



Stormwater Stakeholder Advisory Meeting #6



East Lampeter Township

Herbert, Rowland & Grubic, Inc.



January 31, 2020

NPDES vs. MS4

Site NPDES

- offsets NEW stormwater impacts caused by development of the site.

MS4

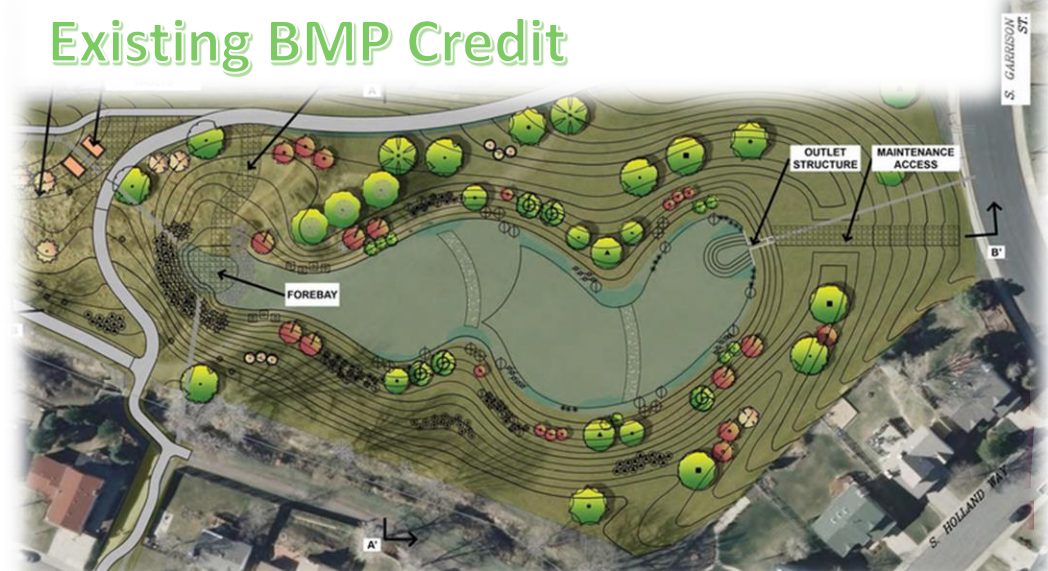
- required to take the baseload as of today (including existing WQ BMPs) and reduce pollutants by 10%



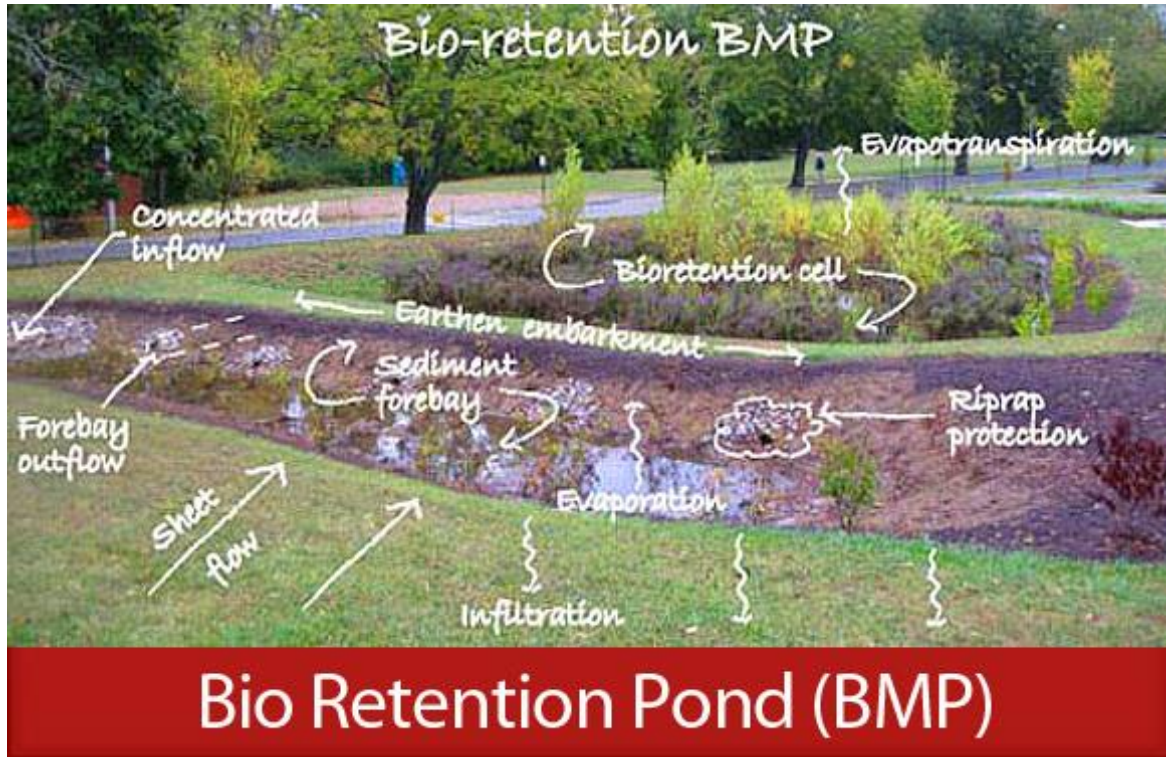
Not a WQ BMP



Is a WQ BMP, but only can take Existing BMP Credit



Purpose of “Credits”



- Account for varying levels of on-site stormwater management that go above and beyond current SWM ordinance
= varying LOS
- Account for properties that:
 - Limit/reduce volume or rate of discharge
 - Improve Water Quality
 - Own and maintain facilities directly serving property that may or may not discharge into Township facilities
- Requirements to receive a credit
 - Criteria for Stormwater Management Devise
 - Documentation
 - O&M Agreement
- Capped 45% of total fee



Breakdown of Program Costs

- Which program fees are fixed costs and what's dependent upon reduced rate/volume of runoff?

Program Costs	Avg 4-yr Cost
MS4 Compliance	668,000
Operation & Maintenance	220,000
Capital Improvement	367,000
Administrative/General	168,000
Average Annual Cost	1,423,000
Fixed Cost =	55%
Variable Related to Rate/Volume =	15%
Variable Related to Water Quality =	30%

Portion of Fee Reduced
through Credit



Credit Eligibility

- Owners are responsible for applying for credits.
- Property must be assigned a minimum IA of 1500 sq ft.
- No outstanding and unpaid SW Fees or sanitary sewer fees against property.
- Owners may apply for one or more Credits.
- Credits will be cumulative up to a maximum Credit of 45% of that property's SMP Fee, unless there is a Stormwater Partnership Credit.
- Credit reduction is proportional to the IA that drains to the BMP.
- Credit revoked if account is overdue by more than 90 days or BMP is not maintained.



General Credit Policies

- Complete applications will be reviewed within 90 days of submission. (Incomplete applications will be returned for correction).
- Credit application fee of \$25 applies to certain types of BMPs.
- Credits expire after periods of time, based on type of credit.
- In the event of a change of ownership, the new Owner must reapply for Credits to verify change in Maintenance Agreement, and associated Credit requirements.



Planned Stormwater Fee Structure

Option A - Tiered All Customer Classes				(No differentiation between Residential and Non Residential)				
Class	Tier	Tier IA Range (sq ft)	% of Total Properties	% of IA	Monthly Charge	# of Properties	Avg IA for Tier (sq ft)	Annual Revenue (see Note)
All Customer Classes	0	0-499	6.5%	0.1%	No Fee	349	98	\$0
	1	500-1499	22.0%	1.9%	\$2.65	1,181	993	\$27,416
	2	1500-2999	41.7%	7.6%	\$5.60	2,241	2,109	\$109,934
	3	3000-4599	8.7%	2.7%	\$9.50	470	3,588	\$39,113
	4	4500-7999	5.2%	2.7%	\$16.00	277	6,023	\$38,824
	5	Over 8000	15.9%	85.1%	16.00+2.65/thousand over 8,000	856	61,872	\$1,190,468
Total:						5,374		\$1,405,756



Credit Types for Consideration

Credit	Eligible Property Type	
	Tiers 2 thru 4	Tier 5
BMP Easement (for projects in Township PRP)	X	X
Peak Rate Control/Volume Control Structural BMP	X	X
Riparian Buffer	X	X
Stream Restoration	X	X
Turf and Landscape Management Program		X
Permeable Pavement	X	X
Green Roofs		X
Education Credit	X	X
Separate MS4 Permit	X	X
Stormwater Partnership Credit		X
Public Participation	X	X
Public Participation Credit Donation		X
Adopt an Inlet	X	X
Agricultural Use Parcels	X	X



Credit Types for Consideration

Credit	Eligible Property Type		Max Credit	Application Fee	Credit Expiration (see below)
	Tiers 2 thru 4	Tier 5			
BMP Easement (for projects in Township PRP)	X	X	TBD	No	(1)
Peak Rate Control/Volume Control Structural BMP	X	X	45%	Yes	(1)
Riparian Buffer	X	X	40%	Yes	(1)
Stream Restoration	X	X	40%	Yes	(1)
Turf and Landscape Management Program		X	25%	Yes	(1)
Permeable Pavement	X	X	45%	Yes	(1)
Green Roofs		X	25%	Yes	(1)
Education Credit	X	X	15%	No	(1)
Separate MS4 Permit	X	X	15%/45%	No	(2)
Stormwater Partnership Credit		X	TBD	Yes	(1)
Public Participation	X	X	15%	No	(3)
Public Participation Credit Donation		X	15%	No	(3)
Adopt an Inlet	X	X	15%	No	(4)
Agricultural Use Parcels	X	X	30%	No	(1)

1) End of Townships MS4 Permit Cycle (currently July 31, 2023).

2) End of Property Owner's MS4 Permit Cycle.

3) December 31st of year applied.

4) One year following credit approval.

Credits – How are they Calculated?

Credit applied to portion of IA draining to BMP

Credit reduction is only applied for portion of property contributing runoff to BMP. If a 30% WQ BMP credit is approved and 50% of property runoff goes to BMP, overall credit is 15% (= 30% credit * 50% of runoff)

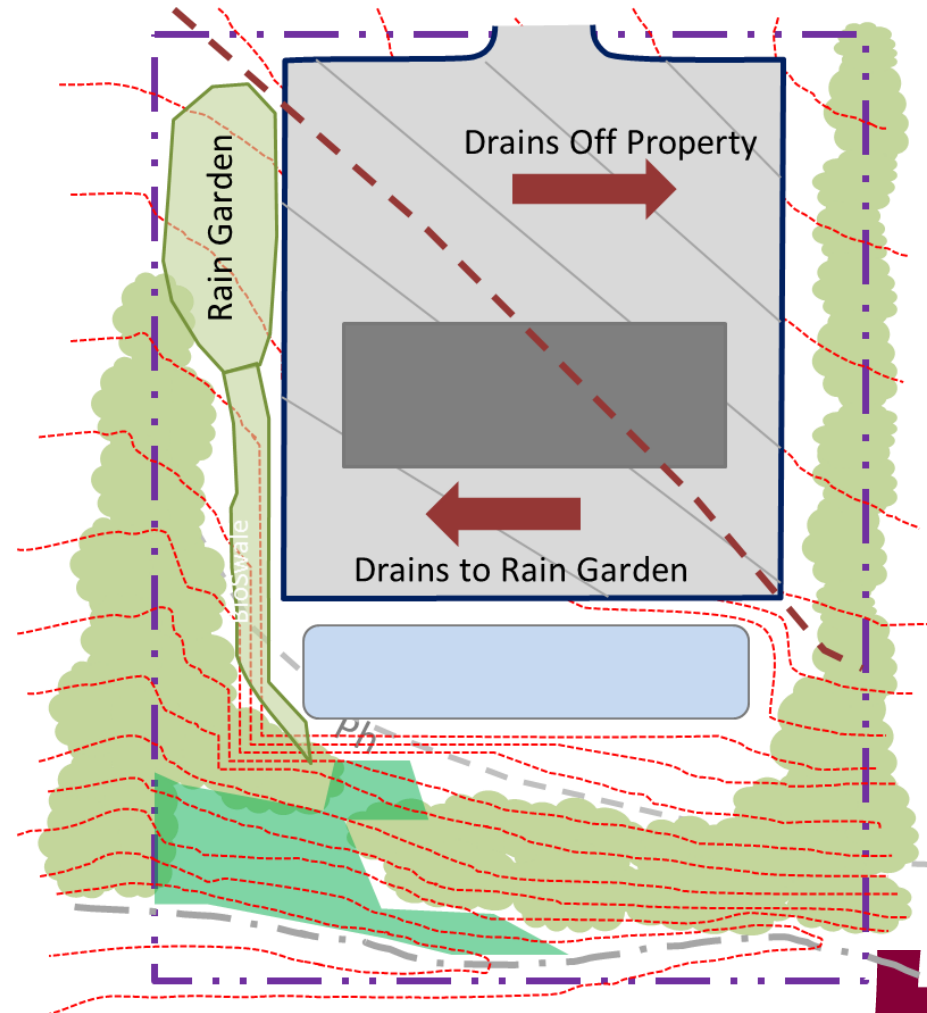
Building IA =	10,000 sf
Parking Lot IA =	14,400 sf
Total Impervious Area =	<hr/> 24,400 sf <hr/>
Fee w/o credit at \$2.65/1,000	\$64.66

45% WQ BMP Credit applied to 50% of the parcel = 45% credit * 50% of the parcel =

22.5% Total Credit reduction

$$24,400 \text{ sf} * (1 - .225) = 18,910 \text{ sf}$$

$$18,910 \text{ sf} * \$2.65 = \$50.11$$



Peak Rate Control/Volume Control BMP

- Control rate, volume and water quality of stormwater generated on the property.
- Max Credit is 45%:
 - 10% for rate control
 - 10% for volume control
 - 25% for water quality.
- Existing, Retrofits and new BMPs are eligible.
 - BMPs Prior to 2003 which retrofit to current standards are eligible.
- Credit only applied to IA controlled by BMPs.
- Requires ELT access rights and O&M Agreement.
- Expires end of Township MS4 Permit Cycle.



Riparian Buffer/Stream Restoration

Creating and maintaining a riparian buffer along a stream or performing streambank stabilization

Riparian Buffer

- Max Credit is 40%
- Must maintain a min. 35' buffer
- Minimum 25-feet in length
- New or existing
- Amount of Credit dependent on site-specific factors.
- Expires end of Township MS4 Permit Cycle.

Stream Stabilization

- Max Credit of 40%
- Minimum 100' length, may be multiple contiguous properties.
- New or existing
- Dedication of easement eligible too
- Amount of Credit dependent on site-specific factors.
- Expires end of Township MS4 Permit Cycle.



Turf and Landscape Management

- For Educational institutions, public recreational facilities, golf courses and cemeteries where fertilizers and pesticides are applied.
- Max 25% credit
- A soil fertility sample must be submitted once every three years .
- Owner must commit to following fertility report findings.
- Owner must commit to following ELSA fertilizer and lime recommendations.
- IA cannot exceed 40% if total parcel area.
- Expires end of Township MS4 Permit Cycle.



Permeable Pavement

- Max 45% credit
- Installation of permeable pavement or pavers for driveways, parking lots, patios, sidewalks, etc.
- Must be installed in accordance with PA DEP BMP manual.
- Must have O&M Agreement.
- Credit percentage awarded based upon type/design of permeable pavement and proportional to IA managed on property.
- Expires end of Township MS4 Permit Cycle.



Adopt an Inlet

- Max Credit of 15%
- Participants responsible for:
 - Keeping leaves and other debris away from adopted inlet.
 - Participants receive periodic emails to alert them to check on inlet and remove debris.
 - Participants alert the Township of maintenance issues around inlet.
 - Participants may donate the credit to an eligible organization under the non profit credit.
 - Credits expire after one year.



Green Roofs

- A property is eligible for a Green Roof Credit when a green roof is installed on a building.
- The design, construction, and maintenance plan must meet as a minimum, the requirements noted for such facilities in the Pennsylvania Stormwater Best Management Practices Manual or approved recognized engineered equivalent.
- Green roofs may be eligible for a Credit up to 25% or may result in a reduction in total IA dependent on design and function.
- Expires end of Township MS4 Permit Cycle.



Education Credit

- Designed to educate students on the importance of water resources and how they can help preserve the integrity of Township water resources.
- Max Credit of 15%.
- Level One education credit of 10% is for institutions educating 50% to 74% of grade levels within school.
- Level Two education credit of 15% is for institutions educating 75% to 100% of grade levels within school.
- Credit is applied to IA of teaching facility.
- Valid for one year but renewable for each year curriculum is taught.



Stormwater Partnership Credit



- ELSA desires to team with large property owners for water quality improvement projects
- Goal for property owners to:
 - propose opportunities for partnerships
 - meet individually with Township Staff to review properties and discuss opportunities
- Credit to be awarded to match ELSA's cost savings as determined through benefit analysis (no maximum credit)
- Agreement extends through Township MS4 Permit Cycle.



Public Participation Donation

- Helps non profit organizations, such as churches, food bank, school, etc.
- Customers can participate in certain community events on behalf of a non-profit organization (such as a church or food bank) or on behalf of a school.
- Activities must be preapproved by ELT and focused on water quality and stormwater management, such as:
 - Participating in a stream or roadside clean-up.
 - Participating in a ELSA or other approved tree planting activity.
 - Hosting a student-sponsored educational event at a public venue.
 - Participating in any other proposed public participation activity pre-approved by ELSA.
 - Sponsoring any other public participation activity pre-approved by ELSA.
- One (1) Credit hour is equal to \$1.50 per quarter. A minimum of four (4) donated hours are required to qualify for the Credit, but do not have to be donated from the same individual.
- Donated Credits will be tallied over a calendar year and applied to the Stormwater bill beginning in January of the year following the donation.
- Donated Credits cannot exceed 15% of the SMP Fee for the recipient property. Credits are valid for one (1) year.



Ag Use Credit

- Credit of 30% for properties where Ag BMPs are planned and fully implemented.
 - Plans approved within 3 months of the commencement of billing receive a credit.
 - 5% credit for an approved E&S Plan + an additional 10% credit for implementing the approved E&S Plan
 - 5% credit for Manure/Nutrient Management Plan+ an additional 10% credit for implementing the approved E&S Plan
- If properties exceed minimum agricultural water quality requirements, additional credit may be negotiated.
- Expires end of Township MS4 Permit Cycle.



Applying for Credits

1. Specific credits generally require a pre-application meeting.
2. Typically All BMPs must meet local municipal ordinances and DEP's Stormwater BMP Manual.
3. Property owners must generally submit a credit application that includes:
 - Photographs, O&M Plan, maintenance log, fees, designed documentation, as-built drawings and engineering analysis (if required), additional documentation (if requested)
4. Maintenance Agreement typically signed between ELSA and Owner.



Appeals and Reassessments

Appeal Impervious Area Assessment

- Used when Owner feels IA estimate is incorrect or they do not own the parcel.
- Review may cause assigned IA estimate to increase or decrease.
- No fee for appeals.
- Application forms available.

Reassessment of Properties

- If IA is removed from property it will be removed from fee.
- \$50 reassessment fee.
- Owners may submit for reassessment once per calendar year. Forms are available.

