



UNRBA PFC Meeting October 7, 2025 9:30 AM to Noon

**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
- Review Draft-Draft Rules Following Integration of Some DWR Text and Subsequent PFC Review
- PFC Consideration of Approval to Submit Draft Rules to the Board
- Extension of IAIA Program and Annual Reports
- 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 UNRBA Rules Development Process

- The UNRBA hosted 18 workgroup meetings and two workgroup workshops between December 2024 and April 2025.
- The PFC has been reviewing and comment on draft rules since May 2025 (see UNRBA [meeting page](#) for summaries)
- On June 24, 2025, DWR hosted a stakeholders [meeting](#)
- DWR provided drafts of their rules to the UNRBA August 25th
- The Executive Director has had calls or meetings to discuss:
 - August 28th to discuss rules crosswalk
 - August 29th to discuss Purpose and Scope
 - September 24th to discuss wastewater rule

Summary of September 24, 2025 Meeting with DWR/DEQ

- The Executive Director, UNRBA Chair, and DWR and DEQ leadership met in person
- DWR/DEQ expressed views that are concerning during the meeting
 - Providing a small allowance relative to the Stage I allocations of 30,000 pounds per year (essentially allowing the facilities to return to baseline levels of loading)
 - Retaining Stage I allocations as a long term goal
 - Revisiting the issue under the next rules readoption process
- After the meeting, DWR provided a meeting summary that was not consistent with the discussions and suggested retaining Stage I and Stage II allocations
- As we have discussed, even meeting Stage I at permitted flow is not feasible and both would require reverse osmosis of purchase of hundreds of thousands of nitrogen offset credits
- The Executive Director briefed the wastewater workgroup on this meeting on October 2, 2025.

Status of UNRBA Rules Development Process

- The UNRBA distributed two rounds of merged rules incorporating some of DWR's draft language where consistent with Consensus Principles II and workgroup discussions
- Our goal is to distribute draft rules to the UNRBA Board and additional stakeholders for review and discussion Oct. 21st
- We anticipate the formal review process managed by the EMC would begin in January 2026
- This process will allow stakeholders an additional opportunity to provide feedback
- Readoption of revised rules through the Rules Review Commission is anticipated in March 2027.
- At the September 17, 2025, meeting, the Board voted to allow the Executive Director approved to engage with Smither Anderson to develop a letter of engagement for support on legal aspects of rule development and to assist, if authorized by the Board, the development of a petition of rule making as allowed by [15A NCAC 02I.0501](#)

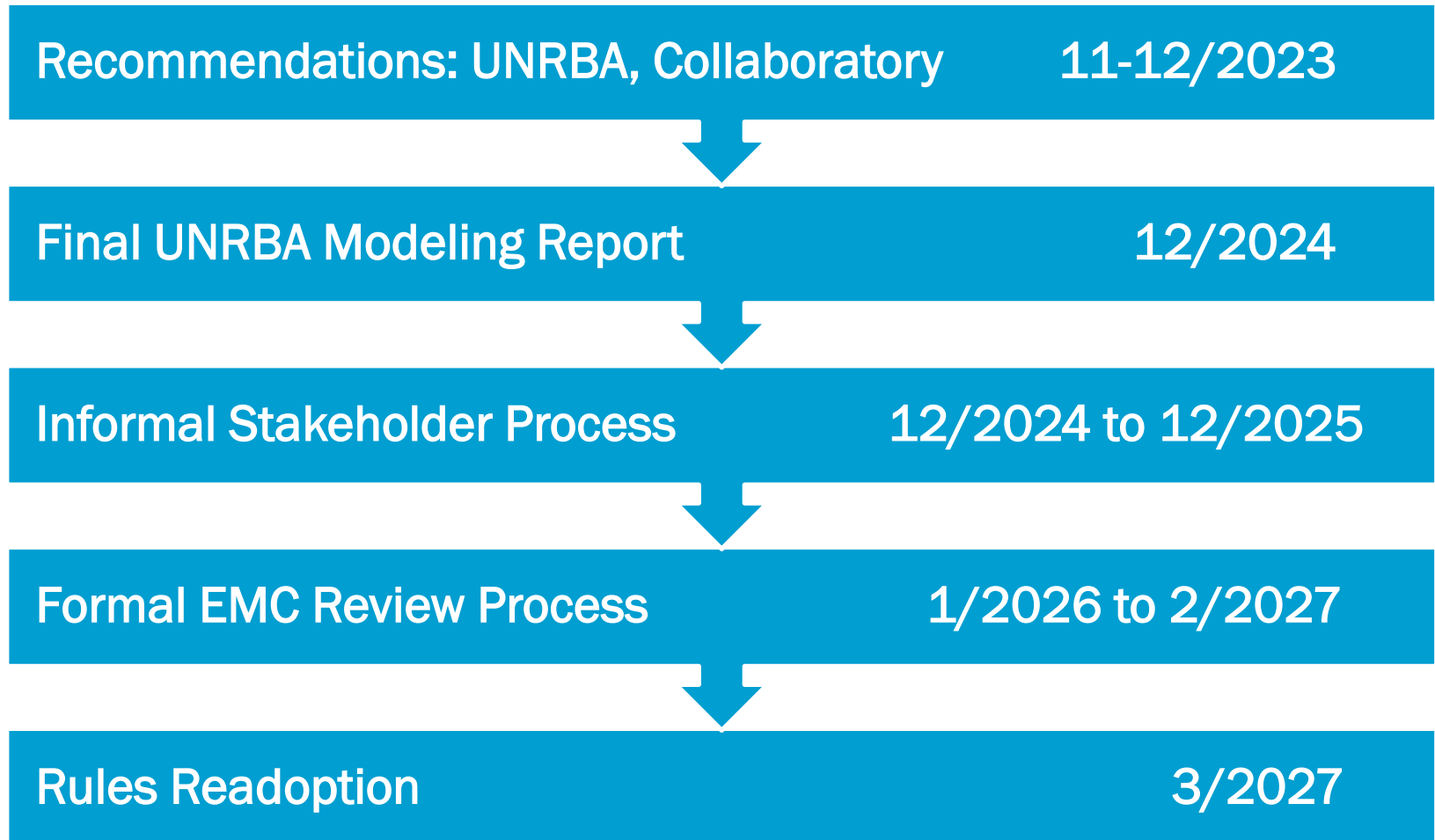
Status of UNRBA Rules Development Process

- There remain important, outstanding, unresolved issues between the DWR and UNRBA draft rules
- Unless agreement on the critical points can be reached, we anticipate DWR may also take their own version of draft rules to the EMC.
- The UNRBA has worked diligently since December 2024, holding 30 workgroup, PFC, and stakeholder meetings to vet our draft rules and address concerns from a wide range of interests.
- We have continued to seek additional input and taken into consideration the draft rules developed by DWR.
- The rules we sent to the PFC ahead of this meeting reflect the input we have received over the last 10 months.
- We have provided detailed notations with our draft rules that include the comments received and how we addressed those comments.

Status of UNRBA Rules Development Process

- Provided that the PFC and the Board support a set of draft rules, we will be requesting letters of support from our external stakeholders and resolutions of support from the individual UNRBA members and the UNRBA Board.
- We will develop a template for this purpose similar to Consensus Principles II

Rules Readoption Schedule



UNRBA: Upper Neuse River Basin Association
EMC: Environmental Management Commission

Anticipated Schedule - Falls Lake Rules Development Process

Draft-Draft-Draft

Four Workgroups

- 12/24 to 4/25
 - 18 workgroup meetings
 - 2 workgroup workshops
- Discussed concepts and challenges
- Developed initial drafts

Draft-Draft

PFC, Board, EMC informational items, and Expanded Stakeholders

- 5/2025 to 12/2025
- Reviewed draft-drafts at UNRBA May and June PFC meetings
- DWR June Stakeholder Meeting
- Collecting fiscal data
- Refining drafts for UNRBA Board recommendation

Draft → Final → Rules

Formal Process

- 1/2026 to 3/2027
- Present to WQC
- Present to EMC
- Public comment period
- Public hearings
- Rules to RRC with fiscal analysis

EMC: Environmental Management Commission

WQC: EMC Water Quality Committee

RRC: Rules Review Commission

Review Draft-Draft Rules Following Integration of Some DWR Text

Meeting Plan

- The UNRBA has incorporated some of DWR's draft rule language into our latest draft rules.
- During September, we sought review and feedback on the drafts
- Compiled input from the PFC and stakeholders
 - Distributed as updated files ahead of this meeting
 - Annotations identify the latest comments and information on how those comments were addressed
- Today, we will summarize changes made as a result of this effort
- We will also summarize the differences and similarities between the UNRBA and DWR draft rules (information also provided ahead of this meeting)

Goal for today is to attain PFC approval to present the drafts to the Board at their scheduled October 21, 2025, virtual meeting

Purpose and Scope Rule

Comparison of Requirements: P&S Rule

| UNRBA Draft Rules | DWR Draft Rules |
|--|---|
| Purpose and Scope Rule: Framework | |
| <ul style="list-style-type: none"> • 4B water quality management plan with long-term goals of meeting the standard, improving and maintaining lake water quality, and protecting designated uses • Includes a commitment to provide monitoring of critical tributaries, allowing for the tracking of delivered nutrient loading to Falls Lake which supports ongoing adaptive management (DWR paused tributary monitoring years ago) | <ul style="list-style-type: none"> • Total maximum daily load that requires 20% nitrogen and 40% phosphorus reductions from baseline 2006 • Retains current, lake-only monitoring |
| Purpose and Scope Rule: Assessment | |
| <ul style="list-style-type: none"> • Includes a Falls-specific assessment methodology <ul style="list-style-type: none"> ○ Considers more intensive sampling program for Falls Lake ○ Aggregates water quality data by lake segment (3) ○ Removes 2-to-4-samples above the water quality standard automatically triggering non-compliance | <ul style="list-style-type: none"> • Retains the statewide assessment methodology applied to 160 NC lakes and reservoirs <ul style="list-style-type: none"> ○ Includes station-by-station assessment ○ Retains the few-sample trigger of non-compliance |

Comparison of Requirements: P&S Rule

| UNRBA Draft Rules | DWR Draft Rules |
|---|---|
| Purpose and Scope Rule: Tracking Progress | |
| <ul style="list-style-type: none">• Expands evaluation of conditions to include other use support data and comparison to historic water quality data and stability• Supports the stated objective of maintaining water quality• Requires five-year status reports to track changes in nutrient loading, water quality, and technological advancements• Requires comprehensive 20-year report to inform recommendations for revised rules• Adds requirements to protect other water supply waters in basin• Requires continued nutrient management across the watershed until the entire reservoir is meeting standards | <ul style="list-style-type: none">• Relies solely on the statewide assessment process• Ambiguous language regarding progress reports (e.g., the Division “may” develop progress evaluations to support ten-year rules readoption process and “may” collaborate with Falls Lake Watershed Association (UNRBA) on this evaluation) |

Advantages and Concerns: P&S Rule

| UNRBA Draft Rules | DWR Draft Rules |
|--|--|
| Purpose and Scope Rule: Framework | |
| <ul style="list-style-type: none"> Integrated watershed management which provides cost effective, flexible solutions with multiple benefits <u>Allows</u> regulated entities to invest in local, community projects that simultaneously improve and maintain water quality Reduces administrative burden, directing a higher percentage of funding towards project goals and community uplift | <ul style="list-style-type: none"> Does not include an agency commitment to monitoring that would allow tracking of loading inputs and help identify changes over time TMDL framework requires counting pounds and projects with state-approved load reductions Limits the application of integrated watershed health practices without state-approved credits Increases administrative reporting requirements on regulated parties and enforcing agencies |
| Purpose and Scope Rule: Assessment | |
| <ul style="list-style-type: none"> Falls Lake is the most heavily monitored lake/reservoir; intensive study by DWR, UNRBA, NC Collaboratory, and local governments For a non-toxic parameter like chlorophyll-a, a heavily monitored reservoir should not be deemed non-compliant when only a few samples are above the standard (nearly 150 chlorophyll-a samples during a five-year period at each individual station) | <ul style="list-style-type: none"> Treats Falls the same as other NC lakes/reservoirs that have about 10% of the monitoring data as Falls, often limited only to the growing season Retains the few-sample trigger of non-compliance which may be appropriate for lakes sampled only during the summer months, once every five years, at a few stations, but not for Falls with 30 stations, sampled monthly, every year |
| Purpose and Scope Rule: Tracking Progress | |
| <ul style="list-style-type: none"> Multifaceted approach is more sensitive to ecological changes and potential impacts to designated uses compared to focusing only on compliance with the standard | <ul style="list-style-type: none"> Statewide assessment process does not provide sufficient information to track progress Vague language leaves uncertainty for regulated parties that adaptive management will continue |

Edits to Address PFC Comments on UNRBA's early September P&S Rule

- Reinserted language regarding integrated watershed management approach and edited to be a requirement:
 - Regulated parties shall implement the Rules to restore and maintain water quality through an integrated water resources management approach across the Falls watershed to align nutrient reduction efforts with other water-related objectives including water supply reliability, aquatic and terrestrial habitat protection, land use planning, flood mitigation, and long-term sustainability of watershed functions and services.
 - Note: regulated parties include the WWTPs, local governments, and non-DOT state / federal entities

Edits to Address PFC Comments on UNRBA's early September P&S Rule

- PFC discuss in light of other parameters like metals:
“The requirements of these water supply classifications found in Rules 15A NCAC 02B .0214 through .0218 shall be retained and applied except as specifically noted elsewhere within the Falls nutrient strategy.
- Deleted reference to this guidance document: “and the periodic updates to the United States Environmental Protection Agency’s Integrated Reporting Guidance for the Implementation of Section 303(d) of the Clean Water Act”
- PFC discuss if station numbers or lat/longs should be included in Rules when discussing the six main lake stations
 - Draft specifies the three lake segments by road crossings
 - Specifies that two stations per segment are required and that one station shall be at the downstream end of the segment

Edits to Address PFC Comments on UNRBA's early September P&S Rule

- Revised the stability metric (the five-year, geometric mean of April through October samples aggregated by lake unit) based on Marty Lebo's analysis for upper lake:
 - The stability metric shall remain between ~~35~~30 micrograms per liter ($\mu\text{g/L}$) and 45 $\mu\text{g/L}$ for upper lake unit, between 25 $\mu\text{g/L}$ and 35 $\mu\text{g/L}$ for middle lake unit, and between 15 $\mu\text{g/L}$ and 25 $\mu\text{g/L}$ for lower lake unit.

Edits to Address PFC Comments on UNRBA's early September P&S Rule

- PFC discuss latest edits to Item (11) REDUCING BURDEN OF COMPLIANCE:
“To ensure effective and equitable implementation, **by January 1, 2029**, the Division shall ~~evaluate and work with stakeholders to~~ recommend **sustainable** funding strategies, **and provide** technical assistance, and capacity-building resources to support local governments, regional organizations, and other implementation partners. ~~The Division shall work with stakeholders to avoid the imposition of unfunded mandates and identify sustainable financing options.~~—Funding strategies and technical assistance developed pursuant to this Item shall give priority to projects and approaches that deliver multiple watershed benefits, including nutrient reduction combined with flood mitigation, habitat restoration, or protection of drinking water supply reliability.”

Edits to Address PFC Comments on UNRBA's early September P&S Rule

- PFC discuss new Item (12)(c) FIVE YEAR STATUS REPORTS:
“(c) Other information relevant to interpreting (a) and (b) such as changes in rainfall patterns, influence of tropical weather systems or droughts, implementation of stormwater control measures or best management practices in the landscape, and other natural events or anthropogenic activities.”

Edits to Address PFC Comments on UNRBA's early September P&S Rule

- Revised the Nutrient Trading section to refer to portions of the watershed draining upstream or downstream of Highway 50 rather than referring to upper and lower lake as defined in 15A NCAC 02B .0701 which could be confused with the terms upper, middle, and lower lake units and is now consistent with the wastewater rule

Edits to Address PFC Comments on UNRBA's early September P&S Rule

- Deleted Item (15) that requires DWR to cooperate with interested parties on reporting and edited Item (19) to include reporting:

“To support integrated watershed management, the Division shall coordinate implementation of these Rules, **including development of reports required under Items (12) and (13) of this Rule and development of** revised rules with affected regulatory programs governing stormwater management, wastewater treatment, buffer protections, and land use planning. Rule revisions and interpretations shall ~~seek to harmonize~~ **be consistent with** objectives **identified in this Rule** and reduce redundancy while maintaining ~~environmental protection and~~ regulatory clarity.

Existing Managed Lands Rule

Comparison of Requirements: EML Rule

| UNRBA Draft Rules | DWR Draft Rules |
|---|---|
| Existing Managed Lands Rule: Compliance Options and Potential Costs | |
| <ul style="list-style-type: none"> Three compliance approaches <ul style="list-style-type: none"> Conventional load reduction option for <u>existing development</u> (20% nitrogen and 40% phosphorus reductions from 2006) Individual investment-based compliance Group investment-based compliance | <ul style="list-style-type: none"> Provides same three options as UNRBA proposal, potentially inconsistent with Purpose and Scope requirements (see Table 3) Requires reductions from development as of 2015 to 2018 (inconsistent with Purpose and Scope, potentially requiring double treatment of new development constructed before 2018) |
| Existing Managed Lands Rule: Early Implementation Credit | |
| <ul style="list-style-type: none"> No limit on early implementation credit Allows rollover of investment credits from IAIA | <ul style="list-style-type: none"> Limits early implementation credit to 15 percent a year for load-based or investment-based compliance |
| Existing Managed Lands Rule: Administrative Burden | |
| <ul style="list-style-type: none"> Retains administrative processes described in the current IAIA program, including submission of individual and group compliance reports | <ul style="list-style-type: none"> Requires 2-yr projections for projects, funding sources, and partners Requires the compliance group (watershed organization) to jointly develop 2-yr planning projections and to negotiate and select projects |
| Existing Managed Lands Rule: Land Conservation | |
| <ul style="list-style-type: none"> Allows full investment credit for all areas of a land conservation project including upland areas where enhancements may not occur (these are areas where future development remains a high probability) | <ul style="list-style-type: none"> Limits investment credit to 25 percent for portions of a site not “enhanced” |

Advantages and Concerns: EML Rule

| UNRBA Draft Rules | DWR Draft Rules |
|--|--|
| Existing Managed Lands Rule: Compliance Options and Potential Costs | |
| <ul style="list-style-type: none">Provides a 4B approach to watershed health, nutrient reduction, and maintaining water quality with investment-based compliance options (individual or group) with an investment commitment of approximately \$15 million over ten years | <ul style="list-style-type: none">Pounds-counting load reduction requirements in Purpose and Scope may put the investment-based compliance option at risk (not all activities eligible under investment-based programs have state-approved nutrient credits)If investment-based compliance is overturned because it does not translate to pound-for-pound reductions, the existing development requirements could cost over \$630 million over ten years |
| Existing Managed Lands Rule: Early Implementation Credit | |
| <ul style="list-style-type: none">Consistent with stakeholder input to fully count early implementation efforts | <ul style="list-style-type: none">Arbitrarily limits early implementation credit to 15 percent a yearCould result in reductions beyond the goal of DWR's Purpose and Scope Rule |

Advantages and Concerns: EML Rule

| UNRBA Draft Rules | DWR Draft Rules |
|--|---|
| Existing Managed Lands Rule: Administrative Burden | |
| <ul style="list-style-type: none"> Provides flexibility to individual members to plan, select, and implement projects that meet local needs Role of watershed organization is limited to as-needed support and development of the annual summary report Individual members retain flexibility and autonomy for efficiency and avoidance of conflict | <ul style="list-style-type: none"> 2-yr planning projections are overly burdensome and would require local governments to hire additional staff Requiring the compliance group to jointly develop 2-yr planning projections and to negotiate and select projects is inconsistent with implementation of a group program like IAIA where individual members conduct their own planning and project implementation to meet local needs Requiring group decision making will be inefficient and create unnecessary conflict |
| Existing Managed Lands Rule: Land Conservation | |
| <ul style="list-style-type: none"> Encourages permanent protection of undeveloped land, an increasingly rare commodity in the watershed | <ul style="list-style-type: none"> Cap on investment credit will limit extent of land conservation and leave upland areas at risk for future development. No stakeholders in the Falls or Jordan Watersheds support a cap |

Edits to Address PFC Comments on UNRBA's early September Existing Managed Lands Rule

- Reinserted language from American Rivers regarding integrated watershed management and drafted similar to P&S rule
- PFC members commented on DWR's limit of 15% on early implementation credit
 - Needs further discussion to address DWR's concern but ensure requirements are within statutory limitations and not arbitrary
 - Need to encourage early implementation, not punish
- Dan commented that the rules cannot require reductions except from lands owned by the local governments due to statutory limitations on local government powers;
 - Needs further discussion of statutory authority
 - UNRBA rules for investment-based approaches say "or willing landowners"; added that wording to conventional load reduction approach section – is that sufficient to address the concern?

Edits to Address PFC Comments on UNRBA's early September Existing Managed Lands Rule

- PFC discuss “The annual reports under Individual conventional compliance are much more detailed and comprehensive than those under the investment-based options, group or individual. Was this intentional?”
- Clarification that when the Commission considers approving additional practices under the investment-based approaches they **shall include those that integrate nutrient reduction with other watershed management objectives, including protection of drinking water supplies, habitat restoration, and flood mitigation**
- Clarifications made to schedule (e.g., if DWR does not grant preliminary approval of a plan)
- Clarification that subsequent program revisions shall meet the requirements of this Rule

Edits to Address PFC Comments on UNRBA's early September Existing Managed Lands Rule

- Deleted consideration of renewal of the NPDES Stormwater permit based on comment from Durham “Based on a call with Isaiah today (9/26/25), EPA does not want anything in the NPDES SW permit that they cannot audit. So there is no benefit to including any reference to the stormwater permits.”
- Comment list of eligible projects and activities will initially be based on IAIA but PFC will need to discuss revisions when the water quality management plan is developed

Edits to Address PFC Comments on UNRBA's early September Existing Managed Lands Rule

- Clarification that when the Commission considers approving additional practices under the investment-based approaches they **shall include those that integrate nutrient reduction with other watershed management objectives, including protection of drinking water supplies, habitat restoration, and flood mitigation**
- Clarifications made to schedule (e.g., if DWR does not grant preliminary approval of a plan)
- Clarification that subsequent program revisions shall meet the requirements of this Rule
- PFC discuss comment that if there are continued objections, it could be 4 years before there is an approved plan; the General Assembly is telling the EMC, make all your comments at the beginning because you may only get one more chance to review stormwater documents; may need to modify for consistency with General Assembly intent

New Development Rule

Comparison of Requirements: New Development Rule

| UNRBA Draft Rules | DWR Draft Rules |
|---|--|
| New Development Rule: Nutrient Loading Targets and Onsite Requirements | |
| <ul style="list-style-type: none"> Retains nitrogen loading target from current rules Eliminates phosphorus loading target (suggestion from DWR during workgroup process) For sites with >12% built upon area, requires a primary stormwater control measure (SCM) (an initial proposal by DWR in the workgroup process) Requires all SCMs treat both nitrogen and phosphorus Considers water quality monitoring required by Purpose and Scope Rule for adaptive management | <ul style="list-style-type: none"> Sets varying nitrogen loading targets based on site-specific rainfall; assumes all sites are hydrologic soil group C Requires two stormwater calculation tool evaluations to determine the “overall” and “onsite” nitrogen loading targets Eliminates phosphorus loading target Because DWR’s wastewater rule would eventually require purchase of 195,000 pounds of nitrogen credit per year, there may not be sufficient credits to support new development (currently need ~3,300 nitrogen offset credits per year to support development) |
| New Development Rule: Flexibility to Meet Loading Target | |
| <ul style="list-style-type: none"> Integrates DWR’s suggested language to add this new concept | <ul style="list-style-type: none"> Allows for any combination of primary or secondary SCMs or land uses to meet onsite nitrogen loading target |
| New Development Rule: Stormwater Calculation Tool | |
| <ul style="list-style-type: none"> Requires continued use of DWR’s current stormwater calculation tool (SNAP v4.2) or higher once approved by the Commission | <ul style="list-style-type: none"> Requires use of a tool that includes the functionality of SNAP v4.2 plus consideration of soil hydrologic group across the Project Area |

Advantages and Concerns: New Development Rule

| UNRBA Draft Rules | DWR Draft Rules |
|---|---|
| New Development Rule: Nutrient Loading Targets and Onsite Requirements | |
| <ul style="list-style-type: none"> • <u>Ensures</u> phosphorus treatment by requiring SCMs that treat nitrogen and phosphorus and requiring a primary SCM if built upon area is greater than 12 percent. • <u>Commits</u> to adjust phosphorus approach if water quality monitoring <u>required</u> in Purpose and Scope Rule indicates that adjustments are needed | <ul style="list-style-type: none"> • Because DWR's wastewater rule would eventually require purchase of 195,000 pounds of nitrogen credit per year, there may not be sufficient credits to support new development (currently need ~3,300 nitrogen offset credits per year to support development) |
| New Development Rule: Stormwater Calculation Tool | |
| <ul style="list-style-type: none"> • Stakeholders have strongly suggested any changes to tools or policies be approved by the Commission to allow for public review and input prior to required use • UNRBA is supportive of tool updates that improve functionality once vetted and approved | <ul style="list-style-type: none"> • Requires use of a tool that meets certain specifications, but no approved tool exists • DWR is developing a revised tool, but it has not been fully tested or vetted by stakeholders • The Rules should not require a tool or functionality that has not been finalized |
| New Development Rule: Relative Costs | |
| <ul style="list-style-type: none"> • Similar administrative costs to current rule; requires submission of project data for specific projects upon request by DWR • Compliance costs <u>likely</u> less than current rule because purchase of phosphorus offset credits would not be necessary | <ul style="list-style-type: none"> • Potentially higher administrative costs for local governments and the state: rule requires submission of "all" data used to develop stormwater calculations • Unknown compliance costs due to variable targets and untested new stormwater tool |

Edits to Address PFC Comments on UNRBA's early September New Development Rule

- Address development excluded to match HB926 (passed House and Senate):

Development of single family or duplex residential dwellings that cumulatively disturb less than 1 acre, which is not part of a larger common plan of development as defined in 15A NCAC 02H .1002

- Comment that the State's definition of meeting "runoff volume match" (i.e., only having to prove < 10% post-dev runoff increase) is less restrictive than the old LID Guidebook that required < 5%)
- Clarification that "runoff volume match" may be achieved through any combination of infiltration, soil improvement, primary or secondary SCM, land use, or other Commission-approved nutrient reduction practices that increase groundwater recharge and reduce downstream flow impacts (similar to later language about implementation options to meet the nutrient loading target)

Edits to Address PFC Comments on UNRBA's early September New Development Rule

- Clarifying edits regarding tracking P reductions and use of P treatment though we do not have a P loading target
- Edited DWR's text to address large parcels to apply more generally:

Where parcels experience multiple development projects over time, the Project area for purposes of stormwater and nutrient calculations shall be calculated as the net increase in built upon area. For purposes of meeting this Rule, any location on the parcel may be used provided that early phases of development are treated.
- Added that other practices (that do not have NC-approved credits) that have been approved for Chesapeake Bay TMDL compliance shall also be credited pursuant to S.L. 2016-94.

Edits to Address PFC Comments on UNRBA's early September New Development Rule

- Comment that some requirements are different than Neuse Stormwater Rules with respect to 24% BUA
 - Disturbance thresholds are different under the Falls and Neuse Rules, and that affects various rule sections differently

Wastewater Rule

Comparison of Requirements: Wastewater Rule

| UNRBA Draft Rules | DWR Draft Rules |
|---|--|
| Wastewater Rule: Requirements for Three Major WWTPs | |
| <ul style="list-style-type: none"> • Allows WWTPs to utilize permitted flows • Set effluent concentration limits of 3.0 mg-N/L and 0.1 mg-P/L (five-stage biological nutrient removal with coagulation) • Require proactive investments in watershed health projects • Track emerging technologies and optimize treatment • Monitor tributary and lake water quality and adapt as loads incrementally increase • Allows group compliance/bubble permit (both rules) | <ul style="list-style-type: none"> • Retains Stage I allocations from current rules which will require one or a combination of the following actions to comply: <ul style="list-style-type: none"> ○ Purchasing offset credits once allocations are exceeded (~195,000 pounds per year nitrogen credit, Table 2), ○ Upgrading to reverse osmosis, or ○ Moratorium on growth • Fails to define the term “best available technology” and leaves this decision to the future discretion of DWR • Allows group compliance/bubble permit |
| Wastewater Rule: Impact Analysis | |
| <ul style="list-style-type: none"> • One watershed and two lake models • Extensive data and research by multiple organizations from 2014 to 2018, including tributary inputs of chlorophyll-a • Research and subject matter expert review by the NC Collaboratory | <ul style="list-style-type: none"> • Single lake model using data from 2005 to 2007 (historic drought) • Lack of tributary chlorophyll-a data led to poor assumptions for lake inputs |

Advantages and Concerns: Wastewater Rule

| UNRBA Draft Rules | DWR Draft Rules |
|---|--|
| Wastewater Rule: Requirements for Three Major WWTPs | |
| <ul style="list-style-type: none"> • Support planned growth and economic development • Considers limitations of current technology (five-stage biological nutrient removal with coagulation) • Proactive investments in watershed health projects offset incremental increases in loading • Provides for adaptive management as loads incrementally increase | <ul style="list-style-type: none"> • Requirement to either purchase offset credits or install reverse osmosis is not feasible • DWR has stated the WWTPs can “do better than” 3.0 mg-N/L and 0.1 mg-P/L based on current effluent concentrations, but the WWTPs are currently operating at half capacity (effluent concentrations will increase as loading to the plants increase) • Ignores progress that could be made with proactive investments in watershed health |
| Wastewater Rule: Impact Analysis | |
| <ul style="list-style-type: none"> • Both UNRBA lake models show insignificant impact on lake water quality with the 3/0.1 scenario; increase in loading is 2% to 15% of rainfall-driven variability in phosphorus and nitrogen load, respectively • Simulated increases in chlorophyll-a are limited to upper part of the lake and are within the variability observed during 2015 to 2018 | <ul style="list-style-type: none"> • DWR modeling scenarios to test impacts on chlorophyll-a due to changing lake nutrient inputs are highly uncertain <ul style="list-style-type: none"> ○ Tributary inflow concentrations were set to concentrations observed in the lake arms, well above observations in free-flowing streams ○ Model <u>calibrated</u> to historic drought conditions when the upper lake dried to the historic river channel; chlorophyll-a concentrations during these years were much higher than those observed after the drought |

Advantages and Concerns: Wastewater Rule

| UNRBA Draft Rules | DWR Draft Rules |
|---|--|
| Wastewater Rule: Feasibility and Costs | |
| <ul style="list-style-type: none">• UNRBA wastewater workgroup has vetted the requirements and indicate they are challenging but doable | <ul style="list-style-type: none">• DWR rules are not feasible• Unlikely that sufficient nitrogen offset credits will be available<ul style="list-style-type: none">○ Nearly 6,000% of historic, annual demand (development)○ If credits were available, cost would be over \$44 million○ Costs will increase as land availability declines○ Projects need to address degraded streams with cattle access to earn high credits; few of these sites remain• Reverse osmosis is extremely costly (over \$450 million over ten years) and generates a highly-concentrated “reject stream,” often discharged to the ocean due to proximity• Likely to result in a moratorium on growth once WWTPs reach their Stage I nitrogen allocations |

Edits to Address PFC Comments on UNRBA's early September Wastewater Rule

- Need to clean up Item (3) Definitions (deleted highlighted text?)

DEFINITIONS. For the purposes of this Rule, the definitions in 15A NCAC 02B .0202 and 2B .0701 and the following definitions apply:

- DWR's rule also deletes the term "limit" but that is not defined in .0701 or .0202.
 - DWR's cross walk notes indicate they intend to add these definitions to .0701.
 - UNRBA to track if "limit" or "limitation" is added and ensure it also includes concentration-based limits.
- Question about who would make the investments and if the requirements would be listed in the permits
 - WWTP owners; yes, that is our expectation
- Question about fixed or annually-changing investment amounts
 - Amounts would be fixed based on proportion of permitted flow for the three major facilities

Edits to Address PFC Comments on UNRBA's early September Wastewater Rule

- Edited annual reporting requirements for the watershed investments to address comments from American Rivers:
(4)(c)(iii) Each facility shall annually report to the Division investment amounts and brief project descriptions including location, location relative to a water supply water within the Falls Watershed, and qualitative descriptions of project co-benefits associated with flood risk reduction, habitat protection, and ecological function. If quantifiable nutrient reductions have been approved by the Department for the practices, the facility shall include estimates of nitrogen and phosphorus load reductions. If no approved methodology exists, the facility shall report other metrics for tracking the extent of projects or activities.

Edits to Address PFC Comments on UNRBA's early September Wastewater Rule

- Question: are inflow and infiltration improvements able to qualify? While this is a permit requirement for the collection system permits, those are not directly impacted by these rules. In addition, it is an important source of groundwater loading.
 - Yes, these are covered by reference to Item 8 in the Existing Managed Lands Rule and reference to Item (5)(c) in this WW Rule.

Edits to Address PFC Comments on UNRBA's early September Wastewater Rule

- Question regarding the reassessment of allocation by the Commission every 10 years: Are these permit adjustments intended to include allocation of common fund shares for supplemental projects? Will DWR be required to amend the permits for these changes even if the next 5-year permit is in process? Readoption of the next Falls rules will surely take a substantial period of time.
 - Language was copied from DWR's rule, except that "Division" was replaced with "Commission." We should discuss with DWR how this process would align with the permit cycle.

Edits to Address PFC Comments on UNRBA's early September Wastewater Rule

- Question regarding the the collective annual mass discharge of total phosphorus shall not exceed 911 pounds in any calendar year for facilities draining downstream of Highway 50: Is this division of annual mass discharge handled in the NPDES permits? If so, that should be in the rule. If otherwise, then the method should be stated as it will otherwise be difficult to enforce.
 - Yes, load allocations in pounds are listed in the permits.
This is a legacy load allocation from the current rules.
- Edited to address comment:
(d)A discharger may request a mass discharge limit in lieu of the concentration limit for nitrogen or phosphorus or both, in which case the Director shall set a limit equivalent to the annual average concentration limit at the facility's permitted flow. The resulting mass limit shall become effective with the ensuing calendar year following revision of the NPDES permit.

Comprehensive Fiscal Comparison

Comprehensive Fiscal Comparison

| UNRBA Draft Rules | DWR Draft Rules |
|---|---|
| Comprehensive Rule Package: Relative Costs | |
| <ul style="list-style-type: none">• Approximately \$25 million over ten years (<u>includes</u> existing managed lands and wastewater rules)• Costs of new development rule would be less than under the current rule with savings due to elimination of need to purchase phosphorus offset credits | <ul style="list-style-type: none">• Several hundred million for existing managed lands rule if investment-based compliance is not acceptable given requirements in Purpose and Scope• Theoretical compliance costs for WWTPs ranging from \$44 million (purchasing credits) to \$450 million (reverse osmosis) over ten years; however, neither option is feasible, and a moratorium on growth is the most likely outcome• Unknown outcomes and costs associated with new development stormwater calculation tool; increased cost of nitrogen offset credits due to much higher demand to comply with wastewater rule |

PFC Consideration of Approval to Submit Draft Rules to the Board

PFC Consideration of Approval to Submit Draft Rules to the Board

- The UNRBA PFC had planned to consider approval of draft Rules to submit to the Board at their September 17th meeting.
- Given that we received DWR's draft Rules at the end of August, the PFC decided to revise the UNRBA drafts in September to incorporate appropriate language from DWR's draft rules.
- Following review by the PFC in September, we provided revised UNRBA rules for review and consideration at this meeting
- The Board has called a virtual Board meeting for October 21st to consider providing draft rules to the EMC ahead of their November meeting (request to present as an information item)
- We hope the EMC will be willing to set the timeline for public notice in early 2026.
- We would like to discuss and seek concurrence with the PFC on this approach.

PFC discussion and vote

Extension of IALA Program and Annual Reports

Extension of the IAIA Program

- IAIA is approved as a five-year program with an option to extend until Falls Rules are readopted.
 - The five-year period ends June 2026
 - Projected rule readoption date is in March 2027; however this could be revised depending on the UNRBA's strategy for moving the process forward
 - IAIA program will need to be extended to maintain compliance with the existing rule
- During the November 19, 2025, UNRBA Board meeting, we are planning to include a Compliance Group Committee (CGC) meeting to consider submitting a request to the EMC to approve an extension of the IAIA program
 - Five 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](#))

Year Four of the IAIA Ended June 30th

- The fourth-year of the Stage I Existing Development Interim Alternative Implementation Approach (IAIA) ended June 30th
- Annual reports from each participant were due to [John Huisman](#) at the Division of Water Resources (DWR) with a copy to the [Executive Director](#) and [Alix Matos](#) by **September 30, 2025**.
- The latest version of the template is available [here](#)
 - Save a local copy of this latest version 6.3
 - Rename with your “**JurisdictionName**” and “FY**25**” in the file name
 - Review the “Instructions” tab and “Column Explanations” tab
 - Enter FY2025 projects into the “User Input” tab
 - Blue cells are dropdown menus
 - Purple cells are automatically populated
 - Green cells are user entered values or text
 - **Carry over from the previous year must be entered manually**

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

- Additional stakeholders will be included when the draft-draft goes to the Board by September 2025
- Status updates to the EMC (November 12, 2025)
- Planning a meeting with the new Secretary of DEQ
- Planning a meeting with staff from the NC Office of State Budget Management
- Meeting with EPA

Other Items

Ongoing Discussions/Issues

- DWR Neuse Watershed Model/Delivery Factors for WWTP –
 - Final modeling report presented January 28th
 - DWR provided a status update to EMC on May 8th
- 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. DWR developing an implementation plan for control of these pollutants—EMC to review

Links to Reference Documents

- UNRBA [Consensus Principles II](#) to guide development of the revised Falls Lake Rules
 - Based on scientific conclusions resulting from a 10-year evaluation of Falls Lake and its watershed by the [UNRBA](#), [NC Collaboratory](#), and [other organizations](#)
 - Companion document: “[Concepts and Principles for the UNRBA Recommendations for a Revised Falls Lake Nutrient Management Strategy](#)”
 - History of Falls Reservoir and Falls Rules
 - Summary of [key findings](#) from modeling and monitoring
 - Recommendations for revised nutrient management strategy
- Additional information available online in the UNRBA Resource Library: <https://unrba.org/resource-library>.
- [Falls Lake water quality evaluation](#) conducted by Dr. Marty Lebo to support development of Falls specific assessment methodology
- [UNRBA Lake Modeling Report](#) (summarizes historic water quality monitoring data and use support information)
- Final Program Document: Stage I Existing Development Interim Alternative Implementation Approach ([IAIA](#))

Closing Comments

**Next Board Meeting Scheduled for
October 21, 2025
9:30 AM to 11:30 PM (VIRTUAL)**

**Next PFC Meeting Scheduled for
November 4, 2025
9:30 AM to 12:00 PM**