

**Environmental Management Commission
Water Allocation Committee
Minutes**

**March 13, 2019
9:00 a.m.**

On March 13, 2019, the Water Allocation Committee or WAC met in the Ground Floor Hearing Room at the Archdale Building in Raleigh, North Carolina.

WAC Members in Attendance:

Dr. Suzanne Lazorick (WAC Chairwoman)
David Anderson (WAC Vice-Chair)
Shannon Arata
Charlie Carter
Mitch Gillespie
Bill Puette

Others Present:

Gerard Carroll
Marion Deerhake
Dr. Stan Meiburg (EMC Chairman)
George Pettus
JD Solomon
Julie Wilsey
Philip Reynolds, Attorney General's office

I. Preliminary Matters:

In accordance with North Carolina General Statute §138A-15, Chairwoman Lazorick asked if any WAC member knew of a known conflict of interest or appearance of conflict with respect to items on the March 13, 2019 WAC agenda; none of the committee members identified a conflict. Chairwoman Lazorick asked if there were any comments or corrections regarding the minutes from the January 9, 2019 meeting. There were no comments or corrections. Mr. Anderson made a motion to approve the January 9, 2019 meeting minutes. The motion was seconded by Mr. Puette and the January 9, 2019 minutes were unanimously approved.

II. Information Items:

- A. NC Flood Risk: Strategies for Resilience - (Randy Mundt and Scott Gentry, NC Department of Public Safety, Risk Management Section)**

The Division of Emergency Management is the lead state agency for hazard risk management, with responsibilities that include flood mitigation planning. The agency communicates risk and drives mitigation activities to minimize risk. Emergency Management supports local level planning by providing technical assistance and at the state level provides capability assessments including the need for acquisition and relocation of properties at risk.

Data that is collected for hazard mapping includes tax data, footprint data for structures, first floor elevation data for structures, and floodplain elevation. Hazard mapping can then be used to estimate flood depths and cost estimates for damages for different recurrence interval storms. Following Hurricane Matthew, the agency used this mapping to identify the number of buildings and the estimated financial impact based on the first-floor flood depth of affected buildings.

Flood hazard data is updated by county. Emergency Management meets with community officials, collects data, and hosts public open houses to communicate flood risk. When communicating risk, the risk analyses help illustrate that the level of risk isn't the same across a community. It is important to identify vulnerable people and property and where there could be disruption to business due to flooding in order to designate "hot spots" on a hazard map, which helps raise local awareness.

Strategies to reduce flood risk cover a wide spectrum, from prevention through zoning regulations, building codes, and open space preservation, to other best practices like stormwater management, structural projects for natural resource and property protection, and public education. Charlotte-Mecklenburg approaches flood risk using multiple strategies, including zoning, insurance, building codes, and stormwater fees. The City has prioritized risks, identified retrofit candidates, acquired properties at flood risk, and restored floodplains as part of its flood risk mitigation efforts. Federal mitigation funding is available through several grant programs administered by FEMA including the Hazard Mitigation Grant Program, Pre-Disaster Mitigation Grant, and Flood Mitigation Assistance.

The Flood Inundation Mapping and Alert Network (FIMAN) is available to the public. This real-time flood inundation mapping shows both current and forecasted flooding across the state and can estimate risk and damage costs. The mapping software operates using a dashboard concept, is interactive, and can show river stage, flow, and forecasted levels. FIMAN can be used to illustrate structures that are or could be impacted by flooding at various depths. FIMAN was used to map the approach of Hurricane Florence, to map projected flooding, and then to map actual impacts after the storm. The predictions and actual impacts were very close, helping to validate the model and provide confidence in the projections that it provides.

Questions and Discussion:

Mr. Gillespie asked how far the state has come in risk assessment since Hurricane Floyd in 1999? He noted that there is still a high cost after flood events, and asked what are we missing? Is there a comprehensive statewide risk assessment to help prevent damage and

financial losses? Mr. Mundt responded that the Hazard Mitigation Plan is very comprehensive and feeds information to the State Mitigation Plan, which promotes higher standards. The Hazard Mitigation Plan contains the state's vision for greater resiliency. He also noted that we have inherited infrastructure such as roadways and bridges that were built before our current level of risk awareness, and it is very difficult if not impossible to remove much of this infrastructure now.

Ms. Wilsey asked whether the Division of Emergency Management has looked at roadway mitigation, such as elevating roads, especially after so many communities were isolated when roads were closed from recent storm events. Mr. Gentry and Mr. Mundt responded, replying that roads fall under the jurisdiction of the Department of Transportation and elevating roads is a DOT decision. However, DOT staff are present at the emergency center during times of a disaster, when Emergency Management is assisting with flood forecasting.

Dr. Lazorick commented that as a state we need to expect more severe weather events, and asked how do we plan for a 100-year storm versus a 1,000-year storm? Mr. Mundt replied that we need standards for higher level storms beyond the 100-year storm. FEMA is trying to address this need. We have the ability to map and estimate impacts from more significant events, but federal regulations need to catch up.

Ms. Arata asked how long does it take local government to incorporate flood hazard data into local planning efforts? Mr. Mundt replied that it depends on the local community's capability to incorporate the digital data that is already available. There is a need for better linking of risk assessment with the mitigation planning process.

Mr. Puette asked who Emergency Management interacts with at the local level? Mr. Mundt answered the agency interacts with the county emergency management director, planning and zoning departments, and more peripherally the COGs (councils of local governments).

III. Concluding Remarks:

Chairwoman Lazorick asked if there was anything else that needed to be discussed or if there were other comments. Chairwoman Lazorick briefly mentioned upcoming agenda topics and asked committee members to send any ideas for future WAC agenda topics to Kim Nimmer. There were no additional comments by the committee members or staff. The meeting was adjourned.