Stormwater Management Service Charge

Credits and Appeals Manual

September 2019 Version
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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 transitioned 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.

PWD recognizes a discounted SWMS Charge for Community Gardens that meet the defined eligibility criteria.

This manual provides detailed information on the policies, eligibility requirements, and technical criteria concerning PWD’s Appeals Program, CAP, Credits Program, and Community Gardens Discount.

## 1.2 Purpose

### 1.2.1 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.

### 1.2.2 Customer Assistance Program (CAP)

The purpose of the SWMS Charge Customer Assistance Program (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 longer period of time than the established 4-year phase-in.

1.2.3 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.

1.2.4 Community Gardens

Philadelphia City Council has determined that Community Gardens should be afforded a discounted SWMS charge if they meet certain criteria. Owners of, or groups associated with, Community Gardens may apply for this discount with PWD.

1.3 Organization of the Manual

This manual is organized into the following four sections and two appendices:

- **Section 2. Stormwater Appeals**
- **Section 3: Customer Assistance Program (CAP)**
- **Section 4: Stormwater Credits**
- **Section 5: Community Gardens Discount**
- **Appendix A: Curve Number Calculation Instructions and Scale**
- **Appendix B: Charges for Stormwater Management Services (SWMS)**

1.4 Definitions

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

*Community Gardens:* Any non-residential parcel of land in the City used for growing crops, whether food or non-food, that meets all the criteria in *Section 5.2* of this Manual and in Section 203 of the Philadelphia Water Department Regulations.

*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 and railroad tracks and station platforms in the railroad 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 hardscaped surfaces such as streets, driveways, roofs, concrete walkways, 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; and tree canopy cover that overhangs onsite impervious areas.

**Non-Residential Parcel:** Real estate which cannot be classified as either Residential or Condominium. Real estate used exclusively as a cemetery shall not be considered Non-residential property.

**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.

**Parcel Classification:** Parcels in the City can be classified as either Residential, Non-Residential or Condominium for stormwater billing purposes.

**PWD Rates and Charges:** On July 1, 2016, Chapter 3 of PWD Regulations was superseded by PWD Rates and Charges. The new Rates and Charges that reflect changes made September 2018 can be found here: [https://www.phila.gov/water/PDF/RatesCharges_September-1-2018.pdf](https://www.phila.gov/water/PDF/RatesCharges_September-1-2018.pdf).


**Residential Parcel:** Real estate used exclusively for residential purposes with at least one and no more than four dwelling units and which cannot be classified as Condominium Property.

**Stormwater Credit:** The value of the reduction of a customer’s monthly SWMS Charge when a property meets the eligibility criteria and an applicant submits an application according to the policies and procedures defined in Section 4 of this Manual.

*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.

*Stormwater Management Service (SWMS) Charge:* Philadelphia Water Department’s monthly charge for stormwater management services. The SWMS Charge may also be referred to as the Stormwater Charge.
2 Stormwater Appeals

2.1 Objectives

The objective of the Stormwater Appeals Program is to provide stormwater customers an opportunity to appeal the Gross Area (GA) and/or Impervious Area (IA) calculations, parcel classification, claim a residential sideyard exemption, or change the distribution of the stormwater charges among multiple accounts on a parcel.

2.2 Reasons for Stormwater Appeal

The following are reasons to file a stormwater appeal.

2.2.1 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.

2.2.2 Inaccurate Property Classification

Property classification is outdated or erroneous. PWD utilizes the parcel’s classification designated by the City’s Office of Property Assessment (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 an exemption from the SWMS Charge.

2.2.3 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.
2.2.4 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 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.
- **Interim Suspension of IA Charge during Development or Redevelopment**: Parcels that are being developed may have the IA Charges associated with the area of demolition and/or construction 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.

2.2.5 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.

2.2.6 Reallocation of Stormwater Charge among Multiple Water Accounts on a Single Parcel

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

Subsequent to the approval of the requested Stormwater 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.

**Note**: It is possible that an appeal can result in an increase in the Stormwater Charge. For example, if the current parcel area used in the Stormwater 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 Stormwater Charge.
2.3 How to Appeal

2.3.1 Applications

2.3.1.1 Form A

A Stormwater Appeals Application for each parcel must be initiated by the owner, owner’s authorized representative, or account holder. The customer may appeal multiple issues in a single appeals application. The customer may file an appeal for one or more of the reasons listed in Section 2.2:

- Incorrect Parcel
- Inaccurate Property Classification
- Inaccurate Gross Area
- Inaccurate Impervious Area
- Residential Sideyard Exemption

2.3.1.2 Form A-1

A Revised Stormwater 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 stormwater appeal. Additionally, it is recommended that the following documentation be provided along with the SWMS Charge Appeals Application (Form A):

2.3.2.1 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 a water bill.

2.3.2.2 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)
The Curtis Center
601 Walnut Street, Suite 300 West
Philadelphia, PA 19106
Phone: 215-686-4334
Fax: 215-686-9223
Website: http://opa.phila.gov/

2.3.2.3 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 is available from the Department of Records (DOR). DOR’s contact information is provided below:

  Department of Records (DOR)
  City Hall
  Philadelphia, PA 19107
  Phone: 215-686-2262
  Email: records.info@phila.gov
  Website: https://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.

2.3.2.4 Residential Sideyard

For appeals requesting a residential sideyard exemption, it is recommended that customers provide site photos and a letter stating that the sideyard parcel is used exclusively for residential purposes.

2.4 Application Procedures

2.4.1 Review Stormwater Billing Property Data Summary

The data used to calculate the Stormwater Charge for each property can be reviewed on the Parcel Viewer Website (http://phillystormwater.org). If any inaccuracies are found, an appeal can be filed.
2.4.2 Application Forms

Form A, the Stormwater Appeal Application, and Form A-1, the Revised Stormwater Charge Allocation Application, are available online at http://www.phila.gov/water/wu/stormwater/. More information on these forms can be found in Section 2.3.1.

2.4.3 Application Submission

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

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

Or, application forms and supporting documentation can be emailed to PWDStormwaterAppeals@phila.gov.

2.4.4 PWD Technical Review

PWD will review the submitted Appeal Application once it is received and determine any corrections to billing data that may be warranted. Applicants may be contacted if further information is needed or to arrange a site visit.

2.4.5 Notice of Disposition

PWD will send a written Notice of Disposition (Form E) to the applicant upon completion of the technical review of the Appeal Application. The Notice of Disposition will state the decision of the Stormwater Appeal Application.

2.4.6 Stormwater Billing Adjustments

The typical length of time to process an Appeal Application (including review, issuing a decision letter, and applying any billing adjustments) is 3-4 weeks from the date the application is received. If an appeal results in adjustments to any previously billed amounts, or the monthly stormwater charge calculation, these adjustments will be reflected in the customer’s monthly water bill within 1-2 billing cycles.

2.5 Policies

2.5.1 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 at http://www.phila.gov/opa or the Department of Records at www.phila.gov/records.
2.5.2 Burden of Proof

If a customer files an Appeal Application, 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).

2.5.3 Right-of-Entry

Following submission of an Appeal 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.

2.5.4 Stormwater Charge Payment

A pending Appeal Application shall not constitute a valid reason for non-payment of the Stormwater Charge.

2.5.5 Documentation Costs

The customer is solely responsible for costs incurred in the preparation of the required documentation and/or the submission of an Appeal Application. There is no application fee associated with the filing of an Appeal Application.

2.5.6 Stormwater Appeals Effective Date

If the Appeal Application 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.

2.5.7 Stormwater Appeal Decision Disputes

Questions regarding an appeal decision can be discussed with the Stormwater Appeals Team at pwd.stormwaterappeals@phila.gov or (215) 685-6244.

To challenge a decision issued, an appeal may be filed with the Tax Review Board within 30 days of receipt of PWD’s decision letter. A copy of the Form E Notice of Disposition must be submitted with the request. More information about the Tax Review Board appeal process is available on the Tax Review Board’s website: http://www.phila.gov/departments/tax-review-board
3 Customer Assistance Program (CAP)

3.1 Objectives

The objective of the Stormwater Customer Assistance Program (CAP) is to enable stormwater customers to mitigate the annual fiscal year increase on their monthly Stormwater 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 Stormwater Charge.

3.2 Eligibility

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

- The account must be for a non-residential property.
- For a fiscal year with a scheduled rate increase, the monthly Stormwater Charge of the customer’s account for the current fiscal year must be at least 10% more than the monthly Stormwater Charge of the prior fiscal year.
- For a fiscal year with a scheduled rate increase, the monthly Stormwater Charge of the customer’s account for the current fiscal year must be at least $100 more than the monthly Stormwater 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.

3.3 Policies

3.3.1 Enrollment Period

The enrollment period for filing CAP applications for new applicants ended September 30, 2013. Only existing CAP applicants are still eligible to participate.

3.3.2 CAP Adjustments

Adjustments are applied to enrolled accounts every month during the last week of the month prior to the upcoming billing period. Enrolled accounts are still billed the full monthly Stormwater Charge on the stormwater line item of the bill. The monthly adjustment applied to the account reduces the net billed stormwater charge to 10% above the Base Year Stormwater Charge. As long as the account remains eligible per the criteria in Section 3.2, the account will receive adjustments such that the stormwater charge increases by 10% each fiscal year. More information about the Base Year Stormwater Charge can be found in Section 3.3.5.
3.3.3 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 account will continue to receive CAP adjustments assuming the applicant still meets all eligibility requirements as outlined in Section 3.2.

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 reapply 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 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.
- Grace Period: Enrollees whose compliance issues can’t be resolved within the 30-day window can request an extension to seek resolution.

3.3.4 CAP Reapplication

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.

3.3.5 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 is determined as follows:
• **Base Year SWMS Charge for September 1, 2018 – August 31, 2019:** The Base Year SWMS Charge will be the CAP SWMS monthly charge that existed on the account as of August 31, 2018.

• **Base Year SWMS Charge for September 1, 2019 – August 31, 2020:** The Base Year SWMS Charge will be the CAP SWMS monthly charge that existed on the account as of August 31, 2019.
4  Stormwater Credits

4.1  Objectives

The Stormwater Credits Program is designed to provide financial and environmental incentives to Non-residential, Condominium and some multi-family residential customers to promote parcel characteristics, such as implementing and maintaining functional SMPs, to mitigate stormwater runoff and help the City meet its stormwater management goals. This in turn provides an opportunity for these customers to reduce their monthly SWMS Charges.

4.2  Eligibility

Customers on a Non-residential or Condominium parcel with at least Five- Hundred (500) square feet of gross area and whose accounts(s) are not past due are eligible to apply for credits. Non-residential properties include multi-family residential properties with five or more dwelling units.

Note: 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.

4.3  Policies

4.3.1  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.

4.3.2  Impervious Area Stormwater Credit (IA Credit)

Two options of IA Credit are available. Customers may be eligible for one or both options of IA Credit.

- Impervious Area Reductions (IARs)
- Impervious Area Management of at least the first inch of runoff
Table 1 presents all possible types of impervious area credits that are available to the customers based on the sewershed of the parcel:

**Table 1: Impervious Area Credit Breakdown, by Sewershed**

<table>
<thead>
<tr>
<th>IA Credit Options</th>
<th>IA Credit Type</th>
<th>Sewershed</th>
<th>Combined Sewer Area</th>
<th>Separate Sewer Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impervious Area Reductions</strong></td>
<td>Tree Canopy Cover</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Roof Leader/ Downspout Disconnection</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pavement Disconnection</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td><strong>Impervious Area Management by SMPs</strong></td>
<td>Infiltrate at least* the first 1” of runoff with a stormwater management practice</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Detain and slow-release at least the first 1” of runoff with a stormwater management practice</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Route the first 1” of runoff through an approved pollutant-reducing practice</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Green Roof</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Blue Roof</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Porous Pavement</td>
<td>✓</td>
<td>✓**</td>
<td></td>
</tr>
<tr>
<td><strong>Impervious Area Management by Surface Discharge</strong></td>
<td>Surface Discharge</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

* Dependent on sewershed. Management in the Separate Sewer Area should be limited to one inch.

** Porous pavement may only receive impervious area credit if the soils underneath the pavement allow for infiltration to occur.
IA Credit Option 1: Impervious Area Reductions

PWD currently offers the three types of IARs listed below. A property may be eligible for one or more IARs.

- **Tree Canopy Cover**
- **Roof leader/Downspout Disconnection**
- **Pavement Disconnection**

IARs result in a direct reduction of the billable IA on a parcel and should meet the requirements defined below.

**Tree Canopy Cover:** A property is eligible for a Tree Canopy Cover IAR when new or existing tree canopy extends over ground level impervious area on a parcel. Under these circumstances, a portion of impervious area may be deducted from total billable IA.

For new and existing trees, the IAR is equal to half of the overlapping canopy area.

**Note:** The tree canopy credit for stormwater credits is calculated differently than the tree credit to meet PWD’s Stormwater Regulations.

**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 may be considered completely or partially disconnected if it follows the guidelines below:

- The length and width of the receiving pervious area is greater than or equal to the contributing impervious area’s length and width.
- 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.

**Note:** These are guidelines. Credit decisions are made based on site-specific conditions and are subject to PWD’s discretion.

**Note:** Disconnection of roof leaders/downspouts may require additional approvals from PWD as well as from the Office of Licenses and Inspections (L&I).

**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 may be considered disconnected if it meets the following guidelines:
The contributing flow path over impervious cover is no more than 75 feet.
The length and width of the receiving pervious area is greater than or equal to the contributing impervious area’s length and 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.

**Note:** These are guidelines. Credit decisions are made based on site-specific conditions and are subject to PWD’s discretion.

### 4.3.2.2 IA Credit Option 2: Impervious Area Management of at least the First Inch of Runoff

To be eligible for IA Management Credit, the customer must demonstrate applicable management of at least the first inch of runoff from impervious areas on a property. As defined in the PWD Rates and Charges, Section 4.5(c)(1), management of at least the first inch of runoff can be achieved by managing runoff in one of the four following ways:

- **Infiltration by Stormwater Management Practice (SMP)**
- **Detention and slow release by SMP**
- **Pollutant reduction and filtration by SMP**
- **Surface Discharge**

**IA Management by Stormwater Management Practices (SMPs):** Not all SMPs are effective in every area of the City. The types of SMPs that qualify for credits are based on the sewershed of a parcel’s runoff. See Table 1 on Page 19 for more information.

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.

**IA Management by Surface Discharge:** Parcels with areas that discharge directly to surface water bodies without the use of PWD infrastructure may satisfy the management of the first inch of runoff 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 complaint with all applicable regulations, constructed according to the original design plans, and are being maintained in a functional condition.
4.3.3 Gross Area Stormwater Credit (GA Credit)

Two options of GA Credit are available. Customers may be eligible for one or both options of GA Credit.

- **NRCS-Curve Number Open Space**: This would apply to open space areas of the property.
- **Management of at least the First Inch of Runoff**: This would be accomplished by different types of Stormwater Management Practices (SMPs) or Surface Discharge.

4.3.3.1 GA Credit Option 1: NRCS-CN Open Space Credit

This option is only applicable to the open space, calculated as gross area subtracted by impervious area (GA-IA), of a parcel. Under this option, the customer must demonstrate an average Natural Resource Conservation Service Curve Number (NRCS-CN) that meets one of the values contained in the Curve Number Scale found in Appendix A. 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 A provides the GA Credit associated with the different scenarios. More information on NRCS-CN is available in the *Stormwater Management Guidance Manual Version 3.1*.

**Note**: Open space area that discharges directly to surface water bodies without the use of PWD infrastructure are eligible for 90% credit, regardless of cover type or hydrologic soil group.

**Note**: Open space area that is managed by an approved SMP may be eligible for 80% credit if the SMP is sized to account for the area. Pre-approval from PWD during the design phase of the project is required.

4.3.3.2 GA Credit Option 2: Management of at least the First Inch of Runoff

GA Credit is automatically achieved when a parcel is approved for IA Credit through management of at least 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. For more information, see Section 4.3.2.2 for IA Credit Option 2: Impervious Area Management.

4.3.4 National Pollutant Discharge Elimination System Industrial Permit Stormwater Credit (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 4.3.5.
4.3.5 Calculation of SWMS Charge with Stormwater Credits

In the case of parcels that are eligible for one or more classes of credits, 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:

4.3.5.1 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.

4.3.5.2 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.

4.3.5.3 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.

4.3.5.4 **Surface Discharge 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 Rates and Charges Section 4.0.
- **Step 5:** 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 PWD Rates and Charges Section 4.3(6).

**Note:** If any account is eligible for special reduced rates under PWD Rates and Charges Section 5.2, the reduction will be applied to the entire water/sewer/stormwater bill after all stormwater credits are applied.

### 4.4 Application Forms

#### 4.4.1 Form B

The customer must submit a complete Form B, the Stormwater Credits Application, as well as all supporting documentation ([Section 4.5](#)) when applying for an initial credit or additional credits. The customer may request one or more classes of credit in the application. Credits are effective the date that PWD receives a complete Form B, including all required supporting documentation. Incomplete credit 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. Credits expire every four (4) years from their effective date.

Note: A credits application fee is no longer required as of September 1st, 2018.

4.4.2 Form C

The customer must submit a complete Form C, the Stormwater Credits Renewal Application, as well as all supporting documentation (Section 4.5) and the Credit Renewal Application Fee of $90 when renewing existing credits. The customer must submit a completed Form C and payment 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.

The credits renewal application fee is non-refundable and may be paid by check or money order to The City of Philadelphia Water Department.

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.

4.5 Application Supporting Documentation

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

4.5.1 Impervious Area Stormwater Credit (IA Credit)

- Pre-2006 Development: Parcels with stormwater facilities constructed prior to 2006 must demonstrate compliance with current stormwater credits regulations to be eligible. Appropriate documentation, including as-built site plans, inspection and photograph logs, a record of maintenance activity, 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.

- Post-2006 Development: Parcels that have redeveloped since 2006 and were subject to the PWD Stormwater Regulations must be compliant to be eligible for stormwater credit. All necessary documentation, including as-built site plans, inspection and photograph logs, and a record of maintenance activity if applicable, must be approved by PWD Plan Review before credits can be evaluated. Please contact PWD Plan Review (pwd.planreview@phila.gov) for questions concerning post-construction documentation requirements.
Stormwater Retrofits: Customers that have implemented stormwater retrofits must also have all necessary documentation approved by the incentives team before credits can be evaluated. At a minimum, this includes as-built drawings, inspection and photograph logs, and a record of maintenance activity if applicable. Please contact the PWD Credits Program (pwd.stormwatercredits@phila.gov) for questions concerning post-construction stormwater management documentation requirements.

Impervious Area Reductions: Customers applying for impervious area reductions should submit a site plan delineating the requested areas to be credited as well as recent photographs of all roof disconnections, pavements disconnections, and tree canopy credit areas.

Surface Discharge: Customers with areas that discharge to a surface water body without the use of PWD infrastructure should provide a site plan indicating drainage conditions and topography, with areas that discharge to a surface water body delineated on the plan. Recent photographs of the property, drainage areas, and all stormwater conveyance and outflow system components should also be submitted.

4.5.2 Impervious Area Stormwater Credit Renewal

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

For areas receiving credit for IARs:

- Recent photographs of all roof disconnection, pavement disconnection, and tree canopy credit areas.
- A written summary of all changes to the property condition since the date of the last credit request.

For areas receiving credit for SMPs:

- Recent photographs of the stormwater management system(s) and contributing drainage areas.
- Record of inspections and maintenance activity for each SMP.
- A written summary of all changes to the property condition since the date of the last credit request.

For areas receiving credit for Surface Water Discharge:

- Recent photographs of the surface water discharge drainage areas and all stormwater conveyance and outflow system components.
- A written summary of all changes to the property condition since the date of the last credit request.
4.5.3 Gross Area Stormwater Credit (GA Credit)

- **NRCS-CN Open Space Credit**: The customer must provide recent site photographs with the completed application (Form B).
- **Management of at least the First Inch of Runoff**: 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.

4.5.4 Gross Area Stormwater Credit Renewal

- **NRCS-CN Open Space Credit**: The customer must provide recent site photographs with the completed renewal application (Form C) and a written summary of all changes to the property condition since the date of the last credit request.
- **Management of at least the First Inch of Runoff**: 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.

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

To request a NPDES Credit, the customer must provide a copy of an active NPDES Stormwater Permit for Industrial Stormwater Discharge Activities and a copy of the results of the required PADEP Discharge Monitoring Report from the current year, along with the Form B or C (and payment with Form C).

4.6 Application Procedures

4.6.1 Application Forms

Form B, the Stormwater Credits Application, and Form C, the Stormwater Credits Renewal Application, are available online at [http://www.phila.gov/water/wu/stormwater/](http://www.phila.gov/water/wu/stormwater/). More information on these forms can be found in Section 4.4.

4.6.2 Application Submission

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

- Stormwater Billing Program
- Philadelphia Water Department
- 1101 Market St., 4th Floor
- Philadelphia, PA 19107
4.6.3 Credits Application Processing

PWD will conduct technical review of credits only after receipt of a complete application, including all required supporting documentation. PWD will review a credits application only if the customer’s account payments pertaining to the parcel are current.

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.

When an additional type of credit is being requested, PWD reserves the discretion to require a new stormwater credit application (Form B) or credit renewal application (Form C) and set the appropriate expiration date for such credits.

Note: If a customer submits an Appeals and a Credits Application at the same time, the Appeals Application will be reviewed and processed first, followed by the Credits Application.

4.6.4 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.

4.6.5 SWMS Charge Payment and Documentation Costs

- A pending credits application shall not constitute a valid reason for non-payment of the SWMS Charge.
- The customer is solely responsible for costs incurred in the preparation of the required documentation and/or the submission of the credits application.

4.6.6 Credits Application Decision

Questions regarding a credits decision can be discussed with the Stormwater Credits Team at pwd.stormwatercredits@phila.gov or (215) 685-6070.

To challenge a decision issued, an appeal may be filed with the Tax Review Board, 100 South Broad Street, Room 400, Philadelphia, PA 19110, within 30 days of receipt of PWD’s decision letter. A copy of the Form D Notice of Disposition must be submitted with the request. Inquiries regarding the Tax Review Board hearing process can be directed to (215) 686-5228.
4.6.7 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.

4.6.8 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.
5 Community Gardens Discount

5.1 Objectives

Philadelphia City Council has determined that Community Gardens should be afforded a discounted stormwater management service charge if they meet certain criteria. A summary of this criteria as well as associated policies and procedures are provided herein.

5.2 Eligibility Criteria

- The non-residential parcel’s principal use is devoted to regularly-planted crop beds and such other related uses as are reasonable and necessary to growing such crops and maintaining the garden.
- At least 80% of the gross area of the parcel is effectively pervious. PWD will evaluate the total Impervious Area as a percentage of the parcel’s Gross Area. Impervious Areas that meet the Department’s Impervious Area Reduction Credit definition (Section 4.3.2.1) will be considered effectively pervious for the purposes of the Community Garden discount.
- The Community Garden is appropriately maintained so as not to cause blight or nuisance.
- A community, non-profit or other organization associated for purposes of operating the Community Garden operates the Garden for public benefit.
- The organization must possess written evidence of the right to use the parcel as a Community Garden.
- Gardening activities are conducted primarily by members of the organization.

5.3 Policies

- The approved discount is good for period of 4 years and can be renewed for an additional 4 years up on submittal of a complete renewal application.
- Approved gardens must continue to meet criteria and are subject to periodic verification by the Department at its discretion.
- When a complete application is received before January 1, 2018 and approved, the discount shall be effective January 1, 2017. Applications received and approved after January 1, 2018 shall be effective the date the complete application is received.
- Community Gardens approved for the stormwater charge discount are still subject to water and sewer charges, as applicable. The Community Garden discount only applies to the stormwater charge of a customer’s water bill.
- Questions regarding a Community Gardens discount decision can be discussed with the Stormwater Appeals Team at pwd.stormwaterappeals@phila.gov or (215) 685-6244.
To challenge a decision issued, an appeal may be filed with the Tax Review Board within 30 days of receipt of PWD’s decision letter. A copy of the Form E Notice of Disposition must be submitted with the request. More information about the Tax Review Board appeal process is available on the Tax Review Board’s website: http://www.phila.gov/departments/tax-review-board.

5.4 Application Forms

5.4.1 Form G

The customer must submit a complete Form G, the Stormwater Community Gardens Discount Application, as well as all supporting documentation (Section 5.5) when applying for the discount.

5.5 Application Supporting Documentation

Form G must be submitted to the Department along with the following: 1) map of garden; 2) recent garden photograph; 3) written evidence of right to use parcel as Community Garden (template contained in Form G-1); and 4) document showing organization of Community Garden. Explanations of each of these items are contained within Form G.

5.6 Application Procedures

5.6.1 Application Form

Form G and G-1 are available online at http://www.phila.gov/water/wu/stormwater/.

Applicants may request the individual discounts for each parcel or may make a single request for a collection of proximal parcels.

5.6.2 Application Submission

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

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

5.6.3 Notice of Disposition

The Department will review the Form G and associated documents for discount eligibility, and a written decision will be provided to the applicant once the review has concluded. The Department may inspect any parcel seeking this discount at any time in order to verify eligibility.
Appendix A: NRCS-Curve Number Calculation Instructions

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.

### Table A-1: PWD Accepted Curve Number Values

<table>
<thead>
<tr>
<th>Cover Description</th>
<th>Curve Number for Hydrologic Soil Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td><strong>Cover Type</strong></td>
<td></td>
</tr>
<tr>
<td>Lawns, parks, golf courses, etc.</td>
<td></td>
</tr>
<tr>
<td>Poor (grass cover &lt; 50%)</td>
<td>68</td>
</tr>
<tr>
<td>Fair (grass cover 50% to 75%)</td>
<td>49</td>
</tr>
<tr>
<td>Good (grass cover &gt; 75%)</td>
<td>39</td>
</tr>
<tr>
<td>Meadow</td>
<td>30</td>
</tr>
<tr>
<td>Athletic Fields</td>
<td>68</td>
</tr>
<tr>
<td>Porous Turf</td>
<td>70</td>
</tr>
<tr>
<td>Brush (brush-weed-grass mixture with brush the major element)</td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>57</td>
</tr>
<tr>
<td>Fair</td>
<td>43</td>
</tr>
<tr>
<td>Good</td>
<td>32</td>
</tr>
<tr>
<td>Woods-grass combination (orchard or tree farm)</td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>57</td>
</tr>
<tr>
<td>Fair</td>
<td>43</td>
</tr>
<tr>
<td>Good</td>
<td>32</td>
</tr>
<tr>
<td>Woods</td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>45</td>
</tr>
<tr>
<td>Fair</td>
<td>36</td>
</tr>
<tr>
<td>Good</td>
<td>30</td>
</tr>
<tr>
<td>Gravel</td>
<td>76</td>
</tr>
<tr>
<td>Dirt</td>
<td>72</td>
</tr>
<tr>
<td>Water</td>
<td>100</td>
</tr>
<tr>
<td>Cover Type</td>
<td>Hydrologic Condition</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Lawns, parks, golf courses, etc.</td>
<td>Poor (grass cover &lt;50%)</td>
</tr>
<tr>
<td></td>
<td>Fair (grass cover 50-75%)</td>
</tr>
<tr>
<td></td>
<td>Good (grass cover &gt;75%)</td>
</tr>
<tr>
<td>Meadow</td>
<td>NA</td>
</tr>
<tr>
<td>Athletic Fields</td>
<td>NA</td>
</tr>
<tr>
<td>Porous Turf</td>
<td>NA</td>
</tr>
<tr>
<td>Brush</td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td>Fair</td>
</tr>
<tr>
<td></td>
<td>Poor</td>
</tr>
<tr>
<td>Wood-grass combination</td>
<td>Good</td>
</tr>
<tr>
<td></td>
<td>Fair</td>
</tr>
<tr>
<td></td>
<td>Poor</td>
</tr>
<tr>
<td>Woods</td>
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<td></td>
<td>Fair</td>
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<td>Gravel</td>
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<td>Dirt</td>
<td>NA</td>
</tr>
<tr>
<td>Water</td>
<td>NA</td>
</tr>
<tr>
<td>TOTAL SUMS</td>
<td></td>
</tr>
</tbody>
</table>

Average CN (F/E)                     |          |                          |          |          |          |          |
% GA Credit                          |          |                          |          |          |          |          |
### Table A-2: Curve Number Scale

<table>
<thead>
<tr>
<th>Open Space GA Curve Number (CN)</th>
<th>Non-Surface Discharge 80% Max Open Space GA Credit %</th>
<th>Non-Surface Discharge with NPDES 87% Max Open Space GA Credit %</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥75</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>74</td>
<td>4</td>
<td>4.35</td>
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<tr>
<td>73</td>
<td>8</td>
<td>8.70</td>
</tr>
<tr>
<td>72</td>
<td>12</td>
<td>13.05</td>
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<td>68</td>
<td>73.95</td>
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<td>72</td>
<td>78.30</td>
</tr>
<tr>
<td>56</td>
<td>76</td>
<td>82.65</td>
</tr>
<tr>
<td>55</td>
<td>80</td>
<td>87.00</td>
</tr>
<tr>
<td>&lt;55</td>
<td>80</td>
<td>87.00</td>
</tr>
</tbody>
</table>
## Appendix B: Charges for Stormwater Management Services (SWMS)

### Effective September 1, 2018 – August 31, 2019

<table>
<thead>
<tr>
<th>Gross Area Charge ($/500 square feet)</th>
<th>Impervious Area Charge ($/500 square feet)</th>
<th>Billing Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.701</td>
<td>$5.304</td>
<td>$2.34</td>
</tr>
</tbody>
</table>

**Non-Residential Minimum Charge**

| $16.07 |

**Residential Charge**

| $15.53 |

### Effective September 1, 2019 – August 31, 2020 (and thereafter **)

<table>
<thead>
<tr>
<th>Gross Area Charge ($/500 square feet)</th>
<th>Impervious Area Charge ($/500 square feet)</th>
<th>Billing Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0.717</td>
<td>$5.41</td>
<td>$2.30</td>
</tr>
</tbody>
</table>

**Non-Residential Minimum Charge**

| $16.33 |

**Residential Charge**

| $15.80 |

**The SWMS Charges effective September 1, 2020 and after are subject to change.**