

TOWNSHIP OF
MIDDLETOWN
BUCKS COUNTY

Middletown Township
Stormwater Impact Fee
Credit Policy Manual

Adopted by the Middletown Township Board of Supervisors on:
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Resolution #25-26R

ATTEST:



Dawn Quirple, Secretary

**BOARD OF SUPERVISORS OF THE
TOWNSHIP OF MIDDLETOWN
BUCKS COUNTY, PENNSYLVANIA**



Michael Ksiazek, Chairperson

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Introduction

The Township of Middletown (“Township”) has established a Stormwater Impact Fee to create a dedicated funding source for the operation and maintenance of the Township’s extensive stormwater infrastructure. All developed parcels in Middletown Township are required to pay the fee. The Fee is established by ordinance of the Township’s Board of Supervisors and may be amended on an annual basis.

A credit program has been developed per Chapter 428, Section 109 “Credits” of the Township’s ordinances to allow owners to apply for credits for implementing and maintaining stormwater best management practices (BMPs) on their parcel(s) to reduce the rate and volume of stormwater entering the storm sewer system or to provide on-site stormwater quality benefits. By implementing such measures, property owners are helping to reduce the demand on the existing system. This manual has been prepared to detail the policies and application procedures for available credits

The primary goals of the Township’s credit program are to:

- Enhance fee equity by recognizing ongoing stormwater management activities on private property;
- Assure a high level of functionality of the existing stormwater infrastructure and maximize the system’s current capacity;
- Limit the need for expansion of the Township’s stormwater related infrastructure and defray the associated future capital costs; and
- Encourage private investment in installing and maintaining private stormwater management systems.

The Credit policy, which encourages and incentivizes the ongoing operation and maintenance of BMPs on private property, will focus on those activities helping to minimize peak flows and runoff volumes as well as on-going management of those facilities to help protect local water quality by managing stormwater pollution.

The stormwater credit program provides an opportunity for nonresidential and residential property owners to reduce their stormwater impact fee. The credits are available if the property owner performs specific actions that reduce the impact of stormwater generated from their property. This policy does not change stormwater management requirements for new development or redevelopment or relieve a property owner or developer from complying with those requirements.

Definitions

Best Management Practices (“BMPs”) - Methods, measures or practices used to prevent or reduce surface runoff and/or water pollution, including but not limited to structural and nonstructural stormwater management practices and operation and maintenance procedures. See also "nonstructural best management practice (BMP)."

Community Service Credit – A credit offered for a property owner’s participation in an approved community service activity, such as a tree planting, debris cleanup, or other event determined by the Township.

Constructed Wetland - A shallow marsh system planted with emergent vegetation designed to treat stormwater runoff.

Credit – A calculated reduction in the Impervious Area used to determine the Stormwater Impact Fee based upon the presence of BMPs and/or requirements described in the Credit Policy Manual.

Credit Policy Manual – This document.

Department of Environmental Protection (“DEP”) – The agency of the Commonwealth of Pennsylvania responsible for protecting and preserving the land, air, water, and public health through enforcement of the state’s environmental laws.

Detention Basin - An impoundment designed to collect and delay stormwater runoff by temporarily storing the runoff and releasing it at a predetermined rate. Detention basins are designed to drain completely soon after a rainfall event and become dry until the next rainfall event.

Developed Property - A parcel altered from a natural state that contains impervious surface equal or greater than 400 square feet.

Groundwater Recharge - The replenishment of existing natural underground water supplies from rain or overland flow.

Impervious Area (“IA”) or Impervious Surface - A surface that prevents the infiltration of water into the ground. Impervious surfaces include, but are not limited to, streets, sidewalks, pavement roofs or driveway areas. Any surface areas designed to be gravel or crushed stone shall be regarded as impervious surfaces, unless a designed stormwater management system is beneath the gravel surface.

Municipal Separate Storm Sewer System (“MS4”) – A PA DEP permitted system of conveyance or system of conveyances (including roads with drainage systems, municipal

streets, catch basins, curbs, gutters, ditches, constructed channels or storm drains) primarily used for collecting and conveying stormwater runoff.

National Pollutant Discharge Elimination System (“NPDES”) - The federal government's system for issuance of permits under the Clean Water Act, which is delegated to the PA DEP.

Non-Single-Family Residential (“Non-SFR”) Property - Any developed property not fitting the definition of single-family residential property. Non-SFR properties include, but are not limited to: apartments, boarding houses, hotels and motels, churches, industrial properties, commercial properties, manufactured home or mobile home parks, commercial and office buildings, storage areas, parking lots and other impervious areas, parks, recreation properties, public and private schools and universities, hospitals and convalescent centers, office buildings, government properties, and mixed-use properties.

Owner - Any person, firm, corporation, individual, partnership, company, association, government agency, society or group owning real property in Middletown Township. Owner may be referred to as "property owner" or "landowner."

Peak Discharge – The maximum rate of stormwater runoff from a specific storm event.

Pervious Surface - A surface that allows the infiltration of water into the ground.

Rain Barrel – A container that collects and stores rainwater from a rooftop downspout for later use in activities like watering gardens or lawns.

Single-Family Residential (“SFR”) Property - A residential establishment which may be constructed as a freestanding building; one-half of a double home or duplex (one party wall in common); one house in a row house or townhouse arrangement (sharing two vertical party walls in common, except for end units); and any other variation of construction with the same result, including buildings subject to the condominium form of ownership.

Storm Frequency - The number of times that a given storm "event" is statistically likely to occur or is exceeded on the average in a stated period of years.

Stormwater - The surface runoff generated by precipitation reaching the ground surface.

Stormwater Advisory Committee – The advisory board to the Middletown Township Board of Supervisors charged with overseeing the application of the Stormwater Impact Fee.

Stormwater Impact Fee - A fee assessed, imposed and to be collected for each developed property in Middletown Township beginning January 1, 2025, and used specifically for stormwater infrastructure needs and to defray the Township's stormwater management costs.

Stormwater Management System - The system of runoff avoidance, infiltration, collection and conveyance, including storm sewers, pipes, conduits, mains, inlets, culverts, catch basins, gutters, ditches, channels, detention ponds, streets, curbs, drains and all devices/appliances and stormwater best management practices (BMPs) and facilities appurtenant thereto used for collecting, directing, pumping, conveying, detaining, infiltrating, reducing, managing, avoiding the generation of, and treating, stormwater.

Water Quality – The measure of how suitable a body of water is for a specific use, based on its physical, chemical, and biological characteristics.

Application Process

To receive any Credit as described in this Manual, a property owner must apply, subject to the applicable requirements below, to the Township.

Credit for Single-Family Residential Properties

Categories

Community Service Credit – A ten percent (10%) credit shall be given to property owners who participate in one (1) approved community service activity. A maximum total credit of fifteen percent (15%) shall be given to property owners who participate in two (2) approved community service activities. A list of community service activities shall be determined and published by the Township by March 1 of a each year. A single SFR Property shall not be eligible for more than fifteen percent (15%) credit regardless of the number of individual property owners who participate. Property owners may participate every billing year.

Rain Barrel Program – Not less than two (2) times per year, the Township shall coordinate a workshop during which attendees may learn about the benefits and proper installation of rain barrels as well as stormwater management practices for residential properties. All attendees completing the workshop shall be eligible to receive one (1) free rain barrel with an installation kit. Such kits shall be paid for from the Township’s Stormwater Fund and in a reasonable quantity determined by the Township. The property shall be eligible not more than once every five (5) years.

Form of Application

In order to obtain credit, property owners may be required to register using an online registration platform. No application fee shall be required.

Applicability

Participation in any single-family residential property credit program may be extended to the property owner(s) themselves, any legal tenant of the property, or any of the property owner's minor children.

The Township may apply the Credit to a bill in the current billing year or future billing year depending upon the date such bills are issued.

Credit for Non-Single-Family Residential Properties

Categories

Structural BMPs – Structural BMPs that control for the rate, volume, or water quality of stormwater generated on the property are eligible for Credit. A maximum of fifteen percent (15%) Credit will be given for each type of BMP. For example, a site that has BMPs in place to control rate, volume, and water quality could receive 15% (rate) + 15% (volume) + 15% (water quality) = 45% total Credit. Existing BMPs can be retrofitted to provide improved functionality and would be eligible for Credits for the existing and new functions. The Credits may only apply to the IA owned by the applicant and controlled by the BMPs.

- a. BMP Functionality
 - i. Low functionality BMPs shall receive a credit of five percent (5%).
 - ii. Medium functionality BMPs shall receive a credit of ten percent (10%).
 - iii. High functionality BMPs shall receive a credit of fifteen percent (15%).
 - iv. Functionality shall be determined by the [PA BMP Manual](#).
- b. Peak Rate Control
 - v. BMPs designed up to a 10-year storm event standard shall be eligible for fifty percent (50%) of the value of the credit.
 - vi. BMPs designed up to a 50-year storm event standard shall be eligible for seventy-five percent (75%) of the value of the credit.
 - vii. BMPs designed up to a 100-year storm event standard shall be eligible for one-hundred percent (100%) of the value of the credit.
 - viii. See Appendix II for additional details.

NPDES Permit Compliance – Non-SFR Credit applications shall include proof of an active NPDES permit and discharge monitoring report from the current year.

MS4 Permit Compliance – Non-SFR Property owners shall be required to submit copies of annual reports demonstrating compliance by June 30th of each year.

Maximum Total Credit – Under no circumstance shall any Non-SFR Property be eligible for more than forty-five percent (45%) of credit.

Applications

Applications shall be prepared by a professional engineer hired by the property owner at their sole expense.

A fee of \$500 shall apply to all first-time applications. This amount may be modified by resolution of the Board of Supervisors in the Township’s fee schedule.

A fee of \$100 shall apply to all subsequent applications. This amount may be modified by resolution of the Board of Supervisors in the Township’s fee schedule.

No fee shall be required for properties previously approved to receive the MS4 credit who are submitting annual reports.

Reapplication

Once approved by the Township Engineer, all Credits for Structural BMPs shall be valid for three (3) billing years, after which time the property owner shall be required to resubmit an application to the Township.

Once approved by the Township Engineer, all credits for NPDES and/or MS4 permits shall be valid for five (5) billing years, or the remaining number of years left on the permit cycle, whichever is lesser, after which time the property owner shall be required to resubmit an application to the Township. It is the responsibility of the property owner to re-apply for credit as needed.

Applicability/Standards

BMPs need to meet at least a minimum level of compliance with current PA DEP standards to qualify for credit.

Credits will not be issued for BMPs with no design information available, or for facilities that are not functional, not operating as designed, or requires cleaning, maintenance, or repair.

Credits shall be calculated as a reduction of the amount of IA at the property used as a basis for the Fee, not as a reduction of the Fee itself. For example, a Non-SFR property with 20,000 sq.ft. of IA receiving a 30% credit shall have, for the purposes of calculating the Fee, a total of 14,000 sq.ft. of IA. The new calculation of IA shall determine the Tier of the Fee the property would be subject to.

Credit will be issued toward the amount of IA treated by the BMP, not necessarily for all IA at the property.

The Township may require an operation and maintenance (O&M) agreement to be in place for a BMP in order to obtain Credit. The Township may require existing agreements to be modified as needed to allow for the Township to inspect facilities.

A property owner seeking Credit for one parcel with one or more BMPs benefitting multiple, contiguous parcels deeded to the same property owner may receive credit for multiple properties. Such cases shall be subject to specific review by the Stormwater Advisory Committee during the initial application. Credits shall be applied to each parcel individually, however such credits shall only apply to the IA controlled by the BMPs. The property owner shall only be required to submit one (1) application for the network of properties.

Properties previously receiving Credit that have been redeveloped to the point of having new or different stormwater management facilities shall be required to re-apply as a first-time applicant.

Property owners shall have until April 30th of the year following a given billing year to apply for Credit.

Right to Appeal

Any property owner who applied for Credit and was denied in whole or in part may appeal said application to the Stormwater Advisory Committee. The decision of the Committee shall be final.

APPENDIX I – STORMWATER IMPACT FEE CREDIT SUMMARY TABLE

Category	Description	Amount of Credit*	Application Frequency**	Credit Frequency	
Non-Residential	Structural Best Management Practice (BMP) - Rate	On-lot stormwater management infrastructure that manages peak stormwater flow.	5/10/15%	Every 3 years	Annual
	Structural Best Management Practice (BMP) - Volume	On-lot stormwater management infrastructure that manages the volume of stormwater runoff.	5/10/15%	Every 3 years	Annual
	Structural Best Management Practice (BMP) – Water Quality	On-lot stormwater management infrastructure that improves the quality of stormwater runoff.	5/10/15%	Every 3 years	Annual
	NPDES Permit Compliance	Demonstrated compliance with permit requirements. Must supply active NPDES Stormwater Permit and Discharge Monitoring Report from current year.	15%	Each 5 year permit cycle; submit annual reports	Annual
	MS4 Permit Compliance	Demonstrated compliance with permit requirements. Must supply active MS4 permit and copies of annual reports.	15%	Each 5 year permit cycle; submit annual reports	Annual
	Maximum Combined Credit		45%		
	*Amount of credit to reflect effectiveness and maintenance of the BMP per PA DEP Stormwater BMP Manual.				
**Initial application fee of \$500. Re-application fee of \$100.					

Category	Description	Amount of Credit	Application Frequency	Credit Frequency	
Residential	Community Event Credit	Credit for attending up to two (2) approved community events in the calendar year.	10% for 1 event 15% for 2 events	Annual	Annual
	Rain Barrel Program	Seminar about benefits and proper installation of rain barrels. Attendees receive free rain barrel installation kit.	Free rain barrel; may purchase additional	Once every 5 years.	N/A

APPENDIX II – BMP CREDIT CALCULATION EXAMPLE

Excerpt from the *PA BMP Manual*:

BMP 6.4.2: Infiltration Basin



An Infiltration Basin is a shallow impoundment that stores and infiltrates runoff over a level, uncompacted, (preferably undisturbed area) with relatively permeable soils.

<p style="text-align: center;"><u>Key Design Elements</u></p> <ul style="list-style-type: none"> • Maintain a minimum 2-foot separation to bedrock and seasonally high water table, provide distributed infiltration area (5:1 impervious area to infiltration area - maximum), site on natural, uncompacted soils with acceptable infiltration capacity, and follow other guidelines described in Protocol 2: Infiltration Systems Guidelines • Uncompacted sub-grade • Infiltration Guidelines and Soil Testing Protocols apply • Preserve existing vegetation, if possible • Design to hold/infiltrate volume difference in 2-yr storm or 1.5" storm • Provide positive stormwater overflow through engineered outlet structure. • Do not install on recently placed fill (<5 years). • Allow 2 ft buffer between bed bottom and seasonal high groundwater table and 2 ft buffer for rock. • When possible, place on upland soils. • 	<p style="text-align: center;"><u>Potential Applications</u></p> <p>Residential: Yes Commercial: Yes Ultra Urban: Limited Industrial: Yes* Retrofit: Yes Highway/Road: Limited</p> <p>* Applicable with specific consideration to design.</p> <hr/> <p style="text-align: center;"><u>Stormwater Functions</u></p> <p>Volume Reduction: High Recharge: High Peak Rate Control: Med./High Water Quality: High</p> <hr/> <p style="text-align: center;"><u>Water Quality Functions</u></p> <p>TSS: 85% TP: 85% NO3: 30%</p>
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Stormwater Function Ranking and Stormwater Credit:

LOW: 5% credit

MEDIUM: 10% credit

HIGH: 15% credit

Peak rate controls for small and large storms, up to the one-hundred-year event, are essential in order to protect against immediate downstream erosion and flooding. Peak rate control must meet requirements of Chapter 431, Stormwater Management for Neshaminy Creek Watershed, section 304, Stormwater peak rate control and management districts. The site’s stormwater management systems must detain, retain, or infiltrate stormwater such that peak flows of stormwater from the project site in its post-

development condition do not exceed the peak flows from the site in its pre-development condition. The maximum credit for peak rate controls shall be based on the BMP's storm-year event design.

- Up to the 10-year storm event: 50% of peak rate control (Low ranking: 2.5%. Medium ranking: 5%, High ranking: 7.5%)
- Up to the 50-year storm event: 75% of peak rate control (Low ranking: 3.75%. Medium ranking: 7.5%, High ranking: 11.25%)
- Up to the 100-year storm event: 100% of peak rate control (Low ranking: 5%. Medium ranking: 10%, High ranking: 15%)

Stormwater credit calculation example:

An infiltration Basin that treats 75% of the impervious area, designed for a 50-year storm and is well designed and maintained. The infiltration basin receives High ratings for volume, peak flow and water quality effectiveness.

Volume Credit: 15% (high effectiveness) \times 75% (impervious area treated) = 11.25% credit

Peak rate: 15% (high effectiveness) \times 75% (storm year design) \times 75% (impervious area treated) = 8.45% credit

Water Quality = 15% (high effectiveness) \times 75% (impervious area treated) = 11.25% credit

Total Credit = $11.25\% + 8.45\% + 11.25\% = 30.95\%$