

Ask the Experts: Stormwater Utility Development and Public Support

In addition to peer-reviewed research, the Bulletin features interviews with experts in the watershed and stormwater professions discussing a specific topic. Here, five professionals weigh in with their perspectives on establishing stormwater utilities to fund water quality restoration projects.

Stormwater utilities can provide a reliable source of funding for the operation of stormwater programs, maintenance of stormwater infrastructure, and compliance with stormwater permits. The funds are generated from fees charged to landowners for the amount of stormwater produced on their property; the fees are typically based on factors that influence stormwater runoff, such as the amount of impervious surface. While many communities across the country have established stormwater utilities, many more have not and may be unsure how to begin and how to justify it to gain public support. Our experts include representatives from jurisdictions that have established stormwater utilities and from an advocacy organization that has been heavily involved in gaining support for stormwater utilities.

Here is what our experts had to say...



Greg Fries, PE

Principal Engineer, Storm and Sanitary Sewer, City of Madison Engineering, Madison, Wisconsin

Greg Fries has a B.S. in civil and environmental engineering, and a master's degree in business, both from the University of Wisconsin–Madison. Prior to his employment with the City of

Madison, Greg worked for the Wisconsin Department of Transportation and RMT Inc. During his 20-year employment with the City of Madison, Greg has worked on the City's Wisconsin Pollutant Discharge Elimination System (WPDES)/US Environmental Protection Agency stormwater discharge permit, stormwater quality and flood control projects, erosion control, utility reconstruction projects, and the City's stormwater utility. Recently, Greg worked on infiltration designs, such as a "rain garden street" and approximately 20 other rain gardens and bioretention projects constructed on City of Madison property to treat streets and parking lots.

What was the impetus for establishing the stormwater utility?

The stormwater utility was created to provide a funding source for existing and future stormwater management requirements, such as state and federal permits (National Pollutant Discharge Elimination System [NPDES] and WPDES) and total maximum daily loads (TMDLs). Equity was also an issue. Because tax value per square foot and stormwater runoff have little to do with each other and because approximately 30% of Madison properties are tax exempt, it was felt that a utility that charges all properties was a more equitable manner to pay for the costs of stormwater management.

What process was used to develop the stormwater utility? Was the public involved? What was the public's perception of the project?

The process to create a stormwater utility took about two years, starting from when we began holding internal discussions and researching the amount and type of effort needed to create a database of impervious and pervious cover for each property. The public portion of it included hearings and meetings and took a little over a year. There were objections by major commercial property owners in the city as this project shifted costs to large paved areas (e.g., malls and car dealers) and away from high-value compact development (e.g., downtown areas) and development by nonprofits (e.g.,

churches, institutions, and city agencies). Prior to the formation of the utility, stormwater management was paid for entirely by the parcels that paid property taxes. Generally, there was not a large response from the residential community.

How was the billing system developed? What is the rate? How are customers billed?

A utility fee is charged to all parcels within the city and is included on the City of Madison utility bill. Our initial rate structure was set up to be revenue neutral, meaning it was designed to bring in the same amount of revenue as was previously generated for stormwater management by the general tax fund. Therefore, the rate for square feet of impervious and pervious cover was calculated to maintain the existing funding budget. This is not exactly tax neutral as you can deduct taxes, but not utility fees, from your state and federal income returns; however, it is pretty close. The 2013 rates are the sum of these three components:

- a customer charge of \$6.00 per six months to cover administrative expenses
- an impervious area charge of \$0.0129905 per square foot per six months
- a pervious area charge of \$0.0009145 per square foot per six months

The City has estimated that a “typical” homeowner will pay \$41.43 per six months or \$82.86 annually. The program provides stormwater utility credits.

What efforts does the utility fund?

The City’s utility pays for limited watershed planning and also covers stormwater and engineering administration and operation and maintenance of stormwater facilities and infrastructure.

Are utility credits offered? If so, what practices are eligible for credit?

The utility's credit policy operates under the idea that it is legal to offer credits/reductions only as a result of either a particular action taken by a customer that reduces or could be reasonably expected to reduce the utility's costs or where the Public Service Commission has deemed it appropriate to mandate a reduced charge upon request. The utility's credit policy is available here.

Erin B. Hawkins, CFM

Water Quality Manager, Department of Water Resources, City of Lynchburg, Virginia



As a water quality manager for the City of Lynchburg, Erin oversees implementation of the City's municipal separate storm sewer system (MS4) permit and master planning efforts, manages the stormwater utility, and works with the Combined Sewer Overflow program. She previously worked in the City's Department of Community Development, providing site plan review for erosion and sediment control and stormwater management and updating the Comprehensive Plan; she continues to serve as the community floodplain manager. Erin also serves on the Board of Directors of the Robert E. Lee Soil and Water Conservation District, is chair of the Middle James Round Table, and serves on the stormwater committee of the

Virginia Water Environment Association.

What was the impetus for establishing the stormwater utility, and when was the utility established?

Faced with new statewide stormwater regulations and the Chesapeake Bay TMDL in addition to the City's NPDES Phase II MS4 requirements, we realized that the City wasn't where it needed to be with the program, and funding was not sufficient to meet the requirements. This started us down a path to explore how to fund the stormwater program, and early discussions focused on either a dedicated tax or a stormwater fee. Ultimately, a utility fee was established in 2012.

What process was used to develop the stormwater utility? Was the public involved? What was the public's perception?

The process of developing a stormwater utility started with the formation of the Stormwater Advisory Committee (SWAC) in the spring of 2010; the SWAC was composed of a cross-section of the community (businesses, residents, industry, and institutional). The goal of the SWAC meetings was to provide input and feedback on the future level of service and funding for the stormwater management program. The SWAC meetings were held monthly for eight months and discussed the City's current and future stormwater challenges, why stormwater management is important, and options for the level of stormwater service and funding. Another series of meetings was then held to get additional public participation. The SWAC meetings resulted in a recommendation to present the option of the stormwater utility to the City Council.

In December 2011, the City Council approved the creation of a stormwater enterprise fund and established the stormwater utility ordinance with a \$0 fee. The Council recognized a difficult budget session, and this lag time between establishing the ordinance and setting the rate gave additional time during the FY13 budget process to discuss the impacts to the citizens and the general fund.

In April 2012, the City Council approved the monthly fee at a rate of \$4 per single-family unit (SFU). The utility was implemented on July 1, 2012.

How was the billing system developed? What is the rate? How are customers billed?

The City's stormwater utility was based on an annual budget of \$3.1 million, and the monthly fee rate per SFU was determined based on the average impervious cover of a single-family residential property (2,672 square feet), which is equivalent to one SFU. The SFU rate is set at \$4 per month, and all developed properties in the city are charged a fee based on the single-family method.

There are three tiers of single-family residential properties—small, medium, and large—and these are charged 0.5 SFU, 1 SFU, and 1.6 SFU, respectively, based on the amount of impervious cover. The rates for all other developed properties (e.g., commercial, institutional, and multifamily) are based on the number of equivalent SFUs on the property. For these properties, the City's consultant calculates the total impervious cover on the site and divides by 2,672 square feet to determine the number of equivalent SFUs. For example, if an institutional property has 10,000 square feet of impervious cover, the stormwater fee would be \$14.80 per month ($10,000 \text{ square feet} / 2,672 \text{ square feet} = 3.7 \text{ SFUs} \times \$4 = \$14.80$ per month).

The City includes the stormwater fee on the property utility bill, which also provides an enforcement mechanism for failure to pay. For example, the stormwater fee is paid first, followed by the sewer and then water; if a property bill is not paid in full, the City has the ability to turn off the water to the property until it is paid. Properties that do not receive a utility bill will receive a separate stormwater bill.

What efforts does the utility fund?

The utility funds the many aspects of the City's MS4 permit, including the development of plans to meet the various TMDL requirements. It funds programs related to water quality, including environmental education, street sweeping, capital improvements to the system, drainage maintenance, administration, review of permits, inspection, and monitoring activities.

Are utility credits offered? If so, what practices are eligible for credit? How often have the credits been used?

The City has implemented a single-family residential and nonresidential credit program, through which customers who implement stormwater best management practices (BMPs) may receive a credit on their stormwater bills. The City has developed manuals that outline the requirements for receiving a credit and a simple application form. The maximum amount of credit that can be earned is 50%. For residential properties, measures such as rain barrels, rain gardens, pervious pavers, and filter strips can earn credit.

Credits for nonresidential properties are based on the amount of area treated by the BMP(s) and are required to meet the standards in the Virginia Stormwater Management Handbook or the Virginia BMP Clearinghouse. Properties that hold Virginia Pollutant Discharge Elimination System industrial stormwater permits are also eligible for a credit. Other credits may be available in the future, such as credit for nutrient management or lawn care credits that would help meet local nutrient-based water quality goals. To date, the City has worked with several dozen properties to approve stormwater credits.

Dru Schmidt-Perkins

Executive Director, 1000 Friends of Maryland



Dru Schmidt-Perkins has served as 1000 Friends of Maryland's executive director since 1998. 1000 Friends of Maryland is a statewide nonprofit organization whose goal is for Maryland residents to achieve a high quality of life through vibrant communities and strong rural economies. Prior to joining 1000 Friends of Maryland, she was the Maryland state and Chesapeake regional director of Clean Water Action for over nine years. Dru has also worked at the federal and state level on energy policy. Dru has received numerous awards, including from the State of Maryland and the US Department of Energy. In 2003 and again in 2013, she was named one of Maryland's Top 100 Women by the Daily Record.

Background: In 2012, Maryland Governor Martin O'Malley signed into law House Bill 987, which requires jurisdictions within Maryland that are subject to a federal MS4 Phase I permit to establish a local stormwater protection and restoration program and implement a local stormwater fee to fund that program by July 1, 2013.

How have you been involved with the stormwater utility fee programs in Maryland?

1000 Friends of Maryland was very involved in the passage of House Bill 987 by the General Assembly—through strategies such as direct advocacy, attending hearings, lobbying, and action alerts. We are also part of the Clean Water, Healthy Families Coalition, whose goal is to ensure that local governments have resources to reduce polluted stormwater runoff and implement their local clean water plans.

1000 Friends of Maryland is a smart growth organization working to get high-quality development in places where it most ought to be and protect the rural areas from poorly planned, costly development. We got a lot wrong with past

development patterns. One result is that most urban areas lost people and the tax base as people followed the new schools and roads out on former farm land. Now old communities don't have the money to make the needed capital fixes, and at the same time their infrastructure is aging. We see the utility fee as a very important chance to rebuild a portion of the cities' and towns' infrastructure and to do so in a way that rebuilds neighborhoods and cleans up waterways.

How have stakeholders responded to the stormwater utility law?

The bill was designed so that local governments would have control over their stormwater fees—it is not a one-size-fits-all law, so the resulting fees vary widely. Each county has the opportunity to design a program that will fix local polluted runoff problems and to structure fees that make the most sense for the community. While most of the counties have complied, two counties have not, and a third has proposed legislation to repeal its program. Some politicians who oppose the fee have dubbed it the “rain tax.” It is very easy to confuse people on this topic, and for the politicians to tap into anger and fear. The utility fee has been so badly messaged. Most counties and nonprofits don't have public relations firms, so most of the press coverage has not been focused on the urgent need to reduce the polluted runoff and local flooding while providing jobs for local engineering firms and landscaping companies. The buzz around this fee means that we anticipate attempts to change the bill during the 2014 legislative session, but we don't know yet what that will look like.

In your experience, what are the most important steps for gaining public support for a stormwater utility?

Educate like crazy. We need to make sure that people know what the fee is for and why it is important. When we have had the opportunity to talk to people about why these fees are needed, people change their minds about the fee pretty quickly. We have to be clearer when we talk about this program. “Stormwater utility fee” is not clear. We need to say what it does and why it is so important. We should be calling it the polluted runoff fee to fund local projects that will clean up local streams and reducing flooding. It is also important for engineering and landscape architecture firms to talk about the

jobs creation aspect—local jobs to fix local problems. Similarly, we need places that have had these fees for a long time to speak up about the benefits and effectiveness in their communities. Accountability is also important. People need to see their money being put to work quickly, effectively, and with great benefits. This program must have great transparency. Nothing is more important than solving the problem by using the fees effectively and showing local citizens how, where, and when it is happening.