

National Recreational Water Quality Workshop

April 6 – 8, 2021

*This agenda is for live panel sessions and does not include time for viewing pre-recorded presentations.
Pre-recorded presentations made available March 15.*

Tuesday, April 6th

2:00 – 3:00 (EDT)

Plenary Session

Presentation

Welcome

Presenter

Mike Komp, Executive Director, Conservation Technology Information Center

Protection of Recreational Waters

Deborah Nagle, Director, Office of Science and Technology, US EPA

What are the Chances of Getting Sick After Swimming; Implications for Community Health?

Sam Dorevitch, University of Illinois Chicago, School of Public Health

Tools of the Trade, Evolution of Beach Management

Julie Kinzelman, University of Wisconsin-Parkside College of Natural and Health Sciences; City of Racine Public Health Department Laboratory, Retired

3:00 – 3:45 (EDT)

Session 1: *Risks to Recreation – Panel Discussion*

**Chairs: Virginia Roberts, Centers for Disease Control and Prevention
Abhilasha Shrestha, University of Illinois Chicago**

Panelists and their Pre-recorded Presentations

Presentation

Integrating Children's Exposure in Risk Assessment

Presenter

Helena Solo-Gabriel, University of Miami

Outbreaks Associated with Untreated Recreational Water — United States, 2009-2017

Mia Mattioli, Centers for Disease Control and Prevention in for Michele Hlavsa

The One Health Harmful Algal Bloom System (OHHABS)

Virginia Roberts, Centers for Disease Control and Prevention

Canine Mortalities in Michigan, Water Exposure

Susan Peters, Michigan Department of Health and Human Services

The National Aquatic Resource Surveys: Findings on Algal Toxins and Pathogens across the Country

Sarah Lehmann, US EPA

Break: 3:45 – 4:00 (EDT)

4:00 – 5:15 (EDT)

Poster Session

- Authors in breakout rooms available for short presentations and questions

Wednesday, April 7th

2:00 – 3:00 (EDT)

Session 2: *Advances in Monitoring: Approaches and Technology – Panel Discussions*

**Chairs: Rachel Noble, University of North Carolina, Chapel Hill
Tracy Bone, US EPA**

Panel A and their Pre-recorded Presentations, Rachel Noble

Presentation

Five Years of Enterococci qPCR in Chicago: Research to Practice

Presenter

Kendall Anderson, Beach Water Quality Project Manager
Chicago Park District

Towards a Quantitative Human Fecal Source Identification Recreational Water Quality Management Tool

Orin Shanks, US EPA

Using Next Generation qPCR to Monitor for Toxic Cyanobacteria

Laura Webb, US EPA

Derivation of the Equivalent qPCR Value for Escherichia coli to Existing Culture-based Water Quality Standards for Monitoring Beaches in Michigan

Shannon Briggs, Michigan Department of Environment, Great Lakes, and Energy

Panel B and their Pre-recorded Presentation, Tracy Bone

Presentation

Predictive Models and Fast Detection of Coliphages for a Paradigmatic Improvement in Rapid Assessment of Water Quality

Presenter

Anicet Blanch, University of Barcelona

Portable System for Early Detection of Harmful Algal Bloom Toxins

Sarah Bickman, MBio Diagnostics

Use of Novel Autonomous Technology for Improved Water Quality Monitoring in High Priority Recreational and Shellfish Harvesting Waters

Denene Blackwood, University of North Carolina Chapel Hill

Antimicrobial Resistance in Wastewater Effluent Streams Discharging to Urban Coastal Waters

Joshua Steele, Southern California Coastal Water Research Project

3:00 – 3:45 (EDT)

Session 3: *Notification and Risk Communication – Panel Discussion*

Chair: Shannon Briggs, Michigan Department of Environment, Great Lakes and Energy

Panelists and their Pre-recorded Presentations

Presentation

Beach Report Card and NowCast: Successes and Challenges of Public Water Quality Notifications

Presenter

Luke Ginger, Heal the Bay, Santa Monica, CA

<i>Lake Erie Beach Monitoring and Public Notification Database: Beachguard</i>	Jenifer Hassinger, Ohio Department of Health
<i>Improving the Communication Strategy for the S.C. Beach Monitoring Program</i>	Lindsey Lachenmyer, South Carolina Department of Environmental Control
<i>Monitoring & Public Notification Program for Harmful Algal Blooms in Recreational Lakes</i>	Matthew Graul, East Bay Regional Park District, CA

Break: 3:45 – 4:00 (EDT)

4:00 – 5:15 (EDT)

Poster Session

- Authors in breakout rooms available for short presentations and questions

Thursday, April 8th

2:00 – 3:00 (EDT)

Session 4: Restoring Waters to Recreational Use – Panel Discussion	Chairs: Orin Shanks, US EPA Julie Kinzelman, University of Wisconsin-Parkside College of Natural and Health Sciences; City of Racine Public Health Department Laboratory, Retired
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Panel A and their Pre-recorded Presentations, Orin Shanks

Presentation

Tracking Land-based Sources of Nutrients and Microbial Contamination in a Pacific Northwest Estuarine Watershed

Presenter

Amy Zimmer-Faust, Southern California Coastal Water Research Project

Ambient Water Quality Thresholds for Human-associated HF183: Effect of Water Temperature, Aging, and Co-contamination with Gull Feces

Jeffrey Soller, Soller Environmental

MERA – an Integrated, Transdisciplinary Study of Water Quality and Human Health at a Tropical Beach

Valerie Harwood, University of South Florida

EPA’s New Sanitary Survey App for Marine and Freshwaters

Samantha Fontenelle, US EPA

Panel B and their Pre-recorded Presentations, Julie Kinzelman

The Florida Department of Environmental Protection’s MST Toolbox in Action

David Whiting, Florida Department of Environmental Protection

Lessons Learned on Remediation Options for Harmful Algal Blooms (HABs) in Recreational Lakes

Rebecca Tuden, East Bay Regional Park District, CA

Identifying Septic Pollution Exposure Routes During a Waterborne Norovirus Outbreak -- A New Application for Human-associated Microbial Source Tracking qPCR Mia Mattioli, Centers for Disease Control and Prevention

Sky Harbor Beach Restoration: Impacts on E. coli Levels Over a Three-Year Period Cindy Hakala, Minnesota Department of Health

3:00 – 4:00 (EDT)

Session 5: Building Partnerships in Recreational Water Monitoring and Remediation – Panel Discussion Chairs: Lesley D’Anglada, US EPA and Ibrahim Goodwin, US EPA

Panel A and their Pre-recorded Presentations, Lesley D’Anglada

Presentation

Utah’s Joint Harmful Algal Bloom and E. coli Recreational Water Quality Advisory Program

Presenter

Kate Fickas, Utah Division of Water Quality

Integrating HAB Detection Technologies with a Regional Observing System in the Great Lakes

Tim Davis, Bowling Green State University

Development of a Multifaceted Statewide Strategy for the Monitoring and Assessment of Freshwater Harmful Algal Blooms in California

Jayne Smith, Southern California Coastal Water Research Project

Panel B and their Pre-recorded Presentations, Ibrahim Goodwin

Presentation

Citizen Science at the EPA: Streamlining Water Quality Testing and Future Visions

Presenter

Jay Benforado, US EPA

Citizen and Community Evolvement to Make a More Swimmable California

Erick Burres, California Water Quality Monitoring Council

A Water Quality Standards Perspective on Swimming in An Urban Waterway – The Anacostia River

Ed Dunne, District of Columbia, Department of Energy and Environment

Building Partnerships to Enhance Public Health Protection at the Beach Through the Surfrider Foundation’s Blue Water Task Force

Mara Dias, Surfrider Foundation

Break: 4:00 – 4:15 (EDT)

4:15 – 4:45 (EDT)

**Session 6: What's Next? Emerging Concerns –
Panel Discussion**

**Chair: John Griffith, Southern California Coastal Water
Research Project**

Panelists and their Pre-recorded Presentations

Presentation

*How well do Coliphages Predict the Presence and
Concentrations of Human Enteric Viruses in Water
and Wastewater?*

Presenter

Mark Sobsey, University of North Carolina

*Risk-based Water Quality Threshold for Coliphage in
Surface Waters of Different Temperatures*

Alexandria Boehm, Stanford

*EPA's Development of Recreational Water Criteria
for Coliphage*

Kaedra Jones, ICF

*Large-scale Patterns of Antimicrobial Resistance
Genes and Fecal Indicator Bacteria in United States
Rivers and Streams*

Scott Keely, US EPA

*Pathogenic Vibrio Species in Southern California
Coastal Waters*

Rachel Diner, University of California San Diego

*International Comparison of Antibiotic Resistance
Genes and Microbial Communities from Wastewater
Treatment Plant Final Effluents and Receiving
Environments*

Ayella Maile-Moskowitz, Virginia Tech

4:45 – 5:00 (EDT)

Meeting Summary

**Steve Weisberg, Southern California Coastal Water
Research Project**

5:00 – 5:15 (EDT)

EPA Closing Remarks

Sara Hisel-McCoy, US EPA