



Testimony Presented by
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Arcadis U.S., Inc.
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Majority Chairman Yaw, Minority Chairwoman Comitta, and Members of the Committee, thank you for the opportunity to testify today. My name is Fernando Pasquel and I work for Arcadis, a global leader in the fields of water, mobility, and environment. We have 27,000 professionals, including 6,000 in the U.S., dedicated to improving quality of life. Arcadis has extensive experience developing stormwater utility fee programs in Pennsylvania and across the U.S.

At Arcadis, I serve as the National Director for Stormwater and Watershed Management. I have 35 years of experience developing stormwater and green infrastructure programs and implementing alternative funding mechanisms throughout the nation, including nine stormwater funding projects in Pennsylvania. I was an invited consultant for the EPA's Stormwater Infrastructure Finance Task Force that prepared the report titled *Evaluating Stormwater Infrastructure Funding and Financing* (2020), required by America's Water Infrastructure Act of 2018. I am a contributing author for three Water Environment Federation publications: *User-Fee Funded Stormwater Programs* (2013); *Green Infrastructure Implementation* (2014), Financing Strategies Chapter; and *Operations & Maintenance of Stormwater Controls* (2022). I was also a co-author of the first *Pennsylvania Handbook of Best Management Practices for Developing Areas* (1998). Pennsylvania has come a long way in terms of knowledge and implementation of BMPs since 1998 and now has some of the most innovative programs in the nation. Examples of those innovative programs include Philadelphia, Lancaster, Hampden, and Pittsburgh. Arcadis is proud to have contributed to those programs.

With that background in mind, I'd like to speak with you today about the importance of properly funding stormwater programs. Stormwater runoff is one of the fastest growing sources of pollution in many waterways across the United States¹. Eighty percent of the U.S.

population lives in a community that has a Municipal Separate Storm Sewer System (MS4) permit. In Pennsylvania, those permits are issued by the Department of Environmental Protection. The stormwater infrastructure covered by those permits is used to manage runoff and is widely viewed as a key part of the solution to improving water quality in local waterways, reducing local flooding problems, and enhancing community resilience. Therefore, stormwater infrastructure is as important to quality of life as wastewater and water infrastructure, roads, or electricity. That is why stormwater needs to be managed and funded as a utility operation so local municipalities and their residents and business can realize the broader benefits of stormwater management.

As we have seen in recent years, uncontrolled stormwater flows resulting from intense weather events can be a danger to both natural and built environments, and the control of stormwater and the pollutants it carries is a difficult and expensive task. Implementation of stormwater management programs and construction of stormwater control measures (SCMs) by local governments, therefore, creates a service that provides community-wide benefits.

Public and private properties are benefitted in several ways by the implementation of stormwater programs. Benefits include flood damage reduction, protection of transportation systems, improved handling of excess drainage from public and private properties, maintaining property access, improved recreational opportunities by keeping streams and lakes clean, reduced pollution of water supply sources, development of urban trail corridors, regulatory compliance, protection of property values, and long-term maintenance of stormwater infrastructure.

It is important to realize that a long-term obligation is created when stormwater infrastructure is built, and stormwater programs implemented. For example, all SCMs, including green stormwater infrastructure, that have been constructed, and will be constructed as a result of new development and redevelopment, must be maintained in perpetuity. In addition, state regulations and stormwater MS4 permits require municipal or authority permit holders to build infrastructure and assure the maintenance of SCMs and continuation of their programs².

The 'lack of funding or availability of capital' to fund stormwater programs was identified as one of the top two ranked challenges in WEF's Stormwater Institute National MS4 Needs Assessment Survey¹. Dedicated and adequate funding and financing continues to limit the stormwater sector in becoming a true utility operation with reliable funding.

The first step to address this challenge is to have state enabling legislation allowing the establishment of stormwater fees and the creation of stormwater authorities or utilities. As you know, the Pennsylvania legislature gave municipalities and authorities the option to establish stormwater fees with the passage of Act 68 in 2013 and its amendments. The second step is for municipalities or authorities to determine their funding needs through stormwater funding studies and master planning efforts that align stormwater management with other community

priorities. Once the studies are done, the stormwater programs, including their funding mechanism, move into an implementation phase where the infrastructure is built.

A properly funded stormwater program can provide the community-wide benefits I mentioned earlier, while complying with the state regulatory requirements. Furthermore, properly funded stormwater programs support infrastructure investments that will in the long run decrease the number of homeowner insurance claims on damaged/flooded properties and could reduce the individual flood insurance costs through FEMA's Community Rating System.

Another topic I would like to address is that of stormwater fees across the country. As municipal stormwater infrastructure needs grow and the regulatory requirements for stormwater management continue to put financial pressure on municipal governments, more and more communities are identifying dedicated funding sources to meet MS4 stormwater permit requirements and fund capital and maintenance needs.

The first stormwater fees/utilities were created in 1974 in Washington and Colorado. By 2008, there were approximately 920 utilities. Now, there are approximately 1,900 municipalities across the nation with dedicated stormwater funding (fees) according to the 2021 Western Kentucky University Stormwater Utility Survey.

Municipalities and utilities with stormwater fees are growing because dedicated fees help them meet local needs and facilitate leveraging of other funding sources. Other funding sources can include state and federal grants and loans, municipal bonds, public-private partnerships, private and non-profit sources, and banking and trading programs. However, the challenges related to funding stormwater infrastructure are daunting and support for acceptance of stormwater fees from all stormwater customers is critical for the long-term sustainability of the local stormwater programs.

Stormwater fees also enable an equitable approach for funding stormwater programs. Stormwater fees are a fair and equitable way to pay for stormwater programs, since all property owners pay their fair share of stormwater management costs, similar to a water or electric utility. The stormwater authority or utility assigns a fee to the customer for stormwater management services based, for example, on the impervious area (e.g., roofs, driveways, parking lots, etc.) on their property. Impervious areas are the most common indicator of stormwater flow and pollutants.

Authorities and municipalities are faced with the need to meet multiple regulatory requirements such as stormwater management and TMDL compliance, flood risk management, erosion and sediment control, and more. At the same time, funding for stormwater management compliance is limited and other community and system needs such as aging infrastructure replacement, flooding, resilience, and erosion control continue to demand additional resources. Therefore, a reliable funding mechanism like stormwater fees are needed and have been shown to be an equitable approach for funding stormwater programs. In addition, aligning community local goals and needs (e.g., revitalization, facility modernization,

local jobs, etc.) with the efforts and projects needed to achieve compliance with MS4 and TMDL requirements facilitates acceptance of stormwater fees.

The maintenance needs of aging stormwater infrastructure can be significant, especially if not properly managed. Much of the nation's stormwater infrastructure is nearing the end of its useful life and will require a much higher level of reinvestment in the future than has been implemented in the past. When determining the revenue requirements for the stormwater fees, the maintenance costs of existing infrastructure often greatly exceed the anticipated costs for regulatory compliance. Therefore, stormwater fees can also help to address aging infrastructure needs by distributing costs of maintenance among all property owners. Funding this maintenance and the overall stormwater program is critical to helping protect the state from the rapidly rising risks of flood events and water quality degradation and, in turn, can yield equitable economic benefits to everyone who lives, works, and plays in Pennsylvania.

Majority Chairman Yaw, Minority Chairwoman Comitta, Members of the Committee: I would be happy to answer any questions you may have. Thank you.

References:

¹ Water Environment Federation Stormwater Institute (WEF SWI, 2021). *2020 National Municipal Separate Storm Sewer System (MS4) Needs Assessment Survey Results*, WEF Stormwater Institute, Alexandria, Virginia.

² National Association of Flood and Stormwater Management Agencies (NAFSMA, 2006). *Guidance for Municipal Stormwater Funding*.