

Living Shorelines Workshop: Habitat tradeoff considerations for design and permit review

October 12, 2023 – 9:00am - 3:00pm

Location: NOAA Beaufort Lab Auditorium

The Living Shoreline Steering Committee defines living shorelines as: **“Living shorelines are a suite of options for shoreline erosion control that maintain connections between upland, intertidal, and aquatic areas essential for water quality, ecosystem services, and habitat values.”**

Workshop Objectives – Participants will:

- Improve their understanding of maintaining and enhancing coastal habitat resilience;
- Improve their understanding of regulatory considerations for the permitting process;
- Consider the latest science on habitat tradeoffs when designing living shorelines to facilitate successful permitting; and
- Develop habitat tradeoff research needs.

Agenda

Time	Agenda Item
8:30am	Meeting Check-in
9:00am	Welcome, Introductions & Agenda Review <ul style="list-style-type: none">• Anne Deaton – N.C. Division of Marine Fisheries• Whitney Jenkins – N.C. Coastal Reserve
9:15am	Living Shoreline History – Where we started <ul style="list-style-type: none">• Anne Deaton – N.C. Division of Marine Fisheries• Daniel Govoni – N.C. Division of Coastal Management• Lexia Weaver – North Carolina Coastal Federation
9:35am	What have we learned about Living Shorelines? Overview of research on effect on fish, habitat, erosion control, hurricane resilience... <ul style="list-style-type: none">• Rachel Gittman – East Carolina University• Brandon Puckett – NOAA
10:30am	15-minute Break
10:45am	Climate change and increasing need for coastal resilience – Review of future predictions, concerns for wetlands and other habitats, review of NC Salt Marsh Plan <ul style="list-style-type: none">• Carolyn Currin – ret. NOAA• Claire Rapp – North Carolina Coastal Federation

11:15am	<p>Panel Discussion: Purpose and subsequent design of living shorelines – maximizing the ecosystem benefits while achieving effective erosion control</p> <ul style="list-style-type: none"> • Marik Polk – North Carolina Sea Grant • Lexia Weaver – North Carolina Coastal Federation • Gregg Bodnar – N.C. Division of Coastal Management • Brandon Puckett – NOAA
11:35am	Lunch, provided
12:20pm	<p>Small Group Discussions:</p> <ul style="list-style-type: none"> • Should living shorelines be designed for current or future conditions? If future, how far out? • How do restoration planners determine the type and size of structure and how do they prevent being overly hardened – height, width, length • What is the importance of the living part of living shorelines? I.e., must a living shoreline have plantings? Does research show the need for fill in living shoreline design? • What are the research needs related to living shorelines maximizing ecosystem benefits while providing effective erosion control
1:15pm	15-minute Break
1:30pm	<p>Panel discussion: How to evaluate the conversion of one habitat to another as well as protect the public trust</p> <ul style="list-style-type: none"> • Carolyn Currin – NOAA • Lexia Weaver – North Carolina Coastal Federation • Maria Dunn – N.C. Wildlife Resources Commission
1:50pm	<p>Small Group Discussions:</p> <ul style="list-style-type: none"> • How should the ecosystem services of different habitats (soft bottom or SAV vs. rock and marsh) be compared? How are existing adjacent habitats (especially SAV) going to respond to living shoreline construction? • How should impacts to public trust be weighed alongside habitat concerns? How should fishing access concerns be addressed (shoreline access, oystering/clamming/gigging access, navigation) when planning gaps, width, and length of a living shoreline? • Should living shorelines be permitted in front of estuarine beaches? • What are the research needs related to the conversion of one habitat to another and protecting the public trust. Do we need to monitor adjacent habitat effects? Do we know the ability of living shorelines to reduce nutrients and sediment?
2:45pm	Next steps, action items
3:00pm	Adjourn