

**Living Shoreline Steering Committee
NC Coastal Federation
Newport, NC 28570
May 15, 2019**

Attendees: Trish Murphey (APNEP), Lexia Weaver (NCCF), Daniel Govoni (DCM), Jess Hendricks (VIMS), Nick Mork (NCCF), Jingyi Sun (NCCF), Nick Werner (NCCF), Ana Zivanovic-Nenadovic (NCCF), Lynn Geiger (NCCF), Sarah Bodin (NCCF), Whitney Jenkins (NERR), Rebecca Ellin (NERR), Johanna Rosman (UNC IMS), Jana Haddad (UNC IMS), Rachel Bisesi (NCCF), Sarah Spiegler (NCSG), Jimmy Johnson (APNEP), Todd Miller (NCCF), Pam Mason (VIMS), Stacey Feken (APNEP)

Phone Attendees: Michael Flynn (NCCF), Mariko Polk (UNC-W), Bill Crowell (APNEP), Tracy Skrabel (NCCF), Leslie Vegas (NCCF), Rachel Love-Adrick (DCM), Reid Corbett (ECU), Lora Eddy (TNC), Erin Fleckinstein (NCCF), Anne Deaton (DMF)

10:00 Welcome, Introductions and Purpose

Trish welcomed everyone to the meeting. She explained that the purpose of the meeting was to hear a presentation on NNBFs from scientists from VIMs and to provide input on the applicability of this work to NC. The committee will also review and discuss the latest draft of the Working Strategy Document, and whether to include living shorelines as a standalone in the upcoming draft of the Oyster Blueprint, get subcommittee updates and hear the latest on the planning of the fall Living Shoreline Transfer Workshop.

10:15 NOAA VIMS project: Using Natural and Nature-Based Features to Build Resilience to Storm-Driven Flooding

Jess Hendricks and Pam Mason, both from VIMs gave a presentation on using Natural and Nature-Based Features (NNBFs) for resilience to flooding. The use of these features is a co-benefit approach to prioritizing lands for Coastal Resilience. NNBFs can offer one means of resilience to flooding events. The study area is the area east of HWY 95 and elevation is less than 10 ft. They highlighted existing features and then highlighted where there are areas unprotected from flooding. They specifically looked at buildings and inundation pathways based on land elevations. The benefits of this approach is to link NNBFs with buildings. They could then demonstrate to local governments where they can work. By using a rating system, areas could be prioritized and targeted for restoration.

Discussion by the group included the issue of trees and their value as a NNBF versus falling during hurricanes, as well as a focus on tide based flooding as opposed to landward runoff. The group also discussed community involvement/outreach. At this point, the community has not been involved but outreach is the third year component of the project. Other items discussed were incentives for local governments such as funding assistance cost-share, nutrient reduction credits and using living shorelines as mitigation banking credits.

Input from the committee included looking at the Greenbox Toolbox Program for data layers, TNC Open Space tool and any other tools that may overlap from local communities and resiliency workshops, consideration of a minimum size for protected services provided by NNBFs and outreach to local communities.

11:00 Draft Living Shoreline Working Strategy

Trish reviewed the latest draft working strategy document provided by a subcommittee of Lexia, Todd, and Rebecca. Most of the content did not change, but clarification of pieces of the document were added. This included how often to meet, role of subcommittees and communication between subcommittees. The working strategy document will be considered a living document. The idea is to not create more work but to collaborate efforts on education, research and implementation of building living shorelines.

Action Item: Send any additional editorial edits to Trish by May 17th for final document.

11:30 Discussion of Inclusion of Living Shorelines in Oyster Blueprint

Trish explained that the Oyster Blueprint is a document that addresses management, restoration, and education of oysters. This document is updated every five years. At the last NCSPAT (NC Shellfish Partnership) meeting, the idea of adding living shorelines as a tool for restoration as a standalone goal to the blueprint was discussed. Erin provided additional details about the blueprint and how to link the two groups together to keep everyone coordinated and informed. The group had no concerns about including living shorelines into the blueprint. Input was to frame it in a way that was complementary for both restoration and living shorelines. Updated draft language on living shorelines will be provided to the committee for review. All members supported adding living shorelines to the oyster blueprint.

11:45 National Living Shorelines Technology Transfer Workshop Update

Rachel B. gave an update on the transfer workshop planning details. It will be held on October 8-9 at the Beaufort Hotel and Conference Center. There will be three field trips on the first day for attendees. These field trips will be a major component of the workshop and all are requested to participate. A draft agenda can be found here:

https://estuaries.org/wp-content/uploads/2019/06/2019-LS-TT-Agenda_6.3.pdf

12:00 Subcommittee Updates

Whitney provided an update on the Education and Outreach Subcommittee. There were two workshops for realtors and contractors with attendance of 45 at one and 43 at the other. In attendance were 14 property owners., several marine contractors and three HOA representatives. She discussed the desire for more engineered design standards and comparisons between different types of living shorelines. There are plans for more workshops in the fall and winter. The NCCF discussed previously held open houses for property owners

and contractors. The group discussed the need for design workshops and that marine contractors should begin to take responsibility of designing living shorelines. Living shoreline design seems to be a huge gap. Pam discussed that VIMs has marine contractor training but it takes time to get there. The group discussed how to get more detailed oriented in order to give contractors a leg up. Bill Crowell suggested that APNEP could possibly fund a scope of work to help fill the gap by increasing the expertise of contractors and engineers.

Johanna Rosman is working on a cross-shore model on how waves break or move through the marsh and is interested in creating a model to play with sill and sill height and look at how effective a living shoreline will be at protecting marsh.

Lexia provided an update on implementation and incentives. The NCCF in partnership with TNC reported an additional 6,000 linear feet of new living shorelines. There are current projects in Atlantic and Oriental. There are some small grants for private property projects. NOAA is funding a shoreline at Morris Landing. The Sandbar Oyster Company just completed a living shoreline that looks like a typical homeowner shoreline. TNC as a 1,200 foot living shoreline planned for Pea Island. She also discussed a concern about harvest of oysters from living shorelines but are in public trust waters, and the need for harvesting restrictions on living shorelines so oysters have time to establish and protect the shoreline. It was suggested that talking with the Sentinel Landscape Partnership about living shorelines.

Action Item: Education committee- scope of work for APNEP for future workshop (must be in APNEP region).

12:15 Regulatory Updates

Daniel gave an update on the big news that there is now a set of conditions that everyone, including the USACOE, agreed upon. The general permit has now been approved and can be issued in a day. Other ACOE districts could learn from this and would be a good topic for the Tech Transfer Workshop.

- Meeting after Tech Transfer Workshop

- Education committee- scope of work for APNEP for future workshop, must be in APNEP region

12:30 Adjourn

The meeting was adjourned with the plan to set a meeting date after the Tech Transfer Workshop.