

I. INTRODUCTION

When a major natural event strikes our built environment, it is deemed a “natural disaster.” Hazard mitigation is simply about preventing natural disasters. The idea of preventing natural disasters at first seems counterintuitive if not impossible. We certainly cannot prevent natural events, like hurricanes and tornados. Yet the impacts of natural events – who and what gets hurt – are largely determined by what, where, and how we build and function. Thus, some impacts of natural hazards on our population, and economic, social, and physical environment are, in the bigger picture, self-inflicted. As citizens and local government entities, we have not inherited a perfectly planned and resilient community. Thus, we must assess current vulnerabilities resulting from past decisions relating to development design and location in an effort to reduce the harmful impacts of natural, and in some cases man-made, hazards.

North Carolina Emergency Management summarizes hazard mitigation as follows:

“Hazard mitigation involves the use of specific measures to reduce the impact of hazards on people and the built environment. Measures may include both structural and non-structural techniques, such as protecting buildings and infrastructure from the forces of nature or wise floodplain management practices. Actions may be taken to protect both existing and/or future development. It is widely accepted that the most effective mitigation measures are implemented before an event at the local government level, where decisions on the regulation and control of development are ultimately made.”

II. PAMLICO SOUND REGION

A regional hazard mitigation plan is classified by the Federal Emergency Management Agency (FEMA) as any mitigation planning effort involving two or more county jurisdictions. This Hazard Mitigation Plan (HMP) involves a five-county region including Beaufort County, Carteret County, Craven County, Hyde County, and Pamlico County. All the municipalities within these five counties are also participants in this plan. Once completed and certified by FEMA, this document will replace all mitigation planning documents previously adopted by any of the participating jurisdictions.

This Regional HMP is being developed as a new document. The planning process and format is being developed in a manner that will facilitate future updates and implementation at the regional scale.

Beaufort, Carteret, Craven, Hyde, and Pamlico counties each maintain a Local Emergency Planning Committee. The Local Emergency Planning Committees (LEPC) are federally mandated entities composed of state and local officials, business representatives and members of the press. The role of the LEPC is to form a partnership with local governments and industries as a resource for enhancing hazardous materials preparedness. This includes incorporating planning for hazmat incidents into the local emergency

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management plan and annexes; assessing capabilities and developing hazmat response capability using local resources, mutual aid and contractors; training responders; and exercising the plan.

Incorporation of the LEPCs into the planning process will assist the Regional MAC in working through the development of regional mitigation strategies. Ultimately, Craven County will function as lead agency in the development of a plan that will serve the mitigation needs of all five participating counties. Craven County was charged with administratively dealing with all grant program requirements; however, all jurisdictions will be addressed equally through the development of this plan.

III. HAZARD MITIGATION LEGISLATION

In the early 1990s, a new federal policy regarding disasters began to evolve. Rather than simply reacting whenever disasters strike communities, the federal government would encourage communities to first assess their vulnerability to various disasters, and then take actions to reduce or eliminate potential risks. The logic is simply that a disaster resistant community can rebound from a natural disaster with less loss of property or human injury, at much lower cost, and consequently more quickly. Moreover, other costs associated with disasters, such as the time lost from productive activity by business and industries, are minimized.

The Robert T. Stafford Disaster Relief and Emergency Assistance Act (Pub. Law 93-288, as amended) embodies this new philosophy. Section 409 of the Stafford Act sets forth the requirements that communities evaluate natural hazards within their respective jurisdictions and develop an appropriate plan of action to mitigate those hazards.

The amended Stafford Act requires that the community identify potential hazards to the health, safety and well-being of its residents and identify and prioritize actions that can be taken by the community to mitigate those hazards – before disaster strikes. For communities to remain eligible for hazard mitigation assistance from the federal government, they must first prepare a hazard mitigation plan (this plan). These plans may be developed at the municipal, county, or regional level.

Responsibility for fulfilling the requirements of Section 409 of the Stafford Act and administering the FEMA Hazard Mitigation Program, as outlined in the Code of Federal Regulations (44 CFR 206.405), has been delegated to the State of North Carolina, specifically to the North Carolina Division of Emergency Management (NCEM).

The Disaster Mitigation Act of 2000 (DMA 2K) amended the Robert T. Stafford Disaster Relief and Emergency Assistance Act (the Act) by repealing the previous mitigation planning provisions (Section 409) and replacing them with a new set of mitigation plan requirements (Section 322). This new section emphasizes the need for state, tribal, and local entities to closely coordinate mitigation planning and implementation efforts.

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On July 1, 2008, FEMA issued a revised version of the *Local Multi-Hazard Mitigation Planning Guidance* (“Blue Book”), which is the standard utilized for preparation of this plan. Among the most significant changes in the planning guidelines reflected in this update are 1) estimation of the numbers and types of structures that have experienced repetitive flood losses, 2) identification of actions to ensure continued local compliance with the National Flood Insurance Program (NFIP), and 3) integration of Community Rating System (CRS) planning initiatives with the overall hazard mitigation planning process.

IV. WHAT IS HAZARD MITIGATION AND WHY IS IT IMPORTANT TO THE PAMLICO SOUND REGION?

A. What is Hazard Mitigation?

Hazard mitigation is the practice of reducing risks to people and property from natural disasters. Hazard mitigation involves recognizing and adapting to natural forces, and is defined by FEMA as any sustained action taken to reduce long-term risk to human life and property from natural hazards. A fundamental premise of hazard mitigation is that current dollars invested in mitigation will significantly reduce the demand for future expenditures by reducing the extent of emergency recovering, repair, and reconstruction following a disaster.

B. Why is Hazard Mitigation Important to the Pamlico Sound Region?

The Pamlico Sound Regional Hazard Mitigation Plan (HMP) is being completed to attain the following goals:

- ▶ Promote the public health, safety, and general welfare of residents and minimize public and private losses due to natural hazards.
- ▶ Reduce the risk and impact of future natural disasters by regulating development in known high hazard areas.
- ▶ Pursue funds to reduce the risk of natural hazards to existing developments where such hazards are clearly identified and the mitigation efforts are cost-effective.
- ▶ Effectively expedite post-disaster reconstruction.
- ▶ Provide education to citizens that empower them to protect themselves and their families from natural hazards.
- ▶ Protect fragile natural and scenic areas within the planning jurisdiction.
- ▶ Improve upon regional emergency service provision and response.

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These goals were developed through discussions with the Mitigation Advisory Committee (MAC) and served as the foundation for the development of regional and local strategies outlined within Section 6 of the plan.

Hazard mitigation planning is intended to construct a framework for the prevention and reaction to disasters if and when they may occur. The framework created by this plan will help to instill an ongoing effort to lessen the impact that disasters have on citizens and property throughout the region. There are many aspects of mitigation planning that cannot be addressed at the regional level. In order to address this issue, this plan will outline strategies that will address both regional mitigation initiatives and strategies that serve the needs of each individual participating jurisdiction.

V. PLAN FORMAT

In developing this plan, including all strategic initiatives and policy statements, the following factors were taken into account:

- ▶ The strategy will improve upon the region's participation and role in the National Flood Insurance Program; and
- ▶ The policy meets at least one community mitigation goal; and
- ▶ The policy complies with all laws and regulations; and
- ▶ The policy is cost-beneficial; and
- ▶ The community implementing the policy has (or will have) the capability to do so; and
- ▶ The policy is environmentally sound; and
- ▶ The policy is technically feasible.

The plan format is presented in a manner that the MAC feels best represents the current situation within the region, as well as each participating jurisdiction. In developing this plan, the Pamlico Sound region has been viewed as a single entity; however, when necessary a detailed overview of county and municipal data is provided.

The plan content is organized as follows:

Section 1. Introduction

This section of the HMP update provides a statement of the problem, the purpose of the plan, acknowledges the participants in the planning process, describes the planning process, and reviews the citizen participation and adoption process for the HMP.

Section 2. Community Profiles

This section of the HMP update outlines the existing conditions throughout the Region and the participating jurisdictions. These overviews address the following existing conditions: history, demographics, topography, climate, and other general information regarding the community. The detailed profiles provided within this section address each county independently. The demographic composition of each county within the Pamlico Sound region varies greatly and the data within Section 2 outlines the key differences.

Section 3. Hazard Identification and Analysis

This section of the HMP update provides relevant data and narrative descriptions of natural hazards that impact the Pamlico Sound region. The information within this section is based on interviews with local officials and on public data sources such as the National Climatic Data Center and FEMA. Throughout this section the Pamlico Sound Region is addressed as a single entity. The hazards identified and discussed within this section generally impact each individual county equally. Due to this fact the weather history and likelihood of occurrence data has been presented at the regional scale.

Section 4. Community Capability Assessment

This section of the HMP update provides an assessment of each community's current hazard mitigation practices, as well as its potential to engage in mitigation activities. This section provides an overview of both regional and local mechanisms available to key decision makers. All participating jurisdictions within this plan have been addressed within this plan's capability review. The following is addressed for each county and municipal government participating in this planning effort: administrative capabilities, infrastructure policies (when applicable), land development controls, and existing local and state policy programs.

Section 5. Vulnerability Assessment

This section of the HMP update identifies specific locations throughout the Pamlico Sound Region that are vulnerable to natural hazards through narrative, data, and maps. The vulnerability assessment looks at each county independently. This approach was taken due to discrepancies in data that exist between each individual county. In working through this assessment, the best available data was utilized to conduct a vulnerability assessment that will give an indication of existing and future "at-risk" development within each participating jurisdiction.

Section 6. Mitigation Strategies

This section of the HMP identifies local/regional goals, objectives, and specific strategies which will respond to identified mitigation needs by completing the following steps:

- ▶ Identifying policies to carry out the mitigation strategies
- ▶ Creating an action plan for the mitigation strategies
- ▶ Prioritizing the policies
- ▶ Identifying funding sources
- ▶ Assigning implementation responsibilities

Strategies have been developed to address both regional and local needs. In developing this plan, it was determined that although this is a regional planning effort, some mitigation efforts are carried out at the county and/or municipal level. Due to this distinction, a wide range of implementation strategies are provided ranging from very broad (regional) to very specific (local project specific strategies).

Section 7. Plan Maintenance and Implementation Procedures

This section of the HMP provides procedures for ongoing monitoring and evaluation after the HMP is adopted by each community's governing body, NCEM, and FEMA. Additionally, this section outlines procedures to ensure that an annual evaluation report is prepared and appropriate revisions and updates of the plan are completed.

Appendices

These sections present supporting documentation as outlined within the plan. All maps referenced throughout the HMP will be included in Appendix A.

VI. INCORPORATION OF EXISTING PLANS, STUDIES, AND REPORTS

Each jurisdiction participating in this plan, including all municipalities, has a wide range of existing policy and regulatory documents to assist in the preparation of the Hazard Mitigation Plan. Information from each respective county's Comprehensive Plan, Zoning/Subdivision Ordinance (where applicable), and Flood Damage Prevention Ordinance were instrumental in compiling information presented in this plan. Through implementation of this plan each participating jurisdiction will continue to reference these documents in an effort to carry out an effective mitigation program at both the local and regional level. A summary of plans and ordinances currently maintained by each participating jurisdiction is provided in Section 4, Community Capability Assessment.

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VII. PLANNING PROCESS

In 2012, Craven County applied for and received a Pre-Disaster Mitigation (PDM) Program grant through the North Carolina Division of Emergency Management (NCEM) for the Pamlico Sound Region. NCEM approved the county's grant application and the hazard mitigation planning process began. Upon receipt of the aforementioned PDM grant, primary responsibility for development of the Pamlico Sound Regional Hazard Mitigation Plan was placed in the hands of the Planning Directors and/or Emergency Management Directors for Beaufort, Carteret, Craven, Hyde, and Pamlico counties.

In early 2013, Craven County procured the services of Holland Consulting Planners, Inc., (HCP) of Wilmington, North Carolina, to assist in the development of a comprehensive Hazard Mitigation Plan Update for the five-county region.

Subsequent to establishing a work authorization with the planning consultant, Craven County called an initial scoping meeting with the project consultant and all regional partners. This meeting involved a general discussion of how the project should be carried out, including establishing a Regional Mitigation Advisory Committee (MAC) to oversee plan development.

Through discussions at the initial meeting, it was determined that the best approach to dealing with this effort would be to establish a Regional MAC, while still maintaining the presence and membership of each individual County MAC. The Regional MAC was charged with developing the overall document and establishing regional strategies. All regional MAC meetings are open to the public, including the MAC members of each individual county jurisdiction. Each County MAC was charged with addressing the needs of their respective county, and was responsible for reviewing the draft and identifying any gaps, errors, and/or omissions.

Dealing with natural hazards and disasters is rarely the responsibility of one employee or official in any community. Rather, it is a team effort, often comprised of representatives from administration, planning/zoning, public works, fire/police, and other offices. These various interests are represented on each County MAC in order to efficiently address this "multi-disciplinary" aspect of hazard mitigation.

County MAC members were charged with the responsibility of working through the development of local strategies, and assisting the consultant through compiling the information, input, and background required to develop the overall regional plan. The following provides a listing of the Regional MAC members that participated in meetings for each participating County jurisdiction (see Section 7, page 7-5 for listings of individual county MAC members).

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Pamlico Sound Regional Mitigation Advisory Committee

<u>MAC Member</u>	<u>Jurisdiction/Agency</u>
Randell Woodruff, County Manager	Beaufort County Representatives
John Pack, Emergency Management Coordinator	
Russell Overman, County Manager	Carteret County Representatives
John Ford, Emergency Services Director	
Eugene Foxworth, Planning Director	
Jack B. Veit, III, County Manager	Craven County Representatives
Donald R. Baumgardner, Planning Director	
Chad Strawn, Assistant Planning Director	
Stanley Kite, Emergency Services Director	
Ira Whitford, Asst. Emergency Services Director	
Bill Rich, County Manager	Hyde County Representatives
Kris Noble, Planning Director	
Justin Gibbs, Emergency Services Director	
Tim Buck, County Manager	Pamlico County Representatives
Chris Murray, County Emergency Coordinator	
Dee Sage, Planning & Economic Development Director	

A series of meetings were held to develop the Pamlico Sound Regional Hazard Mitigation Plan. A minimum of two MAC meetings were held in each county. Notification of all county MAC meetings were made via email communication or hard copy letter depending upon the preference of the jurisdiction (see Appendix B for participation documentation). The distribution list was established in concert with each participating county. Additionally, four (4) meetings of the Regional MAC were held and two (2) widely advertised public input meetings were convened. The following provides a brief summary of all meetings held and what was addressed at each:

Beaufort County

- ▶ **September 16, 2013:** The initial meeting of the Beaufort County MAC was held. This meeting was focused on a review of the county's existing plan including: confirmation of critical facilities, a review of the current hazard summary and impact ratings, and a discussion of progress in relation to current mitigation actions.
- ▶ **May 27, 2014:** The second MAC meeting was rescheduled due to poor attendance.
- ▶ **June 10, 2014:** At the rescheduled second meeting of the Beaufort County MAC, revised strategies were submitted for review and discussion. Discussion focused on finalizing draft strategies and reviewing the steps necessary to complete the draft plan.

Carteret County

- ▶ October 29, 2013: The initial meeting of the Carteret County MAC focused on a review of the county's existing multi-jurisdictional plan including: confirmation of critical facilities, a review of the current hazard summary and impact ratings, and a discussion of progress in relation to current mitigation actions.
- ▶ June 12, 2014: This meeting served to educate new county staffing about the project in general, including what progress had been made to date.
- ▶ June 27, 2014: At the third meeting of the Carteret County MAC, revised strategies were submitted for review and discussion. Discussion focused on finalizing draft strategies and reviewing the steps necessary to complete the draft plan.

Craven County

- ▶ December 6, 2013: Following selection of a project consultant, Craven County, acting as lead agency, held a coordination meeting with the consultant. This meeting focused on working through project logistics.
- ▶ March 11, 2014: The initial meeting of the Craven County MAC was held. An overview of the project scope and schedule was provided. Participating jurisdictions were asked to review elements of the county's existing plan relevant to their jurisdictions.
- ▶ May 27, 2014: This meeting focused on a review of draft mitigation strategies to be incorporated into the plan. Additionally, the MAC discussed progress that had been made in relation to mitigation activities currently in place. The MAC also discussed review and submittal of the draft plan to NC Emergency Management.

Hyde County

- ▶ January 23, 2014: The initial meeting of the Hyde County MAC was held. This meeting was focused on a review of the county's existing plan including: confirmation of critical facilities, discussion of hazard events since adoption of the existing plan, a review of the current hazard summary and impact ratings, and a discussion of progress in relation to current mitigation actions. The MAC members were requested to review the existing plan policies and provide comments on the effectiveness of existing policies.

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- ▶ April 3, 2014: At the second meeting of the Hyde County MAC, the revised strategies were discussed. A schedule for finalizing draft strategies and reviewing the steps necessary to complete the draft plan was discussed. The MAC was provided an update on the posting of the plan on the project website.

Pamlico County

- ▶ July 18, 2013: The initial meeting of the Pamlico County MAC was held. This meeting was focused on a review of the county's existing plan including: confirmation of critical facilities, a review of the current hazard summary and impact ratings, and a discussion of progress in relation to current mitigation actions.
- ▶ May 16, 2014: At the second meeting of the Pamlico County MAC, revised strategies were submitted for review and discussion. Discussion focused on finalizing draft strategies and reviewing the steps necessary to complete the draft plan.

Regional Mitigation Advisory Committee Meetings

- ▶ November 2013: An initial meeting of the Regional MAC was held. Project partners, including representatives of each participating jurisdiction were in attendance. This meeting focused on providing an overview of the project including how the planning process would be carried out.
- ▶ March 21, 2014: A meeting of the Regional MAC was held to provide an update on the project's status. The Regional MAC also discussed draft Regional mitigation strategies for incorporation into the draft plan.
- ▶ May 22, 2014: The Regional MAC convened and finalized the draft Regional mitigation strategies. Additionally, a summary of steps required to finish the project was discussed.
- ▶ June 20, 2014: The final meeting of the Regional MAC was held. At this meeting, an overview of the draft plan was provided in addition to a summary of project closeout procedures.

Regional Project Citizen Participation

In order to solicit public input regarding the Pamlico Sound Regional HMP, two public forums were held; one in New Bern (Craven County) and the other in Newport (Carteret County). These meetings were advertised locally through a newspaper of general circulation in each participating county. Affidavits of publication for the meeting notices have been provided in Appendix C.

- ▶ July 7, 2014: The initial public forum was held in conjunction with the regularly scheduled Craven County Board of Commissioners meeting. The formal meeting was televised locally. No comments from the public were received at this meeting.

- ▶ August 18, 2014: The second public forum was held in the Town of Newport Council Chambers. An overview of the project was provided and no comments from the public were received.

Initial draft sections of the plan were completed and distributed to the MAC on December 16, 2013, with a final draft version of the entire plan being distributed in October 8, 2014, to all Regional MAC members. Additionally, the plan was posted on the Craven County project website (<http://www.pamlicosoundhmp.org>) for review by the following agencies and organizations: NC Forest Service, NC Department of Transportation, NC Cooperative Extension, NC Department of Environment and Natural Resources, American Red Cross, NC Office of Emergency Medical Services, Eastern Regional Advisory Committee (ERAC), and Craven Community College. All adjacent county jurisdictions were made aware that the plan was available for review as well. All entities were notified via email in an effort to solicit input, and included a link to the project website (see Appendix C). No comments have been received to date; however, any comments received prior to adoption and certification will be incorporated into the plan.

Review comments were received from Regional MAC members by October 31, 2014, and NCEM on _____. Revisions were made to the final draft HMP based on these comments (see Appendix D).

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VIII. AUTHORITY FOR HMP ADOPTION AND RELEVANT LEGISLATION

This HMP Update will be adopted by the Beaufort, Carteret, Craven, Hyde, and Pamlico County Boards of Commissioners and the governing bodies of each of the participating municipalities under the authorities and police powers granted to county and municipal governments by the North Carolina General Statutes (see NCGS, Chapter 153A).

The HMP has been developed in accordance with the requirements of the following laws, regulations, and guidance:

- ▶ North Carolina General Statutes (N.C.G.S), Chapter 166-A: North Carolina Emergency Management Act, as amended by Senate Bill 300: An Act to Amend the Laws Regarding Emergency Management as Recommended by the Legislative Disaster Response and Recovery Commissioner (a.k.a. Session Law 2001-214), adopted June 15, 2001; and
- ▶ Public Law 106-390, The Robert T. Stafford Disaster Mitigation Act of 2000, as amended (adopted October 30, 2000); and
- ▶ Interim Final Regulations regarding Hazard Mitigation Planning and the Hazard Mitigation Grant Program at 44 C.F.R. Parts 201 and 206 as published in the Federal Register: October 1, 2002 (Volume 67, Number 190, Page 61512-61515).

The above-listed laws, regulations and guidance should be carefully monitored to ensure continued compliance.