

Path Forward Committee Meeting October 1, 2019



Agenda

- Opening comments
- UNRBA Decision Framework Development
- Status Updates
 - UNRBA Interim Alternative Implementation Approach
 - Transition Monitoring Options for FY2021
 - Modeling and Regulatory Support status
- Other status items

UNRBA Decision Framework Development

Status of the Interim Alternative Implementation Approach - Strawman

Status of the Interim Alternative Implementation Approach

- The PFC discussed the strawman for the Interim Alternative Implementation Approach at a special-topic meeting held September 24th
- Members pointed out the need for distinguishing this as an interim approach rather than the reexamination approach currently under development The PFC voted to continue evaluation of the strawman
- The PFC decided to form a small work group to discuss specific comments received on the strawman from internal and external stakeholders
- A meeting time for the work group is being established

Options for FY2021 Transitional Monitoring Program

PFC Input from Home Organizations

- During the September PFC meeting, options for revising or terminating the UNRBA Transition Monitoring were discussed.
- PFC members requested additional time to discuss the options with their home organizations.

PFC Member Report Out

Modeling and Regulatory Support Status

Topics Discussed at September 25th MRSW Meeting

- Administrative items
 - Reviewed MRSW Decision Framework adopted in January 2019
 - Established routing MRSW meetings for FY2020
 - Discussed 3rd party reviews and data confidentiality
- Discuss options for simulating several types of onsite wastewater treatment systems
- Status updates
 - Development of land use data
 - Incorporating data from DOT and addressing non-DOT roads
 - Merging agricultural data with USGS National Land Cover Data
 - Meteorological data
 - Flow Data
- Discuss Re-examination MOA with DEQ

Administrative Decisions from September 25th MRSW Meeting

- Hold MRSW meetings after PFC meetings
 - One month in person
 - One month by phone
 - One month skip
 - Repeat
- Clarified that member data could be shared with the UNC Collaboratory as part of the 3rd party reviews, but that presentation on or release of member data would require permission from the UNRBA

Technical Decisions from September 25th MRSW Meeting

- Modelers discussed development of custom code for the watershed model that would simulate loading from different categories and types of onsite wastewater treatment systems in the watershed (12 to 15 types)
 - Category: Conventional; discharging sand filter
 - Type: Functioning, malfunctioning; single pass, recirculating, TS-II
 - Discharge layer: Surface or subsurface
 - Wetland treatment via incidental overland flow
- UNC Collaboratory is researching loading from different types of systems as part of their Falls Lake studies
- Watershed model includes 3 types of systems as the default
- Custom code would cost \$17,000 to develop
- MRSW decided not to invest in this customization
 - Assuming loading from onsite systems would be low relative to other sources
 - Recognizing that UNRBA may need \$17,000 to address higher priorities

Technical Decisions from September 25th MRSW Meeting

- Modelers discussed two approaches for dealing with roads that **ARE NOT** maintained by DOT
 - Specify as a separate land use category
 - Lump in with urban development categories, consistent with the USGS National Land Cover Database
- MRSW decided to lump non-DOT roads in with other urban developed categories
 - Simplifies model development in terms of parameters
 - Preserves connection of rooftop, downspout, gutter systems with non-DOT roads
 - Does not affect ability to account for street sweeping
- DOT maintained roads are a separate land use category

Modeling Status from September 25th MRSW Meeting

- Data received from NC Department of Agriculture
- Approach developed to merge Department of Agriculture data with USGS NLCD
 - Discussed approach with the Department prior to analysis
- Analysis passed to Department of Agriculture for QAQC
- Issues identified with raw data provided for Durham County pasture hay
- Refined analysis underway for pass back to Department of Agriculture for final QAQC of baseline land use data prior to hydrologic calibration

Modeling Status from September 25th MRSW Meeting

- Data received from NC Department of Transportation (DOT)
- Approach developed to merge DOT data with USGS NLCD and Department of Agriculture data
 - DOT conducted analysis to separate “connected” and “disconnected” roads
 - Modelers to calculate percent impervious area using right-of-way and road surfaces provided by DOT
 - Modelers to pass land use characteristics back to DOT for QAQC prior to hydrologic calibration (baseline period)

Other Status Items

Communications

- Planning continues for the upcoming non-technical stakeholder session in January/February
- Input is needed from the UNRBA membership to develop an expanded stakeholder list for invitation.
- Other communication work products pending

UNRBA met with UNC Collaboratory researchers on September 20th

- Researchers very complementary of the Monitoring Report
- Researchers very appreciative of the extensive UNRBA data
- Researchers are anticipating the start of Falls Lake studies this year
 - Water movement/temperature stratification study at 3 locations
 - Finance, Governance, and Economics – municipal spending
 - “Re-tree” stormwater retrofits, SCM optimization
 - Nitrogen fixation, denitrification, and nutrient flux at six locations
 - Cyanotoxins at 11 stations using Adsorption SPATT’s
 - Nutrient source identification using existing data
 - Sediment dynamics related to discharge events

Next PFC Meeting is November 5, 2019

9:00 to Noon

Closing Comments Additional Discussion