



# 2024 Ohio River Basin Alliance Summit

Healthy Waters, Healthy Communities:  
From Headwaters to Mainstem  
October 30 - November 1



Learn more  
about  
Pittsburgh



Learn more at [bit.ly/2024ORBASummit](https://bit.ly/2024ORBASummit)

# TABLE OF CONTENTS

**01**

PAGE

**CHAIRS WELCOME**

**02**

PAGE

**ABOUT ORBA**

**03**

PAGE

**LIST OF SPONSORS**

**04**

PAGE

**IMPORTANT SUMMIT DETAILS**

**05**

PAGE

**SUMMIT AGENDA**

**08**

PAGE

**SESSION GUIDE**

**24**

PAGE

**SUMMIT EVALUATION SURVEY**

**25**

PAGE

**POSTER & TABLE SESSIONS**

**26**

PAGE

**SPONSOR INFO, UPCOMING EVENTS, AND EVENT MAP**

On behalf of the Board of Trustees, we would like to thank everyone for their attendance at the 2024 ORBA Summit, “Healthy Waters, Healthy Communities: From Headwaters to Mainstem.” The Alliance is truly a collaborative, diverse group of stakeholders and your participation here at the Summit helps strengthen our voice for water resource priorities of the Ohio River Basin. We would also like to recognize Jonathan Burgess, Megan Lange, Annie Quinn, and the entire Planning Committee for their dedication, energy, and enthusiasm towards making this year’s summit such a huge success. From the diverse slate of speakers and interactive field trips to the first-class amenities and networking opportunities, this group has taken the Summit to its highest level yet which will not only advance critical issues with the Basin, but also propel the entire organization forward during the upcoming year, a year that promises to be an exciting and rewarding one for the Basin.

In addition, we would like to offer our appreciation to the Summit sponsors. Your financial support is absolutely critical to the success of the Summit and to ORBA. We would also like to thank ORSANCO and the U.S. Army Corps of Engineers Great Lakes and Ohio River Division and the Corps Districts within the Basin. As our long-standing partners since the inception of ORBA, your leadership, expertise, and experience have been instrumental in strengthening our region’s economy, protecting our water resources, and enhancing the quality of life for those living within the Basin. We are grateful to partner with you as we strive to sustain healthy waters and healthy communities. Lastly, we would like to welcome our new Board members, including Jonathan Burgess, as incoming Vice Chair. We are grateful for their commitment and look forward to working together.

We hope you enjoy the Summit as we celebrate the past year and prepare for an exciting 2025 for the Basin!

**Craig Butler**

ORBA Chair

[cbutler@mwcd.org](mailto:cbutler@mwcd.org)

**Chris Lorentz**

ORBA Vice Chair

[lorentzc@thomasmore.edu](mailto:lorentzc@thomasmore.edu)

**Harry Stone**

ORBA Past Chair

[hstone@orsanco.org](mailto:hstone@orsanco.org)

**WELCOME to  
PITTSBURGH**



## ABOUT ORBA

The Ohio River Basin Alliance (ORBA) is a collaborative, unified voice of stakeholders for water resource priorities of the Ohio River Basin striving to sustain healthy ecosystems and river communities and vibrant water-dependent economies. ORBA provides a forum for addressing water resource issues in the Ohio River Basin in today's changing environment.

ORBA began in 2009 as an outgrowth of the Ohio River Basin Summit co-led by Ohio River Valley Water Sanitation Commission (ORSANCO), the US Army Corps of Engineers, and the US Environmental Protection Agency. Today, ORBA includes members from over 200 organizations including local, state, and federal agencies, as well as commissions, industry, academia, and non-profit organizations.

ORBA is governed by an 18-member Steering Committee. This committee includes ORBA Working Group leaders who oversee six key goal areas in the Ohio River Basin Strategic Plan.

## SIX PRIORITY AREAS

In 2019 and 2020, ORBA worked with ORSANCO and the US Army Corps of Engineers to develop a Strategic Plan for the Ohio River Basin. This document provides six Ohio River Basin-wide priorities (goals), and lays out objectives and strategic actions for meeting those goals:

### Abundant Clean Water



Ensure the quality and quantity of water in the Ohio River Basin is adequate to support the economic, social, and environmental functions that are dependent on it.

### Healthy and Productive Ecosystems



Conserve, enhance, and restore ecosystems within the Ohio River Basin to support natural habitats and the fish and wildlife resources that depend upon them.

### Knowledge and Education to Inform Decisions



Ensure that research and education adequately inform Ohio River Basin-wide economic, social, and environmental decisions; enhance the profile of education organizations in the Basin that synergize efforts to garner effective public involvement in the stewardship and management of the Basin's resources.

### World-class Recreation



Enrich the quality of life for people and recreation-based economies by maintaining and enhancing riverine, lake, and wetland-associated recreation within the Basin.

### Reliable Flood Risk Management



Provide reliable flood risk management through well-managed and maintained infrastructure, including appropriate floodplain connections for water conveyance and ecosystem benefits, and management of surface and storm water runoff to better protect life, property, and economies.

### Nation's Most Valuable River Transportation and Commerce Corridor



Provide for safe, efficient, and dependable commercial navigation within the Ohio River Basin to ensure a competitive advantage for our goods in global and regional markets; sustain a water use system to efficiently and effectively support agricultural, industrial, and energy productivity.

## GUIDING PRINCIPAL: ENVIRONMENTAL JUSTICE

Consideration of Vulnerable Populations by prioritize the needs and vulnerabilities of low-income or underserved communities given the history of ecological and social injustice. Ensure that all strategic actions are just and equitable, and recognize the importance of tribal communities' contributions to our culture and history.



# THANK YOU TO OUR SPONSORS!

## Basin Sponsors



## Mainstem Sponsors



## Tributary Sponsors



## Headwater Sponsors



## Agency Partners



US Army Corps  
of Engineers®

# SUMMIT MATERIALS

## CONTINUING EDUCATION CREDITS

We will be offering continued education credits for attending the summit. Please see the check in desk and ask for more information.

## SUMMIT BINGO!

Please visit each of our resource & Sponsor tables. during your visit, they will sign/sticker/stamp a space on your bingo card. When you have finished four or more Bingo lines, turn this card in at the registration desk. A single entry will be pulled at 11:30 a.m. November 1st from the main stage. Must be present to win!

## ORBA MEMBERSHIP

Ohio River Basin Alliance (ORBA) Members: Anyone who attends an ORBA summit, or who contacts a Board of Trustees member in writing or via email requesting to participate, is considered a member of the Alliance. [ORBA Bylaws Section II(a)]

## WiFi

Please utilize university wifi capabilities by selecting the public network "Pitt Guest WiFi". A pop up will appear to accept use policy and connect you to the internet.

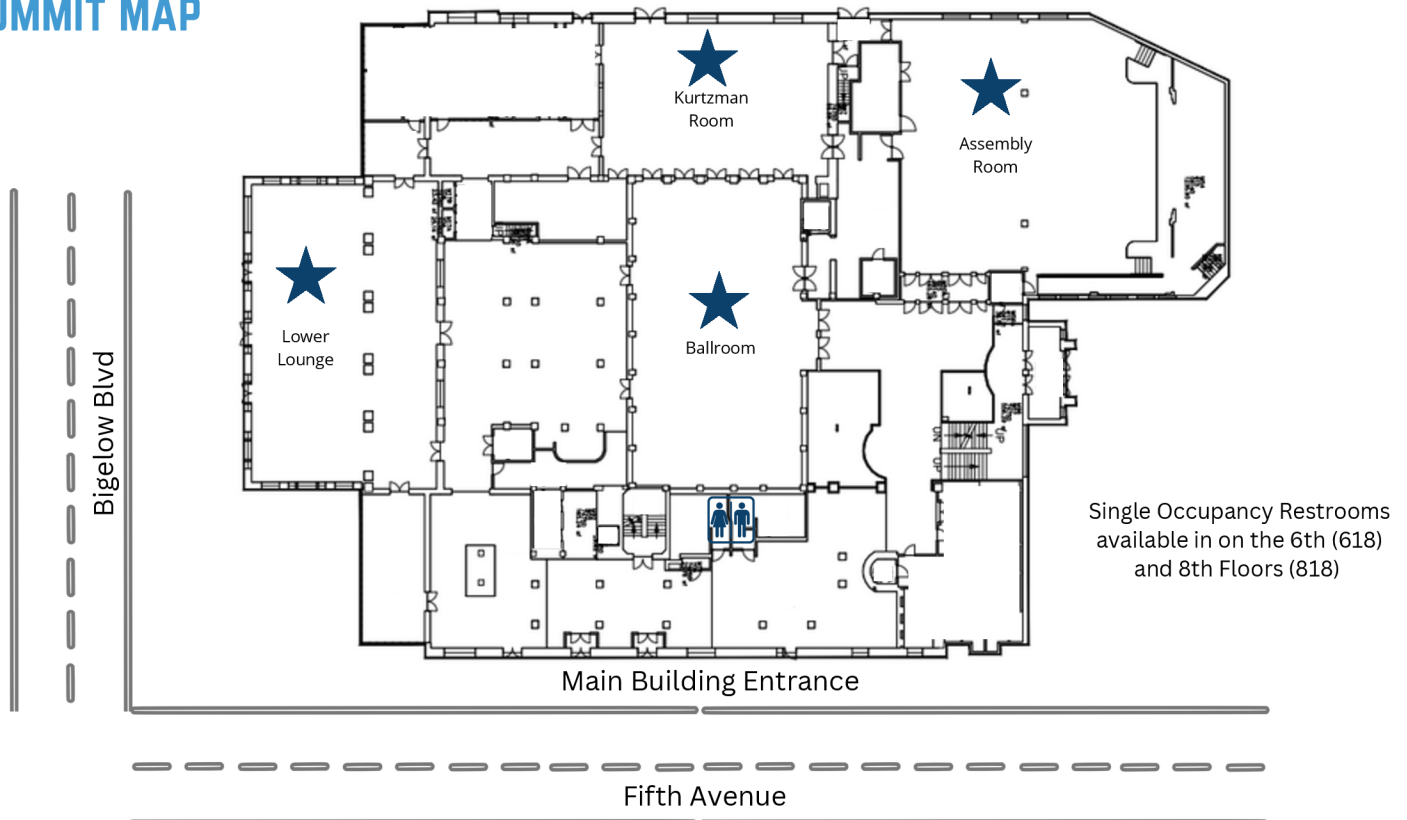
## EVALUATION

Thank you for taking the time to join us at the Ohio River Basin Alliance Summit. In order to make our future events as useful as possible, we would appreciate an additional 3-5 minutes of your time to complete this survey. All results are anonymous and will only be used to help us plan future events.

Please provide your feedback at <https://bit.ly/ORBAEvaluation>



## SUMMIT MAP



## WEDNESDAY, OCTOBER 30

Field Trips			
2:00-5:00	A People-First Approach to Urban Watershed Restoration	PWSA Innovative Green Infrastructure Tour	Reconnecting an Allegheny County High Quality Stream via Dam Removal
"This Is the Ohio River - Life Death Rebirth of the Beautiful" Movie Screening - O'Hara Ballroom			
5:00-6:00	ORBA Board Members Meeting - O'Hara Ballroom		
6:00-8:00	Informal Networking Event at Sly Fox Brewery		

## THURSDAY, OCTOBER 31

Assembly Room			
8:30-8:45	Opening Remarks: Ohio River Basin Alliance - Craig Butler, ORBA Chair		
8:45-9:00	United States Army Corps of Engineers - Colonel Valenti		
9:00-9:15	Environmental Protection Agency - Bruno Pigott		
9:15-9:30	Morning Instructions & Movement		
	Assembly Room	Lower Lounge	Kurtzman Room
9:30-10:30	James Wood PhD., West Liberty University - From Rural to Urban, Trends in Escherichia coli (E. coli) in Wheeling Creek, WV	Jeremy Weber PhD., University of Pittsburgh - Acid Mine Drainage Treatment in Pennsylvania: Past Achievements and Future Needs	Amy Miller and Kalin Drennan, Allegheny County Conservation District - Enhancing Watershed Management with Open Data and Community Collaboration
	Melissa Shafer, West Virginia Water Research Institute - Long-term Water Quality Trends in the Monongahela River Basin	Evan Clark, 3 Rivers Waterkeeper and Eric Harder, Youghigheny Riverkeeper (MWA) - Preproduction Plastics in the Ohio River headwaters	Jacob Moore and Christine Phillips, Pennsylvania Department of Environmental Protection - Nonpoint Source Management in the Ohio River Basin, A History of Funding, Restoration, and Success
	Dr. Emily Elliott, University of Pittsburgh - Our Changing Ohio River: Long-Term Trends in Flow and Nutrients	Jared Carte and Emily Woodward, USGS - USGS Surface Water Quality Monitoring in the Ohio River Basin	Carrie Parmenter, The Nature Conservancy - Community-Led Planning and Floodplain Restoration in the Lower Wabash
10:30-10:40	Movement		
	Assembly Room	Lower Lounge	Kurtzman Room
10:40-11:10	(Discussion) John Gardner & Gabi Zuccolotto, University of Pittsburgh - Harmful Algal Blooms: Monitoring and Mitigation in the Ohio River Basin	US Army Corps, PJ Donovan - Value of Commerce Across the Basin	(Panel) John Stephen, SW PA Water Network - The State of Water Trails in Our States



# 2024 OHIO RIVER BASIN ALLIANCE SUMMIT AGENDA

## THURSDAY, OCTOBER 31

11:10-11:30	Break - Visit Posters & Sponsors in Ballroom		
	<b>Assembly Room</b>		
11:30-12:15	(Panel) USACE - Strategies for Funding and Implementation Mechanisms: Federal Waters Restoration Programs		
12:15-1:15	Lunch		
1:15-1:30	Afternoon Instructions & Movement		
	<b>Assembly Room</b>	<b>Lower Lounge</b>	<b>Kurtzman Room</b>
1:30-2:00	Tim Fitchett and Shawnta Reed, Fair Shake Environmental Legal Services - Navigating Waterway Access: Waterway Access and Inclusion	Brendan Muckian-Bates, Appalachian Citizens' Law Center and Molly Updegrove, Reimagine Appalachia - Flooding in Appalachia: Policy Recommendations for a Resilient Future	Kimberly Kennedy, Julia Spicher and Tim Prevost, ALCOSAN - ALCOSAN Clean Water Plan Update
2:00-2:05	Movement		
	<b>Assembly Room</b>	<b>Lower Lounge</b>	<b>Kurtzman Room</b>
2:05-2:35	(Panel) Mary Walsh - Western Pennsylvania Conservancy, Becca Winterringer - Nature Conservancy, & Marion Divers - USACE, Managing River Flow in the Allegheny River: balancing the needs for aquatic ecosystems and water infrastructure	Lisa Werder Brown, Thomas Batrone, Watersheds of South Pittsburgh - Quantifying the Socioeconomic Impacts and Benefits of Nature Based Floodplain Projects in a Flood Prone Urban Watershed in Pittsburgh, PA	Risa Shimoda, River Management Society - Engaging Folks Who Don't Know They Are In The Ohio Basin
2:35-2:40	Movement		
	<b>Assembly Room</b>	<b>Lower Lounge</b>	<b>Kurtzman Room</b>
2:40-3:10	Eugene Bradshaw, USACE - Water Workforce Needs and Careers for Today and Tomorrow	Lilit Yeghiazarian, University of Cincinnati- Open Knowledge Networks help address flooding and water-energy challenges	Mark D. Kessinger, VP at DLZ Corp., formerly USACE (retired) - Will Climate Change Impact the Ohio River Basin?
3:10-3:30	Break - Visit Posters & Sponsors in Ballroom		
	<b>Assembly Room</b>		
3:30-4:30	Plenary Panel: Centering Communities, Histories and Environmental Justice Issues Across the Ohio River Basin		
4:30-5:00	Closing Remarks - Harry Stone, ORBA Emeritus Chair		
6:00-8:00	Evening Event at Phipps Conservatory and Botanical Gardens & Award Ceremony		



# 2024 OHIO RIVER BASIN ALLIANCE SUMMIT AGENDA

## FRIDAY, NOVEMBER 1

		Assembly Room		
8:30-8:45	Opening Remarks - Chris Lorentz, ORBA Vice Chair, Thomas Moore University			
8:45-9:15	Plenary: Jordan Lubetkin, NWF - ORBA Restoration Plan Overview and Next Steps			
9:15-9:30	Instructions for day & Movement			
		Assembly Room	Lower Lounge	Kurtzman Room
9:30-10:30	Eric J. Chapman (Speaker), Nate Welker, Trent Millum, John Berger, and Alysha Trexler, Western Pennsylvania Conservancy - Freshwater Mussel Conservation in the Upper Ohio River Watershed	Beth Uhler, Center for Watershed Protection - Flowing Forward: Watershed Planning Tools and Strategies for Ohio River Basin Resilience and Sustainability	Interactive Tabling Session: Citizen Science and Environmental Education Across the Ohio River Basin	
	Sebastian Teas, Ohio University, Water Quality Changes from Stream and Wetland Restoration on Former Agricultural Land	Sarah Koenig and Nelson Milano, Audubon Society of Western Pennsylvania - Putting Your Plan Into Action: Lessons Learned from the Buffalo Creek Watershed		
	Patrick Shirey, University of Pittsburgh - Supreme Court and Changes to Clean Water Act and Rulemaking	John Wentzel, Conemaugh Valley Conservancy and Thomas L. Serfass, Frostburg State University - River otters as a flagship for aquatic conservation: the Conemaugh River as a case study"		
10:30-11:00	Break - Visit Posters & Sponsors in Ballroom			
		Assembly Room	Lower Lounge	Kurtzman Room
11:00-11:30	Ted Smith - A Human Health and Safety Framework for Ohio River Basin Restoration	Ellen Kohler, Water Center at Penn - Lead, PFAS and Climate Change: Understanding the Challenges Facing Drinking Water Systems in the Ohio River Basin	Lisa Hollingsworth-Segedy, AICP, American Rivers - Ohio River Basin Fish Habitat Partnership: New Priorities, New Plan	
11:30-12:00	Wrap Up, Raffle Winner, Field Trip Instructions			
12:00-1:00	Lunch			
		Field Trips		
2:00-5:00	A site visit with USGS to a water quality monitoring site in Loweries Run	Riverlife North Shore Ecosystem Restoration Walk		



# SESSION GUIDE

# SESSION GUIDE

WEDNESDAY, OCTOBER 30

9



12:00 - 1:30

**Arrival & Independent Lunch**

1:30 - 2:00

**Movement to Field Trip Meeting Locations**

2:00 - 5:00

**Field Trips**

**Option 1:** Upstream Pittsburgh & USACE: A People-First Approach to Urban Watershed Restoration

**Option 3:** American Rivers: Reconnecting a Allegheny County High Quality Stream via Dam Removal

**Option 2:** Pittsburgh Water & Sewer Authority: Innovative Green Infrastructure Tour

**Option 4:** "This Is the Ohio River - Life Death Rebirth of the Beautiful" Movie Screening

5:00 - 6:00

**ORBA Board Members Meeting - O'Hara Student Center (4024 O'Hara St, Pittsburgh, PA 15213) Ballroom**

***All Members of the Ohio River Basin Alliance are invited to attend the ORBA Membership Meeting (See membership definition on page 4)***

Agenda will include: A Review of Mission, Goals, and Guiding Principles of ORBA. The meeting will continue and include 2024 Amendments to ORBA Bylaws, a introduction and the Chairperson's Report, Results of Election, Incoming Chairperson's Comments, and Opportunities for Membership Engagement



6:00 - 8:00

**Meeting of the Waters: A Community Reception to kickoff the ORBA Annual Summit with water colleagues from throughout the region.**

The Pennsylvania Organization for Watersheds and Rivers, a technical service provider for community watershed organizations, and the Headwaters to the Ohio Water Network, a coalition of organizations working to improve water quality and access in the Upper Ohio River Basin through collaborations, are hosting a reception for our water colleagues at the Sly Fox Brewery, on the Three Rivers Heritage Trail along the Mon River. This is an informal and optional gathering. Appetizers provided, drinks on your own.

**Location:** Sly Fox Brewery at the Highline, 46 S 4th St, Pittsburgh, PA 15219

**Time:** 6-9 PM

**Parking:** Highline Garage, 339 McKean Street \$5 for first 3 hours.

**Bus:** From hotel, take the 61C, 61A, 61B, or 71B to downtown (six/smithfield), catch 48 or 51 on Smithfield heading south. Off at E Carson St + Terminal Way \$2.75 (3 hours), Buses every 8 min

**Carpool:** Meet at 5:45 pm in the Residence Inn -Oakland/University Place Lobby 13341 Forbes Ave, Pittsburgh, PA 15213



# SESSION GUIDE

10



THURSDAY, OCTOBER 31

7:30 - 8:30 **Registration**

7:30 - 8:30 **Light Breakfast**

8:30 - 8:45 **Opening Remarks: Ohio River Basin Alliance**

*Craig W. Butler is the Executive Director/Secretary of the Muskingum Watershed Conservancy District as of 2020. In 2014, Governor John Kasich appointed Butler as Director of the Ohio Environmental Protection Agency (EPA), a position he held until 2019. He recently served as the executive director of the Power Siting Board for the Public Utilities Commission of Ohio. Prior to serving as Director of the EPA, he served as the Assistant Policy Director for Energy, Agriculture, and the Environment in Governor Kasich's administration. Prior to his service in the Kasich Administration, Butler served in various positions in the Ohio EPA and is regarded as an innovator and national leader in balancing environmental protection, conservation, public health, and economic development issues. He holds a Bachelor of Arts in Geography and Environmental Studies from Mansfield University in Pennsylvania and a Master of Science in Environmental Studies from Ohio University.*

8:45 - 9:00 **Plenary: United States Army Corps of Engineers**

*Colonel Phil Valenti hails from Lancaster, Pennsylvania, and began his distinguished military career after graduating from Penn State University with a Bachelor of Science Degree in Environmental Engineering in December 2000, where he received his commission as a Second Lieutenant in the U.S. Army Corps of Engineers. Throughout his career, Valenti served in various leadership roles. COL Valenti's deployments include Operation Enduring Freedom and two deployments in support of Operation Iraqi Freedom. He has pursued an extensive educational background with multiple master's degrees in several disciplines. COL Valenti has been decorated with numerous awards and decorations. His dedication and service to the U.S. Army and the Corps of Engineers exemplify his commitment to the nation and its missions.*

9:00 - 9:15 **Plenary: Environmental Protection Agency**

*Bruno Pigott serves as Acting Assistant Administrator for Water at the U.S. Environmental Protection Agency. The Office of Water works to ensure that drinking water is safe, wastewater is safely returned to the environment, and surface waters are properly managed and protected. Acting Assistant Administrator Pigott is a career public servant, having worked at the intersection of public service and water policy for more than 30 years -- on Capitol Hill, as city councilmember, and Commissioner of the Department of Environment for the State of Indiana. Mr. Pigott believes that government should work to benefit people. He has worked with environment, industry, municipal, and agricultural organizations nationally and in Indiana to protect and enhance the environment. Bruno holds a bachelor's degree in political theory and economics from James Madison College at Michigan State University and a master's degree in public and environmental affairs from Indiana University's School of Public and Environmental Affairs.*

**Assembly Room**

**Craig Butler,**  
*ORBA Chair, Executive  
Director of MWCD*



**Colonel Valenti,**  
*Deputy Division  
Commander, Great Lakes  
and Ohio River Division,  
USACE*



**Bruno Pigott**  
*Acting Assistant  
Administrator for Water U.S.  
Environmental Protection  
Agency*



9:15 - 9:30 **Morning Instructions & Movement**

9:30 - 10:30 **Breakout Sessions described on pages 11-13. Choose one track to attend.**

9:30 - 10:30 **Knowledge & Education to Inform Decisions**

**Assembly Room**

### **From Rural to Urban, Trends in Escherichia coli (E. coli) in Wheeling Creek, WV**



We sought to identify trends in Escherichia coli (E. coli) from 12 sites in the Wheeling Creek watershed for one year to compare changes with land use and to compare E. coli concentrations between recreational and non-recreational seasons. We found that increases in urbanization were significantly correlated with increasing E. coli concentrations. Our study was the first step in the City of Wheeling's efforts to better understand spatial trends and identify sources of E. coli in Wheeling Creek.

**James Wood PhD.**  
*West Liberty University*  
*James.Wood@westliberty.edu*

### **Long-term Water Quality Trends in the Monongahela River Basin**

3RQ program, an initiative of the West Virginia Water Research Institute is focused on monitoring and assessing water quality in the Monongahela River basin. The program collects extensive data on various water quality parameters over time to identify long-term trends and support effective management and conservation efforts. By collaborating with local stakeholders, 3RQ aims to enhance the understanding of water resources and promote sustainability.

**Melissa Shafer**  
*West Virginia Water Research Institute*  
*melissa.shafer@mail.wvu.edu*

### **Our Changing Ohio River: Long-Term Trends in Flow and Nutrient through Climate, Water Quality, and Harmful Algal Blooms**

In 2015 and 2019 unprecedented blooms of the toxin-producing harmful algal bloom, *Microcystis aeruginosa*, extended along 600 and 300 miles of the mainstem Ohio River. Given the unusual nature of these extensive blooms and the potential impacts to human and ecological health, it is imperative to understand factors contributing to bloom formation. Discussion will include ecological, hydrological, and climatic changes over the past 40 years and explore how these factors may be interacting to fundamentally change the ecology and biogeochemistry of the River.

**Dr. Emily Elliott**  
*University of Pittsburgh*



**9:30 - 10:30 Breakout Sessions described on pages 11-13. Choose one track to attend.**

**9:30 - 10:30 Abundant Clean Water**

**Lower Lounge**

**Acid Mine Drainage Treatment in Pennsylvania: Past Achievements and Future Needs**

**Jeremy Weber PhD.**

*University of Pittsburgh  
j.weber@pitt.edu*

Findings from recently published research on acid mine drainage exposure and treatment in Pennsylvania. It documents who is affected by AMD and estimates the miles of waterways protected from impairment through existing passive mine drainage treatment systems and the investment needed to address streams that remain impaired.



**Preproduction Plastics in the Ohio River headwaters**

**Evan Clark**

*Three Rivers Waterkeeper  
evan@threeriverswaterkeeper.org*

Three Rivers WaterKeeper and Mountain Watershed Association ( Youghiogheny Riverkeeper) share a collaborative and cooperative focus on monitoring and pushing for regulation of plastics loss. Nurdles and other waste from production in southwest Pennsylvania makes its way to our rivers and has larger national implications.

**Eric Harder**

*Youghiogheny Riverkeeper (MWA)  
eric@mtwatershed.com*

**USGS Surface Water Quality Monitoring in the Ohio River Basin**

**Jared Carte**

*United States Geological Survey  
jcarte@usgs.gov*

Jared and Emily will present an overview of Pennsylvania’s Water Quality Network, a collaborative program between the USGS and the Pennsylvania Department of Environmental Protection. Jared will discuss the routine sampling that is conducted in the Ohio River Basin (ORB) and Emily will discuss how we use this robust network to study various emerging contaminants. Preliminary results highlighting water quality in the ORB will be presented.

**Emily Woodward**

*United States Geological Survey  
ewoodward@usgs.gov*





**9:30 - 10:30 Breakout Sessions described on pages 11-13. Choose one track to attend.**

9:30 - 10:30

### Healthy & Productive Ecosystems

Kurtzman Room



#### **Enhancing Watershed Management with Open Data and Community Collaboration**

Raising awareness about watersheds empowers individuals and communities to steward local environments. ACCD created open-source data sets including NPDES permits and stormwater control measures. Leveraging this data with municipal input, ACCD is leading a streamlined watershed planning effort in the Plum Creek Watershed.

#### **Amy Miller**

Allegheny County  
Conservation District  
[abmiller@accdpa.org](mailto:abmiller@accdpa.org)

#### **Kalin Drennan**

Allegheny County  
Conservation District  
[kdrennan@accdpa.org](mailto:kdrennan@accdpa.org)

#### **Nonpoint Source Management in the Ohio River Basin, A History of Funding, Restoration, and Success**

The Environmental Stewardship and Watershed Protection Act, Act 68 of 1999, established the Environmental Stewardship Fund which committed funding for and created the Growing Greener Grant Program. Since its inception in 1999, Growing Greener has provided over \$400 million in grant funding to over 2700 grant recipients for Non-Point Source Management projects. We will provide an overview of the history, funding, and case studies of completed projects in the Ohio River Basin.

#### **Jacob Moore**

PA Dept. of Environmental  
Protection  
[jacmoore@pa.gov](mailto:jacmoore@pa.gov)  
(814) 332-6139

#### **Christine Phipps**

PA Dept. of Environmental  
Protection  
[christinph@pa.gov](mailto:christinph@pa.gov)

#### **Community-Led Planning and Floodplain Restoration in the Lower Wabash**

TNC is creating a comprehensive plan to enhance the aquatic and riparian ecosystem for the confluence of the Lower Wabash and Ohio River. We have conducted a series of landowner and partnership meetings along with potential floodplain inundation mapping to identify the concerns of the communities, the existing financial and education gaps, and priority locations for restoration.

#### **Carrie Parmenter**

The Nature Conservancy  
[carrie.parmenter@tnc.org](mailto:carrie.parmenter@tnc.org)  
(812) 618-5372

**10:30-10:40 Movement**

10:40-11:10

Breakout Sessions - Choose one track to attend.

10:40-11:10

### Healthy & Productive Ecosystems

Assembly Room



#### Harmful Algal Blooms: Monitoring and Mitigation in the Ohio River Basin

The Ohio River Basin has experienced several severe harmful algal bloom events in its rivers and reservoirs in recent years. In this session, I hope to convene those who work with, study or are interested in harmful algal bloom events within the basin (i.e., USACE, EPA, ORSANCO, USGS, local watershed group, academics) together in order to share current monitoring and mitigation efforts.

**Gabi Zuccolotto**

*University of Pittsburgh*

**John Gardner**

*University of Pittsburgh*

*jrg150@pitt.edu*

### Nation's Transportation and Commerce Corridor

Lower Lounge



#### US Army Corps – Value of Commerce Across the Basin

The Ohio River Basin's waters play a key role in business and transportation within the inland waterway system. In this session, PJ Donovan of the U.S. Army Corps of Engineers (USACE) will highlight opportunities to learn how USACE turns commodities into the USACE Waterborne Statistical Database. Discussions will focus on USACE data collection authorities, processes, and tools, and on how the USACE Waterborne Statistical Database is used to determine the Value to the Nation the Ohio River provides.

**PJ Donovan**

*Chief, Planning Center of Expertise for Inland Navigation and Risk-Informed Economics Division*

*Patrick.J.Donovan@usace.army.mil*

### World-class Nature-based Recreation Opportunities

Kurtzman Room

#### Panel: Connecting Through Water Trails

Water Trails create a direct connection that has the potential for building new stewards and advocates. The Ohio River Basin, from the Headwaters to the Mississippi, has Water Trails of all sizes and traditions. The presenters will highlight how water trails stand-out with results that go beyond recreational access- like diversity/belonging; conservation stewardship/volunteerism; economic and community vitality and benefits; health and well-being.

Moderator:

**John Stephen**, SW PA Water Network

*john@swpawaternetwork.org, (412) 606-7149*



**Tali MacArthur**

*PA Organizations of Watersheds & Rivers (POWR)  
tmacarthur@pecpa.org  
(570) 285-8013*

**Dr. David Wicks**

*David.Wicks@louisville.edu*

**Amanda Pritzer**

*amanda@cheat.org  
Friends of the Cheat*

**Mark Young**

*ORBA Recreation Working Group, 614-582-7913  
markayoung90@gmail.com*



11:10-11:30

Break - Visit Posters & Sponsors in Ballroom

11:30 - 12:15

**Panel: Strategies for Funding and Implementation Mechanisms: Federal Waters Restoration Programs**

What could enhance federal support for the Ohio River Basin look like? What can we learn from other federally designated waters? In this discussion led by Ryan Fisher of USACE, leaders from the Chesapeake Bay and the Great Lakes will discuss the programs, priorities, successes, and setbacks in their respective regions. There will also be time for a Q&A with audience members.

**Assembly Room**

**Panelists**

**Todd Nettesheim** – US EPA, Deputy Director, Great Lakes National Program Office (GLNPO), [nettesheim.todd@epa.gov](mailto:nettesheim.todd@epa.gov)

**Amy Guise** – USACE, Chief of Planning, Baltimore District, [amy.m.guise@usace.army.mil](mailto:amy.m.guise@usace.army.mil)

**Jay Aya-ay** – USACE, Chief of Planning, Great Lakes and Ohio River Division, [jonathan.j.aya-ay@usace.army.mil](mailto:jonathan.j.aya-ay@usace.army.mil)

*Moderated by Ryan Fisher*

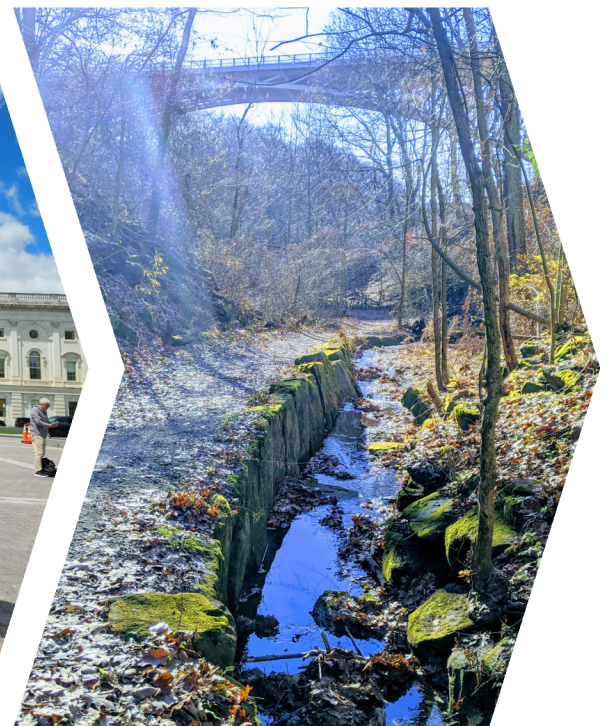
12:15 - 1:15

Lunch

Assembly Room

1:15 - 1:30

Afternoon Instructions & Movement





1:15 **Return to Main Hall for Afternoon Session**

1:15-1:30 **Instructions & Movement**

**1:30-2:00 Breakout Sessions - Choose one track to attend.**

1:30-2:00 **World-class Nature-based Recreation Opportunities** **Assembly Room**



**Navigating Waterway Access: Waterway Access and Inclusion**

We have created the Waterway Access Guidebook that goes in depth on how to increase access to waterways throughout New York, Pennsylvania, Maryland, Delaware, and New Jersey. A copy of the book can be found on our website. The book details the legal concerns around increasing waterway access and provides models and descriptions to overcome those concerns. We have created a presentation that goes over the importance of waterway access and the legalities of waterway access, specifically in urban redevelopment. The presentation also involves a visioning process for attendees to really think about their own rivers and streams and what they would like to see in their communities.

**Tim Fitchett and Shawnta Reed**

*Fair Shake  
Environmental Legal Services*

**Reliable Flood Risk Management**

**Lower Lounge**

**Flooding in Appalachia: Policy Recommendations for a Resilient Future**

Two years after the July 2022 floods hit eastern Kentucky, the Appalachian flood resilience coalition has put together a 30+ page policy guide with 29 separate recommendations covering four key pillars of climate resilience, mitigation, & recovery efforts for state/local governments & low-income households. We will dive into our coalition’s policy pillars and the advocacy work.

**Brendan Muckian-Bates**

*Appalachian Citizens' Law Center  
brendan@aclc.org*

**Molly Updegrove**

*Reimagine Appalachia  
molly.updegrove@reimagineappalachia.org*



**Knowledge & Education to Inform Decisions**

**Kurtzman Room**

**Allegheny County Sanitary Authority (ALCOSAN) Clean Water Plan Update**

Present updates on the Regionalization, Green Revitalization of Our Waterways (GROW) and Regional Tunnel System programs that ALCOSAN is implementing as part of the Clean Water Plan and Consent Decree Compliance for cleaner rivers.

**Kimberly Kennedy**  
ALCOSAN

*Kimberly.Kennedy@alcosan.org*

**Julia Spicher & Tim Prevost**

*timothy.prevost@alcosan.org*



2:00-2:05 **Movement**

2:05 - 2:35


Breakout Sessions - Choose one track to attend.

2:05 - 2:35

### Nation's Transportation and Commerce Corridor

### Assembly Room

#### Managing river flow in the Allegheny River: balancing the needs for aquatic ecosystems and water infrastructure



Kinzua Dam on the Allegheny R alters the natural flow regime and habitats. A Sustainable Rivers Program partnership effort is working to balance the needs of water infrastructure operations and restoration of Allegheny R. Management plan implementation includes the carrying out the flow prescriptions for the reservoir releases and documenting results. Researchers are characterizing baseline conditions of features of the Allegheny and developing a model of post-prescription effects.

**Mary Walsh**

*PA Natural Heritage Program  
mwalsh@paconserve.org*

**Becca Winterringer**

*The Nature Conservancy  
b.winterringer@tnc.org*


**Marion Divers**

*US Army Corps  
marion.divers@usace.army.mil*

### Reliable Flood Risk Management

### Lower Lounge

#### Quantifying the Socioeconomic Impacts and Benefits of Nature Based Floodplain Projects in a Flood Prone Urban Watershed in Pittsburgh, PA



To understand the prolonged negative effects of frequent flooding of Saw Mill Run in Pittsburgh PA, a social and economic analysis of the main stream corridor was performed to understand the economic disinvestment and social injustices to the neighborhoods. This presentation will provide approaches on building an economic case for nature based floodplain strategies with socioeconomic data and state of the art flood modeling tools for a real world case study in a densely built urban watershed.

**Lisa Werder Brown**

*Watersheds of South Pittsburgh  
lisa@wospgh.org*


**Thomas Batrone, PE, CFM**  
*HDR*

*tom.batroney@hdrinc.com  
(412) 497-6005*

### Knowledge & Education to Inform Decisions

### Kurtzman Room

#### Ohio River Basin Awareness Beyond the Mainstems



The "Design thinking" session will discuss how best to engage Basin wide constituents. Ohio Riverway and Tennessee RiverLine recreation initiatives have been wildly successful thanks to their significant vision, institutional support, and volunteerism. The Basin effort needs to extend beyond the mighty mainstem Ohio and Tennessee and throughout our 14 states.

**Risa Shimoda**

*River Management Society  
risa@theshimodagroup.com*

2:35 - 2:40

**Movement**



2:40-3:10

Breakout Sessions - Choose one track to attend.

2:40-3:10

### Nation's Transportation and Commerce Corridor

### Assembly Room

#### Water Workforce Needs and Careers for Today and Tomorrow

#### Eugene Bradshaw

USACE, Division Talent Manager  
eugene.b.bradshaw@usace.army.mil

Featuring panelists from USACE, Landforce, ALCOSAN, PWSA and the Port of Pittsburgh



Across the Ohio River Basin, water interacts with our lives in a host of ways, and there are a broad range of current and future workforce needs necessary to support a vibrant region. This panel, featuring agencies, water systems, non-profits and others will discuss the gaps and opportunities for career development now, as well as how those needs may shift over time.

### Reliable Flood Risk Management

### Lower Lounge

#### Open Knowledge Networks help address flooding and water-energy challenges

#### Lilit Yeghiazarian

University of Cincinnati  
lilit.yeghiazarian@uc.edu



The presentation will describe large NSF-supported projects that break data siloes across disciplines and sectors. Integrating data into Open Knowledge Networks (OKNs) answers complex questions about impacts of flooding and optimal management of the water-energy nexus. OKNs can be used for short-term forecasting and mitigation efforts, as well as long-term planning.

### Knowledge & Education to Inform Decisions

### Kurtzman Room

#### Will Climate Change Impact the Ohio River Basin?

#### Mark D. Kessinger

VP at DLZ Corp., formerly USACE (retired),  
mkessinger@dlz.com



In 2017, was the first study on how climate change is impacting the Ohio River Basin. Now that we are 7 years out from the completion of the study, we will compare the reports predictions to what we are seeing in recent weather patterns and offer potential mitigation strategies to minimize the impacts.



3:10-3:30 **Student Posters & Movement from Breakout**

3:30-4:30 **Plenary: Centering Communities and Environmental Justice Issues Across the Basin**



In the Ohio River Basin, there is a diversity of communities, histories, and priorities. From the Underground Railroad to the present, communities have pushed for equity and support to build vibrant local economies. In this session, Bishop Marcia Dinkins will introduce the work of the Black Appalachian Coalition and lead a discussion with local leaders from across the Basin to learn more about their work and priorities for federal funding.

**Assembly Room**

Panel Facilitated by:  
**Bishop Marcia Dinkins**  
Black Appalachian Coalition  
[marcia@blackappalachiancoalition.org](mailto:marcia@blackappalachiancoalition.org), (330) 307-9784

Featuring:  
**Pamela Mullins**,  
ORBA Trustee & Cultural Organizer and Advocate, along with other invited guests.

4:30-5:00 **Closing Remarks**

**Harry Stone**,  
ORBA Emeritus Chair

## RECEPTION

**6:00 - 8:00 PM Evening Event at Phipps Conservatory and Botanical Gardens & Award Ceremony (Included in ConferencTicket Fee- All 21+ Are Welcome)**

Address: 1 Schenley Drive, Pittsburgh, PA 15213

### RIVER KEEPER AWARD



**BILL  
JOHNSON**

During his esteemed tenure in Congress, Bill served as the Co-Chair of the Ohio River Basin Alliance Caucus. He has provided valuable insight, guidance, and advice as the Ohio River Basin Alliance worked to develop a strategy to encourage Congress to recognize officially the 14-state region as a priority for restoration and critical investment. Bill recognized during his 13-year tenure as a member of Congress, representing the 6th Ohio House District, which hugs the Ohio River, that this region is important to the success of the United States but is needing critical investments to ensure it remains the lifeblood of the United States. Bill's work serving on the Energy and Commerce Committee, the Commerce, Manufacturing and Trade, and the Energy and Economy Subcommittees helped ORBA educate many members of Congress in this region and to assist ORBA in developing soon to be critical legislation to recognize and fund critical necessary investments in the Ohio River Basin. ORBA is excited to welcome Bill to his new role and President of Youngstown State University where he is championing innovation, academic excellence, student success, and strategic growth in the region.

**7:30 - 8:30**      **Breakfast**      **Assembly Room**

8:30-8:45      **Opening Remarks**  
*Chris Lorentz, ORBA Vice Chair, Thomas Moore University*

8:45-9:15      **Plenary: ORBA Restoration Plan Overview and Next Steps**  
*Jordan Lubetkin, National Wildlife Federation*

9:15-9:30      **Morning Instructions & Movement**

**9:30 - 10:30**      **Breakout Sessions described on pages 20-22. Choose one track to attend.**

9:30-10:30      **Knowledge & Education to Inform Decisions**      **Kurtzman Room**

**Interactive Tabling Session: Citizen Science and Environmental Education Across the Ohio River Basin**

An interactive session showcasing environmental educators working across the Ohio River Basin. Hear from various organizations about their citizen science programs, how to get involved, and amplify these efforts. Tables will be set-up for you to informally visit, ask questions, and grab take-home materials.

**Groups:**

**Sierra Weir**  
**Three Rivers Waterkeeper**  
*sierra@threeriverswaterkeeper.org*

**Camden Johnson**  
*Carnegie Mellon University*  
**Watersmith Guild**  
*camden@cmu.edu*

**Morgan van der Linde**  
*Carnegie Mellon University*  
**Watersmith Guild**  
*mvanderl@andrew.cmu.edu*

**Facilitated by:**

**Jen Bowman**  
**Ohio University: Voinovich School of Leadership and Public Service**  
*bowmanj2@ohio.edu*

**Wendy Kedzierski & Laura Branby**  
**Allegheny College Creek Connections**  
*wkedzier@allegheny.edu*

**John Etgen**  
**Project WET**  
*john.etgen@projectwet.org*



**9:30 - 10:30 Breakout Sessions described on pages 20-22. Choose one track to attend.**

**9:30-10:30 Abundant Clean Water**

**Lower Lounge**

**Flowing Forward: Watershed Planning Tools & Strategies for Ohio River Basin Resilience & Sustainability**

**Beth Uhler**

*Center for Water Protection  
beu@cwpa.org*

In the context of rapid environmental change and growing populations, watershed planning is critical to sustainable water resource management. CWP developed the 8 Tools for Watershed Protection nearly 20 years ago. While these tools are still relevant, the technologies to support developing and implementing watershed plans have evolved. This session explores the importance of watershed planning through the foundational elements, new technologies, and its role in climate resiliency.

**Putting Your Plan Into Action: Lessons Learned from the Buffalo Creek Watershed**

**Sarah Koeing**

*Audubon Society of Western Pennsylvania  
skoenig@aswp.org  
(412) 963-6100*



Buffalo Creek is a High-Quality Watershed and Important Bird Area in southwestern Pennsylvania. Since completing the Buffalo Creek Watershed Conservation Plan 10-Year Update in 2019, Audubon Society of Western Pennsylvania has secured over \$1.7M for conservation, education, farmland preservation, and monitoring. This session will focus on keys to success such as partnerships, adaptability, engaging diverse stakeholders, and responding to community feedback.

**Nelson Milano**

*Audubon Society of Western Pennsylvania  
nmilano@aswp.org*

**River otter restoration in Pennsylvania: implications for the Conemaugh River**

**John Wentzel**

*Conemaugh Valley Conservancy  
jwentzel@pacvc.org  
(724) 396-2191*

The presentation will review successful efforts to reintroduce river otters in Pennsylvania and implications associated with the species' recovery in the Conemaugh River drainage.

**Thomas L Serfass**

*Frostburg State University  
tserfass@frostburg.edu  
(301) 697-3446*

9:30 - 10:30

Breakout Sessions described on pages 20-22. Choose one track to attend.

9:30-10:30

### Healthy & Productive Ecosystems

### Assembly Room

#### Freshwater Mussel Distribution in the Allegheny National Forest

WPC has been surveying freshwater mussel populations in the Allegheny National Forest region, in collaboration with National Forest staff, since 2013. Together we have made numerous discoveries in places that have been historically dead due to water quality impairments from early industries in the region which decimated aquatic populations. Documenting the current mussel populations has shown dramatic improvements in a number of locations in the region including the Clarion River.

#### Eric J. Chapman

*Western Pennsylvania Conservancy (WPC)*  
*echapman@paconserve.org*  
*(724) 471-7202 x5103*

#### Nate Welker

*nate.welker@usda.gov;*

#### Alysha Trexler

*atrexler@paconserve.org;*

#### Trent Millum

*tmillum@paconserve.org;*

#### John Berger

*jberger@paconserve.org*

#### Water Quality Changes from Stream and Wetland Restoration on Former Agricultural Land

In 2020, Ohio University was contracted to monitor water quality changes on a farm field as it was restored to natural wetland conditions. Monitoring was conducted before, during, and after site restoration, with a specific interest in nutrient and water retention. For the last three years, the field has served as a research site for OU graduate students, who have collected the data as part of their thesis projects.

#### Sebastian Teas

*Ohio University*  
*teas@ohio.edu*



#### Supreme Court Ruling on Sackett v EPA Redefining Waters of the United States (WOTUS): What does it mean for Wetlands, Streams, and Fish?

The purpose of the Clean Water Act (1972) is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters”. In §404(g), Congress excluded from states the ability to issue permits for the discharge of dredged or fill material into wetlands adjacent to navigable waters. However, in Sackett v. EPA (2023), the Supreme Court ruled that a wetland, to be afforded federal protection, must have a continuous surface connection with a protected water.

#### Patrick Shirey

*University of Pittsburgh*  
*pds25@pitt.edu*  
*(724) 316-5167*

10:30-11:00 **Student Posters & Movement from Breakout**



**11:00 - 11:30 Choose one track to attend.**

11:00-11:30

### Knowledge & Education to Inform Decisions

Assembly Room

#### A Human Health and Safety Framework for Ohio River Basin Restoration

The Ohio River runs 981 miles, supplying water to over 5 million people and supporting a rich ecology. It faces threats like sewage, toxic pollution, farm runoff, and flooding. A new framework, led by NWF, ORBA, and regional groups, calls for significant federal investment in restoring the basin with a focus on human health and security. Emphasizing a One Health approach, it involves collaboration among environmental scientists, health policy experts, and communities, aiming for ecological restoration and profound economic benefits.

**Dr. Ted Smith**  
*University of Louisville*  
[ted.smith@louisville.edu](mailto:ted.smith@louisville.edu)

### Abundant Clean Water

Lower Lounge



#### Lead, PFAS, and Climate Change: Understanding the Challenges Facing Drinking Water Systems in the Ohio River Basin

This session would provide an overview of the immediate challenges facing public drinking water systems in the basin, how these challenges impact water affordability and the role that various stakeholders can play in improving public drinking water system capacity and resilience. We would then turn to representatives from at least two public drinking water systems to provide specific details about the challenges they are addressing and how partnerships/collaborations are helping them address their challenges. Finally, we will identify both state and federal funding programs available to support public drinking water systems.

**Ellen Kohler**  
*Water Center at Penn*  
[ejkohler@sas.upenn.edu](mailto:ejkohler@sas.upenn.edu)

11:00-11:30

### Healthy & Productive Ecosystems

Kurtzman Room

#### A New Strategic Plan and Priority Species for Ohio River Basin Fish Habitat Partnership

Ohio River Basin Fish Habitat Partnership is updating its strategic plan and its priority species and habitats for investment. Please join a brainstorming session to help define these priorities and contribute ideas and activities for ORBFHP's first 12 months of operations under the new plan. Having water resource practitioners from the entire Ohio Basin is a not-to-be missed opportunity to gather collective wisdom about the needs and opportunities in the basin to improve the effectiveness of ORBFHP as an accelerator in habitat connectivity and a conduit for conservation investments.



**Lisa Hollingsworth-Segedy, AICP**  
*American Rivers*  
[lhollingsworth-segedy@americanrivers.org](mailto:lhollingsworth-segedy@americanrivers.org)

11:30-12:00 **Wrap Up, Raffle Winner, Student Poster Award, & Field Trip Instructions** Assembly Room

12:00-1:00 **Lunch** Assembly Room

2:00-5:00 **Field Trips**

**Option 1:** A site visit with USGS to a water quality monitoring site in Loweries Run

**Option 2:** Riverlife North Shore Ecosystem Restoration Walk

## EVALUATION

Thank you for taking the time to join us at the Ohio River Basin Alliance Summit. In order to make our future events as useful as possible, we would appreciate an additional 3-5 minutes of your time to complete this survey. All results are anonymous and will only be used to help us plan future events.



Please provide your feedback at <https://bit.ly/ORBAEvaluation>



# 2024 OHIO RIVER BASIN ALLIANCE

## POSTER & TABLE SESSIONS

Speaker	Title
<b>Matthew Oriente</b> <i>Chatham University (grad student) &amp; HydroPhos Solutions (co-founder)</i>	<b>Direct Application of Derived Wastewater Phosphorus on Agricultural Soils</b>
<b>Sarah Nelson</b> <i>West Virginia University, West Virginia Water Research Institute</i>	<b>Long term water quality trends in the Monongahela River Basin</b>
<b>Emily Huff and James Wood</b> <i>West Liberty University</i>	<b>Analysis of fecal bacteria trends in the Wheeling Creek watershed</b>
<b>Lauren Powell</b> <i>Millvale Community Development Corporation</i>	<b>Girty's Run, Millvale PA: Analysis of Ecological and Public Health History and Current Water Quality</b>
<b>Noah Meyer</b> <i>West Liberty University</i>	<b>Invasive exotic leaf litter and its effects on macroinvertebrate communities in an urbanized, impaired low-order Appalachian stream</b>
<b>Eli Hall</b> <i>University of Pittsburgh</i>	<b>Utilizing Remote Sensing and Stable Isotopes to Explore Nutrient Sources Driving Algae Blooms on the Allegheny Reservoir</b>
<b>Elizabeth Burkey</b> <i>West Liberty University</i>	<b>Interannual variation in water chemistry parameters indicates site specific trends</b>
<b>Geetika Godavarthy</b> <i>Pittsburgh Water Collaboratory</i>	<b>Analyzing the Impact of Train Derailments Across the Ohio River Basin</b>
<b>Rachel Garcia &amp; Evie Perry</b> <i>University of Pittsburgh</i>	<b>Tiny Contaminants, Major Consequences: Microplastics in Southwestern PA's Industrial World</b>
<b>Elle Faris</b> <i>Thomas More University Biology Field Station</i>	<b>Effects of Sediment Composition on Aquatic Macroinvertebrate Communities</b>
<b>Abiodun Ayo-Bali &amp; Emrah Özpolat</b> <i>University of Pittsburgh</i>	<b>Building Resilience: A Landslide Database for Southwestern Pennsylvania</b>
<b>Beth Dakin &amp; Brady Porter</b> <i>Duquesne University</i>	<b>Improvement of the fish community of Nine Mile Run (Allegheny County, PA) following reclamation</b>
<b>Rachel Spirnak</b> <i>West Virginia Water Research Institute</i>	<b>Three Rivers QUEST (3RQ) Mapping Tool for the Upper Ohio River Basin</b>
<b>Anusha Balangoda</b> <i>University of Pittsburgh</i>	<b>Information desk for young professionals</b>

Vote for the student poster award  
[bit.ly/ORBASStudentPoster](https://bit.ly/ORBASStudentPoster)



**THANK YOU TO OUR SPONSORS!**

# Carnegie Mellon University

Protecting the Muskingum River Watershed since 1933



  
**MUSKINGUM  
WATERSHED**  
CONSERVANCY DISTRICT  
[www.MWCD.org](http://www.MWCD.org)

# THANK YOU TO OUR SPONSORS!



**Our clean water future can be found where science and community meet.**

The **Pittsburgh Water Collaboratory** at the University of Pittsburgh bridges efforts in water research, governance, and action. Water is a defining feature of life in western Pennsylvania. There are growing opportunities to address serious water challenges like raw sewage overflows, aging infrastructure, and industrial contamination through collaborative interdisciplinary research.

**Together, the Pittsburgh region is committed to finding sustainable, research-based solutions.**

By connecting universities, local governments, non-profits, and community groups, the Pittsburgh Water Collaboratory aims to align efforts across the region. We work to ensure that data and expertise are accessible to those who need it, that research responds to real needs, and that students are prepared to solve real challenges, today and tomorrow.

**Learn more our work at [water.pitt.edu](http://water.pitt.edu)**



THE OHIO RIVER BASIN ALLIANCE BOARD  
OF TRUSTEES AND SUMMIT CO-CHAIRS

## Thank you volunteers

From brainstorming sessions, to the MANY committees; from proposal review, to helping run the event; your time and energy made all this happen. We are grateful.



# THANK YOU TO OUR SPONSORS!



## We are building the future of clean water for our region.

Each year, approximately 9 billion gallons of wastewater overflow into our region's waterways. As one of the four pillars of ALCOSAN's Clean Water Plan, our Plant Expansion program will provide additional treatment capacity and help reduce the number of overflows caused by excess stormwater entering the system.

To learn more about ALCOSAN and our Clean Water Plan, please visit [www.alcosan.org](http://www.alcosan.org).




### Water Resource Center

Southwestern Pennsylvania Commission

Improving Water Quality & Regional Resilience One Drop at a Time

- ✓ Regional Resources
- ✓ Educational Resources
- ✓ Regulations

Visit Our Website:  
<https://spcwater.org/>



- STORMWATER
- DRINKING WATER & WASTE WATER
- FLOODING
- PLANNING & RESILIENCY



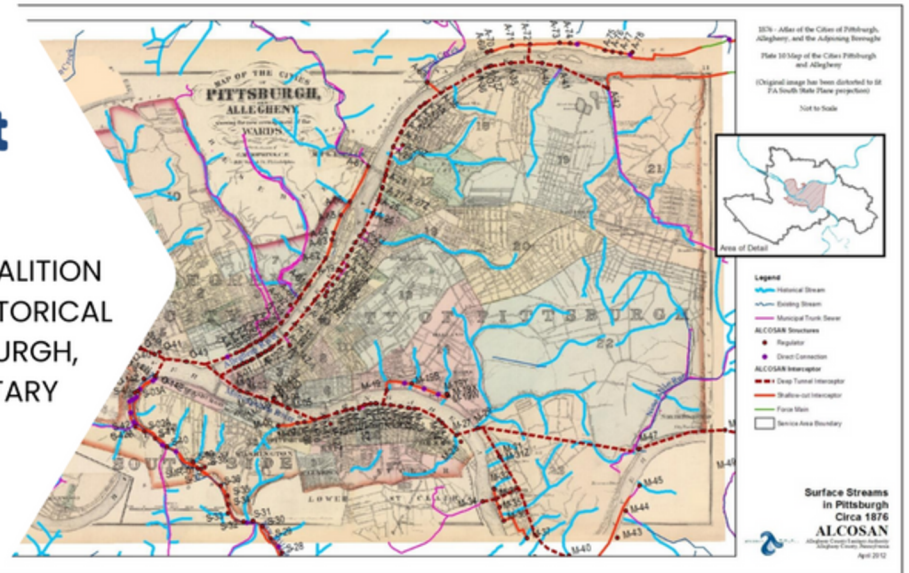
## The Mon Water Project

### OUR MISSION.

THE MON WATER PROJECT (MWP) & ITS COALITION WILL CONSERVE, RESTORE, & ENJOY THE HISTORICAL CRICKS & HOLLOWES OF THE CITY OF PITTSBURGH, PROTECTING OUR NEIGHBORHOOD'S TRIBUTARY WATERS TO THE MONONGAHELA RIVER.

(724) 989-1812 [www.monwaterproject.org](http://www.monwaterproject.org)  
 annie@monwaterproject.org

Surface Streams in Pittsburgh, Circa 1876



Surface Streams in Pittsburgh Circa 1876  
 ALCOSAN  
 Allegheny County Sanitary Authority  
 April 2012

## NETWORKING OPPORTUNITIES

### POST SUMMIT



#### DRINK YOUR WATERSHED

Join Three Rivers Waterkeeper on November 2nd at Pittsburgh Brewing Company to celebrate their work towards drinkable, swimmable, and fishable waters! Enjoy food, drinks, shuffleboard, and a brewery tour! There will also be a silent auction and a door prize! Help them work towards clean water and join them! Tickets at [3RWK.ORG/water](https://3rwk.org/water)

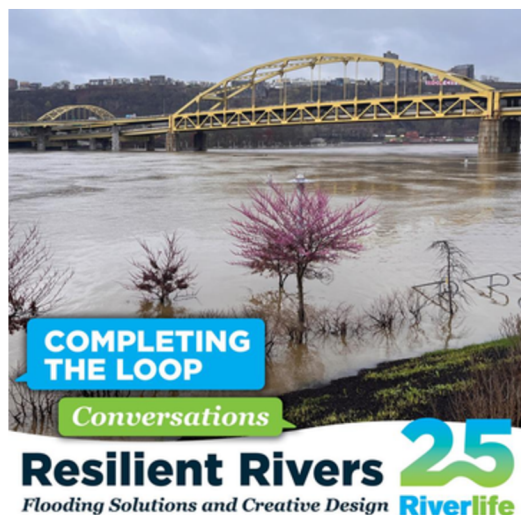
#### EAST HILLS RAIN GARDEN BLOCK PARTY



UpstreamPgh and East Hills residents are celebrating the completion of the Dornbush Street Rain Garden project with a community Block Party along Bricelyn Street on Saturday, November 2nd from 1:00-4:00pm!

This green infrastructure project transformed a few vacant lots into rain gardens that will capture 1.75 million gallons of stormwater annually and will soon house a beautiful piece of custom art by local artist Marlana Adele Vassar. Register at <https://upstreampgh.org/events/block-party-110224/>

#### COMPLETING THE LOOP CONVERSATIONS



Saturday, November 2 | 10:00 AM - 11:00 AM

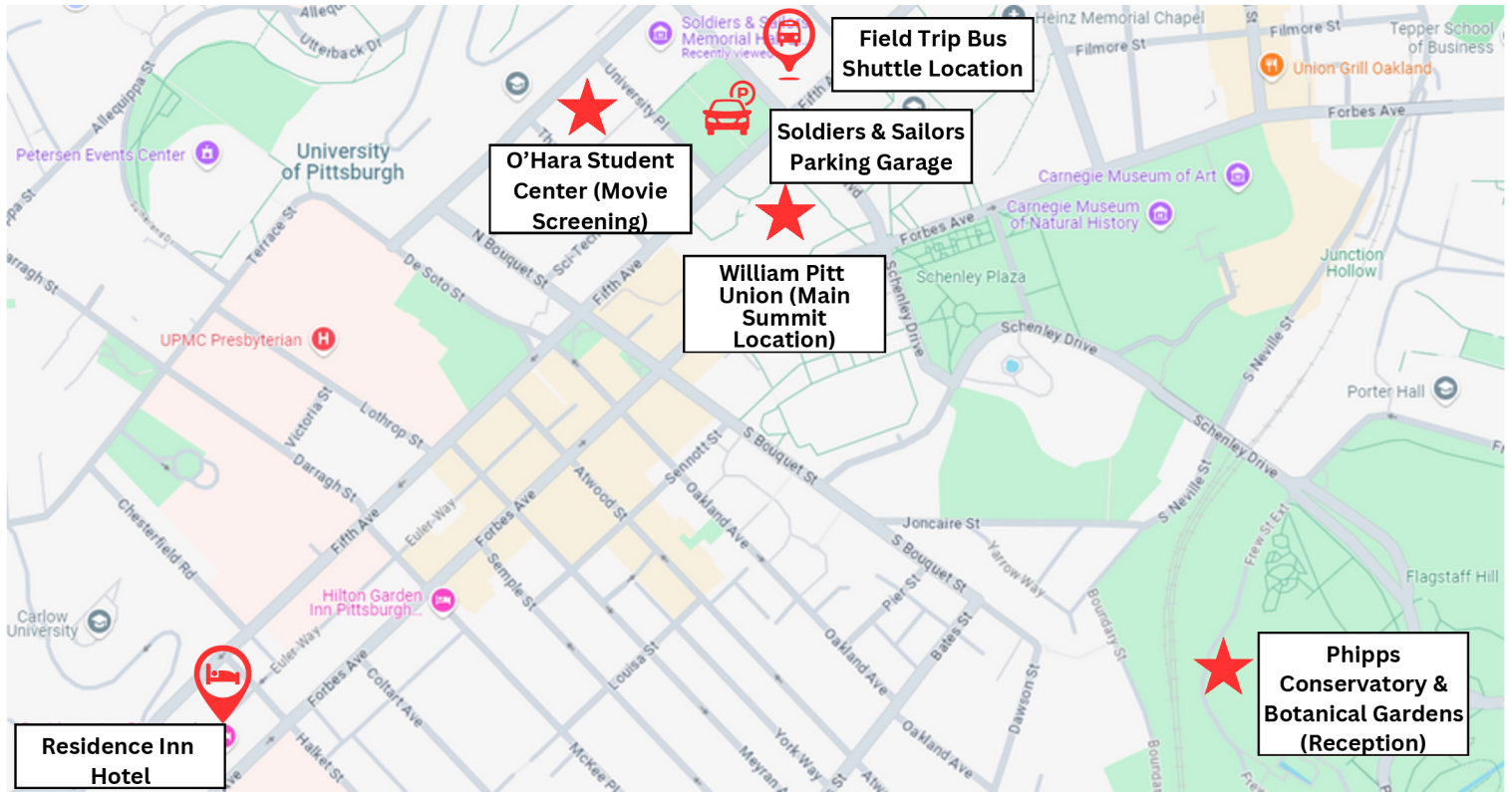
Kamin Science Center | Science Stage

Hear from Jennifer Cristobal of the Army Corps of Engineers on the largest initiatives restoration project on the Ohio River, and Sans Facon artists Charles LaBlanc and Tristan Surtees, and artist collaborator Steve Gurysh on how their work connects communities to the river while addressing climate change and resilient solutions. Gavin White, Riverlife's Director of Projects and Planning, will guide this important discussion on balancing nature, infrastructure, and community connection.

Complimentary Hot Chocolate will be available for those joining us for the brief stroll! Register at

<https://docs.google.com/forms/d/e/1FAIpQLSfV-rY-dPUgff0vIwKKOS6ZaN3D8a94AeWstH2K1RkfKTswdQ/viewform>

# SUMMIT MAP



**THANK YOU FOR  
ATTENDING**