Wednesday, 27 September 2017

Wednesda	ay, 27 Sept	ember 2017	
Start Time	End Time		
10:00 AM	NOON	Registration	Memorial Student Center Lobby
10:00 AM	on	Self-Guided Tour of the Marshall University Green Trail	Green Trail maps will be available at the registration desk
1:00 PM -	4:30 PM	Field Trip to R.C. Byrd Locks and Dam, and WV DNR Apple Grove State Fish Hatchery	Meet outside 5 <sup>th</sup> Avenue Entrance to the Memorial Student Center
2:00 PM -	3:30 PM	Pre-Meeting Information session on the Planning Center of Expertise for Inland Navigation & Risk-Informed Economics (PCXIN-RED) USACE, Huntington District. Hosted by P.J. Donovan, Chief, PCXIN-RED	SRC Conference Room, Memorial Student Center
4:30 PM -	6:00 PM	ORBA Steering Committee & Advisors Business Meeting – <i>by invitation only</i>	Memorial Student Center – Shawkey Room
6:00 PM -	8:00 PM	ORBCRE Trustees Meeting & Dinner – <i>by invitation only</i>	Memorial Student Center – Shawkey Room
8:00 PM -	10:00 PM	ORBCRE/ORBA Leadership Reception – by invitation only	Weisberg Family Applied Engineering Complex Green Roof

# Thursday, 28 September 2017

## **MORNING**

Start Time	End Time		Location
8:00 AM -	9:00 AM	Registration	Memorial Student Center Lobby
8:00 AM -	9:00 AM	Poster Setup	MSC Marco's
9:00 AM -	9:20 AM	University & City Welcoming Remarks	MSC BE-5
9:20 AM -	9:30 AM	Dr. Terry Chang – Welcome from ORBCRE	MSC BE-5
9:30 AM -	9:40 AM	Dr. Harry Stone – Welcome from ORBA & working group information	MSC BE-5
9:40 AM -	9:45 AM	Dr. Chuck Somerville – Introduction of Keynote Speaker	MSC BE-5
9:45 AM -	10:30 AM	Keynote Address – <i>Ohio River Basin</i> climate change mitigation and adaptation report - Mr. Mark Kessinger, DLZ National, Inc.	MSC BE-5
10:30 AM -	10:45 AM	Morning Break – Visit Posters & Sponsors; Post in "Parking Lots"	MSC BE-5, Marco's
10:45 AM -	10:50 AM	K-12 Education & Outreach Panel Information – Ms. Heather Mayfield	MSC BE-5
10:50 AM -	10:55 AM	Inland Navigation Panel Information – Ms. Kari Mackenbach, ms consulting	MSC BE-5
10:55 AM -	11:00 AM	Drone-Based Assessment Tools Panel Information – Dr. Anne Axel	MSC BE-5
11:00 AM -	11:05 AM	Citizen Engagement Panel Information – Ms. Angie Rosser	MSC BE-5
11:05 AM -	11:10 AM	Citizen Science Panel Information – Mr. Ted Lozier	MSC BE-5

# Thursday, 28 September 2017

### **MORNING & LUNCH**

Start Time	End Time		Location
11:10 AM -	11:15 AM	HAB Collaboration Panel Information – Mr. Ted Lozier	MSC BE-5
11:15 AM -	11:20 AM	Water Quality Monitoring Panel Information – Mr. Ted Lozier	MSC BE-5
11:20 AM -	11:25 AM	Flood Control & Risk Reduction Panel Information – Dr. Harry Stone	MSC BE-5
11:25 AM -	11:30 AM	Attracting Industry Panel Information – Dr. Harry Stone	MSC BE-5
11:30 AM -	11:35 AM	Environmental Flow & Sustainable Rivers Information – Dr. Sarah Hippensteel Hall	MSC BE-5
11:35 AM -	NOON	Visit Posters & Sponsors; Post in "Parking Lots"	MSC BE-5, Marco's
NOON -	1:30 PM	Luncheon Lunch Talk: Are We There Yet? Journey to a Unified Ohio River Basin Voice. Dr. Harry Stone, Chair, ORBA Steering Committee	MSC - Don Morris Room
1:30 PM -	2:00 PM	Visit Posters & Sponsors; Post in "Parking Lots"	MSC BE-5, Marco's

## Schedule of Events - Concurrent Scientific Presentations

### Thursday, 28 September 2017

#### **AFTERNOON**

2:00 PM -	3:00 PM	Concurrent Scientific Presentations 1 –	MSC BE-5
		Water Quality	

- 1. Harmful algal bloom smart device application and fixed camera monitoring for classification of harmful algal blooms. M. Waters, Northern Kentucky University
- 2. How will installation of plastic liners in Minor Clark Fish Hatchery ponds alter sediment-water nutrient dynamics? B. Reeder, Morehead State University
- *3. TBD*

2:00 PM -	3:00 PM	Concurrent Scientific Presentations 2 –	MSC Shawkey
		Discharge and Flow Modeling	Room

- 1. Development of a reservoir system operation model for water sustainability in the Yaqui River basin. A. Mounir et al., Ohio University
- 2. *Ice jam conditions of selected rivers in northern part of United States in changing climate.* S. Sharma and H. Williams, Youngstown State University
- 3. Modeling discharge in a watershed affected by acid mine drainage: the upper Raccoon Creek in Ohio. D. Lopez et al., Ohio University

2:00 PM -	3:00 PM	Concurrent Scientific Presentations 3 –	MSC SRC
		Aquatic Community Dynamics	Conference Room

- 1. Seasonal variation in the impact of acid mine drainage (AMD) on stream macroinvertebrate communities. A. Travers and K. Johnson, Ohio University
- 2. Considering multiple stressors: macroinvertebrate recovery rates from simulated flood scouring across a gradient of acid mine drainage impairment. M. Thrush Hood and K. Johnson, Ohio University
- 3. Structure, resilience, and fate of large river bacterial communities. G. Schultz and J. Kovatch, Marshall University

2:00 PM -	3:00 PM	Concurrent Scientific Presentations 4 –	MSC Room 2W22
		Novel Methods for Water Quality	
		Assessment	

- 1. Reliability and sustainability assessment of surface water quality. M. Riasi et al., University of Cincinnati
- 2. Assessing toxicants in effluents using fluorescent microscopy in C. elegans. S. Penta and E. Blough, Marshall University
- 3. HydroGrid. L. Yeghiazarian, University of Cincinnati

# **Schedule of Events – Concurrent Scientific Presentations**

### Thursday, 28 September 2017

#### **AFTERNOON**

3:00 PM -	4:00 PM	Concurrent Scientific Presentations 5 –	MSC BE-5
		Water Quality	

- 1. Three Rivers Quest (3RQ) project: a multi-university collaboration for water quality monitoring in the upper Ohio River basin. M. O'Neal, West Virginia University
- 2. Impact of land use on water quality of Mill Creek watershed. M. Koirala, et al., Youngstown State University
- 3. Creek Connections . . .bringing watershed education to upper Ohio watershed K-12 schools through yearlong creek site sampling for over 20 years. L. Branby, Creek Camp Director, Allegheny College

3:00 PM -	4:00 PM	Concurrent Scientific Presentations 6 –	MSC Shawkey
		Watershed Planning	Room

- 1. Watershed planning. J. Buchanan, USACE, Huntington District
- 2. Appalachian Ohio clean watershed initiative (AOCWI) ArcGIS online watershed planning tool: using data to foster partnerships to improve water quality across Ohio's coal bearing region. B. Stokes, et al. Ohio University
- *3. TBD*

3:00 PM -	4:00 PM	Concurrent Scientific Presentations 7 –	MSC SRC
		Stream Restoration	Conference Room

- 1. Long term partnerships among Ohio University agencies and communities make a difference: 20 years of restoration in acid mine impaired watersheds. J. Bowman, et al. Ohio University
- 2. Twenty year success of urban stream restoration of Mill Creek Cincinnati: from ten worst in 1997 to near compliance in 2017. M. Miller, et al. University of Cincinnati
- *3. TBD*

3:00 PM -	4:00 PM	Concurrent Scientific Presentations 8 –	MSC Room 2W22
		Modeling Surface Water Networks	

- 1. Structural controllability of surface water networks. M. Riasi, and L. Yeghiazarian. University of Cincinnati
- 2. The temporal evolution of risk of microbial contamination in surface water using systems reliability approach. J. Myers, and L. Yeghiazarian. University of Cincinnati
- 3. Modeling the flood of 2016. J. Schray USACE Huntington District

## Schedule of Events – Panel Discussions

### Thursday, 28 September 2017

#### **AFTERNOON**

4:00 PM -	5:00 PM	Panel Discussion – Water Quality	MSC BE-5
		Monitoring	

*Moderator* – Mr. Richard Harrison, PE, Executive Director & Chief Engineer, Ohio River Valley Water Sanitation Commission (ORSANCO)

Panelist – Mr. Jason Heath, Director of Technical Programs, ORSANCO

Panelist – Mr. Jeff Frey, Deputy Director, US Geological Survey, Indiana Science Center

Panelist – Mr. Nicholas Murray, Environmental Resource Specialist Supervisor, WV Department of Environmental Protection

4:00 PM -	5:00 PM	Panel Discussion – Drone Based	MSC Shawkey
		Assessment Tools	Room

Moderator – Dr. Anne Axel, Assistant Professor of Biological Sciences, Marshall University

Panelist – Dr. Mack McCarty, Geospatial Section, USACE Huntington District

Panelist – Dr. Jamie Leonard, Professor of Geography, Marshall University

4:00 PM -	5:00 PM	Panel Discussion – K-12 Education &	MSC SRC
		Outreach	Conference Room

*Moderator* – Ms. Heather Mayfield, Director, Foundation for Ohio River Education (FORE)

Panelist – Ms. Tomi Bergstrom, Western Watershed Basin Coordinator and Project WET Coordinator, WV Department of Environmental Protection

Panelist - Dr. Steven Kerlin, Director of Education, Stroud Water Research Center

4:00 AM -	5:00 PM	Panel Discussion – Attracting Industry to	MSC Room 2W22
		the Ohio River Basin	

Moderator – Mr. Harry Stone, Chair, Ohio River Basin Alliance

Panelist – Mr. Michael Jacoby, VP for Business Development, Appalachian Partnership for Economic Growth

Panelist – Mr. David Lieving, Huntington Area Development Council

Panelist – Mr. Tim Gibbs, Ashland Alliance

# Thursday, 28 September 2017

## **EVENING**

<b>Start Time</b>	<b>End Time</b>		Location
5:00 PM -	5:30 PM	Visit Posters & Sponsors; Post in "Parking Lots"	MSC BE-5, Marco's
6:30 PM -	8:00 PM	ORBCRE/ORBA Banquet & Award Ceremony. Guest Speaker, Colonel Philip M. Secrist, USACE, Huntington District Commander	MSC Don Morris Room

# **Poster Session**

# Thursday, 28 September 2017

**ALL DAY** 

Board No.	Title, Authors and Affiliations
1	The effect of increased nutrient loading on periphyton community metabolism. M.M. Armstead. Marshall University, Department of Natural Resources & the Environment.
2	Use of a dehumidifier to develop a statewide interpretation of atmospheric water vapor quality in Ohio. D. Smetzer, and T.J. Chang. Ohio University, Russ College of Engineering.
	Additional posters under review

### Friday, 29 September 2017

#### **Morning**

<b>Start Time</b>	End Time		Location
7:30 AM -	8:00 AM	Visit Posters & Sponsors; Post in "Parking	′
		Lots"	Marco's

8:00 AM -	9:00 AM	Panel Discussion – Citizen Engagement	MSC BE-5

*Moderator* – Ms. Angie Rosser, Executive Director, West Virginia Rivers

Panelist – Dr. Eric Fitch, Director, Environmental Science Program, Marietta College

Panelist – Ms. Robin Blakeman, Ohio Valley Environmental Coalition (OVEC)

8:00 PM -	9:00 AM	Panel Discussion – Inland Navigation:	MSC Shawkey
		Issues & Opportunities	Room

Moderator - Ms. Megan Barnes, Chief Administrative Officer, Superior Marine Ways, Inc

Panelist – Mr. Patrick Donovan, Director, PCXIN-RED, USACE Huntington

Panelist - TBD

8:00 AM -	9:00 AM	Panel Discussion – Harmful Algal Blooms	MSC SRC
		(HABs) Collaboration	Conference Room

Moderator – Mr. Ted Lozier Chief of Conservation, Muskingum Watershed Conservancy District

Panelist – Dr. Mindy Armstead, Associate Professor of Natural Resources & the Environment, Marshall University

Panelist – Dr. Miriam Kannan, Professor Emeritus of Biological Sciences, Northern Kentucky University

Panelist – Mr. Justin Schneider, Director of State Government Relations, Indiana Farm Bureau

8:00 AM -	9:00 AM	Panel Discussion – Flood Control & Risk	MSC Room 2W22
		Reduction	

Moderator – Dr. Harry Stone, Chair, Ohio River Basin Alliance

Panelist – Mr. Brandon Brummet, USACE Louisville District

Panelist – Ms. Kari Mackenbach, Director of Sustainability, ms consultants, inc.

Panelist – TBD

## Friday, 29 September 2017

### **Morning**

Start Time	End Time		Location	
9:00 AM -	10:00 AM	Panel Discussion – Citizen Science	MSC BE-5	
Moderator –	Mr. Ted Loz	ier, Chief of Conservation, Muskingum Wate	rshed Conservancy	
]	District			
Panelist – Mr	. John King,	Office of the Environmental Advocate, WV I	Department of	
]	Environmental Protection			
Panelist – Mr	. Andrew Jol	hnson, Four-Pole Creek Watershed Association	on	
Panelist – Dr.	Panelist – Dr. Michael Miller, Professor Emeritus, University of Cincinnati			
		,		
9:00 AM -	10:00 AM	Panel Discussion – Environmental Flow &	MSC Shawkey	
		Sustainable Rivers	Room	

9:00 AM -	10:00 AM	Panel Discussion – Environmental Flow &	MSC Shawkey
		Sustainable Rivers	Room

Moderator – Dr. Sarah Hippensteel Hall, Miami Conservation District

Panelist – Mr. Steven Foster, Limnologist, USACE Huntington District

Panelist – Mr. John Stark, The Nature Conservancy

Panelist - Dr. Chris Lorentz, Professor of Biological Sciences, Thomas More College

9:00 AM -	10:00 AM	Panel Discussion – Collaborations across	MSC Room 2W22
		Watershed & Organizational Boundaries	

Moderator – Mr. Harold Jordahl, Director, America's Watershed Initiative

Panelist - Mr. Harry Stone, Steering Committee Chair, Ohio River Basin Alliance

Panelist – Dr. Charles Somerville, Dean, College of Science, Marshall University

### Friday, 29 September 2017

### **Morning**

<b>Start Time</b>	<b>End Time</b>		Location
10:00 AM -	10:15 AM	Morning Break – Visit Posters & Sponsors;	MSC BE-5,
		Post in "Parking Lots"	Marco's
10:15 AM -	10:45 AM	GIS Resource Use and Users Group	MSC BE-5

Speaker – Mr. Michael Saffran, Civil Works Planning, USACE Great Lakes and Ohio River Division. USACE Ohio River Basin Initiatives

10:50 AM -	11:50 AM	ORBA Working Group Report-Outs	MSC BE-5

Water Availability & Management – Mr. Ted Lozier, PE, Muskingum Watershed Conservancy District

Restoration & Protection – Dr. Sarah Hippensteel Hall, Miami Conservation District Enterprise & Infrastructure – Ms. Kari Mackenbach, ms consultants, inc. Sustainable Growth & Competitiveness – Dr. Harry Stone, Steering Committee Chair, ORBA

10:50 AM -	11:50 AM	Concurrent Scientific Presentations 9 –	MSC SRC
		Environmental Engineering	Conference Room

- 1. Massive tunnel protects downtown Columbus. J. Coffey, DLZ National, Inc.
- 2. Unleashing the power of water to produce green energy. B. Bauchmire, DLZ National, Inc.

11:50 AM -	NOON	Closing Remarks – Dr. Chuck Somerville	MSC BE-5

THANK YOU!