

South Carolina Office of Resilience

April 2025

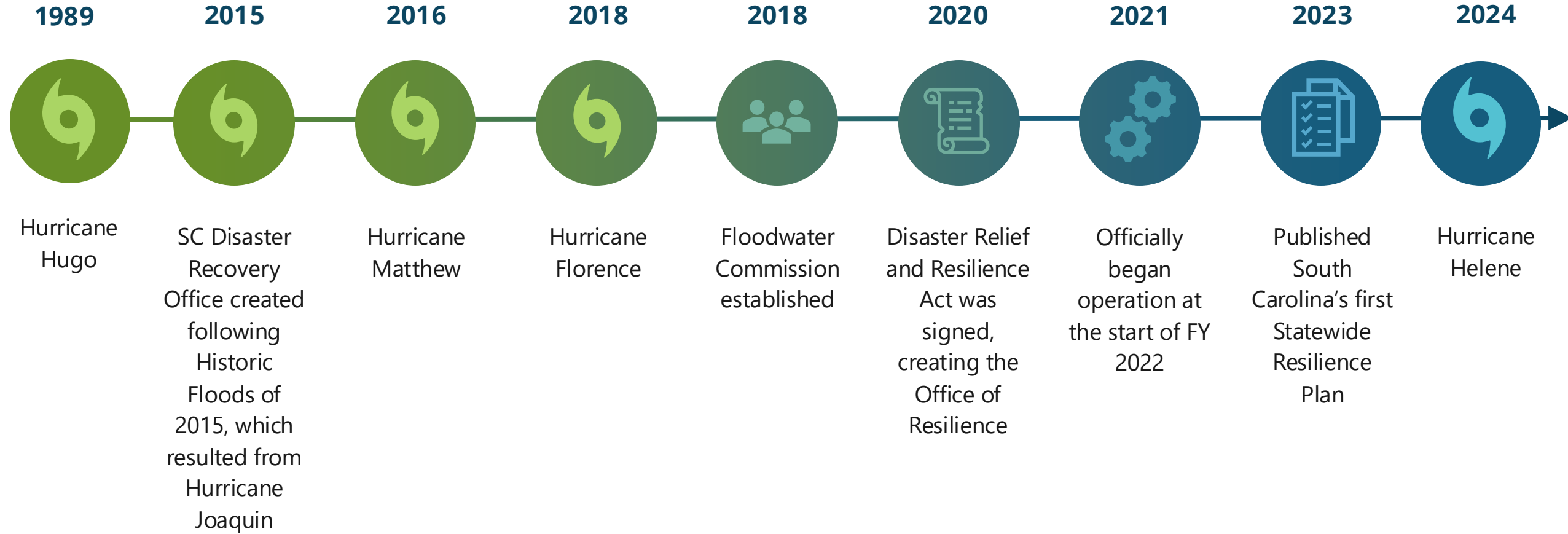


Mission

SCOR lessens the impact of disasters on the communities and citizens of South Carolina by planning and coordinating statewide **resilience, long-term recovery** and **hazard mitigation**.



History



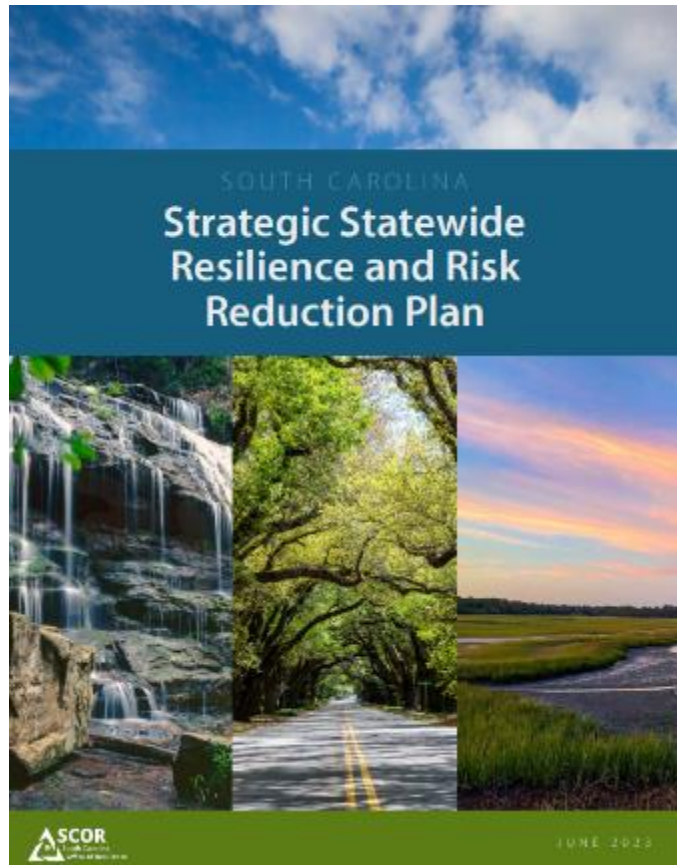
What is Resilience?

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

Resilience Planning and Implementation

Statewide Resilience Plan

The South Carolina Office of Resilience released the **Strategic Statewide Resilience and Risk Reduction Plan** (Resilience Plan) in June 2023. The Plan identifies major flood risks around the state and potential losses that could occur as a result of extreme weather events. The Plan guides state investment in flood mitigation and provides strategies for local governments to implement resilience into their communities in order to mitigate potential flood risks.



Planning Principles

Use **high-quality data** to assess risk and vulnerability, and make that data accessible

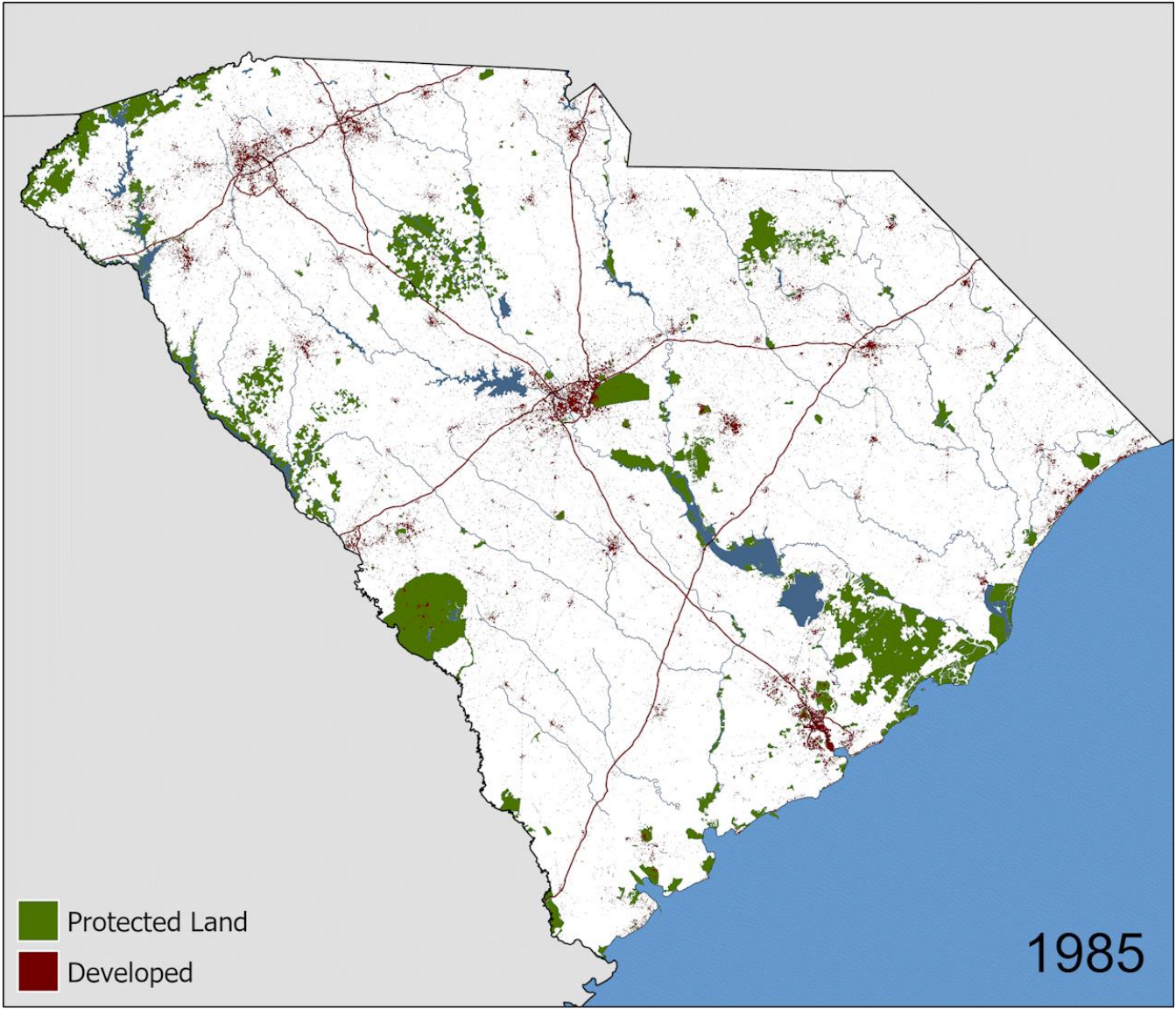
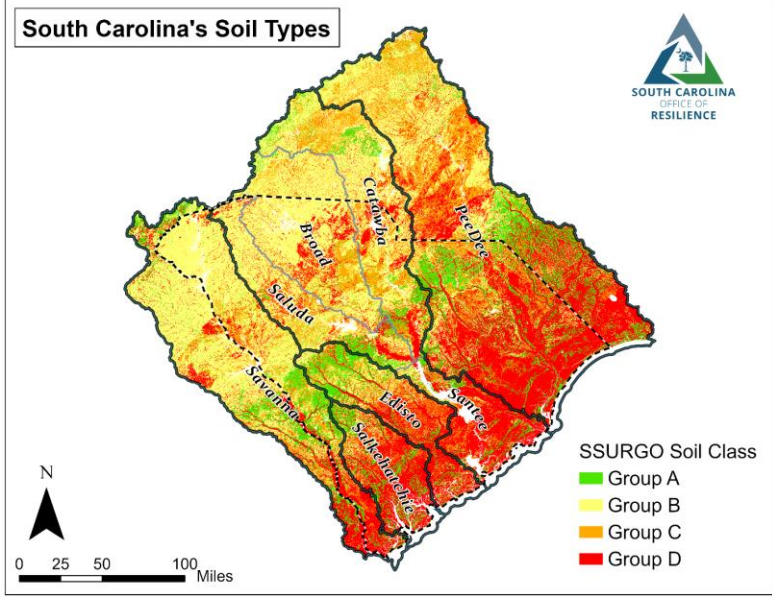
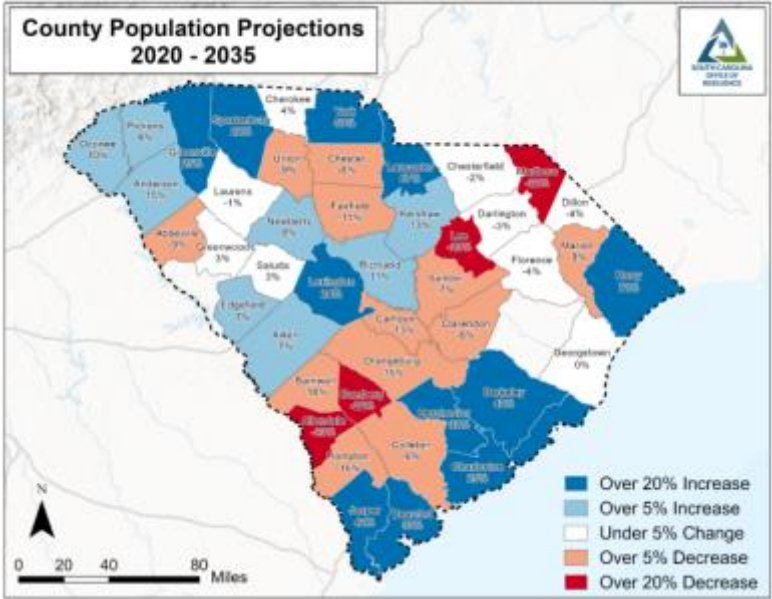
Coordinate at the federal, state, regional and local level

Recognize beneficial function of **natural systems**

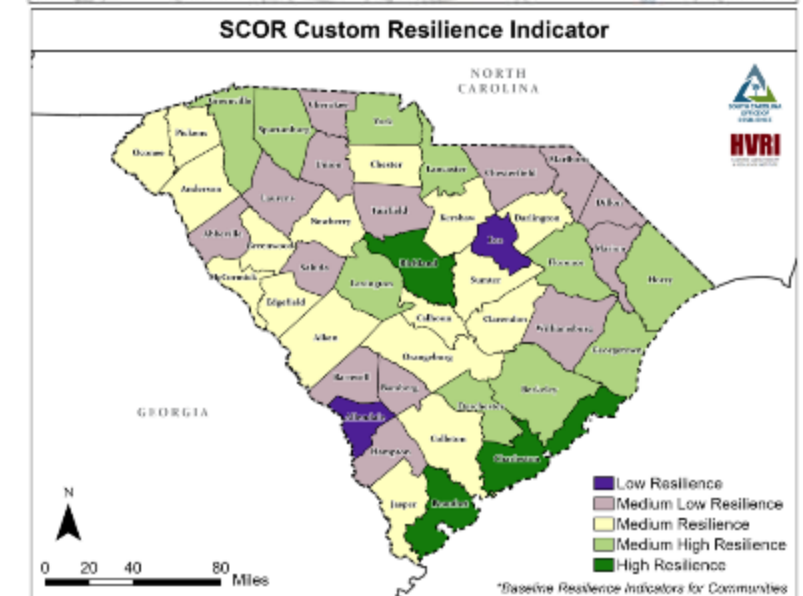
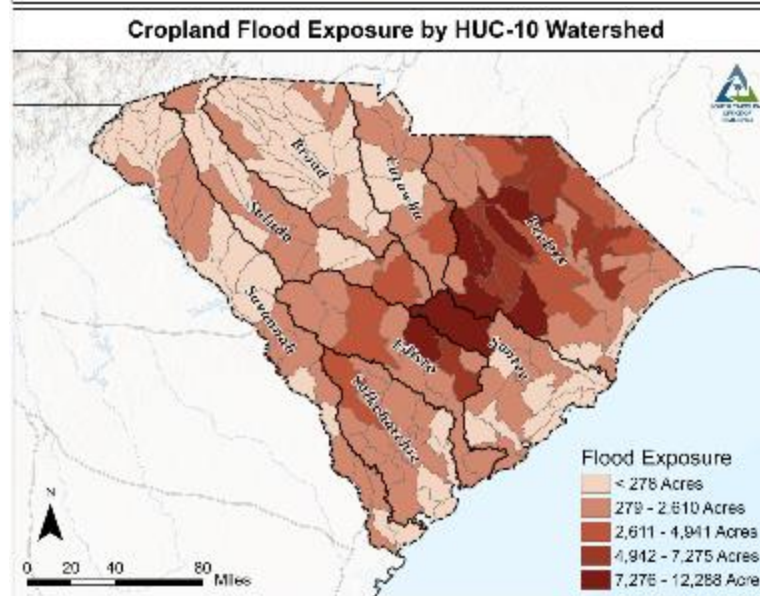
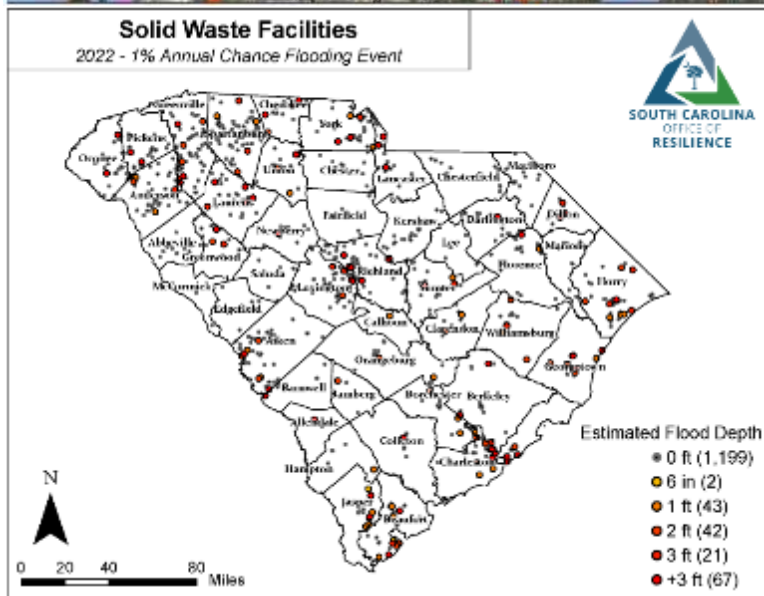
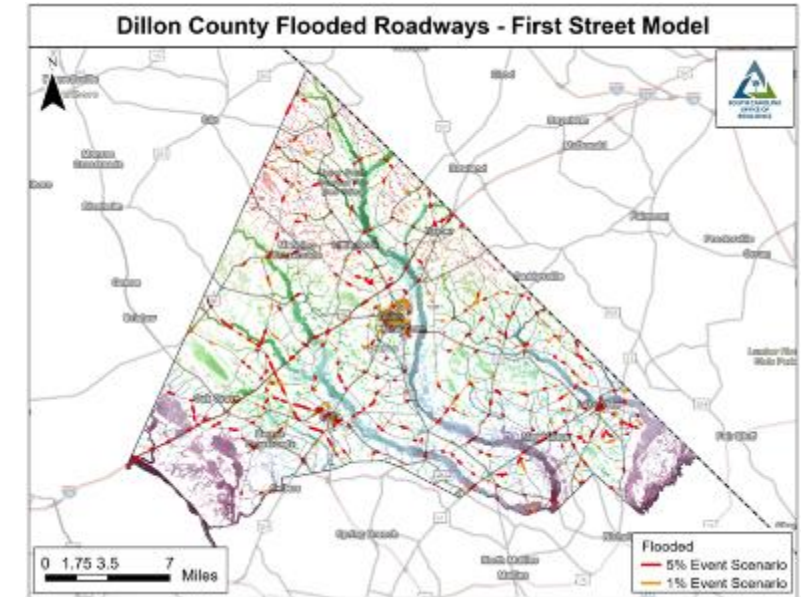
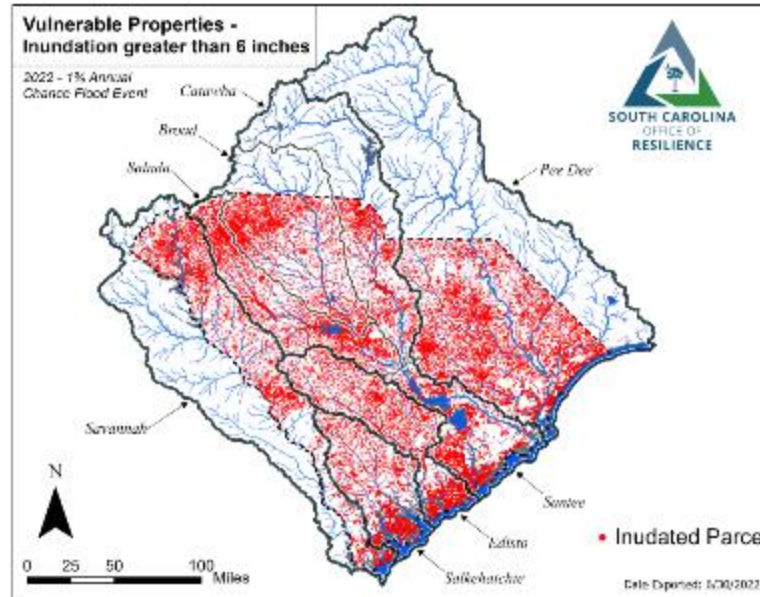
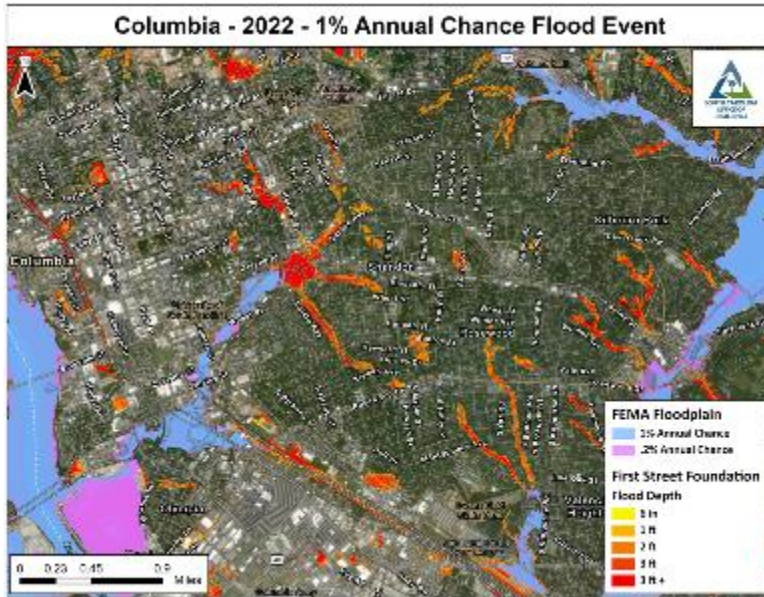
Plan and develop solutions based on **watershed boundaries**, not just jurisdictional

Recognize **Co-benefits** beyond flood mitigation to communities, economies, and ecosystems

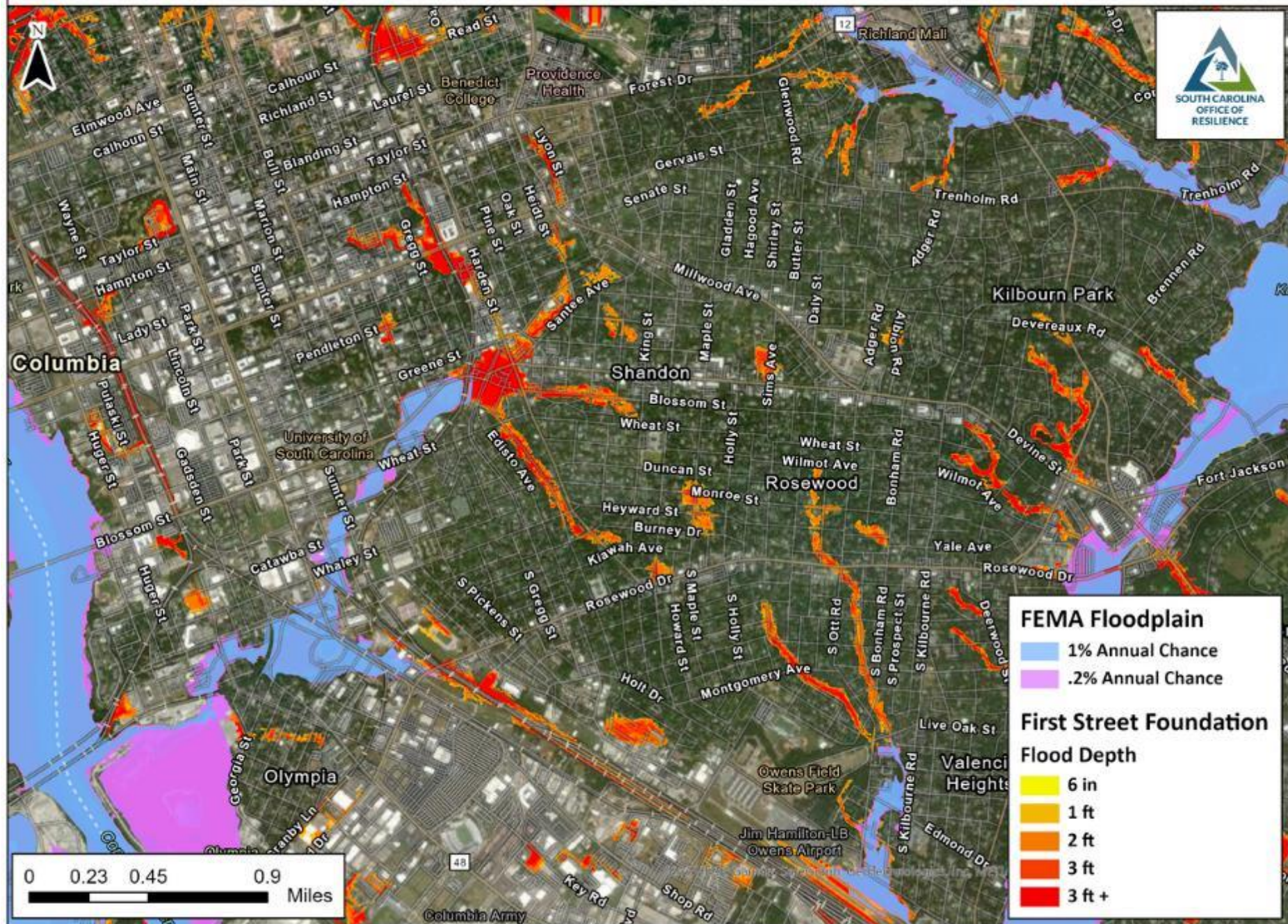
Planning Conditions



Risk and Vulnerability Assessment



Columbia - 2022 - 1% Annual Chance Flood Event



Resilience Plan Implementation

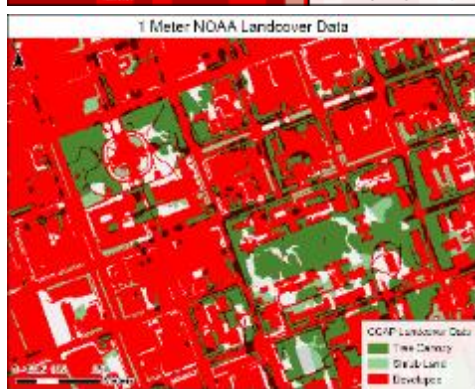
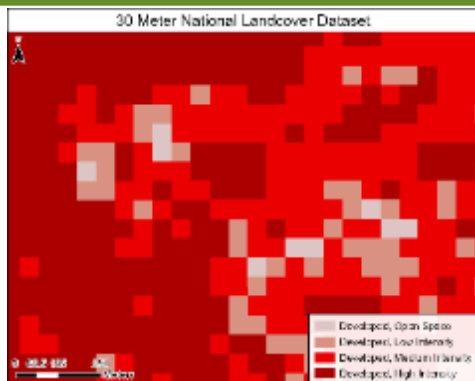
54 Individual Recommendations

Watershed –Based Planning and Coordination



Photo Credit- Use permitted by the Gullah/Geechee Sea Island Coalition

Data Collection and Coordination



Grants

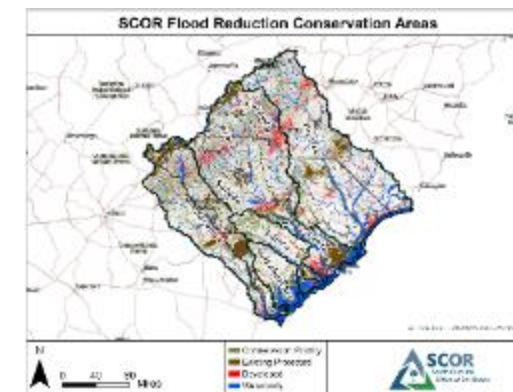
2 NFWF-National Coastal Resilience Fund projects (\$1.1M)

EPA -Solar for All (\$124M)

EPA - CPRG Planning (\$3M)

EPA - CPRG – Regional Conservation Coalition (\$421M, \$89M to SC)

Coordinated Land Conservation



An aerial photograph of a river delta, likely the Amazon, showing a complex network of waterways and land. A solid dark blue horizontal band is superimposed over the center of the image, serving as a background for the title text.

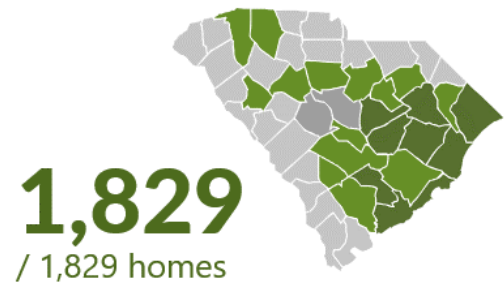
Disaster Recovery

SCOR's Background in Disaster Recovery

SCOR has used three HUD Community Development Block Grant- Disaster Recovery (CDBG-DR) grants to repair, replace, or rebuild 3,459 homes damaged by hurricanes and flooding.

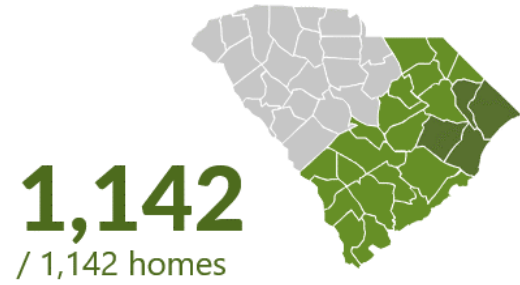


2015 SEVERE STORM
\$126 million | 100% complete



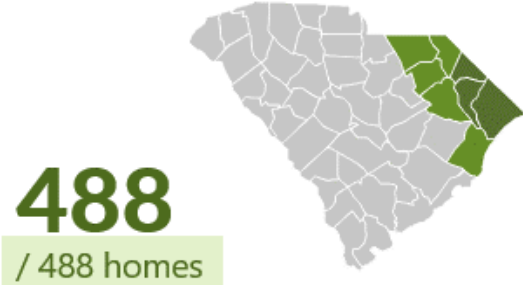
Completion date: September 2021
Within 6-year allotment

2016 HURRICANE MATTHEW
\$95 million | 100% complete



Completion date: December 2022
Within 6-year allotment

2018 HURRICANE FLORENCE
\$72 million | 100% complete

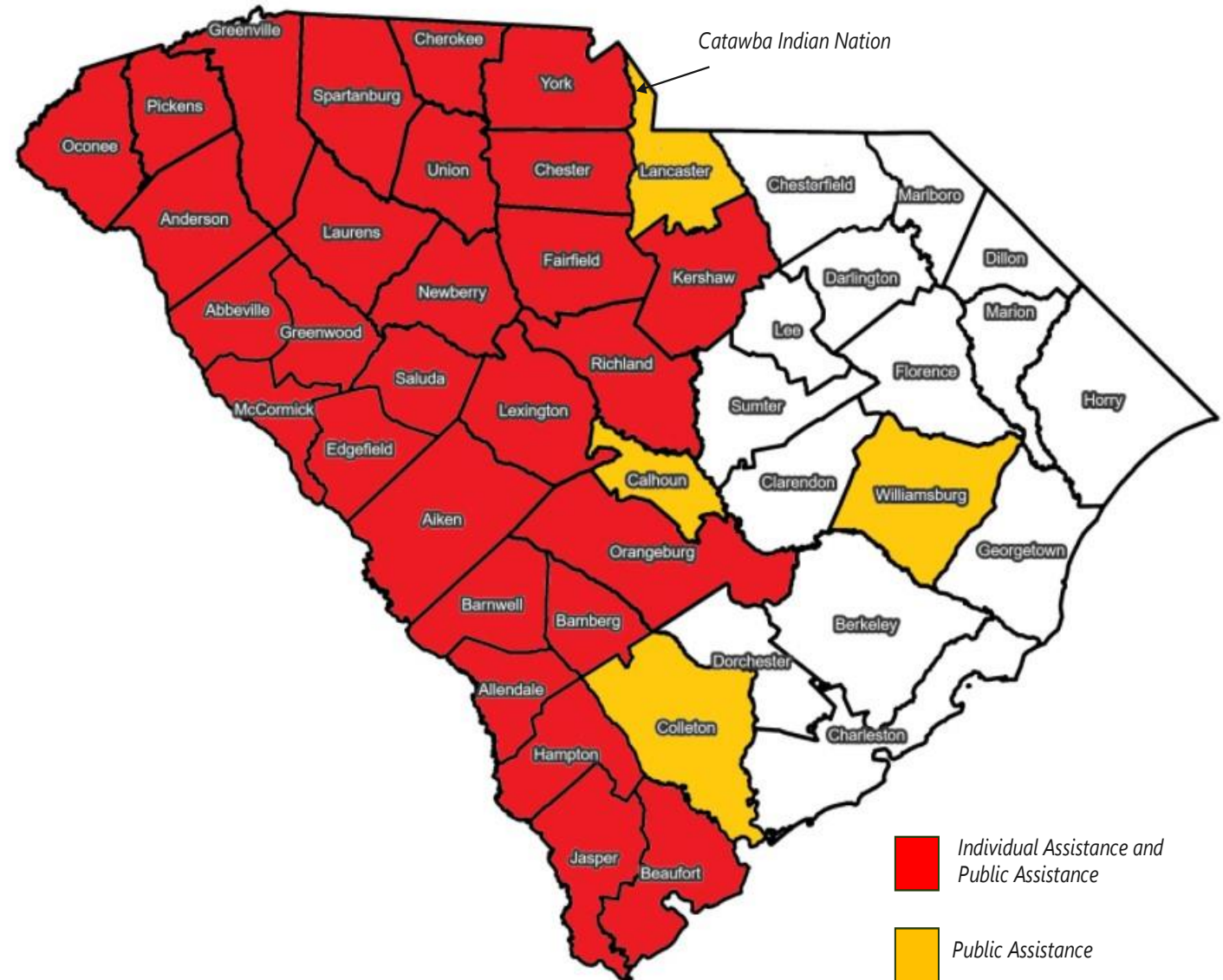


Completion Date: October 2024
Within 6-year allotment

**Note: Richland & Lexington counties received CDBG-DR grants for the 2015 Severe Storm and therefore were not served by our programs.*

2024 Hurricane Helene Disaster Impact

- ❑ 28x counties and the Catawba Indian Nation were declared for FEMA Individual Assistance (IA)
- ❑ 452,000+ citizens have applied to FEMA for Individual Assistance
- ❑ Approximately \$2.1B in Unmet Needs
 - Housing- \$1.7B (81%)
 - Infrastructure- \$192M (9%)
 - Economic - \$224M (10%)



SCOR Hurricane Helene Recovery Efforts

Disaster Case Management (\$22M FEMA DCMP Grant)

- Intake Numbers – 4,053 total; 950+ applicants w/housing needs; 2,000+ referrals to other resources
- 4x Regional Field Offices

CDBG-DR (\$150M Allocation)

- Unmet Needs Assessment
- Developing Action Plan (Updated Guidance From HUD)
- Identifying State Most Impacted and Distressed (MID Counties)

Rapid Rebuild

- Procurement
- House Plans

Coordination and Cooperation

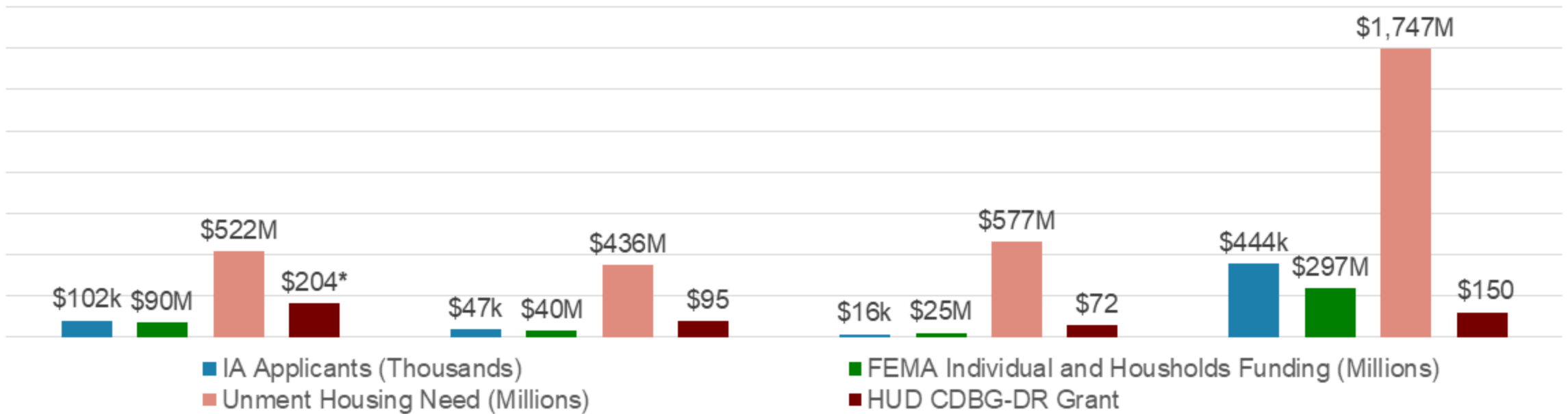
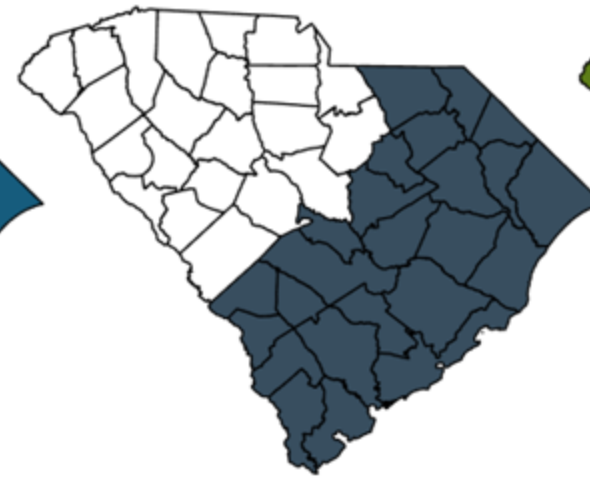
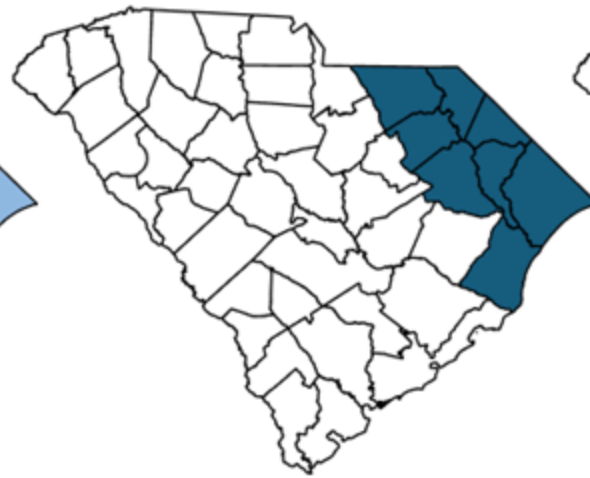
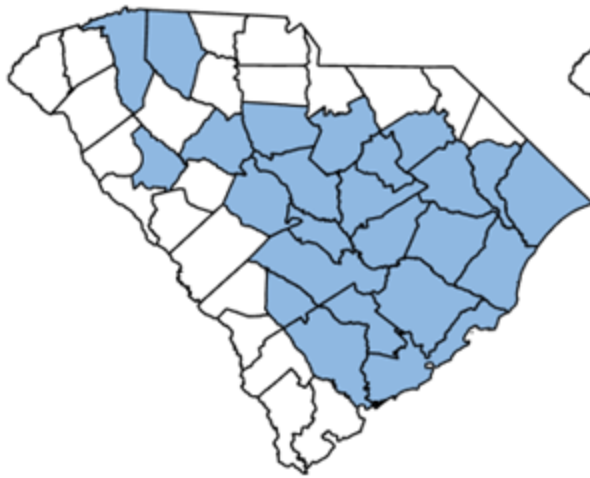
- Coordination with Voluntary Organizations Active in Disaster (VOADs), non-profits (Central Carolina Community Foundation OneSC Fund) and others (Google)
- Agency Coordination: SCEMD, SC Housing, etc.

2015 Floods

2016 Hurricane Matthew

2018 Hurricane Florence

2024 Hurricane Helene



*Includes the sum of CDBG-DR Funds allocated to City of Columbia, Lexington County, and Richland County

An aerial photograph of a wetland or marsh area, showing a network of water channels and vegetated land. A dark blue horizontal band is superimposed over the center of the image, serving as a background for the title text.

Mitigation

Mitigation Department



Funding Sources & Programs:

CDBG-MIT

- Stormwater Infrastructure 27 projects
- Voluntary Buyouts 6 projects
- Plans & Studies 22 projects
- Federal Funds Match 8 projects

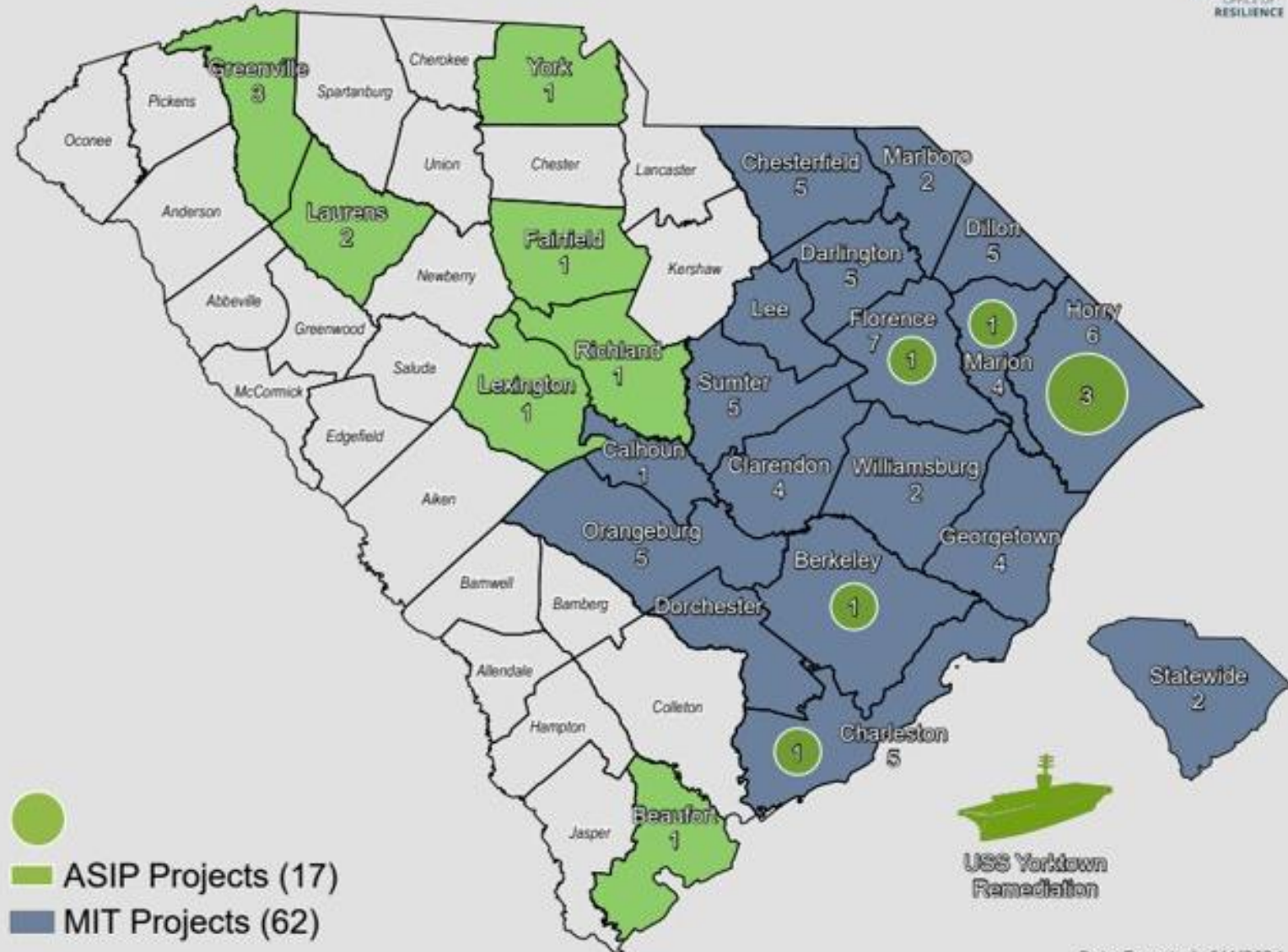
ARPA

- Stormwater Infrastructure 17 projects
- USS Yorktown Remediation

South Carolina Disaster Relief and Resilience Reserve Fund (DRRF)

- Stormwater Infrastructure 2 projects

CDBG-MIT and ARPA Projects



Ehrhardt Tunnel – Charleston Medical District

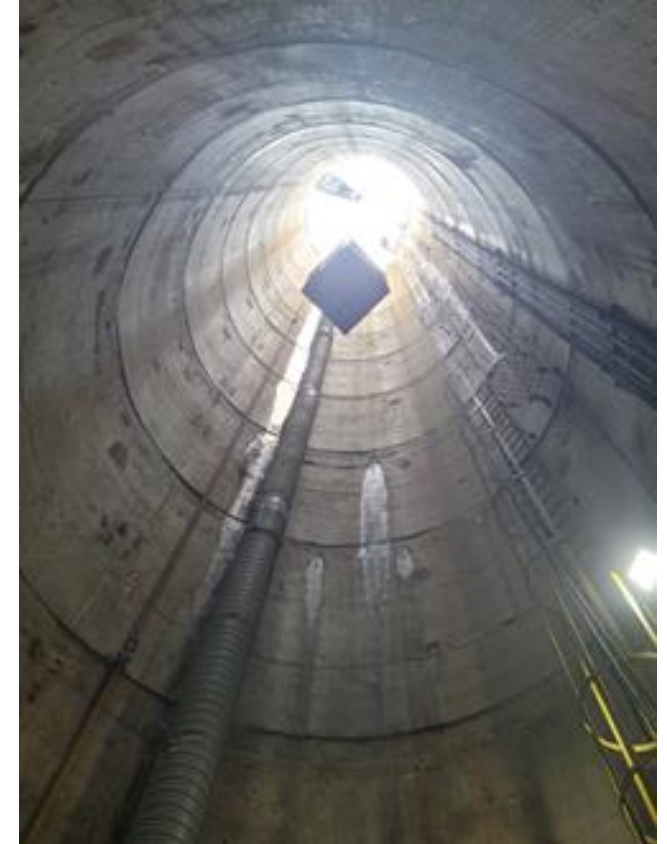
BEFORE

Rain Event – April 2024



Project Details

- Funding Amount: \$10.5M
- Funding Source: HUD CDBG-MIT Infrastructure Program
- Status: Substantial Completion March 2024
- Previously, this area saw up to 4ft of flooding during some events and water would stand for days, causing interruption to vital healthcare services in the area.



AFTER

Afternoon 8/5/2024 (Tropical Storm Debby)



Morning 8/6/2024 (Tropical Storm Debby)



Project Impact

According to the City, with the amount of rain on the morning of August 6th, there would have previously been flooding of 12-18 inches, making the road impassable.

Mingo Pond – Highway 17 in Georgetown County

BEFORE

Hwy 17 – 2015 Floods



Hwy 17 – 2018 Hurricane Florence



Project Details

- Funding Amount: \$3.8M
- Funding Source: HUD CDBG-MIT Infrastructure Program
- Status: Substantial Completion
- Highway 17 is a primary evacuation route for Georgetown County/ Pawley's Island with flooding that has caused significant safety concerns in the past.

AFTER

Hwy 17 Northbound – Morning 8/6/24
(Tropical Storm Debby)



New Outfall South of Hwy 17 - Morning 8/6/24
(Tropical Storm Debby)



Project Impact

Previously, with this amount of rain, there would have been standing water on the Highway.

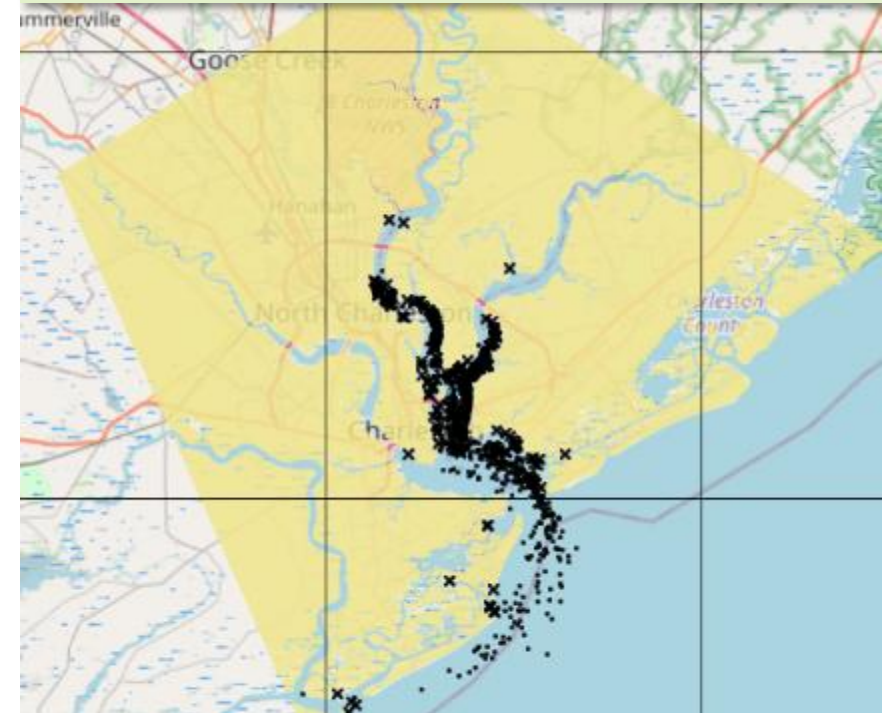
American Rescue Plan Act (ARPA)

USS *Yorktown* Remediation

- SCOR tasked with studying the cost of removing or remediating all legacy contaminants
- 1,750,000 gallons of contaminated water and fuel on the ship



Oil spill trajectory for 2,100 gallons of heavy fuel oil released from the USS *Yorktown* run for 2 days



Impact & Need for Remediation:
Natural Resources, National Historic Landmark, Port Economic Impact

Phase I: Complete

- Estimated \$10,710,016
- Environmental Assessment
- Immediate hull repair and tank cleanup, necessary of environmental remediation
- Phase 2 Bid Package

Phase II: In Progress

- Estimated \$18M
- Cleanup of hazardous materials (fuels, PCBs, etc.)
- Cleanup engineering oversight
- Additional hull repair related to environmental remediation
- Remediation contingency

Economics of Resilience

Flood Frequency

House 1 is in the
500-year floodplain

0.2% chance of flooding
in a single year

6% chance of flooding
over a 30-year mortgage



House 2 is in the
100-year floodplain

1% chance of flooding
in a single year

26% chance of flooding
over a 30-year mortgage



House 3 is in the
10-year floodplain

10% chance of flooding
in a single year

95% chance of flooding
over a 30-year mortgage

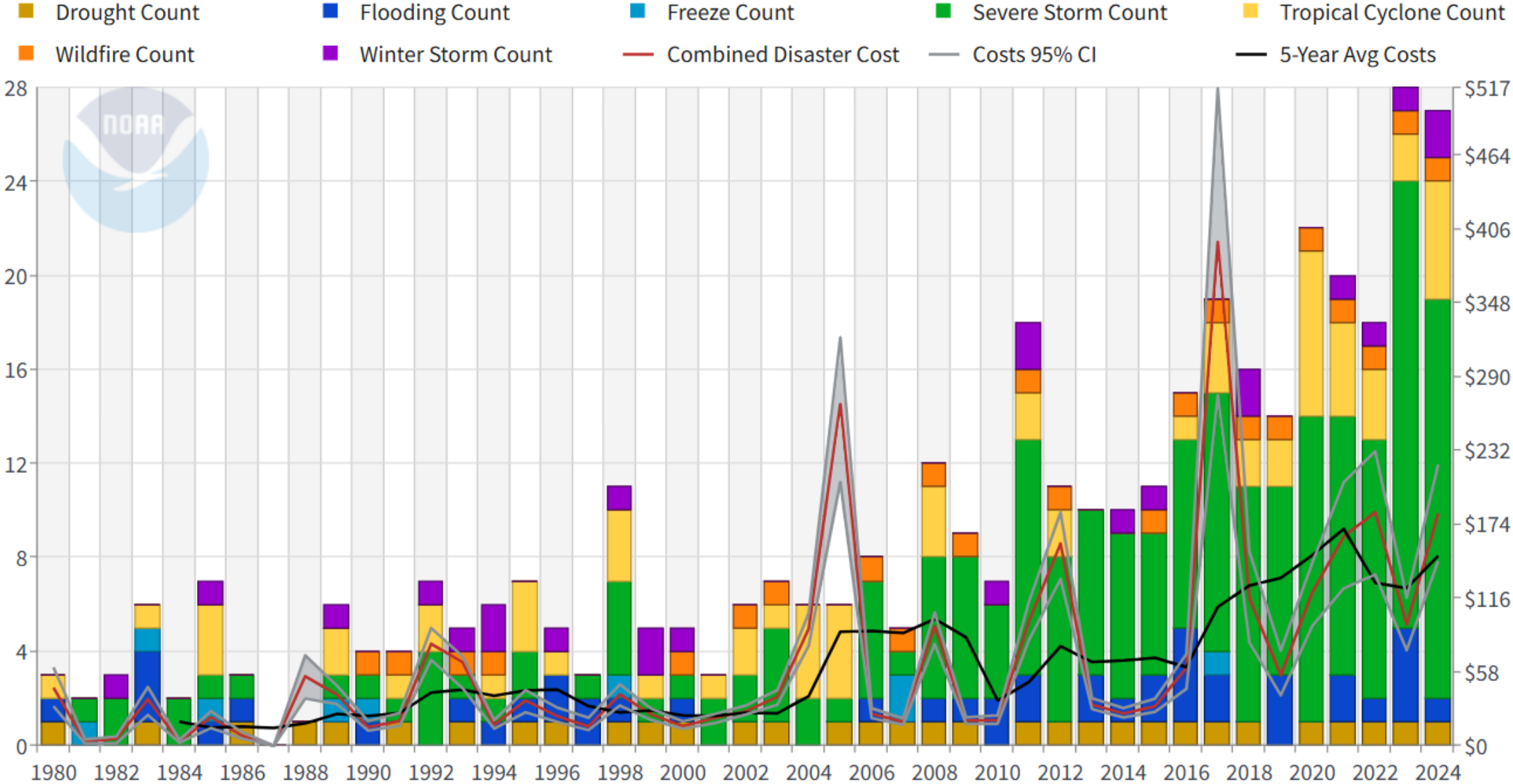


0.2% annual chance (500-year flood)

1% annual chance (100-year flood)

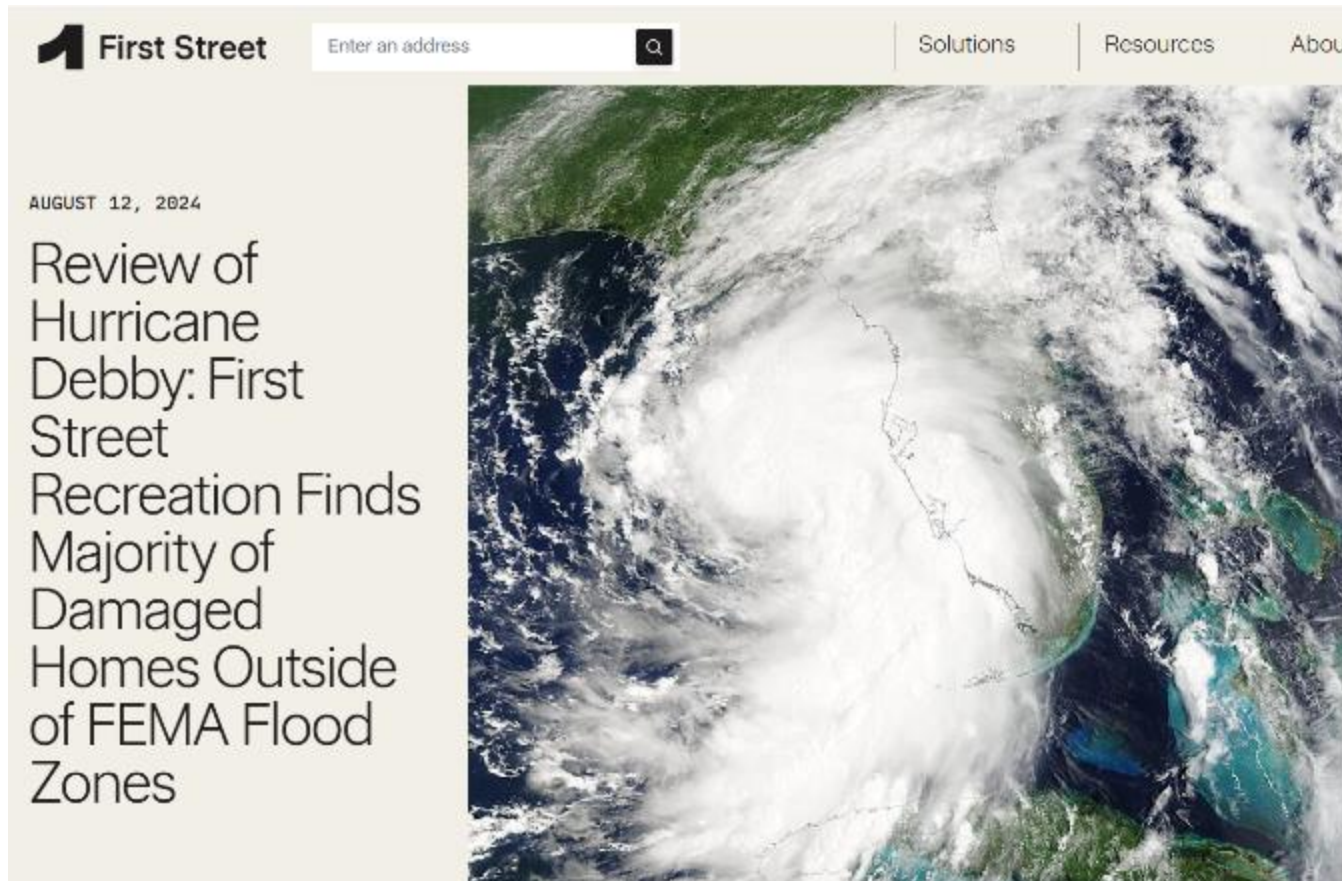
10% annual chance (10-year flood)

United States Billion-Dollar Disaster Events 1980-2024 (CPI-Adjusted)



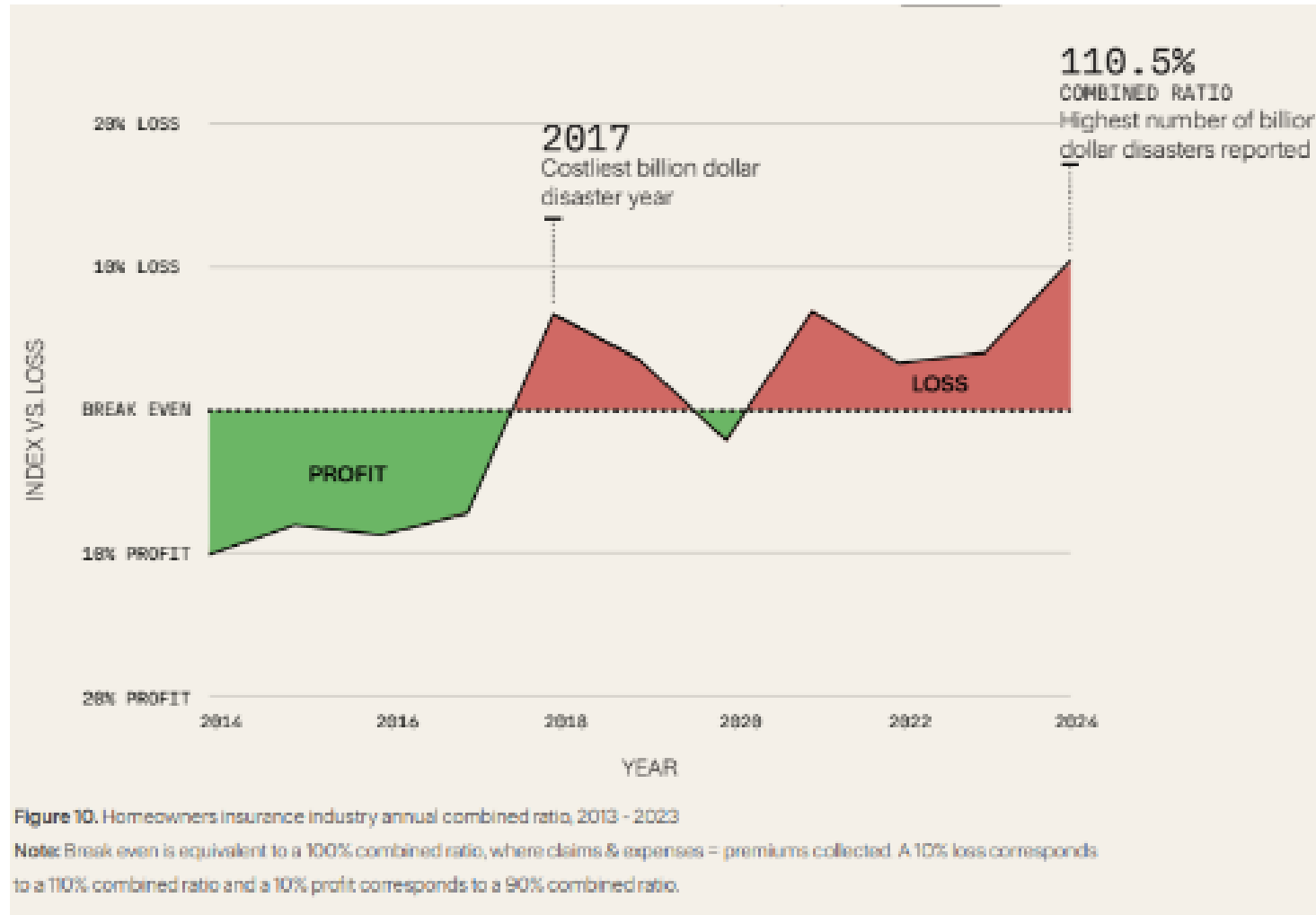
Risk and the Flood Insurance Gap

- First Street found that more than 3 out of 4 Debby-damaged home were outside flood zones.



- **78% of all properties flooded by Hurricane Debby, are outside of the FEMA Flood Zone, and are therefore unlikely to be covered by flood insurance.**
- **Hurricane Debby caused \$12.3 Billion in damage, with \$9.7 Billion outside of FEMA's Flood Zone.**

The Insurance Crisis is a Risk Crisis





U.S. Chamber of Commerce



Allstate



U.S. Chamber of Commerce
Foundation

The Preparedness Payoff: The Economic Benefits of Investing in Climate Resilience



**On average,
10 natural disasters
occur in the U.S.
each year that cost
\$1 billion or more.**

**Every \$1 invested in resilience
and preparedness saves \$13**



\$6

in damage and
cleanup costs



\$7

in economic
savings

+

Questions?