

**Testimony before the Pennsylvania Senate Majority Policy Committee and
Senate Environmental Resources and Energy Committee
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Honorable Chairs and Members of the Committees, in my role for AMEC Environment & Infrastructure, Inc. as well as in my involvement in the leadership of the American Public Works Association, which has three chapters in the Commonwealth of Pennsylvania, I have advocated on behalf of local governments to be empowered and supported to solve ever growing complex issues in water resource management. I have worked in local government water management and public works programs for over 28 years, most recently as a consultant on water policy, water program finance and local government operational program optimization. Previously I served as the Environmental Services Director for the City of Greensboro, North Carolina.

My firm's parent company, AMEC plc, is ranked among the top global consultancy firms providing engineering and project management services to industry and government worldwide. AMEC plc employs approximately 25,000 people in more than 30 countries. My Division, AMEC E&I, provides a staff of approximately 7,700 in over 160 established North American offices. AMEC's depth of staff and resources enables us to offer a wide range of services and expertise.

AMEC is a recognized leader in floodplain management, risk assessment, and watershed restoration throughout North America. Our projects focus on assessing and reducing flood risk, addressing water quality issues, enhancing ecosystems, providing public recreational opportunities, and reducing environmental compliance liabilities.

AMEC staff provide a comprehensive suite of water management services related to flooding, flood protection/reduction systems, ecosystem restoration, sustainable stormwater design, watershed planning, assessment and management, and local government program finance. An integral part of these services involve using sustainable practices to address the necessity to protect the diminishing natural resources. The services cover both institutional and technical needs for local governments, regional organizations, and private entities. Services encompass sustainable land planning and evaluation, water quantity, water quality and ecological aspects of local watersheds.

Two AMEC offices are located in the Commonwealth – in Plymouth Meeting and Pittsburgh. Our water resource specialties provided through these offices include such services as:

- Dam safety engineering;
- Levee inspection, evaluation, and NFIP certification;
- Stormwater management planning and design;
- Watershed and riverine modeling;
- Ecosystem restoration;
- Municipal stormwater management program development and
- Development of stormwater financing mechanisms.

Recent Flooding

As a result of recent flooding, due to Hurricane Irene and Tropical Depression Lee, many municipalities experienced challenges or incidents of significant flooding with their levee systems.

There is a Federal mandate for levee systems to be certified as providing flood protection for the 100-year flood event, and the majority of levee systems in PA are owned by municipalities. PADEP has a program to support municipalities with the certification and accreditation process; however, it was not funded last year, and it's unclear if it will be funded in the future. This program is important for municipalities to meet their federally mandated requirements; avoid mandatory flood insurance requirements in protected areas and related affects on building restrictions, property values, and tax revenue; and maintain safe operation of these systems.

With respect to FEMA, PA should continue to be a strong partner in the National Flood Insurance Program including floodplain mapping, all-hazard mapping, and flood hazard mitigation. Support for local municipalities in performing detailed flood mapping is critical to address areas of known and high potential risk, to help communities better understand flood risk, and to assist in identifying means and methods to mitigate those risks. AMEC works under contract to FEMA Region 3 to provide mapping support to communities within the Commonwealth. These important programs were established to provide knowledge and tools to identify and mitigate flooding hazards and, as in so many areas of government today, need renewed and increased funding to help PA and local municipalities addressing flooding issues to protect lives and property. Proactive, preventative solutions are less costly than emergency response and recovery.

Act 167 Plans

Pennsylvania's Act 167 Stormwater Management program was passed in 1978 and requires counties to develop stormwater management plans for all watersheds across the Commonwealth. The goal of a 167 Plan is to:

“...control post-development stormwater runoff rate, volume and quality to replicate pre-development conditions. This is to prevent additional downstream flooding and to protect water resources and their uses.”

Act 167 Plans were developed to reduce the potential for flooding caused by new development. However, as funding for Act 167 Plans decreased over the past several years and planning activities generally ceased, significant areas of the Commonwealth remain without an Act 167 Plan. Nevertheless, several counties (e.g., Adams, Philadelphia) have demonstrated the importance and value of the Act 167 Plans to the extent that they have proceeded with Plan development, even without state funding. However, the majority of counties have suspended their Act 167 planning efforts until a funding stream is restored. As Act 167 Plans remain incomplete and no updates are made to past Plans that typically focused only on water quantity and not on water quality, it is apparent that stormwater planning at the watershed scale in Pennsylvania has stagnated.

In addition, Act 167 Plans are limited since they only address new development and redevelopment. These Plans focus on addressing flooding issues caused from past land use decisions through the redevelopment process and have no structure to mandate retrofits in areas that, with appropriate investment, could alleviate local flooding conditions.

NPDES

With the publication of the new PAG-13 in September 2011 regulating the discharge of stormwater from federally designated National Pollutant Discharge Elimination System (NPDES) Phase II Municipal Separate Storm Sewer Systems (MS4) communities, Pennsylvania has updated its NPDES standards for municipalities in urbanized areas. Since the original version of the permit in 2003, this renewed PAG-13 has increased municipal responsibilities to raise awareness of stormwater concepts among residents and landowners, maintain municipal facilities that could discharge pollutants through stormwater into surface water, and comply with TMDLs wasteload allocations.

Summary of Issues:

- Water resource management is becoming more complex and challenging for local governments and industry throughout the nation and the Commonwealth.
- Funding sources are limited to support local governments to create effective solutions (Act 167, Growing Greener, Land Use Planning and Technical Assistance, and Rivers Conservation).
- Citizens are becoming more demanding, with the expectation that governments will protect their person and their property from flood risks and water quality pollution.
- Total Maximum Daily Load program goals across the Commonwealth are ambitious; compliance with load allocations is driven through regulatory programs and permits such as the NPDES Phase II program.
- Proactive planning and flood risk abatement is the least-cost solution for overall flood risk management but often it is loss of life and property that generates the resources needed at the local level to take corrective action.

Tools to Manage Stormwater

Pennsylvania needs to continue to maintain its dam and levee infrastructure through effective engineering practices and facility certification programs.

Pennsylvania must ensure that local municipalities are able to develop efficient local stormwater management programs; programs that are locally created and funded using public works industry best practices and strategies. The “heavy lifting” of stormwater management in Pennsylvania occurs at the local municipal level. Though local municipalities have the ability to:

- Set policies and adopt ordinances that fit their communities values and needs (zoning and subdivision codes, pollutant trading mechanisms);
- Create education and outreach programs to raise awareness of local stormwater issues (floodplain vulnerability, aging infrastructure, pollution impacts);
- Develop public involvement campaigns to reduce behaviors that negatively impact water resources; and
- Make intergovernmental agreements with neighboring communities to take advantage of efficiencies of scale for stormwater management services.

The need to expand their resources is critical. They face aging infrastructure, increasingly complex regulations, and growing economic challenges. Expanding local capabilities to create sufficient and stable financial resources is one tool that I encourage you to consider.

Local Funding of Stormwater Programs:

Though empowered to address drainage and runoff infrastructure, to collaborate regionally, to comply with permits and regulations, local municipalities do not have the ability to create a flexible stormwater funding mechanism that is in place in many states throughout our nation. When it comes to TMDL implementation and flood control, it is our local communities who must pick up the pace to address the cause and impacts. They must have the ability to create flexible stormwater programs that meets their local needs.

SB 1261 has been introduced and would provide the specific legislation necessary to – allow for the creation of stormwater authorities, to create a governance structure that is empowered to raise and receive revenues to support an effective stormwater management strategy. Several municipalities in Pennsylvania have already adopted a user fee to fund their stormwater program under their Home Rule status. Others are turning to the Municipal Authorities Act for authorization to create needed funding. SB 1261 would specifically permit the creation of authorities, thus giving local municipalities the confidence to consider if they want to utilize local fees for stormwater management, just like they do for drinking water and sewer.

The first use of community-wide user fees for stormwater programs was developed in the State of Washington 40 years ago. Since that time, all but a handful of states have empowered their local governments to create a local, stable, consistent funding source for surface water management. There are thousands of local governments today who operate their stormwater and drainage management programs, for infrastructure and water quality protection, as a utility. The practice has faced court challenges in a number of states and has prevailed consistently when legislated authority has been put in place that empowers community action.

AMEC E&I is a recognized leader in local government financing of stormwater services. We have been assisting communities for over 25 years, throughout North America. I have assisted communities in over 15 states and the province of Ontario Canada, built local stormwater programs, evaluated operations, policy and funding strategies resulting in changes in services and financing mechanisms that bring real solutions to local needs. I share this information with you to assure you that my colleagues and I understand the complexities of public policy development and finance; we've assisted communities in building consensus for financial changes to focus on real problems and solve long-standing issues.

AMEC staff participated in the preparation of a guide for the stormwater funding by local governments for the National Association of Flood and Stormwater Management Agencies, work supported through a grant from the US EPA. There is a process to be followed for the establishment of user-fees for stormwater management to ensure public engagement and appropriate due diligence to create dedicated resources that support solutions for flood risk reduction and mitigation, pollution reduction, prevention and abatement and public engagement and education for long-term effectiveness.

Summary

An ounce of prevention is worth a pound of cure. Stormwater financing that can allow communities to thoughtfully plan a stormwater program, including infrastructure improvements, education, and cooperative agreements, can find efficiency currently unavailable to them here in the Commonwealth of Pennsylvania.. Granting authority to solve local issues in stormwater management offers options to communities struggling with growing problems and limited resources to address them. It can be transformational – to see changes in communities who can redevelop properties once chronically flooded after appropriate investment in infrastructure and flood mitigation measures is most rewarding. The town in which I live is experiencing this today through the effective funding of significant flood control structures that will allow for growth and rehabilitation of our city core. Without a dedicated funding source, this effort would not be under contract today.

Thank you for the opportunity to present this testimony and for considering my comments in your deliberations.

Resources:

American Public Works Association www.apwa.net
<http://www.nafsm.org/pdf/Guidance%20Manual%20Version%202X.pdf>