

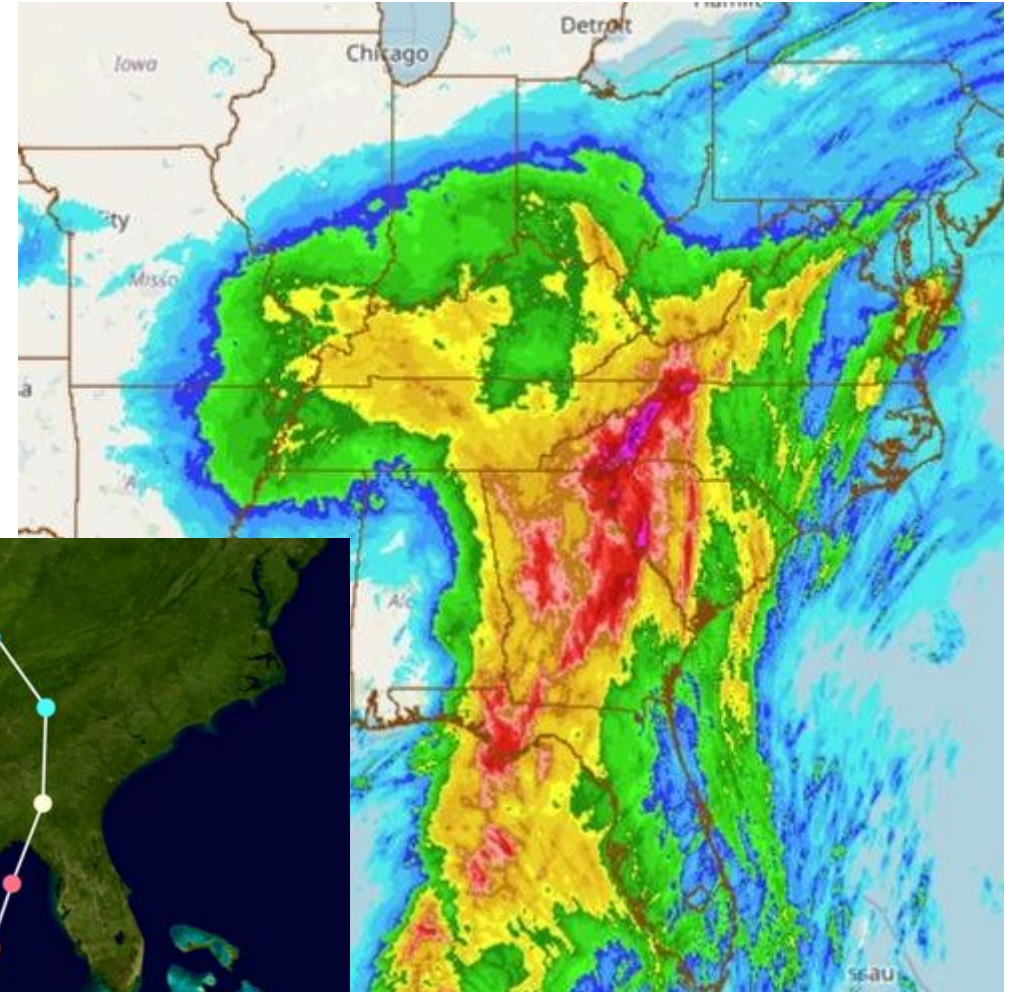
A satellite image of a large hurricane over the Gulf of Mexico. The hurricane has a well-defined eye and a dense, swirling cloud structure. The surrounding ocean is dark blue, and the landmasses of North and Central America are visible in shades of green and brown. The text is overlaid on the center of the image.

2024 Hurricane Season Response Challenges Panel

AFDOSS 2025

Hurricane Helene Snapshot

- Category 4 storm landed in FL September 26th, 2024. Dissipated Sept. 29th.
- \$78.7 billion in damage (\$53 b in NC); *(5th all time)
- 251 deaths (deadliest since Katrina)
- Max sustained wind = 140 mph
- Highest rainfall = >30" over 3 days
- 16.2 million people lost power



Panelists

- **Joan Sims**, Compliance & Response Manager
North Carolina Department of Agriculture & Consumer Services
- **Jessica Silver**, REHS, Environmental Health Director
Buncombe County, NC Environmental Health Services
- **Eyamba Sowers Scott**, MSHSEM, Rapid Response Team Coordinator
South Carolina Department of Agriculture
- **Natalie Hobbs**, MPH, Rapid Response Team Operations & Recall Coordinator
Georgia Department of Agriculture

Objectives

- Describe impact of Hurricane Helene in NC, SC and GA
- Share unique challenges each state faced
- Understand different state infrastructures and how they influenced response

Joan Sims

Compliance & Response Manager

North Carolina Department of
Agriculture & Consumer Services



Hilltop Farm – Henderson
Co.



Hurricane Helene Response



River Arts District and Asheville area Prior to Hurricane Helene:



Flooding on September 29, 2024:



Biltmore village
Asheville, NC



**Morganton, NC
Burk County**



**Marshall, NC
Madison County**



**Burnsville,
NC Yancy
County**



**Chimney Rock, NC
Rutherford County**

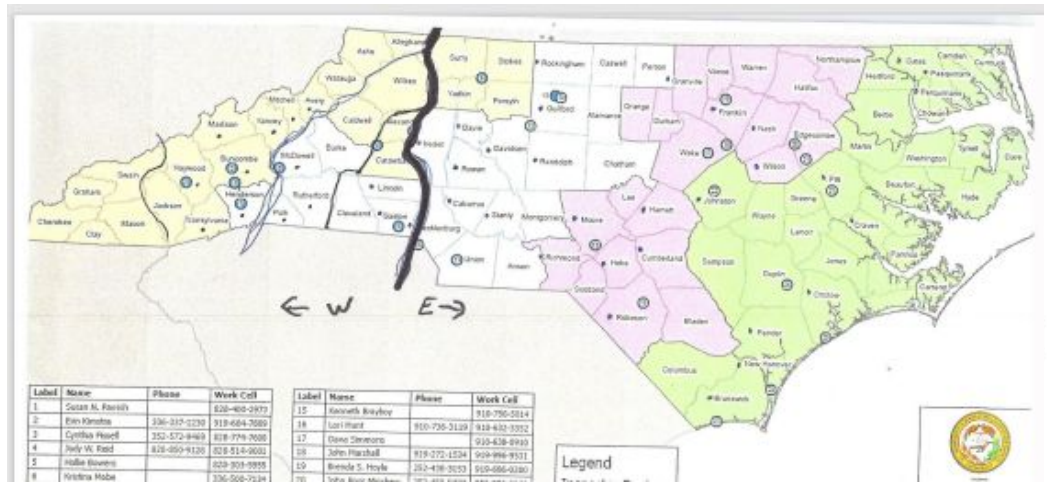
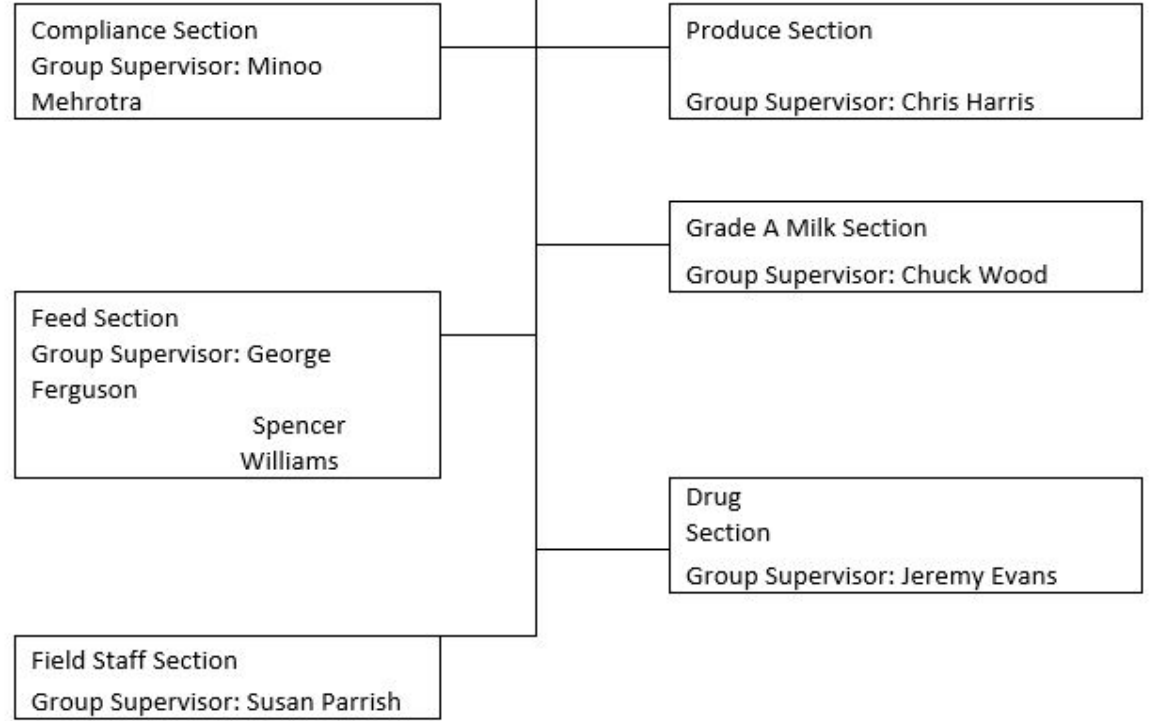
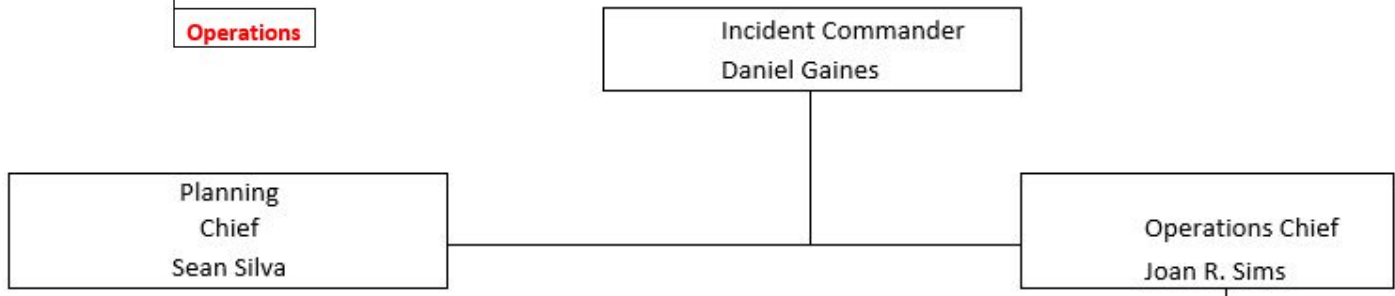
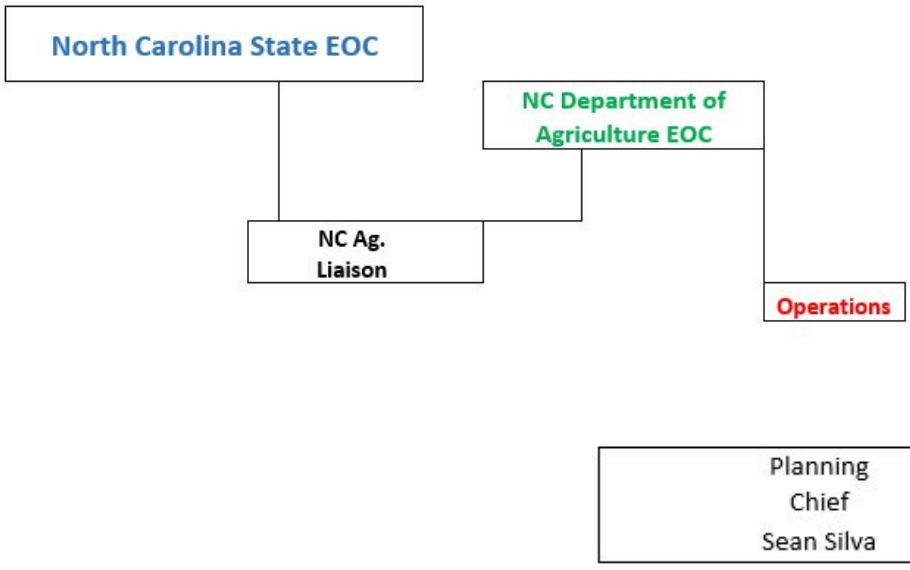
Structures on the campus of Camp Celo outside of Burnsville, N.C., were flooded and damaged by Hurricane Helene. Photos by Drew Perrin/Camp Celo.



Courtesy of North Carolina Department of Transportation | I 40- NC/TN line



Hurricane Helene FDPD Organization Chart September 30, 2024



Emergency Water



Steven W. Troxler
Commissioner

North Carolina Department of Agriculture
and Consumer Services
Food and Drug Protection Division

Christina L. Waggett
Assistant Commissioner
for Consumer Protection

Anita MacMullan
Director

10/4/2024

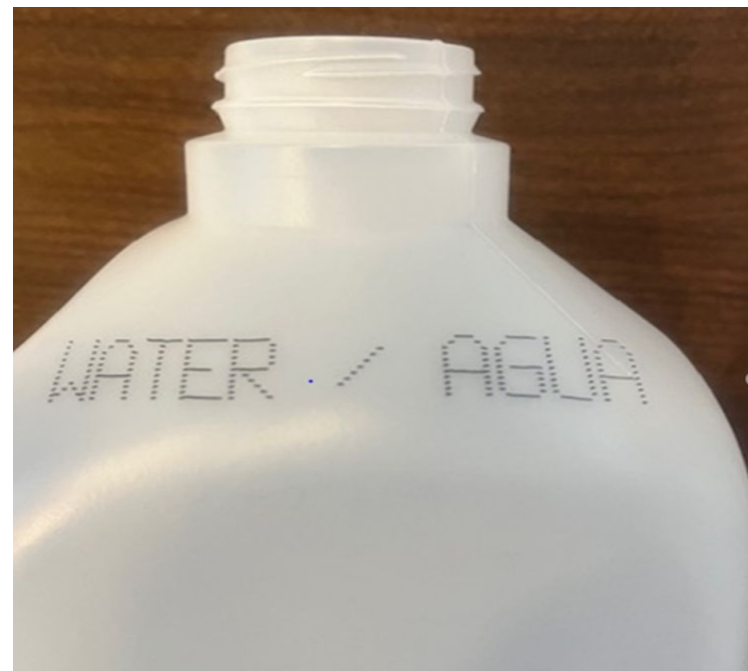
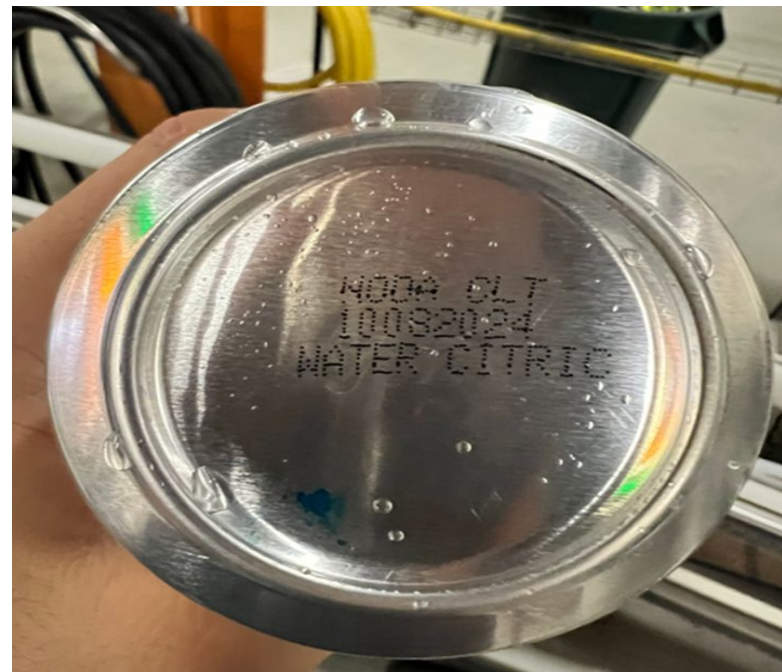
Emergency Water Requirements

Thank you for your cooperation in providing essential resources to those in need. By following these requirements, water can be supplied to meet critical water needs to those affected by Hurricane Helene.

Duration: The emergency water distribution period is 90 days from the date of this publication.

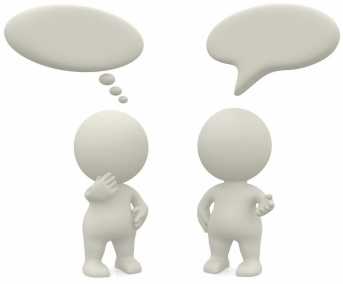
Requirements:

- Water must be from an approved source
- Containers and closures must be new and single use
- Processing and sanitation records must be maintained
- A lot code or date of production is strongly recommended
- Containers are required to be labelled with the following:
 - Manufacturer name and address
 - The phrase "Water for emergency use only; not for sale"
 - Optional but helpful: unit of measure. Example: "8 fl oz (240 mL)"
 - Strongly recommended that a lot code or production date appear on the containers.

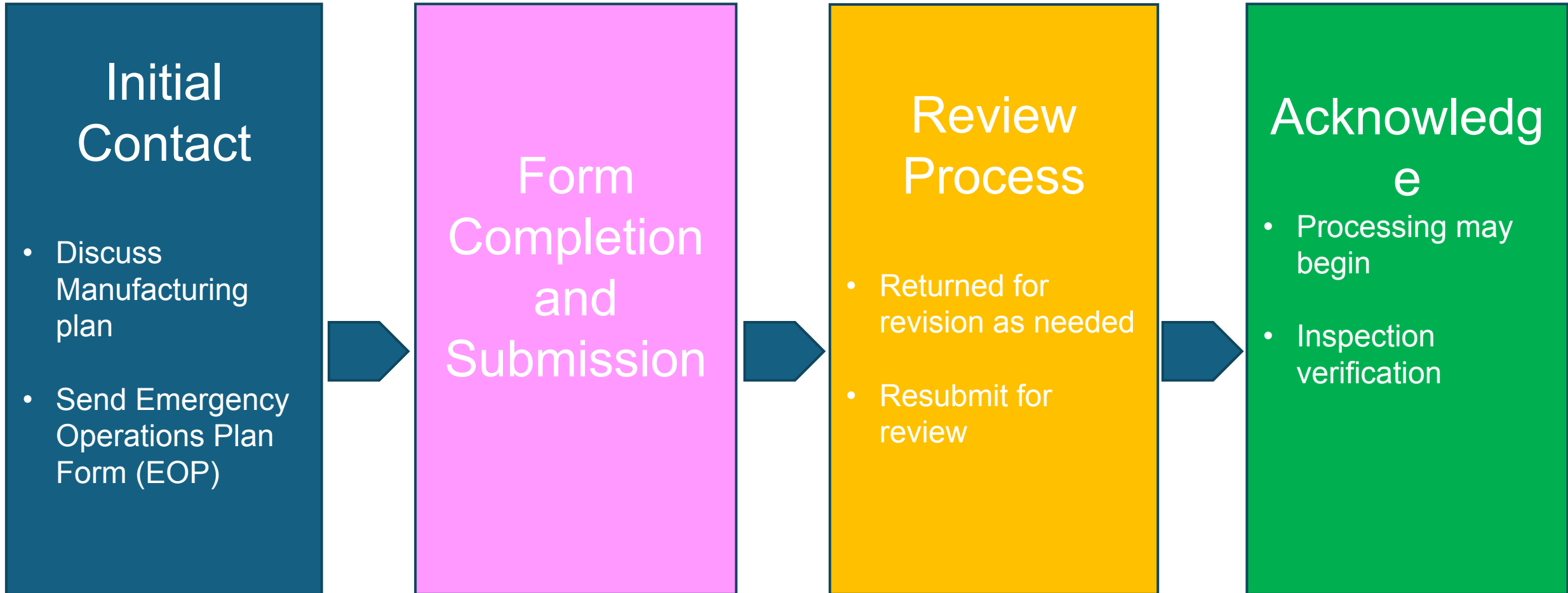




Level	Service	Implication
GREEN	Full menu	Restaurant has power and damage is minimal or absent.
YELLOW	Limited menu	Power is either absent or delivered by a generator, or food supplies are running low.
RED	Restaurant is closed	Indicates severe damage, severe flooding; Severe destruction to the restaurant.



Emergency Water Operation Plan

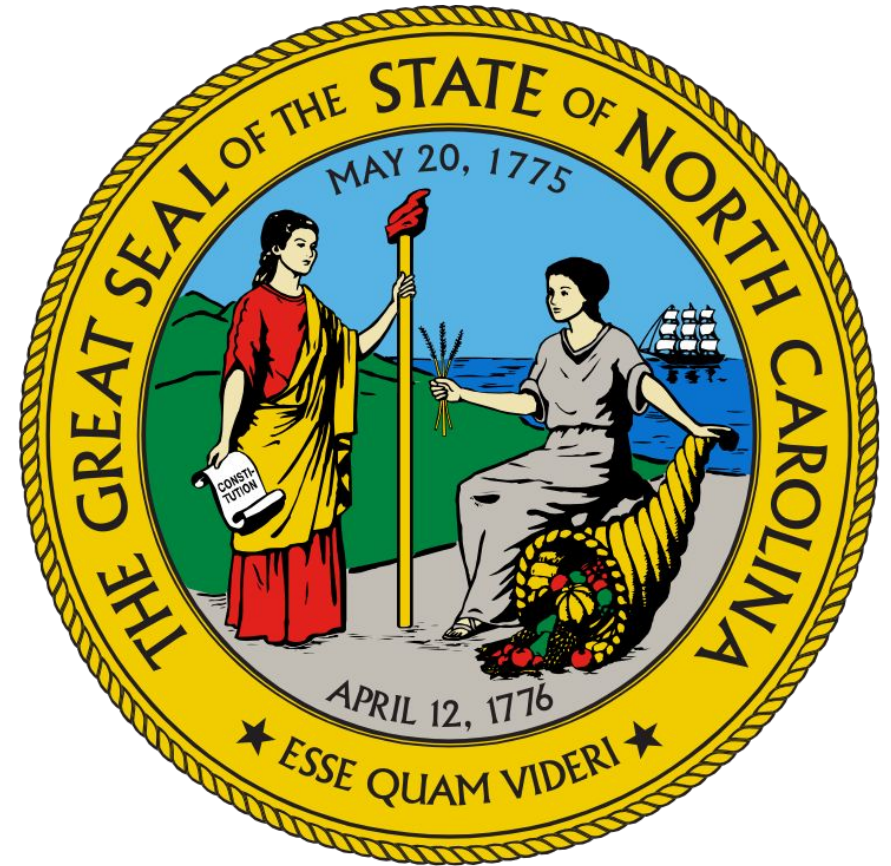




Jessica Silver,
REHS

Environmental Health Director

Buncombe County, NC Environmental
Health Services



Buncombe County Situational Awareness

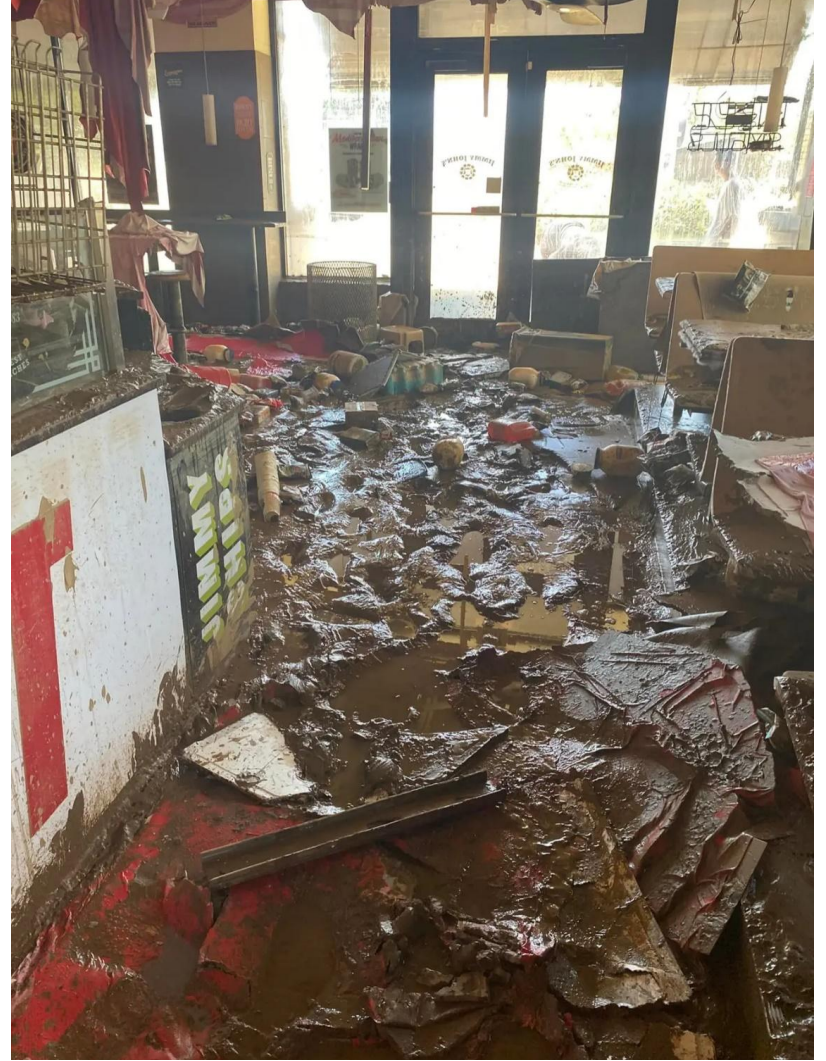
- Consistent rain for 4 days leading up to Helene
- Communications systems were down/severely limited
- Multiple landslides, massive flooding, impassable roadways, bridges out, downed power lines











Challenges

- City of Asheville water disruption
 - No flushing water for 3 weeks
 - Drinking water returned on November 18, 2024
- Food service and lodging establishments, child care centers, nursing homes if not on a well, **NEEDED** emergency approval of alternative water supplies



Priority: Ensure safe drinking water for everyone

- Distributed water and MREs at distribution sites
- Accepted 1,977 bacteriological water samples
- Educate on how to use non-potable water
- Issued 304 new well permits

Priority: Reopen Regulated Establishments

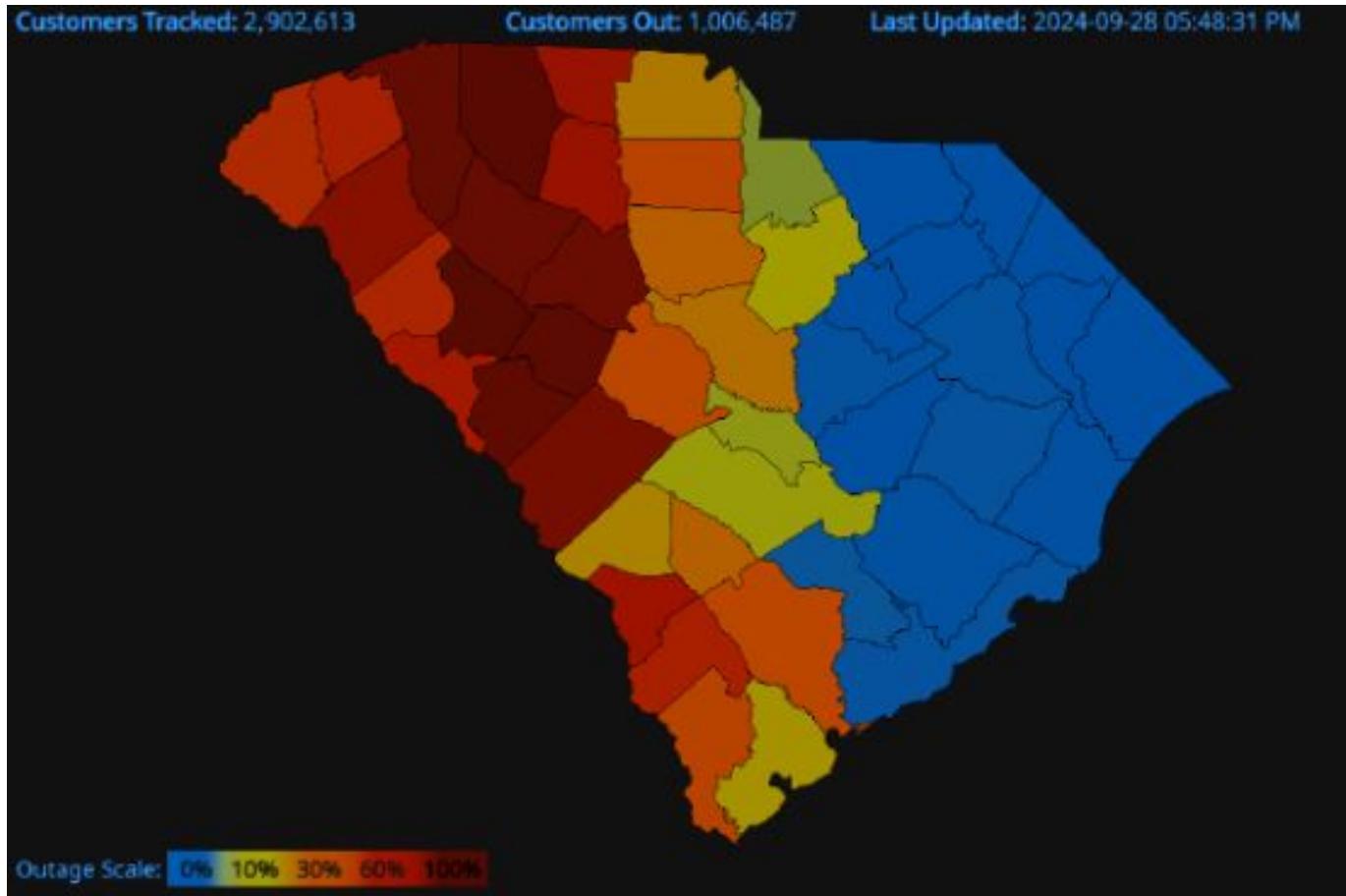
- Safely reopen establishments using a new process to evaluate Emergency Operation Plans (EOP)
- Completed 2,281 visits to establishments

Eyamba Sowers Scott,
MSHSEM

Rapid Response Team
Coordinator

South Carolina Department of
Agriculture





Source: <https://poweroutage.us/>

Tropical Storm Helene moved out of the state during the afternoon of September 27, 2024, leaving a record number of SC citizens without power, impacting accessibility of many roadways, and dropping heavy rain across the state, particularly in the Upstate area. Heavy rains made both flash and river flooding major concerns in the Upstate and Midlands areas



Photos courtesy of SC Forestry Commission taken during impact assessment flight September 29

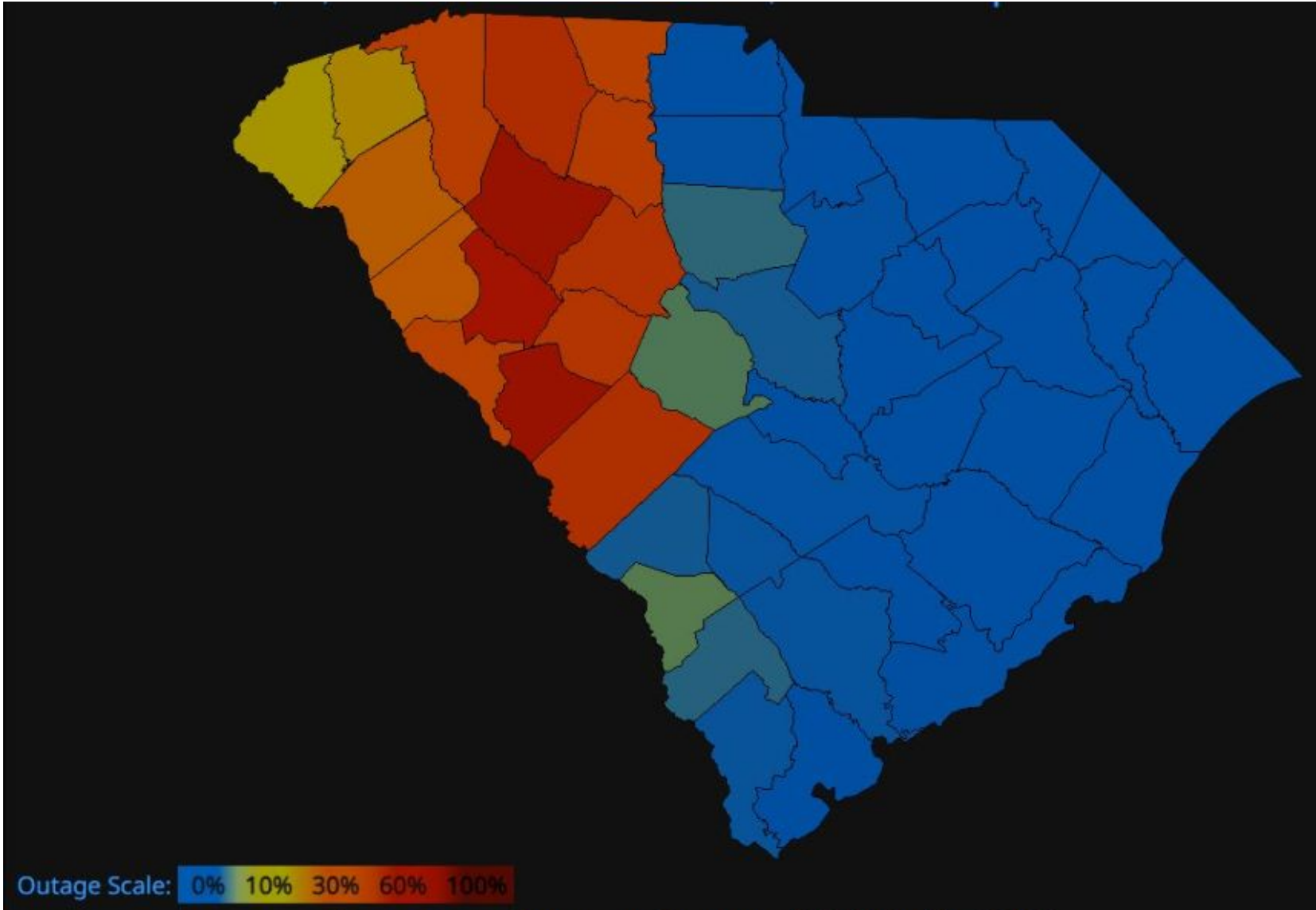


Top left: Flooding along the Broad River on Harbison State Forest (behind SCFC HQ in Columbia)

Top Right: Dam at Lake Monticello

Bottom: Broad River flooding in Newberry County

Photos courtesy of SC Forestry Commission taken during impact assessment flight September 30



Percent Power Outages per County as of 09:00 October 3, 2024



Impact to pecan trees; photo courtesy of SC Department of Agriculture



Photo provided by Clemson Cooperative Extension Service via the Agricultural Impact Assessment Form



South Carolina Department of Agriculture Rapid Response Team

by Eyamba Sowers Scott, MSHSEM
SCDA RRT Coordinator

- Objectives:
 - Highlight the unification of food safety under one agency
 - Outline the new structure post-transition
 - Explain the roles of SC Emergency Support Function 17 (ESF-17) and the SCDA Rapid Response Team (RRT)
 - Identify challenges during integration
 - Address civil disobedience risks to food safety
 - Review efforts to build unified emergency SOPs



One Agency for Food Safety

- Major Transition:
 - On July 1, 2024, the Rapid Response Team (RRT) officially transitioned from the Department of Health and Environmental Control (**DHEC**) to South Carolina Department of Agriculture (**SCDA**).
 - SCDA now regulates food safety in South Carolina with the exception of meat and poultry.
 - The strategic shift aligned emergency response coordination.
 - The transition strengthens SCDA's capacity to lead timely, unified responses to food safety events and emergencies.



South Carolina Department of Agriculture



SCDA Rapid Response Team's Structure Post-Transition

- Current Food/Feed Safety Areas Under SCDA:
 - Wholesale Food Safety
 - Retail Food Safety
 - Milk Safety
 - Produce Safety
 - Animal Feed Safety

- Coordinated Communication with ESF-17



SC Emergency Support Function (ESF) Structure Under SC Emergency Management Division (EMD)

- ESF 1 – Transportation
- ESF 2 – Communications
- ESF 3 – Public Works and Engineering
- ESF 4 – Firefighting
- ESF 5 – Emergency Management
- ESF 6 – Mass Care (MAST and SC Emergency Animal Sheltering)
- ESF 7 – Finance and Administration
- ESF 8 – Health and Medical Services (SC Behavior Health)
- ESF 9 – Search and Rescue
- ESF 10 – Environmental and Hazardous Materials Operations
- ESF 11 – Food Services
- ESF 12 – Energy
- ESF 13 – Law Enforcement
- ESF 14 – Initial Recovery and Mitigation
- ESF 15 – Public Information
- ESF 16 – Emergency Traffic Management
- **ESF 17 – Agriculture and Animals**
- ESF 18 – Donated Goods and Volunteer Services
- ESF 19 – Military Support
- ESF 24 – Business and Industry



Post-Transition Integration Challenges

- Dual Coordination Structure Pre-Transition:
 - Before July 1, 2024, DHEC's RRT Coordinator primarily handled retail food safety for over 20,000 establishments.
 - Before July 1, 2024, SCDA's RRT Coordinator primarily managed wholesale, produce, and animal feed safety concerns.
- Post-Transition Shift
 - SCDA moved to one centralized RRT Coordinator.
 - Oversight was combined for retail, wholesale, produce, milk, and feed.
 - Two separate workflows and communication lines were unified.
- Immediate Operational Pressure
 - Three major hurricane systems hit South Carolina between August and October.
 - The storms exposed gaps and stressed the new coordination model.
 - The storms underscored the need for standardized emergency response.



Civil Disobedience and Food Safety Risks

- Supply Chain Disruptions:
 - Grocery stores in Pickens, Anderson and Greenville counties were heavily affected by warehouse flooding in Asheville, NC.
- Public Panic and Flooding Impacts:
 - Flooding caused major spoilage and disrupted supply routes.
 - Some people tried to take food from store shelves before it was safely discarded.
- Civil Disobedience Escalation:
 - ESF-17 was alerted to possible civil unrest.
 - People reportedly tried to force entry into grocery stores for food.
 - High foot traffic at some stores led to law enforcement being called.



Building Unified Emergency Response SOPs

- Immediate Action Taken:
 - The crisis showed the urgent need for unified response protocols.
 - An SOP workshop was launched to fix the gaps.
- SOP Development Workshop:
 - Brought all five food safety departments together.
 - Each department developed its own emergency response SOP.
 - The SCDA Commissioner's Office joined to ensure leadership alignment.
- Outcome:
 - A full all-hazard emergency SOP framework was created.
 - It strengthened SCDA's support role under ESF-17 during state emergencies.
- Result
 - A unified RRT structure was established.
 - SCDA's ability to lead food and feed emergencies was strengthened.

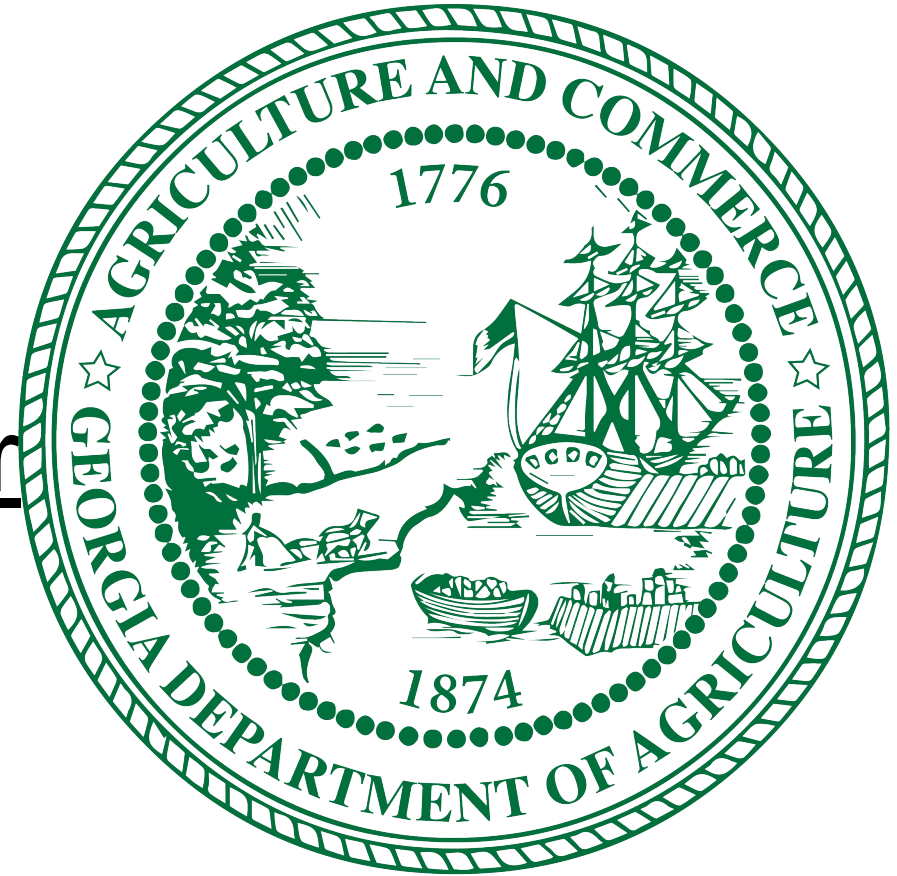


Natalie Hobbs, MPH

Rapid Response Team

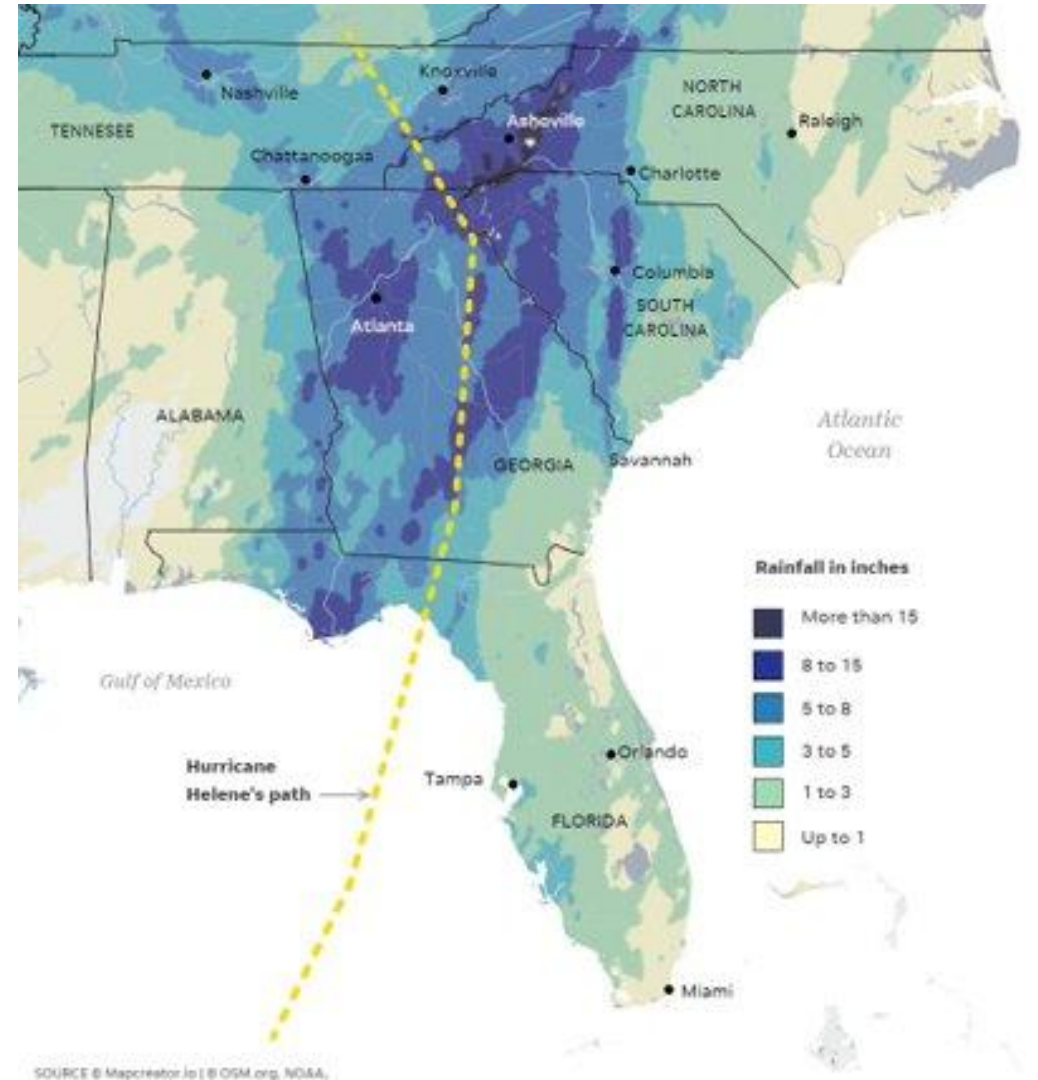
Operations & Recall Coordinator

Georgia Department of Agriculture



Helene in Georgia

- Helene passed through Georgia as a Category 2 hurricane
- The storm path shifted, bringing massive amounts of rain to areas that were not prepared for flooding risks





Cotton on ground in Soperton, GA



Pecan trees in Toombs County after the storm



Small canyons and sandbars created in vegetable fields from rainfall in Johnson County



Collapsed poultry houses in Coffee County



Valdosta, one of the hardest-hit GA cities



Tree branch coming out of a ceiling in an Augusta home



Equipment damage in Toombs County



Submerged car on a flooded Atlanta road



Moses Pecan orchards in Montgomery County



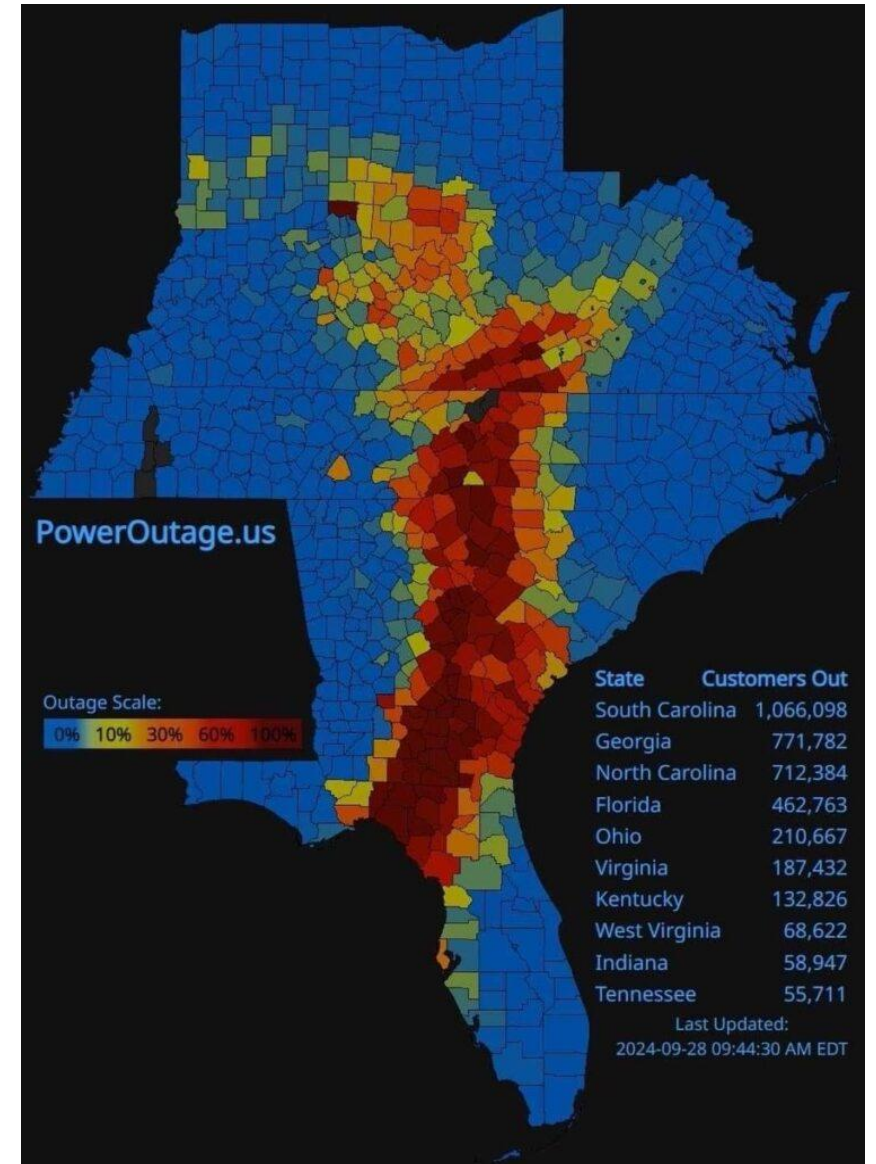
Flooding in Atlanta

Damage Assessment Forms

- Survey123 from ArcGIS
- Damage Assessment form
 - Pull firm lists from Digital Health Department (DHD) by affected counties and filter by program
 - Inspectors are assigned firms and they conduct calls
- Industry Self-Reporting form
 - Firms can self-report damages, their status on open/close, and power outages or other concerns
 - Inspectors are sent out to firms to check up on them if they report damages

Picking Counties to Contact

- Following the path of the storm
- Using GEMA's WebEOC tabs – Statewide Significant Events and Position Log to monitor road closures, downed power lines, dam breaches, etc.
- Using poweroutage.us to track county power outages
- Local news channels



PowerOutage.us map of the Southeast, 9/28/2024

Helene Stats

- 3,700 total submissions on Damage Assessment Form
 - 3,299 unique firms contacted (2,150 retail firms, 918 manufacturing firms, 31 dairy firms, 200 produce firms)
 - 127 firms reported facility damages
 - Estimated \$5.8 million in damages (according to firms that reported)
- 31 submissions on the Industry Self Report Form
 - 21 retail firms, 5 manufacturing firms, 2 mixed firms, 1 dairy firm, 1 produce firm
 - 6 reported being closed, 3 limited open, 21 open fully
 - 3 reported facility damages

Agricultural Impacts



**PRELIMINARY REPORTS
ESTIMATE AGRICULTURAL
DAMAGES FROM HURRICANE
HELENE WILL COST GEORGIA'S
ECONOMY AT LEAST**

\$6.46 BILLION

**WEATHERED
BUT
STRONG**
GEORGIA HURRICANE RELIEF FUND



BLUEBERRIES

**DIRECT LOSS OF
\$52 MILLION.**

**POTENTIAL FUTURE CROP LOSS
OF \$150 MILLION
DUE TO PLANT DAMAGE.**

* PRELIMINARY ESTIMATES FROM
UGA AS OF 10/10/2024

**WEATHERED
BUT
STRONG**
GEORGIA HURRICANE RELIEF FUND



COTTON

LOSS OF 500,000 TO 600,000 BALES.

**ESTIMATED DAMAGE BETWEEN
\$207 - \$220 MILLION.**

* PRELIMINARY ESTIMATES FROM UGA AS OF 10/10/2024

**WEATHERED
BUT
STRONG**
GEORGIA HURRICANE RELIEF FUND

-  **TIMBER | \$1.28 BILLION**
-  **PECANS | \$673 MILLION**
-  **POULTRY | \$500 - \$520 MILLION**
-  **HORTICULTURE | \$451 MILLION**
-  **COTTON | \$365.6 MILLION**
-  **BEEF CATTLE | \$275.1 MILLION**
-  **VEGETABLES | \$122 MILLION**
-  **DAIRY | \$75 - \$100 MILLION**
-  **BLUEBERRIES | \$44 MILLION**
-  **PEANUTS | \$39.5 MILLION**
-  **CITRUS | \$12 MILLION**
-  **TOBACCO | \$3.6 - \$7 MILLION**
-  **SOYBEANS | \$4 MILLION**

Source: UGA CAES & Ga. Dept. of Agriculture

Challenges

- No answers for phone calls
- Firms thinking this is a scam call/hanging up as soon as they hear it's a government agency
- Incorrect or inactive phone numbers in DHD for firms
- Colorful language about other agencies directed at GDA inspectors
- Severe power outages in counties delaying firm list distribution

Audience Questions

