

II. The Planning Process

A. Overview

This section shall serve as the documentation of the planning process utilized to develop the update of the Orange County Hazard Mitigation Plan in accordance with the requirements of Code of Federal Regulations, Title 44, Part 201 for local mitigation plans (44 CFR §201.6, Local Mitigation Plans).

This is an update of the Orange County Hazard Mitigation Plan, which was approved and ultimately adopted in October of 2004. The original plan and this update encompass the unincorporated areas of Orange County, the Town of Carrboro, and the Town of Hillsborough. In accordance with the approved plan, the Orange County Planning Department has served as the coordinator of the hazard mitigation plan update. However, the Orange County Hazard Mitigation (OCHM) Team consists of members representing the Town of Carrboro, Town of Hillsborough, as well as the County.

B. Plan Update Process

The OCHM Team kicked off the update process the latter half of 2008. Orange County Planning staff attended a hazard mitigation plan update session. Individually, team members reviewed the *Local Multi-Hazard Mitigation Planning Guidance* (FEMA, July 1, 2008) and began the evaluation of the approved Orange County Hazard Mitigation Plan. The plan update tracks the guidance provided for in FEMA's *Local Multi-Hazard Mitigation Planning Guidance*, published in July 2008.

The Orange County Planning Department managed the plan update process, organizing meetings and coordinating agendas, updating plan data, and developing drafts of updated plan sections. Representatives from the participating municipalities evaluated their respective Community Capability Assessments and made revisions, as necessary. The OCHM Team met periodically to review and comment on the draft plan updates and discuss possible modifications to methods, goals, and mitigation strategies. Collectively, the OCHM Team evaluated current conditions, hazard occurrences within Orange County since the original plan was adopted, and the mitigation goals included within that plan. The team determined the risk assessment previously adopted was still applicable to the County and participating municipalities and changes were not necessary. In addition, the previously developed goals were determined to remain valid. The majority of the revisions made in the updated plan were modifications to data tables and values, incorporating the most current and best available data. Additionally, the OCHM Team modified the formatting in the updated plan to be more consistent with the most recent adopted State Hazard Mitigation Plan Update from October 2007. The following subsections outline the OCHM Team's specific methods for evaluating and editing specific sections of the Hazard Mitigation Plan Update:

The Planning Process: Collectively, the OCHM Team reviewed 'The Planning Process' section of the adopted plan and determined the methodology was relevant only to the adoption of the original hazard mitigation plan. The language in the adopted plan was outdated and was not applicable to the plan update methods. The OCHM determined 'The Planning Process' section of the update would be re-written to outline the current

conditions. In addition, the team determined the overall format of the adopted plan, including 'The Planning Process' section, was difficult to follow and should be re-worked for ease of use and to be more consistent with the most recent adopted State Hazard Mitigation Plan Update from October 2007.

Risk Assessment: As the adopted plan included the best available data from 2004, the OCHM Team determined that the data outlined in the Risk Assessment should be updated to reflect the best data available currently. The OCHM Team reviewed the adopted State Hazard Mitigation Plan Update (2007), as well as data provided by the National Weather Service, NOAA, and the State of North Carolina for more up to date information on severe weather occurrences and natural disasters affecting the United States, as well as the plan area. The majority of the revisions determined necessary by the team reflect the most current data available. In addition, the OCHM Team evaluated the hazards described within the Risk Assessment section of the plan. While several of the hazards discussed are unlikely to affect Orange County and the municipalities party to the Hazard Mitigation Plan (i.e. volcanoes, earthquakes, tsunamis), the team determined the description of the hazards included in the original adopted plan should remain in the update. The hazards described in the adopted plan were specifically required to be included in the original document by previous authorities and elected officials. While they remain in the update, additional analysis of those hazards was deemed unnecessary. Also, based on comments received, the OCHM team elected to revise the likelihood of Tornadoes potentially impacting Orange County and the Towns of Carrboro and Hillsborough, from "Unlikely" to "Possible". In addition, earthquakes were determined to be "Unlikely", versus "Possible". Finally, the OCHM Team determined the property information and values included in the adopted plan were also outdated. The Risk Assessment was revised to reflect the most current property value data for Unincorporated Orange County, the Town of Carrboro and the Town of Hillsborough.

Mitigation Strategy: The OCHM Team reviewed the mitigation strategies and Action Items included in the original Orange County Hazard Mitigation Plan. After much discussion, the team determined the mitigation strategies for the hazard designated as "Moderate" and "High" remained valid. Minor revisions were made to the text but the strategies remained the same. The Team also determined further analysis and strategies were not necessary for the hazards identified as "Low" in the plan update. In addition, each jurisdiction updated their Capability Analyses shown in Appendices B, C and D to reflect the most current regulations and programs in place for each participating jurisdiction.

Plan Maintenance: The OCHM Team discussed the Plan Maintenance procedures included in the approved Orange County Hazard Mitigation Plan and determined the overall processes were still appropriate. Minor changes to the text were made to make the language more current.

The plans, studies and technical data sources reviewed by the OCHM Team and incorporated in the plan update are listed below. These sources are noted throughout the plan update.

- National Oceanic and Atmospheric Administration (NOAA) - Top 20 States for Number of Tornadoes, Fatalities, and Damages, 1950 to 2007
- National Transportation Safety Board – Accident Database & Synopses

- "The Deadliest, Costliest, and Most Intense United States Tropical Cyclones from 1851 to 2006 (and Other Frequently Requested Hurricane Facts)" by Eric S. Blake, Edward N. Rappaport, and Christopher W. Landsea, National Weather Service – National Hurricane Center, Miami FL, 2007
- Hazards & Vulnerability Research Institute (2008). The Spatial Hazard Events and Losses Database for the United States, Version 6.2 [Online Database]. Columbia, SC: University of South Carolina. Available from <http://www.sheldus.org> "
- State Hazard Mitigation Plan, Final 2007
- National Climatic Data Center - "Storm Data and Unusual Weather Phenomena
- Dam Safety Program, NC Division of Land Resources
- Orange County 2030 Comprehensive Plan
- Orange County Zoning Ordinance
- Orange County Subdivision Regulations
- Orange County Economic Development District Design Manual
- Orange County Soil Erosion and Sedimentation Control Ordinance
- Carrboro Vision 2020, Policies Through the Year 2020
- Town of Carrboro Land Use Ordinance
- North Carolina Flood Mapping Program
- Hillsborough Zoning Ordinance
- Hillsborough Subdivision Regulations
- Hillsborough Vision 2010 Revised Plan
- Hillsborough Floodplain Ordinance
- Agreement Between Town of Hillsborough and Orange County to provide Soil and Erosion Control

The Orange County Hazard Mitigation Plan Update received FEMA 'Approval Pending Adoption' on March 16, 2010. The plan was then presented to the Orange County Board of County Commissioners, the Carrboro Board of Alderman, and the Hillsborough Board of Commissioners for review and adoption. The resolutions of adoption for each jurisdiction are included in Appendix F.

C. Public Involvement

Over the past several years, Orange County and the Towns of Carrboro and Hillsborough have held numerous public meetings to gain citizen input into planning topics and programs. Although hazard mitigation has generally not been the topic per se, programs and regulations that directly mitigate hazard vulnerability have been implemented. For example, both Orange County and Carrboro do not allow any new construction within floodplain areas, regardless of finished elevation. In addition, both of these jurisdictions have implemented regulations that limit development in areas with steep slopes.

Citizens were invited to comment on the draft of the original Orange County Hazard Mitigation Plan on February 25, 2002. The Orange County Board of Commissioners held a public hearing on this date at the Orange County Courthouse located in Hillsborough. The meeting was advertised in the *News of Orange* and *Chapel Hill Herald* newspapers. No public comments were received during the plan development process.

The Town of Carrboro's Board of Aldermen held a public meeting on May 18, 2004 to receive public comments on the draft of the Hazard Mitigation Plan. Notice of the public hearing ran in the *Chapel Hill News*. No public comments were received.

As required by the North Carolina Division of Emergency Management, a public meeting notice was sent to neighboring communities, agencies, business interests, academic interests, nonprofits, and other interested parties on August 6, 2004 inviting them to a public meeting held on August 26, 2004. In addition, notice of the meeting was published in the *Chapel Hill News*, *Chapel Hill Herald*, and *News of Orange* informing the general public of the meeting regarding the draft Hazard Mitigation Plan and inviting public comment on the plan. The only meeting attendees were local government employees who had worked on the plan.

Following adoption, the Orange County Hazard Mitigation Plan was posted on the Planning and Inspections page of the official Orange County Government website. Contact information for the Planning staff member involved in the development and adoption of the plan is also provided to allow interested parties to comment on the plan or ask questions of staff. The plan has remained posted continually since 2004. Once approved and adopted, the Hazard Mitigation Plan Update will be added to the County's website. The Town of Carrboro will also provide a link to the most up-to-date hazard mitigation plan on its website.

Orange County, the Town of Carrboro and the Town of Hillsborough revise ordinances as needed. Many ordinance revisions involve policies which are both directly and indirectly related to hazard mitigation within each jurisdiction. For example, Orange County recently amended the Official Zoning Ordinance to incorporate the previously adopted Flood Damage Prevention Ordinance. This amendment involved meetings with local advisory boards, advertised public hearings and citizen input. This specific case is not isolated. Each jurisdiction processes similar cases on a regular basis, all of which involve citizen advisory boards, public hearings and community outreach. Each jurisdiction maintains transparency in policy development and adoption and requires the opportunity for public involvement.