



MECKLENBURG COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN UPDATE

HAZARD MITIGATION PLANNING COMMITTEE MEETING #3

April 17, 2025, 11am, Charlotte Fire Department Headquarters & Microsoft Teams

Abby Moore and David Stroud from WSP, facilitated a meeting with the Hazard Mitigation Planning Committee to cover the topics outlined in the following agenda:

- 1 Project Overview & Where we are in the planning process
- 2 Capability Assessment
 - a New Capabilities
 - b Substantial Damage Estimate Procedures
- 3 Mitigation Strategy
 - a Review Goals and Objectives
 - b Mitigation Action Updates
- 4 Discussion
- 5 Next Steps

ATTENDANCE

There were 11 attendees in person and 19 online. The full list of attendees is as follows:

Tony Bateman – CMEMO, Emergency Management Planner
Rebecca Deal – CMSWS, Stewardship Program Supervisor
James Scanlon – Mecklenburg County GIS
Andrew DiCristofaro – CMSWS
Aaron Tucker, Cornelius Planning Department, Senior Coordinator
Jenna Hoagland, Mecklenburg County Public Health , Preparedness Coordinator
David Moore – Huntersville Human Resources, Safety and Risk Coordinator
Karli Godfrey, Mecklenburg County Mangers Office
Brandon Jones – Catawba Riverkeeper Foundation
Christina Danis – Centralina Regional Resilience Collaborative
Gidget Dennehy, Charlotte Citizen
Robyn Byers, City of Charlotte, Office of Sustainability & Resilience, Sustainability & Resiliency Manager
Jane Baker, Charlotte, Citizen
Kyle Lanasa, Operations Coordinator, UNC Charlotte
Alex Moore, Mecklenburg County Stormwater, Communications Specialist
Ashley Riggins, City of Charlotte Emergency Management, Emergency Management Planner
Steve Sonnenberg – Davidson, Citizen
Scott Hess – Charlotte Water, Safety Coordinator
Steve Robbins – Public Works, Assistant Director
Josh McSwain – Mecklenburg County Stormwater, Project Manager
James Scanlon – Mecklenburg County GIS

Jerry Winkles – Charlotte Fire Department, Deputy Fire Chief
Carl Baker – NCEM
John Mello – NCEM
Mike Croke – JCI Jones Chemical
Neal Banerjee – FNI, Engineer
David Stroud – WSP
Abby Moore – WSP
Ranger Ruffins – WSP
Kimmy Hansen – WSP

PROJECT OVERVIEW

David Stroud kicked off the meeting with a review of the four phases of FEMA disaster mitigation planning process and the 10 steps of the CRS planning process. We are currently working through Phase 3: Mitigation Strategy, which aligns with Step 6 (Set Goals), Step 7 (Review Possible Activities), and Step 8 (Draft an Action Plan) of the CRS planning process. David reminded the committee that there will be one more committee meeting and one more public meeting where WSP will present the draft plan. Afterwards, the plan will be sent to the State for review.

CAPABILITY ASSESSMENT

A capability assessment measures local resources and tools available to support or implement mitigation projects. It identifies gaps, conflicts, and opportunities in existing local plans, policies, and programs. Additionally, a capability assessment identifies mitigation measures already in place or underway.

Indicators of capability in this plan update include the following:

- Plans and Regulatory – plans, programs, ordinances
- Administrative & Technical – staff, training, expertise
- Fiscal Resources – bonds, fees, taxes, CIP, grants
- Education and Resources – engaged stakeholders, public outreach, warning & notification
- Mitigation Resources – grants, past mitigation projects performance
- Political Will – public and leadership support for mitigation, investments, regulation enforcement

Previous Capability Self-Assessment Results

David reviewed the previous capability self-assessment results which can be found in the table below. David asked if these ratings should be changed and reminded the committee that all comments or revisions about the capability self-assessment results can be emailed directly to the consulting team.

It was noted that Charlotte's early warning system has been upgraded and the City is piloting a new Dam monitoring program.

Mecklenburg County has received funding from Centralina Regional Council to develop a recovery and resilience plan. They have developed a plan and scorecard template that can be shared with the other communities.

Robyn Byers noted that the City of Charlotte updated its Strategic Energy Action Plan (SEAP+) which includes a climate risk assessment, and a strategy focused on climate change. The draft plan is currently up for review and public comment.

Jurisdiction	Plans, Ordinances, Codes and Programs	Administrative and Technical	Fiscal	Education and Outreach	Mitigation	Political	Overall
Mecklenburg County	High	High	High	Moderate	High	High	Moderate
Charlotte	High	High	High	High	High	High	High
Cornelius	Moderate	Moderate	High	Moderate	High	Moderate	Limited
Davidson	Moderate	High	Moderate	High	High	High	Moderate
Huntersville	Moderate	Moderate	Moderate	Limited	Moderate	Moderate	Limited
Matthews	High	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Mint Hill	High	High	High	Moderate	Moderate	Moderate	Limited
Pineville	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate

Changes Since the Last Plan Update

David reviewed the changes in capability that have occurred since the last plan update and mentioned other new resources such as Comprehensive/Land Use Plan updates for all communities, BRIC and FMA funding for Mecklenburg County, and Huntersville, CRS class improvements for Charlotte, Mecklenburg County, Pineville, and Huntersville, increased freeboard requirements in Charlotte and acquisitions and elevations in Mecklenburg.

David suggested communities think about the following changes and updates over the past five years when updating their capability results:

- Additional funding
- New or updated plans
- New staff
- Updated flood or open space regulations
- New emergency warning systems or strategies
- Completed mitigation projects

New FEMA Requirements

David briefly noted that there is a new FEMA requirement for substantial damage estimate procedures. The plan must include information on how participating communities use the NFIP to reduce risk after a disaster through substantial damage and substantial improvement (SD/SI) procedures.

He noted that substantial damage procedures can be found in a communities' floodplain prevention ordinance.

Mecklenburg is responsible for SD determinations for all communities. When an event occurs, a desktop analysis is done to initially predict where potential damage occurred. Trained field staff visits these locations to validate estimates and damage. This validated information is logged into a system that produces substantial damage estimates. Homeowners are then notified via a letter. Mecklenburg also is responsible for permitting in the floodplain. Permit holds are put in place for homes that have validated damage and SD estimates have been established.

Capability Vs. Mitigation

David emphasized the difference between capability and mitigation actions and gave examples of different scenarios found on slide 14. Mitigation actions should be applicable to the next five years and should be specific actions that help achieve the plans goals and objectives. It is important to focus on projects that reduce risk and vulnerability. Abby noted that status updates need to be reported for each individual action and to remove actions that speak to the regular duties of departments.

MITIGATION STRATEGY

A mitigation strategy is meant to reduce the impact of hazards on existing development and ensure future development occurs in a way that minimizes vulnerability.

Goals & Objectives

David reviewed the existing goals and objectives from the previous plan update and discussed potential revisions to implement with the committee for the current plan update.

Goal 1: Identify and implement hazard mitigation projects designed to reduce the impact of future hazard events on existing critical facilities and infrastructure as well as public and private property.

- Objective 1.1: Acquire or retrofit buildings and infrastructure to protect against damage from hazards.
- Objective 1.2: Implement natural, infrastructure, and structural projects to avert hazards and reduce future damage.
- Objective 1.3: Ensure critical facilities can maintain operations during hazard events.

Goal 2: Conduct education and outreach activities intended to better inform people about hazards and encourage personal responsibility for preparedness and mitigation.

- Objective 2.1: Conduct awareness activities in person and via web and social media.
- Objective 2.2: Assist vulnerable populations through targeted outreach.
- Objective 2.3: Promote and incentivize private mitigation activities.

Goal 3: Improve emergency preparedness and response capabilities.

- Objective 3.1: Conduct training and exercises intended to better prepare government officials to respond to, mitigate against and recover from emergencies and disasters.
- Objective 3.2: Improve ability to notify people of impending hazards and disasters.
- Objective 3.3: Establish traffic control procedures intended to reduce injuries and the loss of life before, during, and after emergencies and disasters.

Goal 4: Enact planning and policy measures to reduce the impacts of identified hazards and make future development more resilient to hazards.

- Objective 4.1: Adopt development regulations to limit or prevent development in hazard areas.
- Objective 4.2: Enforce building codes and development regulations.

Regarding goal two, it was suggested that some language be added about online access and digital literacy. Steve Sonnenberg also noted that for goal two language be changes from *people* to *public* to make clear that the intention is to broadly conduct outreach to people, business, and other stakeholders.

Objective 3.2 aims to improve hazard notification, however, it was noted that Mecklenburg County has a robust notification system and process for informing residents. Robyn suggested updating this language to “continue to notify people...”. Others were in agreement.

Kyle asked how the County intends to disseminate warnings in other languages now that the National Weather Service no longer provides its notifications in multiple languages. It was noted that the County is

working with the office of inclusion and language to get notifications in multiple languages although they believe they reach a high number of residents with English and Spanish notifications.

Steve noted that goal four is overall a good goal but that it should speak to the need for enforcement. Robyn noted that we could also expand language to include incentivizing certain policy. WSP will revisit this goal and objective and provide updates based on this feedback.

Mitigation Action Requirements

Abby informed the committee that FEMA requires at least one mitigation action for each identified hazard in the plan update. All mitigation actions will need to be organized into the categories found below. Abby noted that to maximize CRS credit they should include flood-related actions in at least five of the six mitigation categories. The HMPG was reminded that they do not have to have mitigation actions for the man-made hazards but to still look for opportunities to include some if applicable.

1. Prevention (land development plans & zoning, freeboard requirements)
2. Property Protection (acquisition, elevation, floodproofing, backup generators)
3. Structural Projects (floodwalls, stormwater improvements, harden critical infrastructure)
4. Emergency Services (warning systems, response capacity & capability improvements)
5. Natural Resource Protection (dune or wetland restoration, vegetative management, open space preservation)
6. Public Education (mailings, websites, social media campaigns, interactive map tools, hazard disclosure requirements, targeted outreach and engagement)

Current Action Plans

Abby reviewed a summary of the current action plans in terms of what mitigation categories they cover and what hazards they address – slides 21 and 22. Abby noted to the HMPG that there are currently a lot of mitigation actions that are addressing “All Hazards” and none that cover excessive heat or severe winter weather. Communities should consider more hazard specific actions in the future. Similarly, there are no actions that cover natural resource protection. Project examples can be found in this [FEMA publication](#). WSP will send a list of the mitigation strategies for communities to review and provide status updates.

PRI Summary Results

Abby briefly reviewed the PRI summary results with the committee. Flood, excessive heat, severe winter weather, hazardous substances, and radiological emergency are the only hazard profiles to be rated a “High Risk” for Mecklenburg County. Abby reminded the committee that it is important to consider adding more mitigation actions for the high priority hazards. However, FEMA only requires actions for natural hazards and will not review actions for human caused and technical hazards (i.e. radiological emergency and hazardous substances).

High Risk (> 3.0)	Excessive Heat Flooding Severe Winter Weather Hazardous Substances Radiological Emergency
Moderate Risk (2.0 - 2.9)	Dam & Levee Failure Drought Hurricane & Tropical Storm Tornadoes & Thunderstorms Wildfire Cyber Attack Infectious Disease
Low Risk<br (<="" 2.0)<="" b=""/>	Earthquake Landslide

New Mitigation Action Ideas

David discussed potential new mitigation action ideas that could be added into the plan update. He reminded the committee that these are only ideas to help them think of new actions and have not been added to the plan update. The action ideas presented can be found on slides 24-37. Note that WSP will add a drainage improvement action, an elevation and acquisition action, and a mitigation action recommended by NC Forest Service for wildfire mitigation to all communities’ action plans unless there are any objections.

David encouraged the committee to look for plan integration opportunities by incorporating actions from their comprehensive plans or capital improvement plans and to include any actions they want to pursue for grant funding in the next five years. [NCORR's Resilience Exchange Actions Database](#) was recommended as a resource for new mitigation action ideas.

Survey Results

Abby reviewed results of the public survey which received a total of 91 responses. Abby will send a copy of the survey responses, which can be sorted by jurisdiction to help give specific feedback to the different communities regarding proposed mitigation action ideas.

Next Steps

Project Schedule

Abby presented an update on the schedule for the planning process, which includes additional HMPC and public meetings in May. The draft plan is due to NCEM by the end of May. The plan must be approved by NCEM and FEMA and adopted by all communities before the current plan expires in November 2025.

Next Steps & Discussion

Abby presented next steps and action items for WSP and the HMPC. WSP will send the existing mitigation action plans to the committee; the HMPC were asked to send mitigation action status updates and new mitigation actions to Abby Moore at abigail.moore@wsp.com as soon as possible. Please also send capability assessment updates to Abby.

A draft plan is now available on the plan website for the committee and public to review and provide feedback. The final HMPC and Public meeting will be held on May 12th. Communities were asked to help advertise the final public meeting.

Plan Website: www.MecklenburgHMP.com