

Testimony for the Senate Veterans Affairs and Emergency Preparedness &

Senate Environmental Resources and Energy Committees

April 25, 2018

Pennsylvania Emergency Management Agency Richard D. Flinn Jr., Director Good Morning Chairman Vulakovich, Chairman Costa, Chairman Yaw, Chairman Yudichak and members of the Senate Veterans Affairs & Emergency Preparedness and Senate Environmental Resources & Energy Committees. Thank you for the opportunity to come before you and provide testimony on flooding issues that affected the Commonwealth throughout the winter.

My name is Richard D. Flinn Jr., Director of the Pennsylvania Emergency Management Agency (PEMA). While we are a smaller agency, the mission we take on is important: to coordinate the state agency response and support county/local governments in the areas of disaster preparedness, and response to and recovery from disasters, human-caused or natural.

Each day PEMA is provided with a weather briefing from our State Meteorologist. These briefings provide PEMA and our partners with a weather outlook as well as potential hazards that could impact the Commonwealth. Additionally, the Meteorologist works with the National Weather Service (NWS) which produces several products that are used to project weather impacts. During the winter, the NWS provides a Winter/Spring Flood Outlook every two week until the cold to warm season flood risk is non-existent. This product is provided to staff and our county partners in order to provide them with a general overview of what to expect.

Early in January 2018, the Commonwealth experienced colder than normal temperatures which resulted in increasing ice cover and thickness on the rivers. The temperatures were followed by a

period of milder weather, melting snow and rainfall which resulted in increased ice jam/flooding potential throughout the state.

During a one-month period, January 10, 2018 to February 12, 2018, the 24-hour Commonwealth Watch and Warning Center (CWWC) logged 33 incidents of ice jams/flooding into our Knowledge Center incident reporting software. These incidents were reported by the county emergency management agencies. As these incidents came into the CWWC, PEMA area offices and Headquarters remained engaged with our county partners ready to assist the counties with any unmet needs.

On January 17th, PEMA held a series of conference calls with our three area offices, NWS, Army Corps of Engineers, and the impacted counties to discuss the ice jams and offer assistances, if needed. An additional call took place on January 26th with Dauphin, York, Lancaster and Cumberland counties, as well as NWS and Safe Harbor Dam officials to discuss ice jam flooding at dams on the lower Susquehanna River. Lancaster County followed the Lower Susquehanna Regional Ice Jam plan as the flooding alert went to a level IV of a V level system. Those along the rivers were asked to monitor conditions for potential flooding. The Civil Air Patrol conducted flyovers of the lower Susquehanna and drones were deployed to monitor condition.

As these incidents occurred, PEMA would work with our municipal and county first responders who had been monitoring these events and conducting assessments of their ice jams to determine impacts and what mitigation actions to take.

Emergency Management officials and first responders used drones, boots on the ground and river gauges to monitor ice jams and water levels. PEMA deployed staff to impacted communities as well as participated on calls with County/Local Emergency officials to help them determine how to address the ice jam/flooding they were experiencing. During these conversations with impacted areas, a variety of techniques were discussed to address the ice jam, including:

- Continuous monitoring to ensure water flow was consistent under the ice which would allow it to flow downstream
- Calling in the US Army Corps of Engineers for additional assistance
- Weakening/clearing ice using excavation equipment
- Using ice breakers, towboats, hovercraft to break up the blockage
- Ice blasting using dynamite

In order to mitigate ice jams during this winter, communities used a number of mitigation techniques, the most common being to use excavating equipment to clear the jam. Communities worked with their local emergency responders, public works departments, fire department and the Department of Environmental Protections to break up ice jams so that water could continue to flow downstream.

PEMA worked with our partners to ensure that messaging went out to the affected communities informing them of the risks ice jams present, including flooding in low lying areas as well as downstream communities to ensure they were prepared to take action if necessary.

While we cannot prevent ice jams from occurring, PEMA has been working to reduce the damage that occurs to property owners from ice jams through our hazard mitigation (HM) division. This groups works with communities around the Commonwealth to do Acquisition/Demolition, Home Elevations and Hazard Mitigation Planning projects to reduce the impact of flooding to property. During the past two ice jam seasons, PEMA has been notified that due to HM projects in Petersburg, Huntingdon County, and West Pittston Borough, Luzerne County, locals removed homes from harm's way prior to the ice jam/flooding events. Our HM staff is also working with the Department of Community and Economic Development and several other state and local partners and associations to draft the state's first comprehensive Pre-Disaster Recovery Plan to be completed in 2019.

Additionally, PEMA and the Susquehanna River Basin Commission finished a FEMA Hazard Mitigation Grant Program pilot with Dauphin, Lancaster and Huntingdon counties. In this pilot, cameras were set up permanently at flood-prone areas in those counties, some have infrared capability, which can assist at night and for ice jam determinations. These cameras report on-line so that anyone going to the website has verification of what height the water is or whether there might be an ice jam. As we transition to spring, which is traditionally when we see flooding in Pennsylvania, counties have additional weather events including snow storms, flash floods, high wind and landslides. PEMA continues to work with communities impacted by these events. On April 10th, Governor Wolf and I traveled to Allegheny County to visit communities that were affected by landslides. PEMA sent disaster assessment teams out to Allegheny County to work alongside the county emergency management professionals in order to conduct a review of the area in order to determine which type of assistance the Commonwealth should apply for those impacted.

I would like to end by thanking the men and women in the emergency management community for the work they have done for the citizens of the Commonwealth year-round and the communication, coordination, and cooperation we have had during these winter/spring events. I appreciate the opportunity to appear here today and I will answer any questions you might have.