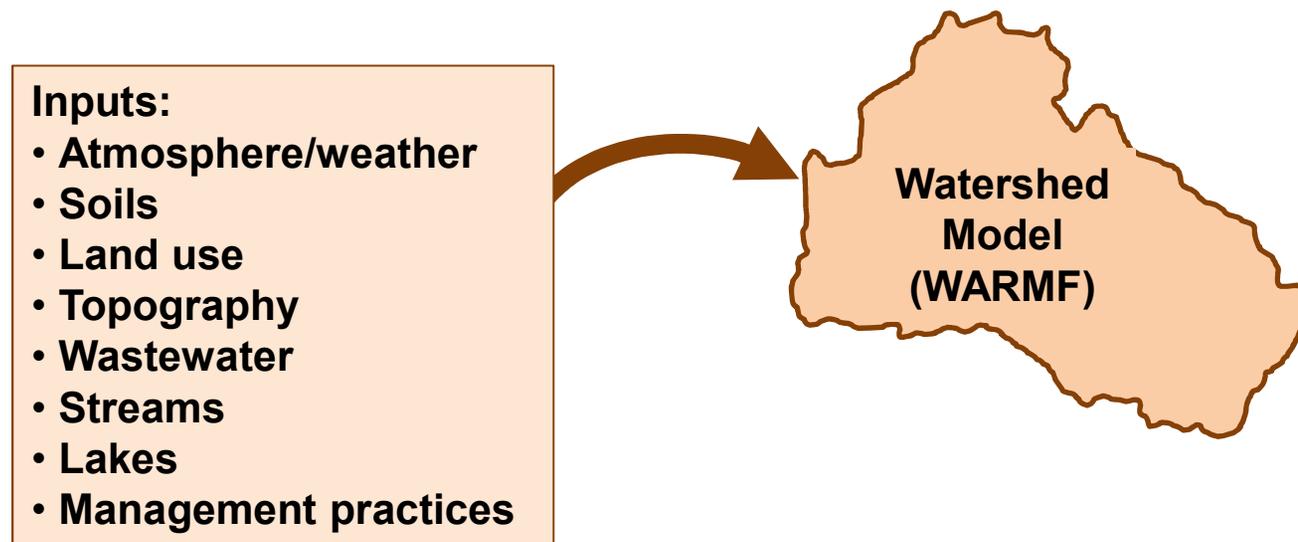UNRBA Board Meeting

MRS Project
Status Update

May 16, 2018

Data Acquisition to Support Modeling

- Continuing to receive data from organizations in the watershed

  - Drafting the data management plan to quality assure the data as it is used

  - Summarizing the data received for review by UNRBA and stakeholders

    - Include 3rd party reviewers as available

Inputs:
- **Atmosphere/weather**
- **Soils**
- **Land use**
- **Topography**
- **Wastewater**
- **Streams**
- **Lakes**
- **Management practices**
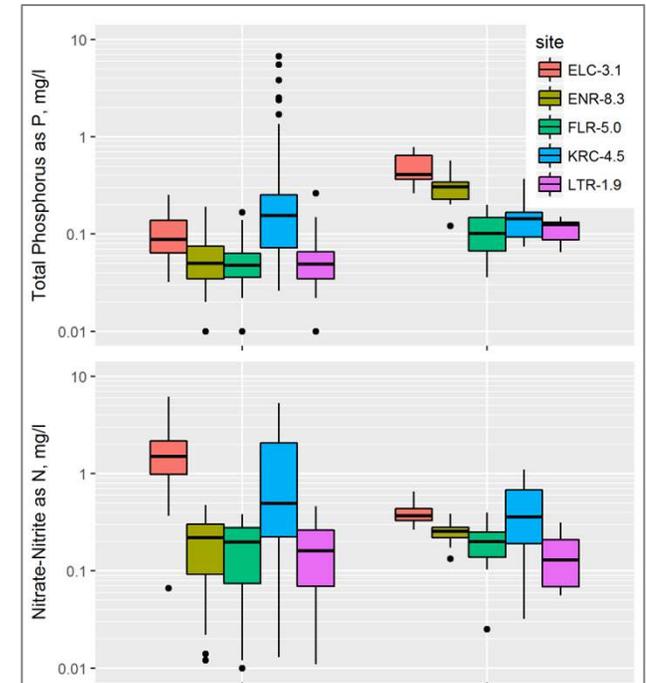
Watershed Model (WARMF)

Highlight Recent Data Provided by NC Department of Agriculture

- County level data
  - Provided for 2007 and 2011 through 2016
  - Crop acres planted (including pasture)
  - Nitrogen fertilization rates for each crop (includes all types)

- Crop Data
  - Planting times
  - Harvest times
  - Fertilization frequency and timing

- Six counties

- Seven years

- Twenty crops

Modeling Team Review of the Annual Report and the UNRBA Monitoring Program

- The water quality data collected is sufficient to develop the watershed and lake models

- Additional parameters or special studies are not needed

- A fifth year of monitoring would not likely provide further benefit to the model (the model period ends in 2018)

- Supporting analyses would be beneficial to the modeling
  - Cluster analyses of in-lake monitoring stations
  - Evaluation of lake profile data
  - Updated load estimations for the big five tributaries

Questions ?