

Sustainability Seminar Series:

Monitoring Water Quality to Assure Sustainability

BY Ron MacGillivray, Ph.D. Senior Environmental Toxicologist Delaware River Basin Commission

ABSTRACT

By its definition, sustainable meets the needs of the present without compromising the ability of future generations to meet their own needs. This includes protecting water quality and acting as stewards of water resources. A regulatory approach to attain healthy waters is through water quality standards and criteria. Surface water regulations include the following objectives: protection or preservation of existing uses associated with the water body; protection or preservation of the existing water quality with the intent of sustaining currently existing conditions; preservation of the water resources for future or intended uses; or establishment of goal or target water quality characteristics that may be achieved through changes in watershed management. I will describe monitoring programs in the Delaware River Basin including data collection for a eutrophication model, biomonitoring in special protection waters, evaluation of ambient toxicity, pollution minimization plans for legacy pollutants and surveys of emerging contaminants that integrate the latest scientific knowledge in measuring the regulatory objectives of sustainable healthy waters.

BIOGRAPHY

Ron MacGillivray is a Senior Environmental Toxicologist at the Delaware River Basin Commission (<u>http://www.nj.gov/drbc/</u>). His work includes characterizing contaminants of emerging concern, monitoring ambient toxicity, establishing water quality criteria, designing field and laboratory studies for environmental assessment and developing Total Maximum Daily Loads (TMDLs) / Pollution Minimization Plans (PMPs) in the Delaware River. Dr. MacGillivray is an Adjunct Faculty at the University of the Sciences in Philadelphia. Prior to working at the DRBC, he was a Project Scientist in the Fate and Effects Laboratory of Roy F. Weston, Inc. (Weston Solutions, Inc.).

Dr. MacGillivray earned a Ph.D. in Environmental Sciences from the University of Massachusetts at Boston, a M.S. in Microbiology from Rutgers University and a B.S. in Biology from Northeastern University. He is past-president of the Hudson Delaware Chapter of the Society of Environmental Toxicology and Chemistry (<u>http://www.hdcsetac.org/</u>).



EVENT DETAILS

DATE: Wednesday, October 4, 2017

> **TIME:** 5 to 6 p.m.

LOCATION: Altorfer 501 Stevens Institute of Technology

> **ATTENDANCE:** Event is open to all.

LIVE WEBCAST: Visit our website or visit http://bit.ly/2jzQaq6

RSVP: No RSVP required. Refreshments provided.

FOR MORE INFORMATION

Contact Dr. Dibs Sarkar dsarkar@stevens.edu

WEBSITE: stevens.edu/sustainabilityseminar-series

Jointly Sponsored by:

The Center for Environmental Systems and the Department of Civil, Environmental and Ocean Engineering (CEOE).

For Fall 2017 announcement of Sustainability Seminar Speakers, click here.