



Storm Water Management Service Charge **Credits and Adjustment Appeals Manual**

City of Philadelphia

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1. Introduction

1.1. Overview

A charge for stormwater management services (SWMS) is included in every Philadelphia Water Department (PWD) customer's monthly water/sewer/stormwater bill. Historically, this charge has been based on an account's meter size and recovered only from properties that have water/sewer service. However, effective July 1, 2010, PWD is transitioning from an equivalent meter-based SWMS Charge to a parcel-area based SWMS Charge.

All properties in the City of Philadelphia (City) are charged for stormwater services based on the property's area and characteristics. Residential properties receive a uniform monthly charge based on the residential mean Gross Area (GA) and Impervious Area (IA). Non-residential and Condominium properties are charged based on property-specific measurements of GA and IA. PWD has determined the GA and IA for each property using Geographic Information Systems (GIS), orthographic aerial imagery, and City land records.

Customers may request corrections to the GA and/or IA determinations if they are found to be inaccurate, and may also seek fee adjustments for any parcel data, classification, or billing errors.

PWD has implemented a Stormwater Credits Program to offer Non-residential and Condominium customers the opportunity to reduce their total SWMS Charge.

PWD has also implemented an interim SWMS Charge Customer Assistance Program (CAP) to enable a gradual transition to the full parcel-area based SWMS Charge.

This manual provides detailed information on the policies, eligibility requirements, and technical criteria concerning PWD's Appeals Program, SWMS Charge CAP, Stormwater Credits Program, and Incentives Program.

1.2. Purpose

The primary purposes of the Adjustment Appeals, CAP, Stormwater Credits, and Incentives Programs are as follows:

Adjustment Appeals

The purpose of the SWMS Charge Adjustment Appeals Program is to enable customers to seek adjustments for inaccurate parcel classification, incorrect parcel identification, residential sideyard exemptions, or for errors in the calculation of a parcel's gross and/or impervious area.

CAP

The purpose of the SWMS Charge CAP is to mitigate the annual fiscal year increase due to the transition from a meter-based charge to a parcel-area based SWMS Charge. The CAP affords Non-residential customers the ability to gradually transition to a parcel-area based SWMS Charge over a shorter period of time than the established 4-year phase-in.

Stormwater Credits

The purpose of the Stormwater Credits Program is to provide Non-residential and Condominium customers the opportunity to obtain stormwater credits and thereby reduce their monthly SWMS Charge. Stormwater credits can be earned as a result of the construction, operation, and maintenance of Stormwater Management Practices (SMPs) that reduce a parcel's contribution of stormwater runoff.

Stormwater Incentives

The purpose of the Stormwater Incentives Program is to offer customers a variety of incentive-based tools that promote the design and construction of green stormwater infrastructure.

1.3. Organization of the Manual

This manual is organized into the following four sections:

Section 2: SWMS Charge Adjustment Appeals

Section 3: SWMS Charge CAP

Section 4: Stormwater Credits

Section 5: Stormwater Incentives

The Appendix provides a list of resources that provide additional stormwater management information.

1.4. Definitions

This section provides definitions for key terms related to the content provided in this manual.

Condominium Parcel: Real estate, portions of which are designated for separate ownership, and the remainder of which is designated for common ownership by the owners of those portions.

Gross Area (GA): All of the parcel area within the legally described boundaries except streets, medians, and sidewalks in the public right-of-way.

Impervious Area (IA): A surface, which is compacted or is covered with material that restricts infiltration of water, including semi-pervious surfaces such as compacted clay, most conventionally hard-scaped surfaces such as streets, driveways, roofs, sidewalks, parking lots, attached and detached structures, and other similar surfaces.

Impervious Area Managed: Impervious area that directs runoff to surface water bodies or to approved Stormwater Management Practices (SMPs).

Impervious Area Reduction: Impervious area that is directed to pervious area on a property or, based on the type of cover, has characteristics similar to pervious area. Impervious Area Reductions include the following disconnection categories: rooftop and pavement areas that are directed to pervious areas on the same property; tree canopy cover that overhangs onsite impervious areas; green roofs used in place of typical roofing; and porous pavement used in place of typical impervious pavement materials.

Non-Residential Parcel: Real estate which cannot be classified as either Residential or Condominium.

Open Space: The pervious area on a parcel that is calculated as the Gross Area minus the Impervious Area.

Post Construction Stormwater Management Plan (PCSMP): A complete stormwater management plan as described in the Philadelphia Stormwater Regulations and in the *Stormwater Management Guidance Manual*.

PWD Stormwater Regulations: Chapter Six of the Philadelphia Water Department Regulations, available at www.phila.gov/water.

Residential Parcel: Real estate used exclusively for residential purposes with at least one and no more than four dwelling units.

Stormwater Management Guidance Manual: The Philadelphia Water Department's comprehensive technical guide to stormwater management, available at www.pwdplanreview.org.

Stormwater Management Practice (SMP): Any structure that is designed or constructed to convey, store, or otherwise control stormwater runoff quality, rate, or quantity.

Surface Discharge: The discharge of stormwater runoff from a property to an adjacent surface water body, without the use of PWD infrastructure.

2. SWMS Charge Adjustment Appeals

2.1. Objectives

The objective of the SWMS Charge Adjustment Appeals Program is to provide stormwater customers an opportunity to appeal the GA and/or IA calculations, parcel classification, parcel identification, claim a residential sideyard exemption, or change the distribution of the SWMS charges among multiple accounts on a parcel.

2.2. Adjustment Appeals Policies

2.2.1. Interim Suspension of IA Charge during Development or Redevelopment

Parcels that are being redeveloped may have their IA Charges temporarily suspended during the time of construction. The customer may request a suspension of the IA Charge, and PWD will suspend it until construction is complete.

2.2.2. Reallocation of SWMS Charge among Multiple Water Accounts on a Single Parcel

When a parcel is served by multiple water accounts, PWD will compute the SWMS Charge for the parcel and then allocate that charge equally among the accounts. However, a parcel owner may request a different allocation of SWMS Charge by filing FORM A-1. If an alternative SWMS Charge Allocation request is granted, PWD will reapportion the SWMS Charge among the accounts that serve the parcel according to the allocation percentages requested.

Subsequent to the approval of the requested SWMS Charge allocation, if the owner adds water accounts or terminates water accounts, it is the owner's responsibility to file FORM A-1 requesting another revised reallocation.

2.2.3. Residential Sideyard Exemptions

Residential sideyard exemptions are only applicable to parcels located directly adjacent to a residential parcel. Additionally, the sideyard parcel must be deeded to the same owner as the residential parcel. Garages or service

buildings used for commercial purposes adjacent to a residence cannot be granted a residential sideyard exemption.

2.2.4. Parcel Classifications

The parcel classifications utilized in PWD's Stormwater Billing Database are based on classifications determined by the Philadelphia Office of Property Assessment (OPA). Additional information regarding a parcel's classification is available from the City's Office of Property Assessment or the Department of Records (DOR) at www.phila.gov/records.

2.2.5. Burden of Proof

If a customer files an adjustment appeal, it is the customer's responsibility to demonstrate that PWD's calculation of GA, IA, designation of stormwater class, or record of owner is erroneous. A customer may need to resolve errors in public records with other City departments (such as OPA or DOR).

2.2.6. Right-of-Entry

Following submission of an adjustment appeals application, the customer shall grant the City, its employees, or authorized agents permission to enter the parcel on providing forty-eight (48) hour written notice and, in any case, at reasonable times and without unreasonable disruption, to inspect the parcel to ensure that the information provided in the appeal accurately represents the current parcel conditions.

2.2.7. SWMS Charge Payment

A pending adjustment appeals application shall not constitute a valid reason for non-payment of the SWMS Charge.

2.2.8. Documentation Costs

The customer is solely responsible for costs incurred in the preparation of the required documentation and/or the submission of an adjustment appeals application. There is no application fee associated with the filing of an adjustment appeals application. Documentation requirements are further discussed in Section 2.3.2.

2.2.9. Adjustment Appeals Effective Date

If the adjustment appeal results in a revised GA and/or IA calculation, correction of parcel classification, correction of parcel identification, or

revisions to the default charge allocation, then the adjusted SWMS Charge will be effective upon receipt of the application.

2.2.10. Adjustment Appeals Application Denials

If the customer disagrees with the PWD's adjustment appeals decision, he or she may request that the decision be re-evaluated.

In exceptional situations, a Stormwater Hearing may be requested by submitting a Stormwater Hearing Request Form. Stormwater Hearings are reserved for situations that cannot be handled administratively.

Customers wishing to have their adjustment appeals decision re-evaluated should contact the Stormwater Adjustment Appeals Team at pwd.stormwaterappeals@phila.gov or (215) 685-6244.

2.3. Adjustment Appeals Application Requirements

2.3.1. Applications

FORM A: A SWMS Charge Adjustment Appeals Application for each parcel must be initiated only by the owner, owner's authorized representative, or account holder. The customer may appeal multiple issues in a single adjustment appeals application. The customer may file an appeal for one or more of the following reasons:

◆ **Incorrect Parcel:** Customer does not own the parcel for which they are being billed. Incorrect parcel information is typically due to:

- **Incorrect Mailing Address** - The mailing address is incorrect, resulting in the stormwater bill being sent to the wrong address.
- **Property Sale** - The property has been sold and the associated stormwater bill is being sent to the previous owner.
- **Water Account not Associated with Correct Parcel** – A water account is receiving stormwater charges based on the GA and IA of another parcel.

◆ **Inaccurate Property Classification:** Property classification is outdated or erroneous. As previously noted, PWD utilizes the parcels classification designated by OPA. Inaccurate property classifications are typically due to:

- **Development/Redevelopment Projects** - The parcel is under development (or has been redeveloped) and the OPA classification no longer applies to the current/proposed parcel use.
 - **Cemetery Exemption** - Properties classified as a Cemetery are eligible for SWMS Charge exemption per PWD Regulations.
- ◆ **Inaccurate Gross Area:** The total GA which is being billed for the parcel is incorrect. Recent subdivisions or consolidations, or otherwise inaccurate parcel boundary delineations, are common examples of this appeal type.
- ◆ **Inaccurate Impervious Area:** The total IA which is being billed for the parcel is incorrect. Inaccurate IA may result from:
- **Development/Redevelopment Projects** - The parcel has been (re)developed, and PWD's impervious coverage data does not reflect changes to the land cover.
 - **Gravel** - Driveways, parking areas, and other surface types appearing as concrete in PWD's aerial photographs consist of a pervious gravel cover.
- ◆ **Residential Sideyard:** Refer to section 2.2.3 above.

NOTE: *It is possible that an appeal can result in an increase in the SWMS charge. For example, if the current parcel area used in the SWMS Charge calculation is lower than what is described in the deed on file with the Department of Records, when the adjustment is performed, the GA of the parcel will increase, resulting in an increase in the SWMS charge.*

FORM A-1: A SWMS Revised Charge Allocation for each parcel must be initiated only by the owner or the owner's authorized representative. The percentages specified on FORM A-1 must collectively add up to 100%. A percentage must be a positive number with up to two (2) decimal places.

2.3.2. Supporting Documentation

For all appeals, the customer should provide a **brief written description** of the reason for their SWMS adjustment request. Additionally, it is recommended that the following documentation be provided along with the SWMS Charge Adjustment Appeals Application (FORM A):

- ◆ **Incorrect Parcel:** Supporting documentation recommended for this appeal type will depend on the reason for the inaccuracy.
 - **Incorrect Mailing Address:** current owner and mailing address for parcel, if known
 - **Property Sale:** copy of a deed documenting the property transfer
 - **Water Account not Associated with Correct Parcel:** copy of water bill

- ◆ **Incorrect Property Classification:** For appeals related to incorrect parcel information, PWD recommends that the applicant provide the following:
 - Written description of the requested classification
 - Site photographs
 - Documentation from the Department of License and Inspections (e.g. Certificate of Occupancy)

Property classifications are available from the OPA. OPA's contact information is provided below:

Office of Property Assessment (OPA)
Property Inquiry Support
Phone: 215-686-4334
Fax: 215-686-9223
The Curtis Center
601 Walnut Street, Suite 300 West
Philadelphia, PA 19106
Website: <http://opa.phila.gov/>

- ◆ **Incorrect GA or IA:** For appeals related to incorrect GA and/or IA information, it is recommended that customers provide adequate evidence supporting the requested GA and/or IA square footage by providing the following:
 - Deed, Deed Reference Number, or Registry Number available from the DOR. DOR's contact information is provided below:

Department of Records (DOR)
City Hall
Philadelphia PA, 19107
Email: records.info@phila.gov
Phone: 215 686 2260
Website: <http://www.phila.gov/records/>
 - Site plan
 - Site photographs

- Marked-up image showing correct parcel boundary and/or impervious coverage

If PWD is unable to make a determination based on the information submitted, then PWD may request a land survey prepared by a Registered Surveyor at the customer's cost.

- **Residential Sideyard:** For appeals requesting a residential sideyard exemption, it is recommended that customers provide:
 - Site photos
 - Letter stating sideyard parcel is used exclusively for residential purposes.

2.4. Adjustment Appeals Application Procedures

2.4.1. Application Forms

FORM A, the SWMS Charge Adjustment Appeals Application, and FORM A-1, the SWMS Charge Revised Charge Allocation Application, are available online at <http://www.phila.gov/water/wu/stormwater/>.

2.4.2. Application Submission

The completed application and the supporting documentation must be submitted to:

SWMS Charge Adjustment Appeals
Philadelphia Water Department
1101 Market St., 4th Floor
Philadelphia, PA 19107

2.4.3. Notice of Disposition

PWD will send a written Notice of Disposition (FORM E) to the customer on completing the technical review of the appeals application. PWD may inspect the subject parcel to verify the accuracy of the information provided in the appeals application.

3. SWMS Charge CAP

3.1. Objectives

The objective of the SWMS Charge CAP is to enable stormwater customers to mitigate the annual fiscal year increase on their monthly SWMS Charge due to the transition from a meter-based to a parcel area-based charge. The CAP affords eligible customers the ability to gradually reach the full parcel area-based SWMS Charge.

3.2. SWMS Charge CAP Policies

3.2.1. Eligibility Criteria

To be eligible for the CAP, an account needs to meet **all** of the following criteria:

- ◆ Property must be a non-residential property
- ◆ The monthly SWMS Charge of the customer's account for the current fiscal year must be at least 10% more than the monthly SWMS Charge of the prior fiscal year
- ◆ The monthly SWMS Charge of the customer's account for the current fiscal year must be at least \$100 more than the monthly SWMS Charge of the prior fiscal year
- ◆ The customer cannot be delinquent in (i) any tax payments to the City or (ii) the payment of water/sewer/stormwater charges
- ◆ The account is not a City, State, or Federal account

3.2.2. Enrollment Period

The enrollment period for filing CAP applications, for new applicants, will run from January 1, 2013 through September 30, 2013.

3.2.3. CAP Re-Application

In the case of an account or property ownership change, the new customer must re-apply for CAP. The following procedures apply:

- ◆ The existing CAP adjustments on the account will continue for 90 days from the ownership change date.
- ◆ PWD will notify the new account holder of the CAP expiration date and remind him/her to re-apply.
- ◆ If new customer fails to re-apply within 90 days, then PWD will revoke the CAP adjustments. If the new customer applies for CAP after the 90-day period, then the CAP application will be processed similar to that of a new CAP enrollee.

3.2.4. Base Year SWMS Charge

The Base Year SWMS Charge refers to the monthly SWMS Charge of a Non-residential account to which the CAP eligibility criteria will be applied and from which the CAP adjustment will be calculated. The Base Year SWMS Charge will be determined as follows:

- ◆ **Existing Stormwater Assistance Phase-in Program (SWAPP) Customers:** The Base Year SWMS Charge will be the SWAPP SWMS monthly charge that existed on the account as of June 30, 2012 (FY 2012).
- ◆ **New CAP Enrollees that apply in FY 2013:** The Base Year SWMS Charge will be the SWMS Charge that existed on the account as of June 30, 2012 (FY 2012).
- ◆ **New Enhanced CAP Enrollees that apply in FY 2014:** The Base Year SWMS Charge will be the SWMS Charge that existed on the account as of June 30, 2013 (FY 2013).

3.2.5. Compliance Checks

Applicants enrolled in CAP will be subject to an annual compliance check processed by the Revenue Department and Water Revenue Bureau. These agencies verify that the tax and water accounts remain in good standing.

- ◆ If approved by both agencies, the water account will continue to receive CAP adjustments assuming the applicant still meets all eligibility requirements as outlined in Section 2.1.
- ◆ If found delinquent by either agency, the applicant will be notified and will receive one (1) additional monthly CAP adjustment.

- If the applicant resolves the delinquency issues and reapplies within 30 days, the adjustments will continue to be applied to the water account.
- If the applicant does not resolve the delinquency issues and/or fails to reapply within 30 days, further adjustments will be suspended. Applicants that fall within this category will be given an additional 60 day grace period to become compliant and reapply to the program.
- Any adjustments missed during the 60 day grace period may be retroactively applied to the water account assuming the delinquencies are cleared within the 60 day grace period.
- Applicants that do not resolve delinquency issues and/or fail to reapply within the additional 60 day grace period will not receive retroactive CAP adjustments. Applicants can still receive future adjustments contingent on their successful approval into the program.

4. Stormwater Credits

4.1. Objectives

The Stormwater Credits Program is designed to achieve the following key objectives:

- ◆ Provide financial and environmental incentives to Non-residential and Condominium customers to implement and maintain functional SMPs and promote parcel characteristics that mitigate stormwater runoff to help the City meet its stormwater management goals
- ◆ Provide an opportunity for Non-residential and Condominium customers to reduce their monthly SWMS Charge

4.2. Credit Policies

PWD's Stormwater Credits Program is governed by the following policies:

4.2.1. Eligibility

Customers on a Non-residential or Condominium parcel with at least Five-Hundred (500) square feet of gross area and whose water, sewer, and SWMS accounts(s) are not past due are eligible to apply for credits.

4.2.2. Classes of Credits

PWD currently offers the following three classes of credits:

- ◆ Impervious Area Stormwater Credit (IA Credit)
- ◆ Gross Area Stormwater Credit (GA Credit)
- ◆ National Pollutant Discharge Elimination System Credit (NPDES Credit) for industrial stormwater discharge activities

Depending on the types of SMPs present on the property, and whether the customer holds a valid industrial NPDES permit for the site, a parcel may be eligible for all three classes of credits.

4.2.3. Impervious Area Reductions (IARs)

PWD currently offers IARs for the following five categories:

- ◆ Tree Canopy Cover
- ◆ Roof Leader/Downspout Disconnections

- ◆ Pavement Disconnections
- ◆ Green Roofs
- ◆ Porous Pavement

IARs result in a direct reduction of the billable IA on a parcel. The customer must demonstrate that the IARs calculated on the parcel meet the requirements defined below.

Note: IARs require ongoing maintenance in order to maintain their effectiveness and are subject to renewal requirements.

4.2.3.1. Tree Canopy

A property is eligible for a Tree Canopy Cover IAR when new or existing tree canopy (from the approved species list) extends over or is in close proximity to ground level impervious area on a parcel. Under these circumstances, a portion of impervious area may be deducted from total billable IA.

The IAR is calculated for new trees as follows:

- ◆ The tree species must be chosen from the approved list (see “Section 8: Landscape Guidance” of the *Stormwater Management Guidance Manual*).
- ◆ New trees planted must be planted within 10 feet of ground level IA within the parcel boundary.
- ◆ New deciduous trees must be at least 2-inch caliper, and new evergreen trees must be at least 6 feet tall to be eligible for the reduction.
- ◆ A 100 square foot IA reduction is permitted for each new tree. This reduction may only be applied to the impervious area adjacent to the tree.

The IAR is calculated for existing trees as follows:

- ◆ An IA reduction equal to half of the overlapping canopy area is permitted. The reduction may only be applied to the IA adjacent to the tree.

4.2.3.2. Roof Leader/Downspout Disconnection

A property is eligible for a Roof Leader/ Downspout Disconnection IAR when a downspout is disconnected and then directed to a pervious area which allows for infiltration, filtration, and increased time of concentration of stormwater runoff. A roof is considered to be completely or partially disconnected if it meets the following requirements:

- ◆ The contributing area of roof to each disconnected downspout is 500 square feet or less.
- ◆ The soil is not designated as a hydrologic soil group “D” or equivalent.

- ◆ The overland flow path has a positive slope of 5% or less.

The IAR is calculated as the area of the roof that meets the Roof Leader/Downspout Disconnection requirements. The maximum allowable IA reduction is 500 square feet per disconnected roof leader.

Note: Disconnection of roof leaders/downspouts may require additional approvals from PWD as well as from the Office of Licenses and Inspections (L&I). PWD will support the customer in its request to obtain necessary Plumbing Code variances for approved downspout disconnections.

4.2.3.3. Pavement Disconnection

A property is eligible for a Pavement Disconnection IAR when pavement runoff is directed to a pervious area which allows for infiltration, filtration and increase time of concentration. This method is generally applicable to small or narrow pavement structures such as driveways and narrow pathways. For impervious areas that meet the requirements, all of the disconnected impervious area may be deducted from the total IA. Pavement is considered disconnected if it meets the following requirements:

- ◆ The contributing flow path over impervious cover is no more than 75 feet
- ◆ The width of the receiving pervious area is greater than or equal to the contributing impervious area's width
- ◆ The soil is not designated as a hydrologic soil group "D" or equivalent
- ◆ The slope of the contributing impervious area is 5% or less
- ◆ The slope of the overland flow path is 5% or less

4.2.3.4. Green Roofs

A property is eligible for a Green Roof IAR when a green roof is installed on a building. The design, construction, and maintenance plan must meet the minimum requirements specified by PWD in "Section 7: Stormwater Management Practices Design Guidelines" of the *Stormwater Management Guidance Manual*. Since a green roof is not a zero discharge system, the roof must be able to safely convey excess runoff to the storm sewer, combined sewer, or receiving water body.

The IAR is calculated based on the entire area of the green roof in square feet. Normal roof areas directed to a green roof may also be eligible for a Green Roof IAR. Please contact PWD's Stormwater Credits team directly for further information.

4.2.3.5. Porous Pavement

A property is eligible for a Porous Pavement IAR when a porous pavement system is installed on a customer's property such that it does not create any areas of concentrated infiltration. Porous pavement systems, including porous asphalt, porous concrete, porous/permeable pavers, and other approved porous surfaces, can be considered disconnected if they receive direct rainfall only and are underlain by a crushed stone infiltration bed that is at least 8 inches deep.

Porous pavement systems must meet the minimum requirements specified by the PWD in "Section 7: Stormwater Management Practices Design Guidelines" of the *Stormwater Management Guidance Manual*.

If the porous surface receives runoff from adjacent conventional pavement surfaces, or if roof drains or other sources of runoff are directed into the subsurface storage bed, the porous pavement/infiltration bed system will be considered a structural SMP and therefore not eligible for an IAR. However, these systems may be eligible for credit as defined in Section 4.2.5.

4.2.4. Calculation of SWMS Charge with Credits

In the case of parcels that are eligible for one or more classes of credits and/or IARs, the total monthly IA and GA charges are calculated in the following sequence:

- ◆ **Step 1:** Determine any areas that meet the IAR criteria and subtract the total IAR area from the billable IA.
- ◆ **Step 2:** Determine any applicable credits. The approach used in calculating the IA and GA credits varies depending on a property's drainage characteristics and existence of an active NPDES permit for stormwater industrial discharge activities. The IA and GA credits are calculated as follows:
 - i. **NON-SURFACE DISCHARGE Areas without NPDES Credits:** For areas of a property that do not discharge stormwater to a surface water body, applicable credits are calculated as follows:
 - The IA Credit is calculated by applying an 80% maximum credit factor to the parcel's IA square footage that is managed (IA Managed).

- For the GA underneath the IA Managed, the GA Credit is calculated by applying an 80% maximum credit factor to the square footage of IA Managed.
 - For any open space areas (GA minus IA), a GA Credit up of 80% may be applied, as applicable
- ii. **NON-SURFACE DISCHARGE Areas with NPDES Credits:** For areas of a property that do not discharge stormwater to a surface water body and the property has an active NPDES permit for industrial stormwater discharge activities, applicable credits are calculated as follows:
- The IA Credit is calculated by applying an 87% maximum credit factor to the parcel's IA square footage that is managed (IA Managed).
 - For the GA underneath the IA Managed, the GA Credit is calculated by applying an 87% maximum credit factor to the square footage of IA Managed.
 - For any open space areas (GA minus IA), a GA Credit maximum of 87% may be applied, as applicable.
 - If the property is not eligible for any GA or IA credits, then the property will receive a 7% credit towards both the IA and GA square footage.
- iii. **SURFACE DISCHARGE Areas without NPDES Credits:** For areas of a property that discharge stormwater to a surface water body, applicable credits are calculated as follows:
- The IA Credit is calculated by applying a 90% maximum credit factor to the parcel's IA square footage that is managed (IA Managed).
 - For the GA underneath the IA Managed, the GA Credit is calculated by applying a 90% maximum credit factor to the square footage of IA Managed.
 - For any open space areas (GA minus IA), a GA Credit maximum of 90% may be applied, as applicable.
- iv. **SURFACE DISCHARGE Areas with NPDES Credits:** For areas of a property that discharge stormwater to a surface water body and the property has an active NPDES permit or industrial stormwater discharge activities, applicable credits are calculated as follows:

- The IA Credit is calculated by applying a 97% maximum credit factor to the parcel's IA square footage that is managed (IA Managed).
 - For the GA underneath the IA Managed, the GA Credit is calculated by applying a 97% maximum credit factor to the square footage of IA Managed.
 - For any open space areas (GA minus IA), a GA Credit maximum of 97% may be applied, as applicable.
- ◆ **Step 3:** The final billable IA and GA (Final IA and Final GA) are calculated as the total IA and GA minus any applicable IA and GA credits, determined in Step 2.
 - ◆ **Step 4:** The IA and GA charges are then calculated based on the Final IA and GA square footage (calculated in Step 2) and the IA and GA rates defined in PWD Regulations, Section 304.0.
 - ◆ **Step 4:** If, after the application of all applicable credits, a parcel's monthly total SWMS charge that is calculated in Step 3 is less than the non-residential minimum monthly charge, then each account will be subject to the Non-residential minimum monthly charge, as defined in the PWD Regulations, Section 304.3(6).

Note: If any account is eligible for special reduced rates under PWD Regulation 305.2, the reduction will be applied to the entire water/sewer/stormwater bill after all stormwater credits are applied.

4.2.5. Impervious Area Stormwater Credit

To be eligible for IA Credit, the customer must demonstrate applicable management of the first inch of runoff from impervious areas on a property. As defined in the PWD Regulations, Section 304.5(c)(1), management of the first inch of runoff can be achieved by employing SMPs that manage runoff in one of the three following ways:

- ◆ Infiltration
- ◆ Detention and slow release
- ◆ Volume reduction and filtration

Not all SMPs are effective in every area of the City. The types of SMPs that qualify for credits are based on the ultimate discharge location of a parcel's runoff.

Table 1 presents the IA stormwater management options that are available to customers based on the discharge location of the parcel:

Table 1 – Impervious Area Management Practice by Discharge Location

Management Practice (SMP) \ Discharge Location	Combined Sewer Areas	Separate Sewer Areas
Infiltrate first 1" of runoff	✓	✓
Detain and slow-release the first 1" of runoff	✓	
Route the first 1" of runoff through an approved volume-reducing practice		✓

Shared SMPs: Stormwater credits may also be available to individual parcels where stormwater management is being implemented on a shared, collective basis by an organization and/or group of parcel owners within a defined geographic area. In these instances, PWD will assess the effectiveness of the SMP, and at its discretion, issue credit to the individual customers based on the square footage of IA managed from each parcel. In other words, credit will be granted for the portion of an individual customer's IA which contributes to and is managed by the shared SMP. PWD encourages cost-sharing to support the design, construction, and maintenance of shared SMPs; however, PWD will neither facilitate nor intervene in private transactions nor be responsible for negotiating or enforcing shared maintenance agreements.

Properties with Surface Discharge: Parcels with areas that discharge directly to surface water bodies may satisfy the management of the first inch of run-off by virtue of the property's drainage characteristics.

For areas that are routed to existing SMPs before being discharged to a surface water body, customers must demonstrate that the SMPs are constructed according to the original design plans and are being maintained in a functional condition.

4.2.6. Gross Area Stormwater Credit

Two options are available to customers to receive GA Credit.

- ◆ **Option 1: Management of the First-Inch of Runoff (Impervious Area Only)**

GA Credit is automatically achieved when a parcel is approved for IA Credit through management of the first inch of runoff. The area that receives IA Credit will also receive an equivalent amount of GA Credit for the land area underneath the IA.

- ◆ **Option 2: GA Credit Based on NRCS-CN (Open Space Only)**

This option is only applicable to the open space of a parcel. Under this option, the customer must demonstrate a Natural Resource Conservation Service Curve Number (NRCS-CN) that meets one of the values contained in the Curve Number Scale found in Appendix 1. The CN represents the runoff potential for a particular soil and ground cover.

A percent reduction is applied for each whole number below a CN of 75. A CN of 55 may yield the maximum applicable GA Credit. The percent reduction that is applied varies depending on a property's discharge characteristics and the existence of a NPDES permit for industrial stormwater discharge activities. The CN Scale in Appendix 1 provides the GA Credit associated with the different scenarios. More information on NRCS-CN is available in the *Stormwater Management Guidance Manual*.

4.2.7. National Pollutant Discharge Elimination System Industrial Permit Stormwater (NPDES) Credit

To receive a NPDES Credit, the customer must demonstrate that the parcel is subject to an active NPDES Permit for industrial stormwater discharge activities and that the operator has been in compliance with the permit requirements during the preceding twelve months. The NPDES Credit will be applied as discussed in Section 4.2.4.

4.2.8. Miscellaneous Credits Provisions

4.2.8.1. Condominium Parcels

Individual Condominium unit owners are not eligible to apply for stormwater credits. Only the Condominium Owners Association (COA) or its authorized representative may apply for stormwater credits for the parcel.

4.2.8.2. Credits Application Rejections

If the customer disagrees with PWD's credits decision, he or she may request a Stormwater Hearing by submitting the Stormwater Hearing Request Form. Stormwater Hearing Request Forms are available upon request from PWD.

4.2.8.3. Credits Application Fee, Cancellation

The credits application fee is non-refundable. Incomplete credits applications expire one year from the date of the original submission. Once an application expires, the customer must submit a new credits application with all supporting documentation and fee.

4.2.8.4. Credits Effective Date

Credits are effective the date that PWD receives a complete credits application, including all required supporting documentation and the application fee.

4.2.8.5. Credits Expiration

Credits expire four (4) years from their effective date. The customer must submit a credits renewal application (FORM C) at least thirty (30) days before the expiration date to renew the stormwater credits. The approved credits renewal is effective on the expiration date of the original credit.

If the customer fails to submit a renewal application at least thirty (30) days before the expiration date, then the credits may expire, as PWD cannot guarantee the renewal will be processed prior to the next billing period. Note: Should the customer fail to reapply within 30 days of the expiration date, the customer will not receive credit towards the SWMS Charge during the months in which the renewal application was past due and the credits had lapsed.

Redevelopment properties with credits approved under previous versions of the *Stormwater Management Guidance Manual* are eligible for credit renewal as long as the SMP for which credit was granted is operational, and maintenance has been performed in accordance with the *Manual*.

4.2.8.6. Credits Application Processing

PWD will conduct technical review of credits only after receipt of a complete application, including the fee and all required supporting documentation. PWD will review a credits application only if the

customer's water, sewer, and stormwater charge payments pertaining to the parcel are current.

4.2.8.7. Site Inspections

After a customer submits a credits or credits renewal application, PWD may inspect the parcel to verify the information provided in the application and in the supporting documentation. It is the responsibility of the customer to allow PWD access to the parcel.

Following submission of a credits or credits renewal application, the customer shall grant the City, its employees, or authorized agents permission to enter the parcel on providing forty-eight (48) hour written notice and, in any case, at reasonable times and without unreasonable disruption, to inspect the parcel to ensure that the information provided in the application accurately represents the current parcel conditions.

4.2.8.8. Termination of Credits

PWD may review and terminate one or more classes of approved credits at any time if SMPs associated with those credits are found to be improperly maintained and/or not adequately functional. Customers may from time to time be asked to submit documentation and/or grant access to the parcel receiving credit. Failure to comply with such requests may result in the termination of credit.

4.2.8.9. SWMS Charge Payment

A pending credits application shall not constitute a valid reason for non-payment of the SWMS Charge.

4.2.8.10. Documentation Costs

The customer is solely responsible for costs incurred in the preparation of the required documentation and/or the submission of the credits application.

4.2.8.11. Application Review Priority

If a customer submits an adjustment appeals and a credits application at the same time, the adjustment appeals application will be reviewed and processed first, followed by the credits application.

4.3. Stormwater Credits Application Requirements

4.3.1. Application

FORM B: The customer must submit a complete FORM B - Stormwater Credits Application when applying for an initial credit or additional credits. The customer may request one or more classes of credit in the application.

FORM C: The customer must submit a complete FORM C - Stormwater Credits Renewal Application when renewing existing credits.

Each application must be submitted with the appropriate fee and supporting documentation.

4.3.2. Supporting Documentation

The following supporting documentation is required for each of the three classes of credits:

4.3.2.1. Impervious Area Stormwater Credit

- ◆ **Post-2006 Development:** Parcels that have redeveloped since 2006 and were subject to the PWD Stormwater Regulations must be compliant in order to be eligible for stormwater credit. Appropriate documentation, including as-built plans and a construction certification package, must be on file with PWD Plan Review before credits can be evaluated. Please contact PWD Plan Review (pwd.planreview@phila.gov) for questions concerning post-construction documentation requirements.
- ◆ **Pre-2006 Development:** Parcels with stormwater facilities constructed prior to 2006 must demonstrate compliance with current stormwater credits regulations in order to be eligible. Appropriate documentation, including as-built plans and associated engineering calculations, must be submitted with a completed application (FORM B). Please contact the PWD Credits Program (pwd.stormwatercredits@phila.gov) for questions concerning submission requirements.
- ◆ **Stormwater Retrofits:** Customers that have implemented stormwater retrofits must also provide appropriate post-construction documentation to PWD before credits can be evaluated. At a minimum, this includes as-built drawings and a construction certification package. Please contact the PWD Credits Program (pwd.stormwatercredits@phila.gov) for questions concerning post-construction stormwater management documentation requirements.

- ◆ **Surface Discharge:** Customers with areas that discharge to a surface water body must provide a plan indicating drainage conditions and topography. Areas that discharge to a surface water body should be delineated on the plan.

4.3.2.2. **Impervious Area Stormwater Credit Renewal**

The customer must provide all of the following along with a completed credits renewal application (FORM C):

- ◆ Recent photos of the SMP.
- ◆ For areas receiving credit because of SMPs, record of inspections and maintenance activity for each SMP and a letter certified by a Registered Professional verifying that the SMP has been observed following a runoff event meeting the original stormwater management requirements.
- ◆ For areas receiving credit because of surface water discharge, a letter certified by a Registered Professional that drainage conditions have not changed since the date of the original credits application.

4.3.2.3. **Gross Area Stormwater Credit**

- ◆ **Option 1: Management of the First-Inch of Runoff (Impervious Area Only)**

If a customer is granted an IA Credit, a GA Credit for the same square footage of the IA managed will also be granted. No additional documentation is required from the customer to support approval of the GA Credit.

- ◆ **Option 2: GA Credit Based on NRCS-CN (Non-Impervious Area Only)**

The customer must provide the following along with a completed application (FORM B):

- Plan delineating cover types and hydrologic soil groups
- Calculations supporting computed CN

4.3.2.4. **Gross Area Stormwater Credit Renewal**

- ◆ **Option 1: Management of the First-Inch of Runoff (Impervious Area Only)**

Renewal of GA Credits approved under Option 1 will be processed in conjunction with the associated IA Credit renewal requirements. No additional documentation is required for the GA Credit renewal.

💧 **Option 2: GA Credit Based on NRCS-CN (Non-Impervious Area Only)**

The customer must provide the following along with a completed renewal application (FORM C):

- Recent site aerial image or photos of the site.

4.3.2.5. National Pollutant Discharge Elimination System (NPDES) Stormwater Credit and Renewal

To request a NPDES Credit the customer must provide all of the following along with a completed Form B or Form C, if requesting a credits renewal:

- 💧 Copy of an active NPDES Stormwater Permit for industrial stormwater discharge activities
- 💧 Copy of the Discharge Monitoring Report(s) from the current year

4.3.3. Fees

Stormwater Credits Application: \$150

Stormwater Credits Renewal Application: \$50

Fees are non-refundable and may be paid by check or money order to The City of Philadelphia Water Department.

4.4. Credits Application Procedures

4.4.1. Application Forms

FORM B: Stormwater Credits Application and FORM C: Stormwater Credits Renewal Application are available online at:

<http://www.phila.gov/water/wu/stormwater/>

4.4.2. Application Submission

The completed application, supporting documentation, and non-refundable application fee must be submitted to:

Stormwater Credits Program
Philadelphia Water Department
1101 Market St., 4th Floor
Philadelphia, PA 19107

4.4.3. Notice of Disposition

PWD will send a written Notice of Disposition (FORM D) to the applicant on completing the technical review of the credits application. PWD may inspect the subject parcel to verify the information provided in the application.

5. Stormwater Incentives

5.1. Objectives

The purpose of the Stormwater Incentives Program is to offer customers a variety of incentive-based tools that promote the design and construction of green stormwater infrastructure. By promoting the construction SMPs, the Stormwater Incentives Program also affords customers the opportunity to reduce their monthly SWMS Charge.

5.2. Types of Incentives

PWD offers various types of monetary and non-monetary incentives. The following are incentives that PWD currently offers to customers:

5.2.1. Green Roof Tax Credits

The Philadelphia City Council, which has been working to address stormwater management costs, passed an ordinance in 2007 granting tax credits to businesses that install green roofs on their buildings. The credit can be claimed against an applicant's Business Privilege Tax for the year in which the green roof is completed. The credit is for 25% of the cost of installing the green roof, up to \$100,000. More information can be found here: <http://philadelphiaretail.com/pdf/GreenRoofTaxCredit.pdf>

5.2.2. Free Assistance Program

The Philadelphia Water Department provides free assistance through site inspections and design recommendations for green retrofits that allow customers to obtain stormwater credits. This program minimizes the up-front costs to customers for preliminary evaluation and concept design, including evaluation of available credits.

5.2.3. Stormwater Management Incentives Program

PWD offers incentives to property owners to implement stormwater management best practices through a grant program administered by Philadelphia Industrial Development Corporation. PWD also provides grant funding to Business Improvement Districts (BIDs) to perform feasibility studies as to how stormwater can be managed most efficiently on a collective basis. More information can be found on PWD's website at http://www.phillywatersheds.org/what_were_doing/SMIP_Grant.

Appendix 1 - Curve Number Calculation Instructions and Scale

1. For each non-impervious area cover type on the subject property, list the hydrologic soil group of the underlying soil in Column C and the corresponding Curve Number (CN) value in Column D. Do not include impervious areas in the calculations.
2. In Column E enter the area that each cover type encompasses.
3. Multiply the values in Column D and E, and place the product in Column F.
4. When all values have been calculated and entered, find the sums of Columns E and F, and place these values at the bottom of the worksheet in the corresponding row titled "TOTAL SUMS".
5. To find the Average CN, divide the total sum of Column F by the total sum of Column E.
6. Calculate the percentage of GA Credit. Use the accompanying CN scale to determine the credit percentage.

Cover Description		Curve Number for Hydrologic Soil Group				
Cover Type	Hydrologic Condition	A	B	C	D	Ub
Lawns, parks, golf courses, etc.						
	Poor (grass cover < 50%)	68	79	86	89	79
	Fair (grass cover 50% to 75%)	49	69	79	84	69
	Good (grass cover > 75%)	39	61	74	80	61
Meadow		30	58	71	78	58
Athletic Fields		68	79	86	89	79
Porous Turf		70	70	79	84	69
Brush (brush-weed-grass mixture with brush the major element)						
	Poor	57	73	82	86	73
	Fair	43	65	76	82	65
	Good	32	58	72	79	58
Woods-grass combination (orchard or tree farm)						
	Poor	57	73	82	86	73
	Fair	43	65	76	82	65
	Good	32	58	72	79	58
Woods						
	Poor	45	66	77	83	66
	Fair	36	60	73	79	60
	Good	30	55	70	77	55
Gravel		76	85	89	91	89
Dirt		72	82	87	89	87

GA CREDIT WORKSHEET
FOR OPEN SPACE CURVE NUMBER

Column A	Column B	Column C	Column D	Column E	Column F
Cover Type	Hydrologic Condition	Hydrological Soil Group	CN	Area (SF)	Product
Lawns, parks, golf courses, etc.	Poor (grass cover <50%)	_____	_____	_____	_____
	Fair (grass cover 50-75%)	_____	_____	_____	_____
	Good (grass cover >75%)	_____	_____	_____	_____
Meadow	NA	_____	_____	_____	_____
Athletic Fields	NA	_____	_____	_____	_____
Porous Turf	NA	_____	_____	_____	_____
	Poor	_____	_____	_____	_____
Brush	Good	_____	_____	_____	_____
	Fair	_____	_____	_____	_____
	Poor	_____	_____	_____	_____
Wood-grass combination	Good	_____	_____	_____	_____
	Fair	_____	_____	_____	_____
	Poor	_____	_____	_____	_____
Woods	Good	_____	_____	_____	_____
	Fair	_____	_____	_____	_____
Gravel	NA	_____	_____	_____	_____
Dirt	NA	_____	_____	_____	_____
TOTAL SUMS		_____	_____	_____	_____
Average CN (F/E)		_____	_____	_____	_____
% GA Credit		_____	_____	_____	_____

Open Space GA Curve Number (CN)	Non-Surface Discharge 80% Max Open Space GA Credit %	Non-Surface Discharge with NPDES 87% Max Open Space GA Credit %	Surface Discharge 90% Max Open Space GA Credit %	Surface Discharge with NPDES 97% Max Open Space GA Credit %
≥75	0	0.00	0.0	0.00
74	4	4.35	4.5	4.85
73	8	8.70	9.0	9.70
72	12	13.05	13.5	14.55
71	16	17.40	18.0	19.40
70	20	21.75	22.5	24.25
69	24	26.10	27.0	29.10
68	28	30.45	31.5	33.95
67	32	34.80	36.0	38.80
66	36	39.15	40.5	43.65
65	40	43.50	45.0	48.50
64	44	47.85	49.5	53.35
63	48	52.20	54.0	58.20
62	52	56.55	58.5	63.05
61	56	60.90	63.0	67.90
60	60	65.25	67.5	72.75
59	64	69.60	72.0	77.60
58	68	73.95	76.5	82.45
57	72	78.30	81.0	87.30
56	76	82.65	85.5	92.15
55	80	87.00	90.0	97.00
<55	80	87.00	90.0	97.00

Appendix 2 – Charges for SWMS

For Non-residential and Condominium properties, the FY 13 SWMS Charge will be calculated as the sum of 25% of the meter-based charge and 75% of the parcel area-based charge. The rate schedule for FY 2013 is shown below.

Effective July 1, 2012 - December 31, 2012:

Meter-based Charges

Meter Size	Meter Code	SWMS Service Charge	Stormwater Billing & Collection
5/8	R	\$ 11.06	\$ 2.60
3/4	Z	72.12	2.60
1	Q	120.20	2.86
1 1/2	P	240.39	3.12
2	X	384.62	3.90
3	O	721.15	5.21
4	W	1,201.92	10.41
6	N	2,403.83	18.22
8	V	3,846.14	26.03
10	E	5,528.80	39.05
12	T	10,336.50	52.06

Parcel area-based Charges

Gross Area	Impervious Area	Billing & Collection
\$/500 sf	\$/500 sf	
\$ 0.528	\$ 4.169	\$ 2.65

Effective January 1, 2013 – June 30, 2013:

Meter-based Charges

Meter Size	Meter Code	SWMS Service Charge	Stormwater Billing & Collection
5/8	R	\$ 10.51	\$ 1.78
3/4	Z	84.25	1.78
1	Q	140.42	1.78
1 1/2	P	280.84	1.78
2	X	449.34	1.78
3	O	842.52	1.78
4	W	1,404.19	1.78
6	N	2,808.39	1.78
8	V	4,493.43	1.78
10	E	6,459.29	1.78
12	T	12,076.08	1.78

Parcel area-based Charges

Gross Area	Impervious Area	Billing & Collection
\$/500 sf	\$/500 sf	
\$ 0.500	\$ 4.001	\$ 1.98

Beginning FY 14, the SWMS Charge will be calculated as 100% of the parcel area-based charge. The rate schedule for FY 2014 is shown below.

Effective July 1, 2013 - June 30, 2014:

Gross Area	Impervious Area	Billing & Collection
\$/500 sf	\$/500 sf	
\$ 0.560	\$ 4.497	\$ 2.15

Effective July 1, 2014 – June 30, 2015 (and thereafter)**

Gross Area	Impervious Area	Billing & Collection
\$/500 sf	\$/500 sf	
\$ 0.590	\$ 4.746	\$ 2.19

**** The SWMS Charges effective July 1, 2015 and after are subject to change.**