



SECTION I: APPLICATION PROCEDURE

Part A: Getting Started

Newark Stormwater Utility

34 South 5th Street

P.O. Box 4100

Newark, Ohio 43058-4100

<http://www.newarkohiowater.net/stormwater>

Phone: 740-670-7762 Fax: 740-349-6794

Each of the credits offered by the City of Newark's stormwater program are based on four primary stormwater management standards. We encourage you to use the four primary documents as baseline guidelines for preparing your credits application, as follows:

1. The City of Newark Stormwater Design Manual;
2. The City of Newark Subdivision Regulations;
3. Ohio Department of Transportation (ODOT) Location & Design Manual, Volume Two, Drainage Design, available at <http://www.dot.state.oh.us/se/hy/default.htm> ;
4. It is suggested that you obtain a copy of the most current "*Rain Water and Land Development*", Ohio's Standards for Stormwater Management Land Development and Urban Stream Protection for support documentation from the Ohio Department of Natural Resources, Division of Soil and Water Conservation, Fountain Square Court, Columbus, Ohio 43224 (614) 265-6610 or fax (614) 262-2064.
5. After review of the guidelines and the credit application package, we would encourage you to contact the Office of the City Engineer to determine what existing data may be available to you for use in completing the credit application package.

The following are key criteria that must be considered for every credit application:

1. The maximum credit to be received will not exceed 50% of the stormwater bill.
2. Credit will be offered in increments of 5%, rounded to the higher increment.
3. Length of review by City staff will be approximately 4 to 6 weeks.
4. Credit will only be offered for that portion of the property that the management practice applies. Credits may not be transferred to other properties.
5. Credit applications will not be accepted from any property that has a delinquent utility account.
6. Management practices submitted for credit consideration shall meet current City of Newark drainage requirements where appropriate. Generally these requirements are:
 - Flow must be restricted if existing storm sewer cannot be shown as adequate to handle increased discharge.
 - All excess stormwater runoff must be retained within the boundaries of the development or stormwater easement and stored in a detention facility as described in the City of Newark Stormwater Design Manual, the City of Newark Subdivision Regulations and/or the Ohio Rainwater and Land Development Manual.
 - The engineer must determine the storm duration that produces the largest detention requirement and design for that volume.
7. Only those non-residential family properties that contain 5 or more ERU's may apply and/or qualify for credits.
8. Credits are not available solely based on compliance with the statewide Construction Activity general permit. However, if a facility is properly designed and properly constructed to meet the City of Newark stormwater minimum requirements, it can be reviewed and potentially receive credit under this credit program.
9. The application fee will be waived for those applicants that apply for credit until further notice.

Part B: Assemble Data

Supporting data is needed to support each credit applied for. The type of supporting data varies depending on the type of credit requested as shown in the table below.

Supporting Data Requirements:

The following is a list of potential supporting data that will be required with your credit application submittal. Please provide as all pertinent information with your application. This will expedite the City's review process of your credit application. Table 1 illustrates the minimum required information for each of the given management practices and credits. You are encouraged to provide additional information not included in the matrix that will be appropriate for your property and assist in evaluating your properties credits.

Site Plans and Surveys

- ☐ Adjoining lakes, streams, or other major drainage ways
- ☐ Existing and proposed contours
- ☐ Impervious delineation and labels (buildings, driveways, etc.)
- ☐ Drainage area map, including off-site areas draining through the site
- ☐ Size and location of all stormwater structures
- ☐ Construction Drawings if not previously approved
- ☐ Plat Maps
- ☐ Engineer or Surveyor Stamp
- ☐ County Auditor Maps
- ☐ Other permits

Calculations

- ☐ Hydrologic calculations for undeveloped and developed land uses
- ☐ Hydraulic calculations stage-discharge relationships of controls
- ☐ Floodplain encroachment calculations

Maintenance Management Plan and Schedule

- ☐ Maintenance Management Plan
- ☐ Maintenance schedule of all operations that affect the efficiency of the structural control including mowing, sediment removal, cleaning, planting, monitoring, watering, and channel restoration
- ☐ Maintenance Agreement

Easement and Deed Restriction for inspection access and long-term maintenance of BMP

- ☐ Easement
- ☐ Deed Restriction
- ☐ Other _____(Please describe)

Other Data

- | | |
|--|--|
| <input type="checkbox"/> Education Plan | <input type="checkbox"/> Pollution Prevention Plan |
| <input type="checkbox"/> Adopt A Road/Stream Application | <input type="checkbox"/> Brownfield Certification |
| <input type="checkbox"/> Clean Up Participation | <input type="checkbox"/> NPDES Permit |
| <input type="checkbox"/> Other _____ | <input type="checkbox"/> _____(Please describe) |

Table 1

Credits Application Supporting Documentation Requirements by Credit Type for Post Construction and Permanent Runoff Control Credits are as follow:

Table 1	Credit Type								
	Post Construction Stormwater Quality						Permanent Runoff Control		
	Forested and Grass Buffer Strips	Infiltration Trenches	Wet Ponds & Extended Detention	Bio Retention Areas	Stormwater Treatment BMP's	Water Quality Ponds	Detention/ Retention	Dry Wells	Catch Basin Inserts
Submission Requirements									
Site Plans			X	X	X	X	X	X	X
Site Survey	X	X	X	X	X	X	X	X	X
Calculations	X	X	X	X	X	X	X	X	X
Maintenance Management Plan	X	X	X	X	X	X	X	X	X
Maintenance Schedule	X	X	X	X	X	X	X	X	X
Easement	X	X	X	X	X	X	X	X	X
Deed Restriction	X	X	X	X	X	X	X	X	X
Engineer/Survey Stamp	X	X	X	X	X	X	X	X	X
Education Plan									
Adopt A Stream/ Road Plan									
Clean Up Documentation									
Proof of Brownfield Documentation									
Pollution Prevention Plan	X	X	X		X				X

Table 2

Credits Application Supporting Documentation Requirements by Credit Type for Stream Channel Construction and Other Credits are as follow:

Table 2	Credit Type											
Submission Requirements	Stream Channel Construction					Other						
	Grass Line Conveyance Channels (Dry Swales)	Riparian Water Quality	Vegetated Stream Buffers	Open-Channel Maintenance	Stream restoration	Experimental BMP's	Direct Discharge	Individual Industrial NPDES Permit	Brownfield Reuse	Preservation/Flood Hazard Area	Education	Adopt a Road/Stream
Site Plans			X	X	X	X	X	X	X			
Site Survey	X	X	X	X	X	X	X	X	X			
Calculations	X	X	X	X	X	X	X	X	X			
Maintenance Management Plan	X	X	X	X	X	X	X	X	X			
Maintenance Schedule	X	X	X	X	X	X	X	X	X			
Easement	X	X	X	X	X	X	X	X	X			
Deed Restriction	X	X	X	X	X	X	X	X	X			
Engineer/Survey Stamp	X	X	X	X	X	X	X	X	X			
Education Plan									X	X		
Adopt A Stream/Road Plan											X	
Clean Up Documentation											X	
Proof of Brownfield Documentation												X
Pollution Prevention Plan	X	X	X					X	X			

Part C: Credit Estimation Calculation

Step 1: Calculate the estimated impervious area of property

- Obtain a “user fee” from the billing statement.
- Divide user fee by \$7.55/ERU to determine ERU’s.
- Multiply ERU’s by 2,600 sq.ft. to determine the approximate amount of impervious area on site.
- **(NOTE: Because bills are based on a rounded ERU, the actual impervious area on the property may be different)**

Step 2: Determine area available for credit on site.

- Determine the percentage of property area benefited by the management practice and BMP.
- Multiply fraction of property benefited by total impervious area to obtain modified Impervious Area for amended charge.

Part D: Instructions for Completing the Credits Application Form

Section A - Applicant

- Name, address, e-mail and phone number of the person or persons responsible for stormwater charge.
- Account Number from stormwater billing statement.

Again, we encourage you to use the two primary documents as baseline guidelines for preparing your credits application, including, the City of Newark Stormwater Design Manual, the City of Newark Subdivision Regulations, and it is suggested that you obtain a copy of the most current “Rain Water and Land Development” Ohio’s Standards for Stormwater Management Land Development and Urban Stream Protection. This will be used the primary guidelines and documentation to approve your application. In addition, if you have documentation from other states that offer experimental BMP’s not listed in this application, the City of Newark will consider “experimental BMP’s that are proven to work as long as the documentation is included as part of your credits application documentation.

Section B - Site Information

- Location where credit is to be applied.
- Impervious area and ERU’s for entire property are based on applicant’s estimate (See Part C-Credit Estimation Calculation above).

Section C – Engineer/Surveyor of Record (If required by credit)

- Name, address, e-mail and phone number of the Certifying Engineer.
- Certification includes engineer’s stamp.

Section D - Data Submittal Check List

- List material being submitted in un-shaded areas.

Section E - Credit Summary

- Applicant lists credits being applied for.

Submit Data, Application and Fee to:

Lindsey Brighton
Stormwater Coordinator
Stormwater Utility
34 S. 5th Street, P.O. Box 4100
Newark, Ohio 43058-4100
<http://www.newarkohiowater.net/stormwater>
Phone: 740-670-7762 Fax: 740-349-6794

Application Fee: **Applications fee will be waived until further notice.**

Part E: Final Requirements to Obtain Credit

- Step 1. Construct the credit management facility in accordance with the approved plans, specifications, and design calculations and obtain an inspection of the credit management facility by the Stormwater Utility Department. Credit will become effective when the structure and/or credit requirements has been completed and operating properly as certified by the City of Newark.
- Step 2: Provide an easement, deed restriction, or land purchase agreement that restricts the use of the property for anything but the intended management facility. Submit copy of recording instrument. (i.e. plat)
- Step 3: Provide regular maintenance for the facility in accordance with the maintenance management plan
- Step 4: Submit an annual management and maintenance report on each facility. At the discretion of the City of Newark Stormwater Utility Department staff, inspections may be performed in order to confirm the operation and maintenance of the applied management practice or compliance with the approved management plan.

PART F: General Guidelines

1. Management practices submitted for credit consideration shall meet current City of Newark drainage requirements where appropriate. Generally, these requirements are:
 - Flow must be restricted if existing storm sewer cannot be shown as adequate to handle increased discharge.
 - All excess Stormwater runoff must be retained within the boundaries of the development and stored in a detention facility capable of containing the excess runoff resulting from a 25-year storm with duration up to 24 hours.
 - Engineer must determine the storm duration that produces the largest detention requirement and design for that volume.
 - Unless a liner is used to prevent vegetative growth, a safety factor of 1.5 must be applied to the calculated volume.
2. The maximum credit to be received will not exceed 50% of the Stormwater bill.
3. Only those non-residential family properties that contain 5 ERU's or more may apply and/or qualify for credits.
4. No partial credit will be given for any management practice.
5. This does not include properties that fall under the state-wide NOI general permit.
6. Length of review by City staff will be approximately 4 weeks.
7. Summary of Credit Calculation Process

- Step 1. Calculate the estimated impervious area of property prior to credit award.
- Step 2. Determine amount of impervious area subject to credit.
- Step 3. Determine estimated credit and modified Stormwater service fee.

Abbreviations

ERU – Equivalent Residential Unit

sf – square feet

* – Multiplied by ERU per month

SECTION II: CREDITS REQUIREMENTS

Post-Construction Stormwater Quality Treatment:

Forested Buffer and Grass Filter Strips;
Infiltration Trenches;
Wet Pond and Extended Detention;
Bio Retention Areas;
Stormwater Treatment BMP's;
Water Quality Ponds.

Permanent Runoff Control:

Detention/Retention; **

Catch Basin Inserts;

Dry Wells (Maintenance Only);

** The detention/retention credit will also apply to regional residential facilities

Stream Channel Construction and Restoration:

Grass Line Conveyance Channels (Dry Swales);
Riparian Water Quality
Vegetated Stream Buffers;
Open-Channel Maintenance;
Stream Restoration;

Other Credits:

Experimental BMP's;
Direct Discharge;
Individual Industrial NPDES Permit;
Brownfield Reuse;
Preservation/ Flood Hazard Area;
Education;
Adopt a Road/Stream.

1. Post Construction Stormwater Quality Treatment

The Post Construction Stormwater Quality Treatment credit is offered to properties that perform an activity or activities that reduce the burden on the stormwater system. This will include “natural” as well as manmade stormwater system structures that are properly maintained and are operating for the purposes of water quality and water quantity benefits, and to reduce the burden on the City maintained stormwater system.

Forested Buffer AND Grass Filter Strips;	30%
Infiltration Trenches;	30%
Wet Pond and Extended Detention;	30%
Bio Retention Areas;	30%
Water Quality Ponds.	30%
Stormwater Treatment BMP's;	30%

2. Permanent Runoff Control (detention/retention)

The Permanent Runoff Control (detention/retention) credit option is the most widely used method of credits by a majority of Stormwater programs throughout the United States. Moreover, this method is used and accepted by most engineers as the best example of a Peak flows facility. This credit also applies to wet pond and extended credits.

The principal is to delay (or in the case of retention completely remove all flows) the highest flow from impacting the drainage system. This is accomplished through the construction of small ponds or dry ponds that fill up during rainstorms. This is the most common form of stormwater management practice.

This credit will apply to regional non-residential facilities that are properly operating and properly maintained for regional detention/retention facilities that are owned and operated by a property owner. The first 10% of this credit will be applied if the facility was installed according to the October 1994 Stormwater Design Manual regulations and is currently operating and maintained as required. The remaining 20% credit will be applied on a sliding scale depending on many factors and judgment by the City engineer or his/her agent.

This credit will also apply only to regional residential facilities that are properly operating and properly maintained for subdivision (regional) detention/retention facilities that are owned and operated by a homeowner's association. One and only one credit “payment” will be made to the homeowner's association on an annual basis. It will be up to the homeowner's association how the credit payment will be allocated back to the individual homeowners. The City of Newark will not reduce each of the individual residential stormwater bills. Reducing individual homeowner's bills will be inconsistent with the overall stormwater program policies and procedures. Similarly, to the non-residential credit process discussed in the above paragraph, the first 10% of this credit will be applied if the facility was installed according to the October 1994 Stormwater Design Manual regulations and is currently operating and maintained as required. The remaining 20% credit will be applied on a sliding scale depending on many factors and judgment by the City engineer or his/her agent.

In order for residential property owners to qualify for this type of credit the following requirements will need to meet:

- Submit this credit application and all of the appropriate forms and site plans etc
- Residential properties in a sub division type setting;
- There needs to be an active owner's association;
- The detention/retention facility must be operating properly as originally designed;
- The detention/retention facility must be maintained regularly
- Only detention/retention facilities built and installed after October 1994 and based on the 1994 Stormwater design manual;
- Sign and submit an annual maintenance agreement included in this document

Design Features: Detention times vary with most being relatively short. Flow lengths are short and direct to outlet works, and depths vary depending on site conditions.

- In order to receive detention/retention credits, the non-residential property owner will need to submit an application, including application fee, right of entry easement, if applicable, and any required engineering plans and calculations stamped by a registered professional engineer. If approved, the credit shall be placed on the appropriate stormwater bill.
- The Stormwater Utility Department shall inspect the detention/retention facility prior to approving the credit and periodically after the credit is issued to ensure compliance with the approved plans.
- If inspections find that the facility has been altered or is not maintained to provide the approved detention/retention, the City may:
 - Require corrective action;
 - Reduce the credit to a level comparable with the detention/retention provided;

Detention/Retention meets minimum standards;	10%
Detention/Retention exceeds minimum standards;	30%
Dry Wells (Maintenance Only);	30%

3. Stream Channel Restoration Credit

The Stream Channel Restoration Credit is offered to properties that perform a restoration activity or activities that would otherwise be required to be performed by City staff. This should include “natural” and/or man-made stormwater system structures that are properly maintained and are operating for the purposes of water quality and water quantity benefits, and to reduce the burden on the City maintained stormwater system.

- In order to receive Maintenance credits, the non-residential property owner will need to submit an application, including application fee, right of entry easement, if applicable, maintenance plan and any required engineering plans and calculations stamped by a registered professional engineer. If approved, the credit shall be placed on the appropriate stormwater bill.
- The Stormwater Utility Department shall inspect the property to determine if the proposed maintenance will reduce operation and maintenance costs to the City. If the proposal is approved for maintenance credit, the Stormwater Utility Department shall periodically inspect the property to ensure compliance with the approved maintenance plan.

Grass Line Conveyance Channels (Dry Swales);	30%
Riparian Water Quality	30%
Vegetated Stream Buffers;	20%
Open-Channel Maintenance;	30%
Stream Restoration;	50%

4. Other Credits

A. Education

Education credits are provided to public and private schools (K through 12) for the purpose of providing water (stormwater, flooding, water quality, and watershed management) type education programs to students. To obtain this credit public and private schools would teach a water curriculum in each grade level. Programs such as **“Project Wet”** and **“Globe”** are an example of a spiral water-related curriculum that would provide a basis for credit in the City of Newark school system.

Stormwater education credits of 50% of the stormwater bill may be granted for approved programs providing public awareness and education on stormwater issues as follows:

- This program is available to all schools as defined in the zoning code, public or private that offer a compulsory education curriculum for grades K through 12 or part thereof.

- Where a site is jointly used by a school and another use (e.g. church) the stormwater fee will be prorated based on usage and the credit will be issued to the school portion of the fee;
- Water Quality Educational Curriculum for Public/private schools would utilize a water curriculum in grade levels to be determined. Appropriate guides to be used include *Project WET*, *GLOBE*, *Project WILD Aquatic*, and *Healthy Water, Healthy People*. Other water related materials may be utilized. Such programs would be in-serviced by the City of Newark staff for 20% of a schools certified (licensed) staff. (or other non certified staff?) This training in turn will be presented to 20% of the schools population.
- Project WET, Project Aquatic WILD, and/or GLOBE type programs should be integrated into standard curriculum for 20% of the students in the school (which equates into approximately once grade level);
- Schools will conduct at least one school-wide (20% or more which is approximately One grade level) awareness activity to be chosen from: water festival day, poster contest, or litter collection day. Additional opportunities include a stenciling project, brochure development, public service announcements, videos, or other projects as approved by City staff.
- In order to receive educational credits, the school will need to submit an application and provide supporting documentation. The application will be due by December 15 to receive credits for the following year. The plan shall be reviewed and approved by the City Engineer. Once approved, the credit shall be placed on the appropriate stormwater bill.
- Upon completion of the educational plan or no later than June 1 of each year which corresponds to the end of the school year, the school shall submit an annual report indicating compliance with the approved plan. The annual report shall be broken down by the types of activities and indicate the number of participants. If the school did not substantially comply with the plan, the report will include an explanation of the failure and any needed corrective action. Other reporting requirements may be required as part of the plan approval and shall be included in the annual report.
- The Stormwater Coordinator will review the annual report. If upon review, the school did not substantially comply with the approved plan, the City may:
 - Require additional activities as a corrective action;
 - Reduce the education credit to a level comparable with the compliance;
 - Refuse approval of any new education plan.
- **Potential Storm Water Guides for the Education Credits**
 - Healthy Water, Healthy People - HWHP is an EPA approved curriculum and will give all the opportunity to create additional partnerships. The purpose of this publication is to raise educators' awareness and understanding of water quality topics and issues by demonstrating the relationship of water quality to personal, public, and environmental health. This publication gives teachers, students, non-formal educators, water managers, treatment plant operators and citizens an opportunity to explore water quality topics in an interactive, easy-to-use, hands-on format.
 - Project WET (Water Education for Teachers) - Project WET is a nonprofit water education program and publisher for educators and young people ages 5 to 18. The program facilitates and promotes awareness, appreciation, knowledge, and stewardship of water resources through the dissemination of classroom-ready teaching aids and the establishment of internationally sponsored Project WET programs.
 - GLOBE (Global Learning and Observations to Benefit the Environment) - GLOBE is a worldwide hands-on, primary and secondary school-based education and science program. For students, GLOBE provides the opportunity to learn by taking scientifically valid measurements in the fields of atmosphere, hydrology, soils and land cover depending upon their local curricula. It also allows them to create maps and graphs on the free interactive web site to analyze data sets while collaborating with scientist and other GLOBE students around the world. You can visit the Globe website at <http://www.globe.gov/>
 - Project WILD Aquatic - The *Project WILD Aquatic K-12 Curriculum and Activity Guide* emphasizes aquatic wildlife and aquatic ecosystems. It is organized in topic units and is based on the Project WILD conceptual framework. Because these activities are designed for integration into existing courses of study, instructors may use one or many Project WILD Aquatic activities or the entire set of activities may serve quite effectively as the basis for a course of study.

City of Newark Storm Water Utility Education Credit Application

School: _____

Contact Name: _____

Address: _____

Phone #: _____ Email: _____

of Staff: _____ # of Students: _____

A) Twenty percent of staff will participate in water quality in-service program.

Please list:

Name	Grade/ Subject	Contact Number	Email

Attach additional information as needed.

B) Choose from the following:

- | | |
|--|--|
| <input type="checkbox"/> Water Festival Day | <input type="checkbox"/> Stenciling Project |
| <input type="checkbox"/> Poster Contest | <input type="checkbox"/> Brochure Development |
| <input type="checkbox"/> Essay Contest | <input type="checkbox"/> Public Service Announcement |
| <input type="checkbox"/> Litter Collection Day | <input type="checkbox"/> Multimedia |
| <input type="checkbox"/> Other: _____ | |

Please describe project chosen from above: _____

School Administrator

Date

Approved:

City of Newark

Date

B. Adopt a Stream, Road and/or Park

- In order to receive credit for participation in an approved Adopt-A-Road Program, the non-residential property owner will need to submit an application including application fee, and a request for roadway designation.
- In order to receive credit for participation in a sanctioned cleanup program, the non-residential property owner will need to submit an application including application fee and tentative list of participants. Participants must register at the event and identify themselves as credit program participants. A single participant may be credited only to one stormwater account.
- To meet the 20% credit, this credit will be applied on a per event basis for every one mile of stream or road. The event will need prior written approval by the City Engineers office or his/her agent.

SECTION III: CREDIT CALCULATIONS EXAMPLES

Four example credit calculations are shown in this section. These examples are provided as a guide for the preparation of a credit calculation for your specific situation and property. For each example, a graphic, a listing of “given” conditions and the necessary steps to calculate the appropriate credits for your property is provided.

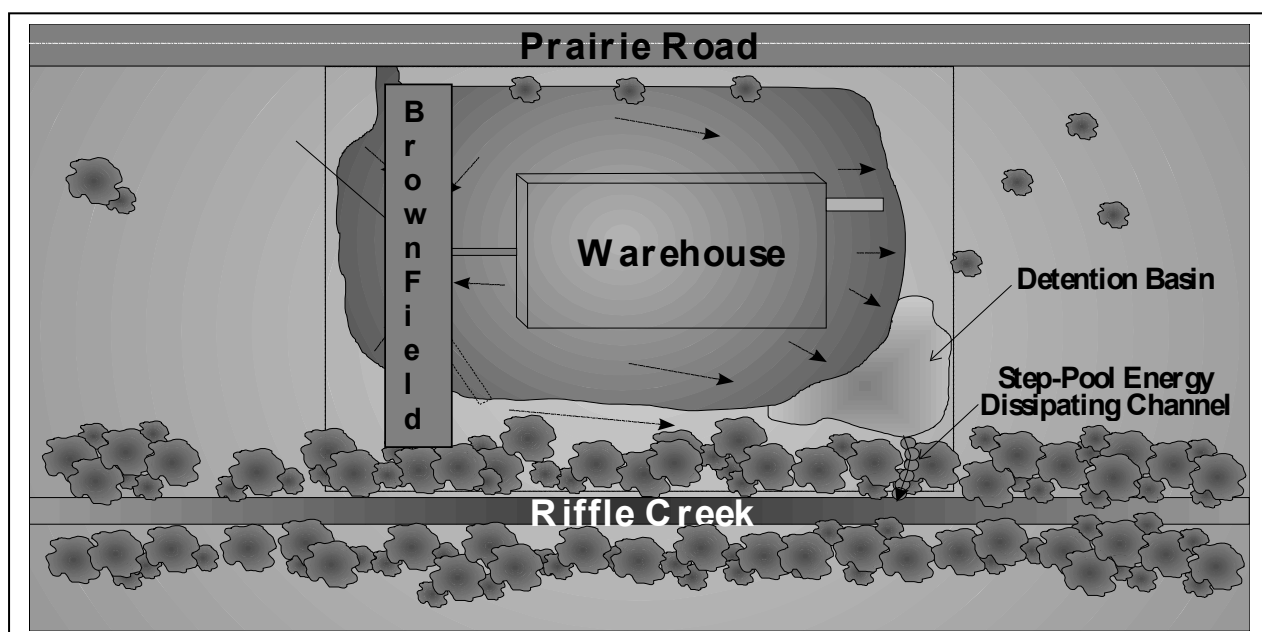
Summary of Credit Calculation Process

- Step 1. Calculate the estimated impervious area of property prior to credit award.
Step 2. Determine amount of impervious area subject to credit.
Step 3. Determine estimated credit and modified stormwater service fee.
Abbreviations:

ERU – Equivalent Residential Unit,
sf – square feet,
* – Multiplied by ERU per month

Example 1:

A developer has submitted preliminary plans to construct a warehouse on a 10-acre brownfield site. He has submitted an application for two credits including a Brownfield credits and a detention/retention credit for his basin.



Given:

- 10-acre site with 3 acres of impervious area (130,680 sq. ft. of impervious area)
- The detention/retention basin receives 100% of drainage from the impervious area
- Development site has brownfield designation
- 10% credit available for brownfield site for a duration of five years
- 30% credit available for the detention pond

Step 1: Calculate the estimated impervious area, ERU, and user fee for the property, prior to applying the credit.

- 3 acres x 43,560 (sq. ft. in acres) = 130,680 sq. ft. of impervious area
- Calculate the number of ERU for the example property
 - 130,680 sq. ft. of impervious area divided by 2,600 (ERU) = 50.26 ERU, rounded to 50 ERU
- Calculate User Fee based on impervious area of property (using 2021 ERU rate)
 - 50 ERU x \$7.40 = \$370.00 per month

Step 2: Determine amount of impervious area subject to credit

- Brownfield = 10% of total impervious area
 - 130,680 sq. ft. * 10% = 13,068 sq. ft.
- Retention/Detention Basin = 30% of total impervious area
 - 130,680 sq. ft. * 30% = 39,204 sq. ft.

Step 3: Calculate Credits Percentage

- Brownfield
 - 13,068 sq. ft. / 2,600 = 5.03 ERU Credit, rounded to a 5 ERU reduction
- Detention/Retention Basin
 - 39,204 sq. ft. / 2,600 = 15.08 ERU Credit, rounded to a 15 ERU reduction

Total Credit Reduction = 15 ERU + 5 ERU = 20 ERU

Total % Credit Reduction = 20 ERU / 50 ERU = 40% for first five years

Total % Credit Reduction = 15 ERU / 50 ERU = 30% after five years

Step 4: Determine estimated credit and modified stormwater service fee

Reduction (\$) = ERU * % Credit * \$7.40/ERU

Reduction (\$) = 50 * 40% * \$7.40/ERU = \$148.00 (for first five years)

Reduction (\$) = 50 * 30% * \$7.40/ERU = \$111.00 (after five years)

Estimated Stormwater Utility Bill = User Fee (\$) - Reduction (\$)

Estimated Stormwater Utility Bill = \$370.00 – \$148.00 = \$222.00 (A reduction in 20 ERUs)(for first five years)

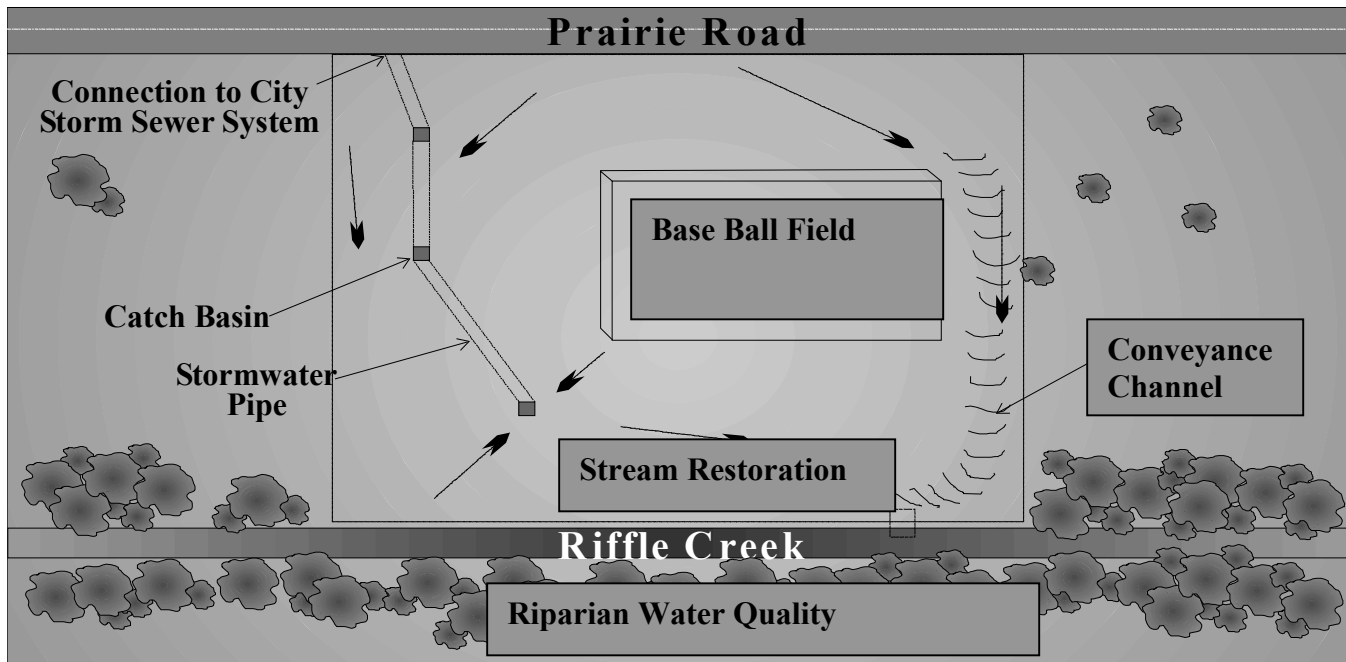
Estimated Stormwater Utility Bill = \$370.00 – \$111.00 = \$259.00 (A reduction in 20 ERUs)(after five years)

Total Credit Available and Timing

Time Period (yr.)	Brownfield Credit (\$)	Detention Basin Credit (\$)	Total Service Charge Reduction (\$)	Estimated Stormwater Utility Bill (\$)
1	37.00	111.00	148.00	222.00
2	37.00	111.00	148.00	222.00
3	37.00	111.00	148.00	222.00
4	37.00	111.00	148.00	222.00
5	37.00	111.00	148.00	222.00
> 5	0	111.00	111.00	259.00

Example 2:

A baseball field has been constructed on a 10-acre site in the City of Newark. The site meets current City of Newark drainage requirements. It includes a parking lot, building and city owned open channels that are regularly maintained by the property owner. The impervious area associated with the parking lot and building is 3 acres in size. One half of the impervious area drains to the city owned open channels. The drainage from the remaining portion of the impervious area drains directly into the City maintained storm sewer. The City has determined that restoration of Riffle Creek and maintenance in its natural state provides a water quality benefit to the City and therefore is eligible for the stream restoration and riparian water quality credit.



Given:

- 10-acre site with 50 feet of channel maintenance approved.
- Conveyance Channel Credit is a maximum of 20%.
- Riparian Water Quality is a maximum of 30%
- Stream Restoration Credit is a maximum of 50%

Step 1: Calculate the estimated impervious area, ERU, and user fee for the property, prior to applying the credit.

- 10 acres x 43,560 (sq. ft. in acres) = 435,600 sq. ft. of impervious area

- Calculate the number of ERU for the example property
 - $435,600 \text{ sq. ft. of impervious area} \div 2,600 \text{ (ERU)} = 167.5 \text{ ERU}$, rounded to 168 ERU
- Calculate User Fee based on impervious area of property (using 2021 ERU rate)
 - $168 \text{ ERU} \times \$7.40 = \$1,243.20 \text{ per month}$

Step 2: Determine the amount of impervious area subject to credit.

- Conveyance Channel Credit = 20% of total impervious area
 - $435,600 \text{ sq. ft.} \times 20\% = 87,120 \text{ sq. ft.}$
- Riparian Water Quality = 30% of total impervious area
 - $435,600 \text{ sq. ft.} \times 30\% = 130,680 \text{ sq. ft.}$
- Stream Restoration Credit = 50% of total impervious area
 - $435,600 \text{ sq. ft.} \times 50\% = 217,800 \text{ sq. ft.}$

Step 3: Calculate Credits Percentage

- Conveyance Channel Credit
 - $87,120 \text{ sq. ft.} \div 2,600 = 33.5 \text{ ERU Credit}$, rounded to a 33 ERU reduction
- Riparian Water Quality
 - $130,680 \text{ sq. ft.} \div 2,600 = 50.3 \text{ ERU Credit}$, rounded to a 50 ERU reduction
- Stream Restoration Credit
 - $217,800 \text{ sq. ft.} \div 2,600 = 83.8 \text{ ERU Credit}$, rounded to an 84 ERU reduction

Total Credit Reduction = 33 ERU + 50 ERU + 84 ERU = 167 ERU

Total % Credit Reduction = $167 \text{ ERU} \div 168 \text{ ERU} = 99\%$

Step 3: Determine estimated credit and modified stormwater service fee

Reduction (\$) = $\text{ERU} \times \% \text{ Credit} \times \$5.41/\text{ERU}$

Reduction (\$) = $50 \times 20\% \times \$5.41/\text{ERU} = \54.10 Conveyance Channel Credit

Reduction (\$) = $50 \times 50\% \times \$5.41/\text{ERU} = \135.15 Stream Restoration Credit

Reduction (\$) = $50 \times 30\% \times \$5.41/\text{ERU} = \81.15 Riparian Water Quality Credit

Reduction (\$) = $50 \times 100\% \times \$5.41/\text{ERU} = \270.50 (All 3 Qualifying Credits)*

- Maximum % credit allowed for any property is 50%

- Reduction (\$) = $50 \times 50\% \times \$5.41/\text{ERU} = \135.15

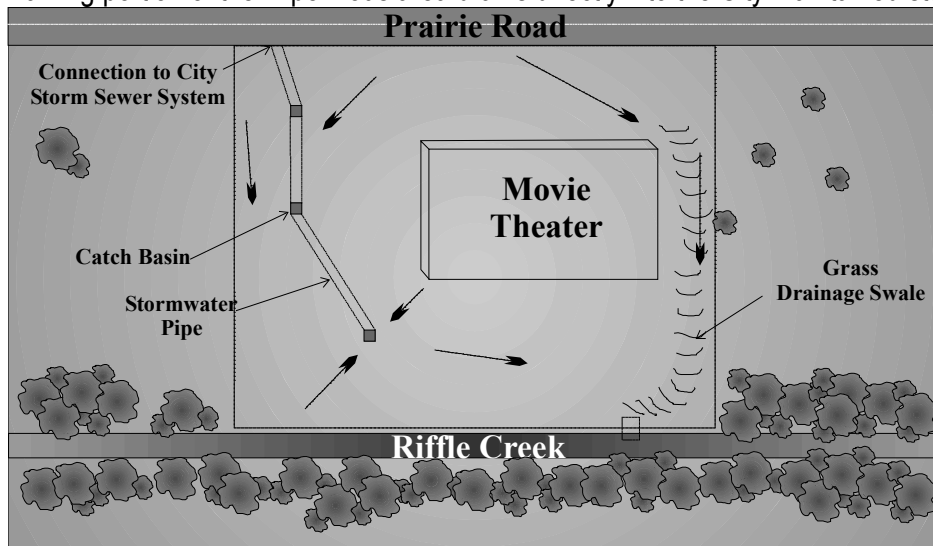
Estimated Stormwater Utility Bill = User Fee (\$) - Reduction (\$)

Estimated Stormwater Utility Bill = $\$270.50 - \$135.15 = \$135.15$ (A reduction in 25 ERUs)

**** NOTE: All credit reductions are based on the corresponding percentages of the impervious area calculations and then converting into ERU's.**

Example 3:

A movie theatre has been constructed on a 10-acre site in the City of Newark. The site meets current City of Newark drainage requirements. It includes a parking lot, building and drainage swales. The impervious area associated with the parking lot and building is 3 acres in size. One half of the impervious area drains through the drainage swales. The drainage from the remaining portion of the impervious area drains directly into the City maintained storm sewer.



Given:

- 10-acre site with 3 acres of impervious area (130,680 sq.ft. of impervious area)
- Drainage swales receives 50% of the drainage from the impervious area
- 30% credit is available for impervious area that drains through the drainage swales

Step 1: Calculate estimated impervious area of property

User fee: \$270.50

$$\text{A. A. ERU} = \text{User Fee} / \text{Credit}$$

$$\text{ERU: } \$270.50 / (\$5.41/\text{ERU}) = 50.00$$

Impervious Area (IA):

$$\text{IA} = \text{ERU} * 2,600 \text{ sq. ft.} = 50.00 * 2,600 \text{ sq. ft.} = 130,000 \text{ sq. ft. (rounding)}$$

Step 2: Determine area available for credit on site

Modified Impervious Area (MIA):

$$\text{MIA} = \text{Impervious Area (sq. ft.)} * \text{Percent of drainage area controlled by management practice (\%)} * \text{Stormwater Credit (\%)}$$

$$\text{MIA} = 130,680 \text{ sq. ft.} * 0.50 * 0.30 = 19,602 \text{ sq. ft.}$$

Step 3: Determine estimated credit and modified Stormwater service fee

$$\text{ERU} = \text{Modified impervious area (sq. ft.)} / 2,600 \text{ (sq ft.)}$$

$$\text{ERU} = 19,602 \text{ sq. ft.} / 2,600 \text{ sq. ft.} = 7.54$$

$$\text{Reduction (\$)} = \text{ERU} * \$5.41/\text{ERU}$$

$$\text{Reduction (\$)} = 7.54 * \$5.41/\text{ERU} = \$40.79$$

Estimated Stormwater Utility Bill = User Fee (\$) - Reduction (\$)

Estimated Stormwater Utility Bill = \$270.50 – \$40.79 = \$229.70

SECTION IV. ANNUAL REPORTING REQUIREMENTS:

Annual reporting is required by all credit recipients to maintain the service fee reduction. A letter or report that describes the status, operation and maintenance of each management practice is to be submitted to the City of Newark, Department of Engineering no later than two weeks (14 days) following the anniversary date of the original credit award. Failure to submit the annual report will result in cancellation of the credit. In addition, the City reserves the right to periodically inspect the credited management practice to assure city requirements are being followed. The annual report will generally require the following information:

- Utility Billing Account Number
- Applicant statement certifying that the conditions under which the credit was originally issued have substantially remained the same;
- Applicant statement certifying that if structural management practices are receiving credit, they are being inspected and maintained within appropriate standards for the management practice;
- Summary of regular inspection results; and
- Summary of maintenance activities.

Submit reports to: Department of Engineering

Lindsey Brighton
Stormwater Coordinator
Stormwater Utility
34 S. 5th Street
P.O. Box 4100
Newark, Ohio 43058-4100
<http://www.newarkohiowater.net/stormwater>
Phone: 740-670-7762 Fax: 740-349-6794



SECTION V: CREDIT APPLICATION FORMS
NEWARK STORMWATER CREDIT APPLICATION FORM

SECTION A - APPLICANT

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: () _____ Fax: () _____

Email: _____

Account Number: _____

SECTION B - SITE INFORMATION

Name: _____

Stormwater Billing Account No: _____

Location: _____

Impervious Area: _____ ERU's _____

SECTION C - ENGINEER OF RECORD

Name: _____

Company: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: () _____ Fax: () _____

Email: _____

CERTIFICATION:

Name Title

Signature Date

A. ENGINEER SEAL

SECTION D-DATA REQUIRED FOR SUBMISSION

Please refer to Table 1 for data submission requirements. List the data you are submitting pertinent to your credits application.

Type of Data	<u>Submitted</u>	<u>Accepted</u>

SECTION E-CITY OF NEWARK STORMWATER CREDIT SUMMARY

The following is a summary of the final credits that will be offered to the non-residential property owners in the City of Newark with the attached suggested percent credit reduction which will be ultimately “at the discretion of the Stormwater Utility Department reviewing the credits applications:

	<u>Available Credit</u>	<u>Credit Received</u>
<u>Post Construction Stormwater Quality Treatment</u>		
Forested Buffer Strips and Grass Filter Strips	30%	_____
Infiltration Trenches	30%	_____
Wet Pond & Extended Detention	30%	_____
Bio Retention Areas	30%	_____
Water Quality Ponds	30%	_____
Stormwater Treatment BMP's	30%	_____
<u>Permanent Runoff Control</u>		
Detention/Retention (Minimum Standard)	10%	_____
Detention/Retention (Exceeding Standard)	30%	_____
Dry Wells (maintenance only)	30%	_____
<u>Stream Channel Construction Restoration</u>		
Grass Line Conveyance Channels (Dry Swales)	30%	_____
Riparian Water Quality	30%	_____
Vegetated Stream Buffers	20%	_____
Open Channel Maintenance	30%	_____
Stream Restoration	50%	_____
<u>Other Credits</u>		

Experimental BMP's;	20%	_____
Individual Industrial NPDES Permit;	10%	_____
Preservation/ Flood Hazard Area;	30%	_____
Education;	up to 50%	_____
Adopt a Road/Stream.	20%	_____

- The maximum credit to be received will not exceed 50% of the stormwater bill.
- Credits shall be awarded in 5% increments "up to" the amount shown in the listing above.
- The amount of credit awarded is at the discretion of the Stormwater Utility Department after a complete review of the credit application.



**NEWARK STORMWATER CREDIT
MANAGEMENT PRACTICE MAINTENANCE AGREEMENT**

APPLICANT:

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: () _____ Fax: () _____

Email: _____

PROJECT INFORMATION:

Name of project: _____

Location: _____

Type of management practice: _____

CERTIFICATION:

I hereby request consideration for a Stormwater Credit. I certify that I have authority to make such a request and authorization for this property. I further certify that the above information is true and correct to the best of my knowledge and belief. I agree to maintain the above stated Management Practice to the prescribed criteria according to the City of Newark. I hereby release the City of Newark from any maintenance responsibility whatsoever on the above identified management practice located on my property. I agree to provide corrected information should there be any change in the information provided herein.

Name

Title

Signature

Date



**NEWARK STORMWATER CREDIT MAINTENANCE AGREEMENT
ANNUAL REPORT
DUE BY DECEMBER 15th FOR THE FOLLOWING YEAR**

APPLICANT:

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: () _____ Fax: () _____

Email: _____

PROJECT INFORMATION:

Name of project: _____

Location: _____

Type of management practice: _____

CERTIFICATION:

I hereby request consideration for a Stormwater Credit. I certify that I have authority to make such a request and authorization for this property. I further certify that the above information is true and correct to the best of my knowledge and belief. I agree to maintain the above stated Management Practice to the prescribed criteria according to the City of Newark. I hereby release the City of Newark from any maintenance responsibility whatsoever on the above identified management practice located on my property. I agree to provide corrected information should there be any change in the information provided herein.

Name

Title

Signature

Date



City of Newark Storm Water Utility Education Credit Application

School: _____

Contact Name: _____

Address: _____

Phone #: _____ Email: _____

of Staff: _____ # of Students: _____

A) Twenty percent of staff will participate in water quality in-service program.

Please list:

Name	Grade/ Subject	Contact Number	Email

Attach additional information as needed.

B) Choose from the following:

☐ Water Festival Day

☐ Poster Contest

☐ Essay Contest

☐ Litter Collection Day

☐ Other: _____

☐ Stenciling Project

☐ Brochure Development

☐ Public Service Announcement

☐ Multimedia

Please describe project chosen from above: _____

School Administrator

Date

Approved:

City of Newark

Date

Please return completed form to:

Stormwater Utility
34 S. 5th Street
P.O. Box 4100
Newark, Ohio 43058-4100