

Modeling and Regulatory Support Workgroup (MRSW) Meeting
October 5, 2021, 9:30 AM to 12:00 PM
Remote Access Only (see last page of agenda for instructions)

Materials related to the meeting will be placed on the UNRBA [Meeting page](#) prior to the meeting.

I. Opening Comments, Agenda Review/Revisions — Chair, Michelle Woolfolk

II. Falls Lake Research Presentation

Item Summary (Forrest Westall and Michael O’Driscoll): Selected research funded through the Collaboratory to study Falls Lake will be presented at either MRSW or PFC meetings in 2021. Dr. O’Driscoll’s study objectives include estimating the influence of onsite wastewater treatment systems on nutrient loading to Falls Lake Watershed. This study is important to the current UNRBA watershed modeling efforts. Dr. O’Driscoll’s short [presentation](#) from the May Symposium and his [interim report](#) are available on line at <https://nutrients.web.unc.edu/2021-falls-lake-symposium/> and <https://nutrients.web.unc.edu/resources/>.

III. Modeling and Regulatory Support Status

Item Summary (Scott Sheeder, Silong Lu, and Alix Matos): The Watershed Analysis Risk Management Framework (WARMF) model for the Falls Lake watershed has been calibrated for stream flows and water quality. The MRSW and the PFC approved the calibration of the model and its use for developing the WARMF and EFDC lake models at their meeting on August 27, and September 7, 2021, respectively. The model output is being post-processed to identify the major sources of loading to the lake and the watershed modeling report is being drafted. Hydrodynamic calibration of the Environmental Fluid Dynamics Code (EFDC) is ongoing and the water quality inputs are being set up to transition to water quality calibration. WARMF Lake hydrologic calibration is also underway. The modeling team met with Dr. Rick Luettich and Dr. Daniel Obenour on September 21, 2021, to discuss progress with respect to the simulation of water movement in Falls Lake. Both models are transitioning to water quality calibration. In addition, the MRSW will review the recommended approaches for comparing model simulations to photic-zone water quality (nutrients, total suspended sediments, chlorophyll-a) composite samples collected in Falls Lake. As the models calculate concentrations for each layer in the simulation, it will be necessary to determine how calibration to the monitoring results will be determined.

IV. MRSW Workgroup Reports

Item Summary (Michelle Woolfolk): The Scenario Screening workgroup continues to evaluate potential scenarios for evaluation with the models. The Scenario Output workgroup has completed their charge of developing reporting formats to facilitate comparison of scenario output. Members of the Scenario Screening Workgroup will provide status reports to the MRSW.

V. Plan for Statistical Model Development and Regulatory Options for the Chlorophyll-a Water Quality Standard

Item Summary (Forrest Westall and Alix Matos): The UNRBA legal workgroup discussed the FY2021 scope of work with Barnes and Thornburg to provide legal support. The primary task for FY2021 is to begin consideration of a petition for rulemaking for Falls Lake (e.g., site specific criteria). This work will be partially supported by the UNRBA Statistical Model of Falls Lake. The models supporting the Re-examination of the Falls Nutrient Management Strategy will be discussed with an emphasis on the Statistical Model. To support this effort, the Technical Advisors Workgroup met in May to discuss contacts for local data and information

that can be used to evaluate the designated uses of Falls Lake. The Technical Advisors Workgroup is comprised of MRSW and PFC members and has identified staff at their jurisdictions or other local experts to provide data and information. DWR has also provided input on the contact list. The modeling team will begin meeting virtually with these contacts in October. The statistical modeling team and the legal team are also coordinating with Dr. Marty Lebo who has been identified as a Subject Matter Expert for assistance to the UNRBA for evaluating site-specific criteria for Falls Lake. Evaluation of other State’s site-specific standards for chlorophyll-a and nutrient-related standards is ongoing.

Next MRSW or PFC Meeting: November 2, 2021, 9:30 AM to Noon

Next BOD Meeting: November 17, 2021, 9:30 AM to Noon

Remote Access Instructions for the MRSW and PFC Meetings

This meeting will open 10 minutes prior to the official meeting start time to allow for users to test equipment and ensure communication methods are functioning.

Equipment Type	Access Information	Notes
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Computers without audio capabilities, or audio that is not working	Join Microsoft Teams Meeting (888) 404-2493 Passcode: 371 817 961# Please mute your phone unless you want to provide input.	Follow instructions above. Turn down your computer speakers, mute your computer microphone , dial the number through your phone and enter the passcode.
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Remote Access Guidelines

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