

Division of Coastal Management Update



NCBIWA Spring Meeting

May 9, 2024

Tancred Miller

**Mission: To protect, conserve, and manage
N.C.'s coastal resources through an
integrated program of planning, permitting,
education, and research.**



NC Coastal Area Management Act (1974)



- **Balance competing coastal pressures** through development permitting
- **Local/state partnership** to addresses coastal growth and related issues
- **Enhance public access** to beaches and coastal waters through grants to local governments
- Created the **NC Coastal Management Program**: Coastal Resources Commission, Coastal Resources Advisory Council, and Division of Coastal Management (DEQ)

North Carolina Division of Coastal Management

Regulatory Section

- 4 District Offices; Local Permitting Officers

Policy and Planning Section

- Policy Development
- Land Use Planning
- Community Resilience
- Waterfront Access Grants
- Strategic Planning & Coordination

Coastal Reserve Program

- 10 Coastal Reserve Sites



NC Coastal Resources Commission

- **13 members** appointed by the Governor, General Assembly
- Membership includes **local gov't, fishing, wildlife, agriculture, coastal land development, engineering/science** experience
- Designates “**Areas of Environmental Concern**”
- Establishes **policies and rules** under the CAMA and the NC Dredge & Fill Act

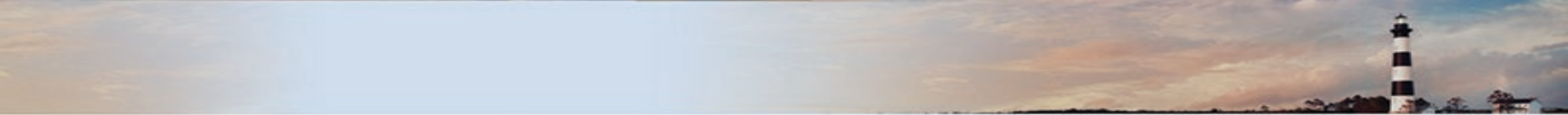


NC Coastal Resources Advisory Council

- 20 members appointed by CRC
 - ½ membership must be residents in coastal counties
- Provide local information and insights from coastal communities to the CRAC, CRC and DCM
- Take information regarding the work of the CRAC and CRC back to their communities
- Provide technical expertise on issues relating to the CRC's work
- Develop recommendations on policy/rule initiatives at direction of CRC



Credit: NC DCM



REGULATORY SECTION



Areas of Environmental Concern (AECs)

Estuarine and Ocean System

- Public trust areas, estuarine waters, coastal wetlands, and coastal (non-ocean) shorelines

Ocean Hazard Areas

- Ocean Erodible Area, Inlet Hazard Areas
Unvegetated Beach Area

Public Water Supplies

Natural and Cultural Resource Areas



Credit: NC DCM

Inlet Hazard Areas of Environmental Concern

Inlet Hazard Areas (IHA) vs. Ocean Erodeable Area (OEA) Rules

Existing IHA Rules

- **Boundaries became effective in 1978, inlets have since moved on...**
- **Calculating long-term erosion rates is more challenging due to the curved, dynamic shorelines at ocean inlets**
 - Rules say apply erosion rates from the adjacent Ocean Erodeable Area

Existing rules

- **Size:** new structures limited to 5,000 sq ft
- **Density:** limited to no more than 1 unit per 15,000 sf of land area (example: no townhome or duplex on lot less than 1/3 acre)
- **No new dunes** can be created inside an IHA. However, you can reconstruct or repair dunes inside an IHA

Inlet Hazard Areas of Environmental Concern



CRC Science Panel Charge

- 1) Perform 5-year re-evaluation of IHA methods and boundaries, incorporating data collected since the 2018 study.
- 2) Evaluate end-point and linear regression methods for calculating oceanfront shoreline change rates.
- 3) Present draft report(s) to CRC, including proposed IHA boundaries and erosion rates, in summer 2024.

Dredging & Beach Nourishment – Busy Season!



BEACHES

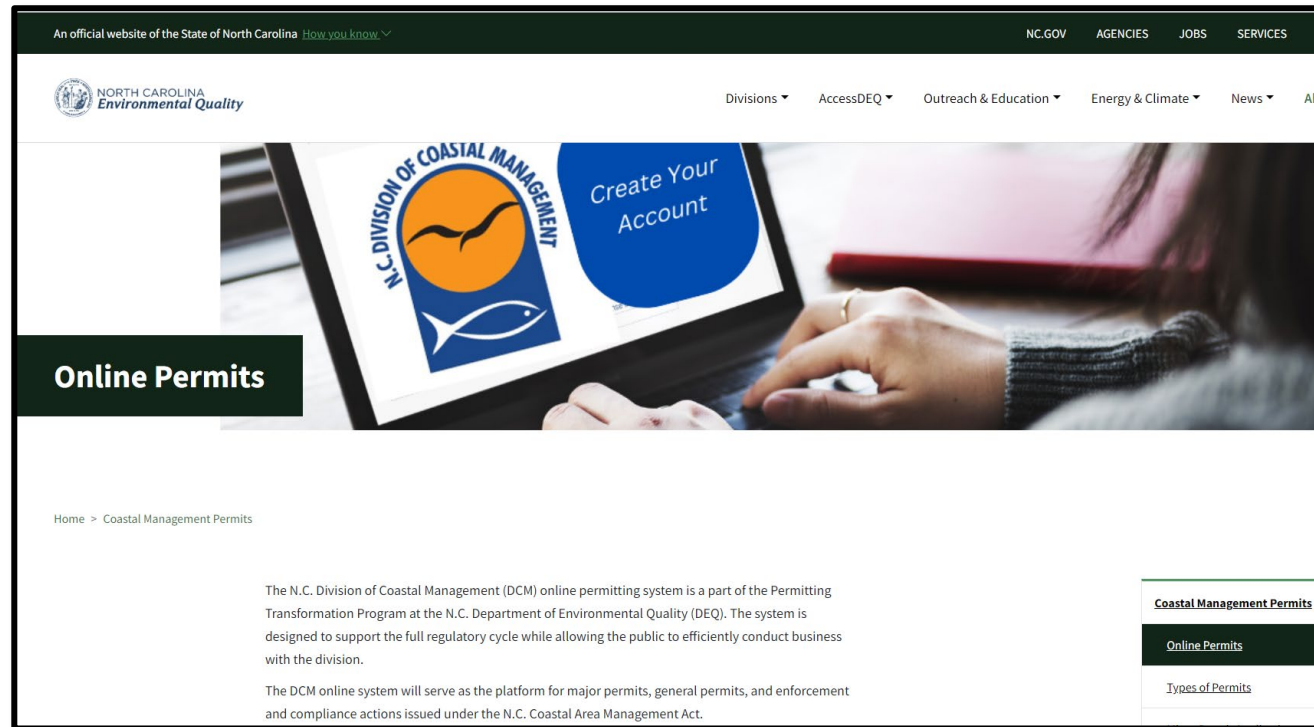
- Atlantic Beach
- Carolina Beach
- Emerald Isle
- Figure Eight Island
- Holden Beach
- North Topsail Beach
- Topsail Beach
- Wrightsville Beach

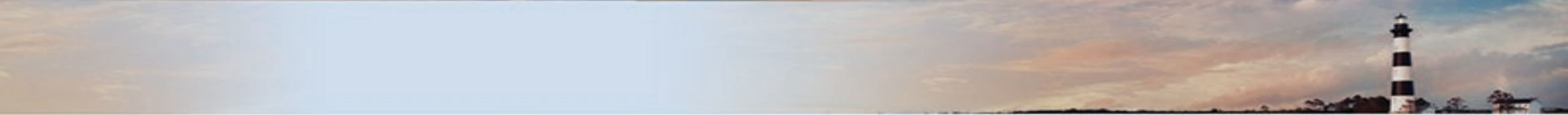
WATERWAYS

- Bogue Inlet
- Lockwood Folly Inlet
- Mason Inlet
- Morehead City Harbor
- Nixon Channel
- Snows Cut

Permitting

- Consistent trend of ~3,000 permit decisions annually (new, modifications, transfers, renewals)
 - Approximately 130 Majors
- Application fee increases took effect Jan. 1, 2024
 - Most GPs increased to \$400; Minors to \$200
 - Shift some regulatory staff back to receipts
 - Last permit fee increase occurred in 2006
- Permitting Transformation Program (e-permitting) implementation going well
- Staffing level is near full—one vacancy in Elizabeth City, one Asst. MP Coordinator, one DOT Representative





POLICY & PLANNING SECTION



DCM Land Use Planning Program

- Key component of the NCCMP
 - Local Planning – long-term, general development issues
 - Regulatory connection under CAMA
- CRC LUP Management Topics
 - Procedural
 - Public Participation
 - Analysis
 - Issues to be addressed
- Local Governments (*Local Control*)
 - Issue-based policies
 - Community character; engagement
 - Traditional land use concerns

An aerial photograph of a coastal town in North Carolina. The town is built on a sandy dune area, with numerous houses and buildings. In the background, a lighthouse is visible on a small island or point. The ocean is in the foreground, with waves breaking on the shore. The sky is clear and blue.

Comprehensive Land Use Planning
in Coastal North Carolina
GUIDANCE FOR LOCAL GOVERNMENTS

NC Division of Coastal Management

October 2022

Public Beach and Waterfront Access Grants

2024-2025 Cycle

\$3.8M in available funding (normal year ~\$1M)

Pre-application period ended April 15th

23 applications received totaling \$3.6M

Final applications due July 15th

Award notifications in September/October





Changes along the North Carolina Coast

Physical Environment (*change*)

- Oceanfront shoreline erosion
- Estuarine shoreline erosion and wetland losses
- Habitat transitions
- Water: *volume, quality, location, duration*

Human Environment (*disruptions*)

- Way of Life impacts: *live, work, movement*
- Increased local government interest in resilience:
Vulnerability assessments, planning, finance, engagement
- Increased stakeholder interest:
NGOs, media, citizens, academia, legislative

NOAA Sea Level Rise Viewer – 1 Foot Scenario



2021-11-08 08:00:22 EST



*“Sunny-
day”
flooding*

(Source: NCSU flood camera)

DCM Coastal Resiliency

- Sea Level Rise assessment Reports (2010, 2015); Draft SLR Update (2024)
- Resilience Evaluation & Needs Assessment Pilot (2016-2018)
- Planning & Management Grants: \$375k for coastal resilience projects (2016-2019)
- Regional Resilience Workshops and Summit (2019)
- Coastal Community Resiliency Guide (2019)
- Resilient Coastal Communities Program (2020)

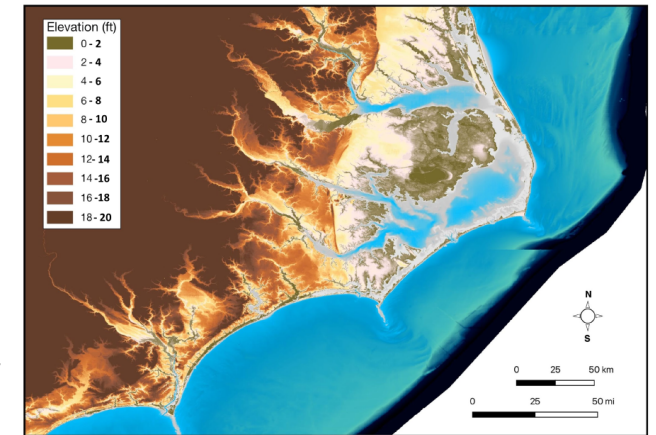
Sea Level Rise in North Carolina: Context, Impacts and Summary of Science Panel Update

Laura J. Moore
Chair, CRC Science Panel

*Professor of Coastal Geomorphology,
UNC Chapel Hill*

*Director, Collaboratory for Coastal
Adaptation over Space and Time
(C-CoAST)*

*Science Panel Members: Kevin Conner (USACE), Reide
Corbett (ECU), Andrea Hawkes (UNC-W), Joseph Long
(UNC-W), Jesse McNinch (USACE), A. Brad Murray
(Duke U.), Martin Posey (UNC-W), Spencer Rogers,
Greg (Rudi) Rudolph (Sulmara)*



Credit: Reide Corbett, ECU

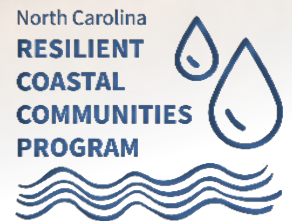
NORTH CAROLINA RESILIENT COASTAL COMMUNITIES PROGRAM (RCCP)



 RCCP Website



Program Coordinator:
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NC Division of Coastal Management
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Mackenzie.todd@ncdenr.gov



RCCP Objectives:

- Address barriers to coastal resilience at the local level, esp. capacity
- Assist communities with risk & vulnerability assessments
- Help communities develop portfolio of well-planned and prioritized projects
- Advance priority projects to “shovel-ready” pipeline
- Link communities to funding streams for project implementation

PHASE I

Community Engagement; Risk & Vulnerability Assessment

Steps:

1. Develop a Community Action Team
2. Set Vision and Goals
3. Review Existing Local Plans & Efforts
4. Develop a Community Engagement Strategy
5. Map Critical Assets and Natural Infrastructure
6. Conduct a Risk and Vulnerability Assessment, including vulnerable & underserved populations

PHASE 2

Planning, Project Identification, & Prioritization

➤ Develop a Project Portfolio

Steps:

1. Identify a Suite of Potential Solutions, including Natural and Nature-Based
2. Consolidate and Prioritize Projects, and Characterize Feasibility
3. Consolidate Steps to Produce a Resilience Strategy

PHASES 3 & 4

Engineering &
Design

Implementation

No-match grants directly to local governments

- PHASE 3: Engineering and Design
- PHASE 4: Implementation



Options for Reducing Flood Risk

Debris Removal and Culvert Size Increase



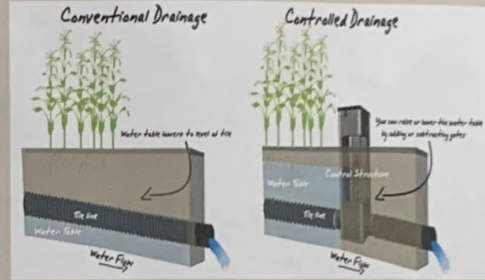
Benefit: Moves water more quickly through the system.

Wetland Restoration and Mitigation Banking



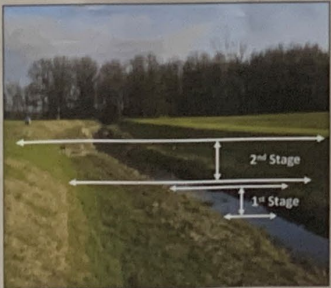
Benefit: Stores water in safe places to protect other areas in watershed.

Controlled Drainage



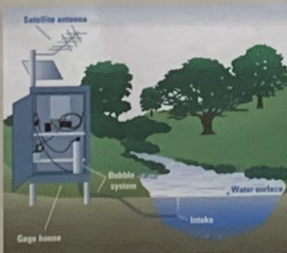
Benefit: Stores water in safe places to protect other areas in watershed.

2-Stage Ditch



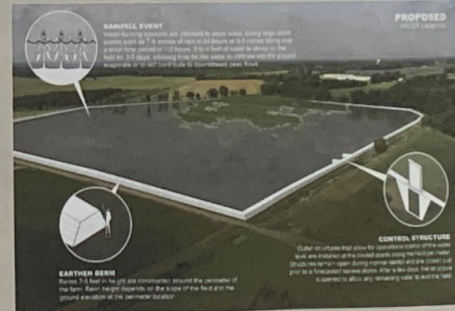
Benefit: Creates more storage for floodwaters to reduce flooding of surrounding land.

River Gauge Installation



Benefit: Tracks and predicts flood patterns to improve emergency response and water management over time.

Water Farming/Dry Detention System



Benefit: Temporarily stores water in safe places to protect other areas in watershed.



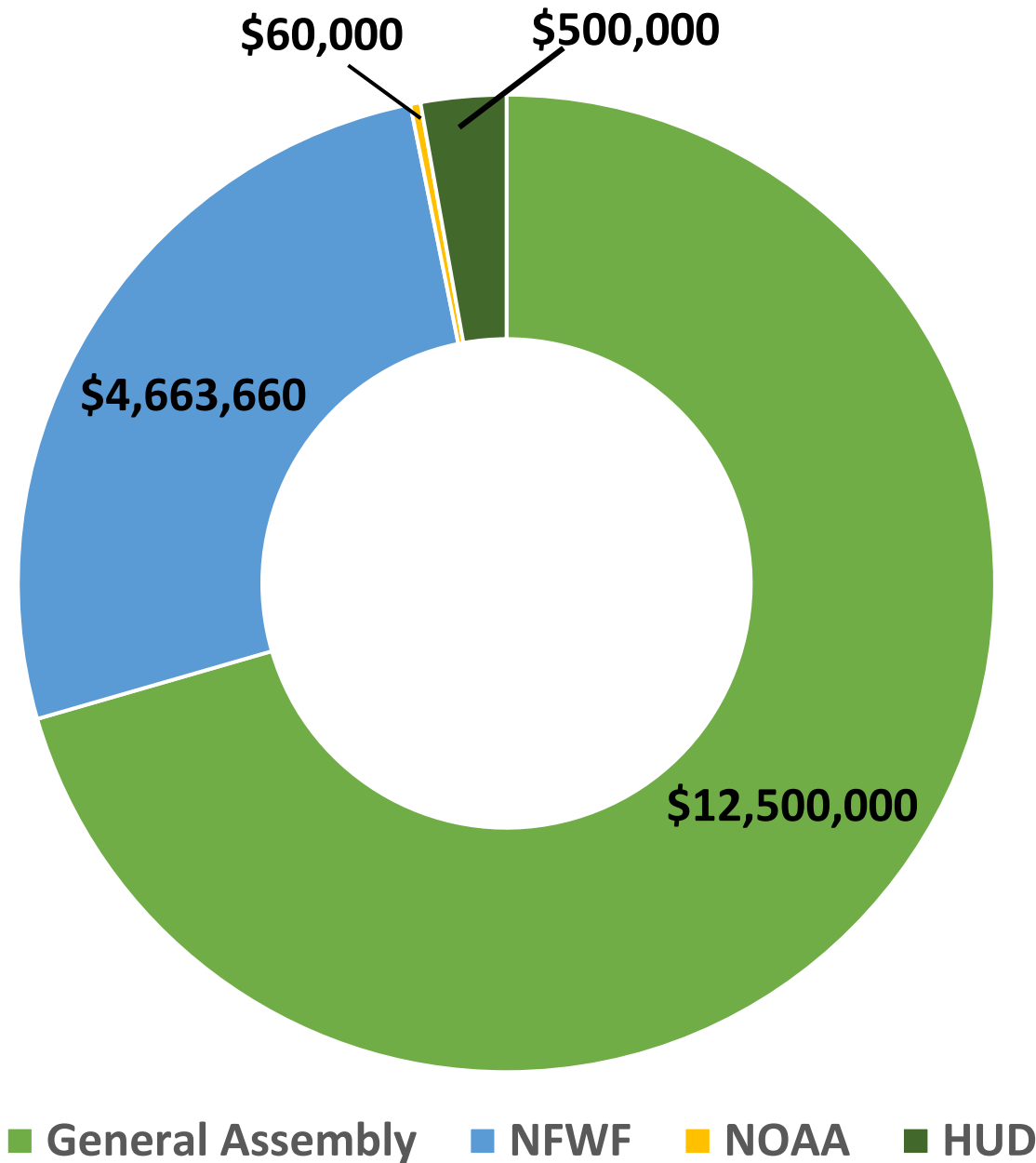
RCCP Funding – Appropriations and Grants

Years 2019 - 2023

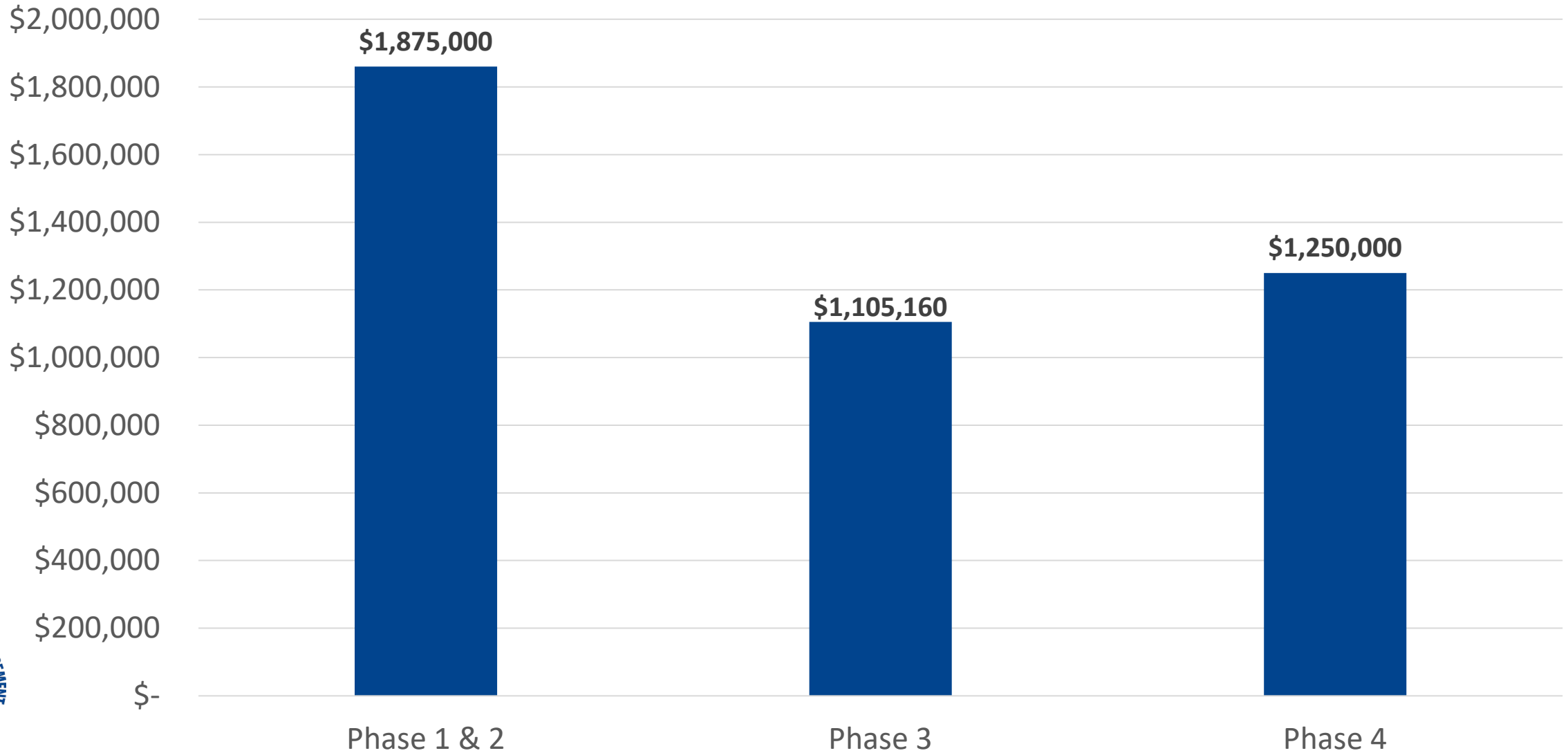
NCGA (SL 2019-224)	\$ 1,350,000
NFWF ECRF	\$ 1,060,000
NFWF NCRF	\$ 545,860
HUD	\$ 500,000
NOAA/CZMA Funding	\$ 60,000
NCGA (SL 2021-180)	\$ 1,450,000
NCGA (SL 2023-134)	<u>\$10,000,000</u>
	\$14,965,860



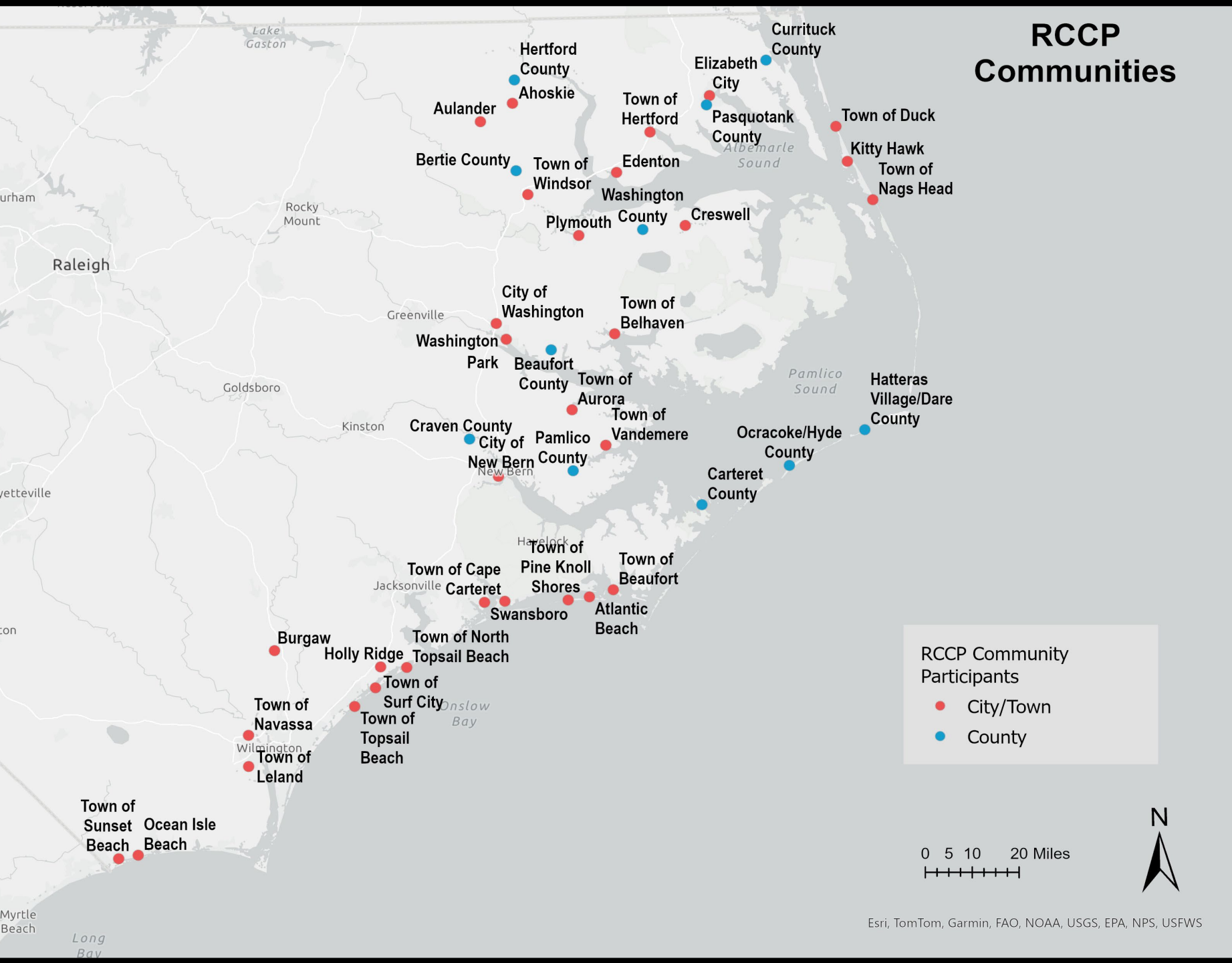
RCCP Funding



Grant Awards to RCCP Communities

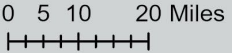


RCCP Communities



RCCP Community Participants

- City/Town
- County



Esri, TomTom, Garmin, FAO, NOAA, USGS, EPA, NPS, USFWS

41 Participating Communities

- 11 counties
- 30 municipalities



RCCP Today



Applied for NOAA's Climate Resilience Regional Challenge grant in partnership with NC Coastal Federation: **\$25M for implementation** of NBS projects. **\$5M match** in Governor's Budget.



National Fish & Wildlife Foundation National Coastal Resilience Fund pre-proposal: **\$2M for resilience planning**



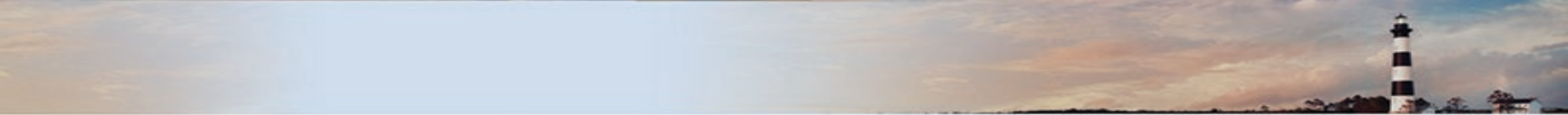
Request for Applications open now for **Phases 3 & 4 Funding**

\$6M available for E&D and implementation projects

No match requirement

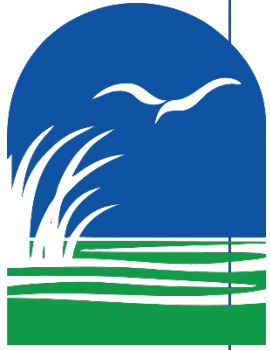
*****Applications due May 31*****





COASTAL RESERVES





**NORTH CAROLINA
COASTAL RESERVE &
NATIONAL ESTUARINE
RESEARCH RESERVE**





Ongoing Issues/Challenges



- **Rulemaking**
 - Objections from the Rules Review Commission. Impacts to process & resource protections
- **Dredged Material Management**
 - Beneficial use/salt marsh enhancement; disposal areas
- **Shoreline Management**
 - Stabilization, nourishment (Beach Plans), restoration, mapping/modeling
- **Ocean Erodible Area and Inlet Hazard Areas**
 - AEC delineation, erosion rates, rule development (e.g., setbacks, density), local outreach
- **Navigation & Placement Projects**
 - Timing, methods, availability and allocation of resources

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