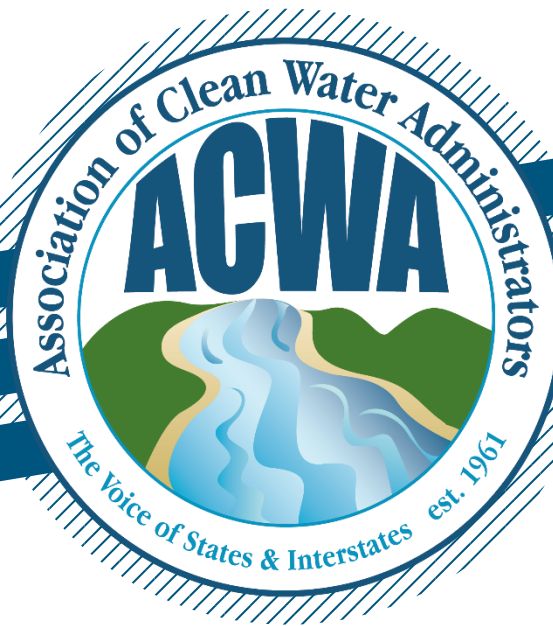


*Association of Clean Water Administrators*

# **2024 Modeling Workshop**

**September 16 - 20, 2024**



This Water Quality Modeling Workshop is a national meeting organized by ACWA, in partnership with USEPA for state program managers and staff involved in water quality modeling, as well as for both Regional and Headquarters-based U.S. Environmental Protection Agency managers and staff.

## MONDAY, SEPTEMBER 16

1:00 – 5:00 PM ET

Full Group Plenary

3:00– 3:30 PM ET

Break

## TUESDAY, SEPTEMBER 17

9:00 – 10:30 AM ET

Welcome and Introduction, Theory and Conceptual SWAT+ model

10:30 – 10:45 AM ET

Break

10:45 – 12:00 PM ET

Hands-on QSWAT+ watershed delineation

12:00 – 1:00 PM ET

Lunch (on your own)

1:00 – 3:30 PM ET

Hands-on QSWAT+ watershed delineation

3:30–4:00 PM ET

Break

4:00 – 5:00 PM ET

Full Group Plenary

Utilizing SWAT+ for TMDL Characterization: A Wisconsin Case Study – Eric Hettler, Wisconsin DNR

6:00 – 8:00 PM ET

Informal Networking Event

Reading Terminal Market - 1136 Arch St, Philadelphia, PA 19107

## WEDNESDAY, SEPTEMBER 18

9:00 – 10:30 AM ET

SWAT+ Editor session using the QSWAT+ project developed and model execution, reading the results, saving projects

10:30 – 10:45 AM ET

Break

10:45 – 12:00 PM ET

SWAT+ Editor session, visualization, running scenarios, and Q&A session

12:00 – 1:00 PM ET

Lunch (on your own)

1:00 – 3:00 PM ET

SWAT+ soft calibration

3:10–3:30 PM ET

Presentation on Model Calibration and Evaluation

Introduction to the case study dataset

3:30–4:00 PM ET

Break

4:00 – 5:00 PM ET

Full Group Plenary

6:00 – 8:00 PM ET

Informal Networking Event

Harp & Crown - 1525 Sansom St, Philadelphia, PA 19102

## THURSDAY, SEPTEMBER 19

9:00 – 10:30 AM ET

1. SWAT+ Toolbox Overview

2. Setting up projects

- Creating new projects
- Opening existing projects

3. Running SWAT+

- Model run setting
- Model run scenarios

4. Parameters

- Adding parameters (Individual vs Sets)
- Parameter change types
- Attaching objects to parameters

10:30 – 10:40 AM ET

Break

10:40 – 12:00 PM ET

5. Observations

- Preparing observations
- Adding observations

6. Running Sensitivity Analysis

- Understanding sensitivity analysis
- Setting up sensitivity analysis run
- Interpreting results

12:00 – 1:00 PM ET

Lunch (on your own)

1:00 – 2:50 PM ET

7. Model Calibrations

- Manual calibrations
- Automatic calibrations

8. Model Checks

- Water balance
- Nutrient balance
- Sediments

9. Management Operations

- Management schedules
- Dealing with decision tables

2:50—3:00 PM ET

Break

3:00—3:30 PM ET

10. Running Scenarios

- Climate change
- Land Management 'Scenarios'

3:30—4:00 PM ET

4:00 – 5:00 PM ET

11. Q&A

Break

Full Group Plenary

## FRIDAY, SEPTEMBER 20

9:00 – 11:00 AM ET

11:00 – 12:00 PM ET

Scenarios and Q&A

Workshop Wrap-Up