

Mecklenburg County Multi-Jurisdictional Hazard Mitigation Plan 2021 Progress Report - City of Charlotte

1 Introduction

To maintain the Community Rating System (CRS) status within the National Flood Insurance Program, the **City of Charlotte** is required to provide an annual status update of the implementation of each of the mitigation actions the city proposed in Mecklenburg County Multi-Jurisdictional Hazard Mitigation Plan (HMP). The objective of this annual status evaluation is to ensure that there is a continual planning process that will keep the HMP plan dynamic and responsive to the needs and capabilities of the community.

The HMP was developed in response to requirements of the Disaster Mitigation Act of 2000. The initial version was completed in 2005 and since then, there have been updates every five years. The current version of plan was adopted by the City of Charlotte on February 8, 2021 and approved by FEMA on February 23, 2021. A copy of the current HMP is available online via the link below: <https://charlottenc.gov/EmergencyManagement/Documents/MecklenburgCounty/MJHMPFinal.pdf>.

During the development of the 2020 plan, the Mecklenburg County Hazard Mitigation Planning Committee (HMPC) met four times between January 2019 and July 2020. Later meetings were virtual due to COVID. A website was created for the 2020 HMP plan update, <http://www.mecknchmp.com/index.html> where you can find information about Hazard Mitigation Planning Committee meetings, public meetings, review draft documents, and learn more about the hazards that affect Mecklenburg County.

2 Implementation

The hazard mitigation planning process involves setting goals and objectives, reviewing community vulnerabilities and capabilities and developing mitigation actions that would make the community more resilient during natural hazards. The goals and objectives of the 2020 plan includes:

- 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.
- Conduct education and outreach activities intended to better inform people about hazards and encourage personal responsibility for preparedness and mitigation
- Improve emergency preparedness and response capabilities
- Enact planning and policy measures to reduce the impacts of identified hazards and make future development more resilient to hazards
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The implementation status of individual mitigation actions outlined in chapter seven (7) of the plan is summarized in a tabular format in Section 5 (Review of Mitigation Actions) of this report.

3 Recommendations

Implementation and maintenance of the plan is critical to the overall success of hazard mitigation planning. The CRS Coordinator will work closely with Charlotte-Mecklenburg Emergency Management (CMEMO) and others to monitor activities and update procedures as needed to meet CRS requirements.

4 Dissemination

This Progress Report will be made available to the Charlotte City Council in August, 2021. The report will also be made available online to the general public via <https://www.charlottenc.gov>. Additionally, copies of this report are available at the Charlotte Mecklenburg Storm Water Services office located at 2145 Suttle Avenue, Charlotte, NC 28208. For more information, please call (980) 314-3207.

5 Review of Mitigation Actions

Action#	Mitigation Action	2021 Implementation Status Update
Charlotte- 1	Consider the need to add or revise existing policies or regulations to more thoroughly address natural hazards during the update of the City’s Zoning Ordinance.	Under development- Stormwater regulations will be incorporated in the Charlotte Unified Development Ordinance.
Charlotte- 2	Enhance area planning activities to better address potential natural hazards.	Under development- These elements will be considered and incorporated in the Charlotte 2040 Comprehensive Plan.
Charlotte- 3	<p>Maintain continued compliance with the National Flood Insurance Program (NFIP) through implementation and periodic evaluation of the following higher regulatory standards (in addition to basic required compliance actions):</p> <ul style="list-style-type: none"> a) Development standards linked to Community Floodplain (Future Conditions). b) Require critical facilities protection to 500-year flood levels. c) Require parking lots to be elevated (no more than six inches deep in any parking space during Community Flood event). d) Require dry land access for new or substantially improved buildings (above Community Flood BFE); e) Levee restrictions. f) Cumulative substantial damage improvement provision. g) Prohibit basements below flood level on filled lots 	County revised floodplain ordinance in November 2018 following extensive review by stakeholder group, advisory council, and County attorney. Goal was to improve clarity, conform with state model ordinance, and adopt newly effective FIRM panels. Higher standards maintained.
Charlotte- 4	Continue participation in the NFIP Community Rating System (CRS) with the goal of increasing CRS credit points to become a Class 4 community or better within five years.	The City of Charlotte has maintained participation in the CRS and is currently a Class 4 community. Effective October 1, 2021 Charlotte will become a Class 3 community
Charlotte- 5	Seek opportunities to provide information and education to Planning staff regarding risks associated with natural hazards and potential prevention/mitigation planning strategies.	Planning staff will continue to seek American Planning Association (APA) related training in conjunction with American Institute of Certified Planners (AICP) Certification Maintenance (CM) credits. On April 12, 2019, we hosted a group viewing of the Principles for Preparing a Community’s Disaster Recovery Plan webinar. The 2-hour course is sponsored by the APA Hazard Mitigation and Disaster Recovery Planning Division and eligible for 2 CM credits.
Charlotte- 6	On an annual basis, coordinate with municipalities on a widespread public outreach activity to provide information on all natural hazards facing the area to local residents, including methods for mitigating and preventing damages from hazardous conditions and how to respond when an imminent hazard threatens.	Ongoing All Hazards Advisory Committee (AHAC) and Local Emergency Planning Committee (LEPC) meetings held on a quarterly basis. AHAC/LEPC Meeting Dates: February 11, 2021, May 13, 2021, and September 9, 2021.

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		<p>February 11, 2021: first AHAC/LEPC meeting of the year; provided COVID update; upcoming plans and areas of concern for the year.</p> <p>May 13, 2021: Brad Panovich presented on the upcoming Hurricane Season and Charlotte-Mecklenburg Storm Water Services provided information on updates to FINS.</p> <p>September 9, 2021: Coming soon</p> <p>Joint Information System (JIS) utilized to coordinate public information across municipalities to communicate important information during an imminent hazard event.</p>
Charlotte- 7	On an annual basis, coordinate with municipalities to provide information on all natural hazards facing the area to local planning staff and elected officials. This should be combined with an annual progress report on the status of local mitigation actions as identified in the Multi-jurisdictional Hazard Mitigation Plan.	All Hazards Advisory Committee (AHAC) meeting held on February 11, May 13, and September 9 in 2021.
Charlotte- 8	Implement spring public information campaign aimed at tornado and severe weather awareness to include information on safe rooms.	<p>Severe Weather Preparedness Week occurred March 2021, including the Statewide Tornado Drill.</p> <p>Charlotte is a Storm Ready Community (designation updated in summer 2020).</p> <p>Charlotte-Mecklenburg Emergency Management and Charlotte-Mecklenburg Storm Water Services held a joint media availability during Hurricane Preparedness Week in May 2021.</p>
Charlotte- 9	Train emergency responders and managers for flood emergencies.	EM has conducted annual trainings including state flood operations training and continues to provide updates.
Charlotte- 10	Equip emergency responders and managers for flood emergencies, including swift water rescue.	Equipment evaluation continues, Ford F-550 prime mover along with two additional boat trailers added to the fleet
Charlotte- 11	Conduct disaster drills for division managers.	Tabletop exercises (TTX) held in multiple hazard areas for a variety of stakeholders including a Senior Leadership TTX. Multiple TTXs provided in the months leading up to the Republican National Convention in August 2020.
Charlotte- 12	Provide and maintain NIMS training for all KBE's, division heads and key government officials.	On-going ICS/NIMS training programs have been established to support the local Incident Management Team (IMT).

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Charlotte- 13	Develop evacuation routes that are not adversely affected by flooding.	Coordinating with 83 rd Civil Affairs Battalion, US Army, in ongoing planning and consultation
Charlotte- 14	Improve the dissemination of hazard information, including maps, broadcasts, Internet Web site(s) and listservs.	CharMeck Alerts continues to be advertised as a main method of receiving emergency notifications. CharMeck Alert is an opt-in system. There is also the ability to send wireless emergency alerts (WEAs) in the case of severe emergencies. A WEA was sent to part of the county during a flood event in November 2020.
Charlotte- 15	Provide information regarding encroachments, abandonments, new construction, and leases.	City zoning and planning provide ongoing outreach
Charlotte- 16	Inspect the condition of 50% of the critical assets (culverts greater than 48 inches that are under City-maintained streets) on a regular schedule (every 5 years).	The City is continuing to meet this objective of inspecting the condition of the critical assets on a regular schedule.
Charlotte- 17	Identify, rank and prioritize capital improvement projects. Revising current criteria to strategically prioritize work by managing our assets.	The City introduced new risk-based asset prioritization criteria in FY 2020 which will be fully incorporated into the CIP program by FY25.
Charlotte- 18	Initiate (plan, design and construct) capital improvement projects to improve 20 linear miles of system between 2020 and 2025.	7.9 miles of system were improved in FY 2020. 12.5 miles of system were improved in FY 2021. This is a total of 20.4 miles.
Charlotte- 19	Identify and map known areas/streets subject to flooding that are outside of currently mapped floodplain areas based on: (1) drainage concerns reported through 311; and (2) past incident reports from the Fire Department and the Charlotte-Mecklenburg Police Department for flooding calls, road closings, swift water rescues, etc.	A geodatabase is being maintained as well as a map containing hazard mitigation data. 311 calls are recorded and analyzed. We receive a monthly export from Fire for flooding rescue calls and also receive data from CDOT for road closures due to flooding. The data is updated monthly, and we have added a Hazard Mitigation layer to the last update of Add Common Themes in ArcGIS.
Charlotte- 20	Maintain continued compliance with the National Flood Insurance Program (NFIP) through implementation and periodic evaluation of the following higher regulatory standards (in addition to basic required compliance actions): a) Implement updates in methodology to Community Floodplain (Future Conditions) b) Additional 1-foot freeboard in the interim before Community Floodplains are updated	County revised floodplain ordinance in November 2018 following extensive review by stakeholder group, advisory council, and County attorney. Goal was to improve clarity, conform with state model ordinance, and adopt newly effective FIRM panels. Higher standards maintained
Charlotte- 21	Strive to have all other NFIP Community Rating System (CRS) municipalities in Mecklenburg County reach a Class 5 rating or better.	The City of Charlotte is currently a Class 4 community. Effective October 1, 2021 Charlotte will become a Class 3 community.

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Charlotte- 22	Create media campaign/message to relay to local media and the general public prior to forecasted severe storm events.	<p>Campaign messaging provided through social media, digital ads, utility bill inserts, and traditional broadcast.</p> <p>The National Association of Flood and Stormwater Management Agencies recognized the Storm Water Services flood safety educational campaign with its top overall 2020 Excellence in Communications award.</p> <p>Social Media Followers: 7,500 Facebook, 1,000 Twitter, and 1,100 Instagram</p>
Charlotte- 23	Conduct annual inspections on ponds/dams that City of Charlotte Storm Water Services has accepted maintenance responsibility.	Annual inspections of 45 dams and associated structures were completed in March 2021. In addition, inspections have been completed prior to large storm events on an as needed basis (i.e., Tropical Storm Sally).
Charlotte- 24	Retrofit critical facilities and City-owned facilities for improved resilience to all hazards with the use of the latest building materials and technology. This could include, but is not limited to; wind retrofits, low water consumption fixtures, leak detectors, backup generators, ignition-resistant materials, lightning protection, hail resistant roofing, and anchoring fixed building equipment.	Evaluation and improvement of critical facilities, including the Charlotte-Mecklenburg Emergency Operations Center, is ongoing.
Charlotte- 25	Install and maintain backup generators or quick connect hook ups for mobile generators on any newly constructed City-owned critical facilities.	Upfitted three Charlotte-Mecklenburg Police division headquarters buildings and one new Charlotte Fire Department station with back-up generators.
Charlotte- 26	Develop a plan to identify and map fueling sites with underground storage tanks and either install backup generators or quick connect hook ups for mobile generators.	An updated and improved emergency fueling plan was developed for the City of Charlotte during the fuel shortage in May 2021.