

Setting the Groundwork for Action

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North Carolina Coastal Federation
Working Together for a Healthy Coast



North Carolina
Coastal Federation
Working Together for a Healthy Coast

Programs



Salt Marsh



Oysters

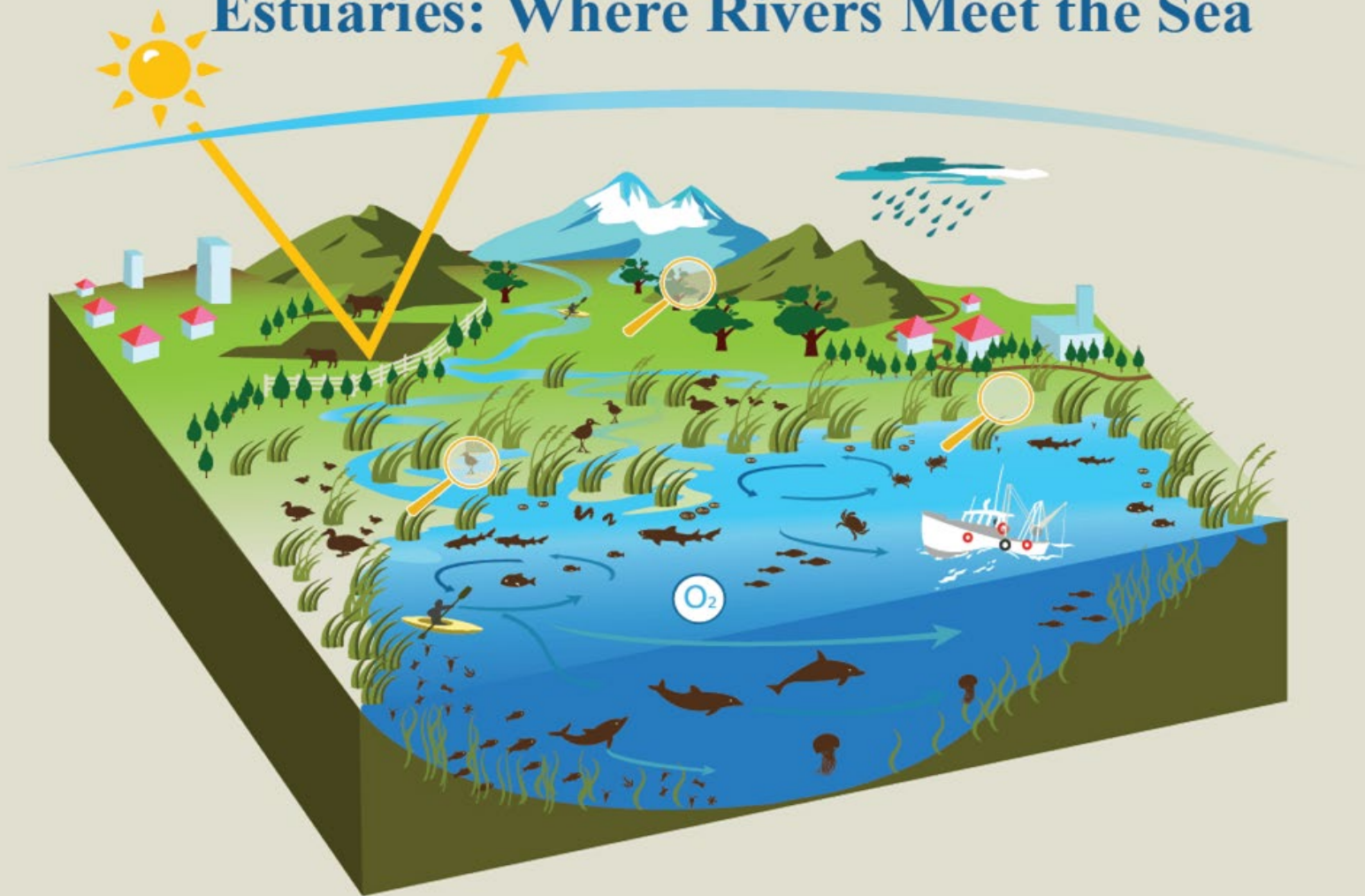


Water Quality



Marine Debris

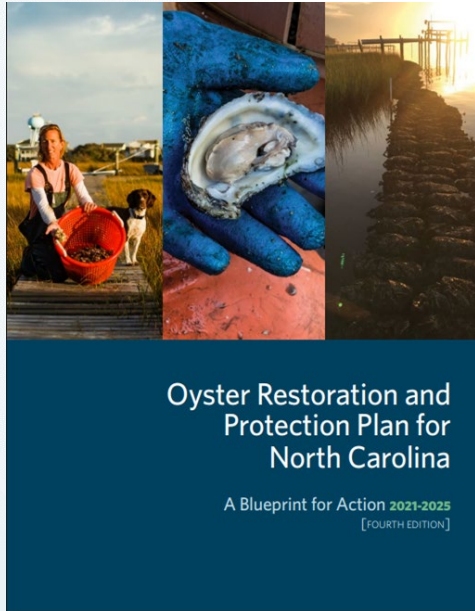
Estuaries: Where Rivers Meet the Sea



Putting Plans into Practice

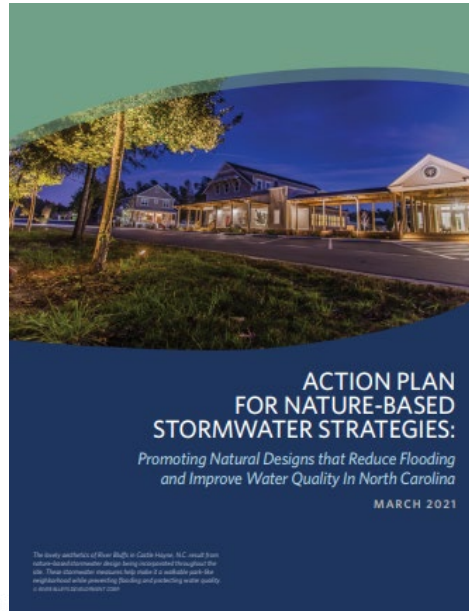
2020

Oyster Blueprint



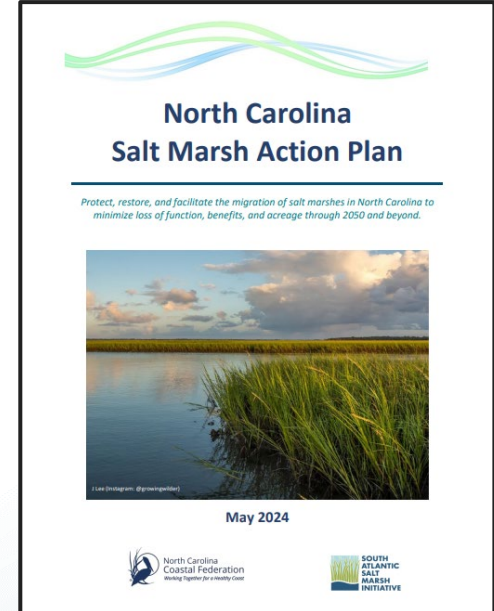
2021

Nature Based Stormwater Strategies



2024

NC Salt Marsh Action Plan



Putting Plans into Practice

2020

Oyster Blueprint

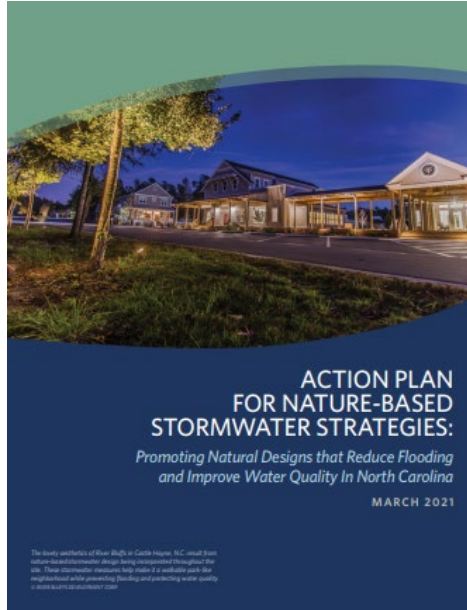


Oyster Restoration and
Protection Plan for
North Carolina

A Blueprint for Action 2021-2025
[FOURTH EDITION]

2021

Nature Based Stormwater Strategies



ACTION PLAN
FOR NATURE-BASED
STORMWATER STRATEGIES:

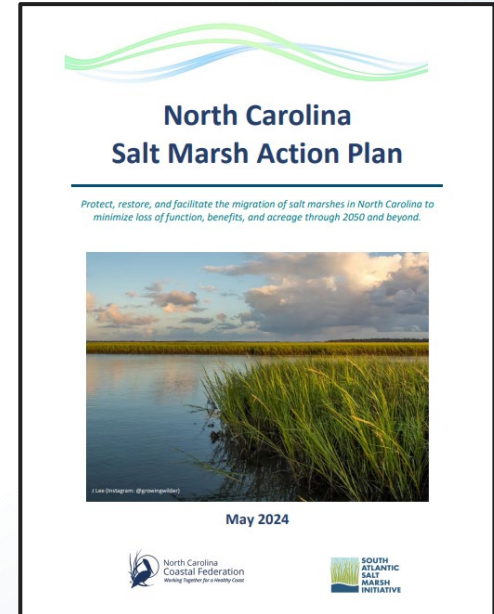
*Promoting Natural Designs that Reduce Flooding
and Improve Water Quality In North Carolina*

MARCH 2021

The diversity and beauty of River Study in North Carolina, N.C., result from nature-based stormwater design being implemented throughout the state. These stormwater management techniques help reduce flood risk and improve water quality while providing flood and protection water quality in urban and suburban areas.

2024

NC Salt Marsh Action Plan



North Carolina
Salt Marsh Action Plan

*Protect, restore, and facilitate the migration of salt marshes in North Carolina to
minimize loss of function, benefits, and acreage through 2050 and beyond.*



(See Instagram: @growinggreen)

May 2024

North Carolina
Coastal Federation
Working Together for a Healthy Coast

SOUTH
ATLANTIC
SALT
MARSH
INITIATIVE

Protect:
water quality,
oyster
sanctuaries

Restore:
living
shorelines,
recycle for
reefs

Educate:
outreach and
engagement

Blueprint

Harvest:
cultch,
harvest,
aquaculture

WATER QUALITY



Protect and restore water quality in shellfish growing waters that are both critically important and endangered.



- ✓ Stump Sound Watershed Restoration Plan
- ✓ Newport River Watershed Protection and Restoration Plan
- ✓ Prioritize additional waterbodies in need of protection

SANCTUARIES



Establish sufficient acreage of protected oyster reefs to support desired ecosystem services including: build fish habitat, supplement wild oyster stock and filter water.



- ☑ Build 100 acres of oyster sanctuary by 2025
- ▨ Determine the feasibility of a protected reef designation in Southern waters.
- ▨ Refine estimates for how many acres of protected habitat is needed to reach ecosystem service goals.

A coastal landscape featuring tall, green and yellow grass in the foreground. A rocky shoreline with a small pool of water is visible. In the background, there is a body of water with a few sailboats and a distant shoreline under a blue sky with some clouds.

Living Shorelines

Expand the use of living shorelines to become the most commonly used stabilization method in estuaries that support oyster habitats.



- ☑ Expand use of living shorelines to be most commonly used method. (3 miles added by 2025)
- ☑ Ensure protection of living shorelines constructed from oyster reef material.

Recycle for Reefs



Create a cohesive oyster shell recycling program to provide 5 percent of material needed to support oyster habitat restoration strategies



- ☑ Recycled material to provide 5 percent of needed material by 2025 (~15,000 bushels).
- ▨ Identify priority reef locations for recycled shell, target 20 acres of reef.

CULTCH PLANTING



Use cultch planting to replenish and enhance oyster habitat for commercial harvest and ecosystem services



- ✓ Plant cultch to build 40 acres of harvestable oyster habitat
- ✓ Study existing program to determine if improvements can be made to maximize oyster growth and ROI.

WILD HARVEST



Sustainably manage natural oyster habitats within public trust areas to perpetuate ecosystem services and wild harvest.



- ☑ Improve the science and monitoring that informs the FMP- work towards a state stock assessment.
- ☑ Coordinate with various state plans: CHPP and FMP in particular..



Shellfish Aquaculture

Build the shellfish aquaculture industry to create a \$45 million industry by 2025.



- ☐ Grow industry to \$45 million by 2025.
- ☒ Education and economic support for new and existing growers; comprehensive marketing and distribution; research and continued regulatory review and planning.

Outreach and Engagement

The background image shows four people standing in silhouette on a grassy bank next to a body of water. They are looking out towards the horizon where the sun is setting, creating a warm, golden glow. The sky is filled with soft clouds, and the water reflects the light from the sunset. The overall mood is peaceful and contemplative.

Create communication and outreach strategies that engage stakeholders and the general public to actively support the goals, strategies and actions outlined in the Blueprint.



**2023 STATE OF THE
OYSTER REPORT**

on the OYSTER RESTORATION & PROTECTION
PLAN FOR NORTH CAROLINA

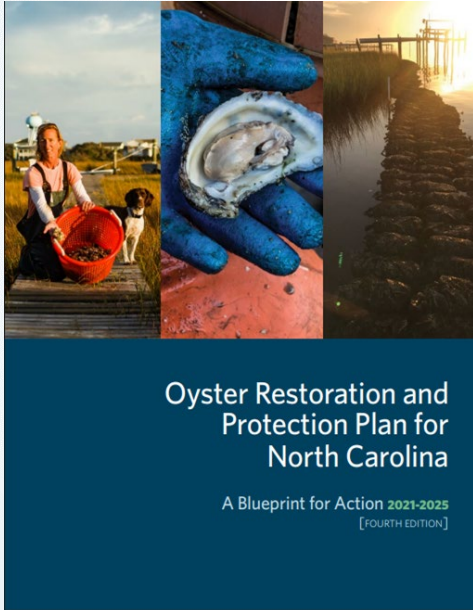
Prepared by the North Carolina Coastal Federation and Published July 2024

- ✓ Continue to engage statewide oyster steering committee
- ✓ Leverage support with NC Aquariums, Museums and visitor's centers
- ✓ Expand the use of traditional and social media outlets- including field trips, public forums and school engagement.

Putting Plans into Practice

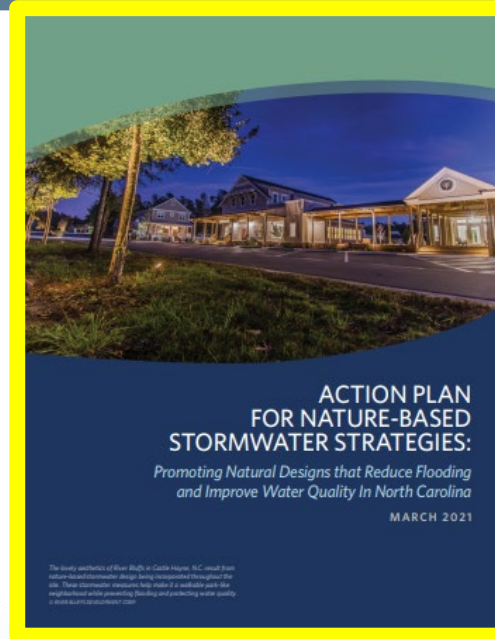
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Oyster Blueprint



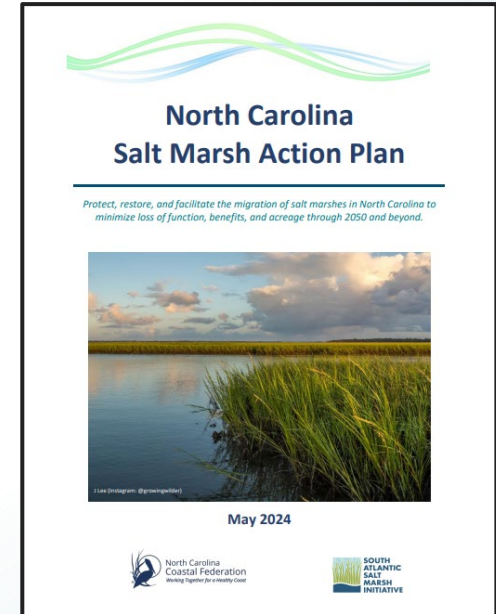
2021

Nature Based Stormwater Strategies



2024

NC Salt Marsh Action Plan



March
2020



Pew and NCCF partner



Establish workgroups



Workgroup Meetings



Identify Barriers to NBSS



Brainstorm solutions and opportunities



Refine Recommendations



Identify priority actions



Write Action Plan



Workgroup review

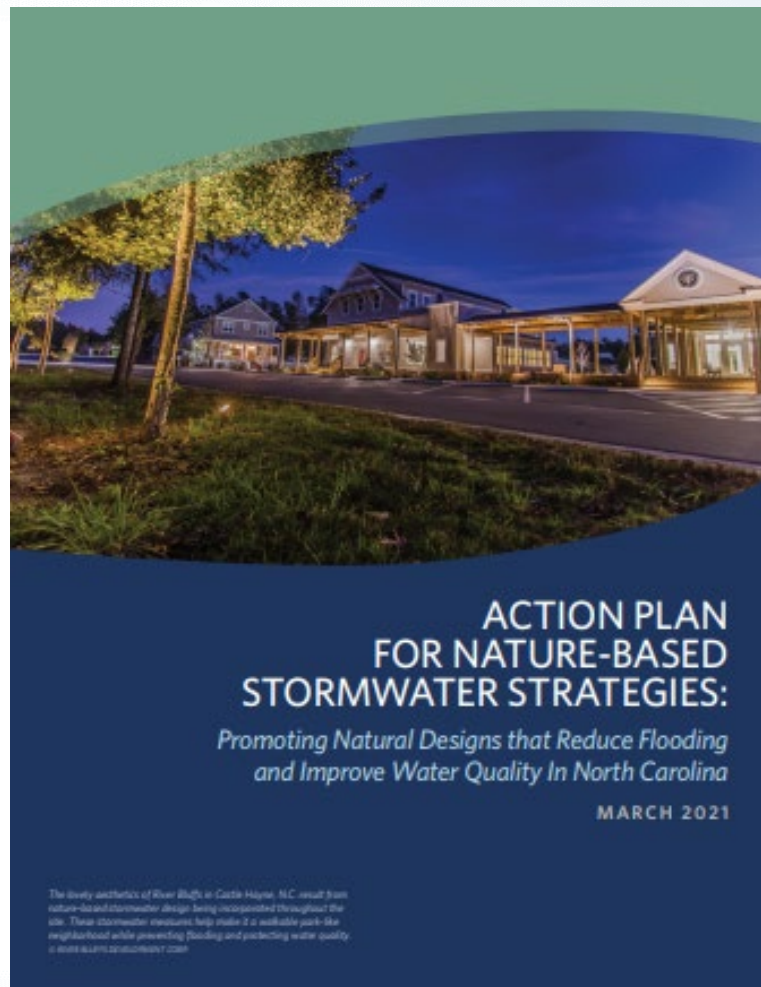



Peer review

March
2021



Action Plan Release





"We saved about \$2 million in development costs on 100 lots by not installing curbing and by using natural areas as infiltration basins and not having to excavate for wet ponds."

Burrows Smith, developer River Bluffs



Effective



Advantageous



Economical



Adaptable



Sensible

Nature Based Stormwater Strategies



Retrofits



New Development



Roadways

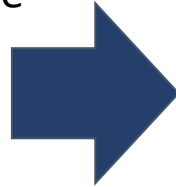


Working Lands

Nature Based Stormwater Strategies

Accomplishments to date:

- ❖ Uniform Floodplain Management Policy Updated
- ❖ Pilot Stormwater Retrofit Cost-share Program
- ❖ State Flood Blueprint embraces NBSS
- ❖ Strategic partnership between NC CLT and NCCF in Newport River
- ❖ Resolution for Additional Agricultural Cost-share Funding



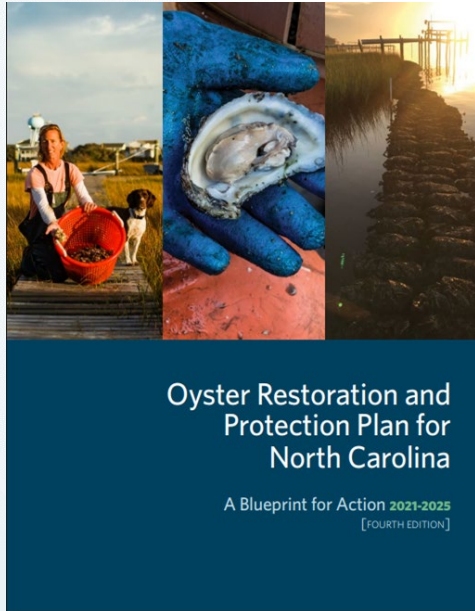
Priorities moving forward:

- Expand conservation land acquisition/easements
- Develop new extension efforts for targeted audiences
- Permitting benefits for NBSS
- Advocate for additional Federal Farm Bill dollars to NC for conservation programs

Putting Plans into Practice

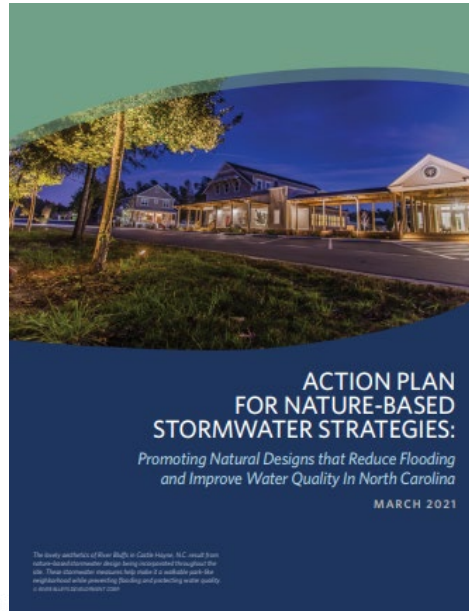
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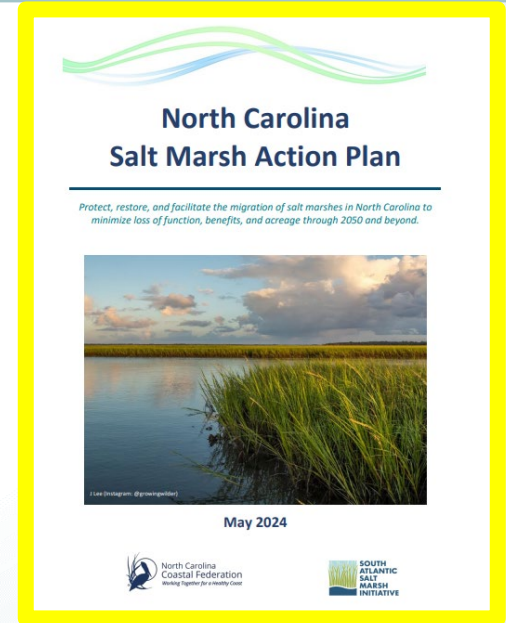
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NC Salt Marsh Action Plan





South Atlantic Salt Marsh Initiative



- **Goal:** To enhance the long-term abundance, health, and resilience of the approximately 1 million acres of salt marshes within the South Atlantic states to ensure no overall loss of the benefits these wetlands provide to fish, wildlife, and people

NC Salt Marsh Action Plan



Workshop 2022

- Scope
- Important factors
- High concern areas



Approach

- 2050
- 1.5' SLR
- Land use



Workshops 2023

- Regional
- Recommendations
- Focused actions

Strategy 1:

Advance salt
marsh
conservation
& restoration

Goal:

Minimize loss of the
function, benefits,
and acreage through
2050 and beyond

Strategy 2:

Facilitate salt
marsh
migration

Strategy 3:

Incorporate
cross-cutting
approaches



North Carolina Salt Marsh Action Plan

Protect, restore, and facilitate the migration of salt marshes in North Carolina to ensure no overall loss of function, benefits, and acreage through 2050 and beyond.



May 2024



Implementation

- Collaborating to:
 - Incorporate actions into existing efforts and programs
 - Develop priorities and ensure effective progress
 - Identify new pathways to implement actions



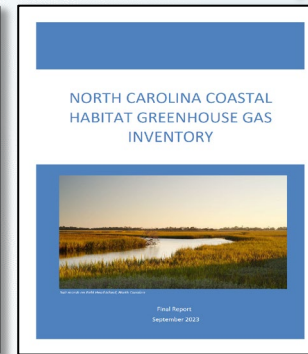
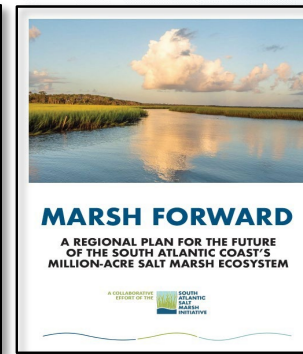
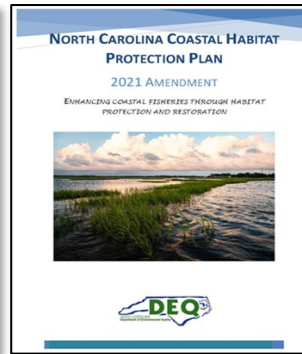
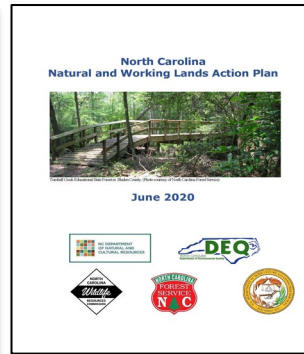
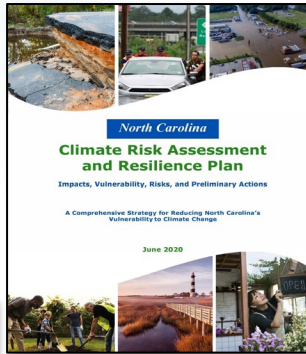
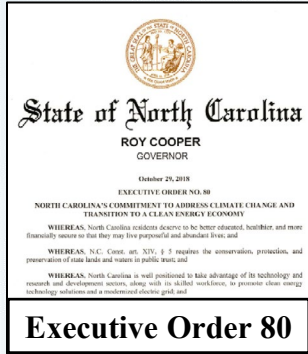


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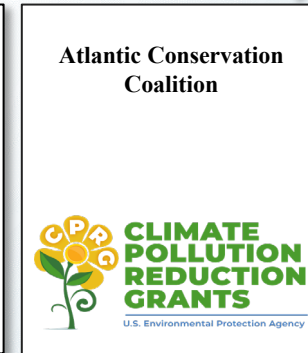
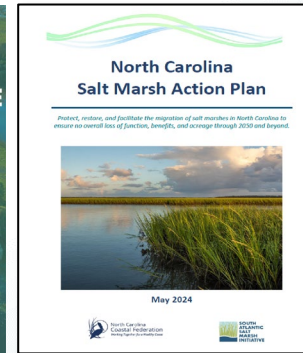
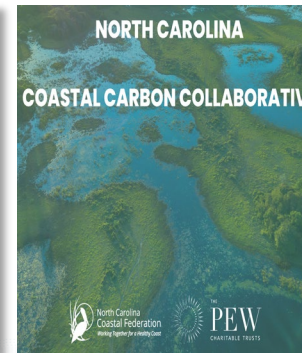
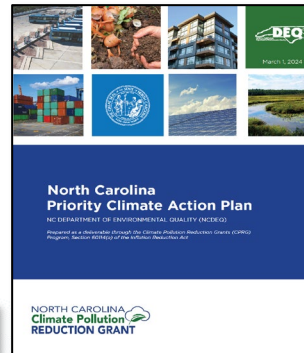
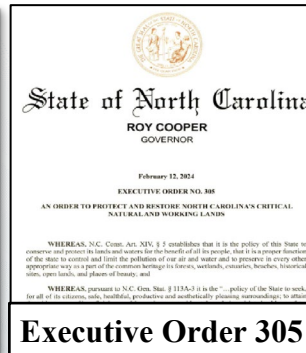
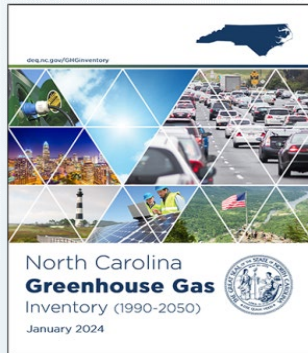
2020

2021

2023



2024



- Nature Based Solutions

Ecosystem

- Strengthen local capacity

Community

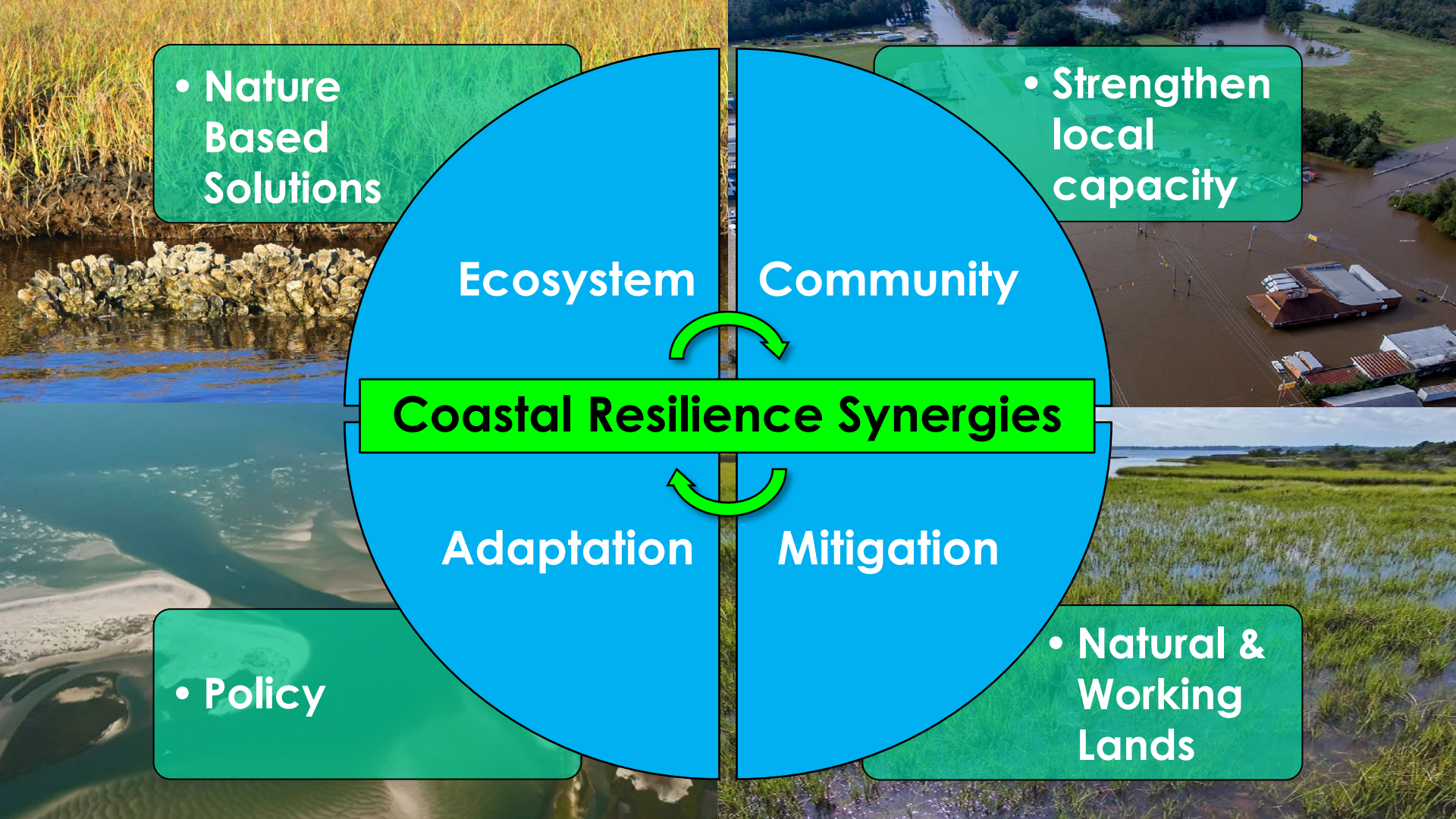
Coastal Resilience Synergies

Adaptation

Mitigation

- Policy

- Natural & Working Lands



Collaboration, Collaboration, Collaboration!



A close-up photograph of the front of a red car. The hood is a vibrant red and has the words "WELL POLLINATED" written on it in a dark red, hand-painted, slightly irregular font. The text is arranged in two lines: "WELL" on the top line and "POLLINATED" on the bottom line. Above the hood, the base of the windshield is visible, showing black wiper blades and a red trim piece. The background is slightly out of focus, showing some green foliage on the left.

WELL
POLLINATED

Cross Cutting Priorities

Planning, Policy, Regulatory

- 1) *Align state/federal land management (and/or grant) programs with salt marsh, water quality, and oyster program goals*
- 2) *Plan for protected reef designation in the southern part of the state*
- 3) *Develop a “permitting road map” for nature-based solutions*

Mapping, Monitoring, Research

- 1) *Create a coastal restoration research needs clearing house/listserv.*
- 2) *Develop a Coastal Conservation Mapping Team tasked with creating a GIS tool for conservation activities.*
- 3) *Identify Sentinel Sites to serve as representative habitat(s) for long-term monitoring*

Education, Outreach, Communication

- 1) *Identify and engage the audiences that aren't showing up*
- 2) *Create showcase project communication materials for collective distribution*
- 3) *Continue getting messaging across in the current political climate and to various audiences*
- 4) *Coordination of communications materials among partners*

Restoration, Protection, Conservation

- 1) *Identify incentive programs that would help swing the needle on the implementation of habitat restoration and/or nbss projects.*
- 2) *Define the metrics of success for habitat goals over the next five years.*