



# Stormwater Stakeholder Advisory Meeting #5



East Lampeter Township

Herbert, Rowland & Grubic, Inc.



August 2, 2019

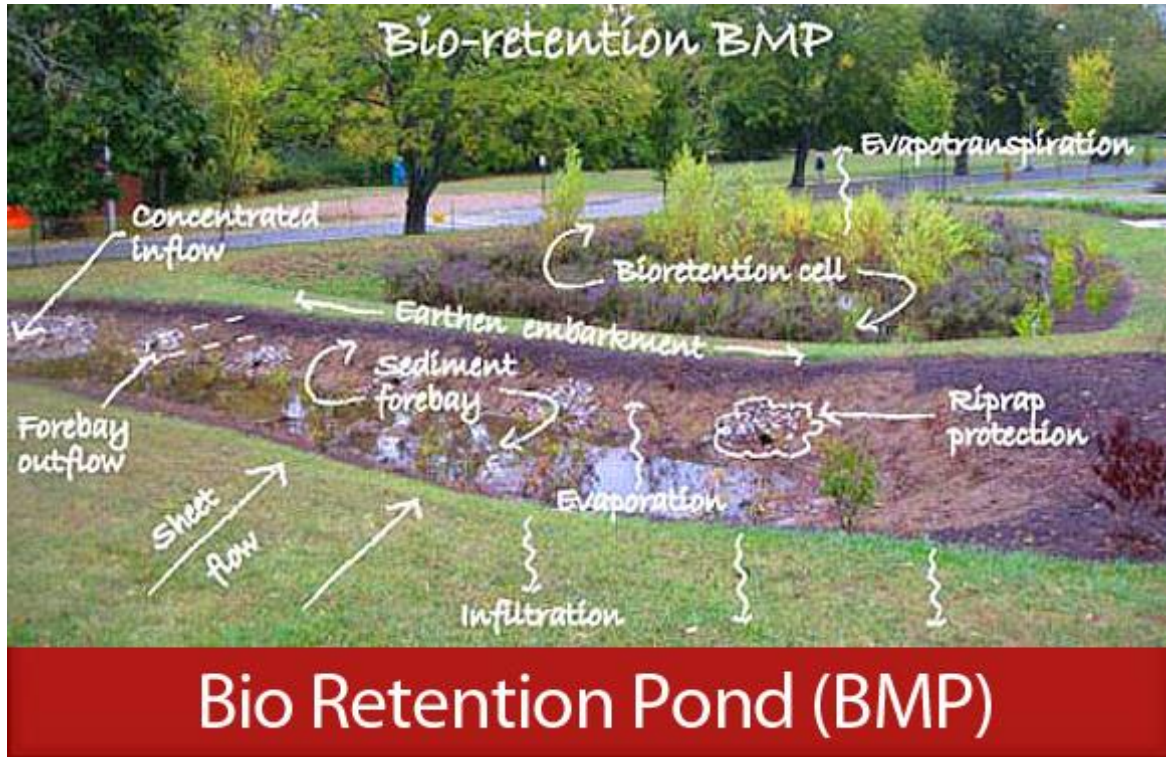
# Private Property Stormwater Management (SWM)

- **What benefits does the Township gain from Stormwater Management (SWM) on private property?**
- Enhanced SWM =
  - Increased Water Quality
  - Reduced Rate of Runoff
  - Reduced Volume of Runoff
  - Reduced Need for Future Capital Improvements
  - Reduced Future O&M Costs
  - Reduced Future Compliance Costs





# Purpose of “Credits”



- Account for varying levels of on-site stormwater management  
= 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
  - Are separate MS4 Permit holders
- In some cases only available to non-residential
- Typically capped [30%-50%] of total fee
- Typical Requirements to receive a credit
  - Criteria for Stormwater Management Device
  - Documentation
  - O&M Agreement



# Credit Policy – What Objectives Matter to the Community?

- A. Meet requirements of the Municipality Authorities Act in order to be legally defensible?
  - 1. Uniformity provision
- B. Stimulate interest in making certain types of SW Improvements that benefit the Township's program?
- C. Ensure improvements undertaken result in a long term cost reduction impact on the system?
- D. Policy easily understood by public and streamlined administratively to keep costs low?
- E. Improve Water Quality?
- F. Enhance Public Education and Awareness?
- G. Create Positive Change in Thinking and Behavior?
- H. Other?



# Credit Types for Consideration - DRAFT

Credit	Eligible Property Type	
	Tiers 2 thru 4	Tier 5
Agricultural Use Parcels	X	X
BMP Easement	X	X
Peak Rate Control/Volume Control Structural BMP		X
Riparian Buffer	X	X
Stream Restoration	X	X
Turf and Landscape Management Program		X
Permeable Pavement	X	X
Urban Tree Canopy	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	



# Township Credit Policy

**Should the same credits be offered to all size property owners?**

## Offers Some Credits to Small Properties

- Bradford (Limited for small properties)
- WVSA (Limited for small properties)
- Derry Township Municipal Authority
- Lancaster
- Mt. Lebanon
- Jonestown (Limited for small properties)
- Meadville (Limited for small properties)
- Radnor (Rebate Program)

## Do Not Offer Small Properties/SRF Credits

- Hampden
- Philadelphia



# Credit Considerations

1. Program cost reduction; Fixed vs Variable costs
2. Portion of IA draining to BMP
3. Previous improvements
4. Effort to manage credit program
5. Min fee and max credit
6. Charge to apply; account current
7. Time to review (60 days?); term; renewal
8. Ensure meeting standards
  - PE?, annual report, inspection, easements





# 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
<b>Average Annual Cost</b>	<b>1,423,000</b>
Fixed Cost =	55%
<b>Variable Related to Rate/Volume =</b>	<b>15%</b>
<b>Variable Related to Water Quality =</b>	<b>30%</b>

Portion of Fee Reduced  
through Credit

Above breakdown is in draft form and may change as program is further defined.  
Assumes Township subsidy for 2019 CIP project.





# Credit Policy

- Credits typically offered for improvements which:
  - Reduce rate of stormwater leaving a property
  - Reduce volume of stormwater leaving a property
  - Improve water quality.
- Policy could provide a maximum reduction in fee of 45% = variable portion of SW budget.
- Propose credit policy implementation 0-6 months following fee implementation
- Could consider providing 45% fee reduction to all properties for initial 6-9 months or making credits retroactive.

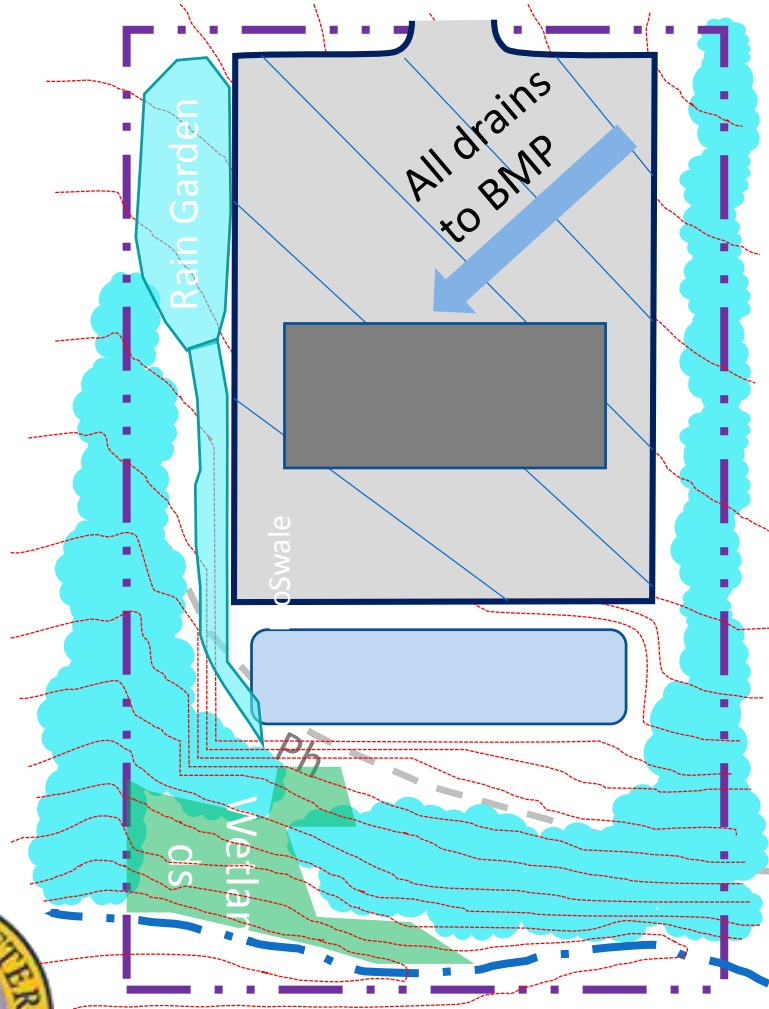


# Credit Types for Consideration - DRAFT

Credit	Eligible Property Type		Max Credit
	Tiers 2 thru 4	Tier 5	
Agricultural Use Parcels	X	X	
BMP Easement	X	X	TBD
Peak Rate Control/Volume Control Structural BMP		X	45%
Riparian Buffer	X	X	40%
Stream Restoration	X	X	40%
Turf and Landscape Management Program		X	25%
Permeable Pavement	X	X	45%
Urban Tree Canopy	X	X	30%
Green Roofs		X	25%
Education Credit	X	X	15%
Separate MS4 Permit	X	X	15%/45%
Stormwater Partnership Credit		X	TBD
Public Participation	X	X	15%
Public Participation Credit Donation		X	10%
Adopt an Inlet	X		15%



# Credits – How are they Calculated?



Building =	10,000 sf
Parking Lot =	14,400 sf
Total Impervious Area =	<hr/> 24,400 sf
If Fee =	\$2.65/1,000 sf
TOTAL Fee =	\$64.66
<b>45% Credit Reduction</b>	<hr/> <b>(\$29.10)</b>
<b>Resultant Charge=</b>	<hr/> <b>\$35.56</b>

# 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)

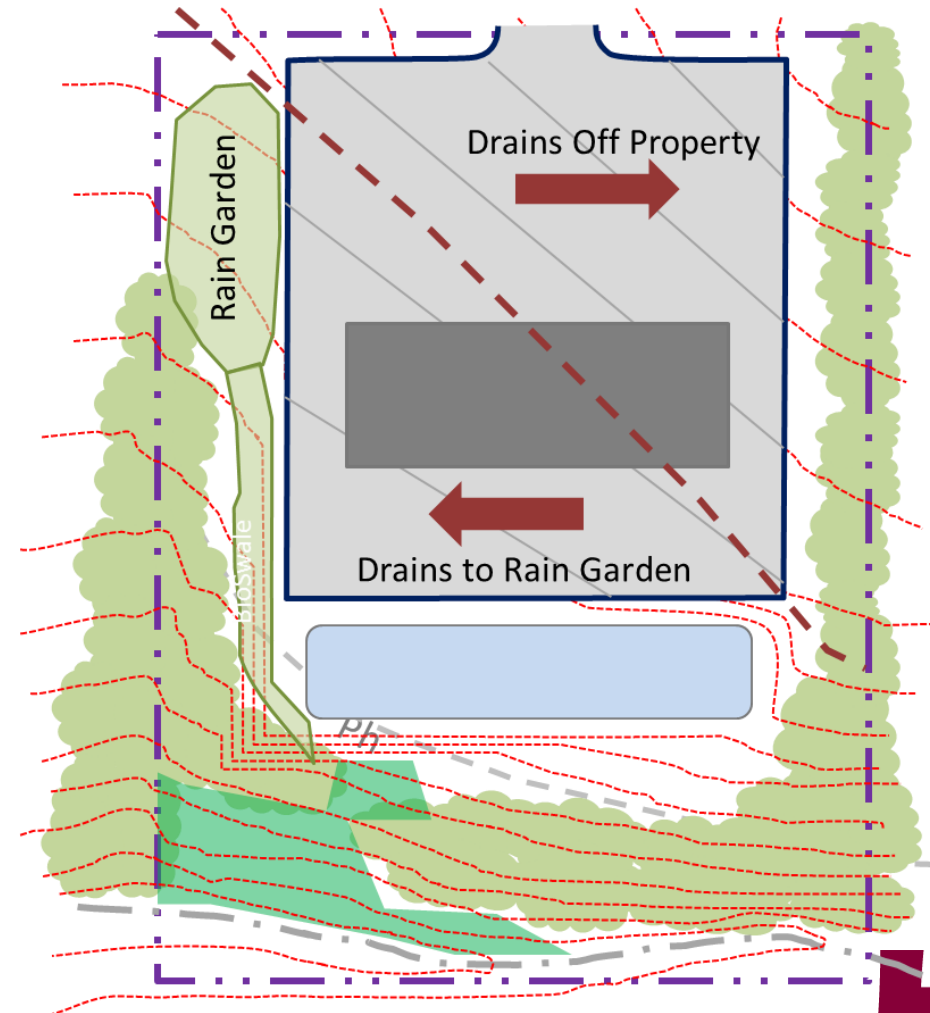
Building IA =	10,000 sf
Parking Lot IA =	14,400 sf
Total Impervious Area =	<hr/> 24,400 sf
Fee w/o credit at \$2.65/1,000	<hr/> \$64.66

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

**22.5% Total Credit reduction**

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

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





# Credit Considerations

1. Program cost reduction; Fixed vs Variable costs
2. Portion of IA
3. Previous improvements (NPDES vs. MS4 vs. Ex. WQ Controls)
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# NPDES vs. MS4

## Site NPDES

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

## MS4

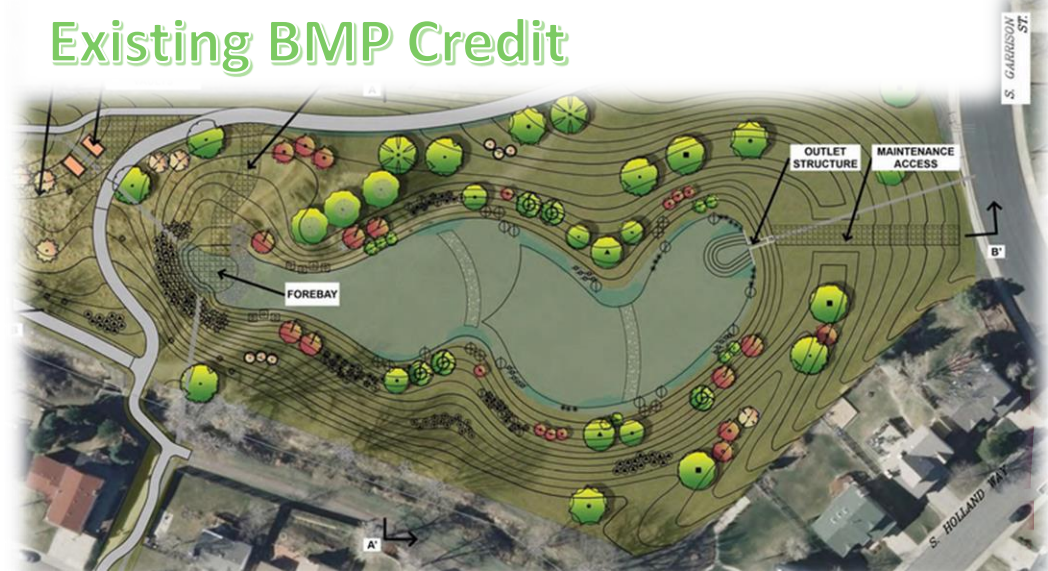
- required to take the baseload as of today (including existing WQ BMPs) and reduce pollutants by 10%



Not a WQ BMP



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



# 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.
5. Re-application is required for credits typically required with change in program costs or with change in property ownership.



# Credit Options

1. Agricultural Use Properties
2. Public Participation
3. Public Participation Credit Donation
4. Adopt an Inlet





# Credit Considerations

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