2023 CONFERENCE AGENDA STREAM RESTORATION 2023: FINDING COMMON GROUND

*Check for updates as the agenda is subject to change.

Sunday, August 20, 2023

1:00 - 5:00 pm Location: 5th Floor Exhibit Hall Registration & Conference Information Desk Open Exhibitor Set-Up

Monday, August 21, 2023

7:00 am (5th Floor - Lobby)
Registration & Conference Information Desk Open

8:30 - 11:15 with a 10 am Break

Pre-Conference Workshops

- 1. Restoration Planning in Developing Countries Location: Fells Point
- 2. Design of Road Crossings for Resiliency and Aquatic Organism Passage (AOP) Location: Watertable
- 3. 2D Hydrodynamic Modeling for Stream Restoration Design Location: Baltimore B
- 4. Eccleston Restoration Project A Coldwater Fisheries Floodplain Restoration Design Location: Kent
- 5. Finding Common Ground to Promote Holistic Restoration Approaches in the Coastal Plain Location: Homeland
- 6. Expanding Monitoring and Performance to Dynamic Stream Systems Location: Baltimore A

11:15 - 1:00 pm - Lunch on Your Own

1:00 pm- 4:45 pm Location: Maryland Ball Room

Opening Plenary Session

Integrated Restoration & Design Approaches

Moderator: Barbara Doll, PhD, PE, North Carolina State University

1:00 pm

Welcome & Opening Remarks

- -- Ken White, Resource Institute
- -- Barbara Doll, PhD, PE, North Carolina State University
- -- Rich Starr, Ecosystem Planning & Restoration

1:30 pm

The State of America's Rivers

-- Serena McClain, Director, River Restoration, American Rivers, Fairfax, VA

2:00 pm

Fostering Riverine Diversity: River-Wetland Corridors

-- Ellen Wohl, PhD, Colorado State University, Fort Collins, CO

2:20 pm

Finding Common Ground Between Different Types of Stream Restoration Design Methods

-- Will Harman, Stream Mechanics, Raleigh, NC

2:40 pm - Q&A with the Presenters

3:00 pm Break in the Exhibit Hall

3:20 - 4:50 pm Panel Discussion

Integrated Restoration & Design Approaches

Session Moderator - Barbara Doll, PhD, PE, North Carolina State University

Panelist Panelist Bios

- -- Rich Starr, Ecosystem Planning & Restoration
- -- Joe Arrowsmith, PE, Straughan Environmental, Columbia, MD
- -- Jim Morris, PE, Johnson, Mirmiran & Thompson (JMT), Cockeysville, MD
- -- Bob Siegfried, RES, Odenton, MD
- 3:50 Q&A with the Presenters

4:10 pm Integrated Restoration & Design Approaches - Regional Perspectives

- -- Jason Vogel, University of Oklahoma, Norman, OK
- -- Aarin Teague, PhD, PE, CFM, ENV SP, San Antonio River Authority, San Antonio, TX
- -- AJ Jones, PE, ESCM, Wolf Water Resources, Portland, OR
- -- David Bidelspach, 5 Smooths Stone Restoration, Livermore, CO
- -- Greg Jennings, PhD, PE, Jennings Environmental, Asheville, NC

4:35 - Q&A with the Presenters

6 - 8 pm Sponsors' Reception (Exhibit Hall)

Tuesday, August 22, 2023

7:30 am (5th Floor - Lobby)

Registration & Conference Information Desk Open

8:30 am- 12:10 pm Technical Breakout Sessions

with a Break at 10:10 am in the Exhibit Hall

A Session - Vegetation Considerations & Project Implementation

(Location: Fells Point)

B Session - Headwaters, Floodplain Reconnection & Urban Case Studies

(Location: Baltimore A)

C Session - Structures, Innovative Approaches, Beaver, Wetlands

& Stage 0 Restoration (Location: Watertable)

D Session - Contemplating Future Challenges, Flood Mitigation & Watershed

Planning (Location: Homeland)

E Session - Benthos & Fish Habitat (Location: Kent)

F Session - Dam Removal (Location: Baltimore B)

12:10 – 1:30 pm Lunch Provided (Maryland Ballroom)

1:30 - 5:10 pm Technical Breakout Sessions

with a Break at 3:10 pm in the Exhibit Hall (Exhibit Hall)

G Session - Outreach & Education (Location: Kent)

H Session - Legacy Sediment & Floodplain Reconnection (Location: Watertable)

I Session - 2-D Hydraulic Modeling & UAV Technology (Location: Baltimore A)

J Session - Gauging Project Success, Reference Reaches, Regional Curves & Channel Adjustment (Location: Homeland)

K Session - Functional Assessment & Water Quality Assessment

(Location: Fells Point)

L Session - Flooding, Erosion, Urban Infrastructure & Tidal Creek Restoration

(Location: Baltimore B)

5:10 pm Adjourn for the Day

5:30 pm A Night at Camden Yards

Hosted by the Maryland Stream Restoration Association

With Special Thanks to RES, Environmental Quality Resources

& Resource Institute

Wednesday, August 23, 2023

7:30 am (Lobby in Front of Federal Hill)

Registration & Conference Information Desk Open

7:15 - 8:15 am

WiSR (Women in Stream Restoration) Confluence: Building Leadership & Connections in the Restoration Landscape

(Location: Baltimore B)

-- A speed networking event for women in the stream restoration field

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7:10-7:20	Sign-in
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7:20 Opening Remarks, Purpose & Vision

7:30 Networking Sessions

8:00 Engagement board roundup

8:05 Closing Remarks

8:15 Adjourn

8:30 am- 12:00 pm

Closing Plenary Session (Maryland Ballroom)

Moderator -- Mike Galvin, PE, JMT

8:30 am

Looking for New Partners and New Sources of Funding? Have you tried the Farm Bill?

-- Dan Wrinn, National Director of Government Affairs, Ducks Unlimited, Inc., Washington, DC

9:00 am - A Canadian (Ontario) Perspective on River Restoration

-- Ed Gazendam, PhD, PE, Water's Edge Environmental Solutions Team Ltd, Cambridge Ontario

9:30 am - 10:15

Panel Discussion - Permitting Innovation: The Challenges and Opportunities for Restoring Dynamic Stream Systems under the CWA 404 Program

- -- Adam Riggsbee, RiverBank Conservation, LLC & Ecological Restoration Business Association, Austin, TX
- -- Brian Topping, US EPA, Office of Water, Washington DC (Invited)
- -- Dave Urban, Ecosystem Investment Partners, Baltimore, MD

10:15 am - Break in the Exhibit Hall

10:35 am

Funding Green Infrastructure Projects

-- Charles Flink, FASLA, Initiative for Community Growth and Development, NC State University

11:35 am

National Stream Restoration Conference Needs Assessment

-- Stephen Pawlak, JMT

11:45 am Cash Drawing for \$500 (Must be Present to Win)

12 pm Conference Adjourns - See you in 2024!

12:30 pm Optional Field Trip - Advance Registration Required
Engineered Wood Structures as a Restoration Approach
- See it for Yourself
Hosted by Biohabitats, GreenVest & Environmental Quality Resources

A SESSION LOCATION: FELLS POINT MODERATOR: GREG GOLDEN VEGETATION CONSIDERATIONS & PROJECT IMPLEMENTATION

Vegetation Considerations

8:30 am

Vegetation and Natural Materials Used for Channel and Floodplain Restoration – Piney Run at Lake Werowance

- -- George Rhodes, Stantec, Fredericksburg, VA
- -- Heather Ambrose, Fairfax County Stormwater Planning Division, Fairfax, VA

8:50 am

Maintaining Forests in Stream Corridor Restoration

-- Lisa Fraley-McNeal, Center for Watershed Protection, Inc., Fulton, MD

9:10 am

To Remove or Not to Remove: The Tree Removal Question

-- Mike Trumbauer, CERP, Biohabitats, Inc., Baltimore, MD

9:30 am

Watercourses and UK Woodland Establishment

- -- Pierre Talpe, Rainbow Professional, Hull, East Yorkshire, UK
- -- Nick May, Ecosulis, London, UK

9:50 am

Vegetation Management in Restored Floodplain/Wetland Complexes

-- Nick Myers, LandStudies, Inc, Lititz, PA

10:10 am

Break in the Exhibit Hall

Project Implementation

10:30 am

The Use of Large Woody Material (LWM) to Promote a Dynamic and Diverse Channel with Increased Floodplain Connectivity on the Bird Track Springs Fish Habitat Enhancement Project

-- Nick Danis, PE, Stantec, Portland, Oregon

10:50 am

Catheys Creek Restoration and Municipal Water Intake Rehabilitation

-- Greg Jennings, PhD, PE, Jennings Environmental, Asheville, NC

11:10 am

Riparian Buffer Establishment In Urban Watersheds

-- Chris Tinklenberg, PWS, Kimley-Horn and Associates, Inc., Charlotte, North Carolina

11:30 am

The Value of the Design-Build Experience

- -- Ty Williams, Wildlands Engineering, Inc., Mount Pleasant, SC
- -- Doug Smith, Wildlands Construction, Charlotte, NC

11:50 am

Engineers and Contractors Finding Common Ground During Challenging Economic Times

-- Chris L. Yow, PE, Burns & McDonnell, Roanoke, VA

B SESSION LOCATION: BALTIMORE A MODERATOR: JOSH WHITE, WATER & LAND SOLUTIONS HEADWATERS AND FLOODPLAIN RECONNECTION & URBAN CASE STUDIES

Headwaters and Floodplain Reconnection

8:30 am

Stream Rehabilitation through UNC Charlotte's Campus Toby Creek and Mallard Creek, Mecklenburg County

-- Jake Maschoff, PE, Kimley-Horn and Associates, Inc., Charlotte, North Carolina

8:50 am

From Fish Farm to Floodplain - A Story of Relocation and Restoration

-- David Hursey, PE, Kimley-Horn, Raleigh, North Carolina

9:10 am

More Than Dirt: Soil Health Enhancement for Floodplain Restorations

-- Shreeram Inamdar, University of Delaware, Newark, Delaware

9:30 am

Cat Branch Stream/Valley Restoration, Stormwater Management Pond Retrofit, and Outfall Retrofit

-- Sean Crawford, PE, BayLand Consultants & Designers, Inc., Hanover, MD

9:50 am

Demonstration and Evaluation of Regenerative Stormwater Conveyance (RSC) for Reducing Nutrient Pollution from Agricultural Sources

-- Barbara Doll, PhD, PE, NC State University, Raleigh, NC

10:10 am

Break in the Exhibit Hall

Urban Case Studies

10:30 am

A Nature-Based Approach for Resilient Infrastructure: SEPTA Jenkintown Stream Restoration

-- Tyler Charles, PE, JMT, Philadelphia, PA

10:50 am

Unearthing Ecological Potential: Daylighting and Restoring A Stream that had Been Buried for a Century

-- Katie Talley, Biohabitats, Inc., Baltimore, MD

11:10 am

Alleviating Flood Damage to Critical Hospital Infrastructure through Stream Restoration at Jewish Hospital and St. Mary's Foundation in Louisville, Kentucky

-- Bradley M. Anderson, PE, CPESC, LEED AP, RES (Resource Environmental Solutions), Louisville, KY

11:30 am

Watershed-Scale Restoration in a Highly Urbanized Setting

-- Max Breslin, GreenVest, LLC, Bowie, Maryland

11:50 am

Northern Virginia Stream Restoration Bank (NVSRB) – Wetland Success?? Case Study of an Urban Stream Priority 1 Restoration Project Restoring Riparian Wetlands

-- Frank Graziano, PE, Wetland Studies and Solutions, Inc., Gainesville, VA

C SESSION LOCATION: WATERTABLE MODERATOR: STEPHEN PAWLAK, JMT STRUCTURES AND INNOVATIVE APPROACHES & BEAVER, WETLANDS, AND STAGE 0 RESTORATION

Structures and Innovative Approaches

8:30 am

Rewilding a Floodplain in Carmel, California

-- Joseph Zhang, PE & Ben Snyder, PE, SWCA Environmental Consultants, Fort Collins, CO

8:50 am

Opportunities for Ecological Restoration along Forested Headwater Streams in Kentucky's Appalachian Mountains

-- Jennifer D. Shelby, RES (Resource Environmental Solutions), Louisville, Kentucky

9:10 am

All Woody Streambank Stabilization Restoration on HOA Budget Presentation

-- Alexander Ottley, River to Tap, Inc., Dunwoody, GA

9:30 am

Standardization and Innovation, Can They Coexist? - Seeking The Best of Both for Stream Restoration

-- Lindsay Nicoll, McCormick Taylor, Baltimore, MD

9:50 am

Long-Term Study of the Effect of In-stream Structures near Bridges on Streambank Erosion and Stream Migration

-- Jason Vogel, PhD, PE, University of Oklahoma, Norman, Oklahoma

10:10 am

Break in the Exhibit Hall

Beaver, Wetlands, and Stage 0 Restoration

10:30 am

Floodplains: The Recordkeepers of Watershed History

-- Justin Spangler, PE, LandStudies, Inc., Lititz, PA

10:50 am

Passive Wetland Restoration Through Stream Restoration

-- Laura W. Kelm, GreenVest, LLC, Bowie, Maryland

11:10 am

Construction Benefits of Beaver Dam Analog Stream Restoration

-- Michael Thompson, Meadville Land Service, Cochranton, PA

11:30 am

Functional Lift of a Headwater Stream-Wetland Complex Restoration Revealed By a Decade of Environmental and Ecological Monitoring

-- Jesse Robinson, PE, University of Louisville Stream Institute, Louisville, KY

11:50 am

Anne Arundel County's Approach to Meeting MS4 and TMDL Requirements through Turnkey Restoration Projects

-- Erik Michaelson, Anne Arundel County and Wildlands Engineering, Inc., Anne Arundel, MD

D SESSION LOCATION: HOMELAND

MODERATOR: EMMETT PERDUE, ECOSYSTEM PLANNING & RESTORATION CONTEMPLATING FUTURE CHALLENGES

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FLOOD MITIGATION AND WATERSHED PLANNING

Contemplating Future Challenges

8:30 am

Urban Stream Restoration: Balancing A Changing Landscape with Ever-Changing Regulations

-- Katie Atkinson, PE, Timmons Group, Richmond, VA

8:50 am

Stream Restoration: Nature-Based Solution for Flood Risk Mitigation and Watershed Resiliency

-- Lee W. Forbes, PE, DWRE, Headway Environmental, Monroe, LA

9:10 am

Adaptive Management of Urban Watersheds

-- Charles Smith, Fairfax County, VA, Department of Public Works and Environmental Services, Fairfax, VA

9:30 am

Restoring Urban Streams and Watersheds to Create Healthy and Happy Cities: 27 Years of Experience in 27 Slides

-- Will Wilhelm, PE, CFM, Kimley-Horn, Denver, Colorado

9:50 am

How Awareness of Environmental Justice Affects Project Implementation

-- Kathy Hoverman, PE, RES (Resource Environmental Solutions), Richmond, VA

10:10 am

Break in the Exhibit Hall

Flood Mitigation and Watershed Planning

10:30 am

The Feasibility of Stream Mitigation in Response to Kentucky Flooding Devastation -- Lise Coquilleau, Kentucky Dept. of Fish and Wildlife Resources, Wetland and Stream Mitigation Fee In-Lieu-Of Program (FILO), Frankfort, Kentucky

10:50 am

Waller Creek Corridor Restoration – When Stream Restoration is Not Enough

-- Diana Wang, City of Austin, Watershed Protection Department, Austin, Texas

11:10 am

Utilizing Watershed-Based Programs to Restore Streams, Riparian Corridors, & Wetlands in the West Fork White River Watershed

-- Sandi J. Formica, Watershed Conservation Resource Center, Fayetteville, AR

11:30 am

Upper Little Patuxent Restoration – 10 Years of Lessons Learned

-- Jeremy Koser, PE, JMT, Hunt Valley, Maryland

11:50 am

Headwaters to Floodplains: Where Stream Restoration Meets Infrastructure and Emergency Management

-- Scott C. Blossom PE, CFM, LEED AP, Blossom Consulting & Engineering, Williamsburg, VA

E SESSION LOCATION: KENT MODERATOR: BOB SIEGFRIED, RES BENTHOS & FISHERIES AND FISH HABITAT

Benthos

8:30 am

Case Study – Marylea Farm Stream Restoration Site Biological Monitoring -- Suraye Solis, Wildlands Engineering, Inc., Springfield, VA

8:50 am

An Examination of the Impact of Urbanization on Stream Biodiversity and Ecosystem Function

-- Anthony J. Roux, Mecklenburg County Land Use and Environmental Services Agency, Water Quality Program,

Charlotte, NC

9:10 am

Trout Habitat Restoration Design & Results for a Dreamy Stream
-- John Giordanengo, MS, AloTerra Restoration Services Fort Collins, CO

9:30 am

Implementing Vernal Pools in Mid-Atlantic Stream Restoration Projects -- Ethan Daviau, Gannett Fleming, Owings Mills, MD

9:50 am

Relocation of Brent Run Creek – Reestablishing Nearly a Mile of Aquatic Habitat/Biota (Featuring natural recruitment of State-listed Slippershell [Alasmidonta viridis])

-- Stu Kogge, PWS, Sr., GEI Consultants of Michigan, PC (GEI), Williamsburg, Michigan

10:10 am

Break in the Exhibit Hall

Fisheries and Fish Habitat

10:30 am

Implementation of Multi-Benefit Juvenile Salmonid Habitat Restoration on the Lower Yuba River: The Hallwood Side Channel and Floodplain Restoration Project

-- Jai Singh, cbec eco engineering, Richmond, VA

10:50 am

Fish Passage Culvert Best Practices - aopMAP and the National Culvert Removal, Replacement & Restoration Grants

-- Justin Lennon, WSP USA Inc., Pittsburgh, PA

11:10 am

NJ Statewide Dam Removal Partnership: Creating a Community of Practice to Accelerate Dam Removals

-- Beth Styler Barry, The Nature Conservancy, New Jersey, Chester, NJ

11:30 am

Use of Multi-Functional In-Channel Structures in Catskill Mountain Streams -- Jillian Cole, Stantec Consulting, Albany, NY

11:50 am

Edgecomb Creek: Stream Restoration in the Pacific Northwest
-- Josh Allen, SWCA Environmental Consultants, Charlotte, North Carolina

F SESSION LOCATION: BALTIMORE B MODERATOR: ROBERT SCRAFFORD, GANNETT FLEMING DAM REMOVAL

Dam Removal Part 1

8:30 am

God Made Dirt, So Dirt Don't Hurt...Except For My Dam Removal Budget

-- Dan DeVaun, GEI Consultants Inc., Traverse City, Michigan

8:50 am

Small Stream Barrier Removal in the University Context

-- Lambert Ngenzi & Andrew Friedman-Herring

Duke University Nicholas School of the Environment, Durham, NC

9:10 am

Social Aspects of Dam Removal – an Engineer'ss Perspective

-- Troy Naperala, GEI Consultants Inc., Traverse City, Michigan

9:30 am

Assessing the Pre-Dam Removal Ecological Functions of Blackwater Creek, 90 Years after the Construction of College Lake Dam: A High Hazard Dam

-- Brandon Alderman, AECOM, Roanoke, VA

9:50 am

Steele Creek Restoration and Flood Mitigation Project

-- Matthew Trueheart, SLR Consulting, New Paltz, New York

10:10 am

Break in the Exhibit Hall

Dam Removal Part 2

10:30 am

From 'Wild and Wonderful' to the 'Downtown Riverwalk': Adjusting Stream Restoration Techniques and Approaches Based on the Degree of Urbanization in the Adjacent Landscape

-- Julianne Busa, Fuss & O'Neill, Springfield, MA

10:50 am

What Happens When a Dam Removal Project Spans a Decade: A Case Study

- -- Jessie Thomas-Blate, American Rivers, Washington, DC
- -- Gabriel Martin, PE, Kleinschmidt Associates, Strasburg, PA

11:10 am

Sediment Management of a Hudson Valley Dam Removal

-- Jake Dittes, PE, Princeton Hydro, Glastonbury, CT

11:30 am

Small-Scale Dam Removal and Pond Decommissioning: Three Different Case Studies from Vermont

-- Evan Fitzgerald, CPESC, CFM, Fitzgerald Environmental Associates, Colchester, Vermont

11:50 am

A Walk in the Park: The Creation of Mitigation Banks on Public Lands

-- Nate Ober, Water & Land Solutions, Crested Butte, Colorado

G SESSION LOCATION: KENT MODERATOR: TOM DEMBROSKI, PRINCE WILLIAM CO OUTREACH & EDUCATION

Outreach

1:30 pm

Benefits of Quarterly and Post-Storm Monitoring to Overall Public Relations and Urban Stream Restoration Project Success

-- Madison Warfield, Gannett Fleming, Owings Mills, Maryland

1:50 pm

Controversy!

-- Kip Mumaw, PE, Ecosystem Services, Charlottesville, VA

2:10 pm

Public Engagement on Urban Stream Restoration Projects

-- Emily Burgess, AECOM, Germantown, MD

2:30 pm

Bridging the Knowledge Gap: MSRA's Public Outreach Initiative

-- Adam Nabors, Maryland Stream Restoration Association, Millersville, MD

2:50 pm

Stafford Drive Stream Restoration – A Tree Save Alternatives Analysis

- -- Juan Campos, PE, Kimley-Horn and Associates, Inc., Reston, VA
- -- Satoshi Eto, City of Fairfax, Fairfax, VA

3:10 pm

Break in the Exhibit Hall

Education

3:30 pm

Using a Unique Sport to Connect Others to the Wonder of Restored Ecosystems – Fly Links

-- David Bidelspach, 5 Smooth Stones Restoration and RiverSHARED, Livermore, CO

3:50 pm

Capacity Building among Alaskan Tribal Entities: A New Approach to Fish Passage Restoration

-- Andrea James, Nay'dini'aa Na' Kayax (Chickaloon Village Traditional Council), Chickaloon, AK

4:10 pm

What did you do to my Stream? How to Effectively Communicate Stream Restorations to the Public

-- Danielle Wynne, Fairfax County, VA Watershed Education and Outreach, Fairfax, VA

4:30 pm

Small Stream, Big Challenges

-- Josh Burch, District Department of Energy & Environment, Washington, DC

4:50 pm

Chronicles of Streamtopia II: Forming a Synergistic D/B/M Team for Branch Ave, Washington, DC

- -- Donna An, Actaeon, LLC, Beltsville, MD
- -- Joe Arrowsmith, Straughan Environmental, Inc.

5:10 pm – Adjourn

H SESSION LOCATION: WATERTABLE MODERATOR: MARK SECRIST, US FISH & WILDLIFE SERVICE LEGACY SEDIMENT

&

FLOODPLAIN RECONNECTION

Legacy Sediment and Floodplain Reconnection

1:30 pm

Applying Principles for the Ecological Restoration of Aquatic Resources to Legacy Sediment in Pennsylvania Watershed

-- Jeffrey Hartranft & Dave Goerman, Pennsylvania Department of Environmental Protection, Harrisburg, PA

1:50 pm

Floodplain Restoration Along Big Spring Run in Lancaster County, PA - Project Implementation Perspectives

-- Ben Uhler, LandStudies, Inc, Lititz, PA

2:10 pm

Font Hill Tributary – A Suburban Community Restoration

-- Frank A Bubczyk, Jr., Johnson, Mirmiram & Thompson, Inc. (JMT), Hunt Valley, MD

2:30 pm

Use of Relict Organic Soils on Restored Floodplains: Effects on Soil Pore Water Nitrogen Concentrations

-- Alexis Yaculak, University of Delaware, Newark, Delaware

2:50 pm

Aquatic Resource Mitigation at Bensalem Township High School

-- Andrew W. Donaldson, Johnson, Mirmiram & Thompson, Inc. (JMT), York, PA

3:10 pm

Break in the Exhibit Hall

Floodplain Reconnection

3:30 pm

Raise the Channel or Lower the Floodplain? Methods for Floodplain Reconnection

-- Brett Long, Biohabitats, Inc., Baltimore, MD

3:50 pm

Broad Creek Park: Valley Wide Floodplain Reconnection and Wetland Creation in an Urban Watershed

-- Brad Mowbray, Gannett Fleming, Owings Mills, MD

4:10 pm

A Practical Approach to Floodplain Sedimentation Modeling Using HEC-RAS and Associated Nutrient Retention

-- Mike Miller, McCormick Taylor, Harrisburg, PA

4:30 pm

No Rise and Reconnection – The Delicate Dance

-- Meghan Gloyd & Brett Long, Biohabitats, Inc, Baltimore, MD

4:50 pm

Using Floodplains to Promote Climate Resiliency and Sustainability

-- Emily Steenkamer, Ecotone, Mechanicsburg, PA

5:10 - Adjourn

I SESSION LOCATION: BALTIMORE A MODERATOR: TIM SCHUELER, HAZEN & SAWYER 2-D HYDRAULIC MODELING &

UAV TECHNOLOGY

2-D Hydraulic Modeling

1:30 pm

How Effective is HEC-RAS 2D at Predicting Stream Instability? A Study Based on Natural Channel Design Stream Restoration Sites

-- Blair M. Borries, RES (Resource Environmental Solutions), Louisville, Kentucky

1:50 pm

Applications of 2D Hydraulic Modelling to Ecosystem Restoration

-- Robert Stewart, PhD, PE, Water and Land Solutions, Johnson City, TN

2:10 pm

Flood Mitigation Assessment of Stream Debris Removal

-- Jack Kurki-Fox, PhD, NC State University, Bio&Ag Engineering, Raleigh, NC

2:30 pm

Optimizing Bedload Using Two-Dimensional Sediment Transport Modeling for Split Flow Condition In-Stream Restoration Designs: A Case Study on the Gwynns Falls Tributary at Kingsbury +

-- Brian Tetrick, WSP-USA, Baltimore, MD

2:50 pm

Modeling Fish Passage Through Nature-Like Rapids Using Civil3D and HEC-RAS in the Context of Dam Removal

-- Samuel H. Prentice, PE, GEI Consultants, Inc., Marquette, Michigan

3:10 pm

Break in the Exhibit Hall

UAV Technology

3:30 pm

Tracking Trajectories of Fully Connected Floodplain Landscapes: Post-Restoration Effectiveness Monitoring with Multispectral Remote Sensing

-- Joe Rudolph, Wolf Water Resources, Portland, OR

3:50 pm

The Next Step – Deploying New Technologies to Improve Restoration Approaches -- Jack Turner, GreenVest, LLC, Bowie, Maryland

4:10 pm

Handheld LiDAR Mapping: SLAM dunk for Fluvial Geomorphology?

-- Brian O'Neill, Burns & McDonnell, Chicago, IL

4:30 pm

The High-Definition Stream Survey of the Chattahoochee River National Recreation Area, Georgia: Highlighting a Fast and Flexible Method to Document Stream Corridor Conditions Leading to Restoration Actions

-- James Parham, PhD, Trutta Environmental Solutions, LLC, Nashville, TN

4:50 pm – Adjourn

J SESSION LOCATION: HOMELAND MODERATORS: SANDRA DAVIS, US FISH & WILDLIFE SERVICE GAUGING PROJECT SUCCESS AND REFERENCE REACHES & REGIONAL CURVES AND CHANNEL ADJUSTMENT

Gauging Project Success and Reference Reaches

1:30 pm

Recommendations for Chesapeake Bay-Wide Indicators of Physical Stream Health -- Mark Southerland, Tetra Tech, Owings Mills, MD

1:50 pm

Pooled Monitoring Initiative – A Novel, Regional Approach to Pooling Funds and Answering Top Restoration Research Questions in the Chesapeake Bay

-- Sadie Drescher, Chesapeake Bay Trust, Annapolis, Maryland

2:10 pm

In Search of a Reference - the Least Disturbed Condition in a Kentucky Landscape -- Andrew J. Stump, Kentucky Dept. of Fish and Wildlife Resources, Wetland and Stream Fee In-Lieu-Of Mitigation Program (FILO), Frankfort, Kentucky

2:30 pm

The Real Value of the Reference Reach

-- Grant Ginn, PE, Stantec Consulting, Asheville, NC

2:50 pm

Using Biological Monitoring to Assess Restoration Success and Plan Future Projects in Connecticut Coastal Streams

-- Alex Krofta, Save the Sound, New Haven, CT

3:10 pm

Break in the Exhibit Hall

Regional Curves and Channel Adjustment

3:30 pm

Understanding Floodplain Connectivity in Indiana

-- Robert C. Barr, Center for Earth and Environmental Science, Department of Earth Sciences, IUPUI - Indiana Fluvial Erosion Hazard Mitigation Program, Indiana FEH, Indianapolis, IN

3:50 pm

Maryland County Level Sub-Regional Curve Development

-- Reid Cook, RES (Resource Environmental Solutions), Warrenton, VA

4:10 pm

A Framework for Identifying and Verifying Bankfull in Diverse Landscapes and Watershed Conditions

-- Will Harman, Stream Mechanics, Raleigh, NC

4:30 pm

Testing and Evaluating in a Southeast Asian Region with Precipitation Events Outside a Precipitation-Based Regional Curve Model's Typical Rainfall Range

-- David Bidelspach, PE & Imanthie Bandara, 5 Smooth Stones Restoration, PLLC, Fort Collins, CO

4:50 pm

Brent Run Creek: A Case Study of Stream Relocation on a Tributary of the Flint River in Michigan

-- Emma Giese, GEI Consultants of Michigan, P.C., Plymouth, Michigan

5:10 - Adjourn

K SESSION LOCATION: FELLS POINT MODERATORS: JACKIE CANTRELL & JACK KURKI FOX, NORTH CAROLINA STATE UNIVERSITY FUNCTIONAL ASSESSMENT & WATER QUALITY ASSESSMENT

Functional Assessment

1:30 pm

Equivalency of Bioassessment Protocols

-- Leslie J. Potts, PhD, Beaver Creek Hydrology, Lexington, KY

1:50 pm

Lessons Learned from Regionalizing the Stream Quantification Tool

-- Cidney Jones, PE & CFM, Ecosystem Planning and Restoration, Fort Montgomery, NY

2:10 pm

Evolution of the Stream Quantification Tool

-- Cidney Jones, PE & CFM, Ecosystem Planning and Restoration, Fort Montgomery, NY

2:30 pm

Updates to the Tennessee Stream Quantification Tool

-- John S. Schwartz, PhD, PE, Professor, Dept of Civil & Environmental Engineering , Director, Tennessee Water Resources Research Center, University of Tennessee, Knoxville, Knoxville, TN

2:50 pm

Applicability of Stream Quantification Tools for Assessing Compensatory Mitigation Credits from Restoration

-- John S. Schwartz, PhD, PE, Professor, Dept of Civil & Environmental Engineering , Director, Tennessee Water Resources Research Center, University of Tennessee, Knoxville, Knoxville, TN

3:10 pm

Break in the Exhibit Hall

Water Quality Assessment

3:30 pm

Using Remote Monitoring to Detect Water Quality Issues During Stream Restoration Construction

-- Sara Tolnay, AECOM, Germantown, MD

3:50 pm

Modeling and Assessing Opportunities for Stream Restoration to Address PFAS and other Emerging Contaminants of Concern

-- Brandon Alderman, AECOM, Roanoke, VA

4:10 pm

Evaluating Stream Restoration Effectiveness: Water Quality and Biology at UT Sassafras -- Allyson Bartell, Maryland Department of Natural Resources, Annapolis, Maryland

4:30 pm

Impact of Hyporheic Exchange on Stream Temperature in Restored Systems -- Ethan Bauer, PE, LandStudies, Inc, Lititz, PA

4:50 pm

Measuring Urban Stream Restoration Success in Flatlick Branch: Processes, Goals, Monitoring, and Regulations May Confound "Ecological Lift"

-- Chris Ruck, Fairfax County, VA, Watershed Assessment Branch, Fairfax, VA

5:10 - Adjourn

L SESSION LOCATION: BALTIMORE B MODERATOR: CHRISTINA CASOLE FLOODING, EROSION, AND URBAN INFRASTRUCTURE & TIDAL CREEK RESTORATION

Flooding, Erosion & Urban Infrastructure

1:30 pm

Building a Long-Term Stewardship Program to Manage and Maintain Urban Stream Improvement and Wetland Projects

-- Beca Deal, City of Charlotte Storm Water Services, Charlotte, North Carolina

1:50 pm

Avoiding and Resolving Land Use Conflicts for Comprehensive Ecological Restoration -- Michael Sachs, RES (Resource Environmental Solutions), Pittsburgh, PA

2:10 pm

Streambank Erosion: The Impact of Streambank Geomorphic Characteristics on Root-Derived Erosion Rates

-- Emily D. Brown, Freese and Nichols, Inc./North Carolina State University, Winston-Salem, NC

2:30 pm

Kings Branch Stream Restoration and Flood Reduction Project

-- Jason Claudio-Diaz, PE, CFM, Kimley-Horn and Associates, Inc., Charlotte, North Carolina

2:50 pm

Defining Project Success

-- Lydia R. Ward, Freese and Nichols, Inc., Winston-Salem, North Carolina

3:10 pm

Break in the Exhibit Hall

Tidal Creek Restoration

3:30 pm

Tidal Stream Restoration at the Lookout Slough Project

- -- Chuck Davis, PE, CFM, Beaver Creek Hydrology, LLC, Lexington, KY
- -- David Urban, PE, Ecosystem Investment Partners, Baltimore, MD

3:50 pm

Aquatic Barrier Removal at the Head-of-Tide

-- Michael Chelminski, Stantec Consulting Services Inc., Northampton, MA

4:10 pm

Consolidated Coastal Stream and Wetland Restoration in the NJ Meadowlands in the Face of Climate Change and Sea Level Rise

-- Richard K. Mogensen, SPWS, Mogensen Mitigation, Inc., Charlotte, NC

4:30 pm

Developing Multidisciplinary Guidance for Resilience of Tidal and Near-Tidal Waterway Crossings

-- Katherine Blair, CFM, EA Engineering, Science, and Technology, Inc., PBC, Hunt Valley, Maryland

4:50 pm - Adjourn