



NORTHEAST OHIO REGIONAL SEWER DISTRICT **Stormwater Fee Credit Policy Manual**



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I. Introduction

On January 7, 2010, the Northeast Ohio Regional Sewer District's (District) Board of Trustees approved Resolution No. 1-10, Authorization to Implement a District Regional Stormwater Management Program through the adoption of Title V of the Code of Regulations. Title V provides for a stormwater fee and credits for account holders who effectively manage stormwater to reduce impacts on the regional stormwater system.

The District's Regional Stormwater Management Program addresses flooding, erosion and water quality problems throughout the District's service area. Stormwater-related problems must be addressed regionally because what happens in one community affects another and these problems cannot be effectively solved without taking a watershed-based approach.

Managing stormwater flows is critical for several reasons:

- Excessive stormwater overwhelms storm drainage systems including streams, culverts and storm drain pipes and causes local and regional flooding.
- Stormwater erodes the land, damaging roads, bridges and other infrastructure, increasing the amount of pollutants added to local streams and Lake Erie.

The District's stormwater management program establishes the regional stormwater system. The regional stormwater system includes the system of watercourses, stormwater conveyance structures, and stormwater control measures in the District's service area that receive drainage from three hundred (300) acres of land or more. Under the District's stormwater management program the regional stormwater system is a public system, similar to water or sanitary systems, which provides a public benefit and is maintained by the region. When a forested or grassy area is paved and impervious surface is added, a larger amount of surface water enters the regional stormwater system. Impervious surface is therefore charged a fee based on the amount of hard surface on a property.

A. What is a Stormwater Fee?

The stormwater fee charged to an account holder is based on the impervious surface on the account holder's property. The District measures the amount of impervious surface based on the number of Equivalent Residential Units (ERUs) per property. One (1) ERU is equal to 3,000 square feet of impervious surface and has an associated fee per month that is established by the District. Under Title V, stormwater fees are categorized as either residential or non-residential.

Residential property is placed into one of three tiers based on the square footage of the property's impervious surface:

Tier 1: Small Residential (less than 2,000 sq. ft. impervious)

Tier 2: Medium Residential (2,000 to 3,999 sq. ft. impervious)

Tier 3: Large Residential (4,000 sq. ft. or more impervious)

The non-residential fee is based on the calculated number of ERUs for the existing impervious surface multiplied by the base ERU fee.

The stormwater fee for properties within the District service area can be found at <http://www.neorsd.org/stormwaterfeemap.php>

B. What is a Stormwater Fee Credit?

Account holders can receive a reduction in their stormwater fee through stormwater fee credits. The stormwater fee credit is a conditional reduction in the stormwater fee if an account holder takes measures to reduce the stormwater rate or volume and/or protect the water quality of runoff flowing from his or her property to the regional stormwater system. The credit can be obtained through:

- Installation and continuing use, operation, and maintenance of an approved stormwater control measure (SCM) that the District does not own, maintain, or operate; or
- Activities that reduce or alleviate the District's cost of providing a regional stormwater management program.

A SCM is an activity, measure, structural device, or facility that prevents or reduces the transport of pollutants, controls stormwater volume and/or rate, and/or limits impacts to the regional stormwater system. These measures can include on-site practices such as rain gardens, bioretention cells, stormwater basins, and other practices that manage stormwater at its source. Only those impervious surfaces associated with a SCM are eligible for credit based on that SCM.

C. What Credits Are Available and Who Qualifies?

Table 1 outlines the type of credits available to each type of account holder. The ability of an account holder to receive any of the credits is dependent on the account holder owning and maintaining a District-approved SCM and providing the documentation required. Credits are available to all qualifying SCMs, whether constructed before or after initiation of the District's Regional Stormwater Management Program.

1. *Individual Residential Property Credit: Flat Reduction of 25%*

An Individual Residential Property Credit of 25% is available to applicants who own a property that contains a single-family home or a multifamily housing complex of four (4) units or less. The applicant must show that a District-approved SCM has been effectively implemented on the property. District-approved SCMs include:

- Rain Gardens
- On-Site Stormwater Storage
- Impervious Surface Reduction
- Pervious Pavement
- Vegetated Filter Strips

See Section II for specific qualifications and details for this credit.

Table 1. Credits available for Residential and Non-Residential Stormwater Fees

Credit Category	Individual Residential Property	Homeowners or Condominium Association	Commercial, Industrial, Mix-Use Development, Other Non-Residential	Public/Private School, Primary to 12
Individual Residential Property Credit	25%*			
Stormwater Quality Credit	up to 25%*	up to 25%**	up to 25%	up to 25%
Stormwater Quantity Credit	up to 75%	up to 75%**	up to 75%	up to 75%
Education Credit				25%
Total Credit Available	Up to 100%	Up to 100%	Up to 100%	Up to 100%

* An individual residential property can receive either the Individual Residential Property Credit or Stormwater Quality Credit, but not both.

** A Homeowners or Condominium Association can apply on behalf of its members.

2. Stormwater Quantity Credit: Reduction up to 75%

A Stormwater Quantity Credit is available to applicants who have District-approved SCMs that reduce the rate and/or volume of stormwater runoff flowing from impervious surfaces on the applicant’s property. Only the impervious surfaces of a particular site that drain through the SCM are eligible for a credit. This credit is separated into two (2) categories:

- Peak Flow Credit: Up to 25% credit
- Runoff Volume Credit: up to 50% credit

See Section III for specific qualifications and details for this credit.

3. Stormwater Quality Credit: Reduction up to 25%

A Stormwater Quality Credit of up to 25% is available to applicants who have District-approved SCMs that provide water quality treatment to stormwater runoff flowing through the SCM. The credit is only available for the impervious surfaces that drain to each SCM. The District has established a list of eligible SCMs that can be used to treat stormwater from associated impervious surfaces and receive a Stormwater Quality Credit. There are also a Quality Credits available specifically for

those industrial properties that have a stormwater related NPDES Permit and agricultural properties that have natural resource management plans.

See Sections IV, V, and VI for specific qualifications and details for this credit.

4. Education Credit: Flat Reduction of 25%

The Education Credit is available to all public and private primary, elementary, and secondary school account holders that are recognized in the State of Ohio and that provide District-approved stormwater pollution prevention curricula to at least 25% of the grade levels across the school or school district. The Education Credit is 25% of the stormwater fee for all the properties at which education curricula are delivered. An Education Credit can be combined with the Stormwater Quality and/or Quantity Credit for a maximum of 100% credit for a particular school property.

See Section VIII for specific qualifications and details for this credit.

II. Individual Residential Property Credit

Individual residential account holders who implement stormwater control measures (SCMs) may be eligible for a reduction of 25% of the stormwater fee for use of one or more of the following permitted SCMs. See Section II.C for restrictions

A. SCMs

1. *Rain Garden*

Rain gardens are landscaped areas that are designed to capture and filter stormwater runoff from a roof or other impervious surface. The plants and soil of the rain garden provide an easy, natural way of reducing the amount of stormwater runoff from individual residential properties. To obtain the Individual Residential Property Credit, the rain garden must meet the following criteria:

- At least 25% of a property's roof area or an equivalent impervious surface area on the property must drain to the rain garden.
- The rain garden must be sized and constructed in accordance with the worksheet in the *Rain Garden Manual for Homeowners*.
- Stormwater overflows from the rain garden must be directed to appropriate outlets to the storm drainage system and away from neighboring properties, sidewalks, steep slopes, or retaining walls.

2. *On-Site Stormwater Storage*

On-site stormwater storage may include rain barrels, cisterns, bladders, or other stormwater storage devices approved by the District. Credit may be approved if the following criteria are met:

- 50% of the property's roof area is properly connected to rain barrels or other approved storage devices that provide at least 40 gallons of storage per downspout, or storage devices must be sized to hold the runoff from 50% of the property's roof area during a 1-inch rainfall event. (*See On-Site Stormwater Storage Fact Sheet in Appendix B for calculation details.*)
- On-site stormwater storage must be covered with a lid or screen that prevents mosquitoes from entering the storage container.

- On-site stormwater storage must be completely drained in no less than 24 hours, and no longer than 4 days, after each rainfall event. Longer drainage periods may be acceptable if the storage device is larger than the minimum required storage.
- Stormwater overflows from on-site stormwater storage or the draining of on-site storage devices must be directed to appropriate outlets to the storm drainage system or to vegetated areas, and away from neighboring properties, sidewalks, steep slopes, or retaining walls.

3. *Impervious Surface Reduction*

An Individual Residential Property Credit can be obtained if an applicant removes 500 square feet or more of existing impervious surface and replaces it with a vegetated, pervious surface. Account holders may also request a recalculation of their tier if they remove impervious surface (see Section F below).

4. *Pervious Pavement*

Pervious pavement may include paving blocks, grid pavers, pervious asphalt, or pervious concrete. Pervious pavements can be used for driveways and patios with a open stone reservoir underneath. The reservoir temporarily stores surface runoff before infiltrating it into the soil below the stone reservoir. Runoff can be infiltrated directly into the soil reducing runoff. Gravel driveways and traditional brick pavers or concrete pavers without spacing lugs are not considered a type of pervious pavement and are not available for any stormwater fee credit (see Pervious Pavement Fact Sheet in Appendix B for more information).

Credit may be approved if the following criteria are met:

- The pervious pavement is installed for the purpose of runoff infiltration or detention.
- Area of pervious pavement is at least 1,000 square feet.
- The open stone reservoir underneath the pervious pavement is at least 10 inches deep at all points.
- The installation meets the local building and zoning standards for driveway installations.

Account holders may also request a recalculation of their tier if they install pervious pavement (*see Section F below*).

5. *Vegetated Filter Strips*

Vegetated filter strips are uniform strips of dense turf, meadow grasses, trees or other vegetation with a minimum slope to slow runoff and improve water quality. In certain circumstances a large lawn may meet the criteria for a vegetated filter strip. Credit may be approved if the following criteria are met:

- 50% of the property's roof area drains to the vegetated filter strip.
- Filter strips are fully vegetated and vegetation is healthy.
- The vegetated filter strip complies with the standards outlined in the District's fact sheet on Residential Vegetated Filter Strips (*see Appendix B*).

B. Maintenance Requirements

1. *SCMs*

SCMs installed on a property must be maintained to ensure continued function of the SCM. Maintenance recommendations for the SCMs can be found in the *Rain Garden Manual for Homeowners*, and on the District Fact Sheets for On-Site Stormwater Storage, Pervious Pavement, and Vegetated Filter Strips found in Appendix B.

2. *Responsibility*

The applicant, or one of the co-applicants, has legal responsibility to maintain the SCM. The recertification process will require documentation that the SCM is continuing to function as originally intended.

C. Restrictions

1. *Eligibility*

Individual Residential Property Credits are restricted to applicants that own a property that contains a single family home or a multi-family housing complex of four (4) units or less.

2. *Local Community Requirements*

A stormwater fee credit is only applicable for SCMs that are allowed by the member community in which the property is located. SCMs must meet all applicable building, subdivision and planning, and zoning code requirements of member communities including downspout disconnection, landscaping and property setbacks requirements. Applicants must contact their local community to determine applicability. NEORSD cannot approve a credit for a practice that does not comply with local community regulations.

3. *Transfer of Credit*

- The Individual Residential Property Credit applies only to the applicant.
- Credits do not transfer if ownership changes. A new application must be submitted for new account holders to continue receiving the Individual Residential Property Credit.

4. *Individual Residential Property Credit Limit*

Individual residential SCMs cannot be combined on a property for a credit larger than 25% (*see Sections III and IV for other credit opportunities*).

5. *Quality Credit Restriction*

Applicants will not receive the Individual Residential Property Credit for SCMs that have been given the Stormwater Quality Credit.

D. Specific Application and Documentation Requirements

To receive the Individual Residential Property Credit, the applicant must submit the documentation listed below. A complete application must be submitted for the District to begin the review process.

1. *General Application (Appendix A).*
2. *Individual Residential Property Credit Application (Appendix B).*
3. *Applicants must provide appropriate documentation that the SCM has been installed according to standards and requirements detailed above, and must provide a photograph of each SCM.*

E. Recertification

1. *The Individual Residential Property Credit is valid for three (3) years. The applicant must submit the District's recertification application to continue to receive credits towards their stormwater fee (see Appendix G2).*
2. *Failure to submit recertification information by the required deadline will result in elimination of the credit. The District will notify account holders in advance of credit expiration dates and recertification deadlines.*

F. Tier Adjustment

1. *If a property owner implements the requirements for the Impervious Surface Reduction or Pervious Pavement fee credits and successfully applies for a credit, a recalculation of their total impervious area will occur. If the total impervious area reduction places the property in a lower tier, the lower tier rate will apply instead of the fee credit. If a lower tier is achieved through reduction of impervious area the property owner may still achieve a credit at that lower tier by implementing a stormwater control measure as outlined under the residential fee credit program.*

III. Stormwater Quantity Credit

The Stormwater Quantity Credit is available for applicants who implement SCMs designed to control stormwater peak flows and volumes. This will reduce the burden on stormwater infrastructure, including streams, storm sewers, combined sewers and other receiving waters, and can reduce flooding frequency and magnitude. This credit is separated into two categories: Peak Flow Credit and Runoff Volume Credit. To ensure maximum stormwater quality and quantity credits for SCMs on new development and redevelopment projects, the District strongly recommends that interested applicants contact the District early in the design phase of a project to discuss the planned SCMs and intended stormwater management plan.

A. Peak Flow Credit SCMs and Design Standards

The District will provide up to a 25% credit for impervious surfaces that drain through a SCM that controls the peak discharge rates using the established design standards listed in Table 2.

Table 2. Stormwater Quantity – Peak Flow Credits Available

Credit Available	Design Standard
25%	Critical Storm Method
15%	Member Community or NEORSD (Title IV: Combined Sewer Code) Detention Standard (other than Critical Storm)
10%	Existing On-Site Detention SCM, no documentation of meeting Critical Storm Method or member community detention standards

1. Critical Storm Method

A Stormwater Quantity Credit of 25% may be provided to an applicant for a SCM that controls the peak discharge rate using the Critical Storm Method or any other method that exceeds the Critical Storm Method requirements.

The Critical Storm Method requires:

- The peak rate of runoff from a Critical Storm and all more frequent storms occurring on the development area will not exceed the peak rate of runoff from a 1-year frequency storm over the same area under predevelopment conditions.
- Storms of less frequent occurrence than the Critical Storm, up to the 100-year storm, have peak runoff rates no greater than peak runoff rates from equivalent size storms under predevelopment conditions.

See the following ODNR Reference for more details on the Critical Storm Method.

<http://water.ohiodnr.gov/water-use-planning/stormwater-management>

To receive the Peak Flow Credit the applicant must submit either:

- A stormwater management plan with calculations for existing stormwater runoff flows and timing into and through all SCMs using the Critical Storm Method, or
- Documentation from the member community that the SCM has been designed according to the Critical Storm Method. This documentation shall provide evidence that the Critical Storm Methodology was required by the community at the time of construction. See Appendix D Member Community Review form.

Submittals to verify the Critical Storm Method must be completed for both pre- and post- development land use conditions and include the underlying assumptions and hydrologic and hydraulic methods and parameters used for these calculations. The applicant must also include the Critical Storm determination and demonstrate that the runoff from upstream areas have been considered in the calculations.

The documentation from a member community may include any of the following:

- Member community approved engineering plans for the SCM,
- Formal approval letter from the member community engineer, or
- A completed Member Community Review Form (*Appendix D*).

It is the responsibility of the applicant to provide this documentation to the District. The applicant can request that the member community complete the Member Community Review Form, but the member community may decline completing the form due to the lack of information that confirms the SCM was designed and built to the standards described in this section.

For redevelopment sites, the pre-developed condition for existing impervious surfaces shall be defined as grassland in good hydrologic condition for the pre-developed peak discharge rates, critical storm and volume storage calculations. In no cases will the District provide a credit for peak flow reduction without the existence or construction of an appropriate stormwater control measure.

2. *Member Community Detention Standard*

A credit of 15% may be provided to an applicant for impervious surfaces that have SCMs that control the peak discharge rate using a method required by a member community's regulation if less stringent than the Critical Storm Method, or the NEORSD Title IV requirements if within the combined sewer system. To receive credit in the combined sewer area, the applicant must demonstrate that the post-construction peak discharge rate for the 6-month 24-hour storm up to the 5-year 24-hour storm does not exceed the 6-month 24-hour pre-development peak discharge rate, consistent with District policies under Title IV. To receive the Peak Flow Credit the applicant must submit either:

- A stormwater management plan with the calculations required for the member community detention standard, or
- Documentation from the member community that the SCM has been designed according to the member community detention standard in place at the time of construction.

- In no case will the District provide a credit for peak flow reduction without the existence or construction of an appropriate stormwater control measure.
- In the separate storm sewer areas, redevelopment projects must demonstrate a 25% reduction in peak runoff for all storms up to a 5-year 24-hour event, all other storms may not exceed the pre-existing condition.

The documentation from a member community may include any of the following:

- Member community approved engineering plans for the SCM,
- Formal approval letter from the member community engineer, or
- A completed Member Community Review Form (*Appendix D*).

It is the responsibility of the applicant to provide this documentation to the District. The applicant can request that the member community complete the Member Community Review Form, but the member community may decline completing the form due to the lack of information that confirms the SCM was designed and built to the standards described in this section.

3. *Existing On-Site Detention SCMs*

A Stormwater Quantity Credit of 10% may be provided to an applicant for associated impervious surfaces that have a SCM that controls the peak discharge rate using a method that does not meet either the Critical Storm Method or current member community regulations. This may also be applicable for a SCM that does not have detention calculations available or was built prior to current regulatory standards. To receive the Stormwater Quantity Credit for detaining the peak flow the applicant must submit a site map and plans including details of the outlet control structure. The principle spillway must provide for detention of storm events.

B. Runoff Volume Credit SCMs and Design Standards

A Stormwater Quantity Credit of up to 50% may be provided to an applicant for impervious surfaces that drain through a SCM (or a series of SCMs) that maintain or reduce runoff volume. The intent of the Runoff Volume Credit is to limit the negative impacts of changing site hydrology by reducing impervious surfaces, increasing stormwater infiltration, increasing evapo-transpiration and harvesting or recycling of rainwater. SCMs may include, but are not limited to infiltration practices, rainwater harvesting, and bioretention.

To receive this portion of the Stormwater Quantity Credit the applicant must show that SCMs and the stormwater management plan meet the volume reduction requirements. The method used to estimate stormwater runoff volumes must be widely accepted and recognized by the District. Riparian and wetland setbacks must also be included based upon the criteria in Appendix F.

Table 3 identifies the credit percentage, type, site and property characteristics, and criteria required to obtain the runoff volume credit. A runoff volume credit of 25% is offered for applicants managing the stormwater runoff volume for the 2-year 24-hour storm. Depending on the existing site imperviousness listed in Table 3, a SCM must reduce the volume by 25% or must maintain pre-developed volume conditions. An exceptional runoff volume credit of 50% is available for applicants employing SCMs that manage the runoff volume for the 100-year 24-hour storm. Applicants achieving the 50% exceptional runoff volume credit will not be eligible for the 25% runoff volume credit.

Table 3. Criteria for Runoff Volume Credit

Credit Available	Credit Type	Site/Property Characteristic	Criteria
25%	Runoff Volume	Sites with Existing Imperviousness Greater than 50%	Implement a stormwater management plan that results in a 25% decrease in the volume of stormwater runoff from the 2-year 24-hour design storm.
		Sites with Existing Imperviousness of 50% or less	Implement a stormwater management plan that prevents the post-development volume from exceeding the predevelopment volume for the 2-year 24-hour design storms.
50%	Exceptional Runoff Volume	All sites	Implement a stormwater management plan that prevents the developed runoff volume from exceeding the pre-developed runoff volume for up to a 100-year 24-hour design storm.

1a. Runoff Volume Credit - Existing Imperviousness Greater than 50%

A credit of 25% may be provided to applicants with existing impervious surfaces greater than 50% of the property who:

- Implement a stormwater management plan and SCMs that result in a 25% decrease in the volume of stormwater runoff from the 2-year 24-hour design storm; and
- Incorporate riparian and wetland setbacks into the site development that either follow the member community standards or are a minimum of 25 feet from all watercourses and Category 2 and 3 wetlands, whichever is more restrictive. If the applicant's property does not contain wetlands or watercourses, this requirement does not apply.

The applicant must show that the post-development quantity (volume) from a 2-year 24-hour storm event is at least 25% less than the predevelopment existing site values. Hydrologic and hydraulic calculations are required to estimate the volumes, using various methods and computer-based software including the U.S.

Natural Resources Conservation Service (NRCS) methods for predicting runoff volumes. Methods should include the development of pre- and post- developed hydrographs to determine the runoff volume generated. Care should be taken not to overestimate initial abstraction values when using the NRCS methodology. The implemented SCMs must have the ability to dewater 25% of the 2-year 24-hour event within 3 days (72 hours) to permit capture of consecutive storm events.

1b. Runoff Volume Credit - Existing Imperviousness Less than 50%

A Stormwater Quantity Credit of 25% may be provided to applicants with existing impervious surfaces of or less than 50% for the property who:

- Implement a stormwater management plan that prevents the post-development discharge volume from exceeding the predevelopment discharge volume for the 2-year 24-hour design storm; and
- Incorporate riparian and wetland setbacks into the site development using member community standards or as detailed in Appendix F, whichever is more restrictive. If the applicant's property does not contain wetlands or watercourses, this requirement does not apply.

The applicant must show that the post-development quantity (volume) from a 2-year 24-hour storm event is equal to or less than the pre-development values. Hydrologic and hydraulic calculations are required to estimate the volumes, using various methods and computer-based software including the U.S. Natural Resources Conservation Service (NRCS) methods for predicting runoff volumes. Methods should include the development of pre- and post- developed hydrographs to determine the runoff volume generated. Care should be taken not to overestimate initial abstraction values when using the NRCS methodology.

2. Exceptional Runoff Volume Credit

A Stormwater Quantity Credit of 50% may be provided to applicants who:

- Implement a stormwater management plan that prevents the developed discharge volume from exceeding the undeveloped discharge volume for up to a 100-year 24-hour design storm; and

- Incorporate riparian and wetland setbacks into the site development using member community standards or as detailed in Appendix F, whichever is more restrictive. If the applicant's property does not contain wetlands or watercourses, this requirement does not apply.

The applicant must show that the post-development quantity (volume) from a 100-year 24-hour storm event is equal to or less than the pre-development values. For all sites, the pre-developed condition for existing impervious surfaces shall be defined as grassland in good hydrologic condition intending to mimic hydrological conditions prior to any development. In effect, the applicant must be able to demonstrate that stormwater runoff from their existing or proposed impervious surfaces does not impact the Local Stormwater System or the Regional Stormwater System, up to a 100-year, 24-hour storm, beyond the impact that would occur from an undeveloped site.

Hydrologic and hydraulic calculations are required to estimate the volumes, using various methods and computer-based software including the U.S. Natural Resources Conservation Service (NRCS) methods for predicting runoff volumes. Methods should include the development of pre- and post- developed hydrographs to determine the runoff volume generated.

C. Maintenance Requirements

1. SCMs

SCMs receiving the Stormwater Quantity Credit must be maintained by the applicant, or one of the co-applicants, to ensure continued function of the SCM.

2. *Responsibility*

The applicant, or one of the co-applicants, must have legal responsibility to maintain the SCM. The recertification process will require documentation that the SCM is continuing to function as originally intended.

3. *Maintenance Plan*

An inspection and maintenance plan is needed for all SCMs receiving the Stormwater Quantity Credit. Implementation of the maintenance plan will be required as part of the recertification of credits.

D. Restrictions

1. *Eligible SCMs*

- Only those impervious surfaces of a particular site that drain through the District-approved SCM are eligible for credit.

2. *Transfer of Credit*

- Stormwater fee credits do not transfer if property ownership changes. A recertification and new general application must be submitted for properties that have had a transfer of ownership.
- In the case where multiple properties are covered under one credit application, for example a Homeowners or Condominium Association, or multiple commercial properties that drain to a single SCM, a recertification and new general application must be submitted only if the property that has maintenance responsibility for the SCM changes ownership.

3. *Local Community Requirements*

- A stormwater fee credit is only available for SCMs that are installed and maintained in compliance with all applicable local regulations of the member community in which the property is located and are approved by the District.

4. *Homeowners or Condominium Association*

- A Homeowners or Condominium Association can apply on behalf of its members for the Stormwater Quantity Credit.

- The Association must own and have legally-binding responsibility to maintain a District-approved SCM.
- The Association must document its legally binding agreement with the individual property owners who will be receiving the stormwater fee credit to provide funding necessary to maintain the SCM.
- If a credit application is approved, the credit will be applied to each account holder listed as a member of the Association who drains to the SCM.

Example

The Willow Creek Homeowners Association (HOA) owns and maintains a stormwater detention pond on its common property. All the storm sewers in the Willow Creek development drain to that stormwater detention pond. Every household in the development is a paying member of the HOA and also a District account holder. The HOA is responsible for the inspection and maintenance required to keep the stormwater detention pond functioning. This responsibility is detailed in the HOA by-laws. The HOA, on behalf of its members, can apply for a Stormwater Quantity Credit using the Stormwater Quantity Credit Application. The HOA must submit the required documentation detailed above showing a legal and financial link between the stormwater detention pond, the HOA, and the District's account holders in the Willow Creek development.

E. Specific Application and Documentation Requirements

A complete application must be submitted for the District to begin the review process. Separate applications must be submitted for noncontiguous properties. For example, medical institutions must submit separate applications for each medical campus. To receive the Stormwater Quantity Credit the applicant must submit the documentation listed below.

1. *General Application (Appendix A)*
2. *Stormwater Quality and Quantity Credit Application (Appendix C)*
3. *Site Map and Plan that include the following:*

- Property boundaries.
- The location and size of each SCM and detailed drawings if available.
- Associated impervious surfaces draining to the SCM.
- Associated calculations demonstrating SCM function.

4. *Inspection and Maintenance Plan or Agreement:*

Includes the SCMs for which the applicant is seeking a stormwater fee credit. At a minimum the inspection and maintenance plan or agreement should include the following items:

- Identification of the landowner(s)/organization responsible for long-term maintenance, including repairs, of the SCM.
- An inspection and maintenance plan for each SCM which includes a description of routine and non-routine maintenance tasks to ensure continued performance of the SCM.
- The location and documentation of all access and maintenance easements will be required for applications in which a SCM is serving multiple properties as in the case of an Association.
- The method of funding long-term maintenance and inspections of all SCMs.

5. *Legal Agreement:*

For applications that include multiple account holders only, a copy of the legally binding agreement between property owners/account holders that at a minimum outlines the ownership, maintenance responsibilities, and funding source

necessary to maintain the SCM. This information must be clear and readily apparent to the District. Application submittals that do not specify these provisions of the legally binding agreement will be deemed incomplete by the District.

6. *Additional Documentation for Peak Flow Credit:*

To receive the Stormwater Quantity Credit for peak flow (except for Existing On-Site Detention SCM), applicants must submit the following additional documentation:

- Stormwater Management Plan that meets the requirements of a member community's stormwater management regulation and includes each SCM, with the design calculations. These documents must be completed by a licensed Professional Engineer; or
- Documentation from the member community that the SCM has been designed according to the standards described in Sections III.A.1 or III.A.2.

This documentation may include but is not limited to the following:

- Member community approved engineering plans,
- Formal approval letter from the member community engineer, or
- A completed Member Community Review Form (*Appendix D*).

It is the responsibility of the applicant to provide this documentation to the District. The applicant can request that the member community complete the Member Community Review Form, but the member community may decline completing the form due to the lack of information that confirms the SCM was designed and built to the standards described under Sections III.A.1 or III.A.2.

7. *Additional Documentation for Runoff Volume Credit:*

To receive the Stormwater Quantity Credit for runoff volume reduction, applicants must submit the following additional documentation.

- Stormwater Management Plan that is the written document and plans setting forth the stormwater management for a particular site, parcel or area that meets the requirements of a member community's stormwater management regulation. These documents must be completed by a licensed

Professional Engineer. The plan must include the details and calculations as described under Section III.B Runoff Volume Credit SCMs and Design Standards.

F. Stormwater Fee Adjustment for Expense of Preparing Applications

The District shall provide a Stormwater Fee Adjustment for the applicant's expense of a licensed engineer to complete approved applications for Stormwater Fee Credits. This Stormwater Fee Adjustment shall only be available to non-residential account holders. Further, this shall be a one-time adjustment and shall not exceed 10% of the annual pre-credit Stormwater Fee for the account holder. The following procedure shall apply to this adjustment:

- 1. Interested account holders shall submit application(s) per the process detailed in this manual.*
- 2. The District shall review, and shall approve or deny the application(s).*
- 3. If the District approves the application, the account holder may submit invoices and receipts for the expense of a licensed engineer to complete the approved Stormwater Fee Credit application. The District will not provide Stormwater Fee Adjustments for any expense related to applications that are not approved by the District. All submitted expenses must be directly related to the completion of an approved Stormwater Fee Credit application. Expenses related to the design and construction of stormwater control measures are not eligible for this Stormwater Fee Adjustment.*
- 4. The District will review the submitted invoices and receipts and, if approved, provide a one-time adjustment to the account holder's Stormwater Fee.*
- 5. Account holders interested in applying for this Stormwater Fee Adjustment must submit any applicable invoices and receipts within six (6) months of the approval date for their Stormwater Fee Credit applications. Expenses submitted after this time shall not be eligible for this adjustment.*

G. Recertification

1. *The Stormwater Quantity Credit is valid for one (1) year. Information must be submitted on an annual basis to the District to recertify the Stormwater Quantity Credit.*
2. *The applicant must use the recertification application provided by the District. An annual inspection report completed by the applicant or the applicant's agent is required (see Appendix G1).*
3. *Failure to submit the required documentation will result in elimination of the credit. The District will notify the applicant prior to the expiration of credits, and the deadlines to submit all recertification documentation.*

IV. Stormwater Quality Credit

The Stormwater Quality Credit is available for applicants that implement water quality SCMs. To ensure maximum stormwater quality and quantity credits for SCMs on new development and redevelopment projects, the District strongly recommends that interested applicants contact the District early in the design phase of a project to discuss the planned SCMs and intended stormwater management plan.

A. Quality Credit SCMs

The District has established a list of eligible SCMs that can be used to treat stormwater from associated impervious surfaces and receive a Stormwater Quality Credit. The approved SCMs are grouped into a three tier classification based primarily on the pollutant removal effectiveness of the SCM.

Table 4. Permitted Stormwater Quality Credit SCMs

Credit Available	SCM
25%	Bioretention
	Infiltration Basin*
	Constructed Wetland (above permanent pool)
	Subsurface Gravel Wetland
	Rainwater Harvesting**
20%	Sand or other Media Filtration
	Pervious Pavement
	Tree Filter
	Infiltration Trench
	Wet Extended Detention
	Enhanced Water Quality Swale
15%	Vegetative Swale
	Dry Extended Detention Basin
	Manufactured Units***

* Underground galleries that infiltrate the water quality volume shall fall under the infiltration basin credit.

** In order to qualify for a Stormwater Quality Credit, the property owner must demonstrate that the stored water quality volume will be drained through use in an industrial, commercial or agricultural practice within 3 days (72 hours) to permit capture of consecutive storm events. The actual credit percentage will be prorated based on the number of months the system is operational. Stormwater that is discharged to a sanitary or combined sewer following industrial or commercial use may be subject to sewerage service charges.

***Tested using the protocol in the Technology Acceptance Reciprocity Partnerships (TARP) Protocol for Stormwater Best Management Practice Demonstrations, is shown to have a minimum total suspended solid removal efficiency of at least 80%, consistent with the Ohio EPA NPDES Construction General Permit, Part III.G.2.e: Alternative Post-Construction BMPs requirements.

B. Water Quality SCM Requirements

1. SCMs must detain stormwater for protection of stream channels, streambank erosion control, and improved water quality.
2. The SCMs chosen must be compatible with site and soil conditions. Structural SCMs must be incorporated into the permanent drainage system for the site.
3. The SCMs chosen, including Rainwater Harvesting, must be sized to treat the water quality volume (WQv), as established in the most recent and applicable Ohio EPA NPDES Construction General Permit (CGP), and to ensure compliance with the CGP.

4. *Approved SCMs must be designed using approved methods from the following sources:*

- Ohio Rainwater and Land Development Manual, which may be found at <http://water.ohiodnr.gov/water-use-planning/stormwater-management>
- Other state stormwater management manuals as recognized by the District (contact the District early in design)
- Technology Acceptance Reciprocity Partnerships (TARP) Protocol, which may be found at http://www.state.nj.us/dep/stormwater/docs/tarp_stormwater_protocol.pdf

C. Maintenance Requirements

1. SCMs

SCMs receiving the Stormwater Quality Credit must be maintained, by the applicant or one of the co-applicants, to ensure continued function of the SCM.

2. Responsibility

The applicant, or one of the co-applicants, must have legal responsibility to maintain the SCM. The recertification process will require documentation that the SCM is continuing to function as originally intended.

3. Maintenance Plan

An inspection and maintenance plan is needed for all SCMs receiving the Stormwater Quality Credit. Implementation of the maintenance plan will be required as part of the re-certification of credits.

D. Restrictions

1. *Eligible SCMs*

Only those impervious surfaces of a particular site that drain through the District-approved SCM are eligible for credit.

2. *Quality Credit Restriction*

Residential property account holders cannot receive both the Individual Residential Property Credit and the Stormwater Quality Credit.

3. *Transfer of Credit*

- Stormwater fee credits do not transfer if property ownership changes. A recertification application and general application (Appendices A and G1) must be submitted for properties that have had a transfer of ownership.
- In the case where multiple residential properties (for example a Homeowners or Condominium Association) or multiple commercial properties that drain to a single SCM are covered under one credit application, a recertification and general application must be submitted only if the maintenance responsibility for the SCM changes.

4. *Local Community Requirements*

- A stormwater fee credit is only available for SCMs that are installed and maintained in compliance with all applicable local regulations of the member community in which the property is located and are approved by the District.

5. *Homeowners or Condominium Association*

- A Homeowners or Condominium Association can apply on behalf of its members for the Stormwater Quality Credit.
- The Association must own and have legally-binding responsibility to maintain a District-approved SCM.
- The Association must document its legally binding agreement with the individual property owners who will be receiving the stormwater fee credit to provide funding necessary to maintain the SCM.

- If a credit application is approved, the credit will be applied to each account holder listed as a member of the Association who drains to the SCM.

E. Specific Application and Documentation Requirements

A complete application must be submitted for the District to begin the review process. Separate applications must be submitted for noncontiguous properties. For example, medical institutions must submit separate applications for each medical campus. To receive the Stormwater Quality Credit the applicant must submit the documentation listed below.

1. *General Application (Appendix A)*
2. *Stormwater Quality and Quantity Credit Application (Appendix C)*
3. *Stormwater Management Plan*

The written document and plans that set forth the stormwater management for a particular site, property or area that meet the requirements of the member community's stormwater management regulation. These documents must be completed by a licensed Professional Engineer. For the Stormwater Quality Credit the plan must include the following for each SCM:

- Location and size, including detail drawings including outlet details, and design calculations. The applicant shall submit calculations that show the SCM is sized to treat the water quality volume (WQv) as defined by the applicable Ohio EPA NPDES CGP.
- Site conditions including subwatershed boundaries, drainage flow paths, stormwater inlets and permanent nonstructural and structural SCMs. Details of SCMs must be drawn to scale and must show volumes and sizes of impervious surfaces draining to the SCM.

4. *Inspection and Maintenance Plan or Agreement*

Includes the SCMs for which the applicant is seeking a stormwater fee credit. At a minimum the inspection and maintenance plan or agreement should include the following:

- Identification of the landowner(s)/organization responsible for long-term maintenance, including repairs, of the SCM.
- The location map of each SCM and identification of the drainage area it serves.
- An inspection and maintenance plan for each SCM which includes a description of routine and non-routine maintenance tasks to ensure continued performance of the SCM.
- The method of funding long-term maintenance and inspections of all SCMs.

5. *Legal Agreement*

- For applications that include multiple account holders only, a copy of the legally binding agreement between property owners/account holders that at a minimum outlines the ownership, maintenance responsibilities, and funding source necessary to maintain the SCM. The location and documentation of all access and maintenance easements. This information must be clear and readily apparent to the District. Applications submittals that do not specify these provisions of the legally binding agreement will be deemed incomplete by the District.

F. Stormwater Fee Adjustment for Expense of Preparing Applications

The District shall provide a Stormwater Fee Adjustment for the applicant's expense of a licensed engineer to complete approved applications for Stormwater Fee Credits. This Stormwater Fee Adjustment shall only be available to non-residential account holders. Further, this shall be a one-time adjustment and shall not exceed 10% of the annual pre-credit Stormwater Fee for the account holder. The following procedure shall apply to this adjustment:

1. *Interested account holders shall submit application(s) per the process detailed in this manual.*
2. *The District shall review, and shall approve or deny the application(s).*
3. *If the District approves the application, the account holder may submit invoices and receipts for the expense of a licensed engineer to complete the approved*

Stormwater Fee Credit application. The District will not provide Stormwater Fee Adjustments for any expense related to applications that are not approved by the District. All submitted expenses must be directly related to the completion of an approved Stormwater Fee Credit application. Expenses related to the design and construction of stormwater control measures are not eligible for this Stormwater Fee Adjustment.

- 4. The District will review the submitted invoices and receipts and, if approved, provide a one-time adjustment to the account holder's Stormwater Fee.*
- 5. Account holders interested in applying for this Stormwater Fee Adjustment must submit any applicable invoices and receipts within six (6) months of the approval date for their Stormwater Fee Credit applications. Expenses submitted after this time shall not be eligible for this adjustment.*

G. Recertification

- 1. The Stormwater Quality Credit is valid for one (1) year. Information must be submitted on an annual basis to the District to recertify the Stormwater Quality Credit.*
- 2. The applicant must use the recertification application to be provided by the District (see Appendix G1).*
- 3. Failure to submit the required documentation will result in elimination of the credit. The District will notify the applicant prior to the expiration of credits and the deadline to submit all recertification documentation.*

V. Stormwater Quality Credit –Industrial Stormwater NPDES Permitted Facilities including Marinas

40 CFR 122.26(b)(14) obligates dischargers of stormwater associated with categorically regulated industrial activities to obtain authorization to discharge their stormwater in the form of an NPDES permit. Ohio EPA can include such authorization in Parts IV, V, and VI of an individual NPDES permit, or a General NPDES permit drafted specifically for industrial facilities.

Industrial facilities with a valid Individual Industrial NPDES permit that contains stormwater language, or facilities with a valid Industrial Stormwater General Permit or a Marina Stormwater General Permit may be eligible to receive a Stormwater Quality Credit of 25% if the facility is in compliance with all permit requirements and submits documentation and annual recertification to the District. Those facilities that have taken measures to minimize pollutant runoff by obtaining a no exposure certificate from Ohio EPA are also eligible.

An industrial property can receive the Stormwater Quality Credit for either the Industrial Stormwater NPDES Permitted Facilities, or for measures described in Section IV of this manual, but not both.

A. Specific Application and Documentation Requirements

In order to receive a Stormwater Quality Credit for the facility's impervious surface, the applicant must submit the following documentation:

1. *General Credit Application (Appendix A).*
2. *Stormwater Quality and Quantity Credit Application (Appendix C).*
3. *Copy of the Notice of Intent (NOI) submitted to Ohio EPA.*
4. *Stormwater Pollution Prevention Plan for the site.*

B. Recertification

1. *The Stormwater Quality Credit for Industrial Stormwater NPDES Permitted Facilities is valid for one (1) year. The applicant must submit an annual recertification application to continue to receive this credit toward their stormwater fee.*
2. *The applicant must use the recertification application provided by the District, which includes the facilities annual report to Ohio EPA (see Appendix G1).*
3. *Failure to submit the required documentation will result in elimination of the credit. The District will notify the applicant prior to the expiration of the credit and the recertification deadline.*

VI. Stormwater Quality Credit – Agricultural Conservation Planning

Account holders that are owners of agricultural lands as defined by Ohio Revised Code Section 5713.30 may be eligible for stormwater fee credits as explained below.

Account holders that are cooperating with a local Soil and Water Conservation District, the United States Department of Agriculture, Natural Resources Conservation Service (NRCS) or the Ohio Department of Natural Resources (ODNR) Division of Forestry and have a natural resources management plan may be eligible to receive a Stormwater Quality Credit.

Account holders with properties operating under a certified *Conservation Plan* or a *Forestry Management Plan* are eligible for a credit of 15%. Account holders with properties operating under a certified *Comprehensive Nutrient Management Plan* or *Prescribed Grazing Plan* are eligible for a 25% credit. Qualifying *Conservation Plans*, *Comprehensive Nutrient Management Plans*, or *Prescribed Grazing Plans* shall be certified by the NRCS District Conservationist. Qualifying *Forestry Management Plans* shall be prepared by a professional forester and approved by an ODNR Service Forester (see *Table 5*).

Table 5. Agricultural Planning Options

Credit Available	Credit Type	Conservation Plan Type	Submittal Criteria
25%	Quality	Comprehensive Nutrient Management Plan	A Comprehensive Nutrient Management Plan (CNMP) certified by the NRCS District Conservationist.
		Prescriptive Grazing Plan	A Prescriptive Grazing Plan Certified by the NRCS District Conservationist
15%	Quality	Forest Management Plan	A Forest Management Plan certified by a Professional Forester
		Conservation Plan	A Conservation Plan addressing a specific need certified by the NRCS District Conservationist

An account holder can receive Stormwater Quality Credit for either the Agricultural Conservation Planning credit, or for measures described in Section IV of this manual but not both. Account holders cannot receive greater than a 25% Stormwater Quality Credit. If a property has both a Conservation Plan and a Forestry Management Plan the maximum Stormwater Quality Credit available under this section will be 15%. If a property has both a

Comprehensive Nutrient Management Plan and a Prescribed Grazing Plan the maximum Stormwater Quality credit available under this section will be 25%. The qualifying plan must be implemented on lands within the parcel (s) on which the credit will be applied.

A. Specific Application and Documentation Requirements

In order to receive a Stormwater Quality Credit under this section, the applicant must submit the following documentation:

1. *General Credit Application (Appendix A).*
2. *Stormwater Quality and Quantity Credit Application (Appendix C).*
3. *Copy of the qualifying Conservation Plan, Forestry Management Plan, Comprehensive Nutrient Management Plan, or Prescribed Grazing Plan which addresses natural resource management concerns.*

B. Recertification

1. *The Stormwater Quality Credit for Agricultural Conservation Planning is valid for one (1) year. The applicant must submit an annual recertification application to continue to receive this credit toward their stormwater fee.*
2. *The applicant must use the recertification application provided by the District, which includes documentation of plan implementation (see Appendix G1).*
3. *Failure to submit the required documentation will result in elimination of the credit. The District will notify the applicant prior to the expiration of credits and the submittal deadline for recertification.*

VII. Reduction of Impervious Surface

Account holders may reduce the amount of impervious surface on their property by the installation of either a vegetated green roof or permeable pavement. If the proper documentation is submitted to delineate the area of green roof and/or permeable pavement, and to demonstrate that it was designed and installed correctly, then the area of the green roof and/or permeable pavement will be removed from the parcel's impervious area calculation. Annual recertification must be submitted to document that the green roof or permeable pavement still exists, and that it is being properly maintained.

Account holders may also reduce impervious area by demolition of structures or pavement and replacement of the impervious surface with vegetation. Owners can request that the impervious area be re-delineated following the establishment of the vegetation. Areas that are not brought to the Districts attention will be re-delineated automatically during periodic impervious surface evaluations. Once removed there is no further recertification required. This is not considered a credit but rather a direct reduction in a properties impervious area.

A. Specific Application and Documentation Requirements

In order to reduce the facility's impervious surface, the applicant must submit the following documentation:

1. *General Credit Application (Appendix A).*
2. *Impervious Surface Reduction Application (Appendix C2).*
3. *Stormwater Management Plan.*
4. *Inspection and Maintenance Plan.*

B. Recertification

1. *Reduction of impervious surface through the use of a green roof or permeable pavement and resultant reduction of fee is valid for one (1) year. The applicant must submit an annual recertification application to continue to receive this reduction of their stormwater fee.*
2. *The applicant must use the recertification application provided by the District (see Appendix G1).*

- 3. Failure to submit the required documentation will result in a recalculation of the impervious surface and a resulting increase in the account holder's fee. The District will notify the applicant prior to the expiration of credits and the deadline for recertification.*

VIII. Education Credit

An Education Credit of 25% is available to public and private primary, elementary, and secondary school account holders recognized by the State of Ohio that provide to their students a regular and continuing program of education concentrating on stewardship of our water resources and minimization of demand on the regional stormwater system. The rationale behind this credit is that the curriculum provided by the institution will assist the District in education regarding our regional stormwater-related water quality and quantity problems, and also instill an appreciation and stewardship of our water resources, providing long-term benefits and/or decreases in the demand on the regional stormwater system and program.

This education must be provided annually to at least 25% of the grade levels across the school or school district. An individual school may apply for the credit, or a school district may apply on behalf of all its schools. The Education Credit may be combined with the Stormwater Quantity and/or Quality Credits for a potential 100% credit for a particular school property.

The Education Credit will apply for one full calendar year, and the credit period will begin one full billing cycle after the credit application is received and approved. A final report must be submitted at the end of the school year in which the curriculum was delivered. If the final report is not received, or the requirements for the credit were not met, an adjustment will be made on future bills to reimburse the District for the credited amount.

The District has identified three options for schools located within its stormwater service area to obtain the Education Credit. Schools can select any one of the options to obtain the credit. The three options for schools to obtain the Education Credit are as follows:

Option 1. Watershed Education Curriculum: The District will provide Watershed Education Curriculum (WEC) materials that schools may use to obtain the Education Credit. These materials will reflect the grade-level Ohio Academic Content Standards

and include specific outcomes. The District is providing materials for grade levels 3, 5, 7, and 10. Schools are encouraged to apply early but may submit an application as late as December 31st of the current school year. *To ensure availability of District provided materials and manuals when school starts schools must apply for this option by June 1st of the preceding school year.*

Final documentation to receive this Education Credit must include a sample of one completed workbook per classroom, along with a final report. This documentation must be received by the District no later than June 15th of the applicable school year.

The District will provide:

- Credit application forms
- Grade-level curriculum and student workbooks
- Teacher manuals
- Final report form

As an example, if a school decides to participate in the 2016-17 school year, the credit application must be received by December 31, 2016. The workbook and teacher manual would be delivered by August 1st of 2016 for those that apply by June 1st; those that wait to apply are subject to material availability. The school must submit the final report by June 15th of 2017. If all requirements are met, the credit will be applied beginning with the first full billing cycle after the application is approved, and will continue for a 12 month period.

Option 2. School Curriculum: Stormwater and watershed curriculum may be taught in the classroom with curriculum developed by the school's teachers in order to obtain the Education Credit. The curriculum must be place-based to ensure that students understand the dynamics of stormwater and watersheds in their own community. A minimum of 4 contact hours is required. To be approved for an Education Credit, the submitted lesson plans must include at least 4 of the topics presented below.

Target topics are:

- The natural water cycle as well as the urban water cycle, including water and wastewater treatment.
- The watershed concept, stream formation, and causes of erosion and flooding.
- Effects of stormwater and surface water pollution on Northeast Ohio rivers, streams, and Lake Erie.
- Stormwater runoff pollution prevention.
- Water conservation and its relevance in water-rich Northeast Ohio.
- Watershed management, topography and the geologic history of our region.
- The function and ecosystem services provided by streams, wetlands, and floodplains for flood control and erosion control.

To qualify for the credit through Option 2, the school or school district must provide the required application forms, which will include a lesson plan form. The lesson plan will include: objectives, activity (if applicable), and summary of the lesson with an estimate of the number of students and grade level expected to receive the curriculum during the school year. Lesson plans must be approved by the District. Schools should submit applications and lesson plan(s) for this option from June 1st to December 31st of the applicable school year to ensure review and acceptance of the lesson plans.

Final documentation to receive this Education Credit will include a final report. This documentation must be received by the District no later than June 15th of the applicable school year.

The District will provide:

- Credit application forms
- Lesson plan form
- Final report form

As an example, if a school decides to participate in the 2016-17 school year, the credit application should be received by December 31st of 2016. The school must submit the final report by June 15th of 2017. If all requirements are met, the credit will be applied beginning with the first full billing cycle after the application is approved, and will continue for a 12 month period.

Option 3. Informal Science Institution Program: Schools may elect to use District-approved programs that will be delivered by informal science institutions to satisfy the requirements of the Education Credit. These institutions will be listed on the District website with a description of the approved programs and associated contact hours. Examples of institutions that might deliver curriculum include the Cleveland Metroparks, Cuyahoga Soil and Water Conservation District, Doan Brook Watershed Partnership and others. These programs will typically range in length from 1 – 4 contact hours the District website will identify the target topics that will be covered.

The Informal Science Institution Programs can assist schools in obtaining the Education Credit by providing all or a portion of the required contact hours. If a portion of the contact hours are provided by the informal science institution, the school will be required to make up the difference of the required 4-contact hours.

Examples:

- A District approved program that provides the required 4-contact hours for the Education Credit is selected, delivered, and documented. This program would satisfy the Education Credit requirement.
- Select District approved program(s) that provide less than the required 4-contact hours will require supplemental classroom work. For example, a program offered by the Cleveland Metroparks Watershed Stewardship Center may provide only 2 contact hours, requiring the school to provide the additional 2 hours of content to satisfy the Education Credit requirement.

To qualify for the credit through Option 3, the school or school district must provide the required application forms. Schools should submit applications for this option from June 1st to December 31st of the applicable school year to ensure review and acceptance of the application.

Final documentation to receive this Education Credit will include a final report. This documentation must be received by the District no later than June 15th of the applicable school year.

The District will provide:

- Credit application forms
- Lesson plan format
- Final report form

A. Restrictions

1. Separate parcels owned by the school or school district such as administrative, transportation or maintenance facilities where no educational curriculum is delivered, as well as closed school facilities are not eligible for the Education Credit, but may apply for any Stormwater Quantity and Quality Credits.
2. Education Credits may be taken in combination with other Stormwater Quantity and Quality Credits; however the total credit amount may not exceed 100%.

B. Specific Application and Documentation Requirements

To receive the Education Credit, applicants must submit the documentation listed below:

1. *General Application (Appendix A).*
2. *Education Credit Application (Appendix E1).*
3. *For Option 2 and 3 only: Lesson plan form (Appendix E2).*
4. *Final report form (Appendix E3), which will include grade levels using the curricula (must be at least 25% of all grades at school or school district), as well as estimated*

number of students reached each school year. Final report form must be received by the District no later than June 15th of the applicable school year.

C. Recertification

- 1. The Education Credit is valid for one (1) year. The school must reapply every year to continue to receive the credit.*
- 2. Failure to submit the required documentation by December 31st will result in elimination of the credit.*

Examples

The North School District has implemented three different curricula that have been integrated across all the school district's 3rd, 7th, and 9th grades. The school district can apply for a 25% Education Credit for providing this curriculum for 25% of the school district's grade levels. The credit would apply to all school buildings in the district that are used for educational purposes.

St. Catherine's High School, is a private 4-year high school that is making use of the District's Watershed Education Curriculum for 10th grade. The school can apply for a 25% Education Credit for providing this curriculum to 25% of the grade levels. The school also has a stormwater detention pond on the school's property, designed to the local community's detention standards, to manage the stormwater runoff from the school parking lot. The school can also apply for a Stormwater Quantity Credit for the impervious surface that drains to the stormwater detention pond as long as it provides the required documentation.

IX. General Credit Application Procedure

Applications must be submitted with all required documentation to the District as described on each application. Applications can be submitted via e-mail to stormwater@neorsd.org or via mail to **NEORSD, Watershed Programs Department, 3900 Euclid Avenue, Cleveland, Ohio 44115**. An online application is available at www.neorsd.org/stormwater

When an application is received, the District will conduct an administrative completeness review of all submitted materials. If the application is not complete, the District will contact the applicant and request the additional information necessary to complete the application.

Following the receipt of a complete application, the District will provide a complete review and the applicant will be notified in writing when an application is approved or denied. If an application is denied, the applicant can appeal based on the appeals procedures in Title V of the District's Code of Regulations.

APPENDIX A – GENERAL APPLICATION

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Appendix A: General Application

1. Applicant Name:
2. Contact Name (if different than applicant):
3. Pemanent Parcel Number:
4. NEORSD Account Number:
5. Property Address: Street number: City: Zip Code:
6. Mailing Address (if different): Street number: City: Zip Code:
7. Phone Number:
8. Email Address:
9. Credits Applying For: <input type="checkbox"/> Individual Residential Property Credit (25% Flat Rate) <input type="checkbox"/> Quality Credit (25% Max.) <input type="checkbox"/> Quantity Credit (75% Max.) <input type="checkbox"/> Education Credit (25% Flat Rate - Schools Only)
10. Impervious Surface Reduction Applying For: <input type="checkbox"/> Pervious pavement <input type="checkbox"/> Green Roof
11. Applicant/Contact Signature:
12. Date:

Mail to: NEORSD, Watershed Programs Department, 3900 Euclid Ave., Cleveland OH 44115

Instructions for Completing the General Application:

1. Applicant Name - Name of individual property owner, business or other incorporated entity, or school or school district.
2. Contact Name - particularly in the case of a non-residential or group application, the name of the contact who is submitting the application.
3. Permanent Parcel Number - Each piece of land that is sold has its own Permanent Parcel Number. This information can be found through the County Auditor's office or website, or from a source such as your local library. If there are multiple permanent parcel numbers, attach a separate and complete list to the application, and note in box 3, "See attached list".
4. NEORS D Account Number - The account number can be found on the statement.
5. Property Address - If there are multiple property addresses, attach a separate and complete list to the application, and note in box 5, "See attached list".
6. Mailing Address – Include if different from box 5.
7. Phone Number – Of primary contact for the application.
8. Email Address – Of primary contact for the application.
9. Credits Applying For - Select the credits for which the applicant is applying. Multiple boxes may be selected.
10. Impervious Surface Reduction Applying For - Select appropriate practice, if applicable. Both may be selected.
11. Applicant/contact signature
12. Date

**APPENDIX B – INDIVIDUAL RESIDENTIAL
PROPERTY CREDIT APPLICATION AND
FACT SHEETS**

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Appendix B: Individual Residential Property Credit Application

1. Applicant Name:

2. Credit Applying For:

Rain Garden

of downspouts draining to rain garden _____ (if applicable)

Completed *Rain Garden Manual for Homeowners* worksheet attached

On-Site Stormwater Storage

rain barrels (number: _____) cistern rain bladder other on-site stormwater storage

of downspouts draining to on-site storage _____

Volume of on-site storage _____ gallons

For cisterns, rain bladders, and other storage, calculations from *On-Site Stormwater Storage Fact Sheet* attached

Impervious Surface Reduction

Impervious surface removed is _____ square feet

Pervious Pavement

Pervious pavement type: paving blocks grid or grass pavers pervious concrete or asphalt

Pervious pavement installed is _____ square feet

Stone reservoir at least 10 inches deep at all points

Vegetated Filter Strips

of downspouts draining to vegetated strip _____

Slope of yard _____ % per *Residential Vegetated Filter Strip Fact Sheet*

Length of vegetated strip _____ feet

3. Photograph of all SCMs as installed is attached.

Mail to: NEORSD, Watershed Programs Department, 3900 Euclid Ave., Cleveland OH 44115

Individual Residential Property Credit Application (cont.)

4. Sketch of property with SCM shown (see instructions for sketch requirements)

5. All applicable local codes

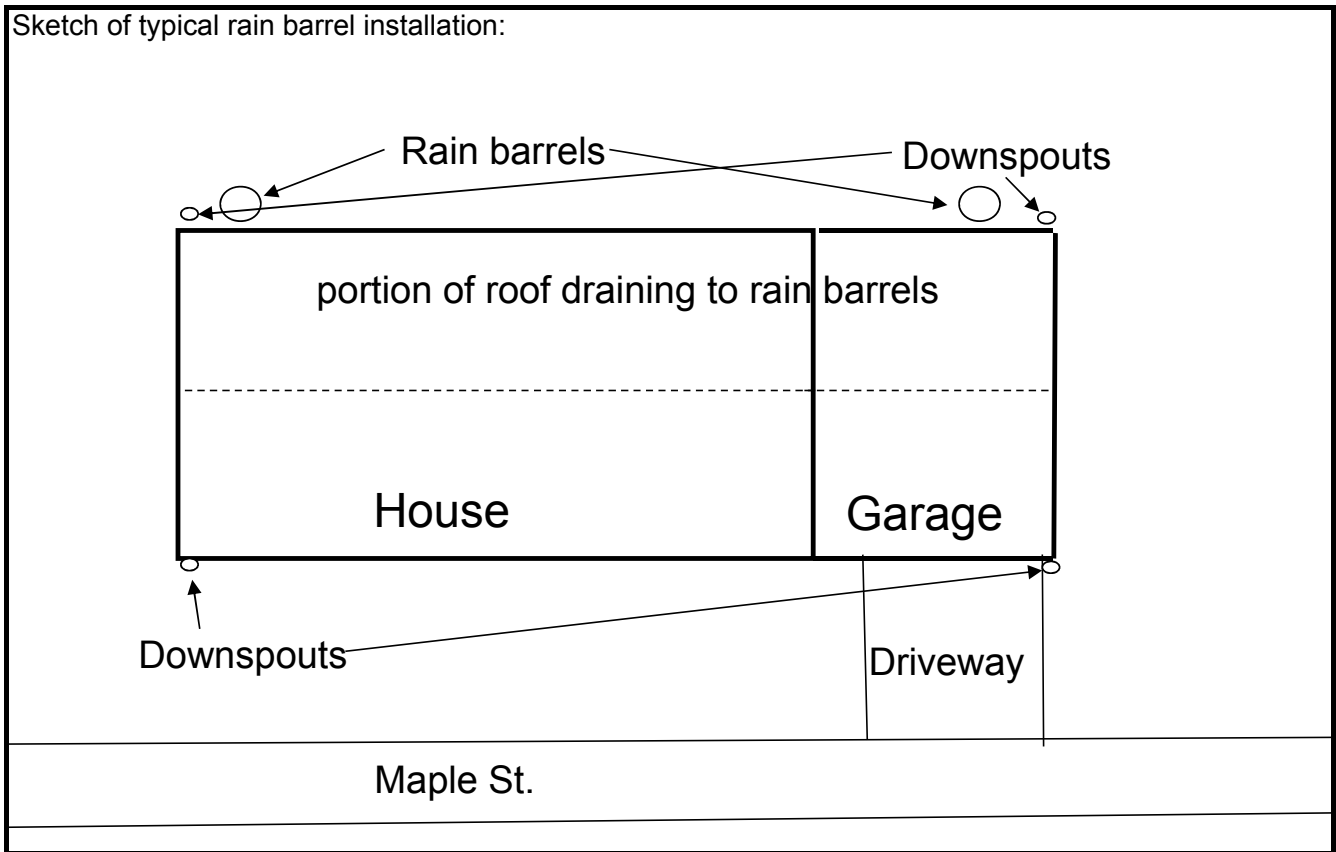
- I, the applicant, have complied with all local codes applicable to the installation of the SCM.

6. Owner certification:

- I hereby certify that I own this property and I further declare, under penalty of perjury, that the information provided by me in this application is the truth to the best of my knowledge and belief.

Instructions for Completing the Individual Residential Property Credit Application:

1. Applicant Name
2. Credits Applying For - Select the stormwater control measure (SCM) that is being submitted for credit approval. Appropriate implementation of any one (1) approved SCM is sufficient to receive the credit. Implementation of additional SCMs cannot increase the Individual Residential Property Credit beyond 25%.
3. Photograph of SCM As Installed - Attach a photograph of EACH installed SCM that indicates the date the photo was taken. If individual photos are included, please place name and address on the back of each photo.
4. Sketch of property with SCM shown - Include a sketch of the property for which the credit is to be applied. This can be a hand drawn sketch. The sketch should represent an aerial view of the property and include at a minimum the house, driveway, SCM(s), and road. If applying for the On-Site Stormwater Storage credit, applicant must also show the location of the downspouts that drain to the storage device, and indicate the portion of the roof that drains to the downspouts. **In order to receive a credit for rain barrels, at least 50% of the TOTAL ROOF SURFACE (including garage) on a property must be connected to rain barrels, with at least 40 gallons of storage per downspout.** See example sketch below for a typical rain barrel installation.
5. Local Codes - All SCMs must meet all applicable building, subdivision and planning, and zoning code requirements of member communities including downspout disconnection, landscaping and property setbacks requirements.
6. Owner Certification - Check the box to certify that you are the owner of the property, and that all information provided is true. Individual Residential Property Credits are available to all owners, for rental properties the application must be submitted by the property owner.



residential vegetated filter strips

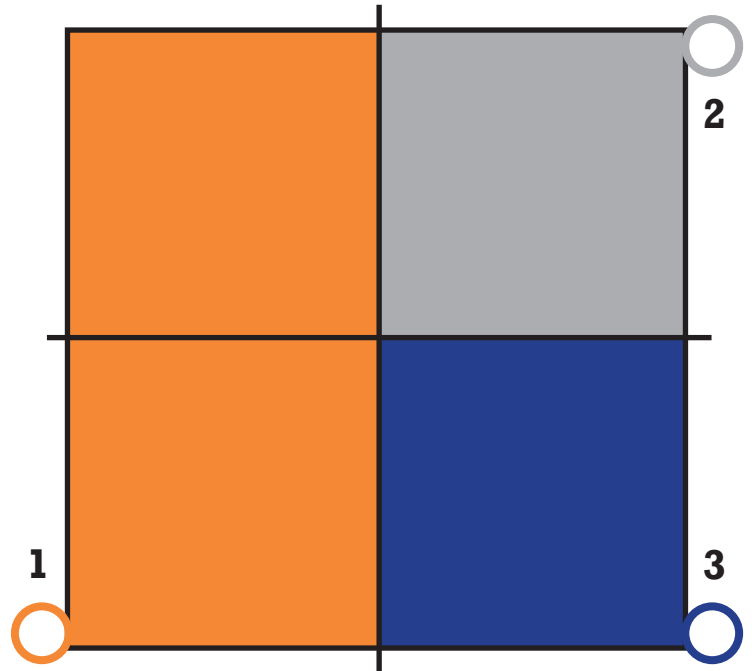
VEGETATED FILTER STRIPS are uniform strips of dense turf, meadow grasses, trees or other vegetation with a minimum slope to treat the water flowing from impervious surfaces. In certain circumstances a large lawn that receives runoff from impervious areas of a property may meet the criteria for a grass filter strip.

installation standards:

To obtain an individual residential property credit for vegetated filter strips the following criteria must be met:

- 50% of the property's roof area must drain to the vegetated filter strip.
- Runoff from downspouts must be dispersed using splash block prior to reaching filter strip.
- The slope of a vegetated filter strip must be greater than 1% and less than 5%.
- Filter strips must be fully vegetated, and vegetation must be kept healthy.
- Filter strips must have a minimum length of 50 feet, but should be designed to provide a length based on their slope within the ranges noted on the next page.
- Filter strips must occur entirely on the applicant's property.

Example roof showing drainage area to downspouts to vegetated filter strips



Downspout 1—Drains the orange area (1/2 of roof)

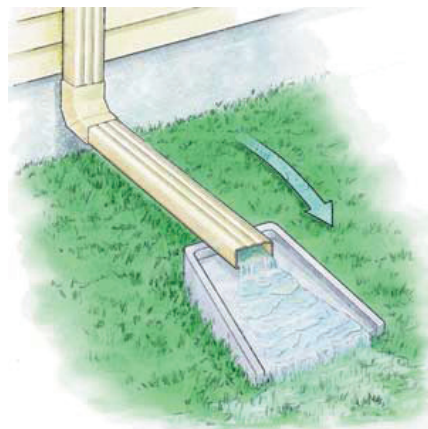
Downspout 2—Drains the grey area (1/4 of roof)

Downspout 3—Drains the blue area (1/4 of roof)

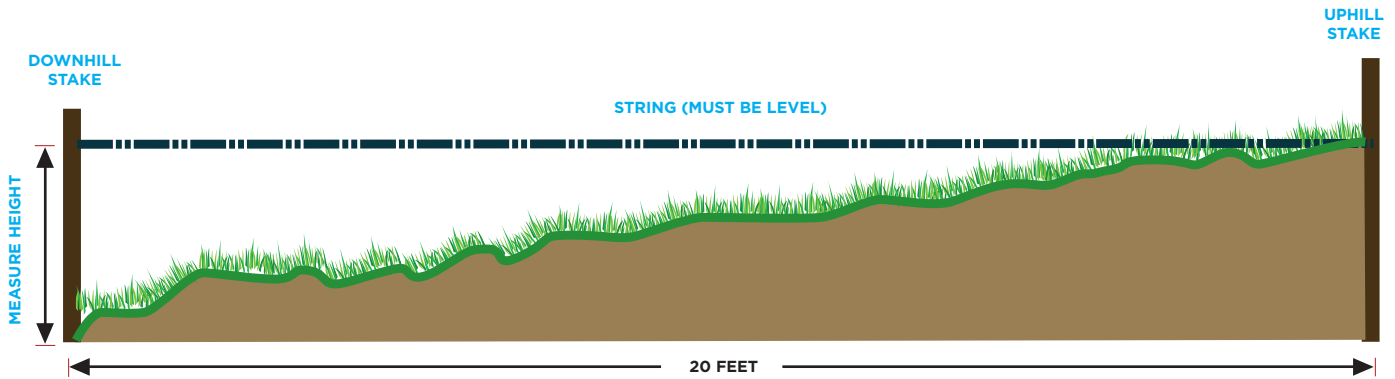
To be eligible for the credit either Downspout 1 or both Downspouts 2 and 3 need to outlet to vegetated filter strips.



Examples of downspouts for vegetated filter strips



how to measure the slope of a residential vegetated filter strip:



Height of string at downhill stake	Approximate slope of filter strip	Minimum length of filter strip
2.5 inches	1%	50 feet
5 inches	2%	120 feet
7 inches	3%	135 feet
10 inches	4%	170 feet
12 inches	5%	210 feet

maintenance guidelines:

1. Maintain healthy vegetation along the filter strip. If planted with grass, the height should be at least 3 to 4 inches.
2. If erosion occurs causing rills and gullies, repair and stabilize.
3. Check splash blocks twice a year to make sure they are not broken or deteriorating. Replace as needed.

residential pervious pavement

PERVIOUS PAVEMENTS are designed to allow percolation or infiltration of stormwater through the surface into the soil below where the water is naturally filtered and pollutants are removed. Pervious pavement may include paving blocks, grid pavers, pervious concrete, or pervious asphalt.

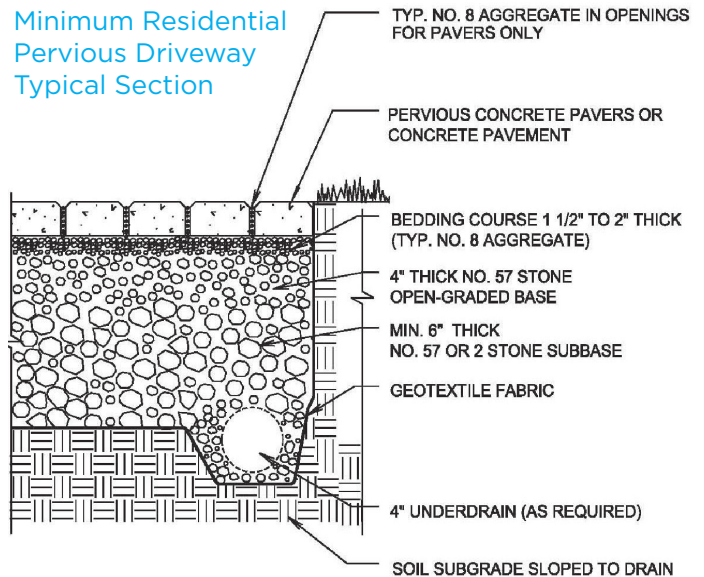
It is recommended that a qualified installer with knowledge in hydrology and hydraulics be consulted for applications using pervious pavement to ensure desired results. This fact sheet provides an overview of construction guidelines and research to date and is not meant to replace the services of experienced, professional installers.



Example of pervious pavers used for residential driveway

To obtain an individual residential property credit for pervious pavements the following criteria must be met:

- Installed for the purpose of runoff infiltration.
- Area of pervious pavement is at least 1,000 sq. ft.
- Used on slopes no greater than 4%.
- The stone reservoir underneath the pavement type must be at least 10 inches deep at all points.
- The installation meets the local building and zoning standards for driveway installations.



maintenance guidelines:

- Ensure pervious pavement system is draining, and there are not visible signs of standing water on surface.
- Remove accumulated salt on surface during winter months.
- Vacuum as necessary to remove sediment accumulation and organic debris on the pavement surface.
- Remove accumulated leaves and debris from pavement surface in the fall.

to apply:

Applicants must complete a one-page **General Application** and a one-page **Individual Residential Property Credit Application**, and include a sketch or a photo of their stormwater control measure. Applications are available at neorsd.org/stormwater or by calling Customer Service at **216.881.8247**.

For more information, contact:

Jeffrey Jowett
216.881.6600 x6881 / jowettj@neorsd.org

Matthew Scharver
216.881.6600 x6880 / scharverm@neorsd.org

Rachel Webb
216.881.6600 x6645 / webbr@neorsd.org

neorsd.org/stormwater

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residential on-site stormwater storage structures

ON-SITE STORMWATER STORAGE STRUCTURES can include rain barrels, cisterns, bladders, or other storage devices as approved by the **Northeast Ohio Regional Sewer District**. These structures collect and capture rooftop rainwater that would otherwise drain directly to the stormwater system or streams. The collected stormwater can be used to water plants, trees, or lawns during dry periods.

rain barrel:

A **rain barrel** is composed of a 40-55 gallon barrel or drum with some type of diverter or connection from a downspout, a spigot or hose to drain the barrel, and some type of overflow mechanism. Any openings to the air should be screened to keep debris and insects out.

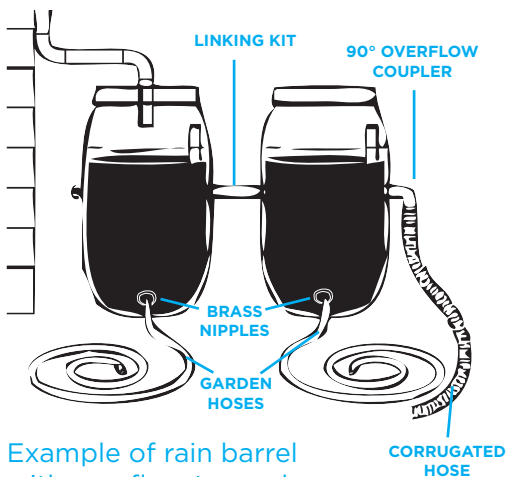
An overflow mechanism must be provided so that when the rain barrel is full, excess water can flow back into the downspout and then to a storm sewer, or into a landscaped area.



Example of rain barrel with downspout diverter that directs overflow back to the downspout

Saving water not only helps protect the environment it saves money and energy because of the decreased demand for treated tap water. Check with your County Soil and Water Conservation District or local watershed group for instructions on how to make and install a rain barrel.

Rain barrels can also be purchased through several online suppliers. Ensure your rain barrel will meet the requirements on the next page.



Example of rain barrel with overflow to yard

rain bladder:

A **rain bladder** is a flexible modular tank designed to be installed into the tightest locations and can be completely hidden from view. They can be installed under the sub-floor of a home, gazebo, and under decking.



Example of rain bladder

cistern:

Cisterns are similar to rain barrels in function but hold larger quantities of water. They can be installed underground, at ground level, or elevated depending on the site and space constraints of the property.



Example of Cistern (Cleve. Metroparks Zoo)

A cistern should be constructed out of reinforced concrete, galvanized steel, or plastic, and should have smooth interior surfaces, be watertight, have enclosed lids and be sized according to the installation standards on the next page to manage the proper amount of runoff.

To obtain an individual residential property credit for onsite stormwater storage **CERTAIN STANDARDS AND GUIDELINES MUST BE MET**

installation standards:

To obtain an individual residential property credit for onsite stormwater storage the following standards and requirements must be met:

1. 50% of the property's roof area is properly connected to rain barrels or other approved storage devices that provide at least 40 gallons of storage per downspout,
- or -
storage structures must be sized to hold the runoff from at least 50% of the property's roof area during a 1-inch rainfall event.

$$V = \frac{1}{2} \times A \times 0.6225 \text{ gallons/feet}^2$$

Where:

V = volume of storage structure in gallons

A = total surface area of roof in square feet

0.6225 = conversion factor (gallons per cubic foot per inch of rain)

Example

A 500-gallon cistern would provide runoff storage from a 1,600-square-foot rooftop for a one-inch rainfall.

A = 1,600 square feet

$\frac{1}{2} \times 1,600 \times 0.6225 = 498$ gallons

2. Onsite stormwater storage must be completed in such a way that does not provide mosquito breeding grounds, such as making sure rain barrels are covered with a lid or screen that prevents mosquitoes from entering the storage structure.
3. Onsite stormwater storage must be equipped with an overflow or bypass mechanism to divert rainwater to the storm drainage systems when storage structure is full. These mechanisms must not cause erosion, property damage or overflow onto a neighboring property.
4. Onsite stormwater storage must be completely drained in no less than 24 hours and no longer than 4 days after each rainfall event.
5. All on-site stormwater storage structures must meet the requirements of member community building and zoning codes for downspout disconnection, landscaping, property setbacks, and other applicable local codes.

maintenance guidelines:

1. Clean your gutters regularly to reduce debris.
2. Clear off any screens as necessary.
3. Periodically check any hoses associated with the storage structure to clear any debris.
4. To winterize, disconnect and return the downspout to its original configuration. Remove the hoses and mesh screen and store them. Make sure to drain the container to prevent it from freezing and cracking. If possible, store it upside down, so no water or materials will be able to enter.
5. For cisterns, leave the outflow spigot fully open during frost/freezing periods and unhook the drain hose about twice a year to clean out any compacted sediment.

to apply:

Applicants must complete a one-page **General Application** and a one-page **Individual Residential Property Credit Application**, and include a sketch or a photo of their stormwater control measure. Applications are available at neorsd.org/stormwater or by calling Customer Service at **216.881.8247**.

For more information, contact:

Jeffrey Jowett

216.881.6600 x6881 / jowettj@neorsd.org

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neorsd.org/stormwater

**APPENDIX C1 – STORMWATER
QUANTITY AND QUALITY CREDIT
APPLICATION**

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Appendix C1: Stormwater Quantity and Quality Credit Application

NOTE - Customers must also fill out Appendix A: General Application. If multiple SCMs are present submit this form for each control measure

1. Applicant Name:	
2. SCM description:	
3. Credit Applying For:	% Credit
Quantity - Peak Flow SCM Credit (CHECK ONLY ONE)	
<input type="checkbox"/> Critical Storm Method	25%
<input type="checkbox"/> Community Detention Standard	15%
<input type="checkbox"/> Existing On-Site Detention	10%
Impervious Surface Drainage area to SCM (does not apply to multiple account holders)	sq. ft.
Quantity - Site Runoff Volume Reduction Credit (CHECK ONLY ONE)	
<input type="checkbox"/> Runoff Volume Reduction - Existing Impervious > 50%	25%
<input type="checkbox"/> Runoff Volume Reduction - Existing Impervious < 50%	25%
<input type="checkbox"/> Exceptional Runoff Volume	50%
Impervious Surface Drainage area to SCM (does not apply to multiple account holders)	sq. ft.
Quality Credit	
<input type="checkbox"/> Stormwater Quality SCM (from Table 4, Section IV) _____	up to 25%
Impervious Surface Drainage area to SCM (does not apply to multiple account holders)	sq. ft.
<input type="checkbox"/> Industrial / Marina / No Exposure NPDES Permit	25%
<input type="checkbox"/> Conservation Planning (conservation plan or forestry management plan)	15%
<input type="checkbox"/> Conservation Planning (CNMP or prescribed grazing plan)	25%
4. Required Documents Attached (check all that apply)	
<input type="checkbox"/> Site Stormwater Utility Plan / Drainage area maps	
<input type="checkbox"/> Inspection and Maintenance Plan or Agreement for each SCM	
<input type="checkbox"/> Legal Agreement for Operation and Maintenance	
<input type="checkbox"/> Stormwater Management Plan, including design calculations	
<input type="checkbox"/> Documentation from member community (may include Member Community Review Form - Appendix D)	
<input type="checkbox"/> Copy of Industrial Stormwater NPDES Notice of Intent Approval Letter	
<input type="checkbox"/> Ohio EPA Approved Stormwater Pollution Prevention Plan	
<input type="checkbox"/> Conservation Plan / Forestry Management Plan / Comprehensive Nutrient Management Plan	

Instructions for Completing the Stormwater Quantity and Quality

1. Applicant Name
2. SCM description - a brief description to identify the specific unit (i.e., "Dry detention basin on north side of building").
3. Credit Applying For - Select all applicable stormwater credits for one SCM. If SCM qualifies for a Stormwater Quality Credit, select the type of SCM from Table 4, Section IV of the Stormwater Fee Credit Policy Manual. If more than one SCM will be covered by this application, include information for additional SCMs on the "Additional Stormwater Control Measures" pages. Use as many sheets as necessary. For the Quantity Credit and the Quality Credit please indicated the drainage area to each SCM.
4. Required Documents Attached - check all documents that apply. If applying for Peak Flow Credit, Volume Reduction Credit, or a SCM based Quality Credit you must supply a site plan that identifies the drainage area to the SCM, an inspection and maintenance plan, evidence of a legal agreement for the maintenance of the SCM (multiple account holders), and a Stormwater Management Plan showing design calculations, OR evidence that the plans met community standards at the time of construction, which may include Appendix D. For Quality Credit applications related to a Industrial NPDES Permit you must supply a copy of the Ohio EPA Approval letter showing the facility permit number AND a copy of the facility Stormwater Pollution Prevention Plan. For Quality Credits related to Agricultural Planning provide a copy of the Conservation Plan / Forestry Mangement Plan, Comprehensive Nutrient Magagement Plan, or Prescribed Grazing Plan.

APPENDIX C2 – REDUCTION OF IMPERVIOUS SURFACE APPLICATION

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Appendix C2: Impervious Surface Reduction Application NOTE - Customers must also fill out Appendix A: General Application
1. Applicant Name:
2. Impervious Surface Reduction Applying For: <ul style="list-style-type: none"> <input type="checkbox"/> Pervious pavement <input type="checkbox"/> Green Roof
3. Total Area of Pervious Surface _____ square feet
4. Required Documents Attached <ul style="list-style-type: none"> <input type="checkbox"/> Site Map and Plan with property boundaries, and location and size for each pervious surface area. <input type="checkbox"/> Stormwater Management Plan <input type="checkbox"/> Inspection and Maintenance Plan or Agreement for each SCM

Instructions for Completing the Impervious Surface Reduction Application:

1. Applicant Name
2. Impervious Surface Reduction Applying For - select type of pervious surface. Select both if applicable.
3. Total Area of pervious surface - total area of permeable pavement and/or green roof(s). If other impervious areas drain to permeable pavement, credits must be applied for separately, using form C1, and D if applicable.
4. Required Documents Attached - all documents must be provided.

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**APPENDIX D – MEMBER COMMUNITY
REVIEW FORM**

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Appendix D: Member Community Review Form

As part of the credit application for the Stormwater Quantity Credit (Peak Flow Credit only), applicants may submit this verification form, filled out and signed by the member community engineer. This form may be submitted in lieu of a stormwater management plan with calculations for stormwater runoff flows into and through all SCMs.

1. Member Community:	2. Engineer Name (printed):
3. Title:	4. Department:
5. Phone Number:	6. Email Address:
<p>I hereby certify that the Stormwater Control Measure(s) covered in this application meet the requirements for control of stormwater peak flow rate as defined by the:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Ohio Critical Storm Method <input type="checkbox"/> Member Community Detention Standards as required by Community Stormwater Management Code in place at the time of construction 	
7. Signature:	8. Date:

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APPENDIX E1 – EDUCATION CREDIT APPLICATION

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Appendix E1: Education Credit Application

NOTE - Customers must also fill out Appendix A: General Application

1. School or School District Name:
2. List Schools That Apply:
3. Program Information: Grade Levels Offered at School/School District _____ Estimated Number of Students Reached Each Year _____
4. Method for obtaining credit (check all that apply) <ul style="list-style-type: none"> <input type="checkbox"/> Option 1 - Watershed Education Curriculum (NEORSO-provided) Grade levels using Option 1 _____ <input type="checkbox"/> Option 2 - School Curriculum Grade levels using Option 2 _____ <input type="checkbox"/> Option 3 - Informal Science Institution Program(s) <ul style="list-style-type: none"> Grade level(s) using Option 3 _____ Name of program _____ Name of institution _____ Grade level(s) using Option 3 _____ Name of program _____ Name of institution _____ Grade level(s) using Option 3 _____ Name of program _____ Name of institution _____

I hereby certify that, under penalty of perjury, that the information provided by me in this application is the truth to the best of my knowledge and belief.

Signature of teacher or administrator _____

Instructions for Completing the Education Credit Application:

1. School or School District Name
2. List Schools that Apply – Provide a list of the school names that are to be included for an education credit. If the list does not fit in box 2, attach a separate and complete list to the application, and note in box 2, “See Attached List”.
3. Program Information: Fill in the program information for all schools that are to be covered under the education credit.
4. Select the option(s) that is being used to satisfy the Education Credit requirements and indicate which grades are using that option.

**APPENDIX E2 – OPTION 2 & OPTION 3 –
SCHOOL CURRICULUM
DAILY LESSON PLAN**

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Appendix E2: Option 2 - Option 3 Curriculum Daily Lesson Plan

School: _____

Teacher: _____

School Year: _____

Grade Level: _____

Title of Lesson:
Duration:
Learning Objectives:
Standards Used:
Activity (if applicable):
Materials/Resources (if applicable):

Complete one plan for each lesson. Please use additional pages to provide complete lesson plans.

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**APPENDIX E3 – EDUCATION CREDIT
FINAL REPORT**

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Appendix E3: Education Credit Final Report

1. School or School District Name:
2. List Schools That Apply and Grade Levels Offered:
3. Program Information: Grade Levels that used Option 1: _____ Grade Levels that used Option 2: _____ Grade Levels that used Option 3: _____ Actual Number of Students Reached (total) _____
4. Comments (please provide any feedback that you would like):

I hereby certify that, under penalty of perjury, that the information provided by me in this application is the truth to the best of my knowledge and belief.

Signature of teacher or administrator _____

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APPENDIX F – RIPARIAN AND WETLAND SETBACK REQUIREMENTS

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Appendix F: Riparian and Wetland Setback Requirements

Applicants for the Runoff Volume Credit must decrease the rate and quantity of stormwater runoff. If a wetland or watercourse is on the applicant's property, the applicant must incorporate riparian and wetland setbacks from all watercourses and Ohio EPA Category 2 and 3 wetlands. These setback requirements for receiving a credit pertain to all soil-disturbing activities, including the location of the stormwater control measures for which the applicant is seeking the Runoff Volume Credit.

The riparian and wetland setback delineation must follow the more stringent of either the member community regulations or the following requirements:

- For sites with greater than 50% impervious surface (as defined in Section 3.B): 25 foot setback for all watercourses and category 2 and 3 wetlands.
- For sites with 50% or less impervious surface (as defined in Section 3.B): the following setback widths are required.
 - A. Riparian setbacks are measured in a horizontal distance from the ordinary high water mark of a watercourse at the following widths:
 1. A minimum of 300 feet on either side of all watercourses draining an area greater than 300 square miles.
 2. A minimum of 120 feet on either side of all watercourses draining an area greater than 20 square miles and up to 300 square miles.
 3. A minimum of 75 feet on either side of all watercourses draining an area greater than ½ square mile and up to 20 square miles.
 4. A minimum of 25 feet on either side of all watercourses draining an area less than ½ square mile and having a defined bed and bank.
 - B. Wetland setbacks are measured in a perpendicular direction from the defined wetland boundary. Wetland setbacks widths are as follows:
 1. A minimum of 120 feet surrounding all Ohio EPA Category 3 wetlands.
 2. A minimum of 75 feet surrounding all Ohio EPA Category 2 wetlands.
 - C. The following conditions also apply to riparian and wetland setbacks:
 1. Riparian and wetland setbacks shall be preserved in their natural state.
 2. Where the 100-year floodplain is wider than a minimum riparian setback the minimum riparian setback shall be extended to the outer edge of the 100-year floodplain. The 100-year floodplain is defined by FEMA.
 3. Where a wetland is identified within a minimum riparian setback, the minimum riparian setback width shall be extended to the outermost boundary of the wetland, regardless of wetland category.

Relevant Definitions:

- Watercourse - Means any brook, channel, creek, river, or stream, either continuous or intermittent, having an established, and defined bed and bank, as determined by the ordinary high water mark, and definite direction of flow.
- Wetland - means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs, and similar areas. (40 C.F.R. 232, as amended).

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**APPENDIX G1 – APPLICATION FOR
RENEWAL OF STORMWATER QUANTITY
AND QUALITY CREDITS AND
REDUCTION OF IMPERVIOUS AREA**

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Appendix G1: Application for Renewal of Stormwater Quantity and Quality Credits and Reduction of Impervious Area

1. Applicant Name:	
2. Contact Name (if different than applicant):	
3. Pemanent Parcel Number:	
4. NEORSD Account Number:	
5. Property Address: Street number: City: Zip Code:	
6. Mailing Address (if different): Street number: City: Zip Code:	
7. Phone Number:	
8. Email Address:	
9. Credit Renewal Applying For: <input type="checkbox"/> Quality Credit - SCM <input type="checkbox"/> Quality Credit - Industrial NPDES <input type="checkbox"/> Quality Credit - Agricultural Conservation Planning <input type="checkbox"/> Quantity Credit	
10. Reduction of Impervious Surface Renewal Applying For: <input type="checkbox"/> Pervious pavement <input type="checkbox"/> Green Roof	
11. Supporting Documentation Checklist <input type="checkbox"/> Completed Inspection and Maintenance Form (Quality, Quantity, Reduction of Impervious Surface Credits) <input type="checkbox"/> Recent photographs of the SCM (Quality, Quantity, Reduction of Impervious Surface Credits) <input type="checkbox"/> Completed Agricultural Conservation Planning Certification Form <input type="checkbox"/> Completed NPDES Permit Compliance Certification Form	
I hereby certify that: <input type="checkbox"/> The impervious area of this parcel(s) remains unchanged since the date of credit <input type="checkbox"/> The Stormwater Control Measure(s) have been maintained and continue to function as intended and as submitted in the original credit application. The information contained in the renewal application and the attached documents is, to the best of my knowledge, correct and represents a complete and accurate statement. I further understand that the stormwater credit will be based on the information provided and the Northeast Ohio Regional Sewer District may suspend or revoke the credit if a later determination indicates that the information provided was inaccurate. I hereby grant permission for NEORSD or it authorized agents, employees, or consultants to enter the property for the purpose of inspecting the facility/structure or system for which the stormwater credit is requested.	
Signature:	Date:

Mail to: NEORSD, Watershed Programs Department, 3900 Euclid Ave., Cleveland OH 44115

Instructions for Completing the Renewal Application:

1. Applicant Name - Name of individual property owner, business or other incorporated entity, or school or school district.
2. Contact Name - particularly in the case of a non-residential or group application, the name of the contact who is submitting the application.
3. Permanent Parcel Number - Each piece of land that is sold has its own Permanent Parcel Number. This information can be found through the County Auditor's office or website, or from a source such as your local library. If there are multiple permanent parcel numbers, attach a separate and complete list to the application, and note in box 3, "See attached list".
4. NEORS D Account Number - The account number can be found on the statement.
5. Property Address - If there are multiple property addresses, attach a separate and complete list to the application, and note in box 5, "See attached list".
6. Mailing Address – Include if different from box 5.
7. Phone Number – Of primary contact for the application.
8. Email Address – Of primary contact for the application.
- 9 & 10. Credit Renewal Applying For - Select the credits for which the applicant is applying for renewal. Multiple boxes may be selected.
11. Supporting Documentation Checklist - For the Quantity, Quality, Pervious Pavement, and Green Roof Credits the inspection and maintenance form must be filled out and signed along with recent photographs of the SCM. For the Industrial NPDES Permit and Agricultural Conservation Planning Credits the appropriate forms must be filled out.

**APPENDIX G2 – APPLICATION FOR
RENEWAL OF RESIDENTIAL
STORMWATER CREDITS**

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Appendix G2: Application for Renewal of Residential Stormwater Credits

1. Applicant Name:
2. Contact Name (if different than applicant):
3. Pemanent Parcel Number:
4. NEORSD Account Number:
5. Property Address: Street number: City: Zip Code:
6. Mailing Address (if different): Street number: City: Zip Code:
7. Phone Number:
8. Email Address:
9. Stormwater Control Measure Renewal Applying For: <input type="checkbox"/> Rain Garden <input type="checkbox"/> On-Site Stormwater Storage <input type="checkbox"/> Impervious Surface Reduction <input type="checkbox"/> Vegetated Filter Strip <input type="checkbox"/> Pervious Pavement
10. Supporting Documentation Checklist <input type="checkbox"/> Signed Renewal Application <input type="checkbox"/> Recent photographs of the Stormwater Control Measure(s)
I hereby certify that: <input type="checkbox"/> The impervious area of this parcel(s) remains unchanged since the date of credit <input type="checkbox"/> The Stormwater Control Measure(s) have been maintained and continue to function as intended and as submitted in the original credit application. The information contained in the renewal application and the attached documents is, to the best of my knowledge, correct and represents a complete and accurate statement. I further understand that the stormwater credit will be based on the information provided and the Northeast Ohio Regional Sewer District may suspend or revoke the credit if a later determination indicates that the information provided was inaccurate. I hereby grant permission for NEORSD or it authorized agents, employees, or consultants to enter the property for the purpose of inspecting the facility/structure or system for which the stormwater credit is requested.
Signature: _____ Date: _____

Mail to: NEORSD, Watershed Programs Department, 3900 Euclid Ave., Cleveland OH 44115

Instructions for Completing the Renewal Application:

1. Applicant Name - Name of individual property owner, business or other incorporated entity, or school or school district.
2. Contact Name - particularly in the case of a non-residential or group application, the name of the contact who is submitting the application.
3. Permanent Parcel Number - Each piece of land that is sold has its own Permanent Parcel Number. This information can be found through the County Auditor's office or website, or from a source such as your local library.
4. NEORS D Account Number - The account number can be found on the statement.
5. Property Address -
6. Mailing Address – Include if different from box 5.
7. Phone Number – Of primary contact for the application.
8. Email Address – Of primary contact for the application.
9. Stormwater Control Measure Renewal Applying For - Select the credits for which the applicant is applying for renewal. Multiple boxes may be selected.
10. Supporting Documentation Checklist - The renewal application must be filled out and signed along with recent photographs of the stormwater control measure.