### SC Office of Resilience

Incorporating Mitigation & Climate Resilience in DR Activities



### **How SCOR Defines Resilience**

**Resilience:** The ability of communities, economies, and ecosystems within South Carolina to **anticipate**, **absorb**, **recover**, and **thrive** when presented with environmental change and natural hazards.



### What We Do

### Disaster Recovery

- Focused on Low to Moderate Income (LMI) citizens
- Focused on Rehab, Replacement, and Reconstruction of storm-damaged homes
- Buyouts

### Mitigation

- Infrastructure
- Buyouts
- Matching funds
- Plans and Studies

#### Resilience

- Statewide Resilience Plan
- Identify knowledge/data gaps
- Identify projects which will make SC more resilient



# **Current Mitigation and Resilience in Disaster Recovery**

- Elevated Reconstructions and Manufactured Housing Units
  - Elevate to base flood elevation (BFE) plus 2 feet of freeboard (1 county is +3')
  - Engineered plans and foundations
  - Elevated utility platforms (HVAC condenser units)



## **Current Mitigation and Resilience in Disaster Recovery**

### Soil remediation

- Soil inspection
- Discovery of unsuitable soil
- Engineered plan
- Removal of unsuitable soil
- Replacement with good soil (lifts monitored by engineer)
- Impact windows instead of hurricane shutters
  - Installed when required by code for elevated homes
  - Shutters and plywood can be difficult to operate and/or install for some



# Current Mitigation and Resilience in Disaster Recovery

#### Buyouts

- Identification through DR applicants and local governments
- Fair market value + incentives
- Removing citizens from danger of repetitive floods
- Land cannot be developed in perpetuity – could be a park, retention pond
- Voluntary



## Current Mitigation and Resilience in Disaster Recovery

### Energy Efficiency Standards

- Energy Star
- Light fixtures
- Appliances

### Enhanced Roofs

- Architectural shingles vs. three-tab
- Rated to withstand minimum 130 MPH winds minimum
- 6-nail pattern in coastal counties
- Ice and water shield for all valleys and low-pitched roofs (lower than 4/12)



## Future Mitigation and Resilience in Disaster Recovery

- Elevated Reconstructions and Manufactured Housing Units
  - Increase elevation to BFE + 3 feet for all elevations in all counties
- Enhanced Roofs
  - Roof decking installed with 8d ring-shank nails, every 6"
  - Sealed roof deck on every home
    - Protects against water intrusion from wind driven rain, damaged shingles, ice dams
    - Self-adhesive membrane, taped seams with #30 felt, or 2 layers of #30 felt
    - Hurricane clips on all decking, where appropriate
  - Shingles installed with six nail pattern on all homes
- Impact windows instead of hurricane shutters
  - All homes located in 9 coastal counties (in general, east of I-95)
- Roof-to-wall Connections
  - Exploring ways to strengthen above hurricane truss straps



## Future Mitigation and Resilience in Disaster Recovery

- Exploring IBHS Fortified Home
  - Mentioned in the CDBG-DR Consolidated Notice Guidebook
  - Facility visited by SCOR teams located in Chester County, SC
  - Home insurance may be reduced
- Land Acquisition
  - Identifying floodplain land to purchase (prevent development)
- Building Codes, Zoning, Land Use
  - Working with local municipalities to change standards
  - Resilience Team working with other agencies and NGOs
- Exploring Green & Resilient Building Standards
  - LEED
  - ICC-700



### Questions?

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