Determining if a Stormwater Utility Is Right For Your Community
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Aging infrastructure and increasing regulatory obligations from the state and federal government have put a heavy burden on local governments, and they are searching for ways to finance stormwater management beyond general tax revenue.

Many states have legislation authorizing municipalities, counties, and/or municipal authorities to charge a fee for stormwater services. Still, local leaders have questions and concerns about whether fees are right for their community.

Every municipality’s financial situation and stormwater needs are different, so it’s wise to seek the counsel of a consultant with dual expertise in engineering and financial consulting to design a custom solution tailored to those unique needs. With that in mind, it’s important to consider the many advantages stormwater authorities offer:

**Stormwater utilities enable you to collect money from tax-exempt users.**

Churches and non-profit organizations like hospitals and universities contribute a lot of stormwater runoff to the local watershed, but a tax would never collect any revenue from them because they are tax-exempt. By using the stormwater utility structure, you can charge fees to these users and collect their fair share contribution to stormwater management efforts.

**Stormwater authorities can collect fees from multiple municipalities who may be contributing runoff to their watershed.**

Political boundaries and watersheds seldom coincide. Stormwater is not neatly contained by political boundaries, and watersheds often cross through more than one municipality. But townships and cities cannot charge other local governments for stormwater management under state law.

A multi-municipal (or joint) stormwater authority, however, can be set up to serve...
an area that extends beyond the boundaries of a single municipality, which enables everyone within a particular watershed to contribute to the stormwater management services it requires.

**Stormwater utility fees are more equitable than a property tax.**

As previously stated, stormwater utility fees ensure that everyone who contributes to a community’s stormwater pays for the services they use (even tax-exempt organizations, particularly if a utility is set up on a watershed-wide basis).

But stormwater fees are also much more flexible and responsive to the true nature of stormwater than a straight property tax would be. The value of someone’s land has little to do with how much stormwater it creates, so a property tax is inherently unfair for this purpose. A property could be appraised at a high value and contribute very little to stormwater, but an experienced financial consultant can help set up an utility’s rate structure based on the quantity and/or quality of runoff a property creates (rather than charging a flat fee or basing it on acreage).

A municipality can also offer credits to property owners who install stormwater best management practices (BMPs) for controlling runoff. (This has the added bonus of encouraging good behavior; inspiring people to install stormwater control measures like rain gardens, buffers, etc., on their property.)

Thus, a well-designed stormwater utility ensures everyone pays according to how much he or she uses the service.

**Stormwater utilities provide a dedicated revenue stream for stormwater improvements.**

Relying on general tax revenue for stormwater improvements isn’t practical for some communities. There simply isn’t enough money to cover all of the needs the municipality must address, and stormwater often falls to the bottom of the list because money is allocated to more high profile projects. (For example, a bridge replacement or pavement rehabilitation.) Unless there is major flooding, stormwater is often forgotten and doesn’t receive the financial attention it needs.

With a dedicated stormwater fee, the money is there to maintain, repair and replace stormwater infrastructure on a proactive basis, rather than waiting till flooding causes expensive damage or impacts public safety.
A dedicated revenue stream for stormwater can improve the finances of a municipality.

It can do so in several ways. First, now that the municipality no longer directs tax revenue to stormwater management, it has more tax dollars available for its other priorities.

Second, debt associated with stormwater improvements is no longer considered direct municipal debt because it can be self-liquidated by the utility’s revenue stream. Therefore, the stormwater debt doesn’t count towards the municipality’s borrowing limit, and its impact on the municipality’s bond rating is reduced. This may enable the utility to implement larger projects or make improvements in a timelier manner than a municipality could using tax revenues.

Third, many agencies that offer grants and loans expect the municipality to put up matching funds, which is hard to do when you don’t have a dedicated stormwater revenue stream. Even if matching funds are not an official requirement of the grant or loan, most funding agencies place a higher preference on recipients who have money available for the infrastructure because they have a greater confidence in their ability to complete the project if there are issues and to maintain it after it’s done.

Stormwater utilities are better positioned to raise rates than municipalities are to raise taxes if stormwater obligations increase.

Tax increases are not popular politically, and they are hard to pass. As stormwater infrastructure needs change, municipalities may need a revenue source that is flexible enough to meet those changing demands.

Every municipality’s financial situation and stormwater needs are different, so it’s wise to seek the counsel of a consultant with dual expertise in engineering and financial consulting to determine if a stormwater utility is right for your community. If it is, your consultant can help you organize a program that maximizes an authority’s potential advantages: providing a dedicated revenue stream for stormwater management that is more equitable than other funding sources and freeing up the municipality’s tax dollars for other priorities without adding to its direct debt or negatively impacting its bond rating.
Common Questions About Forming a Stormwater Utility

Though utilities offer many advantages, municipal officials wisely ask many questions before jumping in. The following are the most common questions we receive from our municipal clients about forming a stormwater utility:

Will voters support new fees for stormwater?

It is true that residents, business owners, and non-profit organizations will initially question the need for another bill; no one likes paying new fees. However, municipalities can win public support with extensive community involvement and educational outreach.

It’s important to communicate that the new fee will be used exclusively for stormwater management and will not be “raided” for other purposes. It’s also important to show the community exactly how their money will be invested: List the specific improvements you intend to make and use photographs and illustrations whenever possible. Emphasize the fairness of the fee: that everyone pays for the services they use based on the stormwater they contribute to the system (and not simply the value of their property). Accentuate the positive by naming the fee after the benefits it provides to the community (such as a “Clean Water Management Fee”), as opposed to the problems it addresses. Invoice the fee separate from taxes, similar to water and wastewater billing.

Will it be expensive to get the utility up and running?

Most municipal budgets are stretched to their limit as it is, so investing money in the start-up costs associated with a new utility or authority is a hard sell when that money could be used for maintenance and repair of ailing infrastructure. But, even though the results are not physically tangible like new culverts or pipe repairs, the money you spend on a new stormwater utility or authority is a true investment in your community’s future. **It will cost money to get up and running, but it will create revenue in the future that can be used to proactively address stormwater needs** before they become costly emergencies. What’s more, that dedicated revenue stream makes you eligible for grants and low-interest loan programs that otherwise would’ve been out of reach because of the need for matching funds.
Speaking of funding, some programs will help defray the start-up costs associated with organizing a utility. For example, West Goshen Township, Chester County, has entered into a 50/50 cost-share with the Army Corps of Engineers for technical assistance with mapping and inventory of their stormwater infrastructure. This step is necessary to develop the Stormwater Management Program and ultimately determine the revenue requirements necessary to establish and justify the stormwater rate.

Depending upon whether the municipality sells its stormwater assets to the authority or leases them, the municipality can also receive an upfront or annual payment from the authority for the transfer of facilities, which will help to absorb some of the start-up costs, as well.

However, municipalities may be able to avoid a lot of the start-up costs associated with an utility by simply adding stormwater to the charter for their existing water or wastewater utility. If they do, the structure and administrative functions (the board, billing, etc.) will already have been set up; the articles of incorporation will just need to be amended.

Is it safe to give an authority responsibility over stormwater when the municipality is still liable for its MS4 permit obligations?

Though the municipality can appoint people to its board, ultimately, the authority is an independent body that makes its own decisions. Yet the municipality – not the authority – may be responsible for any fines incurred from not complying with MS4 permit requirements (Municipal Separate Storm Sewer Systems). This arrangement can easily seem dangerous to many municipal officials, but solutions are available.

A knowledgeable financial consultant can assist in structuring the authority in many different ways to give the municipality flexibility in deciding which powers and purposes it wishes to assign. One option is to set up an operating authority and pair it with a management and services agreement. Under this arrangement, the municipality transfers its facilities to the authority, who collects a rate and charges from local users to finance their operation, maintenance and improvements. The authority then “hires” the municipality to conduct operations and maintenance and perform administrative functions such as billing.

Another option is the reverse leaseback authority. Under this arrangement the municipality continues to own the facilities and finance capital improvements, but it leases the system to the authority for operation, maintenance and the setting of rates and charges.
Hybrid versions of these examples can also be established based upon the priorities and goals of the municipality.

As you can see, the questions that municipalities have about stormwater utilities can be alleviated through joint planning by financial and engineering experts. Though municipalities typically think of their stormwater infrastructure as an issue for their civil engineer, municipal authorities are primarily financial organizations, so a thorough understanding of finance is important to ensure financial and legal obligations are met in the most advantageous way to the municipality as possible. With fears allayed, municipalities are then able to see the many advantages a stormwater utility offers.
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3 Building Voter Support for Fees

Many local officials realize the need to improve stormwater management to protect water quality, but fear constituents would oppose a new fee for stormwater services. Experience shows a transparent approach that involves community stakeholders can build consensus.

Though stormwater utility fees are still largely uncharted territory in some states, the use of dedicated stormwater utilities and stormwater fees is a nationwide movement that has seen steady growth over the past four decades. Western Kentucky University reports that there are more than 1,500 stormwater utilities throughout the United States and Canada, serving communities as small as 88 people to more than 3 million. Their success in building consensus among constituents for stormwater fees can show local municipalities a path to approval in their own community.

Why Would People Oppose a Stormwater Management Fee?

The Pennsylvania State Association of Township Supervisors (PSATS) and other organizations such as the National Fish and Wildlife Foundation and the Foundation for Pennsylvania Watersheds supported research by an organization A picture speaks a thousand words. In a study of 1,000 Pennsylvania residents, opposition to stormwater fees dropped from 35% to 19% once participants were shown photos of the improvements the fee would fund.
known as Water Words That Work, which attempted to answer this very question. They asked 1,000 Pennsylvania residents various questions about stormwater fees to determine whether or not they would approve of such a fee in their community, what they might oppose about paying a stormwater fee, and what conditions could potentially change their mind if they did oppose the fee.

Participants were asked at the beginning of the survey how they felt about stormwater fees and again after they had been shown images that depicted exactly what the fee would specifically accomplish. At the beginning of the survey, opinions were evenly split: 38% approved of a stormwater fee, 35% opposed it, and 27% were neutral.

When asked again later – after they had seen photographs and specific information about the improvements a fee could fund, opposition dropped from 35% to just 19%. What happened?

Initially, the biggest reason people gave for opposing the fee was that they didn’t trust the government to use the money properly. They were afraid the funds would be used for something else, or unnecessary work would be done just because there was money to be spent.

The next most popular reason for opposing the fee, according to Water Words That Work, was an inability to pay the bill. Several people felt they couldn’t afford another monthly fee; their budget was already stretched to the limit.

Some people who opposed the fee felt it was unfair, that churches and non-profit organizations shouldn’t have to pay. Others felt the community had bigger priorities than stormwater.

Like much of our infrastructure, the benefits of our stormwater management system go largely unseen and unnoticed. The only time we really think about stormwater is when we get heavy rains and flooding occurs, but instances like these may be very rare. And, even if they do occur, they may be forgotten before failures can be addressed. This was the case in Fort Worth, Texas, for many years.

According to a presentation given by their engineering manager, Don McChesney, in 2009, rain in Fort Worth tends to come in periodic bursts of storm activity separated by periods of drought. When a major storm would cause flooding in the area, local leaders would commission a study to prevent future flooding, but, by the time the study was completed, most people had moved on and the drive to make changes had dried up along with the rain. So it was until 2004 when two major storms hit the area, flooding more than 300 homes and businesses and causing five people to lose their lives.

This motivated local leaders and the community to make a major change, and Fort Worth was able to pass a stormwater utility in order to provide a stable source of funding to address their infrastructure needs. In fact, the damage caused by flooding events is not an uncommon source of support in communities that have successfully passed stormwater utilities.
How can you build support for a stormwater fee?

Fort Worth is not the only city that has seen flood events motivate local communities to enact stormwater fees. A study by the Environmental Protection Agency found that problems such as flooding and the potential loss of local lakes and streams due to pollution were two of the main factors that coincided with the successful implementation of stormwater fees in 11 communities it examined. Other factors included:

- The financial consequences of doing nothing (for example, if penalties were about to be imposed due to environmental violations).
- The presence of state legislation authorizing stormwater utilities.
- The presence of other communities in the region successfully operating stormwater utilities.
- The presence of a local champion whose opinion matters to the community and who can effectively make the case for a stormwater fee.

Whether these conditions existed or not, the most important factor determining if a community would be successful in building consensus for a stormwater fee was whether it successfully engaged community stakeholders and the general public in an outreach program. How is a successful outreach program designed?

Designing a Stakeholder Outreach Program

According to the EPA’s case studies, each community had its own unique approach to engaging local stakeholders based on their local circumstances and budget resources. (The more robust the outreach program is, the more it costs.) One community, Lewiston, Maine, met one-on-one with key commercial businesses in the area before formally presenting their stormwater fee for adoption, but, more often than not, communities formed stakeholder advisory committees who helped to shape the program over a series of periodic meetings.

This is the approach Derry Township Municipal Authority took in Pennsylvania. The committee was comprised of residents, commercial and industrial business owners, institutions, and leaders of local non-profit institutions, who routinely met to provide feedback on the stormwater program. Their discussions involved recommending spending priorities, evaluating potential fee structures, developing an appropriate credit policy, and determining the best ways to engage and educate the public. From these discussions, the authority learned that a tailor-fit rate solution, which takes into account the various levels of stormwater service the authority provides, is key to overall community acceptance. They’ve also learned that public outreach will go far in terms of educating the community.
about the need for proper stormwater management.

While most of the communities in the EPA study who had stakeholder advisory committees successfully passed a resolution forming a stormwater utility, two did not. Based on the experience in each of those communities, EPA offered several recommendations for ensuring the effectiveness of a stakeholder advisory committee:

1. **Make sure you have identified and involved all the potential stakeholders – even those who oppose the formation of a utility.**
   If you don’t attempt to address the concerns of your opposition in these committee meetings, they can come back to haunt you later when it comes time to pass the resolution. This is what happened in Dover, New Hampshire, and Huntsville, Alabama. Both communities had small advisory committees, but they did not engage all community groups. Though there was unanimous consent among the committee members to form a stormwater utility, the opposition of certain community groups who had not been represented on the committee ultimately drowned out their voices, and the municipal leadership declined to pass the resolution.

2. **Create an open forum where people feel comfortable expressing all points of view.**
   Again, you want to deal with any potential obstacles proactively, rather than be blindsided by them in the final stretch. Stakeholder advisory committee meetings are more conducive to problem-solving and negotiating in a deliberative way than public meetings are. By including your opposition early in the process and giving everyone a chance to speak freely, you ensure that major obstacles to support will have been addressed before a public vote.

3. **Discuss the stormwater program and what it can accomplish first. Don’t bring up funding till you’ve established a need for improvements and motivated people to support them.**
   People need to know what they’re getting before they can be motivated to hand over their money.

**Informing the Community through Public Outreach**

As the examples in Dover and Huntsville show, it is not enough to gain the consensus of your stakeholder advisory committee members; you also need consensus among the broad voting public.

This means a strong public outreach program that educates people about the need for stormwater improvements in their community, the benefits they will receive from a proactive approach, and the manner in which they will be billed.

To be successful, a public outreach program must use a variety of channels to reach the broadest possible audience and must make a compelling case in favor of the
stormwater fee. To reach a wide audience, a municipality will want to spread the word in local newspapers, on TV and radio, via direct mail or billing inserts, on the municipal website, and in-person at community meetings (not just municipal meetings but the meetings of neighborhood civic groups).

Stakeholder advisory committee members can be especially helpful at these community meetings, serving as ambassadors and local champions of the program. No matter how carefully the stormwater utility was planned and designed, inevitably some people will still oppose a stormwater fee. Unfortunately, it is those people who are the most likely to attend public meetings, so it’s important to have supportive members of your stakeholder advisory committees attend these meetings to explain how the program came to be and provide a favorable voice. After their attempt at a stormwater utility failed, leadership in Dover, New Hampshire, said they wished they’d had members of the advisory committee in attendance at their city council meetings to counter the very vocal opposition they had.

The experience of the EPA’s 11 case study communities and the responses to the Water Words That Work survey can provide a good deal of insight into what makes a compelling message in support of stormwater fees:

1. **Clearly define the benefits of the program.**
   Tell people exactly what improvements you intend to make with the money you raise, and quantify the benefits of those improvements whenever possible. For example: “This project will reduce the likelihood of flooding along Main Street by 75%.”

2. **Show, don’t just tell.**
   Visuals are particularly persuasive. Water Words That Work found that showing people photographs of how the fee would be used had the single most dramatic effect of any information provided in gaining approval of the fee.

3. **Choose your words carefully.**
   Name the fee to clearly convey the service you are providing. “Stormwater management” is too vague and largely meaningless to the average person, but “clean water protection” has obvious value. In the Water Words That Work survey, “pollution control and flood reduction fee” tested better than any other term containing the words stormwater, authority or utility.

4. **Emphasize fairness.**
   People generally believe that those who use a service most should pay more for it, so show them how your fee ensures that is the case. Explain why it’s important that non-profits pay the fee because they, too, contribute to stormwater discharges (often more than residents because...
of their large impervious parking areas). Tell them about credits that people can receive if they lower their stormwater impact by installing green infrastructure on their property. In general, people perceive fees based on actual impervious area to be the most fair and equitable (as opposed to a flat rate), but some of the communities EPA studied did successfully enact flat rates with effective public education about the reasons why that option was chosen.

5. **Demonstrate cost-effectiveness and be transparent about finances.**
If a stormwater utility is truly the best approach for your community, the numbers will convey that, and detailed economic studies are always an integral part of the planning process. Use those numbers to prove that the stormwater fee will better accomplish program goals than general fund revenue or any other option available. As previously discussed, voters can often be mistrustful of a government’s ability to use funds wisely. Being transparent about program finances (how the fee was determined, how it will be used) eases minds and reduces the chance of a legal challenge.

6. **Define this as a local solution to a local problem.**
Avoid talk about state and federal mandates or general environmental goals. If flooding is a recurring problem in your community, show how this program will reduce that problem. If pollution is a concern, talk specifically about keeping local waterways clean: the stream families teach their children to fish in, the lake where they go swimming.

Determining whether a stormwater utility is the most effective way to fund infrastructure needs in your community is a complex process that requires dual expertise in civil engineering and financial consulting. Unfortunately, some communities are afraid to even investigate the option because they believe their constituents will never approve of a stormwater fee. In communities where utilizing general tax revenue is not the best approach, research shows that an effective public outreach program, which includes key stakeholder groups in the earliest planning stages, can be successful in persuading people to accept stormwater management fees.

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Voters want to know exactly how their money will be used.

Be transparent about how the fee was determined and what improvements it will make possible. This eases voters’ minds.
Determining If a Stormwater Utility Is Right For Your Community

After weighing the pros and the cons of stormwater fees and learning how to persuade voters to support them, you might be ready to evaluate the feasibility of a stormwater fee for your community. You just have one more question: What exactly will forming the utility involve?

Essentially, the process can be divided into three phases:

• A review of your existing stormwater program

• Public outreach to gain voter support

• Calculation of rate structures and set-up of billing program

During the stormwater program review phase, you will need to inventory all of your existing infrastructure and identify any problems that need to be corrected. You will also need to determine the level of service you intend to provide and how much that will cost.

During the public outreach phase, you will use many of the techniques outlined in the previous chapter to gather feedback from the community and help them see the benefits a stormwater fee will provide them. This can involve forming a stakeholder advisory committee as well as publishing details about the program in local media and municipal communications such as newsletters or billing inserts.

During the final phase of implementation, you will evaluate the various options for calculating user charges, create a cost allocation model, and set up procedures and infrastructure for performing the billing function.

The following is a closer look at some of the steps you will take as you complete this process.

Conduct an inventory of municipally-owned stormwater facilities.

Put on paper (or, even better, in a geographic information system (GIS) database) a list of all your pipes, inlets, outfalls, and other stormwater structures.
Every item in this inventory should include its:

- Location (making sure to note if it is on private property)
- Condition
- Annual maintenance costs

Inventory privately owned facilities that are connected to municipal facilities (as well as those that are not directly connected).

While the municipality does not have to pay to maintain these private facilities, its own system may not function properly if they malfunction, so the municipality must ensure they are being maintained. In order to do so, it will need to examine whether it has the legal authority to compel private owners to conduct maintenance. If it doesn’t, it will need to draft that authority into its stormwater ordinance or any authority charter.

Estimate the timing and cost of future projects.

This information will be the basis of a long-term capital improvement plan, which is a list of the improvements the municipality will be making over a specific period of time (most likely 10 years). This information will help determine how much money will be needed by the authority over the 10-year period, so that it can calculate its revenue needs and secure any financing that may be available. With a clearly defined list of anticipated long-term construction costs, a municipality can determine if its existing funding sources will be enough to cover the need or how much debt it would be forced to acquire. If debt is necessary, the municipality should examine whether or not it has sufficient borrowing capacity.

Identify current annual operating costs for stormwater facilities.

This includes labor, materials and services.

Estimate future annual operating costs and any annual debt service costs that will be associated with existing or planned facilities.

Assess public perception of stormwater costs.

Does the public know the benefits of stormwater management and the cost of providing that service? What is the general opinion of using tax revenue to fund stormwater
management versus a dedicated user fee? Be sure to quantify the percentage of “uncollectable” fees versus the amount of funding that is lost from a tax revenue approach due to tax-exempt properties.

If pursuing an authority, determine how you want to distribute powers between the municipality and the authority.

Since the municipality will always be responsible for the proper enactment and enforcement of state and federal regulations, the relationship between the municipality and an authority must be cooperative. A knowledgeable financial consultant can help a municipality structure an authority in many different ways to give it flexibility in which powers and purposes it wishes to assign.

One option is to set up an operating authority and pair it with a management and services agreement. Under this arrangement, the municipality transfers its facilities to the authority, who collects a rate and charges from local users to finance their operation, maintenance and improvements. The authority then “hires” the municipality to conduct operations and maintenance and perform administrative functions such as billing.

Another option is the reverse leaseback authority. Under this arrangement, the municipality continues to own the facilities and finance capital improvements, but it leases the system to the authority for operation, maintenance and the setting of rates and charges.

Hybrid versions of these examples can also be established based upon the priorities and goals of the municipality.

Be prepared to advance funds to accomplish these steps before the utility is generating revenue.

Stormwater utilities have similar powers and limitations as those placed on other utilities. Charges must be uniform and reasonable. This means that before any billing can occur, the creating body must identify the scope of service and the facilities that are included; determine their costs of acquisition, operation, and maintenance; and adopt a basis for billing. Also, authorities may only bill for service they render; they have no power to “tax” for the general good. Therefore, the municipality may have to put up funds initially to get the ball rolling.

The steps presented above are simply guidelines, and not all steps may be needed for all municipalities. By taking the time to complete the necessary steps, a municipality can be sure that it has designed a customized approach that will most efficiently meet its community stormwater needs.
Are you ready to find a consultant who can help you evaluate the feasibility of a stormwater utility in your community?

Call one of HRG’s experts:

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