

North Carolina Climate Change Interagency Council



Executive Order No. 80: NC's Commitment to Address Climate Change and Transition to a Clean Energy Economy

7th Meeting

October 1, 2020

Virtual Meeting

Meeting Agenda & Objectives

- | | |
|---|--------------------|
| 1. Welcome and Introductions | 10:00-10:15 |
| a. Opening remarks and Meeting Objectives (Sushma Masemore, DEQ) | |
| b. Introductions (Council designees) | |
| 2. Climate Risk Assessment and Resilience Plan | |
| a. NC 2020 Climate Risk and Resilience Plan (Sushma Masemore, DEQ) | 10:15-11:15 |
| • Climate Science Report (Kathie Dello, NC Climate Office) | |
| • Sector Analysis Spotlight and Agency Updates on Resiliency Efforts (Lauren Thie, DHHS, Colin Mellor, DOT) | |
| • Climate Justice (Amanda Martin, NCORR) | |
| • Natural and Working Lands (Misty Buchanan, DNCR) | |
| b. The Path Forward for Resilience | 11:15-11:50 |
| • Overview of Chapter 7 (Jessica Whitehead, NCORR) | |
| • NC Resilience Communities Program (Amanda Martin, NCORR and Tancred Miller, DEQ-DCM) | |
| • Interagency Resilience Team and Agency Resilience Strategies (Marlena Byrne, NCORR) | |
| 3. Break (10 mins) | |
| | 12:00-12:30 |
| 4. Public engagement (30 mins) | |

Council Designee Introductions



North Carolina Resilience Plan



North Carolina

Climate Risk Assessment and Resilience Plan

Impacts, Vulnerability, Risks, and Preliminary Actions

A Comprehensive Strategy for Reducing North Carolina's Vulnerability to Climate Change

June 2020



- Executive Summary
- 1. Key Findings and Recommendations
- 2. Resilience Plan Development Process
- 3. NC Climate Science Report Summary
- 4. Climate and Environmental Justice
- 5. Vulnerability, Risk, and Potential Options for Addressing Climate-Related Hazards
 - Agriculture and Forestry
 - Coastal Resources
 - Commerce and Business
 - Cultural Resources
 - Ecosystems
 - Housing, Buildings, and Support Services
 - Health and Human Services
 - Public Safety
 - Transportation
 - Water and Land Resources
 - Energy
- 6. Nature-Based Solutions to Resilience
- 7. Path Forward

<https://deq.nc.gov/energy-climate/climate-change/nc-climate-change-interagency-council/climate-change-clean-energy-17>



Science Report Contributors:
50+

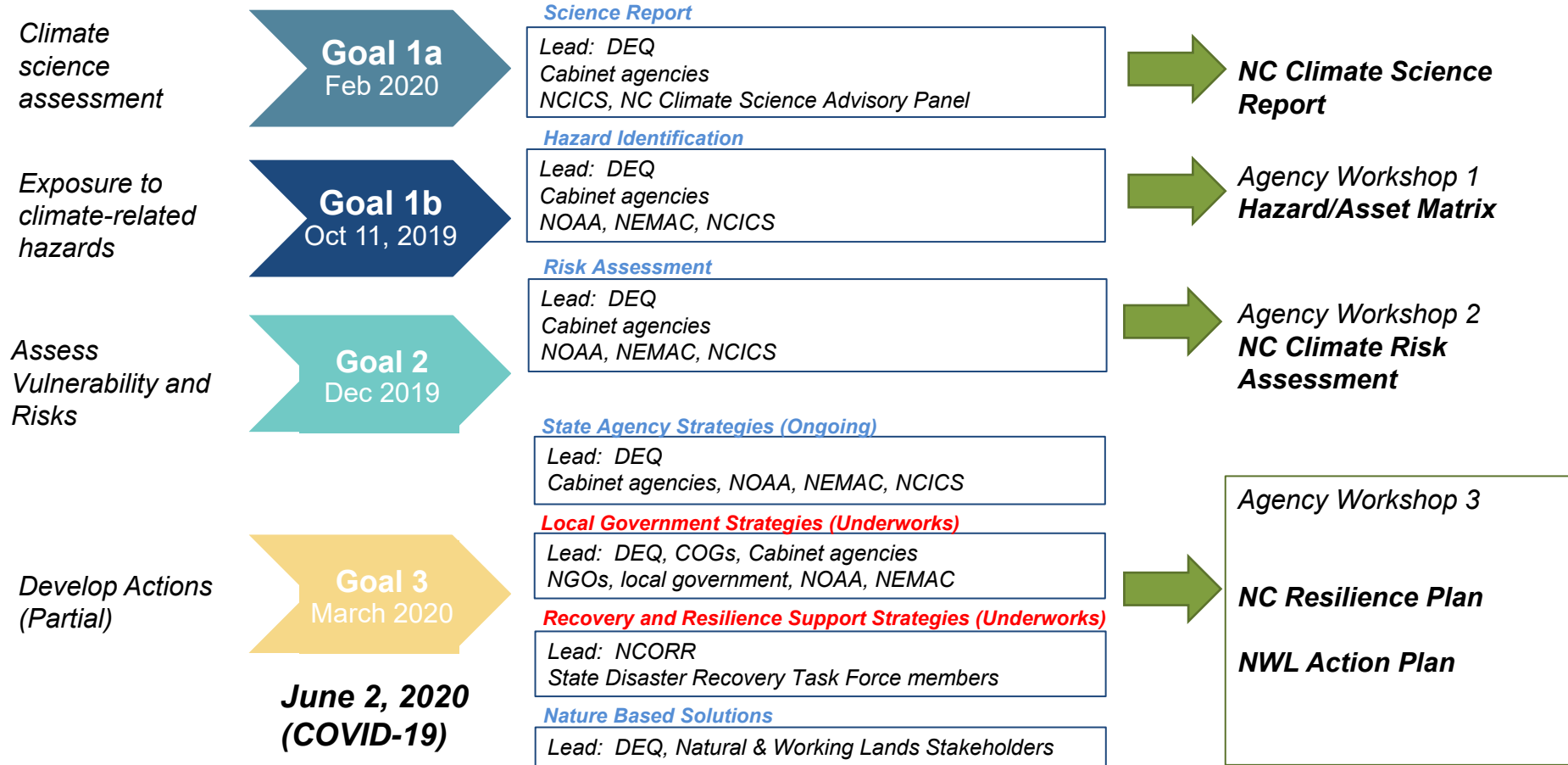
Sector Strategy Developers:
200+

Community Workshops
Participants: 300+

NWL Stakeholders:
100+



Plan Development Strategy



N.C. Climate Science Report

Kathie Dello, NC Climate Office



A hotter, wetter, more humid North Carolina

A quick recap of the North Carolina Climate Science Report

Kathie Dello, Ph.D
State Climatologist of North Carolina
Director of the State Climate Office
North Carolina State University

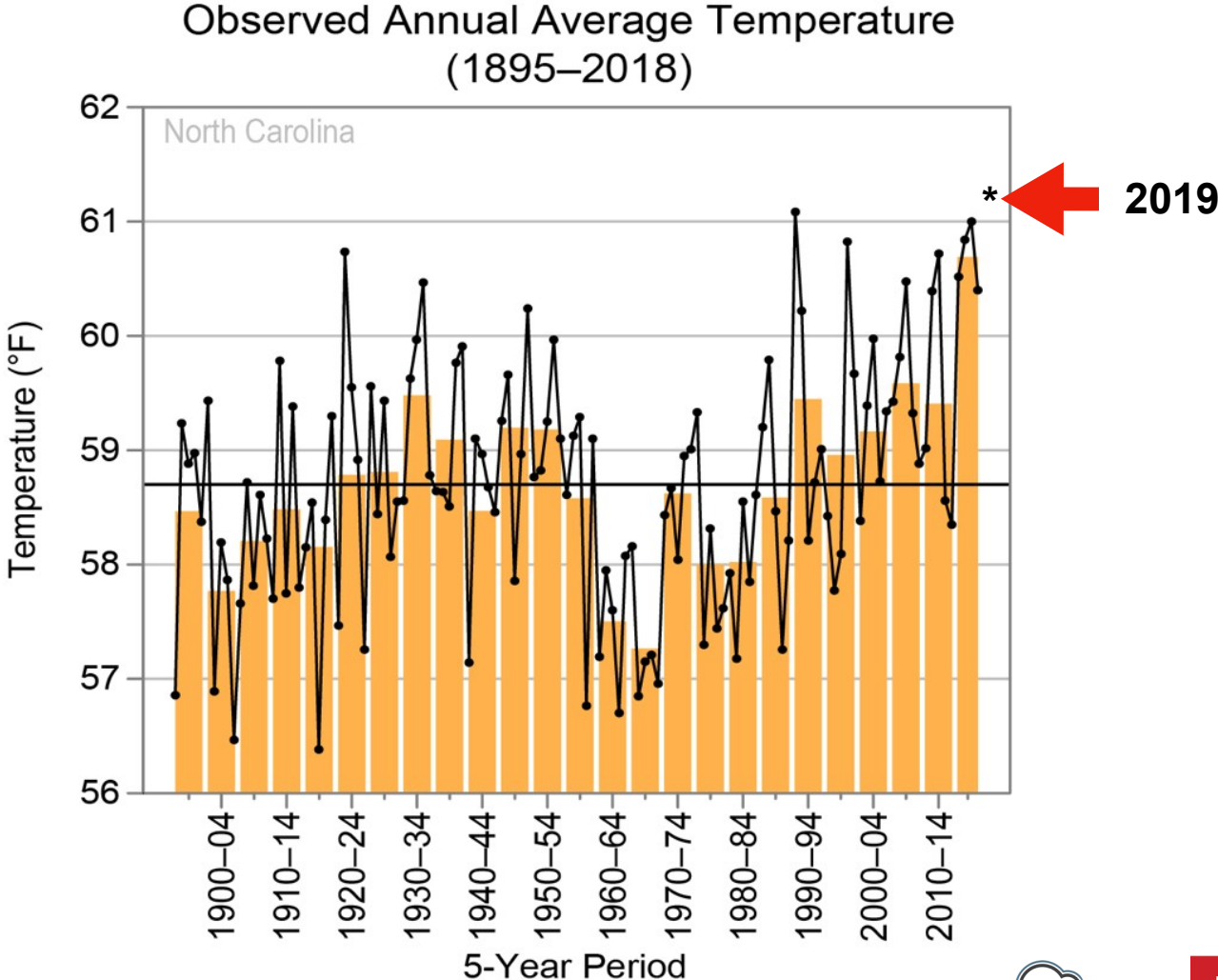


Take-home message

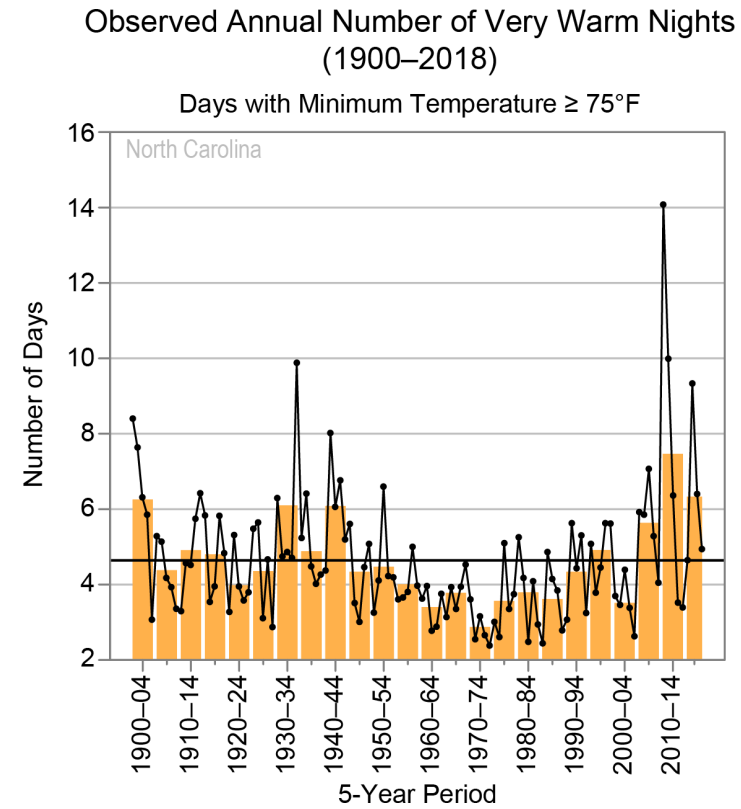
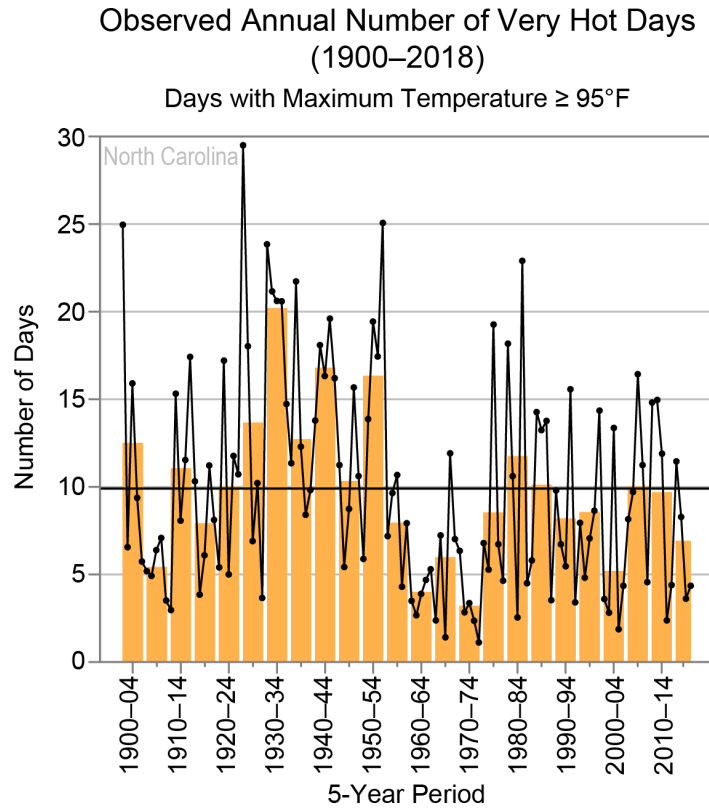
Large future climate changes for North Carolina if our current reliance on fossil fuels for energy continues

- Temperatures outside of historical envelope
- Disruptive sea level rise
- Increases in intensity and frequency of extreme rainfall
- More intense hurricanes
- Higher absolute humidity levels

North Carolina has warmed about 1°F in the recent past



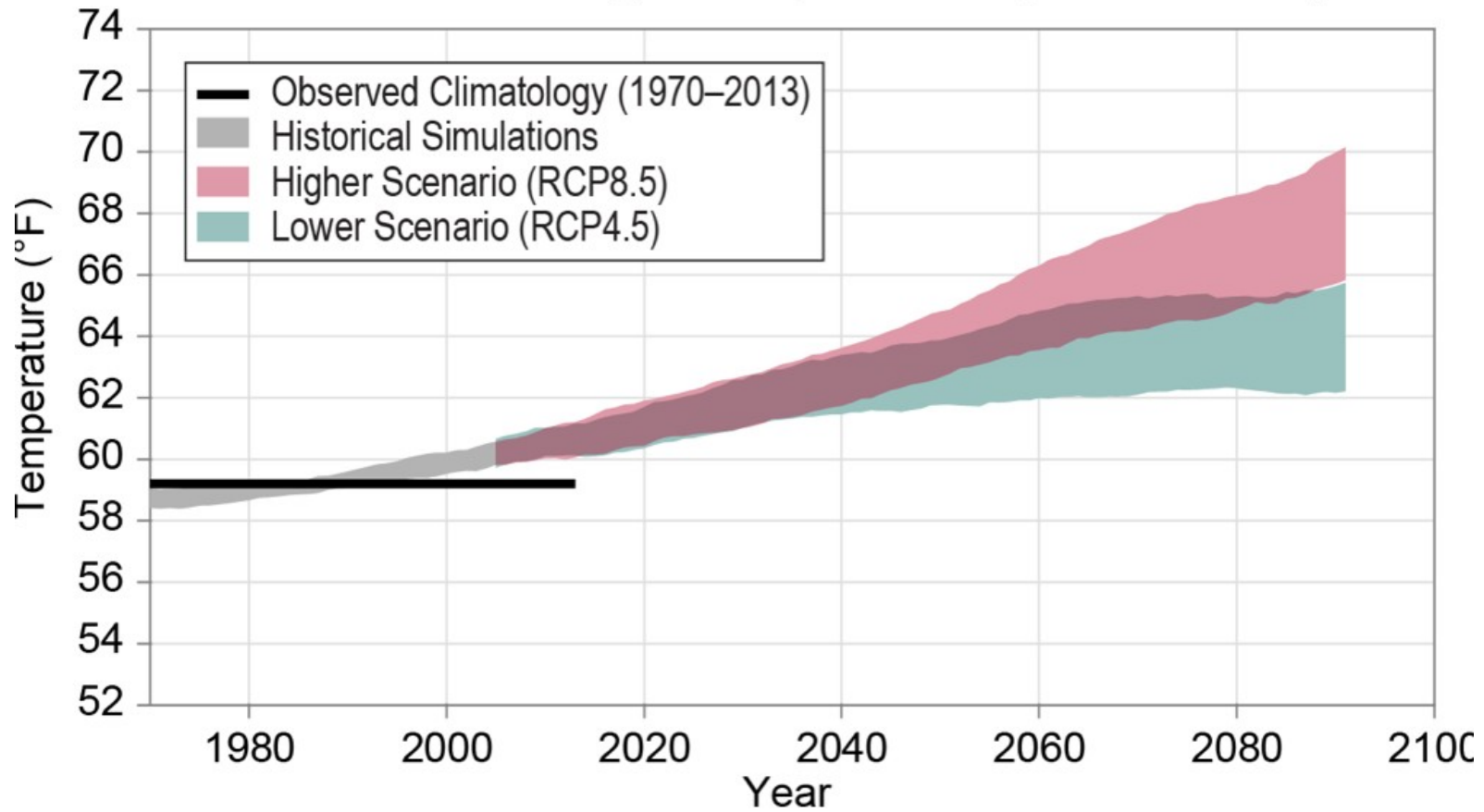
Nights, not days, have been getting hotter



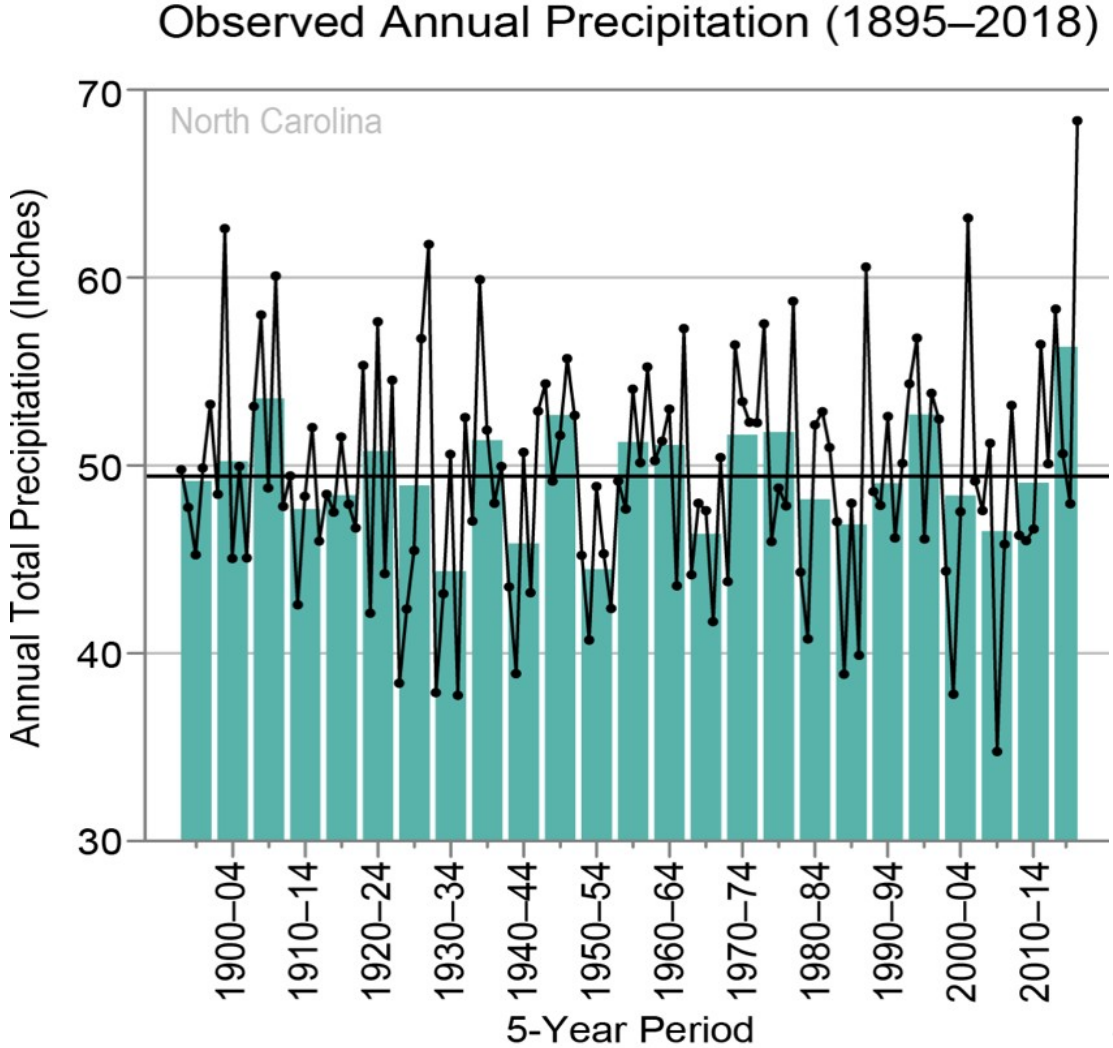
But in the future, both are projected to increase (along with increases in humidity, which presents a public health risk)

We expect the warming to continue in all seasons

Observed and Projected Annual Average Temperature (1970–2100)



There is no trend in annual precipitation, but there is an upward trend in extremes



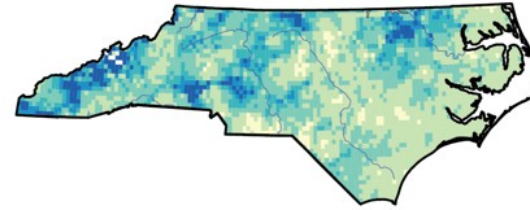
Heavy rains from hurricanes and other weather systems will become more frequent and more intense

→ annual precipitation will increase

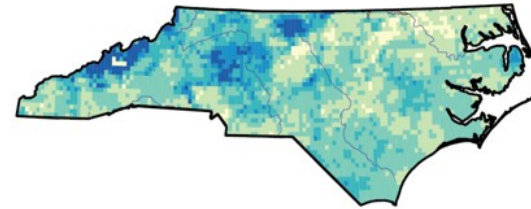
→ more humid

→ As a result, it is **very likely** that extreme precipitation frequency and intensity in North Carolina will increase

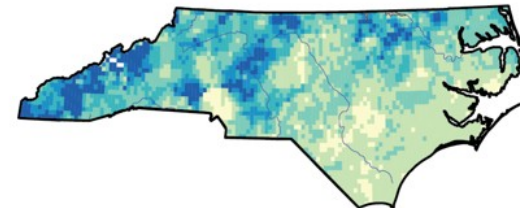
(a) Higher Scenario (RCP8.5), 2021–2040



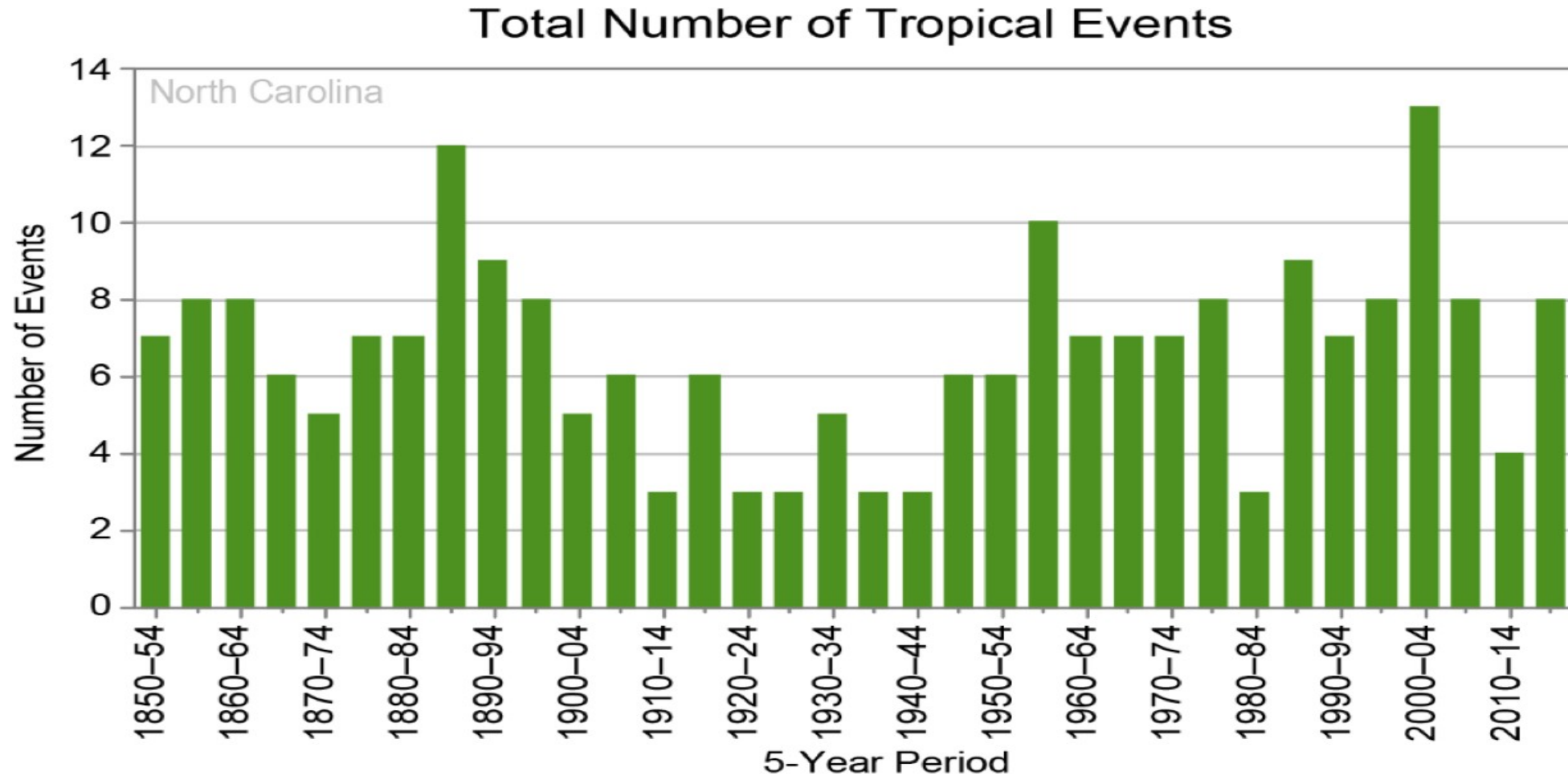
(b) Lower Scenario (RCP4.5), 2041–2060



(c) Higher Scenario (RCP8.5), 2041–2060



Hurricanes will be wetter and are likely to be more intense, though it is unknown whether the number of hurricanes making landfall in North Carolina will change



The North Carolina State Climate Office



A team of North Carolina climate and weather experts that serve the state through research, outreach and extension.

125TB data repository & 43-site ECONet network

kddello@ncsu.edu

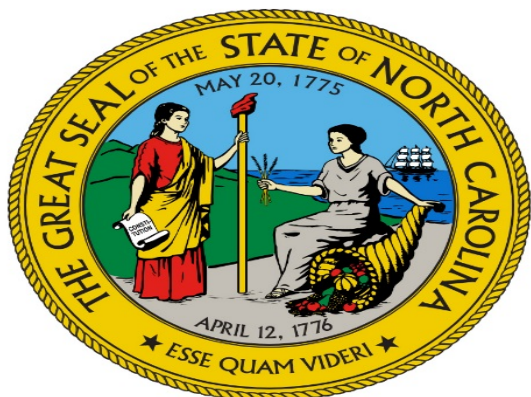


**NC STATE
UNIVERSITY**

Sector Analysis Spotlight and Agency Updates on Resiliency Efforts

Lauren Thie, DHHS; Colin Mellor, DOT





NC Department of Health and Human Services

Interagency Climate Change Council

Iris Cooper, MPA, MS

Virginia Guidry, PhD

Ben Money, MPH

Lauren Thie, MSPH

October 1, 2020



<https://www.sierraclub.org/sierra/green-life/more-dozen-breached-hog-waste-lagoons-found-north-carolina-after-hurricane-matthew>

Key Actions from Last Year

- Completed literature review for pending climate change addendum to the NC Early Childhood Action Plan
- Publication highlighting EO 80 and the benefit to health
- Adaptation work: wildland fire elementary education and heat-health alert systems
- Spreading the word about climate and health connections through presentations:
 - NC Museum of Life and Science
 - SR AHEC
 - International Smoke Symposium



<https://www.ncmedicaljournal.com/content/81/5/334/tab-references>

Sidebar: Health Benefits of North Carolina's Transition to Clean Energy

Virginia T. Guidry, Lauren Thie and E. Benjamin Money

North Carolina Medical Journal September 2020, 81 (5) 334-335; DOI: <https://doi.org/10.18043/ncm.81.5.334>

Critical impacts of climate change affect DHHS, and potential options for addressing impacts exist.

- Response to disasters continues as DHHS addresses the impact and provides staff in a variety of public services**
- Potential options for creating resilience should address existing toxic exposures, such as hazardous waste in water or homes, in low-income communities and communities of color.**
- Need additional support for DHHS programs: Building Resilience Against Climate Effects program, Back@Home program, mold and moisture education, and infectious disease tracking.**

Progress on proposed strategies to protect public health:

- **Reduce Earth-warming air pollution.**
- **Reduce smoke exposure to sensitive populations.**
- **Increase access to cooling.**
- **Increase social and behavioral health supports in vulnerable communities.**

Thanks!

CDC Climate and Health Cooperative Agreement 1 NUE1EH001316-01

Sustainable Sandhills

Hoke County Stakeholders

Questions?

**Virginia Guidry, Lauren Thie
North Carolina Department of Health
and Human Services**

**Occupational and Environmental
Epidemiology**

lauren.thie@dhhs.nc.gov

919-707-5931





NORTH CAROLINA
Department of Transportation



North Carolina's Climate Risk Assessment and Resilience Plan Agency Updates

Colin Mellor, Environmental Policy Unit

October 1, 2020

Climate Stressors

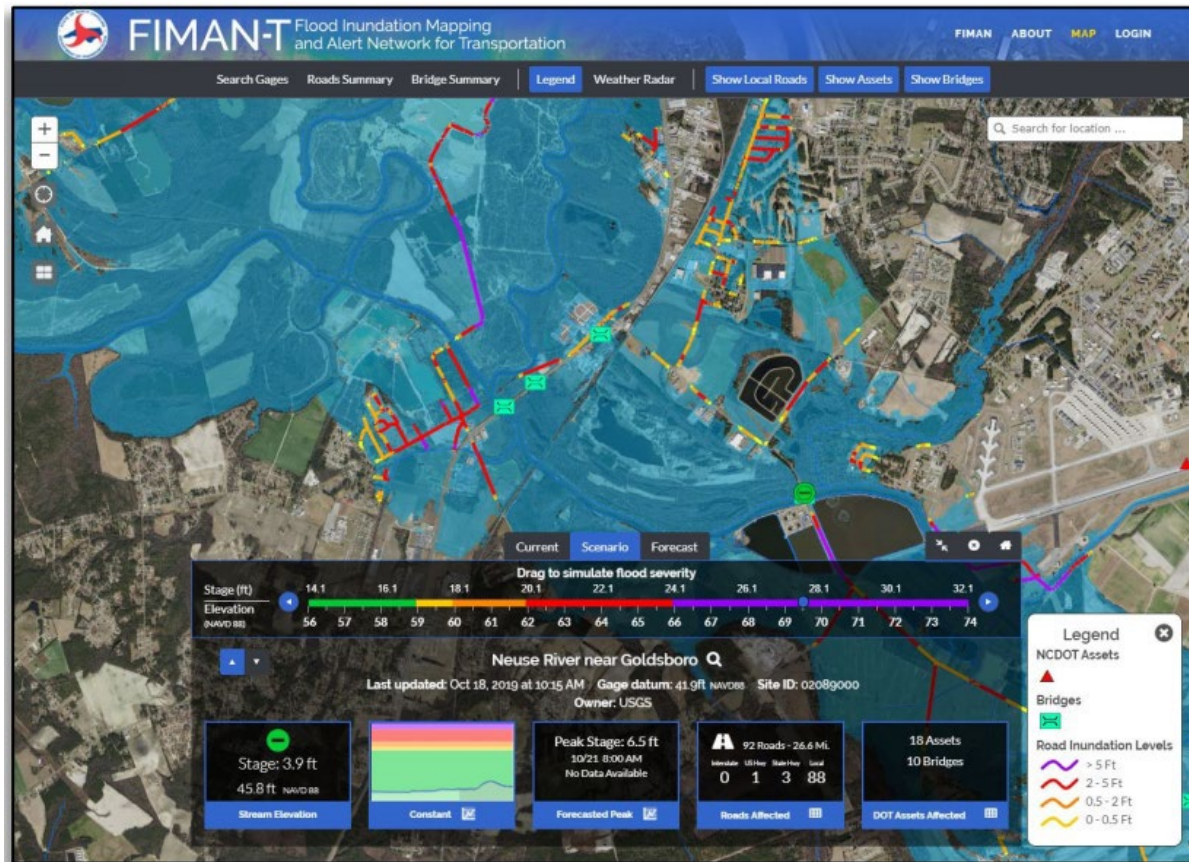


I-95/I-40 Flood Resilience Feasibility Study



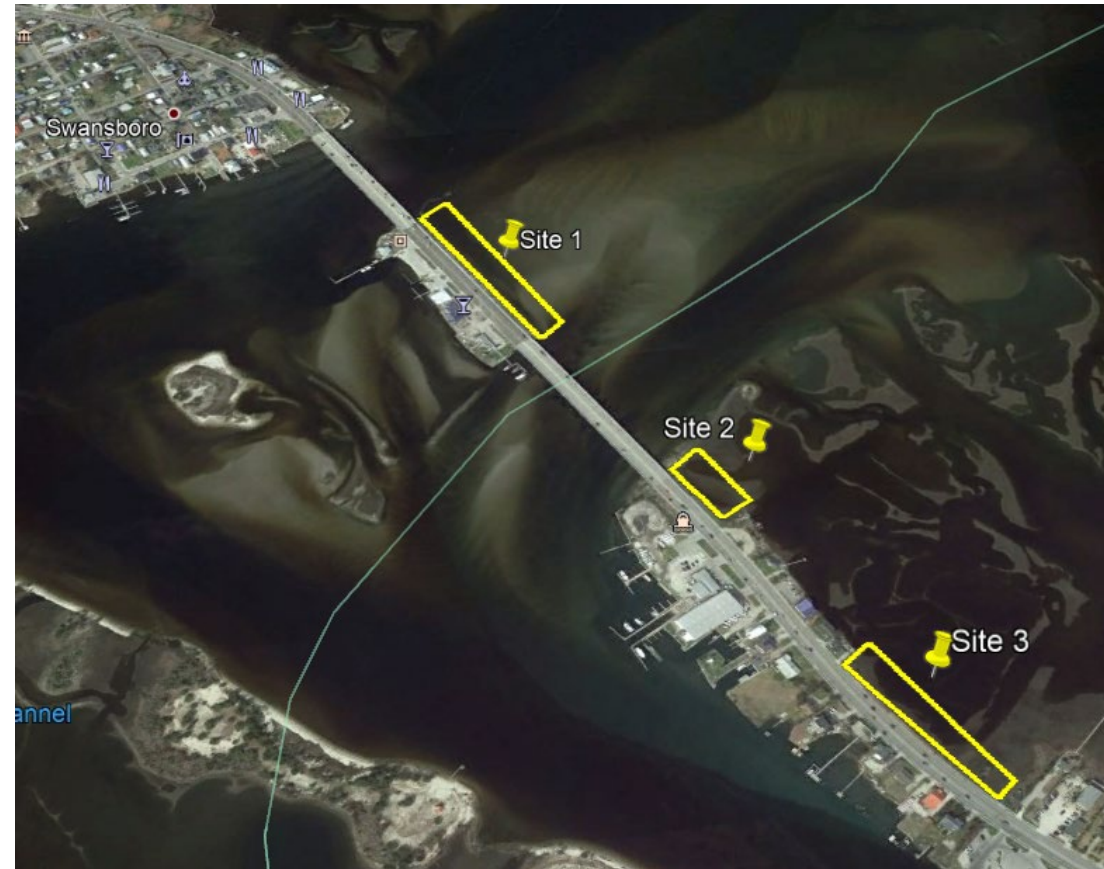
FIMAN-T and BridgeWatch

BridgeWatch



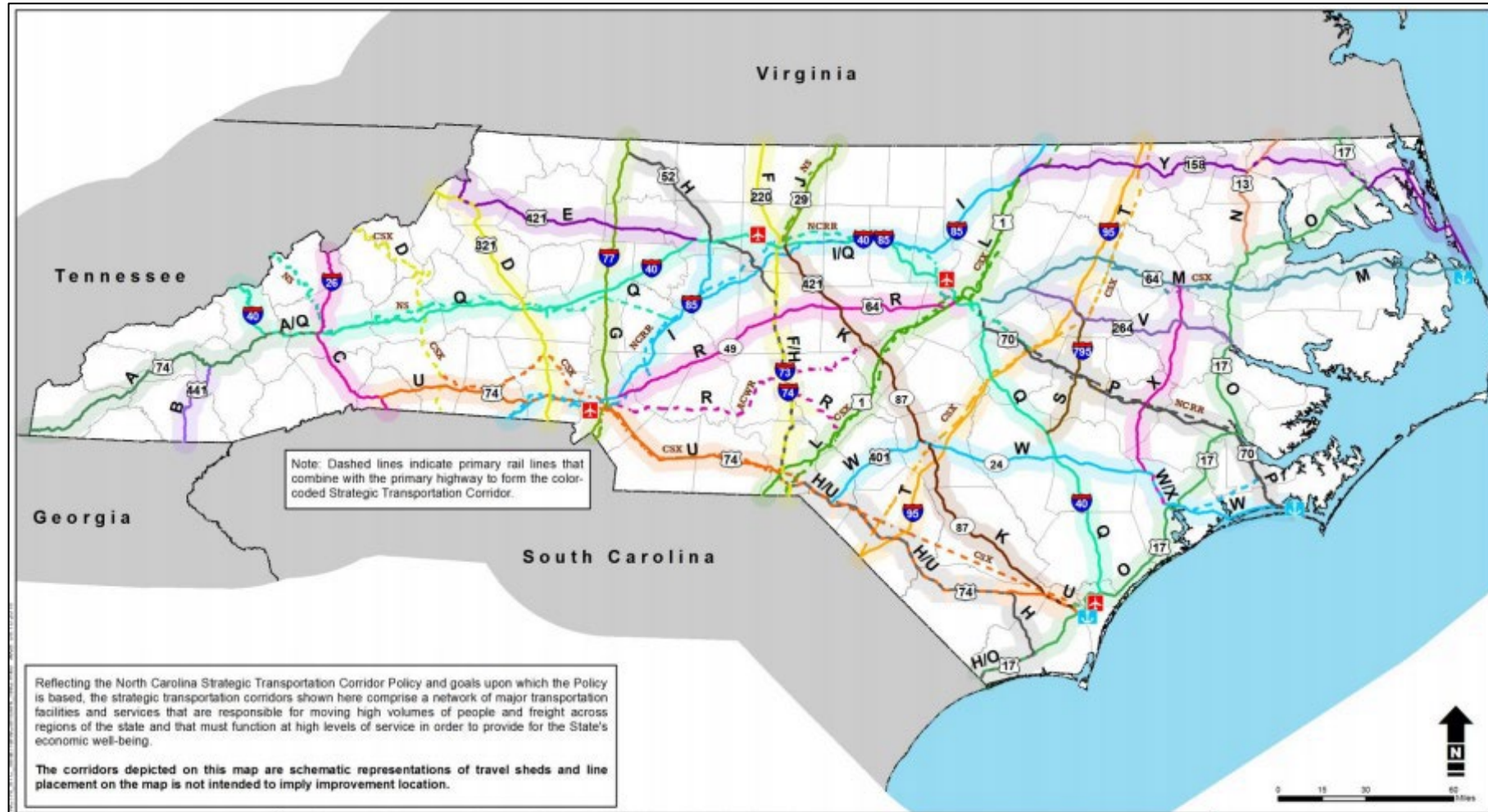
NC 24 Coastal Resilience Grant

- **NFWF Grant awarded in partnership with NC Coastal Federation**
- **Protect ~1/2 mile of NC 24 near Swansboro**





STC - Vulnerability Assessment

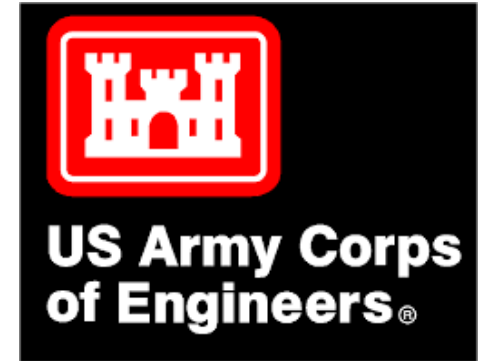
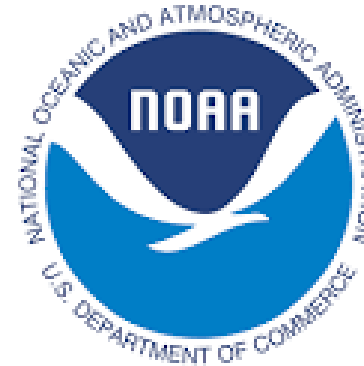


Transportation Resilience Policy



- **Long-range Transportation Planning**
- **Individual Project Planning and Design**
- **Operations and Maintenance**

Partnerships



North Carolina
Coastal Federation
Working Together for a Healthy Coast



Climate Justice

Amanda Martin, NCORR



ReBUILD NC



Climate and Environmental Justice

North Carolina Climate Risk Assessment and Resilience Plan

Amanda Martin, Ph.D.
Deputy Chief Resilience Officer



Chapter 4: Climate & Environmental Justice

A. What is climate justice?

- B. Inequity in climate vulnerability and resilience
- C. Climate justice spotlight issues
- D. Recommendations

The state gratefully acknowledges input from the DEQ Secretary's Environmental Justice and Equity Advisory Board, Climate Change and Extreme Weather Subcommittee

Climate change does not affect everyone equally

Climate justice:

An analysis of the deep inequities posed by climate change impacts

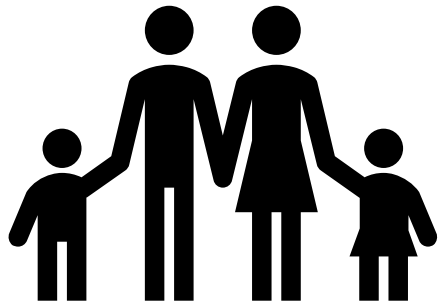
A social and political movement to address the needs of disadvantaged populations in greenhouse gas mitigation and climate change adaptation efforts

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Why does climate change impact some more than others?



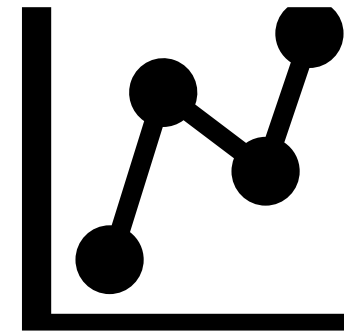
Social vulnerability



Unequal exposure to climate hazards



Infrastructure and housing disparities



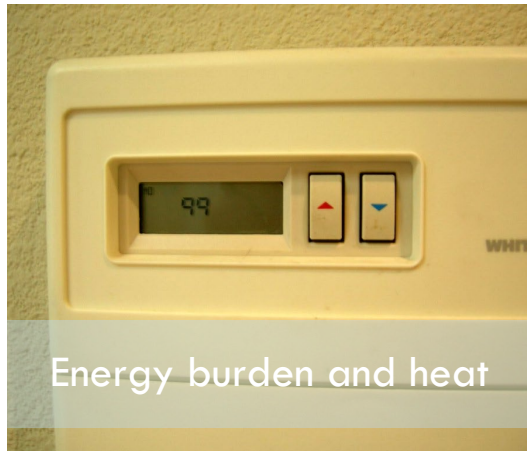
Inequalities in resilience policy and programming

Chapter 4: Climate & Environmental Justice

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Climate justice spotlight issues



Chapter 4: Climate & Environmental Justice

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Recommendations

Cabinet
agencies

State
government

Community
voice

Research

Recommendations to the Climate Change Interagency Council

1. Develop an **equitable public participation framework** for all climate change mitigation and resilience efforts. For use by state agencies as well as boards and commissions.
2. Design an interagency process to **survey and educate staff** on unified definitions of equity; vulnerability; climate risk; resilience and other terms needed to demonstrate state's understanding and to ensure common ground within resilience work.
3. Release a **North Carolina Climate Justice Report** as part of future North Carolina Resilience Plans **with opportunities for public involvement.**

Recommendation to All Branches of State Government

State policy recommendation:

Adopt the **targeted universalism** approach for resilience, in which policies and programs begin by addressing the needs of those who are most vulnerable to climate change, and seek to improve the resilience of the entire state

Recommendations on Community Voice

1. **Engage local voices** and invite the most impacted communities to drive the narrative about their resilience
2. **Engage new types of partners** in resilience work, such as institutions that are frequent points of contact in the lives of socially vulnerable people, *e.g.* schools, medical clinics, retail outlets, houses of worship, and transit services
3. **Prioritize community agency and social infrastructure** as critical components of resilience in state resilience programs

Research Recommendations: Topics





NORTH CAROLINA OFFICE OF RECOVERY AND RESILIENCY

THANK YOU

AMANDA MARTIN, Ph.D.

AMANDA.MARTIN@NCDPS.GOV | (919) 741-9786



Natural and Working Lands Action Plan

Misty Buchanan, DNCR





Natural and Working Lands Action Plan
**Executive Order 80:
North Carolina's Commitment to Address Climate Change and
Transition to a Clean Energy Economy**

Misty Buchanan
Department of Natural and Cultural Resources

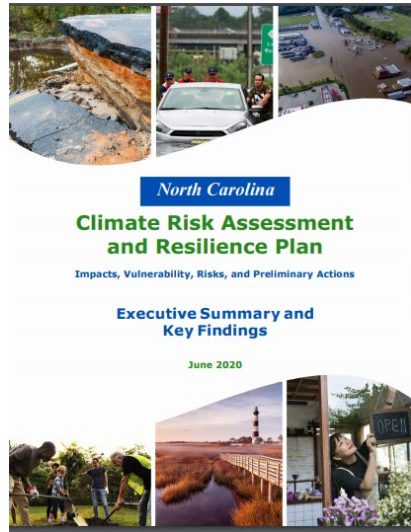




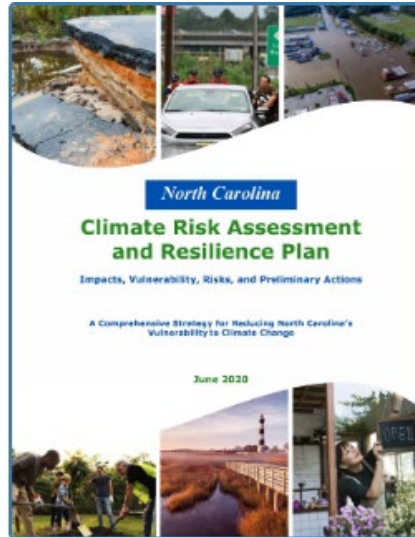
Benefits of Nature-Based Solutions

- Greenhouse Gas emissions mitigation / Carbon sequestration
- Economic opportunities for food/fiber producers and the rural workforce
- Communities develop long-term resilience,
- Improvement of water, air, soil and ecosystem quality
- Aesthetic natural beauty is maintained for recreation and tourism.

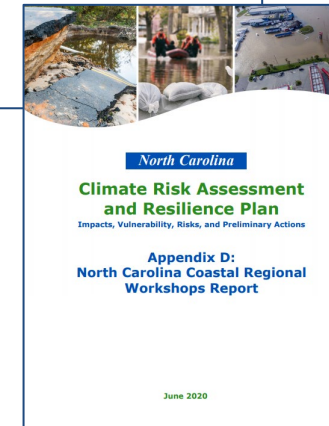
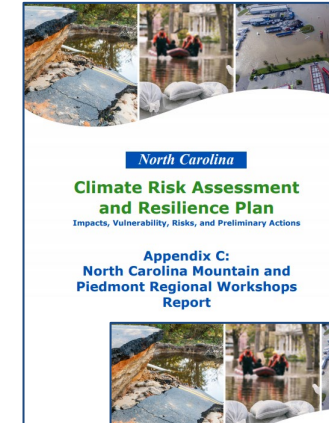
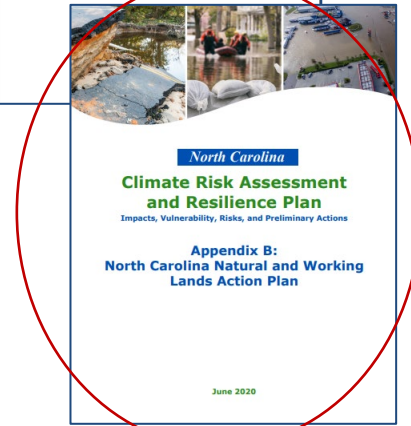
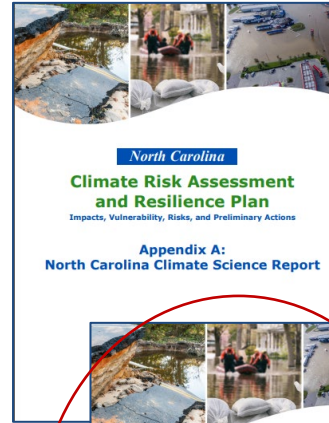
NC Climate Risk Assessment and Resilience Plan



Summary & Key Findings



Main Report



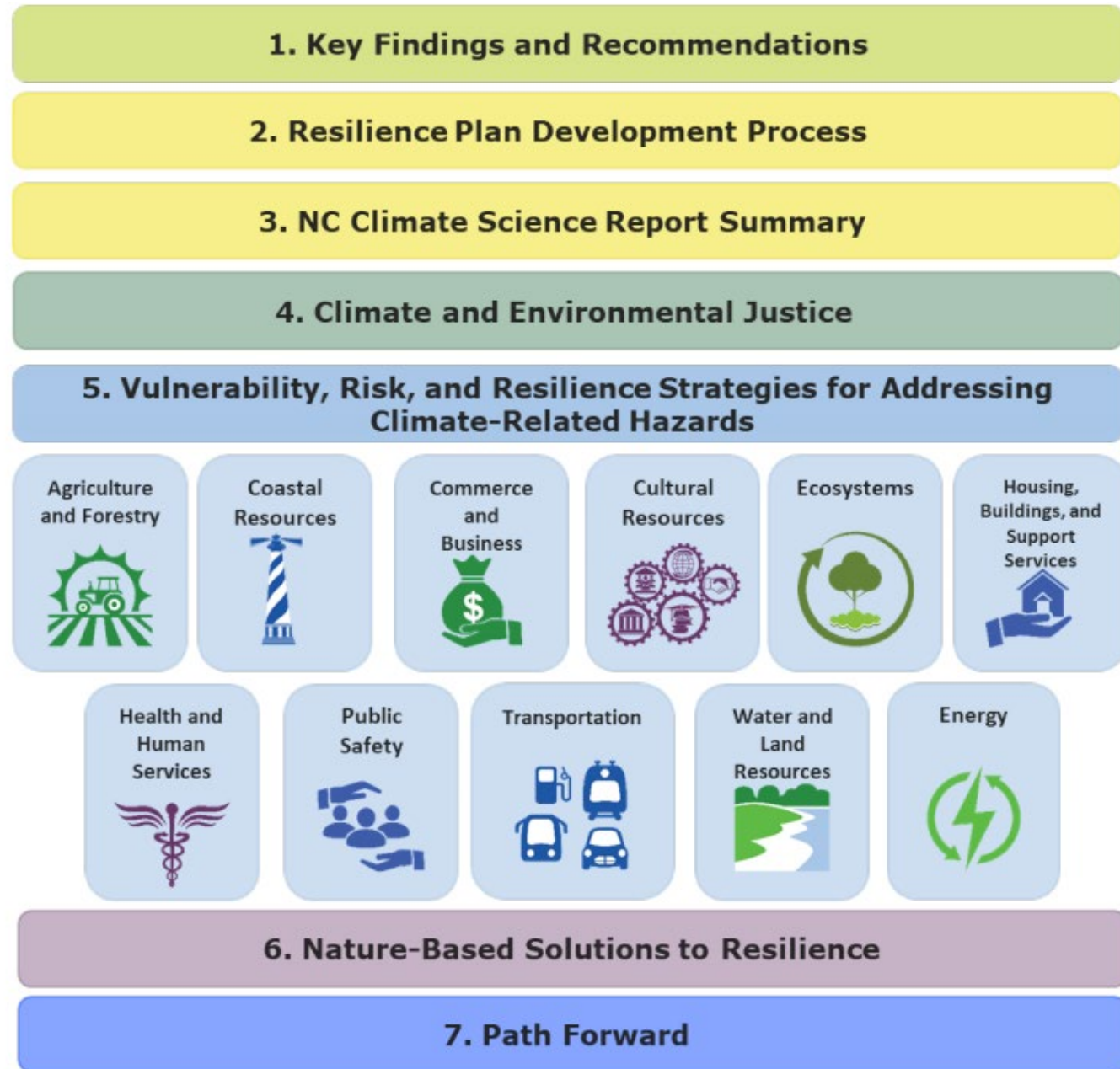
Appendix A: Climate Science Report

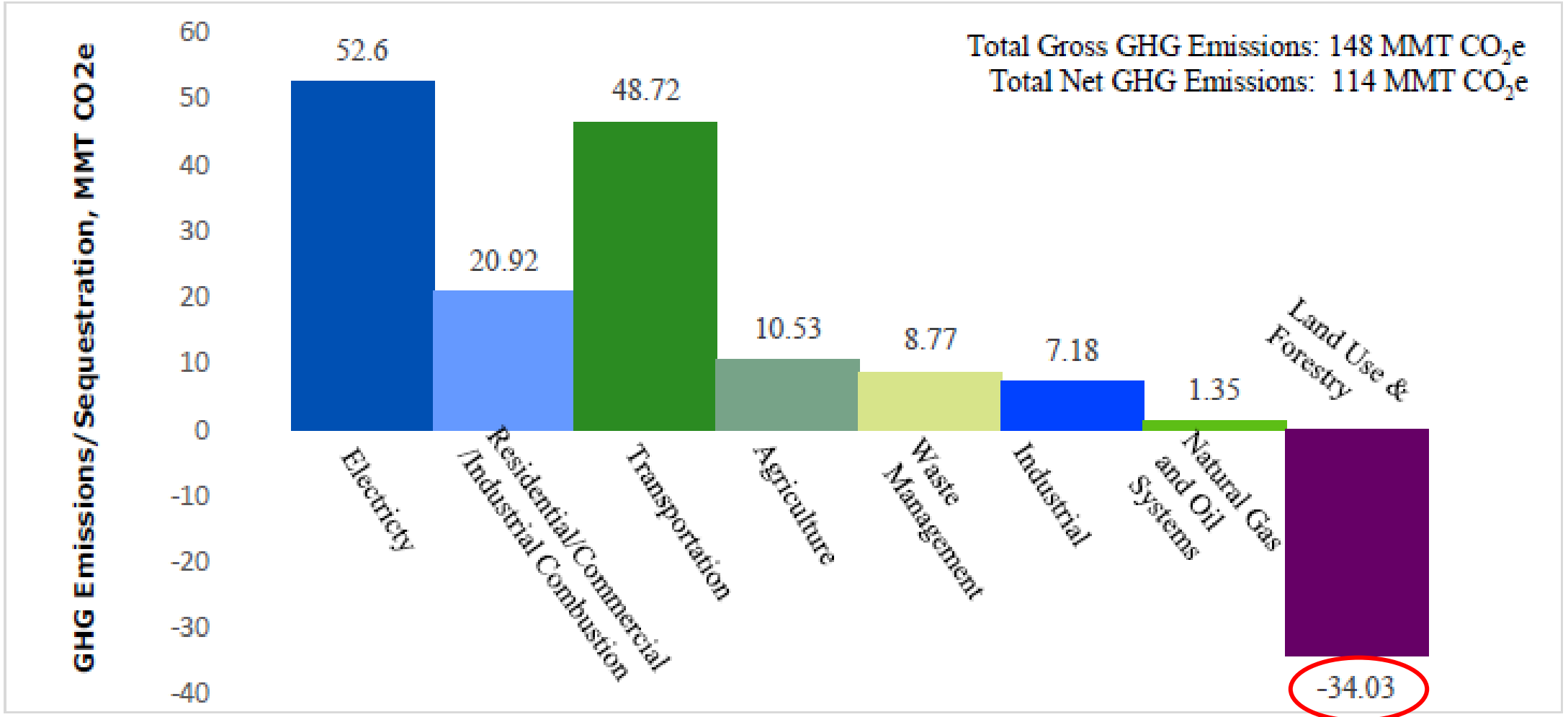
Appendix B: Natural and Working Lands Action Plan

Appendix C: Mountains and Piedmont Regional Workshop

Appendix D: Coastal Regional Workshop

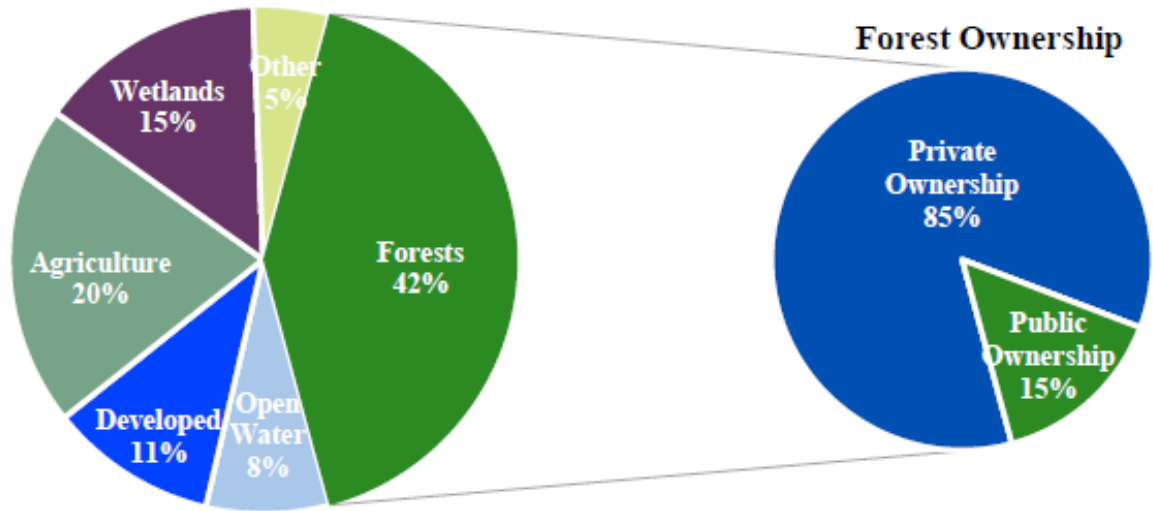
NC Climate Risk Assessment and Resilience Plan Report Structure





North Carolina GHG Emissions Inventory in MMT CO₂e, 2017

Natural and Working Lands in North Carolina



Total Area (land + open water): 33.7 million acres

Miles of Coastline and Rivers in North Carolina

Waterways	Length (miles)
Miles of Ocean Coastline	322
Miles of Estuarine Coastline	12,009
Miles of Rivers	37,853

Benefits of natural and working lands

Natural and working lands are important to North Carolina's economy. North Carolina's gross state product is \$538 billion. Natural and working lands and coastal habitats collectively produce more than 20% of that total:



Photo credits (left to right): [Soil Science](#), [Susie Blackmon](#), [Alan Szalwinski](#), [NC Wetlands](#). References 1, 2, 3, 4 (see credits section).

Natural and Working Lands Participating Stakeholders

Albemarle-Pamlico National Estuary Partnership	NC Farm Bureau
Appalachian State University	NC DA&CS Forest Service
Audubon NC	NC DNCR Natural Heritage Program
Cape Fear River Assembly	NC Foundation for Soil and Water Conservation
Carolina Wetlands Association	NC Pork Council
City of Asheville	NC Sea Grant
City of Raleigh	NC Urban Forest Council
City Soil	NC Wildlife Resources Commission
Compass USA	NOAA National Ocean Service
Conservation Trust of NC	North Carolina Forestry Association
Cultivating Resilience, LLC	North Carolina State University
Defenders of Wildlife	Pine Creek Forestry
Dogwood Alliance	RTI International
Duke University - Nicholas Institute	Regenerative and Resilient, LLC
Environmental Defense Fund (EDF)	Resource Management Service (RMS)
NatureServe	The Nature Conservancy
NC A&T University	Town of Cary
NC Choices	Urban Offsets
NC Conservation Network	US Fish and Wildlife Service
NC Department of Agriculture	US Geological Survey
NC DEQ, Coastal Management	USDA Natural Resource Conservation Service
NC DEQ, Marine Fisheries	USDA SE Climate Hub
NC DEQ, Mitigation Services	Wake County

Enhance carbon sequestration and mitigate Greenhouse Gas emissions

Build resilience in ecosystems and communities

Provide public health and ecosystem co-benefits

Create economic opportunities for agribusiness, recreation, and tourism

Ensure implementation is socially equitable



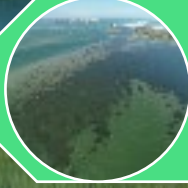
Forestry



Floodplains & Wetlands



Pocosins



Coastal Habitats



Agriculture



Urban Lands

Transformative Recommendations

1. Protect and restore forests and wetlands within **flood-prone areas**.
2. Facilitate voluntary landowner participation in **carbon offset and ecosystem services markets**.
3. Build a **multi-state toolbox** for Natural and Working Land solutions.
4. Integrate climate adaptation and resiliency strategies into **local government comprehensive plans**.





Coastal Habitats

Protect

Provide incentives coastal habitat protection.

Facilitate migration of coastal habitats through protection of migration corridors.

Restore

Prioritize climate change and sea level rise in coastal habitat restoration planning.

Questions:

Misty Buchanan

Division of Land and Water Stewardship

Natural Heritage Program

Misty.Buchanan@ncdcr.gov



N O R T H
C A R O L I N A
DEPARTMENT OF
**NATURAL &
CULTURAL
RESOURCES**

The Path Forward for Resilience



Overview of Chapter 7

Jessica Whitehead, NCORR



ReBUILD NC

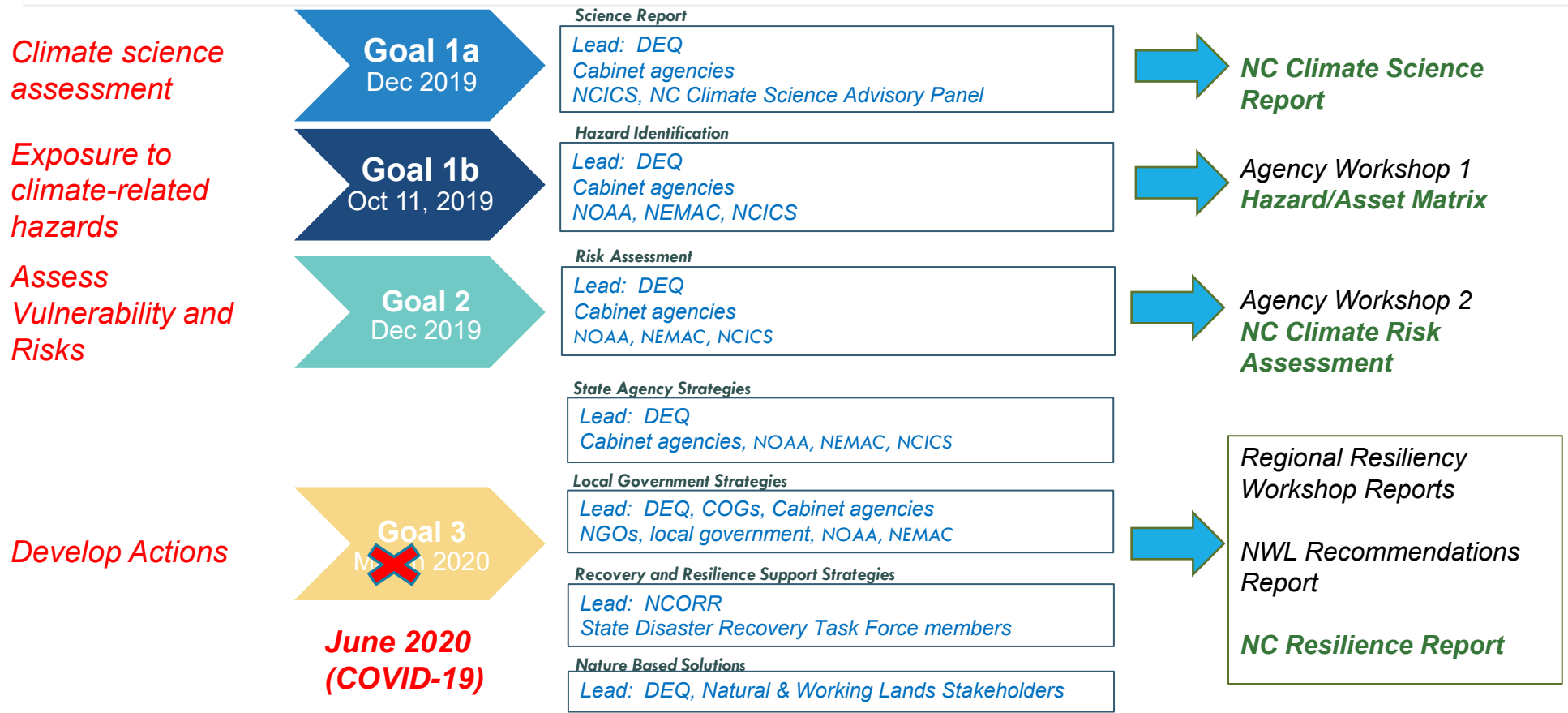


Building a Resilient North Carolina

The Path Forward

Jessica Whitehead, Ph.D.
Chief Resilience Officer

2020 NC Climate Risk Assessment and Resilience Report



Vision of Resilience

A resilient North Carolina is a state where our communities, economies, and ecosystems are better able to rebound, positively adapt to, and thrive amid changing conditions and challenges, including disasters and climate change; to maintain and improve quality of life, healthy growth, and durable systems; and to conserve resources for present and future generations.

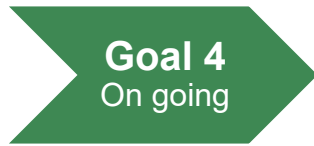
Foundation for a Path Forward: Principles of Effective Resilience Plans

Principle	Definition	Components of Principle
Goals	Future desired conditions	Plan purpose, vision, goals, and objectives
Fact Base	Empirical foundation that identifies and prioritizes issues to ensure that strategies are well informed	Data sources; analysis of current conditions; climate change exposure; vulnerability and risk assessment
Strategies	Guide to decision making to assure plan goals are achieved	Capacity building, land use, green infrastructure etc.; cost and co-benefits of strategy options; prioritization of strategies
Public Participation	Recognition of actors engaged in preparing the plan	Description of planning process and techniques to engage stakeholders; Identify individuals involved in preparation of the plan
Coordination	Recognition of the interdependent actions of multiple organizations and the need for coordination	Engagement of local universities, state agencies, businesses, neighboring jurisdictions, etc. in the planning process
Implementation and Monitoring	Guidance to translate plan strategies into action and track progress towards goals	Organizational responsibilities, timelines, and funds for implementation and monitoring
Uncertainty	Plans recognition of and approaches to overcome uncertainty in future climate projections	Recognize sources of uncertainty; consider multiple future scenarios; flexible, robust, or no-regret strategies

(S. Woodruff, 2019, National Adaptation Forum)

NC Resilience Plan: Path Forward

Local Government and Community Assistance

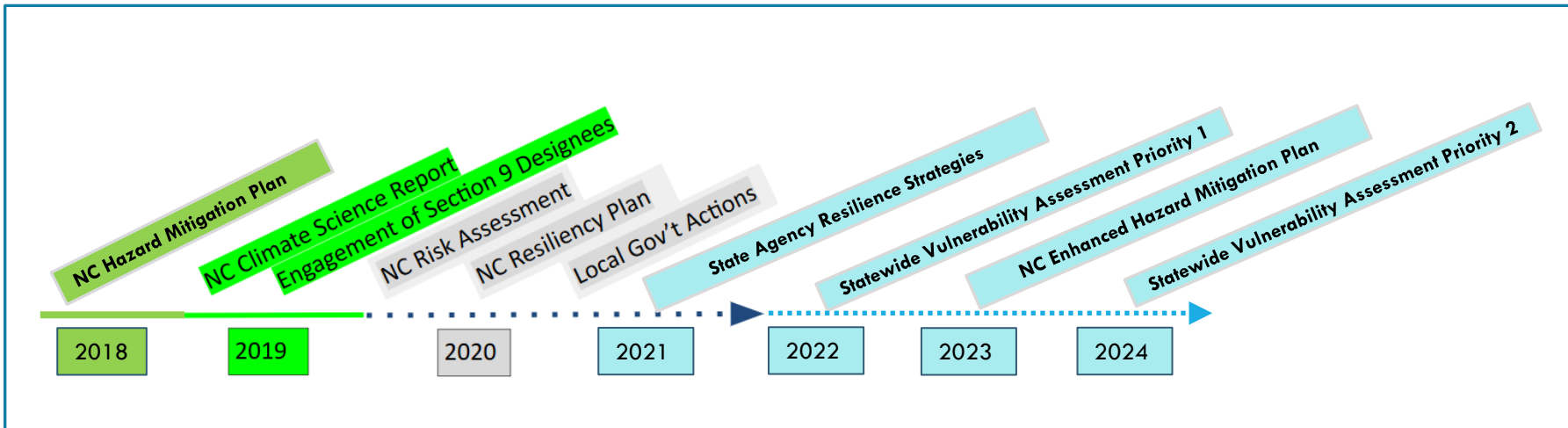


Local and Regional Resilience Plans & Actions

Lead: NCORR
Cabinet agencies, COGs, local governments, NGOs



Local Government Assistance Tools, Funding, Resources, etc.



North Carolina Resilience Plan Element	Current Components	Earlier Versions	Update Cycle
1. Science Report	2020 North Carolina Climate Science Report	Chapter 2 (“Climate Trends”) of 2012 Climate Ready NC	As needed to incorporate new decision-relevant information
2. State Agency Resilience Strategies	Chapter 5 (“Climate Impacts, Risks and Vulnerabilities”) of 2020 Resilience Plan		Agency Resilience Strategies finalized March 2021, and annually thereafter.
3. Statewide Climate Vulnerability Assessment and Resilience Strategy	Chapter 4 (“Climate Justice”), Chapter 6 (“Nature-Based Solutions”), Chapter 7 (“Path Forward”) of 2020 Resilience Plan; Chapter 3 (“Impacts, Risks and Vulnerabilities for North Carolina”); Appendices B through E of 2012 Climate Ready NC	Chapter 4 (“Cross-Sector Strategies”) of 2012 Climate Ready NC	<ul style="list-style-type: none"> • Priority 1: 2022 and every 4 years thereafter • Priority 2: 2024 and every 4 years thereafter
4. State Hazard Mitigation Plan	2018 North Carolina state Hazard Mitigation Plan	2013, 2010, 2007, 2004 SHMP	Current FEMA mandate: every 5 years

PLAN ELEMENTS	NEXT STEPS	PARTICIPATION	RESOURCE NEEDS
1. North Carolina Climate Science Report	<ul style="list-style-type: none"> Update 2020 Climate Science Report as deemed necessary Synthesize decision-relevant studies and contracted analysis from Elements 2 and 3 	<ul style="list-style-type: none"> Universities Federal agencies State agencies External contractors 	<ul style="list-style-type: none"> U.S. National Climate Assessment updates Contracting funds for scientific expertise State agency staff participation
2. State Agency Resilience Strategies	<ul style="list-style-type: none"> Develop Agency strategies based on 2020 Resilience Plan Chapter 5 (“Climate Impacts, Risks, and Vulnerabilities”) Agencies seek advisory capacity on strategies from NCORR State Disaster Recovery Task Force Recovery Support Function teams (RSFs) as needed Agencies publish Agency Resilience Strategy 	<ul style="list-style-type: none"> State agency resilience lead staff NCORR resilience staff (general guidance; administration of SDRTF RSFs) Universities External contractors Local governments Stakeholders representing agency priority areas 	<ul style="list-style-type: none"> Funding for state agency resilience leads (1 new FTE per agency) Each agency will have different resource needs for implementing resilience in its programs, which may include: <ul style="list-style-type: none"> Contracting funds for agency-specific quantitative and qualitative risk and vulnerability assessments Contracting funds for facilitating prioritization discussions and strategy development NCORR guidance
3. Statewide Climate Vulnerability Assessment and Resilience Strategy	<p>Identify, perform supporting vulnerability assessment, and develop Resilience Action Plan for Cross-Cutting Challenges:</p> <ul style="list-style-type: none"> Priority 1 Challenges: extreme events and actions potentially eligible for federal funding, such as Enhanced Hazard Mitigation Plan funding Priority 2 Challenges: long-term issues not addressed through Priority 1 	<ul style="list-style-type: none"> Statewide Strategy development process established by NCORR, with advisory input from Interagency Resilience Team and SDRTF RSFs 	<ul style="list-style-type: none"> Contracting funds for facilitating prioritization discussions and strategy development to gather input and prioritize actions
4. State Enhanced Hazard Mitigation Plan	<ul style="list-style-type: none"> Incorporate climate science data into FEMA required Risk and Vulnerability Assessment process Incorporate Element 3 Priority 1 Cross-Cutting Resilience Action Plan items into FEMA required Hazard Mitigation Strategy 	<ul style="list-style-type: none"> NCEM Hazard Mitigation, with advisory input from NCORR resilience staff (Resilience Strategy support and SDRTF administration) 	<ul style="list-style-type: none"> Contracting funds for quantitative and qualitative risk and vulnerability assessments Contracting funds for facilitating prioritization discussions and strategy development to gather input and prioritize actions across levels of government

Resilient NC Guiding Principles

1. Act quickly and decisively to reduce the most harmful impacts of climate change—flooding, drought, landslides, and wildfires
2. Act thoughtfully and collaboratively to develop equitable solutions for the most socially challenging effects of climate change
3. Invest in safe, affordable, and connected communities
4. Strengthen regional economies
5. Support healthy communities, local identity, and recreational access to nature
6. Implement resilience best practices



Cross-sector Resilience Strategies

- Consider resilience criteria in making investments
- Update plans, standards, and design values
- Increase resilience capacity in state agencies and at local governments
- Identify sustainable funding sources for building resilience
- Increase communication, outreach, and engagement on resilience needs and solutions

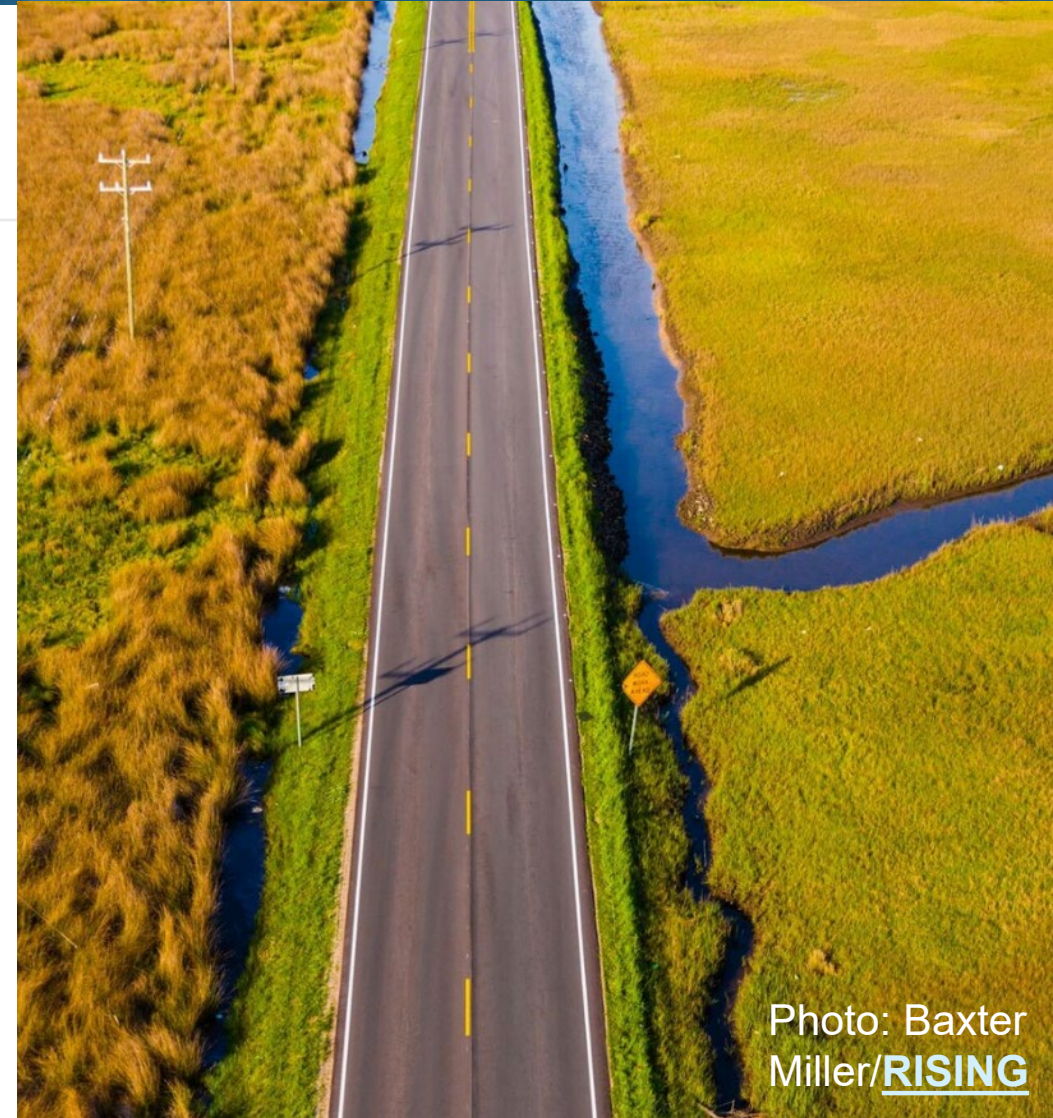
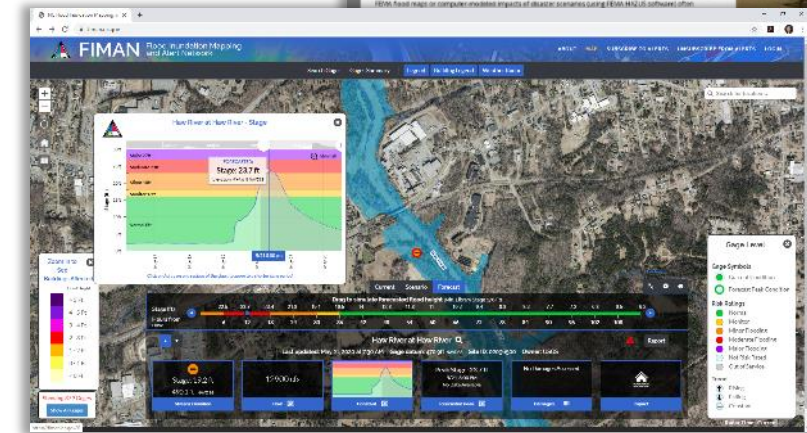
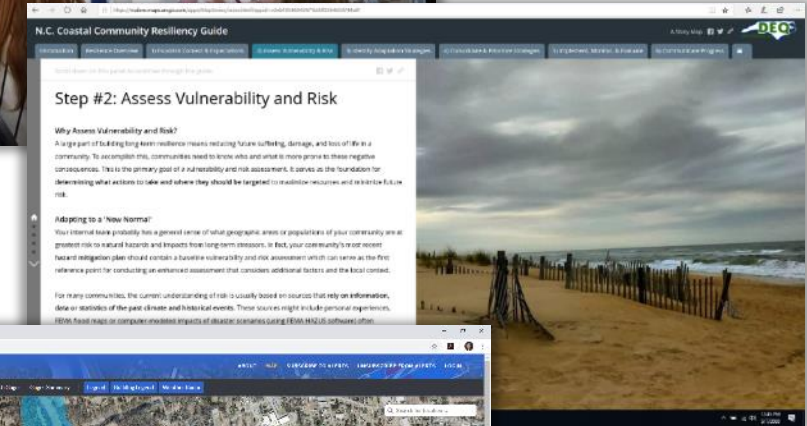
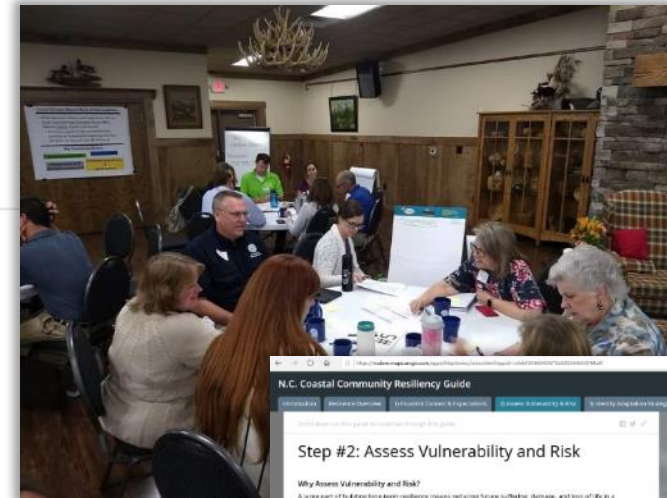


Photo: Baxter Miller/RISING

Priority Initiatives

- ✓ Manage and coordinate statewide resilience
- ☐ Convene a dedicated Interagency Resilience Team
- ✓ Continue resilience efforts through the North Carolina Climate Change Interagency Council
- ☐ Establish the NC Resilient Communities program
 - ☐ Online Climate Resilience Clearinghouse and Toolbox
 - ★ ☐ Resilience training programs for communities
 - ★ ☐ Establish NC Resilient Communities Grant Program



Pilot grant opportunities: NFWF (DCM); EDA (NCORR)

NCORR: Steps toward resilience

Executive Order
80 Addressing
Climate Change

State Disaster
Recovery Task
Force

“Quick Start
Guide” for Local
Government

EDA Application:
Resilient NC
Regional
Portfolio
Program

Statewide
Vulnerability
Assessment
Cross-Cutting
Strategies

Support NCEM
State Hazard
Mitigation Plan
Update



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THANK YOU

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NC Resilient Communities Program

Amanda Martin, NCORR and Tancred Miller, DEQ-DCM



ReBUILD NC



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Resilient Communities Program

North Carolina Climate Risk Assessment and Resilience Plan

Amanda Martin, NCORR
Tancred Miller, NCDEQ

Chapter 7(E). Priority Resilience Initiatives

1. Manage and coordinate statewide resilience
2. Convene a dedicated Interagency Resilience Team
3. Continue resilience efforts through the NC Climate Change Interagency Council
4. Establish the North Carolina Resilient Communities Program

Resilient Communities Program

Communities and regions can solve tremendous resilience challenges

Resilient Communities Program

“Community leaders and residents emphasize that improving local resilience requires **access to expertise, technical support for analysis and planning, and funding to implement measures that advance long-term resilience.**”

–North Carolina Climate Risk Assessment and Resilience Plan

Resilient Communities Program Goals



Build local capacity for vulnerability assessments, planning and project development, and implementation

Provide technical assistance for resilience planning, vulnerability assessments, and project/program identification and design

Supply funds to plan and implement resilience projects and programs

Components of the Resilient Communities Program

Training and
Capacity
Building

Online
Resilience
Portal

Funding for
Planning and
Implementation

Training and Capacity Building

Audience

- Training programs and ongoing collaborations for local and tribal governments, COGs, and nonprofits and businesses

Content

- Resilience best practices, leadership, effective use of climate information, integration of resilience into existing plans, policies, and programs



Funds for Planning and Implementation

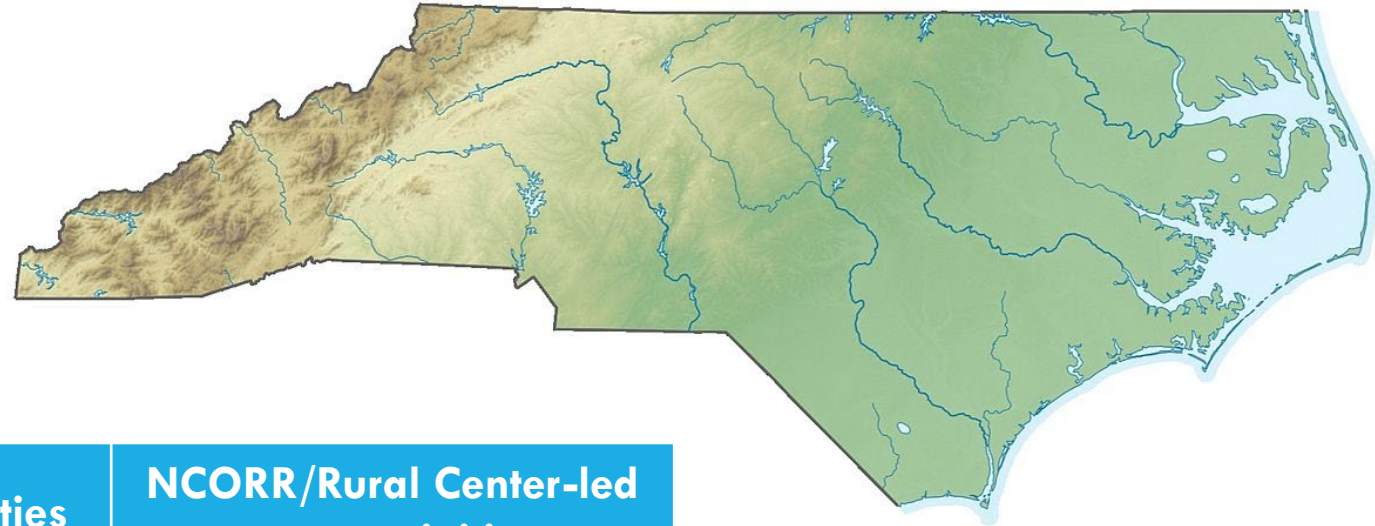
Goal

- Motivate and enable implementation of communities' self-determined resilience priorities

Need

- Few consistent sources of funding for non-construction local resilience projects
 - Risk assessments, land use/comprehensive plans, outreach campaigns, business continuity training
- Federally funded infrastructure projects typically require a local match
 - Functional floodplain restoration, levee maintenance

Phase One

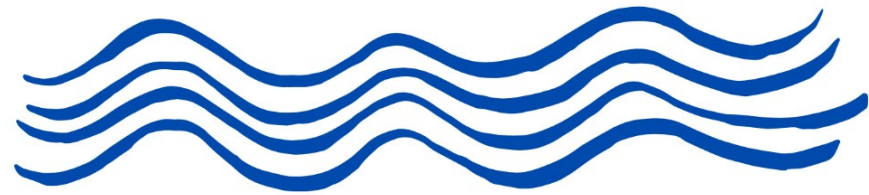


	DCM-led grant activities	NCORR/Rural Center-led grant activities
Training and capacity building		X
Online resilience portal		
Funding planning and implementation	X	X

Scope of Phase One activities and geographies reflect funding opportunities and agency missions

North Carolina

**RESILIENT
COASTAL
COMMUNITIES
PROGRAM**



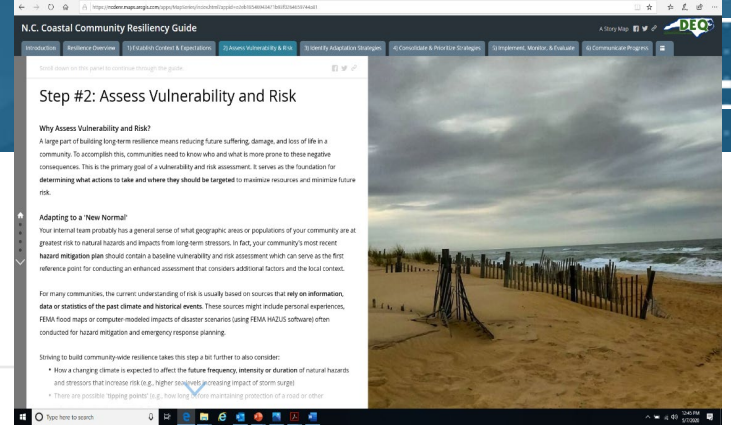
Tancred Miller, DEQ, Division of Coastal Management



NCORR

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\$830k State Disaster Recovery Act (2019)

\$1.1m National Fish and Wildlife Foundation Grant (2020)

Partnership between DCM, NCORR, NC Sea Grant, TNC-NC

- *Parallels NCORR EDA Statewide Resilience Framework and Resilient NC Regional Portfolio Program*

Funds up to 20 local governments with a focus on green-gray infrastructure project development:

- Vulnerability assessments
- Resilience planning
- Engineering and design to get to shovel-ready projects
- At least 1 construction project



Program Objectives

- Assist communities with risk & vulnerability assessments of their people and critical assets;
- Develop a portfolio of prioritized coastal resilience projects and advance to “shovel-ready” status; and
- Link communities to funding streams for project implementation.



Phases 1 & 2 Tentative Timeline

October 31	RFQs and Invitations to Apply issued
December 31	Pre-applications due from communities
December	Responses due from contractors
January 2021	20 communities selected to complete questionnaire
February 2021	Contractors selected
February 2021	Questionnaire due from communities
April 2021	Phase 1 and 2 contracts finalized, work begins
December 2021	Resilience Strategies due; Phase 1 and 2 contracts expire

NCORR/Rural Center EDA Grant

Grant from the Economic Development Administration (EDA) Disaster Supplemental for Hurricanes Florence & Michael

Collaboration between NCORR and the Rural Center

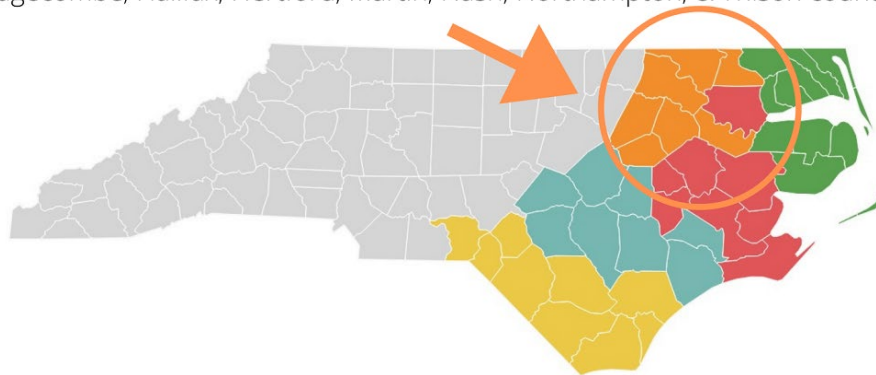


Capacity Building

1. Homegrown Leaders East (series)

Homegrown Leaders Training
November 18-20

Edgecombe, Halifax, Hertford, Martin, Nash, Northampton, & Wilson counties



2. Resilience Webinar Series (October 2020)



3. North Carolina Local/Regional Resilience Guidebook

Regional Portfolio Program

Up to 10 regional resilience partnerships established in Eastern/Central NC

Kickoff workshop, Ongoing coaching and technical assistance

Development of a regional portfolio of resilience projects



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THANK YOU



Interagency Resilience Team and Agency Resilience Strategies

Marlena Byrne, NCOOR



ReBUILD NC



State Agency Resilience

North Carolina Climate Risk Assessment and Resilience Plan

Marlena Byrne
Deputy Chief Resilience Officer



State Agency Resilience

Two Key Components for The Path Forward for North Carolina State Agencies

- State Agency Strategy Reports, *An Element of the North Carolina Resilience Strategy*
- NC Interagency Resilience Team, *A Priority Resilience Initiative of the 2020 Plan*

State Agency Strategy Reports

The **2020 Climate Risk Assessment and Resilience Plan (2020 Plan)** calls for each state agency to develop an **Agency Resilience Strategy Report**

- Published on March 1, 2021
- Updated annually thereafter
- No “one-size-fits-all” concept for the reports
- Intended to be iterative over time and should reflect each agency’s needs and resources

The 2020 Plan's Sector Approach vs The Reports

The 2020 Resilience Plan

- A sector-based approach
 - Analyzed climate hazards and vulnerabilities
 - Identified strategies for addressing the risks posed by climate change

The 2020 Plan's Sector Approach vs The Reports

The Agency Resilience Strategy Reports

- Primarily *intended to describe the work of the agency* in increasing its resilience to the effects of climate change
 - Agency Plans
 - Policies
 - Procedures and Regulations
 - Programs and Projects (including capital projects)
- But each agency will have *a valuable perspective on its sector* even in areas where it might not have direct regulatory, programmatic, or proprietary authority

Contents of the State Agency Resilience Strategy Reports

- Intended to be a report on the agency's resilience work, not the work product itself
- Update the agency's work for Chapter 5 of the 2020 Plan
- Clearly identify priorities, next steps, and actionable items going forward
- Will depend on the agency's capacity and prior work on climate resilience planning, *ranging from*
 - Further research and analysis *to*
 - Developing an implementation plan *to*
 - Specific programs or capital projects

Interagency Resilience Team– What It Is

- Created by the 2020 Plan
- Convened by the Chief Resilience Officer and her team
- At least one lead from each agency
 - Staff experts who have the authority, capacity, and expertise to collaborate on resilience work among agencies

Interagency Resilience Team– What It Does

- Provides a coordinating structure for tackling interagency resilience issues
- Supports the development and release of updates to the 2020 Plan, including the State Agency Resilience Reports
- First meeting held on September 18, 2020



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THANK YOU

MARLENA BYRNE

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Closing Remarks

- Agency Requests:
 - 2020 Interim Report - submit your agency inserts by Oct. 19
 - Building Energy Consumptions Report - DEQ will provide draft report in November for agency review
 - Continue to post agency activities at: <https://deq.nc.gov/energy-climate/climate-change/nc-climate-change-interagency-council/climate-change-clean-energy>
- Today's slides will be posted at: <https://deq.nc.gov/energy-climate/climate-change/nc-climate-change-interagency-council>.
- Next Council meeting tentatively scheduled for Dec. 3, 2020

Contacts

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Deputy Secretary for Public Affairs
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BREAK

Until 12:05PM



Public Engagement

Individuals and organizations may provide input to cabinet agencies on their implementation of EO 80

(Limit: 2 minutes each)

