

UNRBA
Monitoring Program
PFC Meeting
June 2016



Monitoring Program Update





FY 2016 Routine Monitoring

- Monitoring Year 2 is coming to a close
 - 18 Lake Loading Stations
 - 20 Jurisdictional Stations
 - 14 In-Lake Stations (DWR & City of Durham sampling)
 - Tributary data through March 2016 is posted to the database that is accessible through the UNRBA website
 - Interim Report summarizing data and efforts through June is due to the PFC in October



FY 2017 Routine Monitoring – Approved changes

- Suspension of 2nd monthly sample collection at “Big 5” Lake Loading Stations
- Suspension of analysis of CBOD5, DOC, Pt-Co Color in Lake Loading Station samples
- Reduction of TOC analysis to quarterly in Jurisdictional Station samples
- Cost savings to help fund Modeling Effort



FY 2016 Special Studies – Wrapping Up...

- Light Extinction Data [Study Plan posted on UNRBA website](#)
 - Effort completed. No further effort recommended at this time
- Recreational Use Evaluation [Study Plan posted on website](#)
 - Effort completed – summarized in Annual Report
- Basic Evaluation of Model Performance [Study Plan posted on website](#)
 - Draft report provided to Forrest, Jay & Haywood for review
 - Report to be provided to the PFC and discussed at meeting in July
- Storm Event Sampling [Study Plan posted on website](#)
 - Final FY2016 event conducted in May – awaiting data from laboratory
 - Will be presented at future PFC meeting and in Interim Report
- Sediment Evaluation [Study Plan posted on website](#)
 - Dr. Alperin has all data; is preparing report now
 - To be presented at future PFC meeting and in Interim Report



FY 2016 Special Studies – Still acquiring data...

- High Flow Sampling **Study Plan posted on website**
 - **Suitable rain event not likely before June 30 for second event**
 - Remaining budget expected to be unencumbered carry-forward to FY2017
- Lake Constriction Point Study **Study Plan posted on website**
 - To better quantify movement of water and nutrients between lake segments
 - Conducted first of two budgeted events in early January
 - **Suitable rain event not likely before June 30 for second event**
 - Remaining budget expected to be encumbered carry-forward to complete the study in FY2017



FY 2017 Special Studies – Approved Studies

- High Flow Sampling Existing Study Plan to be updated
 - Sample high flows at “Big 5” stations up to 12 times in FY2017
 - Target peak flow, as well as rising and falling portions when feasible
 - Include other significant tributaries as flows and budget allow
- Bathymetry and Sediment Mapping Study Plan to be prepared
 - Use Sonar equipment to map topography of lake bottom
 - Use dual-frequency Sonar to estimate distribution and thickness of unconsolidated sediment layer
 - Prepare bathymetric and sediment maps to support modeling and other purposes



FY 2017 Special Studies

- The budget for FY2016 included funding for seven Special Studies totaling \$240,000
- The approved FY2017 budget provides for just two Special Studies totaling \$170,000
- The cost savings will help fund the Modeling efforts starting in FY2017



Looking Ahead – Model Evaluation Report

- Sent to Forrest, Jay, and Haywood this week
- Distribute to PFC in mid-July for discussion at PFC meeting
- Main topics
 - Comparison of load estimation approaches to measured loads
 - Presentation of EFDC sensitivity analyses to justify suspending certain parameters
 - Discussion of preliminary revisions to model grid
 - Assessment of historic and current data collection efforts with respect to the empirical/probabilistic/Bayesian modeling
 - Additional technical support for revisions to the FY2017 Monitoring Program

