
Event Agenda

13th National Monitoring Conference

Monday, April 24, 2023

8:15 AM - 12:45 PM	Field Trip: SWIFT Lab and USGS Extensometer Tour Location: Meet at the Convention Center pull-in area (off of 19th Street)
8:45 AM - 12:30 PM	Field Trip: Hampton Roads Sanitation District (HRSD) Tour Location: Meet at the Convention Center pull-in area (off of 19th Street)
10:15 AM - 1:30 PM	Field Trip: Brock Environmental Center Tour and Va. Beach Student Engagement Location: Meet at the Convention Center pull-in area (off of 19th Street)
12:00 PM - 5:00 PM	Registration Desk Open
12:00 PM - 5:00 PM	Exhibitor Move-In
12:00 PM - 1:30 PM	Lunch (on own)
1:30 PM - 3:00 PM	Workshop: Harmful and Nuisance Algae Assessment and Ecology (Part 1) Location: Suite 3ABC
3:00 PM - 3:30 PM	Break for Workshop Participants
3:30 PM - 5:00 PM	Workshop: Harmful and Nuisance Algae Assessment and Ecology (Part 2) Location: Suite 3ABC

Tuesday, April 25, 2023

7:00 AM - 5:00 PM	Registration Desk Open
7:30 AM - 9:30 AM	Exhibitor Move-In Location: Exhibit Hall A
8:30 AM - 10:00 AM	Opening Plenary Location: Ballroom 3 Plenary Speaker: Peter Tango
10:00 AM - 10:30 AM	Break / Exhibition / Silent Auction Location: Exhibit Hall A
10:00 AM - 7:00 PM	Silent Auction Open Location: Exhibit Hall A Silent Auction Coordinator: Danielle Wain
10:30 AM - 12:15 PM	Networking Sessions / Meet Your Peers Location: See handout and nametag for location
12:15 PM - 1:30 PM	Buffet Lunch / Posters / Exhibition / Silent Auction Location: Exhibit Hall A
12:15 PM - 1:30 PM	RMC Luncheon (Invite Only) Location: Suite 4ABC

1:30 PM - 3:00 PM

Session C1: Fish tissue contaminants/ bioaccumulation in fish/shellfish

Location: Suite 1B

Session Moderator: Leslie McGeorge

A Probability-Based National Assessment of Contaminants in Fish From U.S. Rivers

1:30 PM - 1:50 PM

Speaker: John Healey

Patterns of PFAS Occurrence in U.S. River Fish: Considerations for Monitoring and Fish Consumption Advisories

1:50 PM - 2:10 PM

Speaker: Andrea Contreras Balbuena

Exploration of Whole Body Mercury and Total PCBs in Fish from Ohio Rivers

2:10 PM - 2:30 PM

Speaker: Richard Budnik

Mercury in Hell(s Canyon): Methylation, uptake, and export from a seasonally anoxic reservoir

2:30 PM - 2:50 PM

Speaker: Austin Baldwin

1:30 PM - 3:00 PM

Session C2: Connecting Community Scientists to Decision Makers: Approaches

Location: Suite 1C

Session Moderator: Robbie O'Donnell

Water Quality and Community Engagement: Promoting Science and Diversity in Prince William County, Virginia (the Monacan Indian Nation (Manahoac))

1:30 PM - 1:50 PM

Speaker: Veronica Tangiri

Data Sharing to Combat Chloride Pollution With Salt Watch

1:50 PM - 2:10 PM

Speaker: Samantha Briggs

Clean Ocean Action's Rally for the Waterways – A Collaborative, No-Blame Approach to Find, Fix, and Eliminate Sources of Pathogen Pollution in Coastal Watersheds

2:10 PM - 2:30 PM

Speaker: S. Muthukrishnan

Leveraging Community Collected Data

2:30 PM - 2:50 PM

Speakers: Isabel Ruff, Lindsay VanFossen

1:30 PM - 3:00 PM

Asynchronous Session C2: Connecting Community Scientists to Decision Makers: Approaches

Location: Virtual via Whova

How Process Leads to Data Quality: A Volunteer-Driven Assessment of WSRs

10:30 AM - 10:30 AM

Speaker: Isabella Pritchard

Using Community Science to Inform Regulatory Action in Appalachia

10:30 AM - 10:30 AM

Speaker: Jenna Dodson

1:30 PM - 3:00 PM

Session C3: River HABs: Identification, Prediction, and Process Understanding of Algal Blooms in Flowing Waters (Pt 1)

Location: Suite 1D

Speaker: Jennifer Graham (she/her)

Application for HAB Monitoring of the Ohio River

1:30 PM - 1:50 PM

Speaker: Chris Nietch

Modeling Transport, Growth, and Downstream Fate of River Planktonic Algal Booms

1:50 PM - 2:10 PM

Speaker: Noah Schmadel

Gaging Downstream Transport of Cyanobacteria From Persistent HABs in a New Jersey Drinking Water Basin

2:10 PM - 2:30 PM

Speaker: Meiyin Wu

Survey Study of Presence of Cyanotoxins in Wadeable Streams in New York State, US (2017–2021)

2:30 PM - 2:50 PM

Speaker: Daniel Rearick

1:30 PM - 3:00 PM

Session C4: Applications of Monitoring Data to Meet the Needs of Policy Makers and Drive Water Quality Management Decisions (Pt. 1)

Location: Suite 2A

Session Moderator: Emma Jones

Using Sediment Fingerprinting to Assess Non-Point Sources of Sediment

1:30 PM - 1:50 PM

Speaker: Allen Gellis

Measuring urban stream restoration success: Processes, goals, monitoring, and regulations may confound “ecological lift”

1:50 PM - 2:10 PM

Speaker: Chris Ruck

CBP Tributary Summaries: Communication Tool on Water Quality Changes to Inform Management Decisions

2:10 PM - 2:30 PM

Speaker: Breck Sullivan

Understanding Environmental Change in the Yukon River Basin Through the Indigenous Observation Network

2:30 PM - 2:50 PM

Speaker: Edda Mutter

1:30 PM - 3:00 PM

Asynchronous Session C4: Applications of Monitoring Data to Meet the Needs of Policy Makers and Drive Water Quality Management Decisions (Pt. 1)

Location: Virtual via Whova

Filling the Knowledge Gap: Monitoring Urbanized Watersheds in the Virginia Coastal Plain

10:30 AM - 10:30 AM

Speaker: Aaron Porter

Estimating Relationship Among Water Quality Variables to Identify Nutrient Threshold Values in Delaware Waters

10:30 AM - 10:30 AM

Speaker: Bhanu Paudel

Integrated Surface and Groundwater Chloride Modeling for Road Salt Impacts

1:30 PM - 1:30 PM

Speaker: Amanjot Singh

1:30 PM - 3:00 PM

Session C5: Advanced monitoring of fecal contamination in urban waterways in support of public access (PT 1)

Location: Suite 2B

Session Moderator: Shawn C. Fisher

Multi-Tracer Investigation of Fecal Indicator Bacteria Sources in a Mixed-Use Creek

1:30 PM - 1:50 PM

Speaker: Menso de Jong

Determining Sources of Fecal Bacteria in an Urban Watershed With Digital PCR

1:50 PM - 2:10 PM

Speaker: Dongmei Alvi

Novel Bacterial Monitoring in Urbanized Areas of the Delaware River Basin in Support of Recreational Water Quality Criteria

2:10 PM - 2:30 PM

Speaker: Dan Skulski

Investigating the Connection Between Sediment Resuspension, Turbidity and Fecal Indicator Concentrations in the Harlem River, New York

2:30 PM - 2:50 PM

Speaker: Ashley Smith-Krudener

1:30 PM - 3:00 PM

Asynchronous Session C5: Advanced monitoring of fecal contamination in urban waterways in support of public access (PT 1)

Location: Virtual via Whova

Effects of the Deal Lake Outflow on a Nearby Swimming Beach

10:30 AM - 10:30 AM

Speaker: Marie Mauro

The Surfrider Foundation’s Blue Water Task Force in Florida Builds Community Awareness of Sewage Contamination and Informs Safe Recreation

1:30 PM - 3:00 PM

Speaker: Michelle Parker-Ortiz

1:30 PM - 3:00 PM

Session C6: Historical perspective of water monitoring and policy: Pre - passage of the Clean Water Act and beyond (Pt 1)

Location: Suite 2CD
Session Moderator: Hugh Sullivan

Regional Water Quality Case Studies in the Shared Waters of New York City-Progress, Challenges and Changes

1:30 PM - 1:50 PM
Speaker: Evelyn Powers

Reviewing long-term water quality data to assess how watershed management, internal phosphorus loading and climate change impact two Mid-Atlantic lakes

1:50 PM - 2:10 PM
Speaker: Fred Lubnow

The Lake Washington Sediment Record Revisited. Long-Term Trends in Metal and PCB Contamination and Eutrophication Indicators

2:10 PM - 2:30 PM
Speaker: Curtis DeGasperi

The Tampa Bay Estuary: A (Mostly) Successful Example of National Estuary Programs Catalyzing Action Towards Clean Water Act Implementation

2:30 PM - 2:50 PM
Speaker: Edward Sherwood

1:30 PM - 3:00 PM

Asynchronous Session C6: Historical perspective of water monitoring and policy: Pre - passage of the Clean Water Act and beyond (Pt 1)

Location: Virtual via Whova

Assessing Change in Lake Eutrophication 50 Years After the National Eutrophication Survey

10:30 AM - 10:30 AM
Speaker: Donald Benkendorf

1:30 PM - 3:00 PM

Session C7: Innovations in Freshwater Monitoring (Pt 1)

Location: Suite 4DE
Session Moderator: Max Herzog

Development and Applications of Rapid Streamflow Duration Assessment Methods

1:30 PM - 1:50 PM
Speaker: Brian Topping

Integrated Synoptic Surveys Using an Autonomous Underwater Vehicle (AUV) to Monitor the Effects of Controlled Reservoir Releases on Water Quality in the Cape Fear River Basin. North Carolina by the U.S. Geological Survey (USGS)

1:50 PM - 2:10 PM
Speaker: Lee Bodkin

Applications of Thermal Imaging Cameras for Groundwater/Surface-Water Exchange Studies

2:10 PM - 2:30 PM
Speaker: Jeff Cole

An Objective Approach for Designing Stream Monitoring Networks

2:30 PM - 2:50 PM
Speaker: Scott Ator

1:30 PM - 3:00 PM

Session C8: PANEL: Lead Testing in Schools and Daycares - California's Case Example

Location: Suite 3ABC

1:30 PM - 3:00 PM

Session C9: Workshop: dataRetrieval Tutorial 1 - Using R to Discover and Obtain Water Data

Location: Suite 1A
Presenter: Laura DeCicco, Lee Stanish, Aliesha Krall

1:30 PM - 3:00 PM

Asynchronous Session: Monitoring and Assessment of PFAS in the Aquatic Environment

Location: Virtual via Whova

Unlocking the Value of Community-Based Freshwater Monitoring in Aotearoa New Zealand: Development of a National Quality Assurance Framework

1:30 PM - 1:30 PM
Speaker: Juliet Milne

Stronger Together: The Importance of Peers in Volunteer-Collected Data Credibility

1:30 PM - 1:30 PM
Speaker: Claire Sanderson

3:00 PM - 3:30 PM

Break / Exhibition / Silent Auction

Location: Exhibit Hall A

3:30 PM - 5:00 PM

Session D1: Biogenic Methane Monitoring and Mitigation

Location: Suite 1B

Session Moderator: Bruce Kania

Effectiveness of Nanobubble Aeration and Floating Treatment Wetlands for the Treatment of Nutrient Impaired Waters and Reduction of Biogenic Methane

3:30 PM - 3:50 PM

Speaker: Cornelius (Andy) Valkenburg

Adapting Aeration/Oxygentation Technologies for Biogenic Methane Reduction in Impaired Water Bodies

3:50 PM - 4:10 PM

Speaker: John Tucci

Laser Analyzers for Quantitative Measurement of Methane Emissions From Waterways

4:10 PM - 4:30 PM

Speaker: Hamish Adam

Facilitated Discussion

4:30 PM - 5:00 PM

3:30 PM - 5:00 PM

Asynchronous Session D1: Biogenic Methane Monitoring and Mitigation

Location: Virtual via Whova

Evidence of Aerobic Methane Synthesis in a River Water Environment

3:30 PM - 3:30 PM

Speaker: Qian Wang

Evaluation of Methods for Determining Methane Flux From Eutrophic Waterways

3:30 PM - 3:30 PM

Speaker: Mark Reinsel

3:30 PM - 5:00 PM

Session D2: Connecting Community Scientists to Decision Makers: Technologies & Tools

Location: Suite 1C

Session Moderator: Robbie O'Donnell

Volunteer Monitoring to Address User Perception of the Schuylkill River

3:30 PM - 3:50 PM

Speaker: Michael Hartshorne

Making Waves With Your Data: Technical Strategies to Amplify Monitoring Programs

3:50 PM - 4:10 PM

Speaker: Erin Hofmann

Advancing Freshwater Science and Conservation With Near-Continuous Real-Time Data Collection by Community Scientists

4:10 PM - 4:30 PM

Speaker: Diana Oviedo Vargas

The River Report Card: Using Community Science to Protect Public Health, Inform Decision-Makers, and Train Emerging Environmental Professionals.

4:30 PM - 4:50 PM

Speaker: Luke Ginger

3:30 PM - 5:00 PM

Session D3: River HABs: Identification, Prediction, and Process Understanding of Algal Blooms in Flowing Waters (Pt 2)

Location: Suite 1D

Speaker: Jennifer Murphy

Exploring Sources and Transport of Riverine Algae Using In-Situ Chlorophyll Sensors at Regional and Continental Scales

3:30 PM - 3:50 PM

Speaker: Marc Peipoch

Assessing the Variability of Harmful Algal Bloom Indicators: A Case Study in the Illinois River Basin

3:50 PM - 4:10 PM

Speaker: Sarah Stackpoole

Elevated Nutrients and Summer Low Flow Result in CyanoHABs on the Poteau River, Arkansas, 2020 and 2021

4:10 PM - 4:30 PM

Speaker: Bradley Austin

Cyanotoxin Occurrence Along the Freshwater to Marine Continuum: A Pilot Study in the Northeastern United States

4:30 PM - 4:50 PM

Speaker: Joshua Rosen

3:30 PM - 5:00 PM

Session D4: Applications of Monitoring Data to Meet the Needs of Policy Makers and Drive Water Quality Management Decisions (Pt. 2)

Location: Suite 2A

Session Moderator: Jason Hill

Joint Mapping of Water Quality Monitoring and Environmental Justice Information

3:30 PM - 3:50 PM

Speaker: Alan Lindquist

Monitoring to Protect High Quality Waters and Advance Tribal Sovereignty

3:50 PM - 4:10 PM

Speaker: Nancy Schuldt

Synthesizing Monitoring Data to Inform Water Management for Ecosystems and Communities

4:10 PM - 4:30 PM

Speaker: Alexandra Fries

Oregon's Pesticide Stewardship Partnerships (1999 – Present): Successes, Lessons Learned, and What's Next

4:30 PM - 4:50 PM

Speaker: David Gruen

3:30 PM - 5:00 PM

Asynchronous Session D4: Applications of Monitoring Data to Meet the Needs of Policy Makers and Drive Water Quality Management Decisions (Pt. 2)

Location: Virtual via Whova

Dissolved Oxygen Monitoring in Great South Bay, Long Island, NY, in Support of Coastal Resource Management

3:30 PM - 3:30 PM

Speaker: Kaitlyn Finkelstein

3:30 PM - 5:00 PM

Session D5: Advanced monitoring of fecal contamination in urban waterways in support of public access (PT 2)

Location: Suite 2B

Session Moderator: Ashley Smith-Krudener

The Aftermath of Thanksgiving Dinner: Tying Tryptophan-Like Fluorescence to In-Stream E. coli Concentration

3:30 PM - 3:50 PM

Speaker: Michael Long

Microbial Source Tracking in the Lower Passaic River Basin – Turning Data Into Actionable Information

3:50 PM - 4:10 PM

Speaker: Kathryn Cahalane

River Monitoring Network: Predicting Real-Time Escherichia coli Densities at River Access Points in Middle Tennessee

4:10 PM - 4:30 PM

Speaker: Ryan Jackwood

Facilitated Discussion

4:30 PM - 5:00 PM

3:30 PM - 5:00 PM

Session D6: Historical perspective of water monitoring and policy: Post passage of the Clean Water Act and beyond (Pt 2)

Location: Suite 2CD

Session Moderator: Hugh Sullivan

Nitrogen, Phosphorus, and Suspended-Sediment Loads and Trends Measured at the Chesapeake Bay Nontidal Network Stations: Water Years 2011–2020

3:30 PM - 3:50 PM

Speaker: Chris Mason

Evaluating Clean Water Act Progress in Idaho 2002–2022

3:50 PM - 4:10 PM

Speaker: Jason Williams

Enhancing the Chesapeake Bay Program Monitoring Networks

4:10 PM - 4:30 PM

Speaker: Breck Sullivan

Creating a Definitive List of Clean Water Act Regulated Waters in Arizona

4:30 PM - 4:50 PM

Speaker: Patrice Spindler

3:30 PM - 5:00 PM

Session D7: Innovations in Freshwater Monitoring (Pt 2)

Location: Suite 4DE

Session Moderator: Max Herzog

Sensible Sensors: Making the Most of Algae Sensor Data for Actionable Information for HAB Management

3:30 PM - 3:50 PM

Speaker: Christopher Lee

Population Assessment of a Threatened Fish Species Using Remotely Operated Vehicle Technology

3:50 PM - 4:10 PM

Speaker: Blaine Snyder

eDNA Monitoring of a Multi-Species Invasion in the Susquehanna River Basin With Implications for Migratory Fish Restoration

4:10 PM - 4:30 PM

Speaker: Aaron Henning

Facilitated Discussion

4:30 PM - 5:00 PM

3:30 PM - 5:00 PM

Session D8: PANEL: Exploring Race and Ethnicity in Water Quality Monitoring

Location: Suite 3ABC

Session Coordinator: Sylvia Lee ; Panelist: Sonnie Cuffey, Owen McKenna (He/Him), Mara Dias, Edda Mutter, Natalie Coleman

3:30 PM - 5:00 PM

Session D9: Workshop ES dataRetrieval Tutorial 2 – dataRetrieval Techniques and Applications

Location: Suite 1A

Presenter: Laura DeCicco, Lee Stanish, Aliesha Krall

5:00 PM - 7:00 PM

Exhibitor Reception (Dinner on Own)

Wednesday, April 26, 2023

7:00 AM - 5:00 PM

Registration Desk Open

7:00 AM - 8:30 AM

Continental Breakfast / Posters / Exhibition

Location: Exhibit Hall A

8:00 AM - 8:20 AM

Mindfulness Moment

Location: Suite 1D

Yoga Instructor: Julie Vastine

8:00 AM - 4:00 PM

Silent Auction Open

Location: Exhibit Hall A

Silent Auction Coordinator: Danielle Wain

8:30 AM - 10:00 AM

Session E1: Data Management Best Practices: Building a Solid Foundation

Location: Suite 1B

Session Moderator: Brian Pointer

Data Management Best Practices of a Large-Scale Stream Assessment Program

8:30 AM - 8:50 AM

Speaker: Alicia Ritzenthaler

A Relational Data Model for Collaborative Green Stormwater Infrastructure Management

8:50 AM - 9:10 AM

Speakers: Matthew McGauley, Bridget Wadzuk

Every Project Is a Data Project – How Data Governance Management Best Practices Support a Digital & Data Analytics Toolbox for All

9:10 AM - 9:30 AM

Speaker: Meghan Eschbaugh

Interagency Data Aggregation to Support HAB Monitoring of the Ohio River

9:30 AM - 9:50 AM

Speaker: Leslie Gains-Germain

8:30 AM - 10:00 AM

Asynchronous Session E1: Data Management Best Practices: Building a Solid Foundation

Location: Virtual via Whova

Chesapeake Monitoring Cooperative's Chesapeake Data Explorer: A Web Application to Centralize, Manage, and Communicate Community Science Monitoring in the Chesapeake Bay Watershed

8:30 AM - 8:30 AM

Speaker: David Parrish

Lesson Learned: Adaptive Monitoring to Long-Term Data Collection

8:30 AM - 8:30 AM

Speaker: Matt Wilson

8:30 AM - 10:00 AM

Session E2: Microbial Source Tracking (MST)/Stormwater Monitoring

Location: Suite 1C

Session Moderator: Leslie McGeorge

Source Track Down Studies in New Jersey: What Have We Learned?

8:30 AM - 8:50 AM

Speaker: Bill Heddendorf

Tracking Sources of Bacteria to Guide Water Quality Restoration and Protection Actions

8:50 AM - 9:10 AM

Speaker: Meiyin Wu

Novel Indicators for Tracking Human Sources of Fecal Pollution During Storm Events

9:10 AM - 9:30 AM

Speaker: Kenneth Schiff

Application of Droplet Digital Polymerase Chain Reaction (ddPCR) in Environmental Samples: An Update From the Implementation Side

9:30 AM - 9:50 AM

Speaker: Darcy Ebentier McCargar

8:30 AM - 10:00 AM

Asynchronous Session E2: Microbial Source Tracking (MST)/Stormwater Monitoring

Location: Virtual via Whova

Use of Microbial Source Tracking to Understand Fecal Contamination Sources Impacting Maumee Bay State Park Beaches

8:30 AM - 8:30 AM

Speaker: Christopher Kephart

8:30 AM - 10:00 AM

Session E3: River HABs: Identification, Prediction, and Process Understanding of Algal Blooms in Flowing Waters (Pt. 3)

Location: Suite 1D

Speaker: Jennifer Graham (she/her)

U.S. Geological Survey's Next Generation Water Observing System Response to Harmful Algal Blooms in the Illinois River Basin

8:30 AM - 8:50 AM

Speaker: Heather Krempa

The Influence and Contribution of Reservoirs on the Downstream Distribution of Algal Toxins in Two River Systems

8:50 AM - 9:10 AM

Speaker: Heath Mash

Nuisance Algae Monitoring Method Development and Results in the Shenandoah River Basin

9:10 AM - 9:30 AM

Speaker: Tara Wyrick

Facilitated Discussion

9:30 AM - 10:00 AM

8:30 AM - 10:00 AM

Session E4: Applications of Monitoring Data to Meet the Needs of Policy Makers and Drive Water Quality Management Decisions (Pt. 3)

Location: Suite 2A

Session Moderator: Sarah Lehmann

Using Taxon – Environment Relationships for Biological Assessment

8:30 AM - 8:50 AM

Speaker: Lester Yuan

Stressor Identification and CADDIS: Moving Forward to Improve Freshwater Causal Assessments

8:50 AM - 9:10 AM

Speaker: Kate Schofield

Improving Existence Valuation of Freshwaters (I): Modeling Biological Condition to Account for Spatial Dependence Between Water Quality and Willingness to Pay

9:10 AM - 9:30 AM

Speaker: Ryan Hill

Addressing the Emerging Environmental Issue of Coastal Acidification in Florida's Estuaries: The Indian River Lagoon Observatory Network of Environmental Sensors (IRLON)

9:30 AM - 10:00 AM

Speaker: M Dennis Hanisak

8:30 AM - 10:00 AM

Asynchronous Session E4: Applications of Monitoring Data to Meet the Needs of Policy Makers and Drive Water Quality Management Decisions (Pt. 3)

Location: Virtual via Whova

Improving Valuation of Freshwaters (II): Quantifying Drivers of Macroinvertebrate Condition in Western US Streams With Structural Equation Models

8:30 AM - 8:30 AM

Speaker: C. Emi Fergus

8:30 AM - 10:00 AM

Session E5: Contaminant-Mixture Exposures and Potential Human Health Effects in Point of Use Drinking Water (Pt. 1)

Location: Suite 2B

Session Moderator: Kelly Smalling

Tapwater Exposures in Northern Plains Nations: Potential Effects and Risk Management

8:30 AM - 8:50 AM

Speaker: Paul Bradley

Cumulative Health Risk Assessment of Home Well Water Consumption, Crow Reservation, Montana

8:50 AM - 9:10 AM

Speaker: John Doyle

Effects-Based Tools to Support Consumers in Tapwater Use Decisions: A Multi-Case Study Summary

9:10 AM - 9:30 AM

Speaker: Elizabeth Medlock Kakaley

Public Health Impacts of Nitrate and Atrazine Exposure in Drinking Water: Evidence From Nebraska

9:30 AM - 9:50 AM

Speaker: Jesse Bell

8:30 AM - 10:00 AM

Session E6: Applications of Data from the National Aquatic Resource Surveys to Address Issues of National Importance

Location: Suite 2CD

Session Moderator: Kerry Kuntz

Carbon Storage in Wetlands of the United States: Using Data From the 2011 and 2016 National Wetland Condition Assessments

8:30 AM - 8:50 AM

Speaker: Amanda M. Nahlik (she/her/hers)

Diatom Nutrient Indicator Development and National Scale Patterns of Diatom-Environment Relationships in Rivers and Streams Based on DNA Metabarcoding

8:50 AM - 9:10 AM

Speaker: Nathan Smucker

Expanding Upon the 2022 National Lakes Assessment to Learn More About Wisconsin Lakes and the Northern Lakes and Forests Ecoregion

9:10 AM - 9:30 AM

Speaker: Catherine Hein

Preliminary Description and Distribution of Blackwater Rivers and Streams of the Contiguous United States

9:30 AM - 9:50 AM

Speaker: Joe Flotemersch

8:30 AM - 10:00 AM

Session E7: Innovations in Freshwater Monitoring (Pt. 3)

Location: Suite 4DE

Session Moderator: Ge (Jeff) Pu

Satellite-Derived Water Quality Data From an Automated High-Performance Computing Environment for 23,000+ Minnesota, Wisconsin, and Michigan Lakes

8:30 AM - 8:50 AM

Speaker: Leif Olmanson

Thinking Outside the Box: How the New Jersey Highlands Council Is Assessing and Protecting Water Resources From More Than a Water Quality Standpoint

8:50 AM - 9:10 AM

Speaker: Christopher Mikolajczyk, CLM

Monitoring During the Winter Blind Spot: Contractor Perspective and Technical Advice

9:10 AM - 9:30 AM

Speaker: Tyler Linton

Assessment of the Effects of In-Situ Filtering of Stormwater Composite Samples on Dissolved Metals Concentrations

9:30 AM - 9:50 AM

Speaker: Gretchen Tellessen

8:30 AM - 10:00 AM

Session E8: LIGHTNING TALKS: Innovative ways in which Shiny apps are being used to analyze and visualize data (for all experience levels)

Location: Suite 3ABC

Session Moderator: Jen Stamp ; Panelist: Erik Leppo, Kateri Salk, Benjamin Block, Cristina Mullin, Lee Stanish, Jason Jones, Jake Vander Laan, Emma Jones, Tim Martin, Casey Schoenebeck, Shane Bowe

8:30 AM - 10:00 AM

Session E9: WORKSHOP: Applying Best Practices and Lessons Learned to Broaden Participations in Volunteer Monitoring Efforts

Location: Suite 1A

Speakers: Liz McQuain, Kristine Stepenuck

10:00 AM - 10:30 AM

Break / Posters / Exhibition / Silent Auction

Location: Exhibit Hall A

10:30 AM - 12:00 PM

Session F1: The National Groundwater Monitoring Network (NGWMN) - Overview of NGWMN Development & Successful Implementation

Location: Suite 1B

Session Moderator: John LaFave

The Development and Implementation of the National Groundwater Monitoring Network (NGWMN) – A Shining Example of Cooperation and Data-Sharing

10:30 AM - 10:50 AM

Speaker: David Wunsch

How the National Groundwater Monitoring Network Design and Implementation Benefitted From International Collaboration

10:50 AM - 11:10 AM

Speaker: Robert Schreiber

NGWMN Data Portal: Lessons Learned From Over a Decade of Multi-Agency Data Sharing Efforts

11:10 AM - 11:30 AM

Speaker: Candice Hopkins

Prospects and Predictions for Continued Federal Support for the National Groundwater Monitoring Network (NGWMN)

11:30 AM - 11:50 AM

Speaker: Ben Frech

10:30 AM - 12:00 PM

Asynchronous Session F1: The National Groundwater Monitoring Network (NGWMN) - Overview of NGWMN Development & Successful Implementation

Location: Virtual via Whova

New Hampshire's Groundwater Level Monitoring Network – Modernizing and Enhancing a Groundwater Level Monitoring Network Through a Federal-State Partnership

10:30 AM - 10:30 AM

Speaker: Michael Howley

10:30 AM - 12:00 PM

Session F2: Monitoring for Water Quality Trends in the Mississippi/Atchafalaya River Basin (MARB)

Location: Suite 1C

Session Moderator: Whitney King

Water Quality Monitoring in the Lower Mississippi River Basin to Assess the Effectiveness of Agricultural Conservation Practices to Reduce Nutrient

10:30 AM - 10:50 AM

Speaker: Yongping Yuan

Status and Trends of Total Nitrogen and Total Phosphorus Concentrations, Loads, and Yields in Streams of Mississippi, Water Years 2008–18

10:50 AM - 11:10 AM

Speaker: Matthew Hicks

Trends in the Eucha-Spavinaw Watershed Show Management Limitations to Reducing In-Stream Nutrient Concentrations

11:10 AM - 11:30 AM

Speaker: Erin Grantz

Facilitated Discussion

11:30 AM - 12:00 PM

10:30 AM - 12:00 PM

Asynchronous Session F2: Monitoring for Water Quality Trends in the Mississippi/Atchafalaya River Basin (MARB)

Location: Virtual via Whova

Measuring for the Future: Creating a Consistent, Integrated and Transparent Monitoring and Information System to Drive Evaluations, Decisions, and Investments in the Mississippi River Basin

10:30 AM - 10:30 AM

Speaker: Bryan Piazza

A Century-Long Snapshot of Water Quality at the End of the Mississippi River

10:30 AM - 10:30 AM

Speaker: R. Eugene Turner

10:30 AM - 12:00 PM

Session F3: Remote Monitoring of Inland Freshwater Harmful Algal Blooms

Location: Suite 1D

Session Moderator: Mike Paul

Forecasting Cyanobacteria Harmful Algal Blooms Utilizing Spatio-Temporal Integrated Nested Laplace Approximation Within the Contiguous United States

10:30 AM - 10:50 AM

Identifying Frequency of Cyanobacteria Events in Lakes and Chlorophyll a Endpoints Using Satellite Estimates of Cyanobacteria Concentration

10:50 AM - 11:10 AM

Speakers: Rebecca Veiga Nascimento, Monty Porter

A Multi-Sensor Cloud-Based Tool for Monitoring Cyanobacterial Harmful Algal Blooms in Small Waterbodies

11:10 AM - 11:30 AM

Speaker: Abhishek Kumar

10:30 AM - 12:00 PM

Asynchronous Session F3: Remote Monitoring of Inland Freshwater Harmful Algal Blooms

Location: Virtual via Whova

Tiered Approaches to HAB Monitoring at Lake Cachuma, CA

10:30 AM - 10:30 AM

Speakers: Elijah Papen, Steve Skripnik

10:30 AM - 12:00 PM

Session F4: Innovations in Volunteer Science

Location: Suite 2A

Session Moderator: Barb Horn (she/her)

Engaging Volunteers in Stream Restoration Assessments

10:30 AM - 10:50 AM

Speaker: Liz Chudoba

Lake Erie Volunteer Science Network: Collaborating for Credible Community Water Quality Monitoring

10:50 AM - 11:10 AM

Speaker: Max Herzog

Five Unique Ways Arizona Leverages Survey123 for a Community Science Program: A Love Note of Sorts From a Passionate Volunteer Coordinator

11:10 AM - 11:30 AM

Speaker: Meghan Smart

QuickDrops – Long Island Sound Community Data Platform (CDP) for Save the Sound

11:30 AM - 11:50 AM

Speaker: Martin Hain

10:30 AM - 12:00 PM

Asynchronous Session F4: Innovations in Volunteer Science

Location: Virtual via Whova

A River Flows Through It: Integrating Community and College to Monitor a River

10:30 AM - 10:30 AM

Speaker: Kirsten Martin

Volunteer Monitoring of Optical Brighteners in Texas Waterways: Education and Research Opportunities

10:30 AM - 10:30 AM

Speaker: Kelly Albus

Twenty Years of Stream Search in South East Michigan

10:30 AM - 10:30 AM

Speaker: Jim Martin

Hold the Salt: The Salt Watch Community Science Initiative

10:30 AM - 10:30 AM

Speaker: Abby Hileman

The Flow Photo Explorer Tool: A Citizen Science-Ready Platform and Data System to Store Trail Camera Imagery and Estimate Relative Streamflow Using Machine Learning

10:30 AM - 10:30 AM

Speaker: Phillip Goodling

10:30 AM - 12:00 PM

Session F5: Contaminant-Mixture Exposures and Potential Human Health Effects in Point of Use Drinking Water (Pt. 2)

Location: Suite 2B

Session Moderator: Elizabeth Medlock Kakaley

Exposures and Potential Health Implications of Mixtures of Organic and Inorganic Contaminants in Public-Supply Drinking Water

10:30 AM - 10:50 AM

Speaker: Kelly Smalling

Cumulative Health Risk Assessment of Private Well Water Consumption Across Western Montana

10:50 AM - 11:10 AM

Speaker: Margaret Eggers

A Survey of Unregulated Contaminants in Minnesota Source and Drinking Water

11:10 AM - 11:30 AM

Speaker: Sarah Elliott

Bottled-Water Contaminant Exposures and Potential for Human Effects

11:30 AM - 11:50 AM

Speaker: Paul Bradley

10:30 AM - 12:00 PM

Session F6: Nutrient Cycling in Streams and Lakes (Pt. 2)

Location: Suite 2CD

Session Moderator: Adrienne G Donaghue, PhD

Nutrient Uptake Stoichiometry of Harmful Algal Blooms on Lake Erie

10:30 AM - 10:50 AM

Speaker: Terri Jicha

Comparing Water Quality Data 2019–2022, North Lake, Sweet Valley, PA

10:50 AM - 11:10 AM

Speaker: Holly Frederick

Boron Isotope as a Powerful Tool for Nutrient Source Tracking: A Multi-Isotope Study of Surface-Water in South Florida

11:10 AM - 11:30 AM

Speaker: Arash Sharifi

Characterizing Seasonal Trends in Dissolved Organic Carbon Among Urban Streams in Boston, USA

11:30 AM - 11:50 AM

Speaker: Annika Quick

10:30 AM - 12:00 PM

Session F7: Using Large Scale Watershed Assessments to Identify and Prioritize Protection of Watersheds & High Quality Waters (Pt 1)

Location: Suite 4DE

Session Moderator: Nicholas Martorano

Healthy Watersheds, High-Quality Waters: Protecting the Wonderful Waters of Wisconsin

10:30 AM - 10:50 AM

Speaker: Pamela Toshner

Applying the Chesapeake Healthy Watersheds Assessment for Communicating the Spectrum of Watershed Health and Vulnerability

10:50 AM - 11:10 AM

Speaker: Renee Thompson

Applying the Maryland Healthy Watersheds Assessment for Protection of High Quality Waters

11:10 AM - 11:30 AM

Speaker: Nancy Roth

Mountain Lake Condition and Threats Across the Contiguous US

11:30 AM - 12:00 PM

Speaker: Amalia Handler

10:30 AM - 12:00 PM

Session F8: PANEL: Interactive water quality analyses with R Shiny: Successes, challenges, and strategies

Location: Suite 3ABC

Session Coordinator: Jen Stamp ; Panelist: Erik Leppo, Kateri Salk, Elise Hinman, Jason Jones, Jake Vander Laan, Emma Jones, Tim Martin, Bryan Rabon

10:30 AM - 12:00 PM

Session F9: WORKSHOP: National Aquatic Resource Surveys - Accessing and Using Data from the Coastal, Lakes, Rivers/Stream, and Wetland Surveys

Location: Suite 1A

Presenter: Donald Benkendorf, Sarah Lehmann, Gregg Serenbetz, Garrett Stillings ; Speaker: Kerry Kuntz

12:00 PM - 1:00 PM

Buffet Lunch / Posters / Exhibition / Silent Auction

Location: Exhibit Hall A

12:00 PM - 2:00 PM

NARS Luncheon (Invite Only)

Location: Suite 4ABC

1:00 PM - 2:00 PM

Exhibit & Poster Viewing

Location: Exhibit Hall A

Poster: The Use of Silicone Bands as a Passive Sampler for the Detection of Organic Contaminants in Coastal Waters

1:00 PM - 2:00 PM

Speaker: Grant Burdine

Poster: Monitoring Climate Change Affects on Water Resources in Pacific Region

1:00 PM - 2:00 PM

Speaker: Stephane Mary

Poster: The Crayfish, a Charismatic Sentinel Organism for Community-Based Monitoring

1:00 PM - 2:00 PM

Speaker: Tate Libunao

Poster: Screening Potential Drinking-Water Contaminant Effects Based on Point-of-Use Exposures and Cumulative Ratios of Health-Benchmarks and In Vitro Activity Cutoffs

1:00 PM - 2:00 PM

Speaker: Paul Bradley

Poster: Direct Comparison of Contaminant Exposures and Potential Risk in Public and Private Tapwater in a Sole-Source Aquifer Setting

1:00 PM - 2:00 PM

Speaker: Kristin Romanok

Poster: Identifying Fecal Contamination Sources in the Grand Bay National Estuarine Research Reserve

1:00 PM - 2:00 PM

Speaker: Amanda Free

Poster: EPA's 2022 National Assessment of Contaminants in Fish From U.S. Lakes

1:00 PM - 2:00 PM

Speaker: Tara Cohen

Poster: Shenandoah River Accumulated Wastewater Ratio Mapper: A Screening-Level Tool to Identify River Segments Which May Contain Endocrine Disrupting Chemicals

1:00 PM - 2:00 PM

Speaker: Chintamani Kandel

Poster: Comparing Application of a Spectral Chlorophyll Index Between the Sentinel-2 and Sentinel-3 Satellite Platforms in Florida, U.S.

1:00 PM - 2:00 PM

Speaker: Wilson Salls

Poster: Low-Cost Active Water Sampler for In-Situ Solid-Phase Extraction Using Consumer Electronics

1:00 PM - 2:00 PM

Speaker: Matthew De Parsia

Poster: Rapid, Portable and Low-Cost Water Quality Sensor Using Artificial Intelligence

1:00 PM - 2:00 PM

Speaker: Andres Saavedra

Poster: Cumulative Health Risk Assessment of Drinking Water Contaminants in Cascade and Lewis and Clark Counties, MT

1:00 PM - 2:00 PM

Speaker: Sarah Warnke

Poster: Benefits of a Secondary Data Repository System: Lessons Learned Over 30 Years of Experience

1:00 PM - 2:00 PM

Speaker: Matthew Carter

Poster: Occurrence of Microplastics in Tributaries to Galveston Bay

1:00 PM - 2:00 PM

Speaker: Zulimar Lucena

Poster: Automating New York State Water Quality Assessments, Reporting, and Communication

1:00 PM - 2:00 PM

Speaker: Sarah Rickard

Poster: Exploring the Use of Satellite Imagery as a Monitoring Tool for Harmful Algal Blooms in Small Lakes in the Susquehanna River Basin

1:00 PM - 2:00 PM

Speaker: Luanne Steffy

Poster: Regional Efforts to Use Sediment Diatoms As Biological Indicators of Lake Condition in the Northeastern U.S.

1:00 PM - 2:00 PM

Speaker: Sylvia Lee

Poster: Calf Canyon-Hermits Peak Post Wildfire Monitoring

1:00 PM - 2:00 PM

Speaker: Diane Van Hoy

Poster: Pb Isotope Variability in Puget Sound Eelgrass: A Possible Monitor of Environmental Metal Pollution

1:00 PM - 2:00 PM

Speaker: Han Weinrich

Poster: Use of Artificial Intelligence to Extract Gage Data From Stream Images

1:00 PM - 2:00 PM

Speaker: Lewis McCaffrey

Poster: Forty-Eight Years of Stream Channel Movement in the Lower Navasota River Basin, Texas

1:00 PM - 2:00 PM

Speaker: Ed Rhodes

Poster: Saltwater Intrusion Monitoring in Southeast Florida

1:00 PM - 2:00 PM

Speaker: Hannah Flynn

Poster: Cyanobacterial Occurrence and Bloom Development in Oligotrophic Adirondack Lakes

1:00 PM - 2:00 PM

Speaker: Rebecca Gorney

Poster: A Paleolimnological Approach to Understand the History of Cyanobacterial Occurrence in Oligotrophic Adirondack Lakes

1:00 PM - 2:00 PM

Speaker: Sabina Gifford (she/her on Haudenosaunee Confederacy lands)

Poster: Water Quality Trends Using Astronomical Seasonal Blocks

1:00 PM - 2:00 PM

Speaker: Roger Stewart

Poster: Integrating Volunteer Monitoring Data Into State Agencies Across the Chesapeake Bay Watershed

1:00 PM - 2:00 PM

Speaker: Matthew Kierce

Poster: Target and Nontarget Analysis of PFAS in Fish Plasma Using Online-Solid Phase Extraction Coupled With Liquid Chromatography High-Resolution Mass Spectrometry

1:00 PM - 2:00 PM

Speaker: Zack Hopkins

Poster: Use of Acoustic Doppler Current Profilers to Supplement and Inform HABs Monitoring

1:00 PM - 2:00 PM

Speaker: Elizabeth Nystrom

Poster: Assessment and Monitoring of Fish in Estuarine Systems Using eDNA

1:00 PM - 2:00 PM

Speaker: Jeffrey Miller

Poster: HAB Smartscope – A Field Imaging and Artificial Intelligence Tool for the Identification of HAB Genera

1:00 PM - 2:00 PM

Speaker: Elizabeth Nystrom

Poster: Evaluating Nutrients, Mercury, and Other Water-Quality Constituents in Tributaries to Clear Lake, California

1:00 PM - 2:00 PM

Speaker: Dina Saleh

Poster: The Ecological Suitability Approach: Communication and Data Needs

1:00 PM - 2:00 PM

Speaker: Erin Reschke

Poster: Towards Development of Intelligent Aquatic Insect Light Traps; Crowdsourcing of Annotated Insect Images Can Help Speed the Process

1:00 PM - 2:00 PM

Speaker: Michael Miller

Poster: Field Methods Used to Assess the Cross-Sectional Variability in Water-Quality Constituents at Continuous Monitoring Stations in the Sacramento-San Joaquin River Delta, California

1:00 PM - 2:00 PM

Speaker: Anna Conlen

Poster: Approach and Methodology for Continuous E. coli Bacteria Monitoring Using Tryptophan-Like Fluorescence in the Anacostia River

1:00 PM - 2:00 PM

Speaker: Jeremy Malen

Poster: Establishing a Standard Sampling Procedure for Microplastics Sampling in Small, Urban Streams

1:00 PM - 2:00 PM

Speaker: Shane Mizelle

Poster: Taste and Odour Issues in the Drinking Water Supply of Calgary, Alberta: Developing New Monitoring and Laboratory Analysis Tools for Characterizing Source and Transport of T&O Compounds

1:00 PM - 2:00 PM

Speaker: Eric Camm

Poster: Harmful Algal Blooms and the Use of Fluorescence Sensors at Hydrologic Monitoring Stations in South Florida

1:00 PM - 2:00 PM

Speaker: Meagan Montgomery

Poster: The Challenges of Incorporating Fluorescence-Based Chlorophyll Measurements Into an Emerging Estuarine Observing System Focused on Harmful Algal Blooms

1:00 PM - 2:00 PM

Speaker: Kaitlyn Parker

Poster: Monitoring and Assessing Food Web Dynamics in Great Bay Estuary Using Diet Analysis of Larval, Juvenile and Adult Green Crabs

1:00 PM - 2:00 PM

Speaker: Kelsey Meyer

Poster: Single-Laboratory Validation of Enterococci and E. coli by Droplet Digital Polymerase Chain Reaction (ddPCR) in Ambient Waters Used for Recreation

1:00 PM - 2:00 PM

Speaker: Tracy Bone

Poster: Can Citizens Become Wetland Scientists to Fill the Gap in State Monitoring Programs?

1:00 PM - 2:00 PM

Speaker: Kim Matthews

Poster: The National Groundwater Monitoring Network in Missouri

1:00 PM - 2:00 PM

Speaker: Trevor Ellis

Poster: The Susceptibility for Recreational Boating to Serve as a Vector for Harmful Algal Blooms

1:00 PM - 2:00 PM

Speaker: John Thraen

Poster: Evaluation of Passive Sampling Methods for Detecting per- and Polyfluoroalkyl Substances Contamination in New Jersey Groundwater

1:00 PM - 2:00 PM

Speaker: Molly Schreiner

Poster: USGS Ohio Water Microbiology Laboratory Capabilities and Call for Collaborators

1:00 PM - 2:00 PM

Speaker: Braden Lanier

Poster: From Sample to Surrogate Models: An Approach for Surrogate Regression Modeling to Meet Stakeholder Needs

1:00 PM - 2:00 PM

Speaker: Natalie Schmer

Poster: Downstream Fate and Transport of Cyanobacteria and Cyanotoxins in the Raritan Basin Water Supply Complex, New Jersey

1:00 PM - 2:00 PM

Speaker: Pam Reilly

Poster: Towards Computationally Integrative Approaches to Stormwater Informatics

1:00 PM - 2:00 PM

Speakers: Matthew McGauley, Bridget Wadzuk

Poster: Interstate Environmental Commission (IEC) Coordinated Volunteer Pathogen Monitoring Program

1:00 PM - 2:00 PM

Speaker: Samantha Wilder

Poster: An Annual Cyanobacteria Monitoring Program in Western Connecticut

1:00 PM - 2:00 PM

Speaker: Edwin Wong

Poster: Assessing the Efficacy of Solid Phase Adsorption Toxin Tracking (SPATT) as a Monitoring Tool for Cyanotoxins in the New York Finger Lakes

1:00 PM - 2:00 PM

Speaker: Joshua Rosen

Poster: PFAS Fate and Transport in Arid Region Soils

1:00 PM - 2:00 PM

Speaker: Ben Linhoff

Poster: Real-Time Fluorescence-Based Warning Devices for Detecting Freshwater Cyanobacterial Lysis and Toxin Release

1:00 PM - 2:00 PM

Speaker: Kuo-Pei Tsai

Poster: Assessment of Perfluoroalkyl Substances in Sediment and Surface Water Across NY State Through K-means Clustering and Principal Component Analysis

1:00 PM - 2:00 PM

Speaker: Fabio Iwashita

Poster: Future Focused: Volunteer and State Collaboration in Scaling Up NALMS' Implementation of AWQMS and Lake Observer for Secchi Dip-In Data Collection, Management, and Submission to EPA's Water Quality Exchange

1:00 PM - 2:00 PM

Speaker: Kayla Gower (Pribble)

Poster: Water Quality Changes Since 2011 in 24 Tributaries in the Great Lakes Restoration Initiative (GLRI) Tributary Monitoring Program

1:00 PM - 2:00 PM

Speaker: Donald Bonville

Poster: What Does Continuous Water Quality Tell Us About Minnesota Rivers?

1:00 PM - 2:00 PM

Speaker: Eileen Campbell

Poster: Drone-Based Particle Monitoring Above Two Harmful Algal Blooms (HABs) in the USA

1:00 PM - 2:00 PM

Speaker: Landon Bilyeu

Poster: Monitoring Harmful Algal Blooms in a Coastal New Jersey System to Examine Cyanotoxin Transport From Freshwater to Marine Environments

1:00 PM - 2:00 PM

Speakers: Kathryn Cahalane, Jake Gray

Analyzing Issues in Water Resource Management Within the US Northeast Zone

1:00 PM - 2:00 PM

Speaker: Edmund Merem

2:00 PM - 3:30 PM

Session G1: The National Groundwater Monitoring Network (NGWMN) - NGWMN Facilitation of Drought Evaluation & Management

Location: Suite 1B

Session Moderator: Candice Hopkins

The USGS National Groundwater Monitoring Network and the USGS Climate Response Network

2:00 PM - 2:20 PM

Speaker: Jason Fine

National Groundwater Monitoring Network – Assessing Drought Impacts and Ground Truthing Big Data in Montana

2:20 PM - 2:40 PM

Speaker: John LaFave

Source Water Protection: The Interconnectedness of Our Aquifers, Our Health, and Our Soil

2:40 PM - 3:00 PM

Speaker: Tatiana Davila

Facilitated Discussion

3:00 PM - 3:30 PM

2:00 PM - 3:30 PM

Session G2: Data of a Known Quality - Data Visualization and Analytics of Continuous Monitoring Data

Location: Suite 1C

Session Moderator: Biswarup Guha

Two Free, Open-Source R-based Tools to Help Water Quality Monitoring Programs Perform Quality Control Procedures, Summarize, and Visualize Continuous Sensor Data

2:00 PM - 2:20 PM

Speaker: Jen Stamp

Visually Displaying Large Datasets at Site Specific and Watershed Scale

2:20 PM - 2:40 PM

Speaker: Dawn Hintz

The Stream Intermittency Visualization Dashboard: A Shiny Web Application to Evaluate High-Frequency Logger Data and Flow Observations

2:40 PM - 3:00 PM

Speaker: Ken Fritz

Near-Real-Time and Interactive Data Assessment in the Delaware River Basin

3:00 PM - 3:20 PM

Speaker: John Yagecic

2:00 PM - 3:30 PM

Asynchronous Session G2: Data of a Known Quality - Data Visualization and Analytics of Continuous Monitoring Data

Location: Virtual via Whova

You've Got Data! Key Considerations when Analyzing Continuous Monitoring Data

2:00 PM - 2:00 PM

Speaker: Leah Ettema

A Water-Resource and Road-Condition Monitoring Study of Alternative Treatments for Road Deicing

2:00 PM - 2:00 PM

Speaker: Natasha Scavotto

2:00 PM - 3:30 PM

Session G3: The Ecology, Monitoring, and Prevention of Harmful Algal Blooms (Pt. 1)

Location: Suite 1D

Session Moderator: Fred Lubnow

The Prevalence of Cyanobacteria in a Temperate Lake Over the Last 150 Years

2:00 PM - 2:20 PM

Speaker: William Hobbs

Cyanobacteria Predictions and Mitigation

2:20 PM - 2:40 PM

Speaker: Amanjot Singh

Monitoring Freshwater Cyanobacterial Harmful Algal Blooms (CyanoHABs) Using eDNA at a Eutrophic Lake in New Jersey

2:40 PM - 3:00 PM

Speaker: T. David Hsu

Use of Artificial Intelligence-Powered Cyanobacterial ID & Enumeration Across Seven States Compared to Established Lab Methods

3:00 PM - 3:20 PM

Speaker: Igor Mrdjen

2:00 PM - 3:30 PM

Asynchronous Session G3: The Ecology, Monitoring, and Prevention of Harmful Algal Blooms (Pt. 1)

Location: Virtual via Whova

From Cow Watering to Sailing Swashbuckers, Are We Asking Too Much of Our Urban Lakes?

2:00 PM - 2:00 PM

Speaker: Shelley Stanley, Chuck Mason Jr., and Doug Kegerreis

HABs Monitoring and Management Planning in Municipal Drinking Water Reservoirs

2:00 PM - 2:00 PM

Speaker: Michael R. Martin CLM

Development of a Coordinated Partner HABs Monitoring Strategy

2:00 PM - 2:00 PM

Speaker: Tricia Lee

HABs in Coastal Lakes of Monmouth County, New Jersey: A Comparative Analysis Using University, State, and Citizen Data

2:00 PM - 3:30 PM

Speaker: Jason Adolf

2:00 PM - 3:30 PM

Session G4: Water Quality Trends - Exploring Advancements in Trend Detection and Driver Attribution (Pt. 1)

Location: Suite 2A

Session Moderator: Sarah Stackpoole

Factors Influencing Benthic Community Health in Urban Streams: A 10-Year, 14-Site Study in Northern Virginia, USA

2:00 PM - 2:20 PM

Speaker: Jeffrey Chanat

Nutrient Improvements in Chesapeake Bay: Direct Effect of Load Reductions and Implications for Coastal Management

2:20 PM - 2:40 PM

Speaker: Rebecca Murphy

Trends in Groundwater Quality of the United States: Perspectives After the First 30 Years of Monitoring

2:40 PM - 3:00 PM

Speaker: Bruce Lindsey

Regional, Passive Saline Encroachment in Major Springs of the Floridan Aquifer System in Florida (1991 – 2020)

3:00 PM - 3:20 PM

Speaker: Rick Copeland

2:00 PM - 3:30 PM

Asynchronous Session G4: Water Quality Trends - Exploring Advancements in Trend Detection and Driver Attribution (Pt. 1)

Location: Virtual via Whova

Evaluating Changes in Stream Water Quality Associated With Agricultural Conservation Within the Great Lakes Restoration Initiative Priority Watershed Program

2:00 PM - 2:00 PM

Speaker: Matthew Pronschinske

2:00 PM - 3:30 PM

Session G5: Effects of Hydrologic Change on Water Availability - Observations and Analysis of Changes to Water Quantity (Pt. 1)

Location: Suite 2B

Session Moderator: Gretchen Oelsner

Combining Monitoring, Modeling, and Mapping to Explore Water Quality Responses to Climate-Driven Wetland Connectivity

2:00 PM - 2:20 PM

Speaker: Owen McKenna (He/Him)

Modeling Groundwater Responses to Multiple Stresses in a Coastal Aquifer Using Transfer Function Models and Wavelet Analysis

2:20 PM - 2:40 PM

Speaker: Gavin Yang

Session G5: Regional Patterns and Drivers of Flow Alteration in U.S. Rivers and Streams Based on Channel Morphology From EPA's National Aquatic Resource Surveys

2:40 PM - 3:00 PM

Speaker: Philip Kaufmann

Long-term monitoring reveals drivers of trends in groundwater quality

3:00 PM - 3:20 PM

Speaker: Sacha Ruzzante

2:00 PM - 3:30 PM

Asynchronous Session G5: Effects of Hydrologic Change on Water Availability - Observations and Analysis of Changes to Water Quantity (Pt. 1)

Location: Virtual via Whova

A National Treasure Through the Years: U.S. Geological Survey Continuous Water-Quality Monitoring

2:00 PM - 2:00 PM

Speaker: Kimberly Shaffer and Diana Phillips

Prioritizing Pharmaceutical Contaminants in Great Lakes Tributaries Using Risk-Based Screening Techniques

2:00 PM - 2:00 PM

Speaker: Matthew Pronschinske

2:00 PM - 3:30 PM

Session G6: Nutrient Cycling in Streams and Lakes (Pt. 1)

Location: Suite 2CD

Session Moderator: Adrienne G Donaghue, PhD

River Phosphorus Cycling During High Flow May Constrain Lake Erie Cyanobacteria Blooms

2:00 PM - 2:20 PM

Speaker: Whitney King

Preliminary Investigations and Geochemical Modeling of Factors Affecting Attenuation and Mobilization of Orthophosphate in the Susquehanna River

2:20 PM - 2:40 PM

Speaker: Charles Cravotta

Use of Spatial Stream Networks to Characterize the N and P Source-Sink Dynamics of the Maumee River Basin

2:40 PM - 3:00 PM

Speaker: Nate Manning

Facilitated Discussion

3:00 PM - 3:30 PM

2:00 PM - 3:30 PM

Session G7: Using Large-Scale Watersheds Assessments to Identify and Prioritize Protection of Watersheds & High Quality Waters (Pt. 2)

Location: Suite 4DE

Session Moderator: Pamela Toshner

Protection for Exceptional Lakes in Minnesota: Development of a Tiered Aquatic Life Use Framework for Minnesota Lakes Based on a Fish Index of Biotic Integrity

2:00 PM - 2:20 PM

Speaker: Jacquelyn Bacigalupi

Development of Dissolved Oxygen, Temperature, and Nutrient Thresholds to Protect Cold Water Fish Species in Minnesota Lakes

2:20 PM - 2:40 PM

Speaker: Jessica Massure

How's the WHADA?: Monitoring Priority Alaska Watersheds

2:40 PM - 3:00 PM

Speaker: Morgan Brown

A Public-Private Approach to Lake and Watershed Management in the New Jersey Highlands

3:00 PM - 3:20 PM

Speaker: Christopher Mikolajczyk, CLM

2:00 PM - 3:30 PM

Session G8: PANEL: Community Science in Southeast Waters - Exploring Strengths and Challenges to Building Better Citizen Science Programming

Location: Suite 3ABC

Session Coordinator: Katie Callahan; Panelist: Dave Chestnut, Mona Dominguez, Rachel McGuire, Steven Evans, Malissa McAlister, Cecilia Nachtmann, Alexandra Firth

2:00 PM - 3:30 PM

Session G9: WORKSHOP: Survey Design and Analysis for Aquatic Resources in R

Location: Suite 1A

Presenter: Karen Blocksom, Michael Dumelle, Garrett Stillings

3:30 PM - 4:00 PM

Break / Posters / Exhibition / Silent Auction

Location: Exhibit Hall A

4:00 PM - 5:30 PM

Session H1: The National Groundwater Monitoring Network (NGWMN) - Examples of NGWMN Participation & Leading-Edge Data Management and Sharing

Location: Suite 1B

Session Moderator: Joseph Lee

Alabama WaterSTAR: A New Groundwater Assessment Tool for Data Exchange With the National Groundwater Monitoring Network

4:00 PM - 4:20 PM

Speaker: Gregory Guthrie

From Pilot to Prolific: Texas-Sized Groundwater Monitoring

4:20 PM - 4:40 PM

Speaker: Heather Dodson

Monitoring Vertical Land Motion and Groundwater Levels in the Chesapeake Bay Region

4:40 PM - 5:00 PM

Speaker: Jim Duda

Facilitated Discussion

5:00 PM - 5:30 PM

4:00 PM - 5:30 PM

Session H2: Use of Machine Learning/Artificial Intelligence

Location: Suite 1C

Session Moderator: Felipe Arzayus

Nationwide Lake Classification to Predict Harmful Algal Blooms (HABs) via Machine Learning Models

4:00 PM - 4:20 PM

Speaker: Kateri Salk

An AI-ML Approach to Advancing Basin-Scale Sediment Source and Transport Models

4:20 PM - 4:40 PM

Speaker: Gretchen Oelsner

Progress Toward Automating Aquatic Time Series Records Processing at the USGS

4:40 PM - 5:00 PM

Speaker: Amber Jones

Facilitated Discussion

5:00 PM - 5:30 PM

4:00 PM - 5:30 PM

Asynchronous Session H2: Use of Machine Learning/Artificial Intelligence

Location: Virtual via Whova

Patterns and Predictions of Drinking Water Nitrate Violations Across the Conterminous United States

4:00 PM - 4:00 PM

Speaker: Michael Pennino

4:00 PM - 5:30 PM

Session H3: The Ecology, Monitoring, and Prevention of Harmful Algal Blooms (Pt. 2): MODERATOR

Location: Suite 1D

Session Moderator: Christopher Mikolajczyk, CLM

Effects of Drought on Phytoplankton Population Composition in a Large Reservoir

4:00 PM - 4:20 PM

Speaker: Charlotte van der Nagel

Cal-WATCH: A Tribal-Government-Health Partnership for Safe Drinking Water

4:20 PM - 4:40 PM

Speaker: Sarah Ryan

Microcystin Thresholds, Hierarchical Structure to Inform Management and Response to Nutrient Additions at Lake Fayetteville, Arkansas

4:40 PM - 5:00 PM

Speaker: Brian Haggard

Facilitated Discussion

5:00 PM - 5:30 PM

4:00 PM - 5:30 PM

Session H4: Water Quality Trends - Exploring Advancements in Trend Detection and Driver Attribution (Pt. 2)

Location: Suite 2A

Session Moderator: Jeffrey Chanat

A Tale of Two Basins: Comprehensive Trend Analysis of Two International Basins Using R-QWTREND

4:00 PM - 4:20 PM

Speaker: Rochelle Nustad

Evaluating Water-Quality Drivers in Streams of Fairfax County, Virginia

4:20 PM - 4:40 PM

Speaker: James Webber

Linking Nutrient Management to Receiving Water Quality Improvements and Ecologic Responses

4:40 PM - 5:00 PM

Speaker: Phoebe Aron

Trend Characterization of Lake Thunderbird, an Multi-Use Oklahoma Urban Water Supply Reservoir

5:00 PM - 5:20 PM

Speaker: Monty Porter

4:00 PM - 5:30 PM

Asynchronous Session H4: Water Quality Trends - Exploring Advancements in Trend Detection and Driver Attribution (Pt. 2)

Location: Virtual via Whova

Advances in Using WRTDS (Weighted Regressions on Time, Discharge, and Season) for Evaluation of Mass-Balances of Contaminants in Reservoirs

4:00 PM - 4:00 PM

Speaker: Robert M. Hirsch

4:00 PM - 5:30 PM

Session H5: (Moderator) Effects of Hydrologic Change on Water Availability - Observations and Analysis of Changes to Water Quantity and Quality (Pt. 2)

Location: Suite 2B
Speaker: Philip Kaufmann

Using Multi-Parameter Sensors to Understand Surface Water-Groundwater Interaction and Associated Changes in Water-Quality in a Karst Aquifer

4:00 PM - 4:20 PM
Speaker: Stephen Opsahl

Characterizing the Impacts of Road Salt in Groundwater From Stormwater Infiltration

4:20 PM - 4:40 PM
Speaker: Rachel McQuiggan

Observation of Natural and Anthropogenically Induced Change: A Network of Networks in the Virginia Coastal Plain

4:40 PM - 5:00 PM
Speaker: Sam Caldwell

Facilitated Discussion

5:00 PM - 5:20 PM

4:00 PM - 5:30 PM

Asynchronous Session H5: Effects of Hydrologic Change on Water Availability - Observations and Analysis of Changes to Water Quantity and Quality (Pt. 2)

Location: Virtual via Whova

Adding Collaboration to the Scientific Method: Restoration of a Turbid, Shallow Lake

4:00 PM - 4:00 PM
Speaker: Cassandra Smith

Water Quality Changes Since 2011 in 24 Tributaries in the Great Lakes Restoration Initiative (GLRI) Tributary Monitoring Program

4:00 PM - 4:00 PM
Speaker: Donald Bonville

4:00 PM - 5:30 PM

Session H6: Innovative Molecular Methods for Water Monitoring

Location: Suite 2CD
Session Moderator: Tim Asplund

Environmental DNA Reveals Diversity and Structure of Freshwater Algal Assemblages Across the Conterminous United States

4:00 PM - 4:20 PM
Speaker: Nick Schulte

The Use of DNA-Based Taxonomic Methods in Algal Bioassessments

4:20 PM - 4:40 PM
Speaker: Benjamin Block

Using Modeling and Synthetic DNA Tracer Studies to Understand Septic Leachate Pollution in the Flathead Basin, MT

4:40 PM - 5:00 PM
Speaker: Emilie Henry

Novel Environmental DNA for Fish Monitoring Using Digital PCR in Urban Creeks

5:00 PM - 5:20 PM
Speaker: Dongmei Alvi

4:00 PM - 5:30 PM

Session H7: Environmental DNA Monitoring in Marine Systems

Location: Suite 4DE
Session Moderator: Jeffrey Miller

Comparing Visual Surveys and eDNA Metabarcoding for Coastal Biomonitoring in California's Rocky Intertidal

4:00 PM - 4:20 PM
Speaker: Mary McElroy

Evaluating the Capacity for eDNA Monitoring to Function as a Fish Enumeration Tool on Mid-Atlantic River Herring

4:20 PM - 4:40 PM
Speaker: Chelsea Fowler

A Roadmap for eDNA Method for Routine Monitoring

4:40 PM - 5:00 PM
Speaker: Susanna Theroux

Facilitated Discussion

5:00 PM - 5:30 PM

4:00 PM - 5:30 PM

Asynchronous Session H7: Environmental DNA Monitoring in Marine Systems

Location: Virtual via Whova

Metagenomic Determination of Oyster Disease Presence in an Estuarine Environment

4:00 PM - 4:00 PM
Speaker: Bonnie Brown

4:00 PM - 5:30 PM

Session H8: Streamlining development and application of the Biological Condition Gradient: tools, programs and tech transfer

Location: Suite 3ABC

Session Coordinator: Susan Jackson ; Panelist: Jen Stamp, Benjamin Jessup, Erik Leppo

Introduction - Streamlining BCG Development & Application

4:00 PM - 4:15 PM

Speaker: Susan Jackson

BCG Model: Describing BCG Level 1 Conditions

4:15 PM - 4:40 PM

Speaker: Susan Jackson

Template and Approach for Developing Taxa Tolerance Attributes

4:40 PM - 5:05 PM

Speaker: Jen Stamp

Calculation & Application Tools

5:05 PM - 5:30 PM

Speakers: Jen Stamp, Erik Leppo

4:00 PM - 5:30 PM

Session H9: WORKSHOP: Screening for Biological Relevance of Environmental Chemistry Data Using the toxEval and ToxMixtures software packages

Location: Suite 1A

Presenter: Laura DeCicco, Steven Corsi

5:45 PM - 6:45 PM

Volunteer Monitoring Meeting and Dinner

Location: Suite 1C

6:00 PM - 6:45 PM

Networking Opportunity: New Water Quality Professionals and Senior Water Quality Professionals

Location: Staging by the registration area in the Exhibition Hall foyer

6:00 PM - 6:45 PM

Networking Opportunity: JEDI

Location: Suite 1A

Thursday, April 27, 2023

7:00 AM - 3:30 PM

Registration Desk Open

7:00 AM - 8:30 AM

Fluid 5K Run/Walk

Location: Meet at registration desk

7:00 AM - 8:30 AM

Continental Breakfast / Posters / Exhibition

Location: Exhibit Hall A

8:30 AM - 10:00 AM

Session I1: Approaches for Evaluating and Increasing Justice, Equity, Diversity, and Inclusion in Water Quality Programs

Location: Suite 1B

Session Moderator: Cynthia (Cyd) Curtis

Advancing Equity in the CWA Section 319 Program

8:30 AM - 8:50 AM

Speaker: Ellie Flaherty

Harmful Cyanobacterial Blooms, Related Loss of Recreational Opportunities and Environmental Justice Areas in New York

8:50 AM - 9:10 AM

Speaker: Sabina Gifford (she/her on Haudenosaunee Confederacy lands)

A New Method for Evaluating Water Quality Monitoring Effort in Service of Environmental Justice Communities

9:10 AM - 9:30 AM

Speakers: Drew Garey, Leah Ettema

Empowering Local Communities in Hawai'i to Tackle Pollution Problems and Protect Safe Recreation With the Surfrider Foundation's Blue Water Task Force

9:30 AM - 9:50 AM

Speaker: Mara Dias

8:30 AM - 10:00 AM

Session I2: Assessing the Impacts of Plastic Pollution Using Standard Methods and Measurement of Trash and Microplastics

Location: Suite 1C
Session Moderator: Shawn C. Fisher

Regional Assessment of Trash and Marine Debris in the Southern California Bight

8:30 AM - 8:50 AM
Speaker: Karen McLaughlin

Developing a Representative and Standardized Method for Microplastic Collection in Streams at Low-Flow Conditions

8:50 AM - 9:10 AM
Speaker: Michael Antidormi

Waterborne Plastics Assessment and Collection Technologies Project

9:10 AM - 9:30 AM
Speaker: Benjamin Maurer

Investigating the Prevalence of “Forever” Contaminants (Microplastics and PFAS) in Small Agricultural Streams: The Importance of a Multi-Matrix Approach

9:30 AM - 9:50 AM
Speaker: Shannon Meppelink

8:30 AM - 10:00 AM

Session I3: Sources, Exposures, and Human Ecological Health Effects of Environmental PFAS Contamination (Pt. 1)

Location: Suite 1D
Session Moderator: Paul Bradley

National Scale Assessment of per- and Polyfluoroalkyl Substances in Public and Private Supply Tapwater

8:30 AM - 8:50 AM
Speaker: Kelly Smalling

Evaluation of PFAS in Great Lakes Tributaries From Passive Samplers and Sediment Samples and Potential for Biological Effects Using Risk-Based Screening Techniques

8:50 AM - 9:10 AM
Speaker: Steven Corsi

Source Attribution of Per-And Polyfluorinated Alkyl Substances (PFAS) in Surface Waters Across the Commonwealth of Pennsylvania

9:10 AM - 9:30 AM
Speaker: Sara Breitmeyer

Ecotoxicology of PFAS and PFAS Alternatives in the Coastal Zone

9:30 AM - 9:50 AM
Speaker: Marie DeLorenzo, Ph.D.

8:30 AM - 10:00 AM

Asynchronous Session I3: Sources, Exposures, and Human Ecological Health Effects of Environmental PFAS Contamination (Pt. 1)

Location: Virtual via Whova

Occurrence of polychlorinated biphenyls and per- and polyfluorinated substances in stormwater management pond sediment and relationship to land use

8:30 AM - 8:30 AM
Speaker: Trevor Needham

8:30 AM - 10:00 AM

Session I4: Urban Nonpoint Source Management - What Does Green Stormwater Infrastructure Monitoring Reveal about Performance and Design Needs?

Location: Suite 2A
Session Moderator: Whitney King

The Importance of Long-Term Monitoring for the Insurance of Continued Green Stormwater Infrastructure Function

8:30 AM - 8:50 AM
Speakers: Matthew McGauley, Bridget Wadzuk

Tracking Downstream Water Quality Benefits of Urban Stream Restoration Using High Spatial- Resolution Longitudinal Monitoring

8:50 AM - 9:10 AM
Speaker: Steven Hohman

Field Monitoring of Bioretention Internal Water Storage: What Nitrogen Dynamics and Dual Isotopes Reveal About First Flush Effects, Seasonality, and Denitrification

9:10 AM - 9:30 AM
Speaker: Adrienne G Donaghue, PhD

Monitoring Green Infrastructure Projects in Georgia

9:30 AM - 9:50 AM
Speaker: Joy Hinkle (she/her)

8:30 AM - 10:00 AM

Asynchronous Session I4: Urban Nonpoint Source Management - What Does Green Stormwater Infrastructure Monitoring Reveal about Performance and Design Needs?

Location: Virtual via Whova

Promoting Best Practices for Stormwater Management in Mississippi's Coastal Communities

8:30 AM - 8:30 AM

Speaker: Kristen Sorrell

8:30 AM - 10:00 AM

Session I5: Implementing Statistical Surveys to Address Water Priorities

Location: Suite 2B

Session Moderator: Sarah Lehmann

Handling Missing Data in Environmental Monitoring Programs via Multiple Imputation for Item Nonresponse

8:30 AM - 8:50 AM

Speaker: Michael Dumelle

Spatial Patterns in Stream Condition Index From Statewide Stream Surveys in Virginia

8:50 AM - 9:10 AM

Speaker: Michael McManus

Comparing Population Based Condition Class Estimates of NCCA Water Quality Threshold Indicators in Two Great Lakes Bays

9:10 AM - 9:30 AM

Speaker: Kansas Keeton

Utilizing Regional Stream Monitoring in Southern California for Management Decision Making

9:30 AM - 9:50 AM

Speaker: Raphael Mazor

8:30 AM - 10:00 AM

Session I6: Effective Use of Monitoring Data to Demonstrate Improved Estuarine Ecological Health from Management Actions

Location: Suite 2CD

Session Moderator: James Ammerman

Using Open Science to Address Current and Future Threats to the Health of Tampa Bay

8:30 AM - 8:50 AM

Speaker: Marcus Beck

Thirty Years of Monitoring Data, Tracking Improvements in Long Island Sound Water Quality in Response to Implementation of a Comprehensive Conservation and Management Plan

8:50 AM - 9:10 AM

Speaker: Matthew Lyman

Long Island Sound Study Water Quality Management Tool

9:10 AM - 9:30 AM

Speaker: Cayla Sullivan

Detecting Improved Ecological Health of Wickford Harbor, Rhode Island, Resulting From Septic to Sewer Conversions

9:30 AM - 9:50 AM

Speaker: James Hagy

8:30 AM - 10:00 AM

Session I7: Biological Assessment in River, Streams, and Lakes (Pt. 1)

Location: Suite 4DE

Session Moderator: Dave Chestnut

Review and Update of Oklahoma's Biological Indices Using Nearly Three Decades of Statewide Data Collections

8:30 AM - 8:50 AM

Speaker: Monty Porter

Using Sediment Core Diatom Records From Hundreds of Lakes to Assess Species Loss and Changes in Water Quality Across the Northeastern United States

8:50 AM - 9:10 AM

Speaker: Nick Schulte

Estimates of Lake Sediment Core Ages in Northeast U.S. to Qualify Diatom Reference Samples

9:10 AM - 9:30 AM

Speaker: Benjamin Jessup

Internal Consistency of Monitoring and Assessment Datasets Enhances Inter-programmatic Comparability

9:30 AM - 9:50 AM

Speaker: James Stribling

8:30 AM - 10:00 AM

Asynchronous Session I7: Biological Assessment in River, Streams, and Lakes (Pt. 1)

Location: Virtual via Whova

8:30 AM - 10:00 AM

Session I8: PANEL: Advancements in Water Data - USGS Updates

Location: Suite 3ABC

Session Coordinator: Candice Hopkins

Visualizing Water Quality and Quantity Data in Pennsylvania

8:30 AM - 8:50 AM

Speaker: Matthew Conlon

Next Generation Delivery of USGS Water Quality Data

8:50 AM - 9:10 AM

Speaker: Lee Stanish

New Directions for U.S. Geological Survey Water Quality Sample Data – Using the Water Quality Exchange (WQX) Standard to Enhance Data Delivery, Interpretability, and Reuse

9:10 AM - 9:30 AM

Speaker: Leslie DeSimone

Introducing the 3D Hydrography Program

9:30 AM - 9:50 AM

Speaker: Steve Aichele

8:30 AM - 10:00 AM

Session I9: WORKSHOP: Engaging Volunteers in the Data Interpretation Process - Best Practices & Lessons Learned

Location: Suite 1A

Presenter: Stephanie Letourneau, Phoebe Galione

10:00 AM - 10:30 AM

Break / Posters / Exhibition

Location: Exhibit Hall A

10:30 AM - 12:00 PM

Session J1: Local, State, and Regional Uses of Community Data

Location: Suite 1B

Session Moderator: Julie Vastine

MiCorps...Michigan's Volunteer Water Quality Monitoring Programs

10:30 AM - 10:50 AM

Speaker: Tamara Lipsey (she/her) MI EGLE

Development and Use of Data Interpretation Products and Community Monitoring Events to Communicate Stream Pollution Issues to the Public and Local Stakeholders

10:50 AM - 11:10 AM

Speaker: David Bressler

Keeping It Fresh: The Salt Watch Community Science Initiative

11:10 AM - 11:30 AM

Speaker: Abby Hileman

Applications of Community Science Monitoring Activities Aligned With Chesapeake Bay Program Partnership Data and Decision Support Needs

11:30 AM - 11:50 AM

Speaker: Peter Tango

10:30 AM - 12:00 PM

Session J2: Risks Posed by Neonicotinoid Insecticides to Aquatic Ecosystems

Location: Suite 1C

Session Moderator: Rick Copeland

Characterizing Neonicotinoid Insecticide Sources and Timing in U.S. Waterways

10:30 AM - 10:50 AM

Speaker: Michelle Hladik

Environmental Relevance and Spatiotemporal Variability of Neonicotinoid Insecticides Detected in Florida's Freshwaters

10:50 AM - 11:10 AM

Speaker: James (Jay) Silvanima

Neonicotinoid Seed Coatings Provide Little Benefit to Corn and Soybean Producers

11:10 AM - 11:30 AM

Speaker: Sally Taylor

Updates to the Re-evaluation of the Neonicotinoid Insecticides

11:30 AM - 11:50 AM

Speaker: Ricardo Jones

10:30 AM - 12:00 PM

Session J3: Sources, Exposures, and Human and Ecological Health Effects of Environmental PFAS Contamination (Pt. 2)

Location: Suite 1D

Session Moderator: Michelle Lorah

Utilizing Integrated Samplers and Multiple Chemical Tracers to Assess Anthropogenic Influence on per- and Polyfluoroalkyl Substances in the Rio Grande Through the Albuquerque Area, New Mexico, USA

10:30 AM - 10:50 AM

Speaker: Kim Beisner

Environmental Sampling of per- and Polyfluoroalkyl Substances in the Middle Chickahominy River Watershed, Virginia

10:50 AM - 11:10 AM

Speaker: Mitchell McAdoo

A Multi-Phase Field and Laboratory Study of PFAS Occurrence and Partitioning in New Hampshire Soils and Biosolids

11:10 AM - 11:30 AM

Speaker: Andrea Tokranov

Water Sensing and Hydrology for Environmental Decision Support (WaterSHEDS)

11:30 AM - 11:50 AM

Speaker: Ryan Hollins

10:30 AM - 12:00 PM

Session J4: Freshwater Monitoring

Location: Suite 2A

Session Moderator: Tom Wall

Neonicotinoid Insecticide Compound Dynamics in Freshwater Runoff and Streamflow Following Cessation of Pesticide Application

10:30 AM - 10:50 AM

Speaker: Melinda Daniels

Risks Posed by Neonicotinoid Insecticides to Aquatic Ecosystems: Introduction to the Session

10:50 AM - 11:10 AM

Speaker: Michael Miller

Regulating Ecology: Case Study Reveals Biological, Chemical and Geomorphic Differences at Small Spatial Scales

11:10 AM - 11:30 AM

Speaker: LeAnne Astin

Development of the StreamCat API

11:30 AM - 11:50 AM

Speaker: Marc Weber

10:30 AM - 12:00 PM

Session J5: Advances in Water Sensor Technologies and Real-Time Water Monitoring (PT 1)

Location: Suite 2B

Session Moderator: Tamim Younos

In-Situ Optical Sensors for Modeling Human-Associated and Fecal-Indicator Bacteria Concentrations and Estimating Sewage Contamination in the Menomonee River, Wisconsin

10:30 AM - 10:50 AM

Speaker: Pete Lenaker

StormSense Inundation Monitoring Using a Deep Learning Algorithmic Approach Combining AI and Edge Detection

10:50 AM - 11:10 AM

Speaker: Derek Loftis

fDOM Sensors: Deployment, Operation, and Corrections for Interferences

11:10 AM - 11:30 AM

Speaker: Amanda Booth

Comparison of High Frequency Nitrate Sensors and Consequences for Data Quality

11:30 AM - 11:50 AM

Speaker: Lucy McKergow

10:30 AM - 12:00 PM

Asynchronous Session J5: Advances in Water Sensor Technologies and Real-Time Water Monitoring (PT 1)

Location: Virtual via Whova

From Silos to Synergy: How Collaborating With Intention Can Influence Data Collection Across a Department

10:30 AM - 10:30 AM

Speaker: Traci Treleven

Real-Time Water Quality Monitoring: Benefits for Decision-Making

10:30 AM - 10:30 AM

Speaker: Thomas Saleh

10:30 AM - 12:00 PM

Session J6: Using Monitoring Data to Address Environmental Issues in Coastal Waters (Pt. 1)

Location: Suite 2CD

Session Moderator: Linda Harwell

Assessing the Relative Importance of Estuarine Stressors to the Benthic Index, M-AMBI in U.S. Waters

10:30 AM - 10:50 AM

Speaker: Marguerite (Peg) Pelletier

Field Testing US M-AMBI Against Regional Benthic Indices of Biotic Integrity in a Northern Gulf of Mexico Estuary: Pensacola Bay (Florida, USA)

10:50 AM - 11:10 AM

Speaker: Jenny Paul

Biologically Relevant Sediment Organic Matter Thresholds for Estuaries of Southern California, USA

11:10 AM - 11:30 AM

Speaker: David Gillett

High-Accuracy NowCast Prediction Models for Bacterial Level Monitoring at California Oceanic Beaches

11:30 AM - 11:50 AM

Speaker: Alison Xunyi Wu

10:30 AM - 12:00 PM

Asynchronous Session J6: Using Monitoring Data to Address Environmental Issues in Coastal Waters (Pt. 1)

Location: Virtual via Whova

Quantifying Cross-Sectional Water-Quality Variability and Comparison to Continuous Monitoring Stations in the Sacramento-San Joaquin Delta, California

10:30 AM - 10:30 AM

Speaker: Leah Lenocho

10:30 AM - 12:00 PM

Session J7: Biological Assessment in River, Streams, and Lakes (Pt. 2)

Location: Suite 4DE

Session Moderator: Monty Porter

Using Joint Species Distribution Models to Establish Biological Benchmarks for Streams and Rivers of the Contiguous United States

10:30 AM - 10:50 AM

Speaker: Darin Kopp

Sample Information Content and Indicator Performance With Variable Taxonomic Resolution of Chironomidae (Insecta: Diptera)

10:50 AM - 11:10 AM

Speaker: Erik Leppo

Visualizing Benthic Macroinvertebrate Community Structures in the Sierra Foothills

11:10 AM - 11:30 AM

Speaker: Emma Walker

Facilitated Discussion

11:30 AM - 12:00 PM

10:30 AM - 12:00 PM

Session J8: Panel Discussion: What is meant by Reproducibility and Comparability in Biological Assessment?

Location: Suite 3ABC

Session Coordinator: Robert Plotnikoff, James Stribling ; Panelist: Sylvia Lee, Jason Hill, Sean Sullivan

10:30 AM - 12:00 PM

Session J9: WORKSHOP: CUAHSI Tools and Infrastructure for FAIR data

Location: Suite 1A

Presenter: Clara Cogswell

12:00 PM - 2:00 PM

Plenary / Awards Luncheon

Location: Exhibit Hall A

Plenary Speaker: Briana Yancy

2:00 PM - 3:30 PM

Session K1: Doing More with Less - Creative Ideas from Successful Monitoring and Assessment Programs (Pt. 1)

Location: Suite 1B

Session Moderator: Emily Resseger (she/her)

Session K1 - How Using an Assessment Dashboard Can Close More Data Gaps and Save Money

2:00 PM - 2:20 PM

Speaker: Jason Jones

Improving Assessment Efficiency Through Field Apps and Assessment Automation

2:20 PM - 2:40 PM

Speaker: Hillary Marler

Development of an Urban Stream Condition Index

2:40 PM - 3:00 PM

Speaker: Alicia Ritzenthaler

Indiana Clean Lakes Program Evaluation: What Recent Upgrades Mean for a 34-Year-Old Monitoring Program

3:00 PM - 3:20 PM

Speaker: Megan Gokey

2:00 PM - 3:30 PM

Asynchronous Session K1: Doing More with Less - Creative Ideas from Successful Monitoring and Assessment Programs (Pt. 1)

Location: Virtual via Whova

Redesign of Oklahoma's Lake Monitoring Program

2:00 PM - 2:00 PM

Speaker: Julie Chambers

Monitoring for Ambient Water Quality Criteria in the Chesapeake Bay and Its Tidal Tributaries

2:00 PM - 2:00 PM

Speaker: Kaylyn Gootman

2:00 PM - 3:30 PM

Session K2: Advancements in Wetland Monitoring & Assessment - Coastal Focus

Location: Suite 1C

Session Moderator: Gregg Serenbetz

Maryland Coastal Bays Program Wetland Assessment Initiative

2:00 PM - 2:20 PM

Speaker: Billy Weiland

Long-Term Monitoring of Marsh Extent and Vegetation Across the Chesapeake Bay, VA

2:20 PM - 2:40 PM

Speaker: Molly Mitchell

Mapping Shoreline Structures with High-Resolution Imagery and Deep Learning

2:40 PM - 3:00 PM

Speaker: Miranda Lv

Facilitated Discussion

3:00 PM - 3:30 PM

2:00 PM - 3:30 PM

Asynchronous Session K2: Advancements in Wetland Monitoring & Assessment - Coastal Focus

Location: Virtual via Whova

Hydrological and Biological Responses in Stream-Wetland Complexes Created by Floodplain Reconnection: Indicators of Water and Nutrient Retention

2:00 PM - 2:00 PM

Speaker: Kelly Johnson

Organic Matter Processing in Forested Stream Channels Versus Open Canopy Restored Wetland Complexes: Apples and Oranges or Useful Functional Process to Monitor?

2:00 PM - 2:00 PM

Speaker: Kelly Love

The New Jersey Tidal Wetlands Monitoring Network

2:00 PM - 2:00 PM

Speaker: Kirk Raper

2:00 PM - 3:30 PM

Session K3: Monitoring & Assessment of PFAS in the Aquatic Environment

Location: Suite 1D

Session Moderator: James (Jay) Silvanima

The Use of Targeted and Nontarget Analysis (NTA) to Characterize Per- and Polyfluoroalkyl Substances (PFAS) in Environmental Samples

2:00 PM - 2:20 PM

Speaker: Julianne Brown (she/her)

Ambient PFAS Levels in the Ohio River

2:20 PM - 2:40 PM

Speaker: Jason Heath

Targeted and Non-targeted Monitoring for PFAS in New York State Ambient Surface Waters

2:40 PM - 3:00 PM

Speaker: Daniel Rearick

Nationwide PFAS Survey of 114 Watersheds Using Novel PFAS Sampling Technology

3:00 PM - 3:20 PM

Speaker: Yuhan Ling

2:00 PM - 3:30 PM

Session K4: Advancements in Water Data - Inspiring Action (Pt. 1)

Location: Suite 2A

Session Moderator: Shelly Thawley

Internet of Water Overview

2:00 PM - 2:20 PM

Speaker: Peter Colohan

Modernizing Water Data in New Mexico

2:20 PM - 2:40 PM

Speaker: Stacy Timmons

Data Sharing for Volunteer Monitoring Impact – An IoW Example

2:40 PM - 3:00 PM

Speaker: Samantha Briggs

Square Peg, Round Hole: Developing a Data Structure for NRSA Habitat Data in the Water Quality Exchange

3:00 PM - 3:20 PM

Speaker: Brandi Easton

2:00 PM - 3:30 PM

Session K5: Advances in Water Sensor Technologies and Real-Time Water Monitoring (PT 2)

Location: Suite 2B

Session Moderator: Tamim Younos

Innovations in Monitoring Dam Removals With Continuous Live Sensors and eDNA: A Case Study in the Musconetcong River at the Hughesville Dam

2:00 PM - 2:20 PM

Speaker: Christa Reeves

Climate-Responsive Automated Control for Green Stormwater Infrastructure

2:20 PM - 2:40 PM

Speaker: Felipe Hernandez Jurado

Continuous Data Collection for Intense Rain Events, Rising Water Levels, and Water Quality Monitoring

2:40 PM - 3:00 PM

Speaker: Charles Kozora

Data Acquisition and Management for the Indian River Lagoon Observatory Network of Environmental Sensors (IRLON)

3:00 PM - 3:20 PM

Speaker: Kristen Davis

2:00 PM - 3:30 PM

Session K6: Using Monitoring Data to Address Environmental Issues in Coastal Waters (Pt. 2)

Location: Suite 2CD

Session Moderator: Mari Nord

A Tale of Two Datasets- Data from the National Park Service and Environmental Protection Agency in North Carolina's Outer Banks

2:00 PM - 2:20 PM

Speaker: Eric Starkey

Two Decades of Persistent Organic Pollutant Data From Monterey Bay

2:20 PM - 2:40 PM

Speaker: Dane Hardin

Regional Monitoring for Sediment Quality in the Urban Ocean of the Southern California Bight

2:40 PM - 3:00 PM

Speaker: Karen McLaughlin

A Sediment Oxygen Demand Study to Help Evaluate TMDL DO Goals in a Coastal Slough

3:00 PM - 3:20 PM

Speaker: Jeremy Burns

2:00 PM - 3:30 PM

Asynchronous Session K6: Using Monitoring Data to Address Environmental Issues in Coastal Waters (Pt. 2)

Location: Virtual via Whova

Connecting Ocean Acidification Monitoring Data With Natural Resources in Washington State

2:00 PM - 2:00 PM

Speaker: Natalie Coleman

2:00 PM - 3:30 PM

Session K7: Biological Assessment in River, Streams, and Lakes (Pt. 3)

Location: Suite 4DE

Session Moderator: Danielle Grunzke

Biological Response to Stream Restoration

2:00 PM - 2:20 PM

Speaker: Mark Southerland

Can mussels function as a best management practice to provide water-quality benefits?

2:20 PM - 2:40 PM

Speaker: Brendan Foster

Macroinvertebrate Monitoring in Bhutan Streams

2:40 PM - 3:00 PM

Speaker: Jan Battle

Temporal and Longitudinal Trends in Stream Metabolism of a Third Order Agricultural Stream in the Upper Midwestern United States

3:00 PM - 3:20 PM

Speaker: Jason Palmer

2:00 PM - 3:30 PM

Session K8: Approaches for Streamlining Stressor Identification: An Open Discussion

Location: Suite 3ABC

Speaker: Kate Schofield

2:00 PM - 3:30 PM

Session K9: WORKSHOP: Algae and Cyanobacteria Blooms - Track, Identify, and Predict

Location: Suite 1A

Presenter: Polly Barrowman, Christopher Lee, Greg Ford

3:30 PM - 4:00 PM

Break

4:00 PM - 5:30 PM

Session L1: Doing More with Less - Creative Ideas from Successful Monitoring & Assessment Programs (Pt. 2)

Location: Suite 1B

Session Moderator: Emily Resseger (she/her)

How the City of San Diego Is Leveraging Limited Resources for Maximum Benefits: Introducing the Water Quality Response Team

4:00 PM - 4:20 PM

Speaker: Darcy Ebentier McCargar

Innovative and Creative Methods for BMP Performance Monitoring

4:20 PM - 4:40 PM

Speaker: Sarah Wein

Redesign of a Municipal Stormwater NPDES Permit Monitoring Program

4:40 PM - 5:00 PM

Speaker: Jian Peng

Changing Michigan's E. coli monitoring strategy to make progress on Clean Water Act goals.

5:00 PM - 5:20 PM

Speaker: Molly Rippke

4:00 PM - 5:30 PM

Session L2: Advancements in Wetland Monitoring and Assessment: Broad Focus

Location: Suite 1C

Session Moderator: Alison Rogerson

10 Years of Innovation and Results in the National Wetland Condition Assessment, 2011–2021

4:00 PM - 4:20 PM

Speaker: Gregg Serenbetz

An Integrated Framework for Evaluating Wetland and Stream Compensatory Mitigation

4:20 PM - 4:40 PM

Speaker: Eric Stein

Using Wildlife Camera Traps as a Tool for Wildlife Habitat Monitoring

4:40 PM - 5:00 PM

Speaker: Kayla Clauson

Facilitated Discussion

5:00 PM - 5:30 PM

4:00 PM - 5:30 PM

Asynchronous Session L2: Advancements in Wetland Monitoring and Assessment: Broad Focus

Location: Virtual via Whova

The Delaware Surface Elevation Table Workgroup

4:00 PM - 4:00 PM

Speaker: LeeAnn Haaf

4:00 PM - 5:30 PM

Session L3: PFAS Monitoring - Sampling and Analytical Approaches Applied at Various Network Scales

Location: Suite 1D

Speaker: Mitchell McAdoo

Advances in the Understanding of PFAS in Groundwater of the United States

4:00 PM - 4:20 PM

Speaker: Andrea Tokranov

Fate and Transport of PFAS Through Decentralized Wastewater Treatment Plants, Suffolk County, NY

4:20 PM - 4:40 PM

Speaker: Irene Fisher

Assessing PFAS Enrichment in Natural Foams on Surface Waters Within the Neshaminy Creek Basin in Southeastern Pennsylvania: Sampling Challenges and Initial Results

4:40 PM - 5:00 PM

Speaker: Emily Woodward

Evaluation of Equipment Selection, Sample Collection and Processing Methods, and Equipment Cleaning Techniques for the Sampling of Flowing Surface-Water and Groundwater for PFAS

5:00 PM - 5:20 PM

Speaker: Joe Duris

4:00 PM - 5:30 PM

Asynchronous Session L3: PFAS Monitoring - Sampling and Analytical Approaches Applied at Various Network Scales

Location: Virtual via Whova

Assessment of per- and Polyfluoroalkyl Substances in Waters Across New Mexico

4:00 PM - 4:00 PM

Speaker: Rebecca Travis

Occurrence and Distribution of per- and Polyfluoroalkyl Substances Collected in Different Environmental Matrices Throughout Virginia and West Virginia

4:00 PM - 4:00 PM

Speaker: Mitchell McAdoo

4:00 PM - 5:30 PM

Session L4: Advancements in Water Data - Inspiring Action (Pt. 2)

Location: Suite 2A

Speaker: Adam Griggs

Addressing to the National Hydrography Dataset with HydroAdd

4:00 PM - 4:20 PM

Speaker: Michael Tinker

Using a Shiny App to Present State Water Quality Data to the Public

4:20 PM - 4:40 PM

Speaker: Joseph Dyer

An Update on the State of USGS Water Data Delivery

4:40 PM - 5:00 PM

Speakers: Candice Hopkins, James Kreft

Facilitated Discussion

5:00 PM - 5:30 PM

4:00 PM - 5:30 PM

Session L5: Advances in Water Sensor Technologies and Real-Time Water Monitoring (Pt. 3)

Location: Suite 2B

Session Moderator: Danielle Grunzke

Planning and Implementation of the USGS Next Generation Water Observing System

4:00 PM - 4:20 PM

Speaker: Brian Pellerin

Implementation of Low-Cost and Low-Power Real-Time Water Monitoring Technologies

4:20 PM - 4:40 PM

Speaker: Greg Cutrell

Quantifying Suspended-Sediment Load Contributed From an Urban Environment, Roanoke, Virginia 2020–2021

4:40 PM - 5:00 PM

Speaker: Sam Miller

Development of a Biosensor for the Detection of *Enterococcus faecalis* for Water Quality Monitoring

5:00 PM - 5:20 PM

Speaker: Pedro Resto

4:00 PM - 5:30 PM

Session L6: Impact of Land Use Changes & Climate Changes on Water Quality Monitoring

Location: Suite 2CD
Session Moderator: Rob Cook

The Effect of Landuse Changes on Water Quality: Transition in Monitoring Techniques With Changing Climate in Prince William County, Virginia USA

4:00 PM - 4:20 PM
Speaker: Veronica Tangiri

Water Quality in National Parks of the National Capital Region

4:20 PM - 4:40 PM
Speaker: Dan Myers

The Influence of Land Use and Hydrology on Annual Suspended Sediment and Nutrient Yields

4:40 PM - 5:00 PM
Speaker: Laura Johnson

Facilitated Discussion

5:00 PM - 5:30 PM

4:00 PM - 5:30 PM

Asynchronous Session L6: Impact of Land Use Changes & Climate Changes on Water Quality Monitoring

Location: Virtual via Whova

Monitoring and Managing the Effects of Climate Change on Lakes and Reservoirs

4:00 PM - 4:00 PM
Speaker: Ben Burpee

Regional Monitoring for Biological Impacts of Ocean Acidification in the Urbanized Coastal Waters of Southern California

4:00 PM - 4:00 PM
Speaker: Karen McLaughlin

Spatial Analysis of Dissolved Oxygen in Eastern Montana Streams

4:00 PM - 4:00 PM
Speaker: Dale White

4:00 PM - 5:30 PM

Session L7: Passive Samplers for Novel Applications

Location: Suite 4DE
Session Moderator: Steven Corsi

Evaluating the Effectiveness of Passive Sampling Techniques for Conducting Probabilistic Stream Monitoring

4:00 PM - 4:20 PM
Speaker: Laura Webb

Passive and Active In Situ Water Samplers for Organic Contaminants: Comparisons and Field Applications

4:20 PM - 4:40 PM
Speaker: David Whittall

Determining Transport of PFAS From Airfields and Urban Centers to the Near-Shore Marine Environment in Oahu, Hawaii

4:40 PM - 5:00 PM
Speaker: David Alvarez

Potential hazards of PAHs in Great Lakes tributaries using water column and porewater passive samplers and sediment equilibrium partitioning

5:00 PM - 5:20 PM
Speaker: Austin Baldwin

4:00 PM - 5:30 PM

Asynchronous Session L7: Passive Samplers for Novel Applications

Location: Virtual via Whova

Identifying Sentinel Indicators of Coastal Acoustic Environments With Metagenomics

4:00 PM - 4:00 PM
Speaker: Grant Milne

4:00 PM - 5:30 PM

Session L8: PANEL: Evaluating the Effectiveness of TMDLs and Other Restoration Plans

Location: Suite 3ABC
Session Coordinator: Emily Cira, Adam Schempp ; Panelist: Robert Voss, scott Collyard

4:00 PM - 5:30 PM

Session L9: WORKSHOP: Algae and Cyanobacteria Blooms: Track, Identify, and Predict

Location: Suite 1A
Presenter: Polly Barrowman, Christopher Lee, Greg Ford

Friday, April 28, 2023

8:30 AM - 10:00 AM

NARS Side Meeting

10:00 AM - 10:30 AM

Break

10:30 AM - 12:00 PM

NARS Side Meeting