



UNRBA
Modeling and
Regulatory Support
Path Forward Committee
Meeting
March 2017



March 22, 2017



Project Status Updates



Status Updates for Project Deliverables

- > Finalized and posted to the UNRBA website (<https://www.unrba.org/reexamination>)
 - **Model Package Selection** memorandum
 - **Conceptual Modeling Plan** memorandum
- > Plan to submit draft **Modeling QAPP** to MRSW next week and to the PFC in April
- > Continuing work on the **Two Year Work Plan**

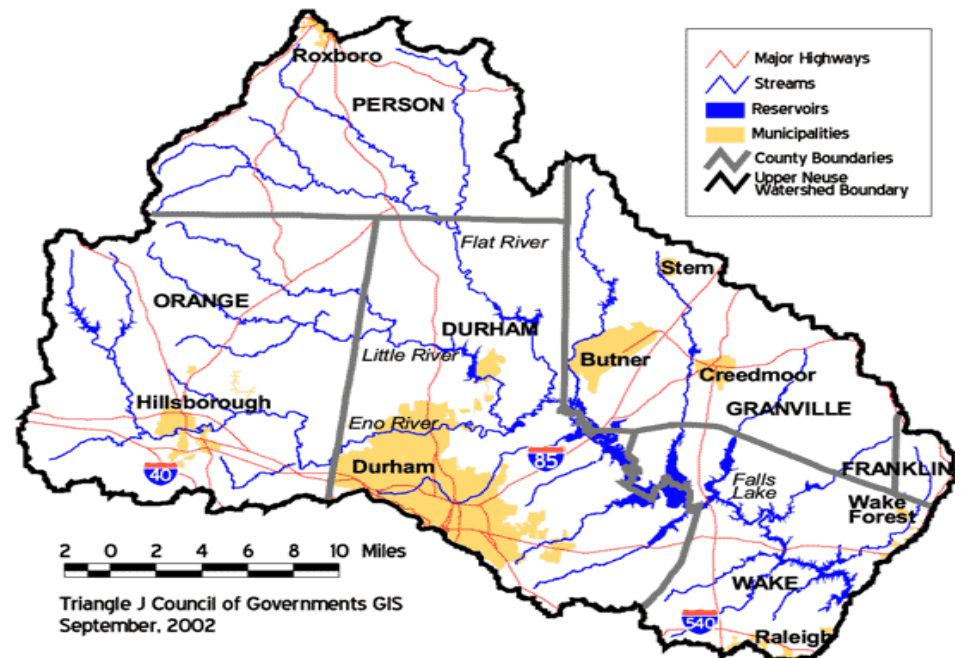


Communications



Falls Lake Session at the WRRRI Conference

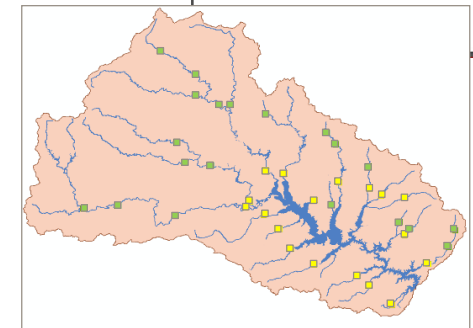
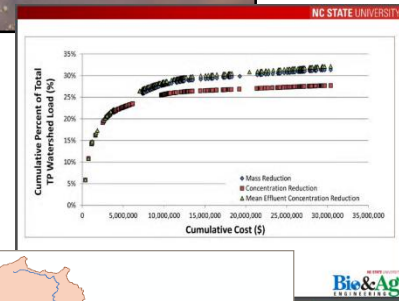
- > UNRBA/UNC Falls Lake session on March 16th
- > Brief project overviews by UNRBA and UNC
- > Stakeholder participation/small group discussion





UNRBA Status Updates

- > Background of the UNRBA
 - History and challenges -> Consensus Principals
 - Goals of the Reexamination
- > Overview of Water Supply Issues
 - Water treatment and issues related to water quality
 - Treatment goals
- > Feasibility and Challenges of Nutrient Reductions
 - Wastewater and stormwater treatment
 - Limits of technology and costs
- > Current Status of UNRBA Projects
 - Credits
 - Monitoring
 - Modeling and Regulatory Support





Status and Objectives of the UNC Evaluation (Steve Wall)

- > 2016 Budget Bill called for the UNC “Development of New Comprehensive Nutrient Management Regulatory Framework”
 - \$500,000 per year for six years
 - Conduct studies of Jordan Lake and then Falls Lake
- > This Nutrient Study is now under the NC Policy Collaboratory (also established by the legislature in 2016)
- > Includes faculty from UNC and NC State University



UNC Nutrient Study Components (Steve Wall)

- > Review data and compare trends in water quality
- > Evaluate risks of harmful algae blooms
- > Identify major sources of nutrients and sediments
- > Analyze nutrient mitigation and regulatory measures
- > Evaluate innovative financing mechanisms
- > Examine costs and benefits of nutrient strategies in other states
- > Conduct additional sampling as needed
- > Engage stakeholders throughout the watershed



Status and Objectives of the UNC Evaluation (Steve Wall)

- > Interim Report (focused mostly on Jordan Lake) submitted in December 2016:
 - <http://collaboratory.web.unc.edu/files/2016/12/UNC-Nutrient-Study-Interim-Update-December-2016.pdf>
 - Outlines the types of projects and research that will be conducted
- > Next steps
 - Research is underway
 - Coordination with DEQ stakeholder group
 - Identify projects needed for next funding cycle
 - Second Interim Report to the legislature due in December 2017



Stakeholder Participation/Small Group Discussion

- > Five small groups participated
- > Almost 50 participants
- > Posted 6 discussion items and provided a handout
- > Still compiling written notes from the meeting





Discussion Items for Small Groups

1. What concerns do you have about the Reexamination? What could we do to address them?
2. Should the UNRBA and UNC processes be coordinated? If so, in what ways?
3. What are the pros and cons of developing surface water sub-classification(s) with associated designated uses to represent the conditions in manmade Piedmont Reservoirs or in certain defined areas of these type waters?
4. What information/studies would the UNRBA need to develop and evaluate to support sub-classifications with associated designated uses for Falls Lake or portions of the lake?
5. What are the pros and cons of developing site specific chlorophyll *a* criteria for Falls Lake?
6. Are you interested in receiving additional information about proposed revisions to the Falls Lake regulatory framework?



Preliminary Feedback from the Debrief of the Groups

- > Most groups expressed the need for the UNRBA and UNC processes to coordinate
- > Some mentioned the need to coordinate with others as well (e.g., business community)
- > Many commented on the difficulty of providing feedback on the regulatory options given the early stage of the process
- > Difficulty in planning for the long term for major capital improvements when limits of technology are changing
- > Site specific response variables are more appropriate for man-made systems
- > How will the reexamination look at impaired tributaries?



Preliminary Feedback from the Debrief of the Groups

- > Difficulties in sub-classifying different parts of the lake
- > Difficulty in defining good water quality for aquatic life
- > Data and analysis
 - Continued data collection into the future
 - Consider legacy sediments and atmospheric deposition
 - Most up to date land use data
- > Need to understand return on investment
- > Possibility of revised use (e.g., swamp designation)
- > No reference condition for Piedmont Reservoirs (most are eutrophic)



Preliminary Feedback from the Debrief of the Groups

- > Over segmentation of the lake could cause problems with strategy implementation
- > Water quality in the Neuse River was historically poor
- > Segment above I-85 functions like a forebay, but is a water of the US
- > Clean Water Act hasn't been working – look at triple bottom line
- > Development will continue in the watershed
- > Plan for adaptive management
- > Need for transparency through out this process
- > What is the next step relative to this feedback?



Next Steps Given Feedback at the Session

- > Continue to hold stakeholder meetings throughout the process
- > Address the data needs in the Modeling QAPP and Two Year Work Plan
- > Incorporate feedback into analysis of strategies
- > Expand the list of stakeholders
- > Continue to coordinate with UNC
 - Research opportunities
 - Supplemental data collection
 - Findings

