

# Climate Action Engagement Academy for Minority & Women- Owned Small Businesses

Fostering Economic Empowerment in the  
Midst of the Evolving Environment



16 SEPTEMBER 2024



# About CAEA

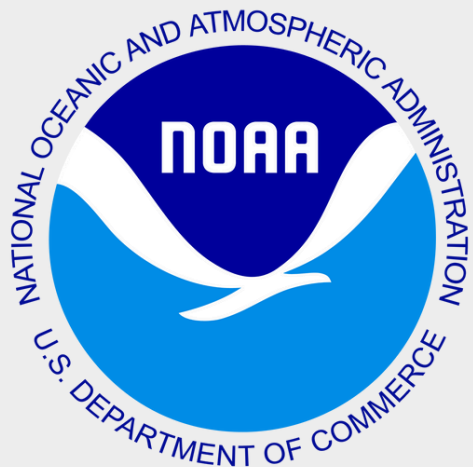


## + Sponsors

- NOAA
- South Carolina Sea Grant

## + Principal Investigator and Co-PIs

- The Citadel – **Dr. Scott Curtis**, PI, **Dr. Bob Riggle**, Co-PI
- Visual Teaching Technologies – **Dr. LJ Palmer-Moloney**, Co-PI
- Trident Technical College – **Dr. Zahia Bird**, Co-PI, **Yvette Parker** (student)
- SC Sea Grant, College of Charleston – **Nora Walker** (student)



# Remembering Debby...

“Reflect & Respond” sharing stories of business challenges & opportunities

- + Impact on goods & services
- + Impact on employees & customers



# Research Questions

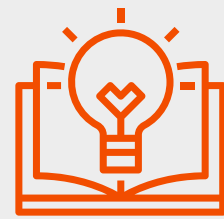
- + How can business owners position themselves as **reliable leaders of climate preparedness**, confronting multiple interacting climate-related stressors?
- + How can community-scale, climate-compatible solutions **improve resilience** for the women and minority-owned small business community?



# The Theory of Change



**Build** community resilience to extreme weather, climate change, and other environmental hazards



**Educate** in areas of Science, Technology, Engineering, and Math (STEM) education, environmental education, social studies education, and related literacies



**Connect** environmental literacy and social-ecological resilience into investigations on the ways human and natural systems interact



**Learn** in active and social ways and embrace the co-production of knowledge



**Integrate** equitable resilience and climate justice



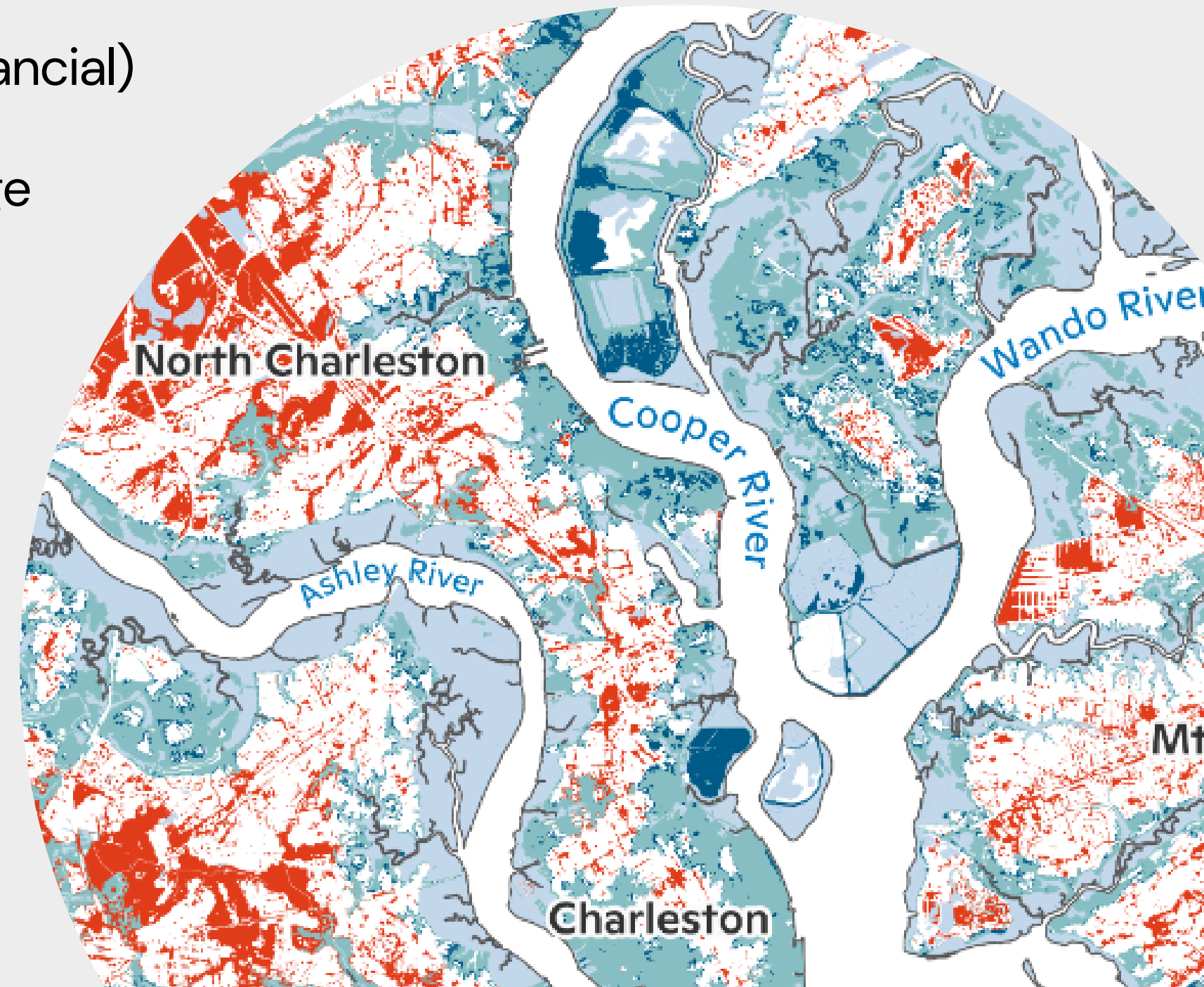
**Inspire hope** and empower agents of change

# CAEA Short Term Goals



**For Charleston, South Carolina's minority and women-owned small businesses**

1. Direct and indirect climate impacts (physical and financial)
2. Which industries are most affected by climate change
3. Climate change challenges
4. Climate change-based information needs
5. Planning for climate-compatibility
6. Marketing and advocacy needs





# CAEA Long Term Goals



For Charleston, South Carolina's minority and women-owned small businesses

1. Climate change resilience education
2. Educate small business community mindset
3. Transform operations toward a sustainable future
4. Individualized business climate action plans
5. "Certificates of Completion" leverage for brand
6. Peer-to peer learning community
7. Climate Action business network
8. Web-based Knowledge Hub







# Our Mission

To develop a community resilience education program, where “theory of change, much like logic models, is the anchor tool for planning, implementation, and evaluation of an initiative” (Bey et al. 2020).



# Survey Instrument Review



## Climate Action Engagement Academy Pre-Survey

6. What has been the financial impact of climate-related events to your firm?

\$0 \$1,000,000+

28 [Clear](#)

7 / 18

39%

Prev

Next

[Link to survey](#)



DAY 1

**Develop a baseline understanding**

# Why participate in the Climate Action Engagement Academy?

## **+ Increased social capital**

- Added support and connections
- Develop a community network

## **+ Certification**

- Display and demonstrate your climate savviness to customers, clients, and employees

## **+ Continuation of training**

- Internet knowledge hub



DAY 1

Develop a baseline understanding

What is it like to operate a small business in Charleston?

- + Pros/Cons
- + Natural environment
- + Climate

# CLIMATE VS WEATHER

CLIMATE IS what you **EXPECT.**

WEATHER IS what you **GET.**

The **AVERAGE** weather conditions of a particular region.

The condition of the troposphere at a particular time and place. changes from **DAY TO DAY.**

**CLIMATE MAP**

**KEYWORDS:**

- Per year
- Annual
- Normal
- Typical
- Always
- **Never**
- Record lows
- Record highs
- Generally
- Extreme weather events from past
- Seasons

**KEYWORDS:**

- forecast
- **Sunny**
- recent
- daily
- today
- tomorrow
- yesterday
- foggy
- current
- **SUNNY**
- **WINDY**
- **CLOUDY**
- **SNOWY**
- **RAINY**



## Starting with definitions

- Climate, Weather
- Hazards, Exposure, Vulnerability
- Risk, Resiliency, Sustainability

Connect to planning horizons

*How much business will I lose because of hurricane X?*

*How many days will my employees be prevented from coming into work because of flooding this season, year and in the future?*



**DAY 2**

**Opportunities to be future-focused  
and climate compatible**

How do you, as a  
business, cope or  
respond?

**+ Information**

Do you seek out climate information  
for business purposes?

- What are trusted sources?
- Could the information and/or  
formatting be improved?

**+ Long Range Plans**

Do you consider climate when making  
long-range business plans?

**+ Climate conversations**

Do you discuss climate with other  
business owners?

# Climate threats affecting coastal businesses today



**Flooding**



**Extreme Heat**



**Sea Level Rise**

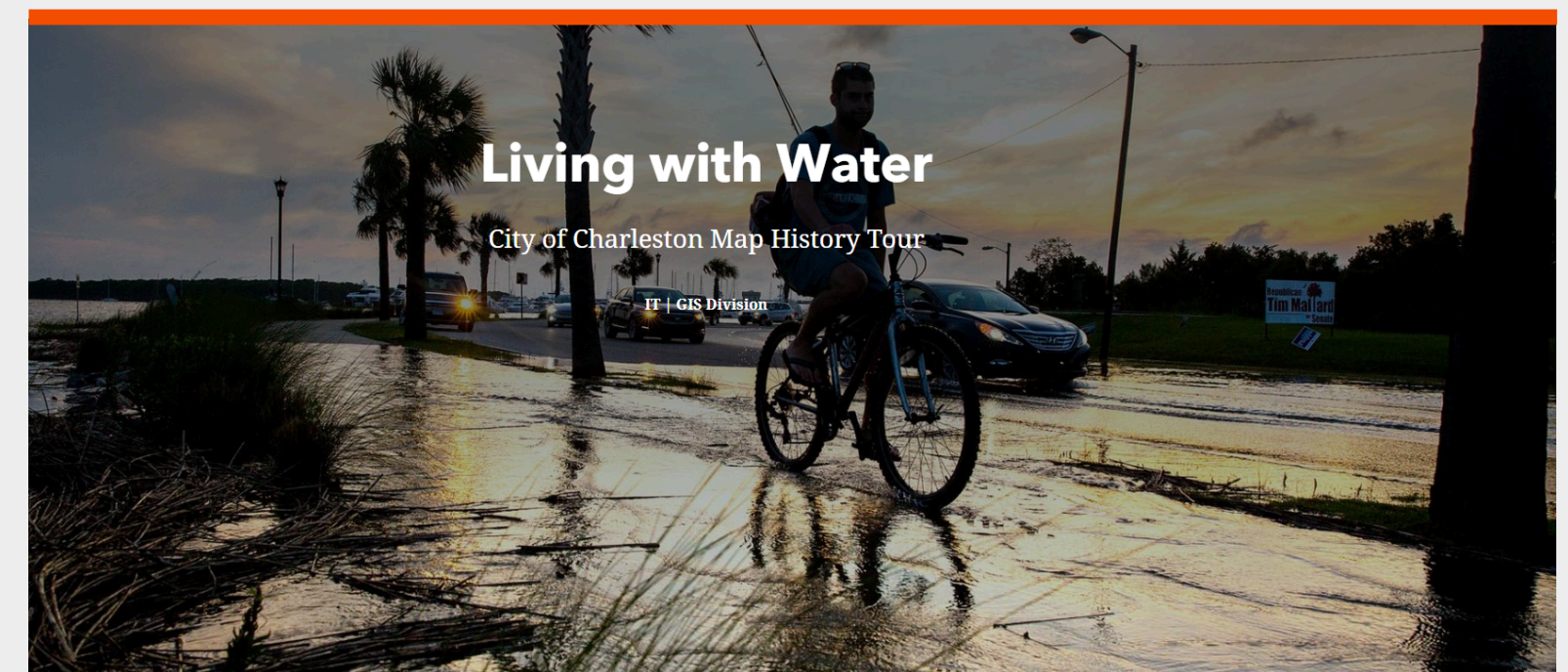
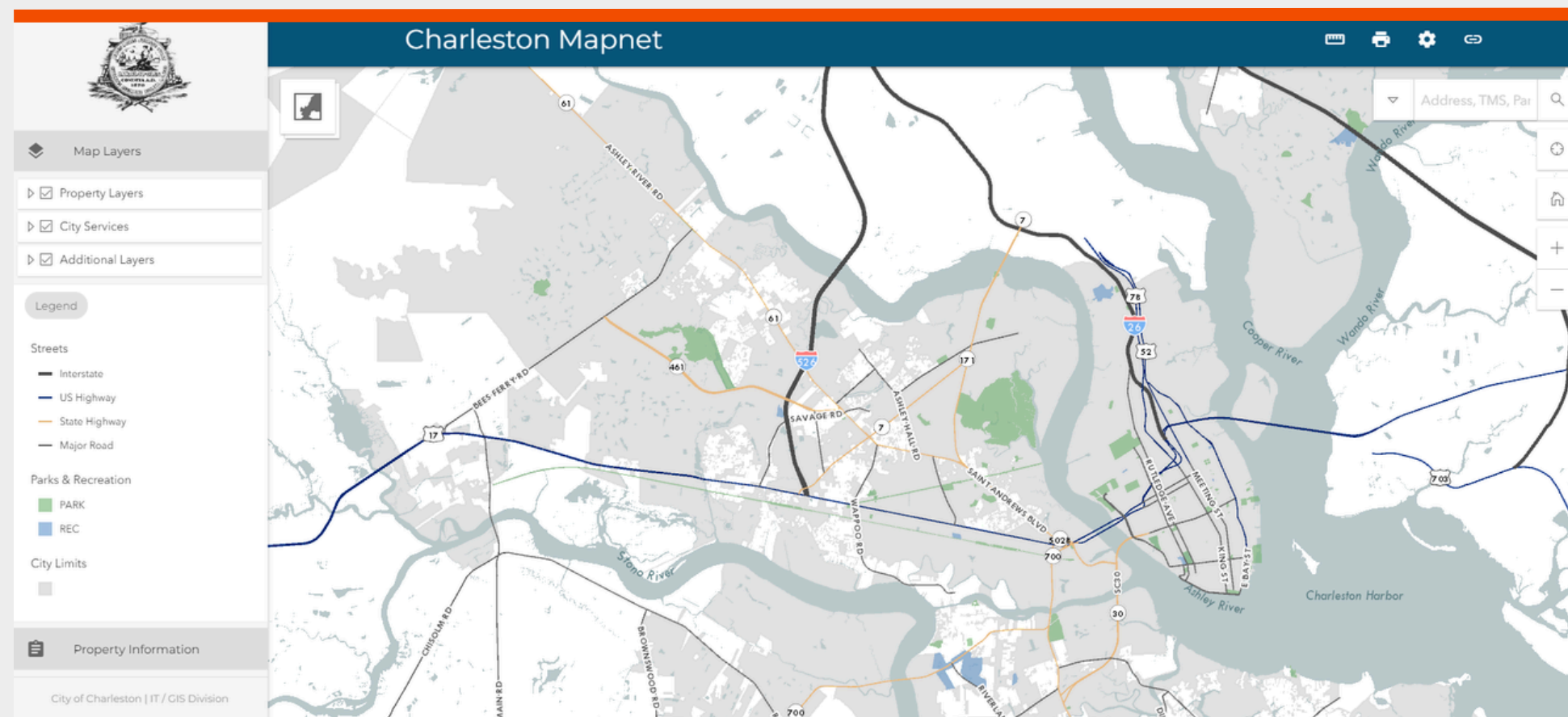


**Extreme Wind**



## CONTENT EXAMPLE

# GEONarrative Engagement with Interactive & Story Maps







**The only thing constant in nature is change.**

Being climate-compatible & future-focused is critical to business success in our quickly changing circumstances.

# And now...

**Intent**

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**Logistics**

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**Content**

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**Recruitment**

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Working group feedback and idea sharing





# Additional Information



**+ NOAA ELP**

**+ Detailed Long Term  
Goals of CAEA**

**+ Content  
examples**

# NOAA Environmental Literacy Program



## Resilience Education project goals:

### + Goal 1

Support local and state government resilience efforts through the use of resilience plans and creation of new partnerships between education institutions and local or state government offices charged with resilience planning

### + Goal 2

Explore and implement community-scale solutions to improve community resilience

### + Goal 3

Integrate the history, culture, and lived experiences of diverse community members

### + Goal 4

Promote equitable and inclusive resilience planning that ensures historically marginalized voices are incorporated into the process and contribute to overall community health

### + Goal 5

Facilitate opportunities for civic engagement and enable audiences to take action in their communities

### + Goal 6

Develop successful community resilience education approaches that contribute to the ELP Community of Practice

# CAEA Long Term Goals



1. Climate change resilience education among coastal minority and women owned small businesses
2. Educate small business community mindset as it pertains to climate change
3. Transform operations toward a sustainable future
4. Individualized climate action plans
5. Certificates of Completion" to participating businesses that can be promoted on social media and encourage further engagement
6. Peer-to peer learning community through "Community of Practice" or "Affinity Group".
7. Medium of continued connection (Slack channel) and information (Near Center, Sea Grant)
8. Web portal as a knowledge hub