quality standard for chlorophyll-a

Next Steps for Submitting a Rule Package

- UNRBA will continue to work with DWR on a joint set of rules and hopes to support a submittal by DWR to the WQC
- The package must include a fiscal note developed by DWR
- The UNRBA has been compiling supplemental fiscal information to support this effort.
 - This document will also need to be reviewed by the PFC and the Board and then approved by the Board for submittal.
 - Developing the UNRBA's economic information is important to timely readoption of the rules.
 - This timing of this document depends on when the rules are finalized, but the contractors are continuing to make progress
- Once the supporting fiscal information has gone through the UNRBA approval process, we will provide to DWR so the formal process can begin.

Prospective Revised Timeline to Develop Rules

Month-Year	Milestone
January 2026	<ul style="list-style-type: none">• UNRBA and DWR continue discussing rule package to be submitted by DWR with UNRBA support• Provides draft rules to PFC for review as available
February 2026	<ul style="list-style-type: none">• PFC reviews draft rules and discusses at PFC meeting• DWR host “all stakeholders” workshop• Drafts are refined based on feedback and redistributed to PFC
March 2026	<ul style="list-style-type: none">• PFC approves draft rules go to the Board;• DWR brings draft rules as an information item to the EMC WQC• Board considers support for formal submittal of package to the EMC
May 2026	<ul style="list-style-type: none">• DWR submits a rule package to the EMC WQC for consideration to move forward to the full EMC.
July 2026	<ul style="list-style-type: none">• Full EMC considers WQC recommendation to approve rules for public notice and appoints hearing officers
October 2026	<ul style="list-style-type: none">• Public hearing
March 2027	<ul style="list-style-type: none">• Final package to WQC
May 2027	<ul style="list-style-type: none">• Final package to full EMC
May/July 2027	<ul style="list-style-type: none">• Package goes to the Rules Review Commission (RRC)

Discuss Budget for FY2027

Discuss Budget for FY2027

- The PFC and Board reviewed a planning-level budget for FY2027 at their November meetings
- A five-year projection was also provided.
- The Board concurred that this projection be used by our members for budget planning and dues for the UNRBA.
- The Board will approve a final budget at their March 2026 meeting.
- We noted that some adjustment to the budget may be required before it is finalized.
- If you have any further comments on the budget projections, please provide those as soon as possible. We want to provide the jurisdictions timely information for their planning purposes.

Planning PFC Workshop on Best Practices for Implementing Falls Rules

Planning PFC Workshop on Best Practices for Implementing Falls Rules

- Granville County and Wake County have requested a comparison and best practices across local governments for their implementation of stormwater rules and regulatory requirements within the Falls Lake Watershed
- Earlier this year, we discussed a workshop approach for UNRBA members to gather information and discuss
- We will continue planning for this workshop

Communications

Additional Information and Activities

- Continue meeting with DWR to work toward a joint set of rules to submit to the WQC
- Status updates to the EMC WQC: January 7, 2026
- Planning a meeting with staff from the NC Office of State Budget Management (DWR will likely need to set this up and participate)
- Planning additional meeting(s) with EPA, linking in DWR as appropriate

Other Items

Ongoing Discussions/Issues

- Upcoming presentation by NC State University on their 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. DWR developing an implementation plan for control of these pollutants—EMC to review

Closing Comments

**Next Board Meeting Scheduled for
January 21, 2026; 9:30 AM to 12:00 PM**

**Next PFC Meeting Scheduled for
February 3, 2026; 9:30 AM to 12:00 PM**