



NORTH CAROLINA OFFICE OF RECOVERY AND RESILIENCY

**NORTH CAROLINA DEPARTMENT OF PUBLIC SAFETY**  
OFFICE OF RECOVERY AND RESILIENCY

## **BUILDING RESILIENT COMMUNITIES**

North Carolina Beach, Inlet & Waterway Association  
2021 Spring Conference  
April 26, 2021

Marlena Byrne  
Deputy Chief Resilience Officer

# Overview for today

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1. Introducing North Carolina's Office of Recovery and Resiliency
2. What do resilient communities look like? Four components
3. How do we get there?

## Introducing...

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- Administering \$1B disaster recovery and resiliency funds from multiple disasters
- Administering Covid rent/utility relief program, HOPE
- Sibling agency to North Carolina Emergency Management



## What is Resilience?







How much time does it take to get back to a baseline after a shock or stress?

... is that baseline the best we can be? Is the baseline good enough for the future?

**PREPARED + CONNECTED +  
ADAPTIVE**

# Climate Resilience

## A. Climate Change Projections in North Carolina<sup>1</sup>

<p><b>Virtually Certain</b> Sea Level will continue to rise</p> 	<p><b>Very Likely</b> Summer Heat Index Values will increase</p> 	<p><b>Likely</b> Annual Total precipitation will increase</p> 
<p><b>Likely</b> Hurricane intensity will increase</p> 	<p><b>Likely</b> Severe droughts will become more intense</p> 	<p><b>Likely</b> Increase in precipitation will lead to an increase in inland flooding</p> 
<p><b>Virtually Certain</b>= 99-100% probability of outcome  <b>Very Likely</b>= 90-100% probability of outcome  <b>Likely</b>= 66-100% probability of outcome  <b>About as Likely as Not</b> = 33-66% probability of outcome  <b>Unlikely</b>= 0-33% probability of outcome  <b>Very Unlikely</b>= 0-10% probability of outcome  <b>Exceptionally Unlikely</b>= 0-1% probability of outcome</p>		

# What Do Resilient Communities Look Like?



Land Use



Infrastructure

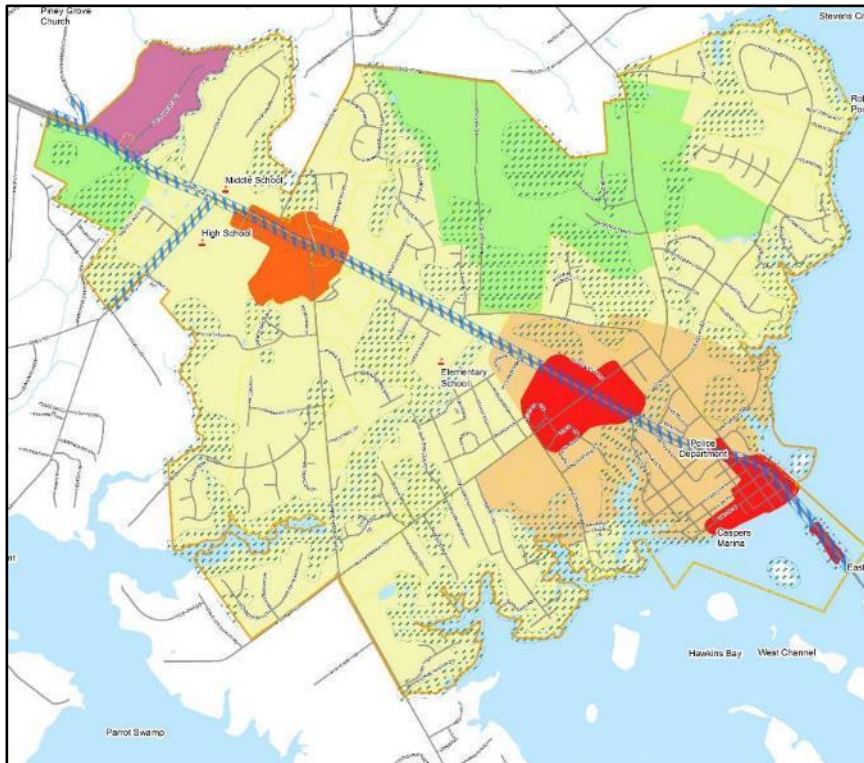


Social, economic  
connectedness



Emergency  
preparedness

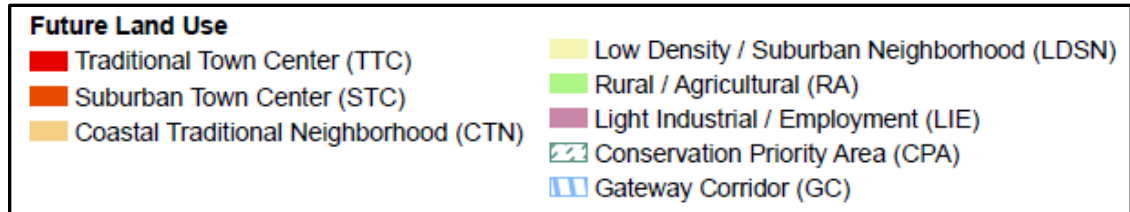
# Land Use



How do we live with water?

A place for development and a place for water.

First, do no harm: Not making flooding problems any worse.



# Infrastructure



Photo (center + left):  
Jess Whitehead

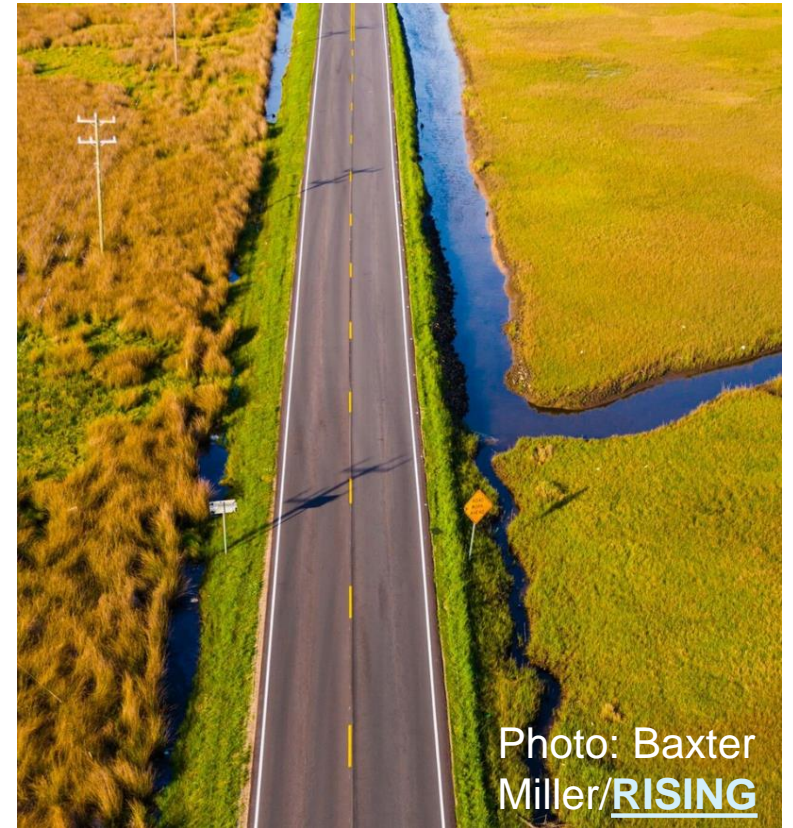


Photo: Baxter  
Miller/**RISING**



# Social and Economic Connectedness



# Emergency Preparedness

- Household emergency kit
- Evacuation preparation, especially for elders, people with disabilities
- Multi-lingual emergency communication
- Know your flood risk: [fris.nc.gov](https://fris.nc.gov)
- Purchase flood insurance (even renters)
- Emergency management



# How do we get there?



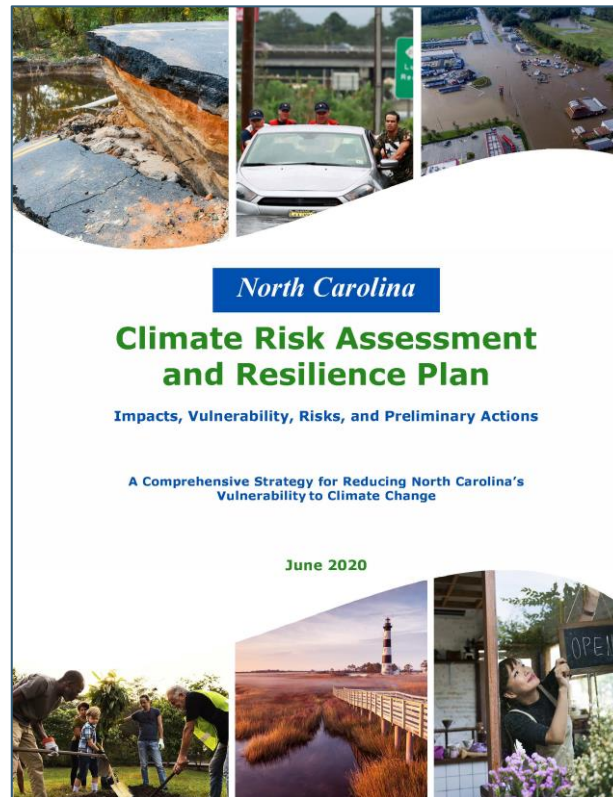
Many pathways of change and action are needed:

- State policy (more in a moment)
- Local policy
- Advocacy
- Community building
- Networks of knowledge and support
- Science and research
- Federal policy
- Investment at all levels

# **Executive Order 80: North Carolina's Commitment to Address Climate Change and Transition to a Clean Energy Economy**

9. Cabinet agencies shall integrate climate adaptation and resiliency planning into their policies, programs, and operations (i) to support communities and sectors of the economy that are vulnerable to the effects of climate change and (ii) to enhance the agencies' ability to protect human life and health, property, natural and built infrastructure, cultural resources, and other public and private assets of value to North Carolinians.
  - a. DEQ, with the support of cabinet agencies and informed by stakeholder engagement, shall prepare a North Carolina Climate Risk Assessment and Resiliency Plan for the Council to submit to the Governor by March 1, 2020.
  - b. The Council shall support communities that are interested in assessing risks and vulnerabilities to natural and built infrastructure and in developing community-level adaptation and resiliency plans.

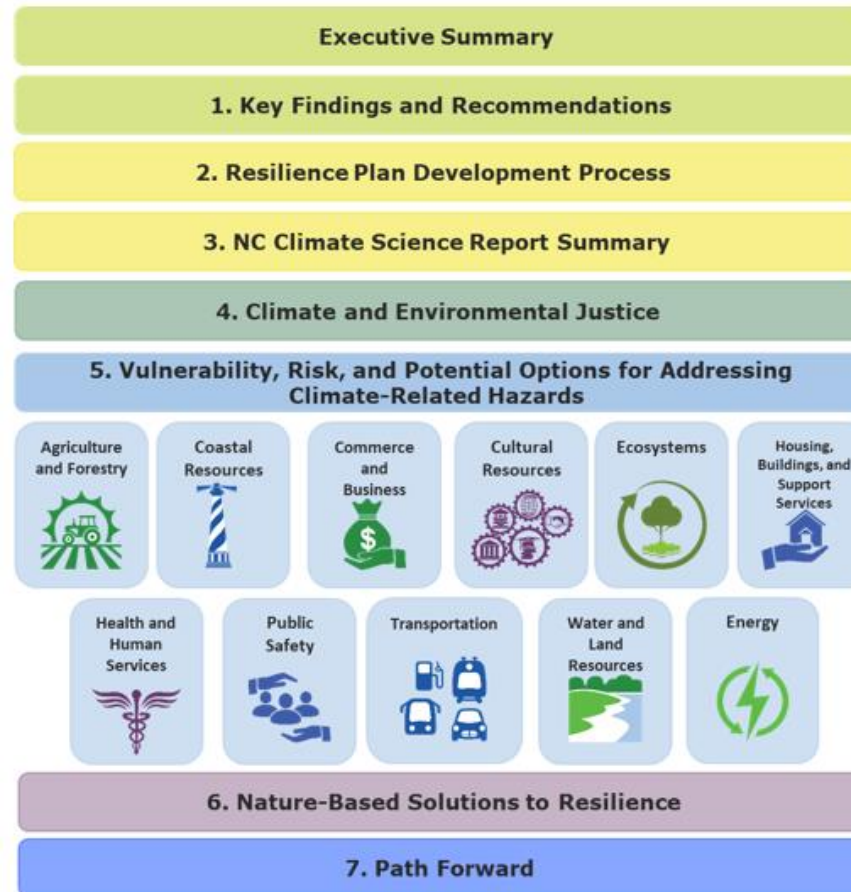
# N.C. Climate Risk Assessment and Resilience Plan



The state gratefully acknowledges:

- Analysis and planning assistance from NOAA and the National Environmental Modeling and Analysis Center (NEMAC)
- Input from the DEQ Secretary's Environmental Justice and Equity Advisory Board, Climate Change and Extreme Weather Subcommittee

# N.C. Climate Risk Assessment and Resilience Plan



# Staff the State Disaster Recovery Task Force

Mission: To facilitate communication and collaboration ...

...to advise on unmet needs and additional barriers in **ongoing Matthew and Florence recoveries**

...to prepare to coordinate with one another in **future disaster recoveries**

...to advise on advancing **resilience** of people, places, and natural areas

# State Disaster Recovery Task Force

Agriculture

Business and  
Workforce  
Development

Communications  
and  
Intergovernmental

Community  
Planning, Capacity  
Building and  
Resiliency

Cultural  
Resources

Education

Emergency  
Management

Environmental  
Preservation

Health and Human  
Services

Housing

Nonprofit and  
Volunteerism

Transportation and  
Infrastructure



# Natural Hazards Resilience

## A Quick Start Guide for North Carolina Communities March 2020

*[www.rebuild.nc.gov/resiliency](http://www.rebuild.nc.gov/resiliency)*

The Quick Start Guide is intended to help North Carolina communities better plan for natural hazards and changing conditions, by incorporating the concepts of resilience into the work they already do.

Preparedness—Connectedness—  
Adaptability



# Resilient Communities Program

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



# RISE, a Resilient Communities Program



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NC RURAL CENTER

= **RISE** Regions Innovating for  
Strong Economies and Environment

*One of two North Carolina Resilient Communities Programs that bring resilience resources to regional and local contexts.  
RISE is funded by the Economic Development Administration.*

# RISE Goals

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**Develop and deliver leadership and resiliency training** for disaster-impacted communities in Eastern North Carolina, to support improved understanding of risks and decision-making to advance resiliency; and

**Provide coaching and technical assistance to regional partnerships** to develop portfolios of resilience implementation measures and projects.

# North Carolina Flood Resilience Framework

## *Concept in Development*

Volume-based, watershed-based modeling of how water moves throughout the state. Provides “decision support”. Learning from examples in Louisiana, Iowa, and Virginia.

\*\*Currently under legislative consideration in House Bill 500.



# Other Resilience Team Activities

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Planning activities for CDBG-MIT

Supporting NCEM's BRIC program

Local planning and zoning for resilience

Support other NCORR programs like strategic buyouts

# Resilience thinking every day

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CONNECT INSIDE  
AND OUTSIDE YOUR  
COMMUNITY



LEARN ABOUT  
FUTURE RISKS



AVOID FUTURE  
SUFFERING



INVEST AND  
UPGRADE WISELY



INTEGRATE  
RESILIENCE ACROSS  
SECTORS AND ROLES

# What does resilience look like in your community?

**Marlena Byrne**  
Deputy Chief Resilience Officer  
[marlena.byrne@ncdps.gov](mailto:marlena.byrne@ncdps.gov)

[www.rebuild.nc.gov/resiliency](http://www.rebuild.nc.gov/resiliency)

