



Appendix A: CAT Meeting Agendas & Attendance List

- ♦ CAT Meeting #1 Agenda 2021-10-07
- CAT Meeting #2 Agenda 2021-10-26
- CAT Meeting #3 Agenda 2022-02-02
- ◆ CAT Meeting Attendance List

North Carolina Resilient Coastal Communities Program Dare County

Community Action Team

Meeting 1 – October 7, 2021

1. Introductions

Contact List

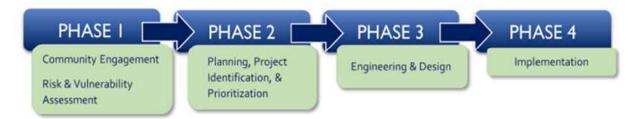
https://docs.google.com/spreadsheets/d/12PxGSPa9ydjnDJU2RJ6ZEVDDme-QWRprMyQVi2V_MAg/edit#gid=0

• Project Google Folder

https://drive.google.com/drive/folders/1l9LmZxszuc936s72xN-bEyh2AiGFNQaR?ths=true

2. RCCP Program Overview

- Administration
- Phases



- Goals & Objectives
 - i. Perform Data and Community driven risk and vulnerability assessment
 - ii. Develop a portfolio of planned and prioritized solutions
- Map critical assets, infrastructure, and natural resources
- Funding Opportunities. Proposed coastal investments in Congress:
 - i. \$207 million for grants to States and Territories to implement coastal and Great Lakes habitat restoration projects which will provide ecosystem and community resilience benefits.
 - ii. \$160 million to address working waterfront infrastructure.

- iii. \$845 million for National Estuaries Programs and other EPA Geographic programs to help coastal communities protect and restore habitat and make on-the-ground improvements for clean and safe water.
- iv. \$1 billion for FEMA Pre-disaster Hazard Mitigation Assistance to help communities—both coastal and non-coastal—adapt to changing conditions and reduce their vulnerabilities so they can withstand and rapidly recover from hazards.
- v. \$500 million for the FEMA Hazard Mitigation Revolving Loan Fund to help communities to mitigate the impacts of future hazard events.
- vi. \$492 million for competitive grants for coastal natural infrastructure projects under the National Oceans and Coastal Security Fund to benefit fish and wildlife and to reduce the impacts of coastal flooding.
- vii. \$491 million for competitive grants for Community-Based Habitat Restoration projects that restore marine, estuarine, coastal, and Great Lakes or protect or construct features that protect coastal communities from flooding or coastal storms.
- viii. \$465 million for USACE projects for streambank and shoreline protection, sediment management, small flood control project, and other purposes.
- ix. \$9.5 billion to NOAA to provide funding and technical assistance for the purposes of restoring a marine, estuarine, coastal, or Great Lake habitat; or providing adaptation to climate change, including by protecting, restoring, or establishing ecological features that protect coastal communities from sea-level rise, coastal storms, or flooding; or designing or implementing blue carbon projects.
- x. \$500M to address coastal flooding and sea-level rise.
- xi. \$50M for insular coastal hazards.
- xii. Total = \$14.2 Billion

3. Vision

Prepare a community-driven plan to identify, assess, and mitigate hazards by identifying and prioritizing
"shovel-ready" projects that enhance community resilience to coastal hazards. Future, recovery, all
natural hazards. Broader. Where we are, want to go? Physical, human, economic infrastructure. Time
horizon on vision statement

4. Project Identification & Prioritization

- Types of projects
 - i. Physical projects i.e. roads, pipes, ditches, pump stations
 - ii. Nature based project i.e. living shoreline (Required at least 1)

- iii. Outreach and education
- iv. Policy based
 - 1. Building Code revision
 - 2. Program to cost-share structure raising or floodproofing
- v. Disaster aid and planning
- Identification of vulnerable populations, infrastructure, assets, and natural resources
- Previous studies
- Known projects needing funding

5. Community Engagement Strategy

- Step 1 Surveys for general goals and objectives
 - i. Geotargeted ads
 - ii. Library and public works fliers
 - iii. Other public facilities
- Step 2 Follow-up survey for citizen ranking of projects
- Step 3 Charrettes.
 - i. Finalize prioritization and ranking

6. Next-Steps

- CAT Meeting #2
 - i. In 3 weeks
 - ii. Dare County EOC (370 Airport Rd, Manteo)
 - iii. Oct 28 9:30-11:30am

North Carolina Resilient Coastal Communities Program Dare County

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Meeting 2 - October 26, 2021

1. Welcome and Introductions

2. Discuss and Vote Vision Statement

- A resilient Hatteras Island is a mix of natural and built communities where the people, economy, and
 ecosystems are better able to recover, positively adapt to, and thrive amid changing conditions and
 challenges, including disasters and climate change; to maintain quality of life, healthy growth, and
 durable infrastructure systems; while conserving resources for present and future generations.
- Vote on Vision Adoption

3. Goals and Objectives

- Goals
 - Identify areas of concern in relation to sea level rise and critical infrastructure. Using 1 ft and 2.5 projected rise.
 - Develop plan to minimize infrastructure vulnerabilities and provide redundancy in critical infrastructure
 - Incorporate the use of nature based solutions to mitigate the impact of natural hazards by identifying at least 1 prioritized nature based project wherever feasible (set criteria for feasibility)
 - o Identify vulnerability to future natural hazards (everyone is vulnerable), develop engagement and education strategies, and incorporate this feedback into the resiliency plans
 - Rank and prioritize long term viability of projects
 - o Prioritize public outreach, education, and awareness
- Vote on Goals Adoption

4. Discuss Vulnerability and At-Risk Locations with CAT throughout Hatteras Island

5. Discuss Potential Projects

- Virginia Beach Sea Level Wise Adaptation Strategy as example of project types
 - Natural Mitigations
 - ii. Engineered Defenses
 - iii. Adapted Structures
 - iv. Prepared Communities
- Discuss specific opportunities

North Carolina Resilient Coastal Communities Program Dare County

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Meeting 3 - February 2, 2022

1. Survey Results

- Overall Statistics
 - i. 819 of 1,121 73% permanent residents of Dare County
 - ii. 314 of 818 Permanent resident of Hatteras Island
 - iii. 212 of 249 Nonresident property owner in Hatteras Island
- Key Findings
 - i. ~40% of residents/property owners unsure if property has a FEMA elevation certificate.
 - ii. ~41% of residents/property owners unsure if structure is elevated above the FEMA Base Flood Elevation
 - iii. Most significant threats
 - 1. Beach Erosion
 - 2. Tropical Weather Systems
 - 3. Flooding Heavy Precipitation
 - iv. Least significant threats
 - 1. Extreme Temperatures
 - 2. Drought
 - 3. Saltwater Intrusion
 - v. Ability of Hatteras Island to withstand and recover from minor storms and limited flooding
 - 1. ~79% able or completely able
 - 2. ~15% unable or somewhat unable
 - vi. Ability of Hatteras Island to withstand and recover from major storms and extensive flooding
 - 1. ~47% able or completely able
 - 2. ~33% unable or somewhat unable
 - vii. Demographic Summary
 - 1. ~82% older adults

- 2. ~15% low-income individuals
- 3. ~13% People with disabilities
- 4. ~3% People of racial or ethnic minorities

viii. Environmental Issues affect disproportionate sectors of the community

- 1. Largely Yes to Low-income individuals, Older adults, and people with disabilities
- 2. No to People of racial or ethnic minorities
- ix. Which areas are most affected by environmental issues? Open-ended
 - 1. 710 Individual responses
 - 2. Compiled summary of responses
 - a. Ocean View Drive Avon
 - b. Mirlo Beach
 - c. NC 12 Entering Hatteras Village
 - d. Buxton Motels
 - e. NC 12 south of Basnight Bridge
 - f. NC 12- near the Food Lion in Avon/Kinakeet
 - g. Entrance to Wind Over Waves
 - h. Cottage Ave/Tower Circle/Ocean Drive/Old Lighthouse Rd
 - i. Eagle Pass Rd
 - i. NC 12 between Hatteras and Frisco
 - k. Pole Road to Hatteras Inlet
 - I. NC 12 S Curves/North of Rodanthe
- x. Effectiveness of Flood Protection Measures
 - 1. Top 5
 - a. Elevations Structures 4.42/5
 - b. Resilient Construction Standards 4.35/5
 - c. Utilities Redundancy & Backup 4.35/5
 - d. Resiliency hubs for post-storm power and supplies 4.29/5
 - e. Land Use Planning 4.19/5
 - 2. Bottom 5
 - a. Shallow Groundwater pumping 3.41/5
 - b. Engineering Beach (Beach nourishment) 3.44/5
 - c. Low Impact Development (LID) 3.73/5
 - d. Enhanced shoreline revetments 3.74/5
 - e. Stormwater wetlands and ponds (SCMs) 3.8/5
- xi. Additional Concerns

- 1. 216 individual responses
- 2. Common concerns
 - a. Development overcrowding
 - b. Taxes & affordable housing
 - c. Septic systems & fill on new construction lots
 - d. Beach nourishment
 - e. Rising groundwater
 - f. Assistance raising structures and bringing older structures to code
- xii. E-mail Follow-ups
 - 1. 318 individuals
- 2. Critical Asset inventory and Vulnerability Index
 - Vulnerability Index
 - i. Exposure Score (0-3): Probability of physical contact between an asset and hazard
 - 1. HI Nothing has no/low exposure so 0 & 1 was excluded
 - 2. If not located in 100-yr floodplain
 - 3. Located in 100-yr floodplain
 - ii. Sensitivity (0-3): Degree to which an asset is impacted by a hazard
 - 0. Not considered due to uniqueness of Hatteras Island
 - 1. Damage & service not likely to be disrupted due to flooding
 - 2. Damage & service may be disrupted due to flooding.
 - 3. Damage & service likely to be disrupted due to flooding
 - 4. Additional consideration given for service use classification
 - iii. Adaptive Capacity (0-3): Ability of an asset to change its characteristics or behavior in response to a hazard
 - 0. Large or extensive infrastructure
 - 1. Buildings
 - 2. Inlets
 - 3. Natural infrastructure
 - iv. Vulnerability Score (0-6): Exposure + Sensitivity Adaptive Capacity
 - Please review. If you feel differently regarding scoring, markup excel file and e-mail to Steve Marks (smarks@withersravenel.com) and Barton Grover (barton.grover@darenc.com)

3. Project Portfolio

- Backup Communications
- Utilities Interconnections
- Living Shorelines Cape Hatteras Secondary School
- Living Shorelines Kite Point/Canadian Hole
- Living Shorelines Frisco/Hatteras Village
- Living Shorelines Rodanthe Harbor
- Beach Nourishment Avon & Buxton
- Beach Nourishment Frisco to Hatteras Village
- Storm Drainage Improvement Avon
- Storm Drainage Improvements Buxton
- Flood Insurance Education and Outreach Program
- Sewer Feasibility Study
- Engineered Wetland Peter's Ditch Area
- Storm Drainage Maintenance (Ditch Maintenance)
- Elevate Well Houses
- Stormwater Management Plan Study
- Dune Restoration
- Property Buyout
- Public Education and Outreach Program
- Stormwater Flood Ordinance Review
- Elevate Structures
- Establish County Resilience Taskforce or Department
- County Stormwater Funding/Utility Study
- Establish Resilience Hubs
- Bridge NC-12 Hatteras Village Frisco

CAT Meeting #1 Attendance		
Individual	Organization	
Steve Marks	WithersRavenel	
Katherine Knight	WithersRavenel	
Donna Creef	Dare County - Planning	
Barton Grover	Dare County - Planning	
Drew Pearson	Dare County - Emergency Management	
Michael Barber	National Park Service	
David Hallac	National Park Service	
Pat Irwin	Dare County Water Department	
Lora Eddy	The Nature Conservancy/Dare Soil & Water	
Catherine Peele	NCDOT Ferry Division	
Erin Fleckenstein	Coastal Federation	
Susan Flythe	Cape Hatteras Electric Cooperative	
James Wooten	Dare County - Emergency Management	
Mark Dowdle	National Park Service	
Win Bridgers	NCDOT Division One	
Ronnie Sawyer	NCDOT Division One	
Art Beyer	Fish and Wildlife	

CAT Meeting #2 Attendance		
Individual	Organization	
Steve Marks	WithersRavenel	
Katherine Knight	WithersRavenel	
Donna Creef	Dare County - Planning	
Barton Grover	Dare County - Planning	
Drew Pearson	Dare County - Emergency Management	
Danny Couch	Dare County Board of Commissioners	
Sarah Toner	US Fish and Wildlife Service	
Pat Irwin	Dare County Water Department	
Lora Eddy (Virtual)	The Nature Conservancy/Dare Soil & Water	
Mackenzie Todd (Virtual)	NCDEQ Coastal Management	
Erin Fleckenstein	Coastal Federation	
Susan Flythe	Cape Hatteras Electric Cooperative	
James Wooten	Dare County - Emergency Management	
Ronnie Sawyer	NCDOT Division One	

CAT Meeting #3 Attendance	
Individual	Organization
Steve Marks	WithersRavenel
Katherine Knight	WithersRavenel
Barton Grover	Dare County - Planning
Pat Irwin	Dare County Water Department
Lora Eddy	The Nature Conservancy/Dare Soil & Water
Catherine Peele	NCDOT Ferry Division
Erin Fleckenstein	Coastal Federation
Susan Flythe	Cape Hatteras Electric Cooperative
Mackenzie Todd	NC Division of Coastal Management
Ronnie Sawyer	NCDOT Division One
Danny Couch	Dare County