

Pooled Monitoring Forum: Restoration Research to make Science and Regulatory Connections

June 21, 2023, from 9 AM to 5 PM



Zoom/tech leads are Bridget Robey, brobey@cbtrust.org, 410-974 2941 xt 410 (all day), Megan Andreasen, mandreasen@cbtrust.org, 410-974 2941 xt 133, and (9am to 12pm), and Kayleigh Katzenberger, katzenberger@cbtrust.org, 410-974-2941 xt 112 (1pm to 5pm)

Pooled Monitoring Forum Agenda

9-9:30 am	Morning Session with <u>opening remarks</u> from Matt Rowe , Assistant Director of Maryland Department of the Environment's Water and Science Administration
9:30 am-12 pm	Keith Eshleman (University of Maryland Center for Environmental Science (UMCES)), Arthur Parola (University of Louisville Research Foundation, Inc.), Erich Hester (Virginia Tech), Jon Butcher (Tetra Tech, Inc.), and Q&A
12-1 pm	Lunch Break – <i>provided by the Chesapeake Bay Trust</i>
1-2 pm	Dong Liang (UMCES), Josh Thompson (Anne Arundel County), DISCUSSION – Optimizing Sampling & Monitoring: What is the science telling us? How are we using the latest science in our programs? How can we use the latest science in our programs?
2-5 pm	Tess Thompson (Virginia Tech), Claire Welty & Andy Miller (University of Maryland Baltimore County), Bob Hildebrand (UMCES), Lauren McPhillips (PennState), Q&A/Input from audience
5 pm to ?	Checkerspot Brewing Company, 1399 S Sharp St, Baltimore, MD 21230, provided by the Chesapeake Bay Trust



Meeting Materials

- Agenda, attendance list, and presentations are at:
https://drive.google.com/drive/folders/1FUnKg41P3q6U4KASfdrkY54pGXcxAnlh?usp=drive_link
- This meeting is being recorded and both the recording and presentations will be posted on the Pooled Monitoring Initiative website after the meeting at:
<https://cbtrust.org/grants/restoration-research/>

Morning Session

- **Welcome, charge for the day, and Pooled Monitoring Program overview, Sadie Drescher** Vice President of Restoration Programs, Chesapeake Bay Trust



- **Matt Rowe**, Assistant Director of Maryland Department of the Environment's Water and Science Administration
 - Opening remarks

Pooled Monitoring Program - Science answers key restoration questions



Lauren McPhillips PI: MS student Alex Brown working on mesocosm to answer research question about deicers
(about to be on the job market for stormwater-related positions in the DC area!)

- ▶ Desire to support the best, most cost-effective practices at the most optimal sites, but differences of opinion sometimes exist, and questions about the performance and function of some of these practices persist
- ▶ Pool resources to answer restoration questions posed by regulatory community & practitioners
 - ▶ **Partnerships and collaborations** – we are all a part of this effort!
- ▶ Increase power, objectiveness, and ability to know what works
- ▶ Bring science back to those that can use the research/data



Pooled Monitoring Initiative Provides Solutions

- ▶ Regulators prioritize their concerns with input from practitioners
- ▶ Funders “pool” resources
- ▶ Top restoration questions issued in the Restoration Research Request for Proposals (RFP) in FY15 administered by the Chesapeake Bay Trust
- ▶ Scientific teams research these questions and deliver answers back to the regulators
- ▶ RFP open to any organization – looking for best groups to answer your questions
- ▶ Results used in decisions, policy, practices, etc.



Claire Welty (UMBC) quantifying the cumulative effects of stream restoration and environmental site design on nitrate loads in nested urban watersheds using a high-frequency sensor network (Baltimore County, MD)
[Final report](#) and [publication](#)

Restoration Research Award Program

- ▶ Supported 43 projects since FY 15 at >\$8M
- ▶ Guided by the Pooled Monitoring Advisory Committee
- ▶ Uses scientific reviewers across the world to vet applications
- ▶ Runs all applications through a “management review”
- ▶ Projects are managed as contracts
- ▶ Questions are cycled off/on the RFP each year
- ▶ All awards, progress, and program products are online at: <https://cbtrust.org/grants/restoration-research/>



Keith Eshleman (UMCES) Plum Branch stormwater monitoring station (Ellicott City, Howard County, MD)

Morning Session

- **Welcome, charge for the day, and Pooled Monitoring Program overview, Sadie Drescher** Vice President of Restoration Programs, Chesapeake Bay Trust



- **Matt Rowe**, Assistant Director of Maryland Department of the Environment's Water and Science Administration
 - Opening remarks

Pooled Monitoring Forum Agenda

9-9:30 am	Morning Session with <u>opening remarks</u> from Matt Rowe , Assistant Director of Maryland Department of the Environment's Water and Science Administration
9:30 am-12 pm	Keith Eshleman (University of Maryland Center for Environmental Science (UMCES)), Arthur Parola (University of Louisville Research Foundation, Inc.), Erich Hester (Virginia Tech), Jon Butcher (Tetra Tech, Inc.), and Q&A
12-1 pm	Lunch Break – <i>provided by the Chesapeake Bay Trust</i>
1-2 pm	Dong Liang (UMCES), Josh Thompson (Anne Arundel County), DISCUSSION – Optimizing Sampling & Monitoring: What is the science telling us? How are we using the latest science in our programs? How can we use the latest science in our programs?
2-5 pm	Tess Thompson (Virginia Tech), Claire Welty & Andy Miller (University of Maryland Baltimore County), Bob Hildebrand (UMCES), Lauren McPhillips (PennState), Q&A/Input from audience
5 pm to ?	Checkerspot Brewery Company, 1399 S Sharp St, Baltimore, MD 21230, light refreshments and a beverage <i>provided by the Chesapeake Bay Trust</i>



Ask Questions:

- In person – Raise hand
- Remote - Use chat/raise hand

Pooled Monitoring Forum Agenda

9-9:30 am	Morning Session with <u>opening remarks</u> from Matt Rowe , Assistant Director of M Environment's Water and Science Administration
9:30 am-12 pm	Keith Eshleman (University of Maryland Center for Environmental Science (UMC (University of Louisville Research Foundation, Inc.), Erich Hester (Virginia Tech), Inc.), and Q&A
12-1 pm	Lunch Break – <i>provided by the Chesapeake Bay Trust</i> WE ARE ON BREAK – SEE YOU BACK HERE AT 1PM
1-2 pm	Dong Liang (UMCES), Josh Thompson (Anne Arundel County), DISCUSSION – Optimizing Sampling & Monitoring: What is the science telling us? How are we using the latest science in our programs? How can we use the latest science in our programs?
2-5 pm	Tess Thompson (Virginia Tech), Claire Welty & Andy Miller (University of Maryland Baltimore County), Bob Hildebrand (UMCES), Lauren McPhillips (PennState), Q&A/Input from audience
5 pm to ?	Checkerspot Brewing Company, 1399 S Sharp St, Baltimore, MD 21230, light refreshments and a beverage provided by the Chesapeake Bay Trust



Input from the Audience

- What are your top restoration questions?
- How are you using this research?
- Where should the research focus?



Purpose:

- Your questions can be addressed using this Pooled Monitoring Initiative's Restoration Research Award Program in the future.
- Hear how others are or are not using this research.



Break
Time



The image features a dynamic and colorful background of paint splatters. The colors transition from purple and blue on the left, through green and yellow in the center, to red and orange on the right. The splatters are of various sizes and densities, creating a textured, energetic feel. Centered over this background is the text "Thank You!" in a clean, white, sans-serif font. The exclamation point is prominent, adding a sense of finality and gratitude.

Thank You!