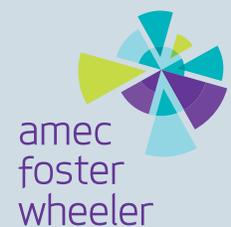


# Stormwater Credit Manual

CITY OF AUGUSTA, GEORGIA



*Prepared by*



# Stormwater Credit Manual

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## 1.0 Background

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### *Stormwater Responsibilities*

The Augusta Engineering Department (AED) manages the stormwater program within Augusta-Richmond County (Augusta) with the exception of Fort Gordon, which manages its own municipal stormwater system. The Augusta Planning and Development Department oversees the floodplain management program that includes flood mapping and mitigation programs.

The goals of the Augusta Engineering Department include both the protection of the quality of the surface waters in Augusta as well as reducing the risk of flood damage to citizens and property. As such, they have construction, inspection, and maintenance oversight for stormwater drainage systems including thousands of structures such as culverts, catch basins, and water quality treatment facilities. These departments are also responsible for regulating new development and redevelopment of properties within Augusta and for meeting State and Federal requirements regarding the quality of creeks and streams within their jurisdiction.

### *Stormwater Service Charge*

The Augusta stormwater service charge is based on the amount of impervious area (IA) – rooftops, parking, etc. on a property. For single-family residential properties (SFR) Augusta uses a simplified fee structure consisting of two tiers that represent different amounts of impervious area on the property:

Tier 1 = 400 - 4,400 square feet of impervious area (IA)

Tier 2 = more than 4,400 square feet of impervious area (IA)

All non-single family residential (NSFR) properties will pay on the basis of number of equivalent residential units (ERUs) on a parcel rounded to the nearest whole ERU. One ERU is 2,200 square feet of impervious area. Thus, for example, a property with 9,680 square feet of estimated impervious area would pay a fee based on  $9,680 \div 2,200 = 4.4$  ERUs, which is rounded to 4 ERUs. When completing a credit application, the stormwater service charge is calculated in this manner prior to calculation of credits.

Properties containing 400 square feet or more of impervious area are considered to be improved properties. While ERU calculations are generally rounded to the nearest whole number, a minimum of 1 ERU is assigned to improved properties. Thus, for example, a property with 1,980 square feet of estimated impervious would pay a fee based on  $1,980 \div 2,200 = 0.9$  ERU, which is reset to the minimum of 1 ERU. Properties containing less than 400 square feet of impervious area will be treated as unimproved properties and will not receive a bill.

### *Service Charge Exemptions*

In accordance with the Stormwater Management Ordinance, no public or private property is exempt from storm water utility service charges with the following exceptions:

- (a) Land containing less than four hundred (400) square feet of impervious area shall be exempt from storm water service charges.
- (b) Railroad tracks shall be exempt from storm water service charges. However, railroad stations, maintenance buildings, or other developed land used for railroad purposes shall not be exempt from storm water service charges.

- (c) Public and private roadways, including the portion of private driveways greater than two hundred (200) linear feet, shall be exempt from storm water service charges.
- (d) Ft Gordon, Georgia including contiguous properties owned or operated as part of Fort operations shall be exempt from the storm water service charge.

Owners of properties that meet one or more of the exemptions above and who receive a bill for the user fee may request in writing that AED investigate the applicability of the stated exemption and that the user fee be removed or reduced for the property. Written requests must be submitted to the address listed in Section 4.0. For properties that, upon examination, are determined to meet the criteria for exemption will be entitled to a refund of overpayment of user fees paid for a period not to exceed six (6) months.

### ***Impervious Area (IA) Adjustments***

AED will review all properties at least once every five years to ensure customers are being billed for the correct amount of Impervious Area. Upon completion of the periodic review, if a customer's amount of Impervious Area has changed, AED will adjust customer's stormwater fee accordingly to reflect the updated amount of Impervious Area.

Customers may request a reassessment of their Impervious Area calculation at any time by submitting a written request to AED at:

***Stormwater IA Review***  
***Augusta Engineering Department***      [or by submitting an online form here.](#)  
***535 Telfair Street, Suite 530***  
***Augusta, GA 30901***

A form to serve as the written request is provided in Appendix D. The form is also provided at [www.augusta.gov/stormwater](http://www.augusta.gov/stormwater) as a fillable PDF form.

Requests for a reassessment may be based on one or more of the following conditions:

1. **Impervious Area Delineation.** Impervious areas include developed areas of land that prevent or significantly impede the infiltration of storm water into the soil. Typical impervious areas include, but are not limited to: roofs; sidewalks; walkways; patios; swimming pools; private driveways and roads; parking lots; access extensions; alleys and other paved, engineered, compacted or traveled gravel surfaces containing materials that prevent or significantly impede the natural infiltration of storm water into the soil. Customers who believe that the delineation of impervious area on the property is in error may request an impervious area review.
2. **Dirt Roads.** It is the policy of AED that roadways and driveways that are comprised of compacted earth (dirt) will be excluded from the delineation of impervious areas. Compacted earth parking areas are not included in this policy since these parking areas are not permitted in Augusta by code. Customers whose property includes a dirt drive or roadway may request that a reassessment of impervious area be performed in order to assure that these dirt travel ways are excluded from the calculation of impervious area.

3. **Disconnected Residential Outbuildings.** It is the policy of AED that outbuildings on large residential properties will be excluded from the delineation of impervious areas if the following conditions are met:
- The outbuilding must be disconnected from the impervious area represented by the primary residence and associated driveway and parking;
  - The outbuilding must drain to a vegetated area that meets the criteria for a Vegetated Filter Strip in accordance with the Coastal Supplement to the Georgia Stormwater Management Manual ; and
  - The Vegetated Filter Strip must be located outside of the stream buffer as defined by the Augusta Soil Erosion, Sedimentation and Pollution Control Ordinance.

## 2.0 Stormwater Credits

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### *What is a Stormwater Credit?*

A stormwater credit is a conditional reduction in the stormwater service charge based on the proper construction and continuing presence of an effectively maintained and approved on-site stormwater facility that reduces the impact of the runoff from impervious area, and thus the overall cost of providing service. The credit is applied only to the physical portion of a site's impervious area treated or, for educational credits, to the number of personnel to which it applies.

Construction of an effective stormwater facility limits the impact to a stormwater drainage system by reducing peak rates of runoff, reducing total runoff volume, and/or removing pollutants. These measures can include on-site practices such as detention areas for flood control and other best management practices (BMPs) such as wet ponds, rain gardens, and other approved designs that manage stormwater quality.

Credits are only available to non-single family residential (NSFR) properties. The reduced impact of single family residential (SFR) properties due to the generally greater amount of grassy area is recognized within the rate structure itself. However, any SFR property that wishes to apply for and obtain a credit can request to be reclassified as an NSFR property and therefore be treated as an NSFR property in regards to fee assessment and availability of credits. Requests for reclassification must be made in writing to the Augusta Engineering Department. Prior to making a request for reclassification, the following guidelines should be considered:

1. NSFR properties are assigned a minimum of 1 ERU, which correlates to 2,200 square feet of impervious area, regardless of applicable credits. The ERU estimate for NSFR properties rounds to the nearest whole ERU. Therefore, a SFR property must have a minimum of 3,300 square feet of impervious area to realize a financial benefit from user fee credits.
2. The stormwater quantity or quality controls serving as the basis for a credit must reside on the SFR property requesting the reclassification and the controls must be maintained by the property owner.

3. Personnel qualifying for the educational credit must be students, employees or members of the facility/institution at the NSFR property.
4. A homeowners association may initiate a reclassification request based on stormwater quantity or quality controls in common areas which serve multiple properties. However, the only properties that can be included in the request are those that actually drain, in whole, to the stormwater controls. The resultant credit(s) will be applied to the user fee for each individual property.

### ***Available Credits***

Stormwater credits for peak flow reduction, water quality impact reduction, and stormwater education are available to non-single family residential properties (NSFR). Design guidance for water quantity and quality facilities and procedures to calculate the associated water quantity and quality reductions, are available in the Augusta Stormwater Technical Manual and Augusta Stormwater Management Plan. Additional guidance of the education credit is available in this manual and on the City's website. The available credits are:

#### **1. Detention Credit – up to 40%**

Stormwater detention facilities provide a reduced demand on the downstream drainage systems through the reduction of flow rates leaving the site. Detention facilities designed, constructed, and maintained in adherence to the current stormwater detention standard in Augusta are eligible for this credit. Current requirements include the provision for adequate storage to match peak outflow for pre-development conditions for the post-development site for the 2, 5, 25, and 50-year storm events. The facility must also be capable of safely passing the 100-year storm event.

Older detention facilities that met previous detention requirements, but not the current detention requirements, may be eligible for a partial credit of 15%. To receive partial credit, documentation must be provided that demonstrates compliance with previous requirements.

#### **2. Watershed Protection Credit – 5%**

Augusta has identified specific watersheds where urban development has more significantly impacted stormwater runoff quantity and quality than in other places. The three watersheds include Rae's Creek Basin, Rocky Creek Basin, and Rock Creek Basin. Additional design requirements for stormwater detention are required in these impacted watersheds. The release of stormwater from storage facilities must be limited to 90-percent of the pre-development rates for the 2, 5, 25, and 50-year storm events. The facility must also be capable of passing the 100-year storm event. Stormwater detention facilities designed and constructed to this higher standard are eligible for a watershed protection credit in addition to the detention credit, throughout the City, regardless of the watershed where they are located.

Some examples of facilities that may qualify for the Detention Credit and/or Watershed Protection Credit are depicted below.



**Examples of Dry Detention**



**Examples of Wet Detention**

### 3. Industrial Credit - 5%

An industrial credit is available to properties that are required by the State of Georgia to secure and maintain an Industrial Stormwater General Permit (IGP) under the National Pollutant Discharge Elimination System (NPDES) program based on their Standard Industrial Classification (SIC) and are required to perform sampling and testing. The current facility Stormwater Pollution Prevention Plan (SWPPP) and Annual Report required by the State must be submitted to AED to receive the credit. Submission of updates to these reports must be submitted annually, as applicable, to maintain the credit and the permit must be kept current and in good standing.

### 4. Water Quality Credit - 15%

A water quality credit is available to properties that meet water quality requirements in the current Augusta Stormwater Management Plan, which requires properly designed and maintained treatment for runoff from the first 1.2 inches of rainfall. Some examples of facilities that may qualify for the water quality credit are depicted below.



**Examples of Bioretention**



**Examples of Urban Bioretention**



**Examples of Infiltration Trenches**



**Examples of Water Quality Swales**



**Examples of Rain Gardens**

## 5. Education Credit - up to 35%

Education credits are available to qualified NSF facilities. This credit is offered in four Tiers for different educational programs including: (1) participation in and satisfactory completion of a course of study (quarter or semester) using current Georgia Science, Technology, Engineering and Math (STEM) criteria, with watershed management, pollution prevention, flood control, and the biological and health impacts of storm water pollutants as examples within the STEM criteria; (2) site visits, field trips and related activities at the Pinizy Nature Center to participate in workshops; (3) hands-on participation in on-site BMP installation and/or quarterly participation in Adopt-a-Stream clean-up programs; and (4) participation in city-sponsored stormwater education classes. Details for the credit are explained further in Section 3.0.

Credits may be combined, however the total of all credits shall not exceed 65% of the property's user fee. Structural credits (credit types 1 through 4) do not expire but may be revoked, in whole or in part, if the conditions qualifying a property for a credit are not maintained. While credits do not expire, they are specifically granted to the property owner who made the application. Thus, a reapplication for credit is required upon a change in property ownership.

Education credits are valid for a period of two years from the time issued, however education credits require semi-annual reporting as discussed in Section 4.0.

## 3.0 Education Credit

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The City of Augusta Stormwater Utility provides for an Education Credit for Non-Residential properties as part of the stormwater rate structure. Ordinance 7498, § 5-1-17 (I) reads:

*Non-residential property owners are eligible to apply for a Storm Water Education Program credit in accordance with the requirements of the Storm Water Education Program in the Augusta, Georgia Stormwater Credit Manual and Augusta, Georgia Management Plan.*

The purpose of the Education Credit is to recognize the value to the City, and to the operation and maintenance of its stormwater system, if members of the community contribute to pollution prevention, stormwater management best practices, and other ways by which improved awareness and participation reduce costs to the public, and improve compliance with federal and state stormwater regulations.

Four types of Educational efforts can qualify for Credits. The Tiers are not mutually exclusive, and thus the employees, members or students located a particular non-residential site, may participate in one or more of these activities, in order for the property to qualify for Education credits. Generally, education participants must be Augusta residents, First Grade age or above, in order to be eligible for the types of programs described above.

The cumulative of all education credits shall not exceed 35% of the stormwater user fee. The Tier 4 education credit is provided as an alternative educational opportunity and, if used as the only source of education credits, shall be capped at 10% of the stormwater user fee.

### ***Tier 1 Education Credit***

Participation in and satisfactory completion of a course of study (quarter or semester) using current Georgia Science, Technology, Engineering and Math (STEM) criteria, with watershed management, pollution prevention, flood control, and the biological and health impacts of storm water pollutants as examples within the STEM criteria. Individuals at each location who participate in these workshops should be able to demonstrate a basic understanding, and application, of STEM criteria to examples based on stormwater system design, installation, maintenance, repair, water quality monitoring, and habitat protection. A summary of the Georgia STEM criteria is provided below. The Tier 1 credit is \$20 per participant per location per year.

### ***Tier 2 Education Credit***

Site visits, field trips and related activities at the Phinizy Nature Center to participate in workshops in more detail than the Tier 1 classroom topics. These workshops would include the hands-on observation of storm water best management practices, pollution prevention techniques, water quality sampling and laboratory testing methodologies, and/or the interrelationships of streams, wetlands, rivers, landscaping, biota, and the chemical, physical and biological science behind evaluating these interrelationships. The Tier 2 credit is \$25 per participant per location per year.

### ***Tier 3 Education Credit***

Hands-on participation in the planning, design, installation and performance monitoring (as applicable) of on-site BMP installation as a facility/site project by the property owner (such as detention, filtration, sediment removal, etc.) and/or quarterly participation in Adopt-a-Stream clean-up programs, in order to demonstrate a hands-on understanding of the benefits to the community of improved storm water management and pollution prevention. The Tier 3 credit is \$50 per participant per location per year.

### ***Tier 4 Education Credit***

Participation in education classes taught by, or sponsored by, the Augusta Engineering Department that promote good stewardship of our water resources specifically in the areas of watershed management, pollution prevention, flood control, or the biological or health impacts of storm water pollutants. Education classes may vary in content and length, but participants must attend a total of 8 hours of class time in order to be eligible for the credit. The Tier 4 credit is \$10 per participant per location per year.

## 4.0 How to Apply

Applicants must complete a Credit Application Form (Appendix A). Except as noted below, the Credit Application Form must be accompanied by Credit Documentation Forms (Appendix B) and Maintenance Inspection Forms (Appendix C), as applicable for the site. As noted on these forms, backup documentation is required including photographs of stormwater control structures. Submit all required documentation to the City at the following address:

**Stormwater User Fee Credit  
Augusta Engineering Department  
535 Telfair Street, Suite 530  
Augusta, GA 30901  
(706) 796-5040**

Upon receipt of a Credit Application Form, a sufficiency review will be conducted within 30 days to determine if the application is substantially complete. If the application is not complete, additional information will be requested from the applicant. The application must be complete before a technical review will be conducted. Once an application has been deemed complete, the applicant will be notified within 60 days whether the credit has been approved or denied. If approved, the credit will be activated in the next billing cycle. If denied, the applicant has 60 days to file an appeal with the Director of the Augusta Engineering Department.

### ***Documentation for New Detention and Water Quality Facilities***

Applicants who are proposing to construct new systems to receive a credit from the stormwater service charge must comply with all current local, state and federal design standards, regulatory review and permitting requirements.

Sufficient documentation must accompany the Credit Application Form to furnish proof of critical contributing impervious area, design dimensions and calculations. It is the responsibility of the applicant to perform calculations and/or measurements to certify the eligibility of the site and structure(s) for credit.

Original sets of development plans, plus certification and documentation that the current control facility and structure have been constructed and maintained as designed, shall be submitted. Where these are not available, new measurements, calculations and other documentation must be performed by a Georgia Licensed Professional Engineer experienced in such designs.

The submitted credit application package must include the Credit Application Form (Form A), the appropriate documentation form (Form B), the appropriate inspection form (Form C) representing initial conditions, and any additional backup required by the forms. As-built certification conforming to design stamped and signed by Georgia Licensed Professional Engineer shall be submitted.

### ***Documentation for Existing Detention and Water Quality Facilities***

Ideally, Applicants who request a credit for existing detention facilities will provide the same forms and backup documentation that is required for new facilities. However, the City of Augusta understands that records for existing facilities may take time to locate, may not be complete, or may not exist. Therefore, the following temporary process is established whereby these Applicants may receive a provisional credit for a limited period of time while a complete credit application package is being developed:

1. Applicant must complete and submit a Credit Application Form (Form A).
2. Within 60 days, AED staff will make an initial inspection or review on behalf of the Applicant to confirm the existence of the facility, the general maintenance condition (functionality) of the facility, and the working order of the primary outlet and the spillway, as appropriate. AED staff will complete an inspection form (Form C) for the file documenting this initial inspection.
3. If in the opinion of AED, the facility appears to be well maintained and in general working order, a provisional credit for the facility will be granted. The provisional credit for detention facilities built before 1980 will be 15%. The provisional credit for detention facilities built on or after 1980 will be 40%.
4. The provisional status of the credit will be lifted upon receipt and approval of a complete credit application package (Forms A, B, and C).
5. Provisional credits will expire on December 31, 2017. In order to receive a credit beyond this date, the Applicant must submit a complete credit application package with required backup documentation and professional certifications.
6. A provisional credit for which complete documentation is not received by December 31, 2017 may be considered illegitimate. In this case, AED will revoke the credit and may, at its sole discretion, back charge the Applicant for the provisional credit given.

### ***Documentation for Education Credit***

Eligible applicants (non-residential property owners or responsible parties) may apply to AED for an Education Credit based on the number of participants planned at their location. The submitted credit application package must include the Credit Application Form (Form A), documentation forms (Form B) for Tier 1, Tier 2, Tier 3, and Tier 4 as applicable, and any additional backup required by the forms.

If a Property Owner is submitting a plan for multiple locations, the plan should describe the numbers of participants at each individual location, for the tiers of educational programs above, and a copy of their educational program, class, BMP project, with sufficient detail for the AED to evaluate the plan's eligibility. Upon approval of the plan, Credits will be applied to the property owner's monthly bills, on a pro-rated basis, for the year. At least twice per year, by June 30 and by December 31, the property owner must report for each location receiving Credits, the number of actual participants by each tier of program. If the actual number of participants is fewer than the planned number receiving Credits, these amounts will be reconciled with the remaining six months of the year for the numbers reported by June 30, and for the subsequent six months in the following year for the numbers reported by December 31.

## **5.0 Maintenance and Inspection**

Stormwater structural controls are only effective if they are properly maintained to ensure they perform as designed. The City may request an inspection of the structural control at any time, as granted by the applicant at the time of application for credit. The City reserves the right to suspend an existing credit upon inspection of a structural control that is found to be non-compliant with maintenance standards, until such time that the property owner performs remedial actions and submits a renewal application for credit.

Once a credit is earned, it may be continued as long as the facility for which it is given is maintained to perform as approved. Therefore, the applicant must ensure the continual functionality of the structural control in order to continue receiving the stormwater credit. AED, or its designee, will periodically inspect facilities and document maintenance condition and functionality using the Maintenance Inspection Reports in Appendix C. It is advisable that applicants familiarize themselves with the appropriate inspection reports in order to insure their inspection and maintenance procedures are adequate.

## 6.0 Resources and Guidance

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### *Structural Facility Credits*

Stormwater facilities within the Augusta-Richmond County stormwater service area must be designed to meet or exceed the requirements of the following regulatory documents:

- [Stormwater Management Ordinance](#), July 21, 2015
- [Stormwater Management Plan, Technical Manual](#), June 1999
- [Soil Erosion, Sedimentation and Pollution Control Ordinance](#), March 20, 2012
- [MS4 Stormwater Management Program](#), October 2012

Additional [Stormwater Technical Documents](#) are available from the City of Augusta.

Pre-approved design guidance documents for BMPs as discussed in Section 2.0 include:

- [Coastal Supplement to the Georgia Stormwater Management Manual](#)
- [City of Portland Stormwater Management Manual](#)
- [LID Technical Guidance Manual for Puget Sound](#)
- [Guidance documents from the LID Center](#)
- [Guidance documents from North Carolina State University stormwater engineering group](#)

### *Education Credits*

The Tier 1 credit may be granted provided the applicant develops a watershed education curriculum that meets the following conditions:

- Attach a list of appropriate Georgia Performance Standards or objectives for the lessons that will be presented, using watershed education curriculum. Age-level appropriate Georgia Performance Standards can be found at: <https://www.georgiastandards.org/Pages/default.aspx>
- Approved curriculum may also include but is not limited to:
  - Project WET/ Project WET Urban WaterShed/ Healthy Water Healthy People <http://www.projectwet.org/>
  - Georgia Envirothon <http://www.georgiaenvirothon.org/event-2021082>

- Wonder of Wetlands  
[http://www.wetland.org/education\\_wow.htm](http://www.wetland.org/education_wow.htm)
- Georgia's Native Waters  
<http://www.georgiaconservancy.org/index.php>  
<http://www.georgiarecycles.org/sustainability-initiatives/water-conservation/>  
<http://www.watersmart.net/>
- GLOBE Program  
<http://www.globe.gov/>
- Project WILD Aquatic  
<http://www.projectwild.org/documents/projectwildaquatic.pdf>
- Earth's Waters: Rivers and Streams  
[water.usgs.gov/edu/earthrivers.html](http://water.usgs.gov/edu/earthrivers.html)

Examples of applications that should be included in the watershed education curriculum:

- Conduct a stream walk, identifying different types of litter, debris, tires or other materials within the stream or along the stream banks. Discuss the types of impacts these items can have on stream conditions. Discuss what can be done to prevent these impacts. Discuss how stormwater system operations and maintenance can address these issues.
- Discuss techniques for collecting water quality samples, and the chemical, physical and biological indicators that might be tested from these samples, such as dissolved oxygen, temperature, suspended solids, metals, nutrients, pathogens (bacteria), etc. Discuss how standards are applied to evaluate stream conditions, and how the concentration of pollutants is measured. Discuss how fertilizers, herbicides, or other chemicals may impact stream samples.
- Look up a property or neighborhood on the Augusta GIS maps. Review the map at the site, identifying the location of storm water pipes, outlets, catch basins, ditches or ponds. Trace back from the nearest stream, and measure the distance along a ditch, or the estimated length of a pipe, to the nearest public street, and to the nearest stormwater inlet. Discuss the types of water quality indicators that might run off the property and reach the stream.
- Investigate the physical attributes of rocks and soils, and how the types of soils, their texture, and site conditions can impact erosion and sedimentation. Discuss how slopes impact erosion, and how different types of vegetation make an impact. Identify in the field a site with erosion, and describe the visual impacts observed.



# Appendix A

## Credit Application Form





# Appendix B

## Credit Documentation Forms



**Post-Development Characteristics**

Drainage Area Impervious Area (acres): \_\_\_\_\_

Paved Area (acres): \_\_\_\_\_ Roof Area (acres): \_\_\_\_\_ Other IA (acres): \_\_\_\_\_

Explain Other Impervious Area: \_\_\_\_\_

Runoff Coefficient: \_\_\_\_\_ (composite Rational C factor or SCS Curve Number)

Time of Concentration (min): \_\_\_\_\_ (minimum of 5 minutes)

Rainfall Intensity (in/hr): \_\_\_\_\_ (Rational Method only)

Storm Length (min): \_\_\_\_\_ (Rational Method only)

**Detention/Retention Facility Data (attach all calculations)**

Facility Storage Volume at Overflow (ft<sup>3</sup>): \_\_\_\_\_  This facility qualifies for the Watershed Protection Credit

	2-YR	5-YR	25-YR	50-YR	100-YR
Peak Inflow (cfs)					
Peak Outflow (cfs)					

*Attach stage-discharge-storage information in tabular form, storage volume calculations, outlet description, overflow description, runoff calculations, and all other pertinent information necessary to perform a detailed review.*

**Engineer's Certification**

I certify under penalty of perjury that this document and all attachment including calculations, technical details, and other associated information were prepared with my direction or direct supervision in according with a system designed to ensure that qualified personnel properly gathered and evaluate the information submitted. I further certify under penalty of perjury that Stormwater Management Facility/Stormwater Control Measure has been constructed in general accordance with the approved engineering plans and is functioning as designed. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

\_\_\_\_\_  
Signature (Georgia PE)

\_\_\_\_\_  
Date



Engineer's Seal



### Engineer's Certification

I certify under penalty of perjury that this document and all attachment including calculations, technical details, and other associated information were prepared with my direction or direct supervision in according with a system designed to ensure that qualified personnel properly gathered and evaluate the information submitted. I further certify under penalty of perjury that Stormwater Management Facility/Stormwater Control Measure has been constructed in general accordance with the approved engineering plans and is functioning as designed. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

\_\_\_\_\_  
Signature (Georgia PE)

\_\_\_\_\_  
Date

\_\_\_\_\_  
Engineer's Seal



## Stormwater User Fee Tier 1 STEM Education Credit Documentation (Form B)

### Owners Representative

Facility Name: \_\_\_\_\_ Location(s): \_\_\_\_\_

Responsible Individual: \_\_\_\_\_  
Last First M.I.

Address: \_\_\_\_\_  
Street Address Apartment/Unit #

City State Zip Code

Phone: ( ) \_\_\_\_\_ Email Address: \_\_\_\_\_

### PLANNED Description of Curriculum to be Taught (Attach Course Information and Use Blank Sheets if Necessary)

Number of participants by age or grade: \_\_\_\_\_

Hours of classroom time that will be spent on this curriculum: \_\_\_\_\_

Dates or period of teaching: \_\_\_\_\_

**AED Staff Use:** \_\_\_\_\_ **Participants X \$20/Participant =** \_\_\_\_\_ **Annual Credit for this Facility**

### Submittal Approval

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

### ACTUAL Completion of Curriculum (Attach Course Information and Use Blank Sheets if Necessary)

Actual numbers of participants by age or grade: \_\_\_\_\_

Hours of classroom time that were spent on this curriculum: \_\_\_\_\_

Actual dates or period of teaching: \_\_\_\_\_

ATTACH DOCUMENTATION SHOWING ATTENDANCE ROSTER, HANDOUT MATERIALS, ETC.  
TO DEMONSTRATE COMPLIANCE WITH THE CREDIT REQUIREMENTS

**AED Staff Use:** \_\_\_\_\_ **Participants X \$20/Participant =** \_\_\_\_\_ **Annual Credit for this Facility**

Charges or additional credit applied to this facility: \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



## Stormwater User Fee Tier 2 Phinizy Workshops Education Credit Documentation (Form B)

### Owners Representative

Facility Name: \_\_\_\_\_ Location(s): \_\_\_\_\_

Responsible Individual: \_\_\_\_\_  
Last First M.I.

Address: \_\_\_\_\_  
Street Address Apartment/Unit #

City State Zip Code

Phone: ( ) Email Address: \_\_\_\_\_

### PLANNED Description of Phinizy Nature Center Workshops to be Taught (Attach Workshop Information and Use Blank Sheets if Necessary)

Number of participants by age or grade: \_\_\_\_\_

Hours of time that will be spent on these workshops: \_\_\_\_\_

Dates of workshops: \_\_\_\_\_

**AED Staff Use:** \_\_\_\_\_ **Participants X \$25/Participant =** \_\_\_\_\_ **Annual Credit for this Facility**

### Submittal Approval

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

### ACTUAL Completion of Workshops (Attach Workshop Information if Changed and Use Blank Sheets if Necessary)

Number of participants by age or grade: \_\_\_\_\_

Hours of time that were spent on these workshops: \_\_\_\_\_

Dates of workshops: \_\_\_\_\_

ATTACH DOCUMENTATION SHOWING ATTENDANCE ROSTER, HANDOUT MATERIALS, ETC.  
TO DEMONSTRATE COMPLIANCE WITH THE CREDIT REQUIREMENTS

**AED Staff Use:** \_\_\_\_\_ **Participants X \$25/Participant =** \_\_\_\_\_ **Annual Credit for this Facility**

Charges or additional credit applied to this facility: \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



**Stormwater User Fee  
Tier 3 BMP Installation Education Credit Documentation (Form B)  
Also Submit Detention or Water Quality Form B As Appropriate**

**Owners Representative**

Facility Name: \_\_\_\_\_ Location(s): \_\_\_\_\_

Responsible Individual: \_\_\_\_\_  
Last First M.I.

Address: \_\_\_\_\_  
Street Address Apartment/Unit #

City State Zip Code

Phone: ( ) \_\_\_\_\_ Email Address: \_\_\_\_\_

**PLANNED Description of BMP and Participation Activities  
(Attach Planned BMP Participation and Education Description Information and Use Blank Sheets if Necessary)**

Number of participants by age or grade: \_\_\_\_\_

Hours of time that will be spent on these activities: \_\_\_\_\_

ATTACH A GENERAL SCHEDULE OF ACTIVITIES FOR EACH BMP OR SET OF BMPS

**AED Staff Use:** \_\_\_\_\_ **Participants X \$50/Participant =** \_\_\_\_\_ **Annual Credit for this Facility**

**Submittal Approval**

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

**ACTUAL Description of BMP and Participation Activities  
(Attach Actual BMP Participation and Education Description Information and Use Blank Sheets if Necessary)**

Number of participants by age or grade: \_\_\_\_\_

Hours of time that were spent on these activities: \_\_\_\_\_

ATTACH A GENERAL SCHEDULE OF ACTIVITIES FOR EACH BMP OR SET OF BMPS

ATTACH DOCUMENTATION SHOWING ATTENDANCE ROSTER, HANDOUT MATERIALS, ETC.  
TO DEMONSTRATE COMPLIANCE WITH THE CREDIT REQUIREMENTS

**AED Staff Use:** \_\_\_\_\_ **Participants X \$50/Participant =** \_\_\_\_\_ **Annual Credit for this Facility**

Charges or additional credit applied to this facility: \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



## Stormwater User Fee Tier 3 Adopt-a-Stream Education Credit Documentation (Form B)

### Owners Representative

Facility Name: \_\_\_\_\_ Location(s): \_\_\_\_\_

Responsible Individual: \_\_\_\_\_  
Last First M.I.

Address: \_\_\_\_\_  
Street Address Apartment/Unit #

City State Zip Code

Phone: ( ) \_\_\_\_\_ Email Address: \_\_\_\_\_

### PLANNED Description of Adopt-a-Stream Activities (Attach Actual Adopt-a-Stream Information and Use Blank Sheets if Necessary)

Number of participants by age or grade: \_\_\_\_\_

Hours of time that will be spent on these activities: \_\_\_\_\_

ATTACH A GENERAL SCHEDULE OF ACTIVITIES FOR EACH STREAM ADOPTED

**AED Staff Use:** \_\_\_\_\_ **Participants X \$50/Participant =** \_\_\_\_\_ **Annual Credit for this Facility**

### Submittal Approval

Submitted by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

### ACTUAL Set of Adopt-a-Stream Activities (Attach Actual Adopt-a-Stream Information if Changed and Use Blank Sheets if Necessary)

Number of participants by age or grade: \_\_\_\_\_

Hours of time that were spent on these activities: \_\_\_\_\_

ATTACH AN ACTUAL SCHEDULE OF ACTIVITIES FOR EACH STREAM ADOPTED

ATTACH DOCUMENTATION SHOWING ATTENDANCE ROSTER, HANDOUT MATERIALS, ETC.  
TO DEMONSTRATE COMPLIANCE WITH THE CREDIT REQUIREMENTS

**AED Staff Use:** \_\_\_\_\_ **Participants X \$50/Participant =** \_\_\_\_\_ **Annual Credit for this Facility**

Charges or additional credit applied to this facility: \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_



## Stormwater User Fee Tier 4 City-Sponsored Education Classes Credit Documentation (Form B)

Owners Representative
Facility Name: _____ Location(s): _____
Responsible Individual: _____ Last First M.I.
Address: _____ Street Address Apartment/Unit #
City State Zip Code
Phone: ( ) _____ Email Address: _____
PLANNED Class Participation
Number of class participants: _____
<b>AED Staff Use:</b> _____ <b>Participants X \$10/Participant =</b> _____ <b>Annual Credit for this Facility</b>
Preliminary Approval
Submitted by: _____ Date: _____
Printed Name: _____
Approved by: _____ Date: _____
ACTUAL Class Participation (This Section for AED Use Only)
Actual numbers of class participants: _____
Date(s) of class: _____
Class Instructor(s): _____
Length of class/classes (hours): _____
Total contact hours (participants x classroom hours): _____
ATTACH DOCUMENTATION SHOWING ATTENDANCE ROSTER(S), HANDOUT MATERIAL(S), ETC. TO DEMONSTRATE COMPLIANCE WITH THE CREDIT REQUIREMENTS
<b>AED Staff Use:</b> _____ <b>Participants X \$10/Participant =</b> _____ <b>Annual Credit for this Facility</b>
Charges or additional credit applied to this facility: _____
Approved by: _____ Date: _____



# Appendix C

## Maintenance Inspection Report Forms





**Maintenance Action Needed**

If any of the above Inspection Items are checked "Yes" for "Maintenance Needed," list Maintenance actions and their completion date below:

Maintenance Action Needed	Due Date

The next routine inspection is scheduled for approximately: \_\_\_\_\_  
date

\_\_\_\_\_  
Inspector Name (print)

\_\_\_\_\_  
Inspector Signature

**Attach Photo  
Documentation**



## Maintenance Inspection Report (Form C) Proprietary BMPs

### Applicant Information

Site Name: \_\_\_\_\_ Owner Change Since last inspection?  Yes  No

Owner Name: \_\_\_\_\_  

Last
First
M.I.

Address: \_\_\_\_\_  

Street Address
Apartment/Unit #

\_\_\_\_\_ 
City
State
Zip Code

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_ Email Address: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
 (if different than property address)

Parcel ID Number: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Weather Conditions: \_\_\_\_\_

### Inspection Item and Status

*Inspection Frequency Key: A=annual; M=monthly; S=after major storms*

Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
<b>Debris Removal</b>				
Adjacent area free of debris?	M			
Inlets and Outlets free of debris?	M			
Facility (internally) free of debris?	M			
<b>Vegetation</b>				
Surrounding area fully stabilized? (no evidence of eroding material into proprietary BMP)				
Grass mowed?	M			
<b>Water retention where required</b>				
Water holding chambers at normal pool?	M			
Evidence of erosion?				
<b>Sediment Deposition</b>				
Filtration Chamber free of sediments?	A			
Sedimentation chamber not more than 50% full?	A			



**Maintenance Action Needed**

If any of the above Inspection Items are checked "Yes" for "Maintenance Needed," list Maintenance actions and their completion date below:

Maintenance Action Needed	Due Date

The next routine inspection is scheduled for approximately: \_\_\_\_\_  
date

\_\_\_\_\_  
Inspector Name (print)

\_\_\_\_\_  
Inspector Signature



## Maintenance Inspection Report (Form C) Bioretention

Applicant Information				
Site Name: _____		Owner Change Since last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Owner Name: _____		_____		
	Last	First	M.I.	
Address: _____				
Street Address			Apartment/Unit #	
City		State	Zip Code	
Phone: (____) _____		Email Address: _____		
Mailing Address: _____				
(if different than property address)				
Parcel ID Number: _____				
Date: _____		Time: _____		Weather Conditions: _____
Inspection Item and Status				
<i>Inspection Frequency Key: A=annual; M=monthly; S=after major storms</i>				
Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
<b>Pre-Treatment Area</b>				
Area free of debris?	M			
Standing water longer than 24 hours after a storm event?	S			
Bare soil or erosion?	M/S			
Excessive landscape waste/yard clippings?	M			
<b>Inlet/Outlet Structures</b>				
Inlets provide stable conveyance into the facility?	A			
Evidence of erosion at or around inlet?	A			
If connected to extended detention, is outlet to pond functioning properly?	A			
Other	A			
<b>Basin</b>				
Adjacent area fully stabilized (no evidence of eroding material into Bioretention area)?	A			



**Maintenance Action Needed**

If any of the above Inspection Items are checked "Yes" for "Maintenance Needed," list Maintenance actions and their completion date below:

Maintenance Action Needed	Due Date

The next routine inspection is scheduled for approximately: \_\_\_\_\_  
date

\_\_\_\_\_  
Inspector Name (print)

\_\_\_\_\_  
Inspector Signature

**Attach Photo  
Documentation**





**Maintenance Action Needed**

If any of the above Inspection Items are checked "Yes" for "Maintenance Needed," list Maintenance actions and their completion date below:

Maintenance Action Needed	Due Date

The next routine inspection is scheduled for approximately: \_\_\_\_\_  
date

\_\_\_\_\_  
Inspector Name (print)

\_\_\_\_\_  
Inspector Signature





## Maintenance Inspection Report (Form C) Infiltration Trench

### Applicant Information

Site Name: \_\_\_\_\_ Owner Change Since last inspection?  Yes  No

Owner Name: \_\_\_\_\_  
Last First M.I.

Address: \_\_\_\_\_  
Street Address Apartment/Unit #

\_\_\_\_\_ City State Zip Code

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_ Email Address: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
 (if different than property address)

Parcel ID Number: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Weather Conditions: \_\_\_\_\_

### Inspection Item and Status

*Inspection Frequency Key: A=annual; M=monthly; S=after major storms*

Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
<b>Debris Removal</b>				
Trench surface clear of debris?	M			
Contributing area free of debris?	M			
Inlets/Inflow pipes free of debris?	M			
Overflow spillway clear of debris?	M			
<b>Vegetation</b>				
Mowing done when necessary?	M			
Unauthorized or inappropriate plantings?	A			
Fertilized per specification?	M			
Evidence of erosion?	M			
Contributing drainage area stabilized?	M			
Trees growing in the trench?	A			
<b>Dewatering</b>				
Trench dewaterers between storms?	M			
<b>Sediment traps, forebays, or pretreatment swales</b>				
Adequately trapping sediment?	A			

Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Structural damage?	A			
Greater than 50% of original storage volume remaining?	A			
<b>Sediment removal of trench</b>				
Any evidence of sedimentation in trench?	A			
Are pea gravel/topsoil and top surface filter fabric functioning properly?	M			
Does sediment accumulation currently require removal?	A			
<b>Inlets</b>				
Good condition (no need for repair)?	A			
Evidence of erosion?	A			
<b>Outlets/overflow spillway</b>				
Good condition (no need for repair)?	A			
Evidence of erosion?	A			
<b>Aggregate repairs</b>				
Surface of aggregate clean?	A			
Top layer of stone in need of replacement?	A			
Trench in need of rehabilitation?	A			
<b>Observation wells</b>				
Evidence of clogging/failure to percolate? (Should percolate within 3 days.)	M			
Has drawdown rate been measured at observation well and is well capped?	A			
<b>Hazards</b>				
Have there been complaints from residents?	M			
Public hazards noted?	M			
<b>Inspector Comments:</b>				
<b>Overall condition of Facility:</b> <input type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable				

**Maintenance Action Needed**

If any of the above Inspection Items are checked "Yes" for "Maintenance Needed," list Maintenance actions and their completion date below:

Maintenance Action Needed	Due Date

The next routine inspection is scheduled for approximately: \_\_\_\_\_  
date

\_\_\_\_\_  
Inspector Name (print)

\_\_\_\_\_  
Inspector Signature





## Maintenance Inspection Report (Form C) Water Quality Swale

### Applicant Information

Site Name: \_\_\_\_\_ Owner Change Since last inspection?  Yes  No

Owner Name: \_\_\_\_\_  

Last
First
M.I.

Address: \_\_\_\_\_  

Street Address
Apartment/Unit #
  

City
State
Zip Code

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_ Email Address: \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
 (if different than property address)

Parcel ID Number: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_ Weather Conditions: \_\_\_\_\_

### Inspection Item and Status

*Inspection Frequency Key: A=annual; M=monthly; S=after major storms*

Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
<b>Debris Removal</b>				
Facility and adjacent area free of debris?	M			
Inlets and outlets free of debris?	M			
Any dumping of yard wastes into facility?	M			
Litter (branches) removed?	M			
<b>Vegetation</b>				
Surrounding area fully stabilized? (no evidence of eroding material into swale)	M			
Soil media is adequately covering (18 inches) choker stone layer below?	M			
Grass mowed?	M			
Plant height not less than design water depth?	M			
Fertilized per specifications?	M			

Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Plant composition according to approved plan?	M			
Unauthorized or inappropriate plantings?	A			
Plants healthy? (no diseased or dying vegetation)	M			
Evidence of plants stressed from inadequate watering?	M			
<b>Filtration Capacity</b>				
Clogging from oil or grease?	M			
Facility dewateres between storms?	M			
Underdrain functioning properly?	M			
<b>Check Dams and Energy Dissipaters/Sumps</b>				
Any evidence of sedimentation buildup?	A,S			
Are sumps greater than 50% full of sediment?	A,S			
Any evidence of erosion and downstream toe of drop structures?	A,S			
<b>Sediment Deposition</b>				
Swale clean of sediments?	A			
Sediment not > 20% of swale design depth?	A			
<b>Outlet/Overflow Spillway</b>				
In good condition?	A			
Any evidence of erosion?	A			
Any evidence of blockages?	A			
Has facility been filled or blocked inappropriately?	A			
<b>Hazards</b>				
Have there been complaints from residents?	M			
Public hazards noted?	M			
Maintenance accesses free of hazards and fully operational?	M			

**Inspector Comments:**

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**Overall condition of Facility:**  Acceptable  Unacceptable

**Maintenance Action Needed**

If any of the above Inspection Items are checked "Yes" for "Maintenance Needed," list Maintenance actions and their completion date below:

Maintenance Action Needed	Due Date

The next routine inspection is scheduled for approximately: \_\_\_\_\_  
date

\_\_\_\_\_  
Inspector Name (print)

\_\_\_\_\_  
Inspector Signature





# Appendix D

## Impervious Area Review Application Form



[Click here to access the online form.](#)

## Stormwater Impervious Area Review Application

Date: \_\_\_\_\_  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
Parcel Number: \_\_\_\_\_  
Phone/Contact#: \_\_\_\_\_  
Water-Sewer Account # if Applicable: \_\_\_\_\_  
Residential or Commercial: \_\_\_\_\_  
If Commercial - Business Name: \_\_\_\_\_  
Recorded Impervious Area (sf): \_\_\_\_\_  
Reason for Review: \_\_\_\_\_

<p><b>Attach all Applicable Documents</b> Please list all attached documents below:</p>	<p>Comments:</p>
---	------------------

### For Internal Use Only

Review Number:	
Review Date:	
Reviewed by:	
Result of Review:	
Comments:	

Rev. 1  
12/15