

UNRBA
Modeling and
Regulatory Support
Path Forward Committee
Meeting
October 2016







Project Status

- > Held kickoff meeting with stakeholders on September 28th
- > Developed preliminary list of model package selection criteria
 - Distributed to the MRSW on October 13th
 - Responded to MRSW comments and distributed to the PFC on October 20th
- > Today we would like to
 - Summarize feedback from the kickoff meeting
 - Discuss the draft list of model package selection criteria
 - Identify the most important criteria for the evaluation







Summary of the September 28th Kickoff Meeting





Stakeholder Notes from the Kickoff Meeting

- > Approximately 50 meeting participants organized into seven discussion groups
- > Examples of concerns
 - How will the UNRBA project be affected by other processes such as the
 - UNC study of nutrient management strategies?
 - DEQ's rules revisions?
 - NC numeric nutrient criteria?
 - Will EPA regulators get impatient and step in if the UNRBA process takes too long?
 - Are you considering loading from sources such as landfills, groundwater, sediments, atmospheric deposition, etc.?









Example concerns, continued

- > Accuracy of land use data and temporal variability for agriculture
- > How will you measure project success?
- > Will the regulators accept the outcome?
- > Current rule structure is divisive will new rules foster collaboration?
- > How will output from multiple models be used and interpreted?









Examples of Advice Shared

- > Follow QAPPs closely
- > Communicate with the public
- > Loop in EPA early on
- > Define project goals (beyond modeling goals)
- Consider multiple regulatory options and collect relevant data
- Monitor and consider legislative/political environment
- > Communicate modeling assumptions and results into a language appropriate for officials, public, developers, etc.
- > Explain how the multiple models will be used









Examples of Encouragement

- > Maintain transparency
- > Continue tracking UNC study
- > Linking water quality to designated uses
- > Considering loading from lake sediments
- > Evaluating constriction sites
- > Strong collaboration
- > Communication with DWR
- Incorporating analysis of what has worked elsewhere
- > Lots of available resources, data, experts, studies, other organizations









Comments on List of Modeling Goals in Materials

- > Account for the "design" of the lake
- > Characterize loads at the watershed level
- > Accurately estimate flows from tributaries
- > Account for sediment resuspension
- > Simulate water level fluctuations
- > Account for internal lake loading
- > Prioritize goals
- > Evaluate designated use standards and current uses









Further Comments on the Stakeholder Meeting?







Review of Model Package Selection Criteria





Draft Model Package Selection Criteria Memorandum

- > Draft criteria based on original modeling goals, previous model comparisons, and notes from the kickoff meeting
- > Includes criteria organized by
 - Model characteristics
 - Focus parameters
 - Accounting and capabilities
 - Source allocation
 - Applications
- > Excluded items outside of the scope of the project
 - Emerging contaminants of concern









Discussion of the Draft Model Package Selection Criteria

- > Additions
- > Deletions
- > Revisions
- > Highest priorities

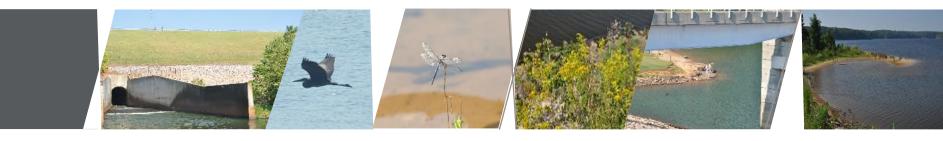






Schedule for Model Package Selection





Schedule for Review and Decision on Modeling Packages

- > Finalize selection criteria based on input from the PFC and DWR (comments due November 2nd the earlier the better); distribute to stakeholders November 9th
- > Develop a scoring and weighting system for the criteria
 - Send preliminary draft to the MRSW October 28th
 - Discuss with MRSW on November 3rd
- > Populate the selection criteria scores and weights and evaluate model packages
- > Develop preliminary recommendations for model package selection
- > Send memorandum to MRSW for review November 15th









Schedule, Continued

- > Develop recommendations for model package selection based on MRSW feedback
- > Distribute draft to PFC and DWR (November 30th)
- > Discuss at Dec PFC meeting
- > Comments due one week after Dec PFC meeting
- > Revise based on PFC and DWR feedback
- > Distribute to stakeholders (December 31st)
- > Draft the conceptual multi-modeling plan







Review Process for Documents





Review Process for Documents

Review by Forrest

MRSW reviews revised draft

PFC and DWR review revised draft

Stakeholders review final draft

Final materials posted to UNRBA website









List of Deliverables and Corresponding PFC Meetings

- > Memo Model Package Selection Criteria (October)
- > Memo Evaluation and Recommendation of Model Packages (December)
- > Memo Conceptual Multi-modeling Plan (January)
- > Document Modeling QAPP (April)
- > Memo Two Year Work Plan (June)

















