

# CERTIFICATION OF STORMWATER RUN-OFF PLAN

The owner(s) of the property identified below hereby makes an application to the municipality for certification of their proposed stormwater run-off plan.

Property Owner's Name: \_\_\_\_\_

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

City, State, Zip: \_\_\_\_\_

Telephone Number: \_\_\_\_\_ Email address: \_\_\_\_\_

Township: \_\_\_\_\_ Parcel ID #: \_\_\_\_\_

Property Location (road name): \_\_\_\_\_

Type of Structure: Single-Family Residence

Multiple-Family Residence       Recreational Cabin       Single-Wide MFG Home

Double-Wide MFG Home       Commercial       Industrial

Public       Church/School       Other

Name of Installation Contractor: \_\_\_\_\_

Telephone Number of Contractor: \_\_\_\_\_

Anticipated Amount of Impervious Surface: \_\_\_\_\_ SQ. FT.

Anticipated Total Amount of Earth Disturbance: \_\_\_\_\_ SQ. FT.

**Earth disturbance activity**—A construction or other human activity which disturbs the surface of the land, including land clearing and grubbing, grading, excavations, embankments, land development, agricultural plowing or tilling, operation of animal heavy use areas, timber harvesting activities, road maintenance activities, oil and gas activities, well drilling, mineral extraction, and the moving, depositing, stockpiling, or storing of soil, rock or earth materials. For additional information regarding Earth Disturbance Activity, Please contact Warren County Conservation District (814-726-1441).

- Less than 5000 sq ft total Earth Disturbance – must implement Erosion and Sediment (E&S) Control Best Management Practices (BMPS) on site.
- Between 5000 sq ft and 0.99 ac of total Earth Disturbance – must have a written E&S plan on site and implement the E&S BMPS on site (special circumstances may require this be reviewed by the Warren County Conservation District, contact the Conservation District for additional information).
- Greater than one acre of total Earth Disturbance – Permits are required, contact the Warren County Conservation District.

**MUNICIPAL USE ONLY**

The stormwater plan submitted by the above named owner of the property listed has been reviewed and certified as meeting all the requirements of the municipal stormwater run-off ordinance.

\_\_\_\_\_  
Printed Name of Municipal Representative      Signature      Date of Approval

## Warren County Small Project Stormwater Management Application

Per **Glade Township's** Act 167 Stormwater Management Ordinance, a stormwater management plan is required whenever more than 2,500 square feet of impervious surface is proposed. Impervious surfaces are areas that prevent the infiltration of water into the ground and shall include, but not be limited to, roofs, patios, garages, storage sheds and similar structures, and any new streets or sidewalks.

<b>To Calculate Impervious Surfaces Please Complete This Table</b>					
Surface Type	Length (ft)	X	Width (ft)	=	Proposed Impervious Area
Building (leading to a downspout)		X		=	
		X		=	
		X		=	
		X		=	
Driveway		X		=	
		X		=	
		X		=	
Parking Areas		X		=	
		X		=	
		X		=	
Patios/Walks		X		=	
		X		=	
		X		=	
		X		=	
Other		X		=	
		X		=	
		X		=	
<b>Total Impervious Surface Area to be managed (sum of all areas)</b>					

<b>0-1,000 s.f.</b> – SWM Run-off Plan only – <b>No fee required</b>
<b>1,000 to 2,500 s.f.</b> – SWM Run-off Plan & Small Project SWM Application (Pages 1 & 2) <b>FEE \$10.00</b>
<b>2,500 to 5,000 s.f.</b> – Applicant must complete entire Application <b>FEE \$20.00</b>
<b>Larger than 5,000 S.F.</b> , complete the remainder of the Application. FEE Per Terms of Stormwater Management Ordinance #205

Property Owner Acknowledges that submission of inaccurate information may result in a stop work order or permit revocation. Acknowledgment of such is by signature below. I declare that I am the owner or owner's, legal representative. I further acknowledge that the information provided is accurate and employees of Glade Township are granted access to the above-described property for review and inspection as may be required.

Owner

Date:

\_\_\_\_\_

\_\_\_\_\_

**CREDITS**

**Credit 1: DISCONNECTION OF IMPERVIOUS AREA**

When runoff from impervious areas is directed to a pervious area that allows for infiltration, filtration, and increased time of concentration, all or parts of the impervious areas may qualify as Disconnected Impervious Area (DIA). Using the criteria below, determine the portion of the impervious area that can be excluded from the calculation of total impervious area.

**Criteria:** An impervious area is considered to be completely or partially disconnected if it meets the requirements listed below

- rooftop area draining to a downspout is ≤500 sf
- paved area draining to a discharge is ≤1,000 sf
- flow path of paved impervious area is not more than 75'
- soil at discharge is not designated as hydrologic soil group "D"
- flow path at discharge area has a positive slope of ≤5%
- gravel strip or other spreading device is required at paved discharges.

Length of Pervious Flow Path from discharge point * (ft)	DIA Credit Factor
0 – 14	1.0
15 – 29	0.8
30 – 44	0.6
45 – 59	0.4
60 – 74	0.2
75 or more	0

\* Flow path cannot include impervious surfaces and must be at least 15 feet from any impervious surfaces.

Calculate DIA Credit & Required Capture Volume									
Surface Type	Proposed Impervious Area (from previous sheet)	X	DIA Credit Factor	=	Impervious Area to be managed	÷	6	=	Required Capture Volume (ft³)
Building (area per downspout)		X		=		÷	6	=	
		X		=		÷	6	=	
		X		=		÷	6	=	
		X		=		÷	6	=	
Driveway		X		=		÷	6	=	
		X		=		÷	6	=	
		X		=		÷	6	=	
Parking Areas		X		=		÷	6	=	
		X		=		÷	6	=	
		X		=		÷	6	=	
Patios/Walks		X		=		÷	6	=	
		X		=		÷	6	=	
		X		=		÷	6	=	
		X		=		÷	6	=	
Other		X		=		÷	6	=	
		X		=		÷	6	=	
		X		=		÷	6	=	
<b>Total Req'd Capture Volume</b>									

**Credit 2: TREE PLANTING**

Perhaps the best BMP is a tree as they intercept rainfall, increase evapotranspiration and increase time of concentration. A portion of the required capture volume can be reduced provided the criteria are met.

**CREDITS**

Deciduous Trees	Evergreen Trees
6 ft <sup>3</sup> per tree planted	10 ft <sup>3</sup> per tree planted

**Criteria**

To receive credit for planting trees, the following must be met:

- Trees must be native species (see below), minimum 1" caliper tree and 3 feet tall shrub (min).
- Trees shall be adequately protected during construction.
- Trees shall be maintained until redevelopment occurs.
- No more than 25% of the required capture volume can be mitigated through the use of trees.
- Dead trees shall be replaced within 12 months.
- Non-native species are not applicable.

	<b>Req'd Capture Volume (ft<sup>3</sup>)</b>
-	
	<b>Tree Planting Credit (ft<sup>3</sup>)</b>
	<b>Capture Volume to be managed (ft<sup>3</sup>)</b>

**Sizing of BMP**

	How much of the Volume will you manage with a Rain Garden?
+	
	How much of the Volume will you manage with a Sump or Trench?
	<b>Capture Volume to be managed (ft<sup>3</sup>)</b>

Enter the volumes into the **Small Project SWM Plan Worksheet** on the next sheet.

**Native Species Trees (Common Name)**

- |                                      |                                                       |
|--------------------------------------|-------------------------------------------------------|
| - Blackgum                           | - Oak, (white, swamp white, scarlet, pin, red, black) |
| - Cucumber magnolia                  | - Dogwood (silky or red osier)                        |
| - Hophornbeam                        | - Tuliptree                                           |
| - Maple, (sugar, red or silver)      | - Willow, black                                       |
| - Pine, (pitch or eastern white)     | - Chokeberry (red or black)                           |
| - Ironwood                           | - Basswood, American                                  |
| - Hickory, sweet pignut or shag-bark | - Serviceberry, (downy or shadbush)                   |
| - Sycamore, American                 | - Elderberry                                          |
| - Cotton-wood, eastern               | - Witch hazel                                         |
| - Aspen, big-tooth or quaking        | - Mountain laurel                                     |
| - Cherry, black                      |                                                       |

# Small Project SWM Plan Worksheet

Based upon the information you have provided a **Stormwater Plan IS Required** for this development activity. The Stormwater Management Ordinance developed through the Warren County Act 167 Stormwater Management Plan regulates compliance requirements for Stormwater Management in this jurisdiction. A complete copy of the Plan can be found on the Warren County Planning & Zoning office.

Regulated activities shall be conducted only after Glade Township approves a stormwater management plan. The Warren County Act 167 Stormwater Management Plan will assist you in preparing the necessary information and plans for Glade Township to review and approve. **This document will constitute an approved plan if all of the relevant details are to be installed in their entirety AND no part of the stormwater system adversely affects any other property, nor adversely affect any septic systems or drinking water wells on this, or any other, parcel.** If an alternative system is to be used a plan will need to be submitted to Glade Township for approval. A design by a qualified professional may be required for more complex sites.

## PLEASE INITIAL BELOW TO INDICATE THE STORMWATER MANAGEMENT PLAN FOR THIS SITE

Minimum Control #1 Erosion & Sediment Pollution Control (Elements 1-10)  
 Minimum Control #2: Source Control of Pollution  
 Minimum Control #3: Preservation of Natural Drainage Systems and Outfalls

The relevant details from Warren County Act 167 Stormwater Management Plan will be installed in their entirety AND the system will be located as not to adversely affect other property, nor any septic systems or drinking water wells on this, or any other, parcel.

To meet this requirement, the following will be installed and maintained:

Capture Volume to be managed (ff <sup>3</sup> )		Conversion	Surface Area of BMPs (ff <sup>2</sup> )
By Rain Garden 6" ponding; 2' soil depth	x	1.20	
Dry Well or Infiltration Trench 2½' aggregate depth	x	1.25	
Total		Total	

In lieu of meeting the above, an alternative and/or professional design is attached for approval AND the system will be located as not to adversely affect other property, any septic systems or drinking water wells on this, or any other, parcel.

### Site Sketch Plan showing:

- Property lines with dimensions
- Proposed buildings with dimensions
- Proposed impervious surfaces with dimensions
- Proposed septic system, if applicable
- Proposed well site, if applicable
- Proposed stormwater management system(s)

### Operation and Maintenance Agreement

**Condition on approval** - The stormwater management plan must be fully implemented prior to a request for final inspection of the building or zoning permit.

**Acknowledgment** - By executing below, the Owner acknowledges the following:

- I declare that I am the owner of the property.
- The information provided is accurate.
- I further acknowledge that municipal representatives are granted access to the above described property for review and inspection as may be required.

Owner

Date:

\_\_\_\_\_

\_\_\_\_\_