

USGS Maryland-Delaware-District of Columbia Water Science Center

Seminar Series

Tuesday, March 15, 2016 at 11:00 a.m.

Innovative Surface Water Systems for Nutrient Removal to Control HAB's (Hazardous Algal Blooms): Case Study Grand Lake St. Mary's

Christopher L. Overcash, P.E., BCEE, LEED AP, ENV SP

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Instructor, Johns Hopkins University, Whiting School of Engineering

Associate, Environment, Energy, Sustainability, and Health Institute of Johns Hopkins University

Grand Lake St. Mary's is one of a series of nation-wide events, highlighted by the temporary shutdown of Toledo's water treatment plant in the summer of 2014, which is paving the way for the emerging regulatory issue of HAB control. At this 21 square mile lake in Ohio microcystin toxins from HABs resulted in reduced tourist revenue as well as a significant reduction in home values in the surrounding areas. This discussion will review the emerging HAB regulatory situation as well as the restoration plan and innovative treatment train systems put in place by the lake management team at KCI to help restore the lake ecosystem.



Mr. Overcash is a Senior Associate and Practice Leader of Water and Wastewater Infrastructure at KCI Technologies, a Maryland based engineering consulting firm. He is also an adjunct professor of Environmental Engineering at the Johns Hopkins University Whiting School of Engineering and an Associate of the Johns Hopkins Environment, Energy, Sustainability, and Health Institute. He holds a Masters of Environmental Engineering from Johns Hopkins. He is a licensed professional engineer in six states, is a Board Certified Environmental Engineer of the American Academy of Environmental Engineers, and is also credentialed by the Institute for Sustainable Infrastructure and the U.S. Green Building Council. He teaches courses on a wide variety of environmental engineering topics and is an expert in water resource supply and sustainability. Mr. Overcash also leads design teams for water supply and wastewater systems.

This presentation will also be available remotely via Webex:

<https://usgs.webex.com/usgs/j.php?MTID=m7c8f483cb36621f1c7825fe2202ff2d1>

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