

Outer Banks Regional Hazard Mitigation Plan

Meeting 1: Hazard Mitigation Planning Committee Project Kick-Off Meeting – Dare

Time & Date: Tuesday, March 5, 2019, 3:00-5:00 p.m.

Location: Dare County Emergency Operations Center, 370 Airport Road, Manteo

Introductions

Drew Pearson, Dare County Emergency Management Director, welcomed everyone to the meeting, gave a brief overview of the previous plan, discussed the change to a smaller planning region of just Dare and Currituck Counties, and emphasized the importance of the hazard mitigation planning process in terms of eligibility for FEMA grant funding, preparation for emergency management, and eligibility for Community Rating System (CRS) credit. Drew then introduced David Stroud and Abby Moore, consultants from Wood, to facilitate the rest of the meeting. David began by providing the meeting agenda and had everyone in attendance introduce themselves. There were 30 attendees recorded on the sign-in sheet, including representatives from all Dare County jurisdictions participating in the plan update.

Hazard Mitigation Plan Update Requirement

David discussed the Disaster Mitigation Act of 2000 plan update requirement and the HMGP grant process. Communities are required to update their hazard mitigation plans every five years to remain eligible for federal disaster funding. HMGP funding is provided by the North Carolina Division of Emergency Management with a 75% federal/25% local cost share.

Trends in Disasters

Trends are resulting in increases costs for disaster response and recovery. As growth and development occur, exposure to hazard events increases, particularly as the desirable locations with waterfront or water access in the region are also areas with greater risk. Exposure to risk includes the people as well as the infrastructure and buildings. Because exposure has increased, when hazard events occur they cause more damage. There are also more hazards, with recognition of human-caused hazards, and trends toward more severe hazard events. There has been a continual increase in hazard expenses and an increase in the issuance of major disaster declarations. David reviewed a list of the costliest natural disasters by NOAA estimates. All of them occurred within the last 30 years, and 9 occurred within the last 20 years. These figures did not include Hurricanes Florence and Michael because it is still too early to estimate the full costs of these disasters. David also noted that these costs are general damage estimates, but that the actual cost of disasters to state and local governments, businesses, insurance companies, homeowners, and others is much higher.

Four reasons why addressing these trends is a priority were presented: 1) the cost of doing nothing is too high as the costs of response and recovery continue to grow; 2) many events are predictable and repetitive; 3) loss reduction activities can be undertaken, and they work, they're cost effective and environmentally sound, and there are funds available to help; and 4) there are legal and moral responsibilities to act.

Planning Requirements

David reviewed the Disaster Mitigation Act (DMA) of 2000 planning requirements, which include a four-phase planning process: organize resources, risk assessment, develop a mitigation plan, and adoption and implementation. The approach that will be led by the consultant team at Wood blends this four-phase process with the processes of the Flood Mitigation Assistance (FMA) Program and the Community Rating System (CRS) Floodplain Management Planning. This completed Hazard Mitigation Plan (HMP) will meet the requirements of all three FEMA programs.

David discussed the main phases of this planning process, as follows:

Phase I: Organize Resources, will involve planning for public involvement and coordinating with other departments and agencies. Other stakeholders to involve include North Carolina Emergency Management, FEMA Region IV, NOAA, other adjoining communities, citizens, schools, businesses, and others.

Phase II: Risk Assessment entails hazard identification (what can happen here), vulnerability assessment (what will be affected or impacted), and capability assessment (how prepared we are).

David presented Wood's recommendations for which hazards to include in the plan. The HMPC's discussion on the hazard identification is summarized as follows, by hazard:

- ▶ Terrorism: The HMPC expressed concern that there are several sites with a high concentration of people as well as several large-scale events hosted in Dare County. Due to these concerns, terrorism will be profiled in the plan. Vulnerability is assessed using hypothetical scenario modeling. This will be done for two scenarios.
- ▶ Flooding: Concerns were raised about secondary hazards from contamination of waterbodies as a result of flooding, especially insofar as the impacts may affect the fishing industry. The hazard profile will discuss these concerns and the consequence analysis will specifically address impacts on the economy and the environment. The extent to which this will be included in the vulnerability assessment will depend on the availability of data. Lora Eddy from the Nature Conservancy may have some information on nutrient loading to share. We will also look into whether this issue would be eligible for FEMA mitigation funding or whether it would fall under EPA jurisdiction. On a separate issue, there was concern expressed that the FIRM and therefore the IRISK data will not fully encompass flood issues because the current FIRM does not model rainfall. To compensate for problem areas not addressed on the FIRM, we will assess localized stormwater flooding issues; this will require that all jurisdictions submit information on the location of stormwater problem areas / hot spots.
- ▶ Dam Failure: A question was raised about the impact of upstream dam releases. The NC Dam Inventory does not list any dams in Dare or Currituck counties nor in the larger Pasquotank River Basin, and the region is not listed as the direct downstream community for any upstream dams.
- ▶ Erosion: Many committee members expressed concern about estuarine and Sound-side erosion as this results in increased vulnerability to storm surge flooding from the Sound. SLOSH models do not adequately address sound-side flooding. We will attempt to show this flood potential within the assessment of sea level rise.
- ▶ Rip Current: David noted that rip currents cannot be predicted and that the hazard cannot be altered, so mitigation would be difficult other than potential for public education. FEMA will not fund life-saving efforts as mitigation. The HMPC decided that rip currents should remain in the plan because of the number of deaths they cause every year. It was decided that rip currents will be addressed under the coastal hazards section.
- ▶ Tsunami: David clarified that there is no precedent for tsunami on the east coast and little to no geological foundation to support a tsunami occurring. The HMPC felt that the hazard should still be included because there has been previous encouragement from the state for the Counties to be designated as "Tsunami Ready". The HMPC decided tsunami should be addressed within the earthquake hazard.
- ▶ Hazardous Materials Incident: There was concern about fixed facility and transportation related hazardous materials incidents, including incidents occurring on the water such as an oil spill. It was decided that this hazard will be profiled in the plan.
- ▶ Cyber Threat: David noted that information will be difficult to find at a local level for this hazard and that it was likely included in the state plan because the vulnerability and exposure is so much greater at the state level. However, the HMPC felt that because Dare County serves as the regional 911 center for 3 counties there is significant vulnerability in the region to cyber threat.
- ▶ Transportation Infrastructure Failure: This hazard was included in the previous plan as Transportation Infrastructure Impacts. A question was raised as to why this would be removed from the new plan. Abby noted that transportation infrastructure impacts will be assessed for every hazard that may impact key infrastructure. HMPC members still want to profile this as an independent hazard because of the County's significant dependence on a few key bridges and roads. An example was given of a barge hitting a bridge and damaging it. David noted that these are not predictable or repetitive events that can be measured, but the HMPC decided to profile the hazard.

- ▶ **Sea Level Rise:** It was confirmed that sea level rise will be addressed within the Coastal Hazards profile.

Based on this discussion, the following hazards will be profiled: Flooding, Hurricane & Coastal Hazards (Erosion, Rip Current, Nor'easter), Severe Winter Weather, Extreme Heat, Earthquake (Tsunami), Wildfire, Drought, Severe Thunderstorm, Hazardous Materials Incident, Terrorism, Cyber Threat, Transportation Infrastructure Failure. The vulnerability assessment will use NCEM IRISK data. Hazards will be prioritized using the Priority Risk Index. Each community will self-assess capability to determine ability to implement projects and where gaps exist.

Phase III: Develop Mitigation Plan involves setting planning goals, reviewing mitigation alternatives, and drafting an action plan. Typical strategies are to alter the hazard, avert the hazard, adapt to the hazard, or avoid the hazard. In addition to reviewing actions from the previous plan, the HMPC may need to develop new actions.

Scope of Work

The plan will meet the following criteria:

- The plan will include all required elements, as defined in the FEMA Local Mitigation Plan Review Guide.
- The plan will meet or exceed the final rule for local mitigation planning found in 44 CFR, Section 201.6, in order to be approved by FEMA.
- Natural hazards assessed in the plan will coordinate with the current FEMA-approved State Mitigation Plan.
- The plan will include natural and human-caused hazards and mitigation measures.
- The plan will incorporate any local climate adaptation data and findings.

Risk Management Tool

Abby discussed North Carolina Emergency Management's new tool for mitigation planning, which will be used in this effort. RMT integrates all available IRISK data to assist in the vulnerability assessment. Additionally, the RMT will generate and maintain a digital version of the plan, which may be useful in plan maintenance and future updates.

Project Schedule

The anticipated project schedule was presented. The process will aim for completion of a final draft document by August 2019 to send to NCEM for review. This timeline does not include final approval and adoption of the plan. The update must be approved and adopted by June 2020.

Working Groups

The region will be divided into a Dare County Working Group and a Currituck County Working Group for the entirety of the planning process due to facilitate ease of attendance at planning meetings.

Plan Website

Abby presented the website for the planning process, which will be a tool for HMPC coordination and public outreach. The website is www.OBX-HMP.com. The site contains upcoming meetings announcements, meeting agendas and minutes, the public survey, draft documents of the plan update, information on the identified hazards, and opportunities to provide feedback. All communities are encouraged to place a link to this website on their local community pages to encourage more public involvement.

Next Steps

Community representatives need to complete the capability assessment and return it to Abby at abigail.moore@woodplc.com by March 29th. Representatives should come to the next meeting with a status identified for all existing mitigation actions from the 2015 plan. It was noted that more substantial information than "ongoing" must be provided for continuing actions; it should be clearly noted for each action whether it's Completed, Deleted, or Carried Forward. Representatives should also be prepared to discuss revisions to the mitigation goals. The capability assessment and past actions are posted on the plan website.