

# PLENARY SPEAKERS

### Meghan Wren

### Founder and Executive Director, CEO & CFO Bayshore Center at Bivalve Ecological and Maritime Restoration in the Delaware Bay

Meghan Wren is a graduate of the University of Pennsylvania and has been an iconic protector of the Delaware Bay for over 26 years, Meghan has spent most of her life working on behalf of the bay and the communities that depend upon its bounty for survival, and has devoted her life to restoring the region through hard work, dedication and leading by example.

Bayshore's Center at Bivalve integrates ecological restoration with historic and cultural restoration and preservation. The Bayshore Center educates the public about maritime preservation and environmental restoration projects, such as horseshoe crab-red knot interactions and creation of living shorelines to address rising sea level. The Center has effectively enabled locals to understand the links between coastal ecological restoration and the revitalization of commercial fisheries and aquaculture.

#### Dennis Whigham, PH.D Smithsonian Environmental Research Center (SERC) Restoring Chesapeake Bay Wetlands: Short and Long-Term Views

Dennis Whigham, PH.D, holds an undergraduate degree from Wabash College, and a Ph.D. from the University of North Carolina and Rider University. He has worked at the SERC since 1977, and his research has led to journeys through forests, fields and wetlands around the world. His current focus is on: wetlands and the role of wetlands associated with juvenile salmon habitat in Alaska; the rarest terrestrial orchid in eastern North America; invasive species; and, establishment of the North American Orchid Conservation Center (NAOCC), an initiative of the Smithsonian and the US Botanic Garden.

Dennis' talk today will focus on vegetation studied in three categories of depressional wetlands (natural, restored, and former wetlands converted to cropland) located along the Atlantic Coastal Plain from Delaware to North Carolina. Within the first decade, aboveground biomass and nutrient concentrations differed in the three categories. Resampling 15 years later demonstrated that woody vegetation eventually became established around the wetland perimeter but that species composition won't resemble the natural forested wetlands in the study area. The results of these studies will be used to discuss management objectives, restoration goals and the effectiveness of restoring wetland ecosystem functionality within a larger framework.





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#### **Debbie Mans** Baykeeper and Executive Director NY/NJ Baykeeper **Community-Based Restoration in a Changing Estuary**

Debbie Mans has been Baykeeper and Executive Director of the NY/NJ Baykeeper since April 2008. Prior to that, Debbie was the Environmental and Energy Policy Advisor for Governor Jon S. Corzine from 2006-2008, and the Policy Director at Baykeeper from 2002-2006. Debbie is a graduate of The University of Michigan and holds a J.D. from Vermont Law School.

The focus of Debbie's talk will be on the Baykeeper's current efforts to protect, preserve and restore the ecological integrity and productivity of the Hudson Raritan Estuary, one of the worlds' most densely populated estuaries. Day-to-day restoration efforts are focused on bringing back oyster populations, managing community volunteer efforts, and restoring coastlines to natural systems using living shoreline concepts. Coupled with issues like the 2012 Superstorm Sandy, oil spills, rising sea level, port activities, and an uncooperative political environment, it can be a complex and ever-changing effort that requires innovative partnerships, practices and advocacy.

## **Clare Billett**

Program Officer Delaware River Watershed Protection Program, William Penn Foundation Setting Restoration Priorities in the context of the Delaware River Watershed Initiative (DRWI)

Clare Billet is a Professional Conservation Practitioner and Registered Landscape Architect who brings over 26 years of experience and passion to her current role as the Programs Officer for the WPF. Clare holds a bachelor's degree in Geography with a specialization in Biogeography from Nottingham University and a Master's degree in Landscape Architecture from the University of Sheffield, UK. She is the author of dozens of Conservation Planning documents; has presented at numerous conferences throughout the US; has also taught courses on the topics of ecological design, studio design, and ecological restoration at the U of Penn, Delaware Valley College, Temple U and the U of Virginia.

The WPF distributes \$30M in grants annually to protect watersheds in the Delaware River. Clare's presentation will focus on the WPF's support for restoration of Delaware River's sub-watersheds that span 13,500 square miles, provide drinking water for 15M people, generate \$25B/year of business, support globally rare species and habitats, and offer abundant recreation.





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#### Laura Craig PhD Associate Director of River Restoration American Rivers Dam removal: Restoring riverine habitat and ecological function in the Mid-Atlantic

Laura Craig is an ecosystem ecologist with particular expertise in aquatic biogeochemistry, stream ecology, and restoration theory. In her position at American Rivers, she facilitates and manages river restoration activities in PA, NJ and DE. She is involved in establishing collaborative partnerships with academic institutions and local watershed groups to improve restoration monitoring and increase communication between researchers and practitioners. Laura has broad interdisciplinary training in ecology, chemistry, geology, hydrology, and natural resources management. She holds a Ph.D. in Ecology from the University of Maryland and a B.S. in Biology from Susquehanna University.

This presentation will include: an introduction to the practice of and ecological and social benefits of dam removal; national and regional trends using dam removal; a review of efforts to synthesize dam removal science, the monitoring dilemma, and research needs; and the challenges and opportunities related to advancing functional river restoration as a conservation tool.

### Keith Bowers, FASLA, RLA, PWS

President and Founder Biohabitats Inc. Looking Back to Move Forward: Celebrating Ecological Restoration

For nearly three decades, Keith Bowers has been at the forefront of applied ecology, land conservation and sustainable design. As the founder and president of Biohabitats, Keith has built a multidisciplinary organization focused on regenerative design – the blurring of boundaries between conservation planning, ecological restoration and sustainable design. Using living-systems as the basis for all of its work, Biohabitats applies a whole-systems approach to all of its projects. Keith has applied his expertise to more than 600 projects throughout North America. His work has spanned the scale from site-specific ecosystem restoration projects involving wetland, river, woodland and coastal habitat restoration to regional watershed management and conservation planning, to the development of comprehensive sustainability programs for communities and campuses throughout the country. Keith is also president and founder of Biohabitats' sister company: Ecological Restoration and Management, Inc. Keith served on the Board of Directors for the Society for Ecological Restoration, twice as its Chair. He holds a B.S. in Landscape Architecture from West Virginia University and an honorary degree from the Conway School of Design.

This presentation will highlight past eco-restoration projects from within the Mid-Atlantic region and around the world, and discuss potential future goals for eco-restoration.

