EcoStream 2018 - Stream Ecology & Restoration Conference

Evolving from Two Decades of Lessons Learned to Meet Future Challenges

MONDAY, AUGUST 13, 2018			
6:00-9:00 pm	*SOCIAL at Pack's Tavern, 20 S Spruce St, Asheville, NC 28801*		
TUESDAY, AUGUST 14, 2018			
8:15 am-12:00 pm	**GENERAL SESSION**		
	Grand Ballroom		
Moderator	*Barbara Doll, NC Sea Grant*		
8:15 - 8:30	Conference Welcome - **Barbara Doll**, Extension Assistant Professor, NC State University, and Extension Specialist, NC Sea Grant		
8:30 - 9:00	Three Decades of Stream Restoration: Lessons Learned and Future Challenges - **Dave Rosgen**, Wildlands Hydrology Consultants		
9:00 - 9:30	Ten-Year Anniversary of the Mitigation Rule: Changing Policies, Perceptions and the Path Forward - **Palmer Hough**, US EPA		
9:30 -10:00	Community Catch-22 - Inspiring Involvement- **Eve Brantley,** Alabama Cooperative Extension & Auburn University		
10:00 -10:30	*Break*		
10:30 -11:00	Hurricane Harvey - What Have We Learned? - **Lee Forbes**, SWCA Environmental Consultants		
11:00 -11:30	Addressing Flooding and Extreme Weather with Restoration Efforts - **Brian Bledsoe**, University of Georgia		
11:30 -12:00	Resilient by Design - **Charles "Chuck" Flink**		
12:00 - 1:20	*Lunch*		
1:20 pm - 3:00 pm	**CONCURRENT SESSION 1**		
	Salon A	**Salon B**	**Windsor Ballroom**
Session Title	***Fish Passage and Dam Removal***	***Nutrient Removal & Crediting for Stream Restoration***	***Design Approach and Process Innovations***
Moderator	*Eric Somerville, US EPA*	*Greg Melia, NC DMS*	*Michael Adams, Stantec*
1:20 -1:40	**Elizabeth Kanner** - Fish Passage Analysis at Highway Culverts	**Barbara Doll** - Evaluation of Nutrient Reduction Crediting for Stream Restorations	**David Bidelspach** - Naturalizing Performance Standards for Urban Channel "Restoration"
1:40 - 2:00	**Wes Newell** - Dam Removal and River Restoration: Milburnie Dam on the Neuse River in Raleigh, NC	**Amy Longcrier** - Stream Restoration as a Cost-Effective Technique to Meet TMDL Water Quality Goals	**Ian Jewell** - Navigating to Flexible Projects: Making Implementation of Design Build Stream Restoration in North Carolina a Reality for Publicly Funded Projects
2:00 - 2:20	**Angela Allen** - Hoosier Dam Removal Project: Restoring Habitat for the Endangered Cape Fear Shiner	**Kip Mumaw & Chris Tomsic** - Developing the First Nutrient Bank Through Stream Restoration in Virginia	**Robert Hawley** - Making Stream Restoration More Sustainable
2:20 - 2:40	**Yaw Bangolame** - Barrier Removal for Fish Passage and Drainage Improvement Along the Roanoke River	**Lin Xu & Greg Melia** - Comparing Water Quality Functional Uplift Outcomes from Common Models and Direct Measurement Using the NC Stream Function Quantification	**Amy Reed and Colin McGill** - Less is More: Sustainable Strategies for Stream Restoration Design and Construction
2:40 -3 :00	**George Howard** - Milburnie Dam and the Future of Mitigation Through Dam Removal	**Erich Hester** - Comparing Reach Scale Nitrate Removal of Instream Restoration Techniques	**George Athanasakes** - Iowa River Restoration Toolbox: A Collaborative Approach to Develop Tools to Protect and Enhance Streams for Iowa
3:00 - 3:30	*Break*		

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3:30 pm - 4:50 pm	CONCURRENT SESSION 2		
	Salon A	**Salon B**	**Windsor Ballroom**
Session Title	***Macroinvertebrate Assessment***	***Streambank Erosion Assessment & Monitoring***	***SPECIAL SESSION 1***
Moderator	*David Penrose, Penrose Environmental*	*Melonie Allen, NC DMS*	*Erin Shanaberger, City of Charlotte*
3:30 - 3:50	**James Barber & Peter Schneider** - Final Update of Seeding of Benthic Macroinvertebrates by Use of HabiTubes as a Habitat Restoraiton Technique	**Lisa Fraley-McNeal & Byron Madigan** - The Self-Recovery of Stream Channel Stability in Urban Watersheds Due to BMP Implementation, Carroll County, MD	Climate Change Implications for Stream Restoration: Learning from the Past to Prepare for the Future **Joel Nipper,** CMSWS**, Ken Kunkel,** NOAA, **Sandra Clinton**, UNC-Charlotte, **Will Wilhelm**, Kimley-Horne and Associates, and **Greg Jennings**, Jennings Environmental
3:50 - 4:10	**Anthony Roux** - Correlating Species Diversity, Species Traits and Stream Habitat Quality to Better Inform Restoration Practices	**Periann Russel** - Process-based Modeling and Measurement of Streambank Retreat in a NC Piedmont Stream	
4:10 - 4:30	**Chris Ruck** - Urban Bioassessments Indicate Increased Benthic Tolerance	**Bryan Dick & Emily Darr** - TMDL Reduction Credit for Stream Restoration - Case Studies and Comparison of Several Methods	
4:30 - 4:50	**Ward Marotti & Jay Squires**- Urban Stream Mitigation: Negotiations, Daylighting, Bridges and Bugs	**Josh DeMaury** - App for that? Of course! Bank Erosion Hazard Index (BEHI) and Near Bank Stress (NBS) Analysis Field Data Collection Using Mobile Operation Systems	
5:10-7:00 pm	*POSTER PRESENTATIONS & EXHIBITOR RECEPTION at Exhibit Hall (Salon C)*		
	WEDNESDAY, AUGUST 15, 2018		
8:00 am - 5:00 pm	**FIELD TOURS & SPECIALTY WORKSHOP**		
8:00 - 2:30	**Tour:** River Bank Enhancement and DuPont State Forest Stream with Waterfall Hiking or Mountain Biking		
8:00 - 12:00	**Specialty Workshop:** Advanced Modeling for Stream Restoration, Dam Removal, and Fish Passage Workshop		
8:30 - 12:30	**Tour:** Urban and Rural Agricultural Stream Restoration Combination Tour		
9:00 - 3:00	**Tour & Workshop:** Drone Technology		
10:00 - 4:30	**Tour:** Ivy River Bank Enhancement with Zipline or Rafting on the French Broad River		
1:30 - 5:00	**Tour:** Tour de Asheville: Urban Stormwater Bike Tour		
1:30 - 5:00	**Tour:** Brewery, Low Impact Development and Stream Restoration		
5:00 - 9:30 pm	*SOCIAL at the Smoky Park Supper Club, 350 Riverside Dr, Asheville, NC 28801*		

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Thursday, AUGUST 16, 2018			
8:10 am - 9:50 am	**CONCURRENT SESSION 3**		
	Salon A	**Salon B**	**Windsor Ballroom**
Session Title	***Riparian Buffers and Wood in Streams***	***Watershed Approaches to Urban Stream Restoration***	***Urban Stream Restoration and Infrastructure Considerations***
Moderator	*Lin Xu, NC DMS*	*Eve Brantley, Auburn University*	*Sean Connolly, SC DOT*
8:10 - 8:30	**Kevin Nunnery** - Get the Rock Out	**Ken Barry, Michael Pannell, & Brent Wood** - Stream Mitigation Design and Construction for an Over-Widened Bedrock Channel	**Will Wilhelm & Brian Sikes** - Making the Connection: Linking Urban Streams and People - Case Studies in Urban Stream Restoration and Greenway Projects in Charlotte, NC
8:30 - 8:50	**Thomas Barrett** - Assessing Large Woody Debris to Improve Stream Projects	**Jennifer Murphy & David Phlegar** - A Decade of Lessons Learned and Applied Using Adaptive Management and Design - South Buffalo Creek Restoration Initiative	**Tim Schueler** - When Manholes Go Missing: Stream Solutions for Municipal Sanitary Systems
8:50 - 9:10	**Meghan Fellows** - What is Stream Restoration Vegetation Success? It Depends.	**Calvin Sawyer** - Restoring Hunnicutt Creek: Results and Perspectives from a University Campus Restoration Project	**Paul Le Bel** - Effective Stream Restoration Construction Management within Piscataway Creek
9:10 - 9:30	**Johan Liebens** - Monitoring Restoration Impacts on Downstream Riparian Habitat Health	**Alex James** - Moore Money, Moore Problems: Fluidly Transitioning Phases of the Moores Creek Watershed Restoration Project	**Daren Pait & Jason Diaz** - Using Stream Enhancement in Urban Settings to Protect Valuable Infrastructure and Prevent Potential Water Quality Impacts from Infrastructure Failure
9:30 - 9:50	**Mike Adams** - Incorporating Wood in Urban Systems	**William Harris & Emily Reinicker** - Reedy Creek Stream Restoration Project: Applying Design-Build Methodologies for Stream Restoration in a Headwater Watershed	**Nora Korth & Kurt Cooper** - Watershed BMPs Reestablish Downstream Baseflows and Attenuate Peak Flows to Improve Stream Integrity
9:50 - 10:20	*Break*		
10:20 am - 11:40 am	**CONCURRENT SESSION 4**		
	Salon A	**Salon B**	**Windsor Ballroom**
Session Title	***Habitat and Species Focused Restoration***	***Mitigation Lessons Learned***	***Advancing Technology for Restoration***
Moderator	*Casey Haywood, NC DMS*	*Jeff Jurek, NC DMS*	*Periann Russell, NC DMS*
10:20 - 10:40	**Andy Dortch & Dave Penrose** - Benthic Invertebrates as an Indicator of Stream Restoration Success in the Coastal Plains	**Timonthy Denicola** - Stream Restoration on Mining Impacted Watersheds, West Virginia	**David Bidelspach & Brad Fairley** - 15 Years of Challenges, Failures, Successes and Future Hope for 3D Natural Channel Design
10:40 - 11:00	**Brad Fairley** - Stream Restoration and Fish Habitat Banking In Canada	**Katie Hill** - No Net Loss in the Army Corps Savannah District	**Nathan Ober** - Designs that Drive the Success of Stream Mitigation Banks
11:00 - 11:20	**Brady McPherson** - Habitat Use Preference of Trout in Hatchery Creek: Kentucky's First Sustainable Trout Fishery	**Jessica East** - Learning from Restoration Mistakes is the Key to Restoration Success	**Scott Gregory** - From the Cloud to the Stream...of Decision-Support: Taking GIS Beyond the Map
11:20 - 11:40	**Joseph Famularo** - Combining Species Distribution Models and High-Resolution Habitat Mapping to Prioritize Restoration for an	**Jessie Boles** - A Maturing In-Lieu-Fee Program's Role in Design and Construction of Restoration Projects	**Marla Denicola** - Using Aerial LiDAR to Assess Stream Restoration Project Sites
11:40 - 12:40	*Lunch*		

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12:40 pm - 2:00 pm	CONCURRENT SESSION 5		
	Salon A	**Salon B**	**Windsor Ballroom**
Session Title	***Watershed & Water Quality Assessment***	***Communicating with Stakeholders***	***Sediment Sources and Modeling***
Moderator	*Callie Moore, Hiwassee River Watershed Coalition*	*Wendi Hartup, Town of Kernersville*	*Jonathan Page, NC State University*
12:40 - 1:00	**Gregory Melia & Casey Haywood** - Determining the Likelihood of Detecting Change in Water Quality Resulting from Stream Restoration Practices Over Mitigation Time Frames	**Chris Roessler** - Reap What You Sow: Cultivating a Mitigation Site and Delivering it Through Project Implementation	**Jake Maschoff & Stephanie Roberts-Bowman** - Benefits of 2D Modeling for Proposed Bank Stabilization
1:00 - 1:20	**Campbell McNutt** - Tools for Better, Faster, Cheaper Restoration Planning	**Aaron Earley & Crystal Goode** - From Buyout to Restoration: The Chantilly Ecological Sanctuary at Briar Creek	**Matthew Gramza** - 2D Hydraulic Modeling, Steering Stream Restoration Design
1:20 - 1:40	**LeAnne Astin** - Triassic Lowlands, a Unique Region in the Piedmont: Implications for Stream Restoration, Bioassessment and Stormwater Management	**Kelly Mattfield** - Getting Our Feet Wet at Every Stage: Optimizing the Restoration of Urban Streams	**Robert Stewart** - Using 2D Hydraulic and Sediment Transport Modeling to Evaluate Species-Focused Restoration
1:40 - 2:00	**Hunter Freeman** - Above and Beyond - Quantifying Exceptional Watershed Management Strategies	**JD Solomon** - Communicating Reliability, Risk, and Resiliency to Decision Makers	**Kyle Greene** - Spivey Mill Dam - Incorporating Sediment Analysis with 2D Hydraulic Modeling to Predict Potential Dam Removal Outcomes
2:00-2:20	*Break*		
2:20 pm - 3:40 pm	**CONCURRENT SESSION 6**		
	Salon A	**Salon B**	**Windsor Ballroom**
Session Title	***Learning as We Go***	***SPECIAL SESSION 2***	***Wetland Stream Complexes and the Role of Beaver***
Moderator	*Rachel Smith, NC Division of Soil & Water Cons.*	*Paxton Ramsdell, EDF*	*Anita Goetz, US Fish & Wildlife Service*
2:20 - 2:40	**David Phlegar** - Why Greensboro's Stream Banks Have "Grown Up"? The Development of Riparian Stream Buffers in Greensboro, NC	Connecting Science and Policy using the Stream Quantification Tool **Will Harman**, Stream Mechanics, **Sara Donatich**, NC State University, **Vena Jones**, Tennessee DEC, **Eric Somerville**, US EPA	**Scott McGill** - Ecological Amnesia: A Historical Perspective on Streams and Floodplains - Don't Believe Everything You Think
2:40 - 3:00	**Jon Calabria** - Experiential Learning in Lilly Branch		**Arthur Parola** - Two-Dimensional Modeling and Design for Resilience and Sustainability
3:00 - 3:20	**David Woodie** - Setting the Stage		**Josh Gilman** - To Beaver, or Not To Beaver
3:20 - 3:40	**Mitch Woodward & Bill Lord** - Successful Smaller Projects - Backyard Stream Repair		**Erin Shanaberger** - Challenges & Alternatives to Traditional Wetland Mitigation in an Urban Environment: The Charlotte Case Study
3:40 - 4:00	*Break*		
4:00 pm - 4:40 pm	**GENERAL SESSION**		
	Grand Ballroom		
Moderator	*Greg Jennings, Jennings Environmental & NC State University*		
Panel Discussion	Effective Project Management for Ecosystem Restoration	**Will Wilhelm**, Kimley-Horn and Associates, Inc. **Anita Geotz**, US Fish & Wildlife Service **Shawn Wilkerson**, Wildlands Engineering, Inc. **Alan Walker**, USDA-NRCS **Will Harman**, Stream Mechanics	
4:40 pm	*Conference Adjourned*		