

Agenda

Examining the Relationship between Total Maximum Daily Loads (TMDLs) and Stormwater Permitting *B. Uhler*

Clean Water Act Section 303(d) Impaired Waters
Identification and enforcement by Pennsylvania Department of Environmental Protection (PA DEP)
Sources and causes of impairments (including siltation, nutrients, pathogens, etc.)
What a Total Maximum Daily Load (TMDL) is and when one is necessary

Addressing TMDLs and Impaired Streams *B. Uhler*

NPDES permits for stormwater discharges (industrial, construction, MS4s)
TMDL and impaired stream requirements for MS4s
Watershed planning - addressing TMDLs and stream impairments outside of urban areas
Characterizing land cover and impervious areas
Simple and complex methods of estimating pollutant loads
Selecting and implementing appropriate best management practices (BMPs) to meet TMDL requirements

Case Study: The Conowingo Watershed Implementation Plan (WIP) *B. Uhler*

Chesapeake Bay TMDL and the need for the Conowingo WIP
Conowingo Dam Reservoir and dynamic equilibrium for trapping sediment and nutrients
Adaptive management approach and primary strategy for implementation targeting nitrogen through a suite of agricultural BMPs
Current status and BMP implementation funding

Case Study: A Collaborative Approach to Implementation of the Christina Basin TMDL *S. Byun*

Overview of the background and development of the Christina Basin TMDLs for bacteria, sediment, and nutrients
Christina Basin TMDL Implementation Plan, including locations, priorities, and components for MS4s, agriculture, voluntary, and county actions
Coordinated watershed approach and ongoing partner engagement

Case Study: Saw Mill Run – Managing the Issues of TMDL and Flooding in an Urban Stream *L. Werder Brown*

History of Saw Mill Run and Watersheds of South Pittsburgh
Saw Mill Run and urban stream syndrome
Current stream and corridor conditions
The challenges of integrated watershed management
Planning for a transformative future

Case Study: Lancaster Clean Water Partners (LCWP) Rapid Stream Delisting Program *A. Gibson
C. Dean*

Lancaster Clean Water Partners (LCWP) restoration goal for impaired stream in Lancaster County

- The “rapid stream delisting” strategy
- Collaborative Watershed Mapping Tool
- Steps to stream delisting and current status of program

Addressing Pennsylvania Impaired Waters and Total Maximum Daily Loads (TMDLs)
Live, Interactive Webinar - Tuesday, July 23, 2024

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Learning Objectives

You'll be able to:

Examine the relationship between Total Maximum Daily Loads (TMDLs) and stormwater permitting.

Address Pennsylvania impaired waters and **discover** simple and complex methods of estimating pollutant loads.

Learn about adaptive management approach and primary strategy for implementation targeting nitrogen through a suite of agricultural BMPs.

Discuss a collaborative approach to implementation of the Christina Basin TMDL.

Explore Saw Mill Run and analyze the issues of TMDL and flooding in an urban stream.

Review a case study of the Lancaster Clean Water Partners (LCWP) Rapid Stream Delisting Program.

Consider the challenges of integrated watershed management and to plan for a transformative future.



HalfMoon Education Inc.,
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Addressing Pennsylvania Impaired Waters and Total Maximum Daily Loads (TMDLs)

Live, Interactive Webinar - Tuesday, July 23, 2024



Explore the relationship between TMDLs and stormwater permitting

Address TMDLs and impaired streams

Examine Pennsylvania watershed case studies

Discuss the “rapid stream delisting” strategy

Identify the challenges of integrated stormwater management

Discuss Conowingo Watershed, the Christina Basin, Saw Mill Run and Lancaster County impaired waters

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Webinar Information

Online - Tuesday, July 23, 2024	
Log into Webinar 8:00 - 8:30 am EDT	Break 11:45 am - 12:45 pm EDT
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Faculty

Beth Uhler *Pennsylvania Director, Center for Watershed Protection, Inc.*
Ms. Uhler serves as the Pennsylvania director for the Center for Watershed Protection, with over 20 years of expertise in various areas including stormwater management, watershed planning, GIS solutions, wetland science, and NPDES MS4 permit compliance. Her contributions have been instrumental for local governments and stewards of Pennsylvania's waters and beyond. Ms. Uhler adopts a collaborative and technology-driven approach, providing sound scientific and regulatory advice while delivering project and program guidance. Additionally, she conducts water resources training and presentations, and serves as a subject matter expert for stormwater management programs. She is currently a member of the PA DEP's Water Resources Advisory Committee, providing input on state policy and regulation and serving as an intergovernmental liaison among local, state, and federal entities. Ms. Uhler holds a bachelor of science degree in Geo-environmental Studies from Shippensburg University. She enjoys hiking, skiing, canoeing and kayaking Pennsylvania's streams and rivers.

Seung Ah Byun, PhD, PE
Executive Director, Chester County Water Resources Authority
Dr. Byun joined the Chester County Water Resources Authority (CCWRA) as the executive director in 2020. She has more than 25 years of experience in water resources management, having worked at nonprofits, government agencies, academia, and private consulting. Prior to her role with CCWRA, Dr. Byun served as a water resource engineer with the Delaware River Basin Commission and the senior planner for Water Resources with the Brandywine Conservancy. She also contributed to the development of watershed management plans, conducted source water assessments, and analyzed wastewater collection systems, primarily for the City of Philadelphia, during her time with CDM Smith, an engineering and construction firm. Dr. Byun's collective experience spans the water resources field, ranging from water supply availability to stormwater management to local policy-based initiatives for water quality improvement. She received her bachelor of science degree in Systems Engineering from the University of Pennsylvania, master of science degree in Environmental Engineering from Drexel University, and a doctorate from the University of Pennsylvania in City and Regional Planning, with a focus on environmental planning and urban design. Dr. Byun has also served as an adjunct instructor at the University of Pennsylvania, Weitzman School of Design.

Lisa Werder Brown *Executive Director, Watersheds of South Pittsburgh*
Ms. Werder Brown's work focuses on the Saw Mill Run and Streets Run Watersheds in Pittsburgh's southern neighborhoods and communities that are impacted by the shared environmental issues of stormwater runoff and sewage overflows. She works closely with the watershed communities, local governments, and academic and nonprofit partners to identify the issues and explore opportunities for stormwater mitigation in the watersheds. Prior to her work with Watersheds of South Pittsburgh, Ms. Werder Brown held leadership positions with EDS, Nine Mile Run Watershed Association. She graduated from Chatham University with a B.S. degree in biology and holds a Certificate in Nonprofit Executive Management from Georgetown University. Ms. Werder Brown's graduate studies focus on the public's understanding of uncertainty in science.

Allyson Ladley Gibson *Executive Director, Lancaster Clean Water Partners*
Ms. Gibson facilitates collaboration between a unique set of multi-sector partners who are working to improve local water quality. She spent her childhood in Lancaster County, exploring streams and growing up in her family's business. Ms. Gibson attended the University of Richmond then spent 13 years in Maryland with the Chesapeake Bay Foundation in their Education Department. She returned to her Lancaster roots at Kitchen Kettle Village before bringing all her worlds together with the Lancaster Clean Water Partners in 2018. Ms. Gibson participated in the Rural-Urban Leadership Program and serves as the co-director for the Lancaster Watershed Leadership Academy. She loves life in Lancaster along with her husband and two kids.

Carly Dean
Director of the Chesapeake Tributaries Initiative, Chesapeake Conservancy
Ms. Dean will expand the successful Rapid Stream Delisting program to more states in the watershed beyond Pennsylvania. After completing her master's degree in environmental science at Towson University in Baltimore, Maryland, she researched sustainable development for a real estate developer in Beijing, China and social resilience at the International Institute for Applied Systems Analysis near Vienna, Austria. Ms. Dean earned her bachelor's degree in environmental science from Baylor University in Waco, Texas. At the Conservancy, her work is focused on creating and delivering innovative, customized datasets and tools for diverse partners to help restore farmland and improve urban stormwater management. Ms. Dean lives in Baltimore where she enjoys city life and spending time with her niece, Ruby.

Credit Information

This webinar is open to the public and is designed to qualify for 6.0 PDHs for professional engineers, 6.0 HSW continuing education hours for landscape architects, and provides a 6.0-hour learning opportunity for licensed architects in Pennsylvania. This course may qualify for continuing education credits in other states; please refer to specific state rules to determine eligibility.

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This Association of State Floodplain Managers has approved this course for 6.0 CECs for floodplain managers.

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