



Funding Stormwater Management in Pennsylvania Municipalities:

Creating Authorities and Implementing Ordinances





About PennFuture

PennFuture works to protect Pennsylvanian's air, water, and land by empowering citizens to build sustainable communities for future generations. We protect your health, your environment, your climate, and your access to natural land. We enforce environmental laws with a team of lawyers to protect your right to clean air and clean water and work in Harrisburg to defend and support laws that protect the environment and public health.

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Funding Stormwater Management in Pennsylvania Municipalities: *Creating Authorities and Implementing Ordinances*

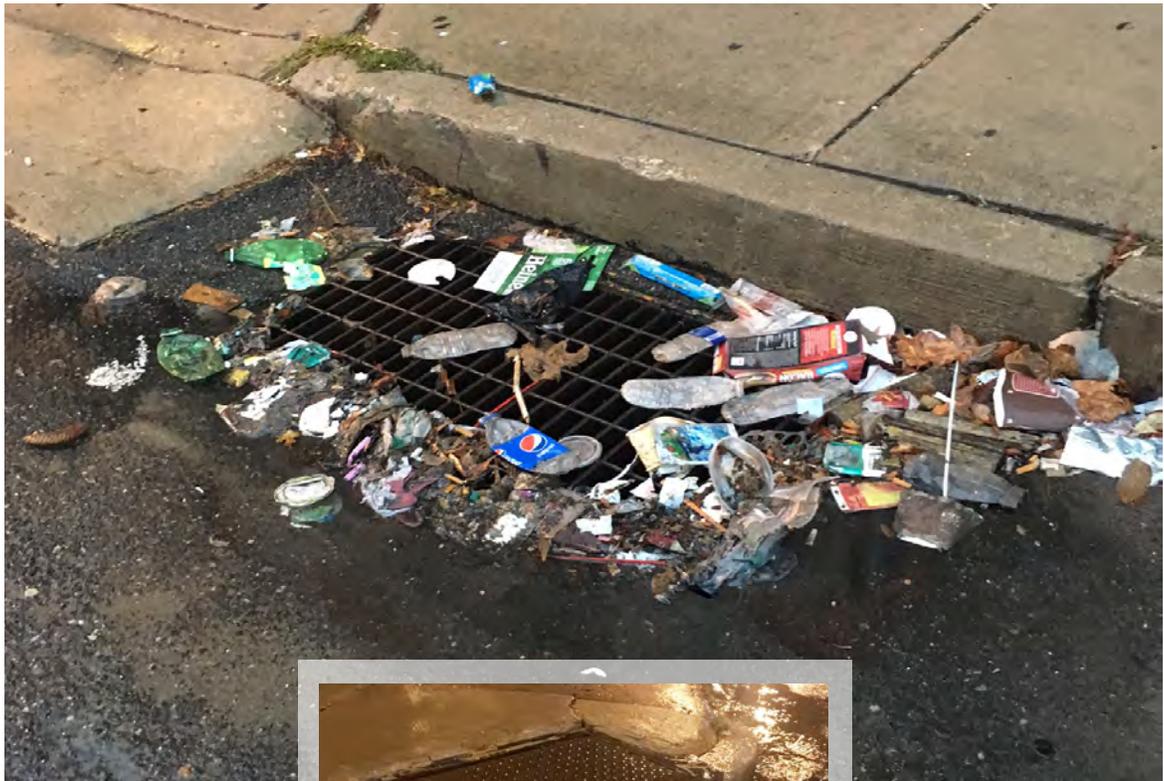
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Why Do We Need to Manage Stormwater?

Stormwater runoff is water from rain or melting snow that flows across the land instead of sinking into the ground. Stormwater from rain and snow events is a significant source of water pollution in streams and rivers. Large areas of hard, nonporous surfaces commonly built in urban centers can exacerbate the impacts of a rain or snow event. As precipitation runs down rooftops and over dirty streets and sidewalks, it collects pollutants such as oil, fertilizers, litter, and pet waste. All of these pollutants are delivered to streams, rivers, and lakes.

The National Weather Service estimates that, over the last 30 years, the United States lost an average of 82 lives and \$7.96 billion *per year* due to flooding.¹



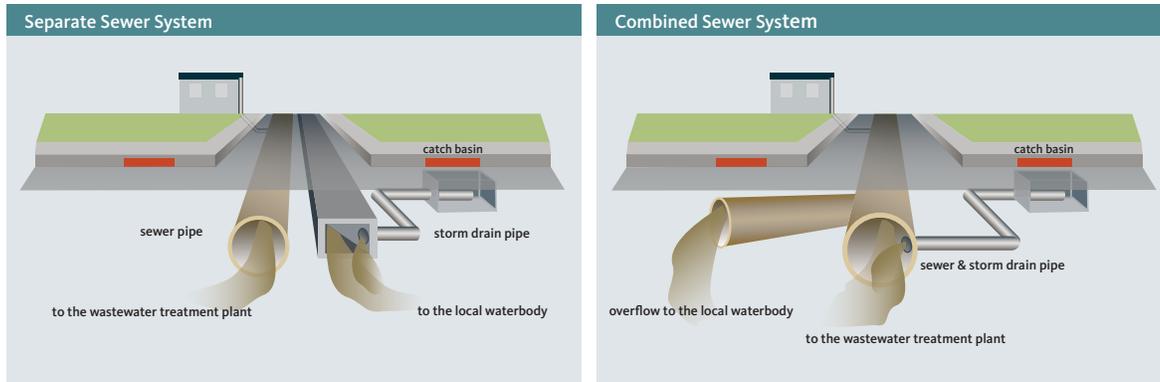
Pollution and trash also enter storm drains



¹ National Weather Service, Hydrologic Information Center – Flood Loss Data, *available at* <http://www.nws.noaa.gov/hic/> (last visited January 9, 2017).

The Types of Stormwater Management Systems

Many municipalities have built stormwater management into their infrastructure using a system of underground pipes and sewers that removes excess water from the street and releases it into connected waterbodies. Two commonly used stormwater management systems are municipal separate storm sewer systems (MS4s) and combined sewer systems. MS4s have two sets of pipes that run parallel to one another: one that carries wastewater from homes, businesses, and industry to wastewater treatment facilities for treatment, and one that carries stormwater collected from the tops of buildings and the street directly to nearby streams and rivers without being treated.²



In cities with combined sewer systems, stormwater from streets and wastewater from homes, buildings and industry is collected by a single pipe and is delivered to a wastewater treatment facility. In the event of a heavy flood or snowmelt, a combined sewer system can become overwhelmed with the incoming volume of water. This results in a combined sewer overflow where untreated stormwater and wastewater is discharged directly into nearby streams and rivers.



Discharge point into local waterways

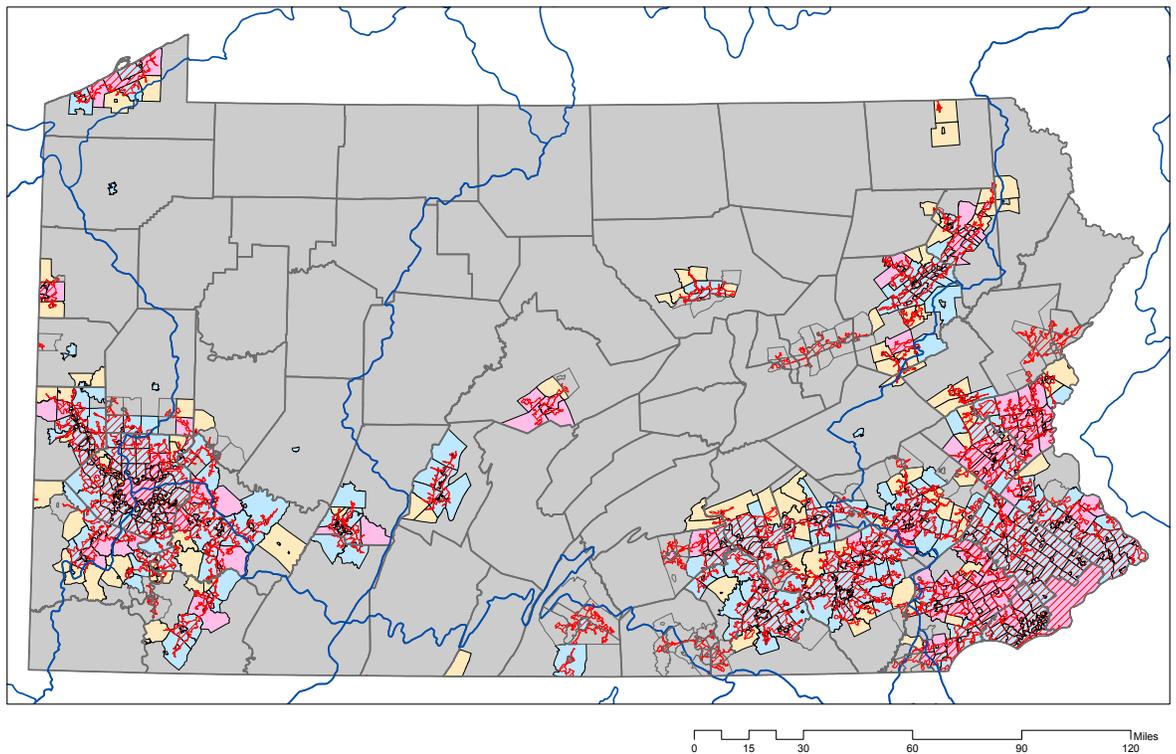
² Philadelphia Water Department, Separate Sewer System, available at http://www.phillywatersheds.org/watershed_issues/stormwater_management/separate_sewer_system (last visited January 9, 2017).

What are federal and state government agencies doing to address this problem?

Federal and state government agencies are both ramping up their efforts to address stormwater. The United States Environmental Protection Agency (EPA) has been escalating its efforts to inspect municipal compliance with stormwater regulations.³

In Pennsylvania, the stormwater permitting program is administered by the Pennsylvania Department of Environmental Protection (PADEP). PADEP recently released the final version of a permit requiring municipalities to implement stringent stormwater controls.

MS4 Municipalities / 2010 Urbanized Areas



Permit Status as of May 2012*

- | | | |
|------------|-------------------|--------------------------|
| General | Municipalities | 2010 Urbanized Area |
| Individual | County Boundaries | Major Watershed Boundary |
| Waiver | | |

³ See, e.g., Patrick Lester, "Pennsylvania Municipalities Targeted in Clean Water Crackdown" The Morning Call (April 25, 2015), available at <http://www.mcall.com/news/local/mc-lehigh-valley-epa-storm-water-crackdown-20150425-story.html> (last visited January 9, 2017).

⁴ DEP

How are municipalities affected?

Municipalities are on the front lines of stormwater management. Although not all municipalities are required to obtain stormwater permits, those that are must satisfy numerous permitting requirements that are becoming increasingly stringent. Those requirements include: keeping the public educated and involved; identifying improper discharges to the stormwater system; regulating stormwater discharges resulting from new construction; and implementing municipal “good housekeeping” practices. For municipalities that discharge to impaired waters or waters within the Chesapeake Bay watershed, additional stormwater control practices are required to reduce pollution discharged to those waterbodies. Communities will receive a net benefit from conducting these activities in the form of reduced risks to life and property from flooding, and improved water quality.

What is the best way to address stormwater pollution?

Recent developments in stormwater research and experience make clear that the best way to manage stormwater is to use “green infrastructure” (also called “low-impact development”). Green infrastructure takes advantage of nature’s own infiltration and evaporation processes to control stormwater flow and remove pollutants. In the long-term, it has been found to be the most economically, environmentally, and socially beneficial form of stormwater management. Green infrastructure includes, among other things, rain gardens, tree trenches, green roofs, porous pavement, and rain barrels. These techniques all allow water to naturally soak into soil or evaporate into the air without carrying pollutants into streams and rivers. At the same time, they provide residents with cleaner air, more attractive parks and streets, and a healthier community.



Green roof (left) and porous pavement (above)



Discharge point into local waterways

Funding Stormwater Improvements

To implement these benefits for municipalities and their residents, substantial funding is required. Various mechanisms are used by municipalities around the country. Two important considerations for a municipality when determining how to generate sufficient funds for stormwater management are whether the funding source provides a practical connection between the cost and the stormwater impacts created, and whether the source of funding is stable and sustained.

Traditionally, municipalities have reached to their general funds, which are generated primarily through property taxes, to cover a full range of municipal services. These funds are subject to competing demands and have limited growth potential. Stormwater management activities are regularly low on the list of uses for general funds, unless recent events have garnered attention (e.g., flooding, algal blooms in local waterway, etc.) or regulatory requirements come into effect. In addition, use of the general fund does not reflect the true cost certain sites have in relation to their stormwater impacts. For example, large areas of impervious surfaces, like parking lots, result in significant stormwater runoff, but generally have a relatively low property tax rate. Additionally, tax-exempt properties, such as schools, churches, and government properties, contribute stormwater to the system, but do not contribute to the general fund.

There are some state and federal grants available for stormwater management activities, such as educational programs, maintenance, and physical improvements. These grants are competitive, typically one-time or time-constrained funding sources, and likely to require a local funding match. Although a helpful source to look to, this funding is neither stable nor sustained and does not provide a practical connection between costs and the stormwater impacts created.

Bonds and loans also represent funding that may be available for stormwater management. Although repayment terms can offer low or no interest financing, these sources do require full repayment from municipal recipients. An example of the loan program funding source is Pennsylvania's Infrastructure Investment Authority (PennVEST), which provides limited, low interest loans for design, engineering, and construction of publically and privately owned drinking water infrastructure and treatment facilities, stormwater conveyances and wastewater treatment and collection systems. Furthermore, PennVest's investment in stormwater is very limited. Of the 2,862 projects PennVest has approved for grants or loans, only 153 have been to address stormwater.⁴ Thus, this funding source is not a secure option for municipalities faced with regulatory mandates, does not provide a sustainable source of funding over years to come, and provides no practical connection between costs and the stormwater impacts created.

Another frequently used mechanism for municipalities to fund stormwater work is implementing a fee on users of the system landowners. There are a variety of methods municipalities use to calculate the amount of their stormwater service fees. Impervious area is the most important factor influencing stormwater runoff and is therefore a frequently measured element in the method. Fees are directly related to stormwater management benefits received and create a reliable source of funding that is dedicated to meeting stormwater needs and impacts.

Stormwater Authorities

Like gas, electricity, water, and sewage, stormwater runoff can be managed by an authority and billed as a fee. Municipalities can realize many benefits from allowing authorities to handle stormwater permitting and management functions. A few examples of those benefits include:

- Municipal authorities have clear power to implement stormwater fees to pay for their work, so general tax revenue can be conserved for other municipal needs.
- Because authority staff will be responsible for stormwater, municipal staff will not need to spend time or resources on stormwater permitting or stormwater management.
- Having people dedicated to stormwater management allows authority staff to develop expertise, which will allow for more efficient and effective stormwater management.
- Local staff members will be attuned to the needs of the community that they serve, helping to ensure service that is responsive to the needs of the community.
- Long-term planning of stormwater projects will be easier, because there will be a steady stream of funding and committed full-time staff.
- If communities come together to form a joint authority that serves multiple municipalities, they will be able to add efficiency to their stormwater management efforts by creating economies of scale and locating stormwater management projects in areas where they can be most beneficial.

⁴ PennVEST, Approved Projects, <http://www.pennvest.pa.gov/Information/Pages/Approved-Projects.aspx>. Data as of January 2017.

Forming a Municipal Authority in Pennsylvania

To form a municipal authority, such as a stormwater authority, in Pennsylvania, a municipality must follow the procedures described in the Municipal Authorities Act, 53 Pa.C.S.A. § 5603. Municipal attorneys are advised to refer to this law when forming an authority.

- 1.) Municipalities publish public notice about public hearing regarding consideration of a resolution or ordinance to form an authority (at least 30 days before the hearing, following notice procedures in § 5603(b)). 53 Pa.C.S.A. § 5603(a).
- 2.) Municipalities hold public hearing about the resolution or ordinance to form authority. 53 Pa.C.S.A. § 5603(a).
- 3.) Municipalities adopt a resolution or ordinance stating their intent to form an authority. 53 Pa.C.S.A. § 5603(a).
- 4.) If the resolution or ordinance is passed, municipalities must publish notice at least once in the legal periodical of the county and at least once in a newspaper of general circulation. 53 Pa.C.S.A. § 5603(b).
 - a. Notice must contain brief statement of the substance of the ordinance or resolution, including the substance of the articles making reference to this chapter of the MAA.
 - b. Notice shall state that on a date certain (not less than 3 days before the notice), the articles of incorporation of the proposed authority shall be filed with the state.
- 5.) On (or before) date specified in the notice, municipalities will file with the Secretary of the Commonwealth articles of incorporation, together with proof of publication required above. 53 Pa.C.S.A. § 5603(c). Articles of incorporation must include:
 - a. Name of the authority;
 - b. Statement that the authority is formed under this chapter of Municipal Authorities Act;
 - c. Statement about other existing authorities organized in the municipality;
 - d. Name of incorporating municipalities together with names and addresses of its municipal authorities; and;
 - e. Names, addresses, and term of office for first members of authority board.
- 6.) Articles of incorporation must be executed by each incorporating municipality. 53 Pa.C.S.A. § 5603(d).
- 7.) Secretary of the Commonwealth will then endorse his/her approval of the articles of incorporation and issue a certificate of incorporation. 53 Pa.C.S.A. § 5603(e).
- 8.) Once officers of the authority are elected, the authority's secretary must certify to the Secretary of the Commonwealth the names and addresses of the officers. 53 Pa.C.S.A. § 5603(f).

Implementing a Stormwater Management Fee

Why is a stormwater fee good for communities?

In order to protect communities from flooding and streams from harmful pollution, stormwater management requirements are becoming more stringent. Although green infrastructure techniques are more cost-effective than their alternatives in the long-term, they do require an up-front investment. Implementing a stormwater fee, instead of relying on general tax revenue, ensures that all members of the community who contribute to the generation of stormwater runoff, and who benefit from stormwater management, will contribute to paying for the solution. Because the funding will not be able to be diverted to other uses, the stormwater fee also guarantees that there will be enough funding allocated to stormwater management every year.

How will the fee be used?

The fee will be placed into a dedicated fund used only for the municipality's stormwater program. It will cover costs associated with improving existing stormwater systems, such as cleaning and repairing storm drains and sweeping streets, and capital improvements, such as planting trees, building green roofs, disconnecting downspouts, installing rain gardens, and providing rain barrels.



Street sweeping reduces pollutants entering the storm sewer system

How PennFuture's model ordinance calculates fees

Municipalities have used various methods of calculating stormwater service fees. Some adopt a simplified, tiered system in which different fee rates apply to different categories of properties. Others base the fee on the amount of impervious area on the assessed property. Another option is to calculate the amount of stormwater runoff from each property and assess a fee based on the amount of stormwater flowing off the property.

For a given amount of precipitation, the amount of stormwater runoff generated by a given area depends largely on the nature of the surface, with hard, impervious surfaces like roofs and paving creating more (and faster) runoff than surfaces like fields, which allow more precipitation to percolate into the soil. The more stormwater generated, the greater the contribution to the problem, so basing the stormwater management fee on the impervious surface area present on each property is an equitable method, because runoff from impervious areas is the primary contributor to the storm sewer system.

Calculating the impervious surface on every property in the municipality, however, would be extremely time consuming and burdensome. To simplify matters, PennFuture's model ordinance uses a sampling method that takes impervious area into account without requiring a determination of every property's impervious area.

PennFuture's model stormwater management fee relies on a concept called an "equivalent residential unit" or "ERU." The first step in determining the municipality's ERU is to take a random sample of developed, residential

properties and calculate the area of the impervious surface on each lot in the sample. The average area of impervious surface across the sample lots is the ERU for the municipality, which is measured in square feet per parcel.

The stormwater management fee is calculated by assigning an amount to be collected for each ERU. The fee charged for each ERU is determined by evaluating the total financial needs of the municipality for stormwater management and dividing that number by the estimated total number of ERUs in the community. The result is a fee rate in dollars per ERU. This way, each ERU is paying its share of the overall stormwater management need.

For each property, the stormwater management fee will be assessed by multiplying the number of ERUs by the calculated fee rate. Again, this method ensures that each property owner pays for stormwater management roughly in proportion to its contribution to the problem of stormwater runoff.



Street curb storm drain

How much will the fee be for a property owner?

To help simplify the calculation of the applicable fees, all one-, two-, and three-family residences are conclusively assumed to contain 1 ERU of impervious surface area.

Residential properties with more than three residences on site (such as condominiums and apartment buildings) and non-residential properties will have the stormwater fee assessed based upon the amount of impervious surface area located on the property. Such properties that contain less than or equal to one ERU are assessed at a rate of one ERU, while those containing an impervious surface area greater than one ERU will have the fee assessed at a rate equal to the number of ERUs rounded to the nearest $\frac{1}{4}$ of an ERU on the property. For example, a commercial property with 2.4 ERUs of impervious surface would be assessed a fee of 2.5 times the rate of an ERU.

Is there a way to reduce the fee?

For certain industrial, commercial, and larger residential properties, PennFuture's ordinance provides ways for the property owner to reduce the amount of the stormwater fee.

To simplify and reduce the cost of administering the ordinance, most residential properties pay an identical fee. Specifically, the fee for all one-, two-, or three-family residences is the same, based on the assumption of one ERU per property, and cannot be reduced.

For owners of other properties, PennFuture’s ordinance creates an incentive to reduce runoff by discounting future stormwater fees, up to a certain percentage. The most effective way for owners of a property that is not a one-, two-, or three-family residence to reduce the stormwater management fee is to reduce the amount of impervious surface area on the property. For example, a green roof can be installed, or concrete or gravel parking area can be replaced with permeable pavers.



The owner of a property that is not a one-, two-, or three-family residence may also apply for a credit for certain engineered stormwater practices or structures on his or her property that provide quality treatment and/or quantity attenuation of the stormwater runoff from his or her property.

Who will pay?

The fee will be paid by all property owners in the municipality whose property has impervious surfaces, including roofs, driveways, sidewalks, walkways, and roads. Wholly undeveloped properties are not subject to a stormwater management fee.

Model Stormwater Management Fee Ordinance

Section 1: TITLE

This Ordinance shall be known as the Stormwater Management Fee Ordinance for [the Municipality].

Section 2: PURPOSE

The purpose of this Ordinance is to provide dedicated funding needed to ensure the proper development and maintenance of stormwater management practices within [the Municipality].

Section 3: AUTHORITY

- A. [Second Class Township Municipality] is empowered by [53 Pa. Cons. Stat. § 67705] to assess reasonable and uniform fees for stormwater management activities and facilities.
- B. [The Municipality] is empowered to regulate stormwater management activities and facilities by the authority of the Stormwater Management Act, 32 P.S. § 680.1 et seq., and the [Second Class Township, Borough, Third Class City Code], Title 53 P.S. § 35101 et seq.
- C. [The Municipality] is also empowered to regulate land use activities that affect stormwater runoff and stormwater management systems by the authority of Pennsylvania’s Municipalities Planning Code, 53 P.S. § 10101 et seq.

Section 4: FINDINGS

The governing body of [the Municipality] finds that:

- A. Inadequate development and maintenance of stormwater facilities increases stormwater runoff rates and volumes, contributes to erosion and sedimentation, overtaxes the carrying capacity of storm sewers and streams, increases the cost of public facilities to carry and control stormwater, undermines flood plan management and flood control efforts in downstream communities, reduces groundwater recharge, threatens public health and safety, and increases pollution of water resources.
- B. A comprehensive program of stormwater management, including the generation of funding to pay for effective stormwater best management practices, is fundamental to the public health, safety, and welfare and the protection of people of the Commonwealth, their resources, and the environment.
- C. Stormwater is an important water resource which provides groundwater recharge for water supplies and base flow of streams, which also protects and maintains surface water quality.
- D. Approaches to water management that protect, restore, and mimic natural water cycles have significant environmental, social, and economic benefits and should be encouraged.
- E. Federal and state regulations include requirements for municipalities to implement a program of stormwater controls. Regulated municipalities are required to obtain a permit for stormwater discharges from their separate storm sewer systems under the National Pollutant Discharge Elimination System (“NPDES”). In order to establish, operate, and maintain the stormwater infrastructure of [the Municipality], as well as all systems upon which the stormwater infrastructure depends, sufficient and stable funding is required to fund these public services.
- F. [The Municipality] intends to establish fair and equitable stormwater management fees to assure that each lot within [the Municipality] will pay its proportionate share of the costs of operation, maintenance, repair, administration, replacement, and improvement of all stormwater services provided or paid for by [the Municipality].

Section 5: DEFINITIONS

Base ERU Rate

The total fee, as proposed by the [implementing agency], and approved by the [Municipality] in the form of a resolution, as the fee assessed to one equivalent residential unit. The Base ERU Rate shall be set such that the Municipality's total anticipated stormwater expenses divided by the number of ERUs in the municipality shall be equal to the Base ERU Rate.

Best Management Practices (“BMPs”)

Methods, procedures, and analyses specified in Pennsylvania's Department of Environmental Protection's Stormwater Best Management Practices Manual (“Stormwater BMP Manual”), Commonwealth of Pennsylvania, Department of Environmental Protection, No. 363-0300-002 (December 2006), as amended and updated, to reduce flooding potential and control the volume, flow rate, and water quality of stormwater.

Credit Rate

The scaling factor that shall be applied in the calculation of stormwater management fee credits. For structures or practices that, as determined by the [implementing agency (usually the agency that manages the Municipality's environmental issues, but may also be an authority)], are anticipated to provide:

- A. Both treatment quality and quantity attenuation, the credit rate shall be 80%;
- B. Either treatment quality or quantity attenuation (but not both), the credit rate shall be 50%.

Developed

Manmade changes made to a property or lot, which may include, but are not limited to, buildings or other structures for which a building permit must be obtained under the requirements of the Uniform Construction Code, mining, dredging, filling, grading, paving, excavation or drilling operations, or the storage of equipment or materials.

Equivalent Residential Unit (“ERU”)

The average amount of impervious surface on a residential lot in [the Municipality], as proposed by the [implementing agency] and approved by [the Municipality] in the form of a resolution. The ERU shall be determined by generating a random, statistically significant sample of residential properties and calculating the impervious surface on each lot in the sample. The mean average of impervious surface area across the sample lot shall be the ERU. The ERU is used in determining the fees assessed for each lot in the municipality.

Impervious Surface

Any surface on a lot that, because of the surface's composition or compacted nature, impedes or prevents natural infiltration of water into the soil, including, but not limited to, roofs, solid decks, driveways, patios, swimming pools, sidewalks (other than public walks located in [the Municipality's] right-of-way), parking areas, tennis courts, concrete, asphalt, or crushed stone streets or paths, or compacted gravel or dirt surfaces, as determined by [implementing agency].

Impervious Surface Area

As recorded or calculated by [the implementing agency], the number of square feet of horizontal surface on a lot covered by an impervious surface. In determining the impervious surface area of a lot, [the implementing agency] may use any appropriate methods, including but not limited to aerial photography and surface feature evaluation processes.

Lot

A designated parcel, tract, or area of land established by a plat or otherwise as permitted by law and to be used, developed, or built upon as a unit.

Property Owner or Owner

The owner of a lot as shown on the County tax records.

Residential Property (for purposes of ERU calculation)

Lot containing one (1) structure designed for occupancy by one (1), two (2), or three (3) family(-ies) and shall include, single family residences, two-family residences, three-family residences, manufactured homes, and mobile homes located on individual lots. Lots may be classified as 'residential' despite the presence of incidental structures associated with residential uses such as garages, carports, or small storage buildings. 'Residential Property' shall not include developed land containing: structures used primarily for non-residential purposes; manufactured homes and mobile homes located within manufactured home or mobile home parks; or other multiple unit residential properties such as apartments, condominiums, and town homes.

Stormwater

Drainage runoff from the surface of the land resulting from precipitation, including snow or ice melt.

Stormwater Services

[The Municipality's] program for stormwater quality and for the partial control and conveyance of stormwater, including, but not limited to: public education; monitoring; removing, and regulating stormwater pollutants; other activities described in [the Municipality's] NPDES permit; mapping; planning; regulating, reviewing, and inspecting private stormwater infrastructure; operating, constructing, improving, cleaning, and maintaining [the Municipality's] stormwater system; and any and all expenses deemed reasonably necessary to the management of stormwater within [the Municipality] in the judgment of [the implementing agency], including but not limited to the payment of principal and debt service, and the establishment of a reserve fund, to pay for these services.

Stormwater System

The system of natural and constructed conveyances for collecting, managing, and transporting stormwater, including but not limited to lakes, ponds, rivers, perennial, intermittent, and/or channeled streams, connected wetlands, open ditches, catch basins, and other inlets, pipes, storm sewers, drains, culverts, and created stormwater management facilities that provide partial treatment by passive means such as wet detention ponds, detention basins, and stormwater wetlands.

Stormwater Management Fee

The fee charged for costs incurred by [the Municipality] in providing stormwater management services.

Stormwater Management Fee Credit

A conditional reduction in the amount of a stormwater management fee to an owner based on approved on-site controls, NPDES industrial storm water discharge permit, or proof of direct discharge outside of the corporate limits.

Section 6: UNIFORM APPLICATION OF RENTAL, RATES, AND CHARGES

Rental, rates, and charges shall be assessed, imposed, liened and collected as to all Property, owners, lots, parcels, buildings units, and users.

Section 7: STORMWATER MANAGEMENT FEE

A. Stormwater Management Fee

- (1) Each developed lot in [the Municipality] shall be subject to a monthly stormwater management fee equal to the product of the Base ERU Rate and the number of ERUs of impervious surface area on the lot as calculated in subsection (2) below, less any credits for the lot approved by [the implementing agency] pursuant to Section 8 of this Ordinance.
 - (a) One-, two-, and three-family residences on a single lot will be deemed to have one ERU.
 - (b) For lots that do not contain a one-, two-, or three-family residence:
 - i. Each lot with an impervious surface area less than or equal to one ERU, shall be deemed to have an impervious surface area equal to one ERU.
 - ii. The number of ERUs of impervious surface area on a lot with an impervious surface area greater than one ERU shall be calculated by dividing the lot's impervious surface area by the value of one ERU, and rounding the result to the nearest $\frac{1}{4}$ of an ERU.
- (2) At least once every five years after the effective date of this Ordinance, the [implementing agency] shall propose to [the Municipality] an appropriate Base ERU Rate that accounts for any changes in [the Municipality's] total anticipated stormwater expenses, the average impervious area of a residential property, and the number of ERUs in [the Municipality]. [The Municipality] will take into account the [implementing agency's] proposal and establish, by resolution, a revised Base ERU Rate as appropriate.

B. Measurement of impervious surfaces.

- (1) An owner may file an application with [the implementing agency] contesting the calculation of impervious surface area on the lot as of the date of the application. The applicant must submit satisfactory evidence as required by [the implementing agency], such as square footage measurements and descriptions of the relevant buildings or materials. Any approved changes in calculations will take effect on the first day of the billing period beginning after the application was submitted, even if retroactive as of date of approval; no refunds or credits shall be granted for amounts billed prior to submission of the application. The applicant may appeal the determination of [the implementing agency] as set forth in Section 11.
- (2) [The implementing agency] shall review and update as necessary the impervious surface data in [the Municipality's] records at least once every five years.
- (3) Upon close-out of any building permit under which the associated documentation or other data indicate that at least $\frac{1}{4}$ of an ERU of impervious surface has been constructed upon a lot, the personnel from [the agency authorized to enforce the building code] shall provide [the implementing agency] notice of the number of square feet of impervious surface added, in net, to the lot, as indicated on documentation associated with said permit, together with the applicable tax lot number. [The implementing agency] shall thereafter update the data in [the Municipality's] records to reflect the adjusted impervious surface area on the lot.

Section 8: STORMWATER MANAGEMENT FEE CREDITS

- A. The stormwater management fee for a lot shall be reduced as provided herein if [the implementing agency] certifies that the lot is eligible for one or more credits in accord with this section.
- B. One-, two-, and three-family residences on a single lot are not eligible for stormwater management fee credits.
- C. The credit for a practice or structure shall be the product of: the lot's stormwater management fee, the percentage of the total impervious surface area on a lot from which the first 1.5 inches of stormwater runoff is mitigated or managed by the practice or structure, and the practice or structure's Credit Rate; provided, however, that the maximum credit that may be applied to any lot shall be 80% of the stormwater management fee that would be assessed to that lot in the absence of any stormwater management fee credit.

- D. Credits are available for those stormwater management practices or structures enumerated in the Stormwater BMP Manual as updated from time to time. The stormwater management practice or structure enumerated in the Stormwater BMP Manual must follow the Stormwater BMP Manual guidelines, as updated and amended.
- E. An engineered structure or practice beyond those enumerated in the Stormwater BMP Manual that provides quality treatment and/or quantity attenuation shall be considered by [the implementing agency] for stormwater management fee credits under this section using the following criteria:
 - (1) The proposal must demonstrate that the practice will provide a quantifiable treatment and/or runoff control benefit to the lot through engineered design principles.
 - (2) The drainage area leading to the practice must be clearly defined, including the area, amount of impervious cover, flowpath, and existing and proposed land use.
 - (3) The proposal must demonstrate that the practice will perform as well or better than the Stormwater BMP Manual design.
- F. Administration of credits.
 - (1) In order to obtain a credit, an owner must apply in a form satisfactory to [the implementing agency]. The [implementing agency] will determine materials required for a satisfactory application, but must include:
 - (a) A plan of operation and maintenance, and
 - (b) A demonstration of the BMP's management of stormwater.
 - (2) If an application is approved by [the implementing agency], the resulting reduction in the stormwater management fee shall take effect with the beginning of the next billing period that begins at least 30 days after the application was approved.
 - (3) The owner must assume all responsibility for operation and maintenance of stormwater management structure. Failure to maintain the structure shall result in cancellation of the credit.
 - (4) A credit shall continue to be applied to each future bill so long as the lot continues to be eligible for the credit; provided, however, that [the implementing agency] shall cancel any credit for failure to provide [the Municipality or the implementing agency] with access to inspect and confirm that the lot's continuing eligibility for a particular recurring credit.
 - (5) The applicant may appeal [the implementing agency's] denial of an application or cancellation of a previously approved credit as set forth in Section 11 of this Ordinance.

Section 9: STORMWATER ACCOUNT AND BILLING

- A. [The Municipality's Controller/financial manager] shall create and maintain a dedicated stormwater account separate from all other [Municipality] accounts or funds. All stormwater management fees, and any penalties or interest on such fees, shall be deposited into that account, and shall be used by [the Municipality] solely to provide stormwater services.
- B. Billing.
 - (1) [The Municipal Controller or other Municipal official tasked with billing] shall issue bills for stormwater management fees on a quarterly basis, or another regular periodic basis, not less regularly than annually. The stormwater management fees may be billed on a combined utility bill that contains other charges, including water and/or sewer service. Stormwater management fees that are shown on a combined bill may be for a different service period than that used for other utility services.
 - (2) Bill recipient.

- (a) Single water and/or sewer account. For a lot associated with only one water and/or sewer account, [the Municipality] will bill the stormwater management fee to the individual or entity receiving the utility bill for such account. The owner may elect to receive the bill or redirect the bill to a third party, including but not limited to a tenant or other occupier of the lot, with the third party's consent, by executing and submitting a form provided by [the Municipality].
- (b) All other lots. For all other lots, [the Municipality] will bill the stormwater management fee to the owner on a separate utility bill. The owner may elect to redirect to a third party, including but not limited to a tenant or other occupier of the lot, with the third party consent, by executing and submitting a form provided by [the Municipality].
- (c) In all cases, the owner is finally responsible for any unpaid stormwater management fees, including penalties and/or interest.
- (3) If a lot is incorrectly billed, or not billed, or a bill is sent to the wrong party, [the Municipality] may back-bill the owner for a period not to exceed two years.
- (4) [The implementing agency, the Municipal Controller or other responsible for the Municipality's finances, and others that the Municipality wishes to designate] is authorized to develop billing forms, guidelines, and practices not inconsistent with this section.

Section 10: ENFORCEMENT AND PENALTIES

A. Effects of nonpayment

- (1) The stormwater management fee shall be payable without penalty for 30 days following the bill date.
- (2) Effective on the 31st day following the bill date, a penalty of 5% of the billed amount for that billing period shall be added for nonpayment within the time allowed.
- (3) On all amounts remaining unpaid after 60 days following the bill date, and after each period of 30 days or portion thereof thereafter, 1% of the amounts unpaid (including penalties assessed for non-payment) shall be added and collected.
- (4) In accordance with the Municipal Claim and Tax Lien Law, 53 P.S. § 7101, et seq., any uncontested portion of the stormwater management fee, with any added penalty or interest, shall constitute a lien upon and against the subject lot from the date of the bill date.

Section 11: REVIEW AND APPEAL PROCESS

A. Any owner who believes the provisions of this Ordinance have been applied in error may appeal in the following manner and sequence.

- (1) Any person aggrieved by [the implementing agency's] determination pursuant to Sections 7 and 8 of this Ordinance (appealing impervious surface or credit determination) may appeal such decision to the [the implementing agency] within 60 days of the date of the adverse decision. Such appeal must be in writing and explain why [the implementing agency's] decision should be reversed. The appeal will be considered at the next scheduled open meeting after its receipt by [the implementing agency]. The aggrieved person may present evidence at the open meeting at which the appeal is considered, but such evidence must be limited to the matters stated in the written appeal. [The implementing agency] will issue a written determination within 30 days of the open meeting at which the appeal was considered.
- (2) Any person with a direct interest who is aggrieved by [the implementing agency's] written determination of an appeal, or by the failure of the [implementing agency] to make a written determination within 30 days of the meeting at which an appeal was considered, shall have the right to appeal to the Court of Common Pleas.

- B. Whenever any stormwater management fee charged under the provisions of this Ordinance is set aside, then [the implementing agency] is authorized to issue a new fee with the same force and effect and complying with any legal requirements.

Section 12: FLOODS AND LIABILITY

- A. Floods from stormwater runoff may occur occasionally that exceed the capacity of the stormwater system maintained and financed with the stormwater management fee. This ordinance does not imply that properties subject to stormwater management fees shall always be free from flooding or flood damage, or that all flood control projects to control runoff can be constructed cost-effectively. Nothing whatsoever in this ordinance shall deem [the Municipality, the Municipal Council, the Board of Supervisors, the Municipal Administrator, or local agency staff] liable for any damages incurred in a flood or from adverse water quality. Further, payment of a stormwater management fee does not relieve an owner or third party from any local, State, or Federal requirements to obtain flood insurance or other law applicable to the lot.

Section 13: SEVERABILITY

- A. If any section, subsection, sentence, clause, phrase, or portion of this ordinance is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct, and independent provision. Such holding shall not affect the validity of the remaining portions of this ordinance, it being the intent of [the Municipality] that this Ordinance shall stand on its own merit.

RESOLUTION No. _____

A Resolution Establishing an Equivalent Residential Unit (“ERU”) area and Base ERU Rate in Accordance with Ordinance No. _____ Entitled Stormwater Management Fee Ordinance WHEREAS, the Council of [Municipality] passed the Stormwater Management Fee Ordinance, No. ____, on [Date], establishing a stormwater management fee, and, by this Resolution, is hereby establishing an Equivalent Residential Unit (“ERU”) area and a Base ERU rate as defined in the Ordinance. The ERU is hereby established at ____ square feet, and the Base ERU Rate is hereby established at ____ dollars per ERU.

BE IT HEREBY RESOLVED by the [Council] that it adopts and incorporates an ERU of ____ square feet and a Base ERU Rate of ____ dollars per ERU pursuant to Ordinance No. ____.

ADOPTED BY [The Board of Supervisors] this __ day of _____, 20__.

Additional Resources

Choose Clean Water, Stormwater Communications: Tools to Help Your Community Understand and Support an Effective Stormwater Utility Plan, available at <http://choosecleanwater.org/toolkit/stormwatertoolkit.pdf>.

Environmental Protection Agency, Region 3, Funding Stormwater Programs (Jan. 2008) available at https://www.epa.gov/sites/production/files/2015-10/documents/region3_factsheet_funding.pdf.

Environmental Protection Agency, Managing Wet Weather with Green Infrastructure: Municipal Handbook, Funding Options (Sept. 2008) available at https://www.epa.gov/sites/production/files/2015-10/documents/gi_munichandbook_funding.pdf.

National Association for Flood and Stormwater Management Agencies (under grant provided by Environmental Protection Agency), Guidance for Municipal Stormwater Funding (Jan. 2006) available at https://www.epa.gov/sites/production/files/2015-10/documents/guidance-manual-version-2x-2_o.pdf.

Natural Resources Defense Council, Financing Stormwater Retrofits in Philadelphia and Beyond (Feb. 2012) available at <https://www.nrdc.org/sites/default/files/StormwaterFinancing-report.pdf>.

Natural Resources Defense Council, Rooftop to Rivers II (2011) available at <https://www.nrdc.org/sites/default/files/rooftopstoriversII.pdf>.

University of Maryland, Environmental Finance Center, Stormwater and Financing Outreach, available at <http://efc.umd.edu/stormwater.html>.

Western Kentucky University Stormwater Survey (Nov. 2016) available at <https://www.wku.edu/engineering/civil/fpm/swsurvey/swsurvey-2016draft11-7-2016hq.pdf>.



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