

April 22, 2018

Senate of Pennsylvania
Veteran's Affairs & Emergency Preparedness Committee
Senate Environmental Resources & Energy Committee

First, I would like to thank the Senate Veteran's Affairs & Emergency Preparedness Committee, the Senate Environmental Resources & Energy Committee, and Senator Randy Vulakovich for allowing me to testify on behalf of the Borough of Etna regarding flooding and emergency preparedness in our community.

This past winter, Western Pennsylvania, Allegheny County, has experienced repeated heavy rainfalls, large snow falls and drastic temperature changes. The combination of these three weather events which occurred sporadically, many times all three in a week and even in a given day, have caused flooding and landslide issues throughout our County, including Etna Borough. The quick snow melts caused by the frequent rainstorms added to the inundated streams, creeks, rivers and sewer systems. None of which have the capacity to sustain and pass these events through their systems.

Etna Borough lies about seven miles north of the City of Pittsburgh, with a population of 3,405 and was incorporated in 1868. We are 150 years old this year. The town grew into a vibrant industrial based community, developing along the Allegheny River and housed several steel mills for a century and more, including Armco Steel and Carnegie Steel, which later became U. S. Steel. With the decline of the steel industry and significant job loss, along with the construction of State Route 28, which took four hundred homes for highway construction, Etna began to decline and today has a population of which 51% are low to moderate income.

Etna Borough is at the bottom of the Pine Creek Watershed, a 67- square mile watershed, which drains into Etna Borough, which itself comprises roughly 67/100's of a square mile of that watershed (less than 1%). Pine Creek begins near the border of Butler County and drains down into Etna into Pine Creek and to the Allegheny River. Etna also sits at the bottom

of the sewershed, and one half of Shaler Township, one-fifth of Ross Township and portions of Indiana and O'Hara Townships sewer through our community in order to connect to the regional sewage treatment system, the Allegheny County Sanitary Authority. Heavy rain events cause capacity issues in both the watershed (Pine Creek and the Allegheny River) and sewershed systems (sanitary and storm sewers), causing overtopping of stream banks, overflows from both the combined sewer and sanitary sewers into the stream (Pine Creek), and the roadway flooding as the storm systems cannot take the flows as they are at capacity.

In the aftermath of Hurricane Ivan, on September 17, 2004, Western Pennsylvania sustained major flooding throughout the region, particularly hard hit was a large portion of Allegheny County. Etna Borough sustained major flooding with four hundred homes (25% of properties), two hundred of those sustaining first floor flooding. The Etna Municipal Complex, housing Police, Fire and Administration services, had seven feet of water in it, hindering emergency response to our citizens. While this was an extraordinary event, beyond a 100- year storm, the devastation was widespread and catastrophic. Rehabilitation costs to homes, business and municipal facilities, including roads, water and sewer systems, and streambank restoration was in the billions of dollars.

Shortly after immediate response for health, safety and welfare was provided, the Etna Emergency Management Committee meet to review our response to this emergency and where it had been lacking. Included in that assessment was our ability to communicate with residents and businesses on preparation, evacuation and response during the event. This, as well as having the ability to conduct water rescues with the proper equipment, were paramount in our review. Our volunteer Fire Department at the time, had row boats. I personally watched as firemen tried to reach a building where a man was trapped on the first floor, with the waters ever rising, and watched as the row boat was tossed about in huge waves with large pieces of floating debris, which included cars, telephone poles and garbage dumpsters. It was nothing short of a miracle that those firemen not only survived but were able to reach the building, break out a window and save the trapped man. Etna Borough immediately set out to secure a better means of communication and better equipment for our emergency responders. Through state grant funding, DCED, the borough acquired a jet ski for the fire department and an emergency radio station, AM Alert 1670 to aid us in communication during future events. Since that time our

community has invested millions of dollars, the majority being secured through various grant programs, including the Community Development Block Grant Program, FEMA/PEMA Hazard Mitigation funds, Growing Greener 319 funding and State Dept. of Community and Economic Development funds, for flood protection work, including providing the Allegheny Valley Railroad \$700,000.00 to raise a railroad bridge at a bottleneck in Pine Creek in Etna and for sewer rehabilitation and storm water improvement projects. All of which leads me to the point I would like to make and that is flood protection MUST be a proactive focus of our federal, state, county and local government. Currently, it is a REACTIVE approach when substantial damage has already occurred, including loss of life in many cases.

Earlier I mentioned that the Municipal Complex sustained seven feet of flood waters in the aftermath of Hurricane Ivan. Etna recognized that flooding would happen again and that it had an obligation to respond to its citizens when flooding occurred. Protecting the municipal complex was critical to that response process. We were able to secure Hazard Mitigation Funding to floodproof our municipal complex. This floodproofing consists of the installation of air-tight barriers around all windows and doors at the municipal police and administrative offices. We were able to apply for this funding, as this project was proposed in the Allegheny County Hazard Mitigation Plan by Etna Borough and included by Allegheny County. All communities in Allegheny County are able to participate in the planning and updates to the Hazard Mitigation Plan. Etna participated heavily and asked that this project be included.

This past winter, Etna has had to have those barriers installed on two occasions, due to the potential overtopping of Pine Creek, which reached levels not seen since Ivan. With the advancements in technology, the Borough has acquired a reverse 911 phone calling system, a cost of \$2,500.00 annually, which allows us to pre-record messages that within a total of twenty minutes can contact every home, business and cell phone within our community. Cell phones are added voluntarily as the base system comes from the regional (County) 911 data base. After Ivan, we also converted a fire siren, through FEMA recovery funds as the siren's motor burnt out during Ivan as no one could get to it due to the height of the flood waters, into an Emergency Response Siren and developed a Warning System whereby residents are informed that if they hear the siren, they are to tune into AM 1670 for emergency notifications. They

are called in advance through the reverse 911 system informing them of precautions they need to take, which can include removing items from their basements and leaving the area to wait out the storm elsewhere. This entire system was practiced earlier last year, far in advance of the impending weather events and our residents greatly appreciated the test run and this helped them be prepared when we instituted the Warning System during several heavy storm events of the last year. Our residents are aware of levels within our waterways that trigger actions. They are reminded of this Warning System annually and when the waters rose this winter, they knew what they needed to do and what they could expect. All of these systems were used twice this past winter, historically, not the high flood prone season. Normally and traditionally spring was the season for worry – now any day, any season can see flooding.

We have worked closely with our neighbors in Pine Creek since Ivan through our Council of Governments, working on an Act 167 update for Pine Creek through the formation of the North Hills Council of Governments Stormwater Management Committee. I am the Chairperson of that Committee. We adopted the first multi-municipal Stormwater Management Ordinance across the state of Pennsylvania. These efforts have shown that regional communication and coordination can and will be successful. While these efforts have been fruitful, they are a far cry from the needs of the communities in addressing flooding and stormwater management to the degree necessary to adequately protect our citizenry and property. Funding and technical capacity is limited and stretched thin. Regional facilities need to be developed, funded, constructed and maintained. When I began my career at Etna Borough, flooding mostly occurred in downstream communities like Etna. That is not the case today. This past year saw frequent flooding of areas far upstream and far removed from Pine Creek. McKnight Road, as an example, flooded numerous times. This is a heavily built up, affluent shopping district, with little or no past instances of this level of flooding. The storm systems in place simply cannot handle the amount of runoff from these heavy rain events. Flood maps now include areas far removed from stream banks and natural floodplains. Regional facilities should be the focus of preventative action plans on the larger level to protect our most important assets, our citizens and the tax base of those communities, School Districts and Counties. They are vital to their continued operation.

Stream gauges have helped us have advance warning of impending disaster. They should be installed and monitored along all flood prone rivers and streams. Residents in Etna can log onto our website and look at the stream gauges that directly affect them during heavy rain falls. All emergency personnel have these gauge apps on their phones so that they can be monitored from anywhere. This should be standard for all. We direct residents on how to install this app on their phones so that they can monitor and be aware at any time and know when they need to begin preparing for the potential of flooding.

Many will say that the natural floodplains should be re-established. The issue with that is, the cost to demolish all those homes is exorbitant not to mention relocation costs. And where would they go? Traditionally homes located in these areas are far more affordable for people like teachers, nurses, postal workers, all vital to our society. They, too, are entitled to home ownership and the American dream. They have the ability to achieve that where property values are lower and more affordable. These are nice neighborhoods in our community, with good, hardworking people living there, contributing to our society in meaningful ways. It would be far cheaper to floodproof those homes or protect upstream then to tear them down and relocate people. As we relocate them, we just move the problems further upstream. FEMA and our own PEMA agencies are forced to react after events, when costs are incredible for reconstruction, rehabilitation and temporary housing. You can turn on the television almost any day and see flooding somewhere in our country with FEMA having to react to disaster after disaster; and not just flooding. We need a comprehensive approach, with everyone at the table to plan preventative actions plans and flood protection facility locations. Mitigation funding for acquisition cannot keep up with the amount of properties located within these zones, homes located there long before the advent of floodplain area establishment and flood insurance.

We need to incorporate a more holistic approach to development, including highway systems. Planning projects should be inclusive of the communities surrounding these projects to identify areas where stormwater and localized flooding is already an issue so that we aren't contributing to an existing problem. This should include technical experts like those at the Army Corps of Engineers, who deal with flood protection planning projects regularly so that features are built in at the time of

construction to lessen and perhaps actually improve flooding and stormwater issues already prevalent in those areas.

Lastly, I would like to talk about the National Flood Insurance Program. Flood insurance rates have increased steadily over the last few years. This increase is expected to be 25% over the next five years. This is due to the repeal of a former “grandfathering clause” (part of the Stafford Act) which provided a discount on federal flood insurance policies to properties located in flood hazard areas (100-year flood zone) built **prior** to the establishment of the national flood insurance program. This increase is driving people from these homes. If your median income is \$50,000.00 or \$60,000.00, you may be able to afford a mortgage but flood insurance costs will prohibit that affordability. This drives people to other areas where affordable home ownership doesn’t come with this price tag. This depletes the tax base of the community, School District and County. Not to mention bringing blight with the property abandonment. Blight brings a whole other set of dire circumstances to a community such as crime, drug abuse and disinvestment in the community. This taxes our emergency services even more. This helps NO ONE. The flood insurance program has not had a true overhaul in approach or in coordination with FEMA for decades. One is still a reactive based system and not tied to realistic means of mitigation or prevention; the other a means to recoup costs of the reactive actions through insurance premiums. Hard working home owners are paying exorbitant rates to help defray the cost of multi-million dollar, secondary costal homes. Please understand – they have that right to ownership of those properties but costs for rehabilitation after a coastal storm event incredible on these properties. One restoration could equal an entire block in an affordable neighborhood. Primary home ownership properties should not be paying the same rates as secondary, costal vacation homes. This drives home ownership reality out of the hands of hard working citizens and damages our own tax base in the process.

Finally, Etna is grateful to you all for allowing us to share our experiences with flooding and how we are addressing it to the best of our capabilities – both technically and financially. We understand the great difficulties that face our nation and our state that each of you are face daily and applaud you for taking up this regional issue.

Mary Ellen Ramage,
Manager, Borough of Etna