

Water Quality Modeling Basics and Beyond

About the Water Quality Modeling Basics and Beyond Webinar Series

EPA's Water Quality Modeling Workgroup is hosting a series of webinars to help water quality professionals better understand surface water quality modeling and how models can be used to solve common problems that face water quality regulators. The webinars are focused on modeling as it applies to the Total Maximum Daily Load (TMDL), Standards, and Water Quality Permitting Programs, but they are applicable to a wide range of audiences. These two hour webinars cover everything from modeling basics (e.g., model setup and calibration) to applied water quality modeling of different pollutants. Webinars are recorded and archived on EPA's website at https://www.epa.gov/waterdata/surface-water-quality-modeling-training.

Reservoir Eutrophication Models on the Wisconsin River

The Wisconsin River watershed is impaired by significant phosphorus loadings which contribute to eutrophication and algal overgrowths. This webinar will give an overview of eutrophication models for three reservoirs on the Wisconsin River that were the focal points of a basin-wide total maximum daily load (TMDL) for total phosphorus (TP). A generalized additive (regression) model was used to evaluate chlorophyll response to TP and to identify site-specific TP criteria that will meet numeric chlorophyll targets to support recreational uses. A TP mass-balance model with empirical estimates of sedimentation and release was then used to estimate external loading to meet the reservoir TP criteria. The webinar will discuss alternative models considered, with a focus on data requirements, complexity, and the endpoints required for management planning.

Speakers: Matthew Diebel and Kevin Kirsch, Wisconsin DNR

December 12, 2018

Eastern: 1-3 pm | Central: 12-2 pm | Mountain: 11-1 pm | Pacific: 10 am-12 pm | Alaska: 9 am-11 am

Sponsored By: EPA Water Quality Modeling Workgroup

Target Audience

The target audience is Clean Water Act (CWA) water quality regulators in programs such as TMDLs, monitoring, wetlands, standards, nonpoint sources, permitting, and assessment. The Webinar content assumes that audience members have an understanding of basic hydrology and water quality principles. The Webinars are open to everyone and will be relevant to anyone conducting water quality investigations.

Registration: You must register in advance to participate in this free Webcast. Please register at: <u>https://epawebconferencing.acms.com/wisconsin_river/event/registration.html</u>. For more information contact Arndt Gossel (<u>gossel.arndt@epa.gov</u>). *Please be sure to <u>view system requirements</u> prior to the webcast*.

The materials in this Webcast have been reviewed by EPA staff for technical accuracy. However, the views of the speakers and the speaker's organization are their own and do not necessarily reflect those of EPA. Mention of any commercial enterprise, product, or publication does not mean that EPA endorses them.