

DRAFT

THE N.C. LIVING SHORELINE STEERING COMMITTEE WORKING STRATEGY FOR THE COOPERATIVE EDUCATION, IMPLEMENTATION, RESEARCH AND MONITORING OF LIVING SHORELINES IN COASTAL NORTH CAROLINA

PURPOSE OF THE STEERING COMMITTEE

This working strategy document establishes the general framework for the N.C. Living Shoreline Steering Committee (Committee). The overarching goal of the Committee is to support sustainable management of estuarine shorelines in North Carolina through the promotion and expanded use of living shorelines by fostering strategic cooperation and participation among the partners in the education, implementation, research and monitoring of living shorelines along the coast of North Carolina.

BACKGROUND

Living shorelines as defined by the N.C. Division of Coastal Management are a suite of options for shoreline erosion control that maintain existing connections between upland, intertidal, and aquatic areas which are necessary for maintaining water quality, ecosystem services, and habitat values. Unlike vertical stabilization measures such as bulkheads, living shoreline techniques typically use native materials such as marsh plants, oyster shells, and occasionally minimal amounts of structural materials (e.g. stone) to stabilize estuarine shorelines, minimize erosion, and enhance habitats.

According to the N.C. Coastal Habitat Protection Plan (CHPP), biologically productive wetland and shell bottom habitat along shorelines have declined in many areas due to natural erosion and vertical shoreline hardening with bulkheads. Living shorelines protect estuarine shorelines from erosion while perpetuating valuable fish habitat and ecosystem services. The CHPP in 2017 listed living shorelines as a priority issue and encourages more widespread use of living shorelines.

Progress has been made in promoting the use of living shorelines and in documenting their benefits and limitations. This work has been accomplished by local, state and federal agencies, universities and nonprofit organizations. Research demonstrates that living shorelines support a higher diversity and abundance of fish and shellfish than bulkheaded shorelines, effectively deter erosion, and survive storm events. Education and outreach efforts have been done to increase awareness of this technique to the public and contractors. Nonprofit organizations have constructed numerous demonstration projects on both public and private properties. Despite these efforts, living shorelines are still the exception rather than the rule for shoreline stabilization¹. Advancements in permitting and the provision of incentives such as the use of cost-share programs and technical assistance make it easier to design, permit, fund and construct living shorelines.

COMPOSITION OF THE STEERING COMMITTEE

The Committee is comprised of stakeholders from industry, local, state and federal agencies, universities and nonprofit organizations including... (list agencies)

¹ Approximately 60 living shorelines have been permitted coastwide, in contrast to 93 miles of bulkheads (based on 2012 DCM mapping). These data will be updated as they become available.

ROLES AND RESPONSIBILITIES OF THE STEERING COMMITTEE

The Committee will serve as a sounding board and advisory committee for the Subcommittees. Committee member's roles will include:

- Provide guidance and recommendations on actions necessary to adequately promote the use of living shorelines
- Promote best practices for how to locate, design, build and maintain living shorelines
- Set the priorities for collaboration
- Provide status updates periodically on progress being made with living shorelines in North Carolina
- Update the Partner Initiatives Document yearly
- Develop and implement a strategic plan to promote the use of living shorelines.

MEETING FREQUENCY

The Committee meets at least twice a year with the subcommittees meeting in between or more frequently as needed.

PARTNER INITIATIVES DOCUMENT

The Partner Initiatives Document includes a compilation/list of living shoreline partner actions grouped by Subcommittee topics.

SUBCOMMITTEES

The Committee is comprised of three working Subcommittees. The purpose of the Subcommittees is to increase awareness of ongoing living shoreline activities, share experiences and lessons learned, identify needs and opportunities for collaboration, discuss priorities, and provide a list of partner accomplishments annually. Each subcommittee reports back to the Committee. Membership of the subcommittees is open to everyone involved in the respective topic and is at the discretion of the Subcommittee chair. The Chair of the Subcommittee is a member of the Committee. Additional Subcommittees may be added as need by the Committee.

- Education and Outreach (Chair: Whitney Jenkins)
 - Examples of Education and Outreach activities include engaging and enhancing communications with contractors, realtors, and homeowners' associations about living shorelines through workshops, educational materials, educational incentives and demonstration projects.
- Implementation and Incentives (Chair: Lexia Weaver)
 - Examples of Implementation and Incentives activities include providing technical, financial and regulatory assistance to encourage the construction of living shorelines. This Subcommittee will track trends in the use of living shorelines and explore ways that partners can further incentivize appropriate living shoreline practices.
- Research and Monitoring (Chair: Carolyn Currin)
 - Examples of Research and Monitoring activities include establishing research priorities, sharing results and lessons learned, recommending geographic priority areas, sharing and standardizing protocols, testing alternative materials for living

shoreline construction and documenting costs, identifying social and economic factors affecting shoreline management decisions.

STEERING COMMITTEE MEMBERS (Add Shellfish Sanitation, John Fear, Martin Posey, oyster growers as steering members or subcommittees???)

Co-Chair

Trish Murphey, Watershed Manager
Albemarle – Pamlico National Estuary Program
North Carolina Department of Environmental Quality
North Carolina Coastal Reserve and National Estuarine Research Reserve
101 Pivers Island Rd,
Beaufort, NC 28516
trish.murphey@ncdenr.gov

Co-Chair

Lexia Weaver, Coastal Scientist and Central Regional Manager
North Carolina Coastal Federation
3609 Highway 24
Newport NC 28570
252-393-8185
lexiaw@nccoast.org

Jimmy Johnson, Coastal Habitats Coordinator
Albemarle – Pamlico National Estuary Program
North Carolina Department of Environmental Quality
943 Washington Square Mall
Washington, NC 27889
252-948-3952
jimmy.johnson@ncdenr.gov

Todd Miller, Executive Director
North Carolina Coastal Federation
3609 Highway 24
Newport NC 28570
252-393-8185
toddm@nccoast.org

Daniel Govoni, Policy Analyst
Division of Coastal Management
North Carolina Department of Environmental Quality
400 Commerce Avenue
Morehead City, NC 28557
252-808-2808
daniel.govoni@ncdenr.gov

Rebecca Ellin, Coastal Reserve Program Manager
North Carolina Coastal Reserve and National Estuarine Research Reserve
Division of Coastal Management
North Carolina Department of Environmental Quality

101 Pivers Island Rd
Beaufort NC, 28516
252-838-0880
rebecca.ellin@ncdenr.gov

Whitney Jenkins, Coastal Training Program Coordinator
North Carolina Coastal Reserve and National Estuarine Research Reserve
Division of Coastal Management
North Carolina Department of Environmental Quality
101 Pivers Island Rd
Beaufort NC, 28516
252-838-0882
whitney.jenkins@ncdenr.gov

Anne Deaton, Habitat Coordinator
Division of Marine Fisheries
North Carolina Department of Environmental Quality
P.O. Box 769
Morehead City, NC 28557
252-726-7021
anne.deaton@ncdenr.gov

Karen Higgins, 401 & Buffer Permitting Branch Supervisor
Division of Water Resources
North Carolina Department of Environmental Quality
1617 Mail Service Center
Raleigh, NC 27699-1617
919-807-6360
karen.higgins@ncdenr.gov

Dr. Niels Lindquist, Joint Professor
The University of North Carolina at Chapel Hill – Institute of Marine Sciences
3431 Arendell Street
Morehead City, NC 28557
252-726-6841, ext. 136
nlindquist@unc.edu

Rachel Gittman, Assistant Professor
Department of Biology
Coastal Studies Institute East Carolina University
Greenville, NC 27858-4353
252-328-9986
gittman17@ecu.edu

Reide Corbett, Director
Coastal Studies Institute
850 NC 345,
Wanchese, NC 27981
252-328-1367
corbettd@ecu.edu

Brian Silliman, Rachel Carson Professor of Marine Conservation Biology
Duke University Marine Laboratory
Nicholas School of the Environment and Earth Sciences
135 Duke Marine Lab Road
Beaufort, NC 28516-9721
252-504-7655
brian.silliman@duke.edu

Brian Boutin, Program Director
The Nature Conservancy
701 west Ocean Acres Drive
Kill Devil Hills, NC 27948
252 441 2525 ext. 6
bboutin@tnc.org

Spencer Rodgers, Coastal Construction and Erosion Specialist
North Carolina Sea Grant
University of North Carolina-Wilmington
Center of Marine Science
5600 Marvin K. Moss Ln.
Wilmington, NC
910-962-2491
rogerssp@uncw.edu

Carolyn Currin, Research Ecologist
NOAA National Ocean Service
National Centers of Coastal Ocean Science
101 Pivers Island Rd.
Beaufort, NC 28516
252-728-8749
carolyn.currin@noaa.gov

Twyla???? National Marine Fisheries Service
101 Pivers Island Rd.
Beaufort, NC 28516
252-838-0828
fritz.rohde@noaa.gov

Devon Eulie, Assistant Professor
Department of Environmental Sciences
University of North Carolina-Wilmington
Center of Marine Science
5600 Marvin K. Moss Ln.
Wilmington, NC
919-962-3230
eulied@uncw.edu

Paul Wojoski, Senior Environmental Specialist
Division of Water Resources
North Carolina Department of Environmental Quality
1617 Mail Service Center

Raleigh, NC 27699-1617
919-807-6364
paul.wojoski@ncdenr.gov

EFFECTIVE DATE

This document is considered a living document and will be subject to updates and adjustments as needed by the Committee.