



2nd National Living Shorelines Technology Transfer Workshop
February 21-22, 2018
Hilton Oakland Airport Hotel, Oakland, CA

Wednesday, February 21

- 7:30 am: **Registration Opens**, *Building 4 – Entryway to International Ballroom*
- 8:30 am: **Welcome and Keynote Address**, *Building 4 – International Ballroom*
 - Welcome, Introductions, and Setting the Context for the Workshop
 - Suzanne Simon, Restore America's Estuaries
 - David Lewis, Save The Bay - San Francisco
 - Sam Schuchat, California Coastal Conservancy
 - Keynote Panel: *Where We Were, Where We Are, Where We're Going*
This session will be a thoughtful exploration of how living shorelines and nature-based approaches started and evolved, what the latest state of the practice is, and where the community should be heading, particularly with respect to their role in climate change and adaptation.
 - Moderator: Sam Schuchat, California Coastal Conservancy
 - Tracy Skrabal, North Carolina Coastal Federation
 - Kathy Boyer, San Francisco State University
 - Letitia Grenier, San Francisco Estuary Institute
- 9:45 am: **Networking Break**, *Building 4 – International Ballroom and Foyer*
- 10:15 am: **Plenary/Full Group Session – Latest Findings on Science, Efficacy, and Ecosystem Services**, *Building 4 – International Ballroom*
 - Session will provide an overview of the latest research findings describing a full account of all the benefits that living shorelines projects provide.
 - Moderator: Lee Weishar, Woods Hole Group
 - Panelists: Hugh Shipman, Washington State Department of Ecology; Carolyn Currin, NOAA
- 11:15 am: **Plenary/Full Group Session – Outreach, Engagement, and Social Science Aspects Related to Living Shorelines and Nature-based Projects and Programs**, *Building 4 – International Ballroom*
 - Session will explore what motivates people, communities, and institutions to adopt living shorelines and nature-based approaches (or not) and best practices on engagement, particularly to typically-underserved and underrepresented communities.
 - Moderator: Suzanne Simon, Restore America's Estuaries
 - Panelists: Todd Woodard, Samish Indian Nation; Nicole Faghin, Washington Sea Grant
- 12:15 pm: **Lunch** [provided], *Building 4 – International Ballroom*

- 1:30 pm: **Breakout Sessions #1** – Interactive sessions will provide attendees an opportunity to engage each other on a particular topic, share lessons learned and obstacles, and devise recommendations. Please note that this breakout includes a networking break that will occur 3:00 pm – 3:30 pm. Attendees choose one to attend:
 - 1) **Determining and Documenting Efficacy (or Lack of) for Living Shorelines and Nature-based Approaches, Building 4 – California Room**
 Session will explore understanding and improving the science of these techniques, including monitoring approaches, datasets, technology, and addressing efficacy in varying habitats and tidal regimes.
 - Facilitator: Megan Cooper, California Coastal Conservancy
 - Speakers: Chela Zabin, Smithsonian Environmental Research Center, UC – Davis; Ryan Fikes, National Wildlife Federation
 - 2) **Meaningfully Engaging Typically Underserved Communities, Building 5 – Boardroom 3**
 Currently, the majority of property owners adopting these techniques are more affluent and more educated, yet these typically underserved communities are often the most at risk due to coastal flooding, sea-level rise, climate change, etc. This session will explore lessons learned and share best practices.
 - Facilitator: Donna Ball, Save The Bay – San Francisco
 - Speaker: Nahal Ghoghaie, Environmental Justice Coalition for Water; Heidi Nutters, San Francisco Estuary Partnership; Todd Woodard, Samish Indian Nation
 - 3) **Challenges Working with Materials in Living Shorelines and Nature-based Approaches, Building 5 – Boardroom 2**
 Session will delve into the obstacles and solutions for working with and fabricating materials, including shortages (e.g. shell), working with fabricators and contractors who are new to these techniques, use of plastics (pros, cons, and substitutes), and beneficial reuse.
 - Facilitators: Janine Harris, NOAA; Natalie Cosentino-Manning, NOAA
 - 4) **Envisioning the Future of Living Shorelines and Nature-based Approaches, Building 4 – Pacific Room**
 Session invites attendees to discuss and brainstorm innovative, new, and aspirational ideas. Where can and should the community go?
 - Facilitator: Anne Morkill, USFWS
 - Speakers: Lee Anne Wilde, Galveston Bay Foundation; Melody Ray-Culp, USFWS; Matt Gerhart, California Coastal Conservancy; Amanda Brown Stevens, Resilient by Design Bay Area
- 4:15 pm: **Plenary/Full Group Session– Report of Breakout Sessions, Building 4 – International Ballroom**
 - Moderator: Evyan Sloane, California Coastal Conservancy
- 5:00 pm – 6:30 pm: **Networking Reception and Poster Session** – light appetizers and cash bar, *Building 4 – International Ballroom and Foyer*
 - Poster details follow at the end of the agenda

Thursday, February 22

- 7:30 am: **Registration Opens, Building 4 – Entryway to International Ballroom**
- 8:30 am: **Plenary/Full Group Session – Design and On-the-Ground Implementation, Building 4 – International Ballroom**
 - Session will provide an overview of the latest in design and implementation advancements with a focus on lessons learned and working in a variety of habitats, scales, and energy regimes.
 - Moderator: Cameron Perry, HDR
 - Panelists: Jim Johannessen, Coastal Geologic Services; Todd Bridges, USACE; Marilyn Latta, California Coastal Conservancy
- 9:45 am: **Networking Break, Building 4 – International Ballroom and Foyer**
- 10:15 am: **Plenary/Full Group Session – Policy, Permitting, and Regulation, Building 4 – International Ballroom**
 - Session will be a forum for discussing how states and regions permit these approaches, along with an exploration of ramifications of Nationwide Permit 54.
 - Moderator: Amy Hutzell, California Coastal Conservancy
 - Panelists: Xavier Fernandez, San Francisco Bay Regional Water Quality Control Board; Niki Pace, Louisiana Sea Grant

- 11:15 am: **Plenary/Full Group Session –Valuing Ecosystem Services, Finance, Investment, Building 4 – International Ballroom**
 - Session will overview the value of these types of projects, the best way to value them, and ways to fund them.
 - Moderator: Chris Hilke, National Wildlife Federation
 - Panelists: Tracy Rouleau, TBD Economics; Adam Davis, Ecosystem Investment Partners
- 12:15 pm: **Lunch** [provided], *Building 4 – International Ballroom*
- 1:30 pm: **Breakout Sessions #2** – Interactive sessions will provide attendees an opportunity to engage each other on a particular topic, share lessons learned and obstacles, and devise recommendations. Attendees choose one to attend:
 - 1) **State and Regional-level Permitting and Laws, Building 4 – Pacific Room**
This session will be a deeper exploration of what has worked on the state and regional level, how state laws have been passed, and how to overcome the hurdles to implementing regional state permitting.
 - Facilitator: Tracy Skrabal, North Carolina Coastal Federation
 - 2) **Design and Implementation, Building 4 – California Room**
Attendees will explore recommendations and describe solutions to overcoming design and implementation hurdles, including working in urban and industrialized settings, how to “soften” hardened shorelines that will never be fully softened, and overcoming risk management fears on the part of professionals and property owners.
 - Tom Ries, ESA Associates; Eryan Sloane, California Coastal Conservancy
 - 3) **Valuing Restoration Projects to Increase Financial Investment, Building 5 – Empire Room**
This session will explore concepts and simple approaches to help restoration practitioners tell their value story, and explore how to tie project metrics and data to outcomes and information to increase investor interest and help get funding.
 - Facilitator: Tracy Rouleau, TBD Economics
 - 4) **Incentivizing Adoption of Living Shorelines and Nature-based Approaches, Building 5 – Boardroom 2**
This session will examine what incentives can be implemented to encourage adoption of these techniques, including differences in working with private versus public entities and identify and share what has been successful elsewhere.
 - Facilitator: Rebecca Schwartz Lesberg, San Diego Audubon
- 3:15 pm: **Networking Break, Building 4 – International Ballroom**
- 3:45 pm – 5:00 pm: **Plenary/Full Group Session– Report of Breakout Sessions and Closing Comments, Building 4 – International Ballroom**
 - Moderator: Donna Ball, Save The Bay
 - Closeout: Jeff Benoit, Restore America’s Estuaries

Friday, February 23

Field session. Registered attendees should meet in the hotel lobby no later than 8:00 am.

Poster Details

- 1) *Natural Infrastructure for Sea Level Rise Adaptation Along the California Coast***
Maya Hayden, Point Blue Conservation Science, and Jenna Judge, NOAA Sentinel Site Cooperative.
- 2) *Citizen Science and Oysters in San Francisco Bay***
Helen Fitanides, The Watershed Project
- 3) *Enhancing Tidal Marsh Habitat to Support California Ridgway's Rail***
Jeanne Hammond, Olofson Environmental, Inc.
- 4) *Forms and Uses of a Novel Biodegradable Composite for the Protection and Creation of Oyster and Salt Marsh Habitats***
Niels Lindquist, Sandbar Oyster Company Inc.
- 5) *Why Living Shoreline Design and Implementation Differs for Southern California: A Regional Perspective***
Emma Ross and Laura Engeman, San Diego Regional Climate Collaborative and the Middlebury Institute of International Studies
- 6) *The Effect of Sedimentation on Oysters Adjacent to Eelgrass Meadows***
Victoria R. Wood, California State University, Fullerton, Department of Biological Science
- 7) *Finding Opportunities at the Estuary's Margin***
David Thomson, SFBBO Habitats Program
- 8) *Scaling Up Native Species Propagation Methods to Accommodate Large Scale Transition Zone/Ecotone Projects of the Future***
Donna Ball, Save the Bay
- 9) *Understanding the Broader Consequences of Tidal Wetland Loss for Sea Level Rise Adaptation Planning: San Mateo County Case Study***
Kelly Malinowski, California State Coastal Conservancy
- 10) *Reconstructing an Estuarine Beach at Aramburu Island – Shoreline Design Performance Five Years Post-Construction***
Roger Leventhal, Marin County Flood Control District
- 11) *Resilient Landscape Restoration on Lower Walnut Creek***
Michelle Orr, ESA, and Paul Detjens, Contra Costa County Flood Control District
- 12) *Designing High Tide Refuge Islands for the California Ridgway's Rail***
Gavin Archbald, H. T. Harvey & Associates
- 13) *A New Living Shorelines Project at Giant Marsh: Integrating Restoration Features Across an Elevational Gradient for Sea Level Rise Adaptation***
Katharyn Boyer, San Francisco State University