



**SOUTHEAST
DISASTER
RECOVERY
PARTNERSHIP**

Resilient Disaster Recovery: Building Back Better in the Public and Private Sectors

Amanda Martin, SDRP Coordinator

CISA Carolinas Climate Resilience Conference
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Columbia, South Carolina

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Resilience vs. recovery

- Recovery: Long-term rebuilding and restoring built and natural environment after disaster
- Resilience: Ability for social, natural, and built environment systems to bounce back after disaster or cope with long-term change
- Where is the interface?
 - More resilient infrastructure, communities, businesses, etc. have fewer recovery needs
 - There are opportunities to improve resilience in disaster recovery
- Disaster v. climate resilience

Brainstorm #1

- What are some opportunities to improve climate resilience during disaster recovery?

https://www.polleverywhere.com/free_text_polls/XWzhSlbNV8R5oj2

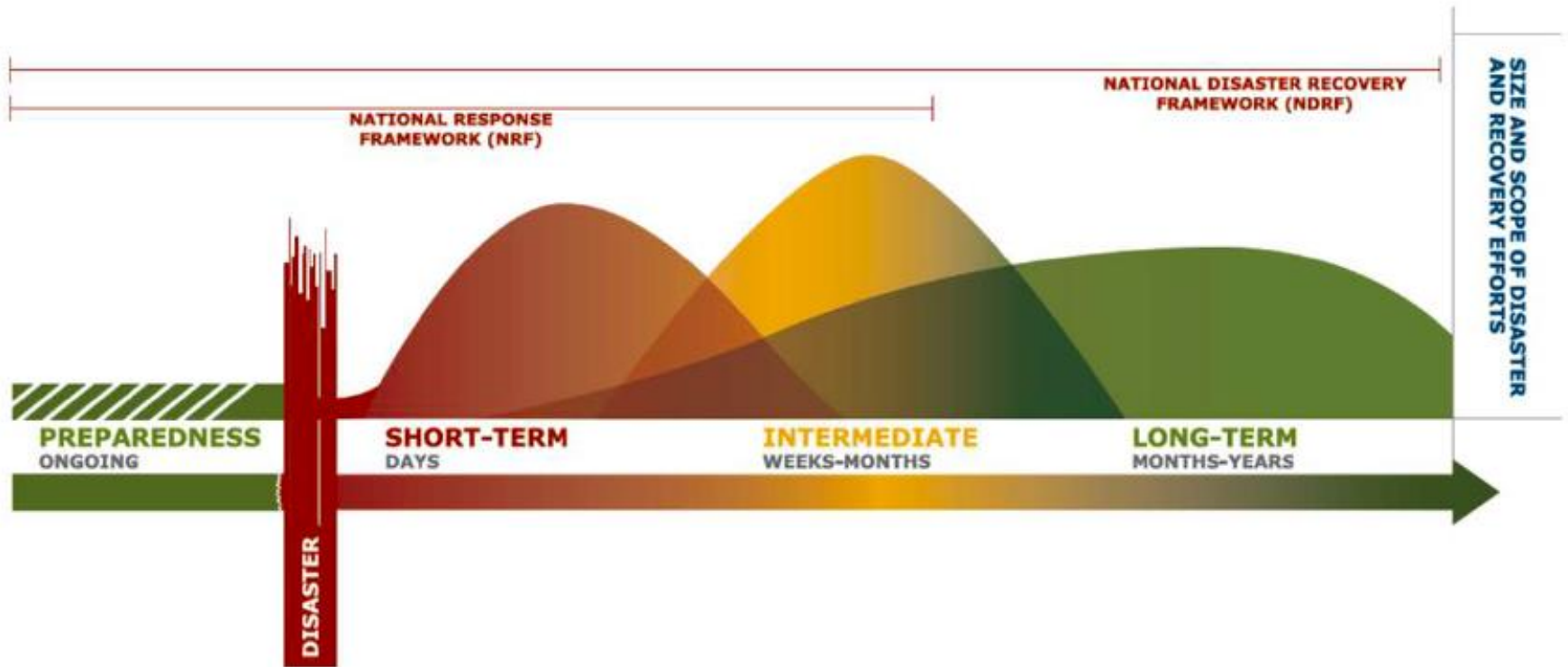
Brainstorm #2

- What are some challenges for increasing climate resilience during disaster recovery?



https://www.polleverywhere.com/free_text_polls/RWWL55xDwNg3rmh

Disaster Recovery Concepts and SDRP Projects

What is disaster recovery?



Disaster recovery planning

Operational	Outcome-oriented
 <p>Created by Gregor Cresnar from Noun Project</p> <ul style="list-style-type: none">• Emergency mgmt approach• Recovery support functions (RSFs) and the National Disaster Recovery Framework• Who will be involved? Whose capacities should be tapped?	 <ul style="list-style-type: none">• Land use, design approaches• Policies that guide redevelopment• Should we rebuild in a different way?• How should we spend the money?



SOUTHEAST DISASTER RECOVERY PARTNERSHIP

Vision: Strengthen the ability of the Southeast's coastal economy and environment to recover from the next coastal storm.

Mission: Provide training, resources, information, and relationships that communities need to effectively bounce back.



SCEMD



FEMA





SOUTHEAST DISASTER RECOVERY PARTNERSHIP

ACTIVITIES

1. Support **priority projects in NC, SC, GA, and FL** that enhance the ability of coastal communities to prepare for disaster recovery
2. Build capacity and relationships in **the private sector** to support disaster recovery
3. Build **regional capacity** for disaster recovery planning

North Carolina

- **Subawardee:** North Carolina Emergency Mgmt
- **Project:** Lessons learned from the Hurricane Matthew disaster recovery



South Carolina

- **Subawardee:** South Carolina Emergency Mgmt
- **Project:** Resilient business trainings in coastal counties



SOUTH STRAND NEWS

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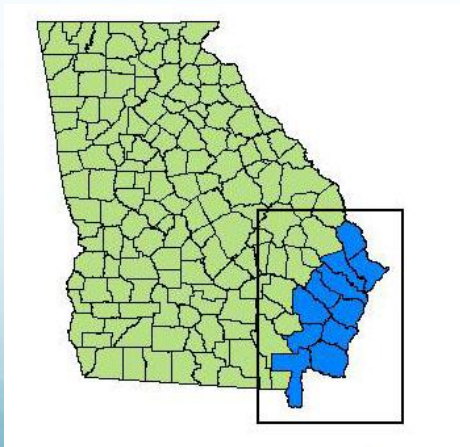
'After Matthew': Businesses share ideas about disaster preparedness

By Clayton Stairs cstairs@southstrandnews.com May 2, 2018



Georgia

- **Subawardee:** Georgia Dept. of Natural Resources, Coastal Mgmt Division
- **Project:** Disaster Recovery and Redevelopment Plans for Brunswick-Glynn County and Charlton County; Annex on Marine Debris Removal



Florida

- **Subawardee:** Miami-Dade Emergency Management
- **Project:** Update /business engagement on existing disaster recovery plan; Business survey

Project Phases

1. Literature Review and Gap Analysis
2. Roundtable Discussions
3. Implementation Strategy
4. Engagement Sessions
5. Updates to Recovery Plan and Post-Disaster Redevelopment Plan



Discussion

How can you, in your work, contribute to building resilience through disaster recovery?

Partnerships for Disaster Recovery

Public private partnerships for disaster recovery

SDRP Publications



2018

For the Long Haul: Public-Private Partnerships for Long-Term Disaster Recovery – (PDF, 2MB) This white paper examines public-private partnerships active in long-term disaster recovery. It includes insights about disaster recovery and P3s from existing resources, as well as a case analysis of six partnerships.

Economic and Business Recovery After Coastal Disaster: Strategies for the Private Sector and Economic Development in the Southeast (in development)

Why P3s?

In 2017, disasters affected the lives 46.9 million U.S. residents, 15 percent of the population (Brock Long, FEMA Administrator).

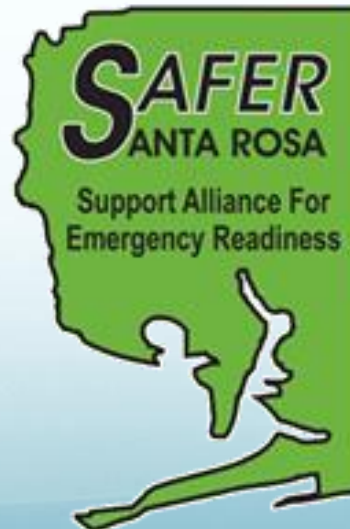
Public sector cannot meet all recovery needs.



P3s for disaster recovery

- Includes small and large partnerships across sectors
- We find 3 general objectives:
 - Redevelopment
 - Information-sharing and learning
 - Planning and policy

Six Cases



BUILDING MORE RESILIENT HOMES

Design can enable **resilience** at the house scale to save individual families from the threat of flooding. The book introduces house design and construction strategies that make your home stronger, and to give you and your family peace of mind.

I WANT
(OR WAS
APPROVED)
TO...



HOMEPLACE

CONVERSATION GUIDES FOR SIX COMMUNITIES,
REBUILDING AFTER HURRICANE MATTHEW

WINDSOR, NC
FAIR BLUFF, NC
SEVEN SPRINGS, NC
KINSTON, NC
DORCEVILLE, NC
LUMBERTON, NC

Partners
UNC-Chapel Hill and NC State
Private design firms
Six municipalities in North Carolina

RESILIENT



RESILIENT
The housing reference in this guide addresses the following challenges for resilient design and construction:
• Build with materials, construction methods and systems that are resilient to hazards.
• Provide sufficient structural strength to ensure that a design is resilient to hazards.
• Use low-impact materials, systems and construction methods that are resilient to hazards.
• Use low-impact materials, systems and construction methods that are resilient to hazards.

AFFORDABLE + EFFICIENT



AFFORDABLE
The five house types are designed to be affordable, meaning they are designed to be built with a variety of materials, construction methods and systems that are resilient to hazards. The houses are designed to be built with a variety of materials, construction methods and systems that are resilient to hazards.
EFFICIENT
The five house types are designed to be efficient, meaning they are designed to be built with a variety of materials, construction methods and systems that are resilient to hazards. The houses are designed to be built with a variety of materials, construction methods and systems that are resilient to hazards.

FLEXIBLE + ACCESSIBLE



FLEXIBLE
The five house types are designed to be flexible, meaning they are designed to be built with a variety of materials, construction methods and systems that are resilient to hazards. The houses are designed to be built with a variety of materials, construction methods and systems that are resilient to hazards.
ACCESSIBLE
The five house types are designed to be accessible, meaning they are designed to be built with a variety of materials, construction methods and systems that are resilient to hazards. The houses are designed to be built with a variety of materials, construction methods and systems that are resilient to hazards.

CURB APPEAL



The five house types are designed to be attractive, meaning they are designed to be built with a variety of materials, construction methods and systems that are resilient to hazards. The houses are designed to be built with a variety of materials, construction methods and systems that are resilient to hazards.

Homeplace

I WANT (OR WAS APPROVED) TO...

Relocation and elevation are two of the most common forms of FEMA- and state-funded hazard-mitigation and risk-reduction techniques. The choice to relocate or elevate can be one of the most important and stressful decisions faced by homeowners in flood-prone areas. This guide will walk you through your options.



RELOCATE

In this scenario, the local government uses FEMA and state funds to purchase the home, demolish it, and turn the land into open space in perpetuity. Homeowners receive pre-disaster fair market value for their homes, and they move elsewhere.

[GO TO PAGE 24](#)



ELEVATE

Before or after a disaster, homeowners can choose to have their current house elevated in place to meet the latest hazard safety standards. Safety standards and elevation options are explained in the following pages.

[GO TO PAGE 40](#)

I WANT TO RELOCATE

Where can I move?

For many property owners, the best solution might be to move to a site outside of the floodplain and to build new from the ground up. This is the primary solution for those who select to participate in the buyout program, and it reduces the risk that your house will flood.

Part of the HOMEWORK survey evaluation strategy is to identify areas outside of the floodplain but within town boundaries where those purchasing a buyout may move. This would reduce flood risk while maintaining Lumberton's tax base.

What can I afford?

The cost of a house depends on many factors, including location, size, quality of materials and construction, complexity of details, site work, utility requirements, customer requirements, development and permitting fees, and general market and economic conditions. Housing affordability counseling can help those seeking to purchase a new home.

What will my house look like?

The five house types in the guide are designed to fit comfortably into existing neighborhoods in Lumberton or to form new, inclusive, attractive neighborhoods. The styles, forms, materials, and details are contemporary, but they reference historical precedents from eastern North Carolina.

FIVE HOUSE TYPES



04 _ HOMEPLACE _ COMMUNITY CONVERSATION GUIDE

TABLE OF CONTENTS
01 _ INTRODUCTION TO THE GUIDE
02 _ FLOODING IN LUMBERTON
03 _ RECOVERY OPTIONS

04 _ RESOURCES
05 _ GLOSSARY

I WANT TO ELEVATE

What can I afford?

The cost of elevating a house depends on many factors, including location, size, quality of materials and construction, complexity of details, site work, utility requirements, customer requirements, development and permitting fees, and general market and economic conditions. The following pages will help you consider your options.

What are my elevation options?

The first step in elevating a house is to consult relevant codes and regulations. There are three basic strategies for constructing an elevated house: lifting on piers, installing a crawlspace, and building a full foundation. All three strategies are explained in this section.

When considering elevating a house to its second floor, it is important that the work is carried out in compliance with the Local Flood Damage Prevention Ordinance. This might require, for example, obtaining a "no-rise certification" before work may begin.

What will my house look like?

The three elevated house types in the guide are designed to fit comfortably into existing neighborhoods in Lumberton. The styles, forms, materials, and details are contemporary, but they reference historical precedents from eastern North Carolina.

ELEVATION OPTIONS



ELEVATED HOUSE TYPES



04 _ HOMEPLACE _ COMMUNITY CONVERSATION GUIDE

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Discussion

How can you, in your work, partner with other organizations or sectors or engage existing partnerships toward the goal of disaster recovery?

Wrap Up

Engage with SDRP

- Join our listserv
- Participate on our listserv and calls
- Share our partnership with your colleagues
- Attend our annual meeting
 - Tentative place and date
- Share your work or facilitate a conversation at our annual meeting

SDRP is *considering* a regional project that would examine opportunities and challenges for disaster recovery and redevelopment planning. If your jurisdiction might be interested in exploring one, please let Amanda know!

Taking steps

- What are three concrete next steps you can take to advancing resilience in disaster recovery?

Share with us

- Please share one of your steps (anonymous poll)

https://www.polleverywhere.com/free_text_polls/Y3ziMBK58G89C34

Thank you

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Please reach out!

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National Disaster Recovery Framework

Strengthening Disaster Recovery for the Nation

Acronyms: NDRF and RSF

Recovery Support Function	Federal Coordinating Agency
 Community Planning and Capacity Building	Department of Homeland Security/Federal Emergency Management Agency
 Economic	Department of Commerce/Economic Development Administration
 Health and Social Services	Department of Health and Human Services
 Housing	Department of Housing and Urban Development
 Infrastructure Systems	Department of Defense/Army Corps of Engineers
 Natural and Cultural Resources	Department of the Interior