

BY JEREMY MILLER, PE

ampden Township is a Township of the first class located in the eastern portion of Cumberland County.

The Township is approximately 17 square miles and is home to approximately 30,000 residents. The Township is a Phase II Municipal Separate Storm Sewer System (MS-4) permitee.

Hampden's MS-4 consists of more than 250,000 linear feet of storm pipe, 120 centerline miles of streets, 200 plus outfalls and numerous structural Best Management Practices (BMPs). Its current Individual MS-4 Permit was issued January 1, 2014 and is effective until December 31, 2018. Included in the current permit is the requirement of developing a Chesapeake Bay Pollution Reduction Plan. Also included in the Permit is the following statement:

"The permittee shall maintain adequate funding and staffing to implement and manage all provisions of the attached Stormwater Management Program."

Concurrent with the development of the Chesapeake Bay Pollution Reduction Plan, Township staff prepared specifications for a \$10,000,000 road resurfacing project. As part of its due diligence effort, the Township televised all storm sewers within the road project area with the intent of completing required repairs prior to paving. As common with many municipalities in the nation, Hampden has

been mostly reactive towards storm sewer maintenance and has addressed facilities only when defects became apparent in the form of a sinkhole, street flooding or some other manner visible from the surface. Consequently, the results of the TV inspection were troubling, with more than 75% of the storm sewers in the project area requiring rehabilitation or replacement. Ultimately, \$1.5 million was diverted towards storm sewer repairs.

As a result of costs associated with growing MS-4 requirements and a commitment to becoming more proactive with maintenance of the storm sewer system, it is anticipated that the Hampden Stormwater Management Program budget will increase from approximately \$600,000 in 2014 to approximately \$1.5 million in 2019. The question is "how do you pay for it?"

In July 2013, the Commonwealth passed Act 68 amending the Purposes and Powers of Municipal Authorities to include stormwater as an activity which authorities may oversee. The intent of the Act was to provide a funding source, other than taxes, for stormwater management. During the summer and fall of 2013, Hampden Township and the Hampden Township Sewer Authority (HTSA) evaluated the potential for creating a stormwater authority and implementing a Stormwater Management Fee (Fee). After many meetings and presentations, the decision was made to

amend the HTSA Articles of Incorporation and in December of 2013 the HTSA became the first stormwater authority in the Commonwealth. Many factors were considered while making this decision. Several major considerations included:

- Stormwater management costs continue to rise, but tax rates have not. The current tax rate in Hampden Township is 0.157 mills and the Board of Commissioners has indicated no intention of raising taxes.
- A fee is a stable, long-term revenue source dedicated solely to funding stornwater activities. Often, elected officials are forced to make difficult decisions due to limited funds. A question such as "Do we purchase a \$750,00 fire engine or spend \$200,000 to meet our MS-4 Permit requirement?" is not unthinkable. With a stormwater management fee this question cannot be asked because all revenue generated from the fee MUST be spent in support of the stormwater management program.
- A fee provides an equitable distribution of cost based on use of the MS-4. Higher property value does not equate to more stormwater runoff.
- Tax-exempt properties are subject to the Fee. In Hampden Township this means large tax-exempt properties, such as the hospital and the 800acre Navy Support Activity, would also be billed.

## "IMPORTANT TO THE SUCCESS OF THE HTSA EFFORTS TO IMPLEMENT THE FEE WAS A WELL-DEFINED STORMWATER MANAGEMENT PROGRAM WHICH CLEARLY DEMONSTRATES THAT THE RATES REFLECT THE LEVEL OF SERVICE TO BE PROVIDED."

After being tasked with oversite of stormwater management, the HTSA's first action was to retain a consultant to assist with a Fee evaluation. A Request for Proposal was issued in May of 2014 and, after a series of interviews, the HTSA retained Arcadis in October 2014.

The process of calculating the stormwater management fee started with identifying how much revenue was required to support the stormwater management program. In order to do this a level of service had to be determined. During this evaluation Arcadis developed three levels of service: low, medium and high. In general, the low level of service consisted of continuing with the current program of doing what was needed to maintain permit compliance and addressing problems as they came to the surface; the medium level of surface consisted of maintaining permit requirements, developing a proactive maintenance plan for the stormwater system, and starting to address longstanding flooding issues within the Township and; the high level of service included the activities identified in the medium level plus taking ownership and maintenance responsibilities of privately owned stormwater facilities. The medium level of service was chosen and the associated estimated costs were set as the basis of the Fee.

The second step towards calculating the Fee was to identify a billing structure. Based on recommendation from Arcadis, it was decided that residential properties would be billed a flat fee per Equivalent Residential Unit (ERU) and nonresidential properties would be billed multiples of ERUs based on impervious area. There are approximately 10,000 residential properties in Hampden Township. In order to determine the impervious area of an ERU, a representative sample of 1,000 residential properties was digitized by Township staff using GIS and aerial photography. This resulted in an average ERU value of 3,534 square feet of impervious area. Staff then digitized the impervious area of all the more than 700 non-residential properties to determine the total number of billing units within the Township.

The final factor that had to be considered when calculating the fee was credits. Credits promote billing equity in

that a property with a stormwater BMP installed onsite will likely discharge less runoff into the MS-4 than a property of the same size and impervious area which does not have a facility installed. Additionally, a credit program will encourage the construction of new stormwater BMPs on properties, which could potentially help the Authority meet future pollution reduction goals. Largely in part to these reasons, the HTSA adopted a credit policy which provided non-residential property owners the opportunity to receive a credit of up to 50%. The HTSA policy includes credits for stormwater rate and volume control, fertilizer management, education programs, and Separate MS-4 permitees. Individual credit values ranged from 15% to 50% and a property owner may take advantage of multiple credits, if applicable, up to the maximum total of 50%.

Once the annual cost of the chosen level of service and the total number of residential and non-residential ERUs were identified, the Fee was determined by dividing the annual cost by the total number of ERUs. The Fee necessary to support the Stormwater Management Program was calculated to be \$13.25 per ERU per quarter, which incorporated a 10% credit allowance for non-residential properties.

In July 2015 the Township and HTSA took the action necessary to implement the Fee. This included transfer of ownership of all stormwater facilities from the Township to the HTSA, adoption of a Fee Resolution and Credit Policy, and execution of a maintenance agreement by which Township staff would oversee daily stormwater activities on behalf of the HTSA. Prior to the issuance of the first hills. letters were sent to all non-residential property owners which identified the calculated impervious area and resulting fee for each property. The property owners were given 30 days to appeal the calculation and submit supporting documentation for a revision. Additionally, all nonresidential property owners where given a one-time 50% credit on their bill and provided additional time to prepare an application for continued credit. The first bills were issued in October 2015.

Important to the success of the HTSA efforts to implement the fee was a well-defined stormwater management program which clearly demonstrates that the rates reflect the level of service to be provided. Also important was the development of a Stake Holder Advisory Committee. The committee members included representatives from homeowner associations, land developers, chambers of commerce, Council of Governments, state senator and representative offices, builder associations, school districts, and the Department of the Navy. The committee met a total of five times during the Fee evaluation, and although they were not a decision-making body, they provided valuable feedback relative to policy and messaging decisions. Possibly the most important effort was a strong public outreach program. Public outreach efforts included five public meetings, two of which were specific to nonresidential properties. Additional outreach methods included numerous newsletter articles, development of a stormwater web page, and a bill stuffer that was included the second quarter 2015 utility bill.

After a year of implementation, the HTSA stormwater management Fee has been successful. Most of the initial concerns of residents and nonresidential property owners seemed to have been addressed, and with the exception of the Navy and PennDOT properties, the delinquency rate for the fee is extremely low. In the first year, the HTSA has collected approximately \$1.1 million. These funds have been used to offset costs associated with stormwater system repairs and to support a new stormwater division of the public works department. The stormwater division now oversees permit activities as well as operation and maintenance activities. such as storm sewer inspection, leaf collection, street sweeping, and various other activities completed in support of the stormwater management program.

## **About the Author**

Jeremy Miller, PE, is a graduate of Penn State University with a Bachelor of Science in Environmental Systems Engineering and is the Hampden Township Director of Public Works.