

2016 Texas and North Carolina State Flood Risk Symposia

In May 2016, the Texas Floodplain Management Association (TFMA), and the North Carolina Association of Floodplain Managers (NCAAFPM), in coordination with the national Association of State Floodplain Managers (ASFPM) Foundation, each hosted one day Symposia to discuss the many concerns about recent flooding, climate change impacts, flood risk identification, and related topics in their respective states. The TFMA Symposia was held at the San Antonio Westin Riverwalk, and the NCAAFPM Symposia was held at the Wake Tech Community College in Raleigh.

In recent years, North Carolina has experienced several flood related hazards across the state, such as increased coastal flooding, coal ash dam spills, and storm affects from Hurricane Joaquin. The State of North Carolina and several proactive communities have been working together for years to assess and analyze riverine and coastal flooding hazards. However, many within the emergency management and planning field recognize that much more can be done within the state to further outreach, education and communication of these flooding hazards.

Recent flooding causing massive destruction and loss of life, has heightened concern and awareness throughout the state of Texas. In 2016, Governor Greg Abbott signed an initiative to provide the Texas Water Development Board with funds to implement a stream gage warning system and explore more options for early warning systems.

The goal for each Symposium was to assemble a diverse group of individuals who will contribute toward productive discussions and potential solutions. Invitees include community staff responsible for managing floodplains within their communities, emergency managers, scientists, members of the engineering, business and environmental communities, and local elected officials who comprehend the flooding issues in their communities. We have also invited representatives from state and federal agencies, including FEMA, which administers the National Flood Insurance Program.



The purpose of the symposium was not only to generate ideas and solutions from within our group of professionals and jurisdiction representatives but also to understand and include the many challenges and multi-faceted interests of all other potential stakeholders as well. Only by

working in serious partnerships with all stakeholders do we stand a chance of being successful in managing our floodplains effectively.

Each State had a series of compelling plenary speakers, touching on critical needs for partnerships on issues very pertinent to each State throughout their presentations.

For Texas, the following plenary speakers presented:

- Don Ferguson, City of Wimberley, presented “Setting the Stage - A Review of the 2015 Texas Floods”. This devastating Memorial Day 2015 flood caused loss of life and property in the Wimberley area initiating a call to action from emergency responders in all surrounding counties.
- Paul Yura, National Weather Service – “National Weather Service – During the Storms” was comprehensive report on the recent flooding in Texas. Paul shared data from a meteorologist’s perspective and showed not only the storms, but the buildup and aftermath.
- Texas Water Development Board Chairman, Bech Bruun addressed the “Disaster Funding from Governor Abbott for TWDB Enhanced Flood Programs in 2016”. Chairman Bruun spoke on the need for stream gauges and preparedness in flood prone areas.

For North Carolina, the following plenary speakers presented:

- Dave Canaan, Director of Mecklenburg County Storm Water Services in Charlotte, North Carolina. He provides overall direction and guidance on financial, budgetary, organizational, planning and regulatory matters related to storm water/floodplain management; and land development services in Mecklenburg County.
- John Dorman, Assistant North Carolina Emergency Management Director for Risk Management. He is responsible for all design, build, acquisition, analysis, and dissemination of data, models, analysis, systems and applications associated with hazard risk management. He is currently the Chair of the National Technical Mapping Advisory Council. Dr. Gavin Smith, Director of The University of North Carolina at Chapel Hill, Department of Homeland Security’s Coastal Resilience Center of Excellence, a consortium of universities located across the country. He is currently engaged in a number of planning and policy-related research projects within the center including an assessment of the role governor’s and state agency officials play in disaster recovery.

Following the plenary presentations, the Symposia attendees were broken up into three groups for Texas, and four groups for North Carolina, that were then led by facilitators from the Foundation and group reporters and scribes from the Chapter, who helped lead discussions on the following breakout group topics –

Texas –

- Over the next 5 years, what should state and local communities be working on to reduce the risk and damages of flooding and increase community resilience?
- How can we improve the communication and understanding of flood risk to the public, elected officials, and the business community to ensure community resilience in the future?

- What is the role of flood warning systems and weather forecasting on local flooding now and in the future and how can we improve collaboration utilizing new technologies?

North Carolina –

- The State of North Carolina has long been known for being a "data rich" state. Over the past 15 years, the state has acquired, updated, and maintained vast amounts of flood related data. In addition, applications and tools have been developed to view and use the data. Going forward, how can these assets be utilized/leveraged to improve resiliency and contribute to flood insurance affordability?
- Over the next 15 years, what should the State and local communities be working on to reduce the risk and flood damage while increasing community resilience? Where are our training gaps and how do we close them? How do we deliver the consistent and timely training to smaller and understaffed locations?
- Recent advancements in GIS mapping, federal and state maintained stream and coastal gaging stations, flood forecasting, H&H modeling as well as flood probability raster dataset have afforded the development of flood warning applications such as North Carolina's FIMAN site. What should the role of flood warning systems and weather forecasting play in today's floodplain management and emergency response?
- As we witnessed in October in South Carolina, some of the most devastating and life threatening flooding occurs following single and or multiple dam failures. It is widely known that the lack of dam breach inundation areas impact accurate and timely warning of such events. What are the lessons learned and data gaps revealed from the South Carolina floods with respect to dam failure? What are the existing and potential data, tools, and processes that may be utilized to reduce future losses from dam failure?

These breakout groups were then given the opportunity to convene as a large group in the afternoon at each Symposium, and provide group report-outs to all attendees. This was beneficial in allowing visibility to and input from all groups on all topics. The outcomes of these discussions will be captured in a final Flood Risk Symposia Report from each State, along with actionable goals to achieve in continuing the dialogues and outcomes.

In summary, it is clear that as the professionals who are considered "experts" in this field, we need to continue to reach outside of our comfort zone and have sustainable floodplain management conversations with a very diverse group of stakeholders to achieve the goal of protecting our communities from flood related risk. As you are going about your work day, take a moment to think about collaboration, partnering and sharing resources. Who can you work with? How can you make sure that all stakeholders are being supported? In addition to your projects and programs being successful, how can you develop a program to enhance and showcase other community interests as well?

ASFPM State Flood Risk Symposia Background

The Association of State Floodplain Managers (ASFPM) Foundation has a strong presence in national discussions about flood risk. Over the past decade, the Foundation has sponsored five "Gilbert F. White National Flood Policy Forums," in which groups of 100 national and international experts and leaders convened in Washington, D.C.

The National Flood Policy Forums have focused on reducing flood losses, managing flood risks and floodplain resources, the future of floodplain management, holistic coast approaches, and addressing new Federal standards and requirements. The goal of each forum was to facilitate discussion on flood risk, establish priorities for improving policy and program implementation, and to formulate recommendations and directions for the future.

Based on the success of the national forums, in 2011 the Foundation began promoting similar meetings at the state level. Since 2011, Flood Risk Symposia have been held in Colorado, Indiana, Texas, Georgia, Florida, Illinois, and Arizona. For 2016, New York, Texas (for a 2nd time), and North Carolina were selected to host these State Flood Risk Symposia. In addition to productive discussions, there is a strong emphasis on proposed action items and how to measure progress in flood risk management at the community level.