



Living Shorelines: Sound Science, Innovative Approaches, Connected Community Living Shorelines National Technology Transfer Meeting and Regional Workshops December 1-2, 2015 at the Hilton Hartford, Hartford, CT

Day 1 – Tuesday, December 1, 2015

Attendees will join together to hear experts share and discuss updates on a variety of living shorelines topics that are nationally relevant. The themes of adaptation and resilience with respect to living shorelines will be a common thread throughout the presentations and discussions.

- **Registration Opens:** 7:30, Hilton Ballroom Foyer [3rd Floor]
- **Beverages and Light Refreshments:** 7:45 – 8:15 am, Hartford Commons [2nd Floor]
- **Welcome and Keynote Address:** 8:30 – 9:45 am, Hilton Ballroom [3rd Floor]
 - Jeffrey Benoit, President, Restore America's Estuaries
 - Dr. James O'Donnell, Executive Director, Connecticut Institute for Resilience and Climate Adaptation
 - Robert Klee, Commissioner, Connecticut Department of Energy and Environmental Protection
 - Curt Spalding, Regional Administrator, U.S. Environmental Protection Agency
 - Keynote address: Arlene Kern, Senior Vice President, Munich RE – "Creating Coastal Resilience: What's at Risk?"
- **Networking Break:** 9:45 – 10:15 am, Hartford Commons [2nd Floor]
- **Science and Ecosystem Services:** 10:15 – 11:15 am, Hilton Ballroom [3rd Floor]

This session will provide a discussion and overview of the latest updates on the science of living shorelines. In addition, panelists will cover recent innovations in technology, tools, best practices, and advancements related to data collection and analysis.

Moderator: Dr. James O'Donnell, CIRCA

 - Rachel Gittman, Northeastern University
 - Josh Moody, Partnership for the Delaware Estuary
 - Marilyn Latta, California Coastal Conservancy
 - Brian Majka, GEI Consultants, Inc.
- **Policy, Permitting, and Regulation:** 11:15 am – 12:15 pm, Hilton Ballroom [3rd Floor]

This session will focus on policy aspects of living shorelines. In particular, panelists will discuss what's working in this realm, along with what is on the horizon.

Moderator: Mark Jaworski, CH2MHill

 - Niki Pace, Mississippi-Alabama Sea Grant
 - Bill Sapp, Southern Environmental Law Center
 - Bill Lesser, Federal Emergency Management Agency
 - U.S. Army Corps of Engineers representative (*invited*)
- **Lunch:** 12:15 – 1:30 pm, Hilton Ballroom [3rd Floor]

Moderator: Todd Miller, North Carolina Coastal Federation

 - John Goodin, U.S. EPA
 - Living Shorelines Academy Debut & Demo – Tracy Skrabal, North Carolina Coastal Federation, on behalf of Ana Zivanovic-Nenadovic, North Carolina Coastal Federation

- **Outreach, Education, and Engagement:** 1:30 – 2:30 pm, Hilton Ballroom [3rd Floor]
This session will highlight innovations and approaches that inform, educate, and engage the varying constituencies within the living shorelines community. The panelists will also discuss their experiences in identifying target groups and meaningfully involving them.
Moderator: Curt Johnson, Save the Sound
 - Tracy Skrabal, North Carolina Coastal Federation
 - Jon Miller, Stevens Institute of Technology
 - Juliana Barrett, Connecticut Sea Grant
 - Jeff DeQuattro, The Nature Conservancy Gulf of Mexico Program
- **Networking Break:** 2:30 – 3:00 pm, Hartford Commons [2nd Floor]
- **Valuation and Innovative Financing:** 3:00 – 4:00 pm, Hilton Ballroom [3rd Floor]
This session will explore how the living shorelines community can - and must - evolve its current approach to valuing living shorelines and how projects and programs are financed. Panelists will share their perspectives on new approaches that involve partners and techniques in innovative ways, particularly as it relates to gaining private sector support and investment.
Moderator: Jonathan Stone, Save the Bay – Narragansett Bay
 - Dan Nees, University of Maryland Environmental Finance Center
 - Michael Curley, Environmental Law Institute
 - Nick Shufro, United Nations Office for Disaster Risk Reduction & PricewaterhouseCoopers
- **Day 1 Wrap-Up,** Hilton Ballroom [3rd Floor]
At end of Day 1, we will provide an overview of Day 2 Regional Workshops and present the workshop “charge” questions, which will frame each of the regional workshop discussions.
Jessica LeClair, CIRCA, and Suzanne Simon, Restore America’s Estuaries
- **Evening Networking Event:** 5:00 – 7:00 pm, Hartford Commons [2nd Floor] – light appetizers and cash bar

Day 2 – Wednesday, December 2, 2015

Regional workshops: presentations and overall format will vary by workshop and will be shaped by the needs of the community. Each workshop will address the regional challenges through the lens of four primary “charge” questions:

- What are the biggest barriers you face in your region in terms of implementing living shorelines projects and programs? This question applies to all aspects of living shorelines - science, policy, permitting, outreach, financing, etc.
- How can these barriers be addressed or overcome?
- What resources and approaches are needed to make this happen? What approaches have worked?
- How should the living shorelines community advance and move forward?

For the purposes of these breakout discussions, the regions will be defined as: Great Lakes, Northeast (New York to Maine), Mid-Atlantic (Virginia to New Jersey), Southeast (North Carolina to Florida), Gulf Coast, and West Coast. Attendees will self-select which workshop they would like to attend. Given the nature of the workshop discussions, attendees are encouraged to participate in one workshop for the duration of the day. Every workshop will follow the overarching schedule below. Please see detailed agendas for each regional workshop on the following pages.

- **Beverages and Light Refreshments:** 7:15 – 7:45 am, Hartford Commons [2nd Floor]
- **Session 1:** 8:00 – 10:00 am
- **Session 2:** 10:30 am – noon
- **Working Lunch** [provided]: 12:00 – 1:15 pm
- **Session 3:** 1:15 – 2:30 pm
- **Wrap-up and Closing Comments:** Reconvene for report-out to all attendees - 3-4 pm, Hilton Ballroom [3rd Floor]
 - Jeffrey Benoit, Restore America’s Estuaries; Lou Chiarella, National Oceanic and Atmospheric Administration; and Jim O’Donnell, CIRCA

Northeast Regional Workshop

Hilton Ballroom West [3rd Floor]

Session 1: Overview of primary techniques used in the Northeast, then breakout group discussions on barriers associated with each

- Overview of primary living shorelines techniques used in the Northeast
 - Moderator: Jennifer Mattei, Sacred Heart University
 - Salt marsh: Varoujan Hagopian, GEI Consultants, Inc.
 - Dune and beach nourishment: John Ramsey, Applied Coastal Research and Engineering, Inc.
 - Bioengineering on coastal banks: Rebecca Haney, Massachusetts Office of Coastal Zone Management
 - Shellfish reefs: Anamarija Frankic, Green Harbors Project
- Facilitated breakout discussions to identify barriers associated with each technique; groups will identify top barriers by end of session
 - Facilitator: Caitlin Chaffee, Rhode Island Coastal Resources Management Council

Session 2: Facilitated breakout groups session to identify solutions to top barriers and resources needed to address them

- Facilitator: Julie Stein, HDR, Inc.

Session 3: Facilitated discussion to develop specific recommendations and approaches to address barriers and move forward

Mid-Atlantic Regional Workshop

Hilton Ballroom East [3rd Floor]

Session 1: Review status of living shorelines within the Mid-Atlantic, followed by examination of barriers by state

- Setting the stage – an examination and reflection of the Mid-Atlantic living shorelines community: Karen Duhring, Virginia Institute of Marine Science
- Brief overview by state
 - Moderator: Karen Duhring, Virginia Institute of Marine Science
 - New Jersey: Bill Shadel, Shadel Environmental, and Capt. Al Modjeski, American Littoral Society
 - Delaware: Andrew Howard, Delaware Department of Natural Resources and Environmental Control
 - Maryland: Bhaskar Subramanian, Maryland Department of Natural Resources
 - Virginia: Christine Tombleson, Virginia Institute of Marine Science
- Facilitated breakout groups discuss and identify barriers by state, then identify top barriers by the end of the session
 - Facilitator: Jessica Grannis, Georgetown Climate Center

Session 2: Facilitated discussion to identify approaches and resources needed to overcome and address identified barriers

- Facilitator: Jessica Grannis, Georgetown Climate Center

Session 3: Facilitated session to develop solutions framework

- Facilitator: Jessica Grannis, Georgetown Climate Center

Southeast Regional Workshop

Ethan Allen Room [3rd Floor]

Session 1: Examine the barriers related to getting private property owners invested in living shorelines approaches

- Brief overview of workshop context and introduction: Kristine Cherry, Governors' South Atlantic Alliance
- What does it take? Lessons Learned from Decades of Projects: Tom Ries, Scheda Ecological
- Facilitated discussion and identification of barriers
 - Facilitator: Bill Sapp, Southern Environmental Law Center

Session 2: Facilitated session to develop solutions for key barriers and identify resources to support solutions

- Facilitator: Lisa Schiavinato, North Carolina Sea Grant

Session 3: Facilitated session to create framework with clearly identified actions, including type(s) of organizations needed and priorities

- Facilitators: Bill Sapp, Southern Environmental Law Center, and Kristine Cherry, Governors' South Atlantic Alliance

Gulf Coast Regional Workshop

Nathan Hale Room [3rd Floor]

Session 1: Interactively discuss, explore, and identify barriers and opportunities related to living shorelines, both broadly and through the lens of the upcoming settlement money

- Introduction to workshop and overview of the Deepwater Horizon settlement process: Debbie DeVore, U.S. Fish and Wildlife Service
- Identifying barriers: interactive, facilitated group exercise
 - Facilitators: Lee Anne Wilde, Galveston Bay Foundation, and Matt Chasse, National Oceanic and Atmospheric Administration

Session 2: Facilitated group discussion to brainstorm and identify solutions to barriers

- Facilitators: Niki Pace, Mississippi-Alabama Sea Grant, and Martha Gruber, Tampa Bay Watch

Session 3: Facilitated group discussion to develop action plan and implementation strategy

- Facilitators: Chris Boyd, Troy University; Rick Harter, Ecology and Environment, Inc.; and Jeff DeQuattro, The Nature Conservancy

West Coast Regional Workshop

Hilton Ballroom Center [3rd Floor]

Session 1: Discussion of projects being implemented on the West Coast, including both outer coast and estuaries, and increasing information transfer and coordination between California, Oregon, Washington, and British Columbia. The conversation will be focused on developing a West Coast working group on living shorelines to increase information transfer between entities engaged in living shorelines on the West Coast and nationally. Potential topics include: developing a summary list and map of West Coast living shorelines projects; creating a list of common design components and habitat types; summarizing monitoring components; and discussing permitting and regulatory issues.

- Facilitator: Marilyn Latta, California State Coastal Conservancy

Session 2: Discussion of barriers, information sharing, and capacity building

Session 3: Join other regions to learn from others working nationally on living shorelines about approaches being deployed around the country, monitoring activities, issues faced, solutions and results, etc.

Great Lakes Regional Workshop

Silas Deane Room [3rd Floor]

Session 1: Interactively discuss and identify barriers

Session 2: Identify solutions to top barriers and resources needed to address them

Session 3: Develop action plan and implementation strategy