

**THE SUMMARY OF THE MEETING OF THE  
HRPDC REGIONAL ENVIRONMENTAL COMMITTEE  
October 4, 2018**

**1. Summary of the September 6, 2018 Meeting of the Hampton Roads Regional Environmental Committee.**

There were no comments on the September meeting summary.

**2. Public Comments**

There were no public comments.

**3. Hurricane Florence Evacuation and Know Your Zone**

Mr. Stewart Baker, Hurricane Program Manager for the Virginia Department of Emergency Management (VDEM), discussed evacuation decision-making processes in advance of major storms. VDEM initially tracks all storms as they develop, and will commence its evacuation action timeline 144 hours prior to the estimated arrival time of a storm should a threat arise. The Department consistently conducts threat assessments to determine the arrival of storm impacts and account for time needed for each evacuation zone to evacuate prior to those impacts. Clearance times have been estimated for each zone to account for any level of evacuation, as well as decisions on highway lane reversals. Levels of evacuation are determined by storm intensity and the direction in which the storm is moving. Last, VDEM coordinates with localities to communicate its plans throughout this process, including a Governor's conference call with chief elected officials and conference calls with localities.

Mr. Matt Fanghella asked Mr. Baker to explain lane reversals. Mr. Baker replied that following Hurricane Floyd in 1999, many states developed plans to reverse the direction of interstates to allow for quicker evacuations. He explained that highway lane reversals have not yet been used in Virginia, but improvements still have been made, such as gates installed at interchanges to better direct traffic.

Ms. Beth Arnold asked whether there was a provision for buses to evacuate those without vehicles. Mr. Baker replied affirmatively that VDEM has buses to move people to shelters based upon locality requests.

Mr. Fanghella asked whether VDEM has accounted for any risks for residents not evacuated who need to move through other evacuated zones. Mr. Baker replied that zones were determined by past flooding events, storm impacts, and isolation from storm surge, but that they are conservative for residents' safety.

Ms. Jill Sunderland asked if there is a minimum time an evacuation needs to last. Mr. Baker replied that no, there is no minimum, but the duration of an evacuation is determined by whether there are perceived storm or flooding threats in the affected area.

Mr. Ben McFarlane asked why the National Hurricane Center does not release storm surge predictions until 48 hours prior to a storm event. Mr. Baker replied that it releases its predictions closer to the event because it has greater certainty at that time, although VDEM continually asks for more information.

Dr. KC Filippino asked whether a report would be completed on the response to Hurricane Florence. Mr. Baker replied that VDEM would produce a report.

#### **4. U.S. Army Corps of Engineers (USACE) Feasibility Studies (3x3x3)**

Mr. Greg Steele, USACE, briefed the committee on 3x3x3 studies, which provide a quick and cost-effective route for USACE and non-federal partners to identify specific projects for potential authorization. He first explained the process for initiating a water resources project, beginning with local perception of a water resources problem or opportunity through to USACE initiation of a feasibility study once funding is appropriated. Mr. Steele then expanded how federal authority impacts the projects USACE studies, defining what to study and where. Such authority may be granted in resolutions from the House Transportation and Infrastructure Committee, the Senate Environment and Public Works Committee, the Water Resources Development Act (WRDA), or, rarely, in the appropriations process. Further, there are existing authorities for smaller projects.

Mr. Steele explained there are short-term and long-term study options available within USACE to meet the navigational, environmental, and other water resource issues identified by localities. In the short-term, planning assistance is available to states and flood plain management services where study is needed, but construction may not be available. Similarly, small scale water resource issues may be feasible where construction is desired. In the long-term, USACE would initiate a General Investigation (GI) study leading to construction recommendations for larger projects with multiple issues. In order to access construction funding, USACE must have the proper authorization and appropriations from Congress.

USACE has a focused portfolio of priority feasibility studies, which are expected to follow a 3-3-3 rule: 3-year study duration; \$3 million maximum cost per study; and vertical team integration at three command levels. The goal of these studies is to derive a recommendation from USACE based on a Benefit Cost Ratio (BCR). As an example, Mr. Steele expanded further on the Norfolk Coastal Storm Risk Management Study, its timeline, and the public engagement process.

Mr. McFarlane emphasized that authorization is a critical component to initiating these studies. The proposed WRDA reauthorization bill (S. 3021) would allow USACE greater flexibility to study water resources issues across multiple jurisdictions, which would be beneficial to projects identified in Hampton Roads.

Mr. Matt Smith asked how funding is appropriated. Mr. Steele replied that funding decisions are made two years ahead of time, but, in the absence of earmarks, the appropriations process offers USACE some flexibility on projects it funds.

## **5. Regional Green Infrastructure Planning**

Dr. KC Filippino and Mr. Ben McFarlane, HRPDC, briefed the Committee on updates to regional Green Infrastructure planning. Dr. Filippino described the need for an update since the last Green Infrastructure Plans were published in 2007 and 2010, as well as factors such as new technologies, tools, and practices. She provided an overview of the goals for an updated planning effort, including working to reach all types of local planners; to educate local staff on tools available and why they may wish to use them; and to raise awareness of options available, such as HRGEO and other online tools.

Mr. McFarlane explained that the updates will include data inputs such as land use/cover, future rainfall frequency/duration, sea level rise/climate change predictions, and shoreline analysis. These data inputs will be used to provide analyses such as identifying flooding hot spots and areas for natural water storage and appropriate areas for shoreline adaptation. The planning process would also include policy recommendations, funding focuses, and priorities. He described the regional benefits of the initiative, including a one-stop shop for data layers and analytical tools; filtering capabilities to address specific needs; links to available analyses and protocols to conduct analysis; and possibly tools for custom-made analyses. It was clarified that the result will not be a static planning document, and instead, it will be a toolbox available to assist localities as they incorporate green infrastructure strategies into their own planning efforts.

Last, a timeline was offered, which so far has included developing a roadmap for the initiative. In 2019, staff plans to gather data and create base layers. In 2020 and moving forward, staff will develop analyses and policy recommendations, followed by development of an application.

Ms. Barbara Brumbaugh asked if staff intended to pursue grant funding, and Mr. McFarlane replied that the Coastal Zone Management grant that the HRPDC receives annually from the state may be a good fit for this project.

## **6. Coastal Zone Management Program Update**

Mr. McFarlane provided an update on CZM program accomplishments for FY17-18. The HRPDC annually receives funding from the Virginia Coastal Zone Management Program to support local and regional coastal resources management. The program includes technical assistance for localities, data acquisition, management and analysis, special research projects, environmental impact review of state and federal projects, and coordination of local governments, state agencies, and other stakeholders.

The HRPDC is placing a greater emphasis on special projects, such as the green infrastructure planning effort. For this year, one of the special projects was to develop a roadmap for green infrastructure planning to guide future research and analysis projects. Another project for this year was the development of a GIS application to assist with grant requirements for environmental review. The application includes data layers such as flood plains, AICUZ, airports, and coastal barrier islands. This project was

developed to meet a specific need and as a demonstration of types of applications that can be developed through this program.

## **7. Status Reports**

CBF – Mr. Tanner Council announced the Lafayette River Restoration Celebration was to be held on October 8, 2018 at the Norfolk Yacht & Country Club. More information is available here: <http://chesapeake.cbf.org/site/Calendar?id=101361&view=Detail>.

DEQ – Mr. Matt Fanghella thanked the permittees for submitting MS4 annual reports on time. He also responded to a question Ms. Sunderland had asked a few weeks ago regarding the first reporting year of the new MS4 General Permit, which will span two General Permits. He indicated that Phase II MS4 permittees should prepare their annual reports that are due on October 1, 2019 based solely on requirements listed in the new MS4 General Permit.

DEQ – Ms. Kristie Britt reported the Tidewater Regional Office is hiring new staff and working on its 2018 report.

HRPDC – Mr. McFarlane reported that a resolution regarding recommended policy approaches to sea level rise will be voted on at the next HRPDC meeting scheduled for October 18, 2018.

The next meeting of the Regional Environmental Committee will be held on November 1, 2018 in Chesapeake, VA.