

UNRBA  
Modeling and  
Regulatory Support  
Path Forward Committee  
Meeting  
October 2016





## Project Status

- > Held kickoff meeting with stakeholders on September 28<sup>th</sup>
- > Developed preliminary list of model package selection criteria
  - Distributed to the MRSW on October 13<sup>th</sup>
  - Responded to MRSW comments and distributed to the PFC on October 20<sup>th</sup>
- > 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 28<sup>th</sup> 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 2<sup>nd</sup> – the earlier the better); distribute to stakeholders November 9<sup>th</sup>
- > Develop a scoring and weighting system for the criteria
  - Send preliminary draft to the MRSW October 28<sup>th</sup>
  - Discuss with MRSW on November 3<sup>rd</sup>
- > 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 15<sup>th</sup>



## Schedule, Continued

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

