

MACO Summer Conference

August 16, 2018

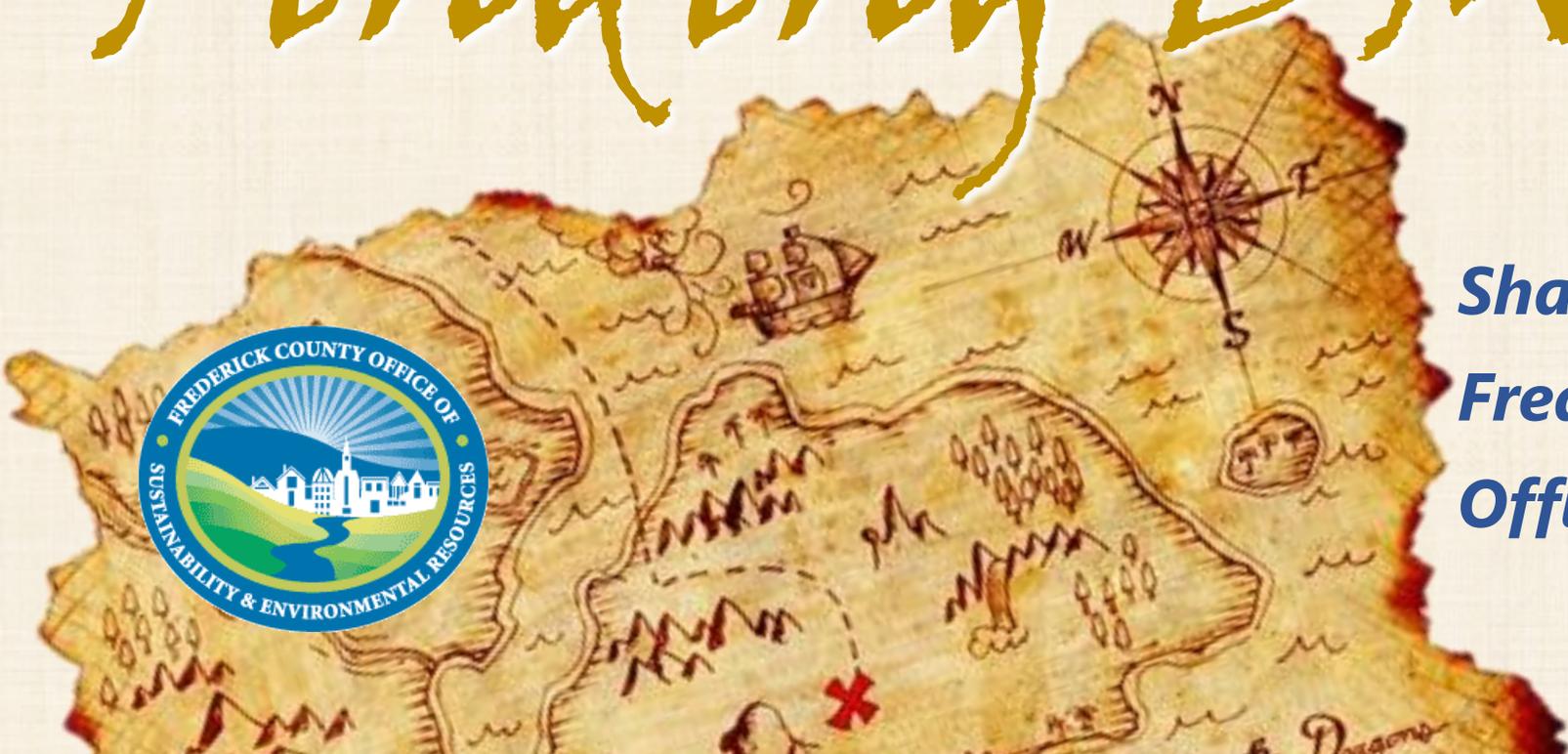
Session: X Marks the Spot - A Treasure Trove of Stormwater Solutions

Finding BMP Gold

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Office of the County Executive



Frederick County Government

- Phase I Municipal Separate Storm Sewer System (MS4) Permit
- Permit expires December 29, 2019.
- Permit is challenging:
 - Requirement to treat 20% of untreated urban impervious area with stormwater management
 - Focus on large-scale program delivery
 - Simultaneously build capacity and projects
 - Address rapid cost escalation
 - Maintain regulatory compliance





Find yer treasure

- Opportunities are jurisdiction-specific
- Review the financial assurance plans
 - Look at plans for jurisdictions like yours (urban versus more rural)
 - Phase I jurisdictions update plans to the legislature every 2 years
 - These jurisdictions have several permit cycles of experience with BMP installation.
 - Large blocks of acres of practice types = cost-effective mass deployment
 - Contact jurisdictions for advice and lessons learned





Frederick County's Plan

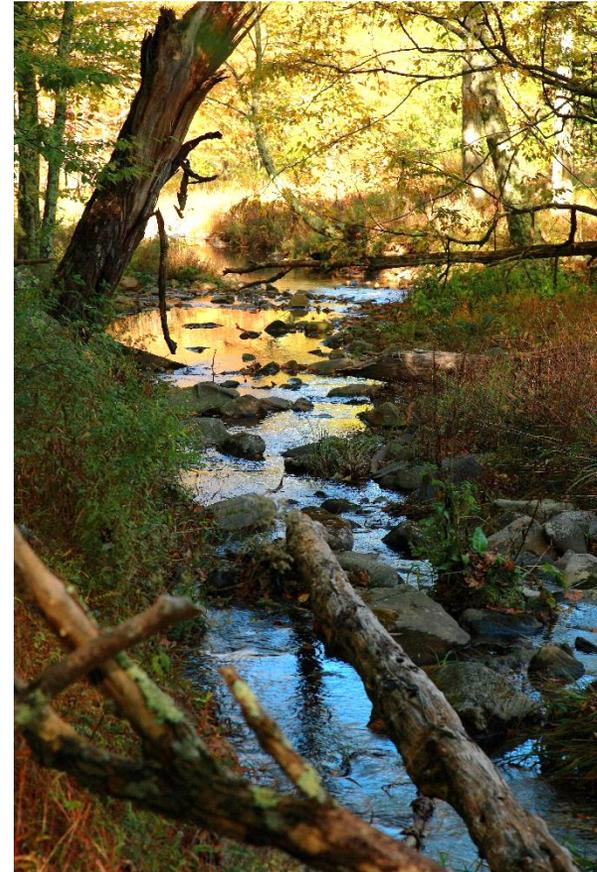
Estimated Complete, Programmed, and Identified Impervious Restoration Credit by Type

Strategy	Completed	Programmed	Total Planned Credit (by end of permit)
<i>Retrofit</i>			
Wet Pond 	12	313	325
Filtering		2	2
<i>New Stormwater</i>			
Bioretention	4		4
Bioswale	3		3
Wet Pond		7	7
Stream Restoration/Regenerative Stormwater	55	80	135
Tree Planting 	39	160	199
Septic Denitrification	55		55
Septic Connections to WWTP	3		3
Vacuum Street Sweeping	25		25
Outfall Stabilization	2	2	4
Septic Pumping 	194	135	329
Total	392	699	1,091
<i>Pollutant Trading with WWTP Performance</i>			<i>As Needed</i>



Case Study: Creek ReLeaf

- Multi-year program to plant trees on private and public lands to provide stormwater control, reduce stream temperatures, and to provide credit towards the County's MS4 Permit;
- The County pays landowners for permanent easements on the reforested area, pays for the trees (350/ac.) and the first 5 years of maintenance;
- This is a voluntary program for landowners.





Case Study: Creek ReLeaf

- Currently a 2 acre minimum requirement;
- Easement is forever, conveys with inheritance or sale of property for protection of the forest and the MS4 credit;
- 5 years maintenance followed by triennial inspections for easement compliance and retention of MS4 credit;
- Owner must maintain the planting and control invasives;
- Contract is piggybackable; uses indefinite quantities. Has both machine and hand planting, installation, supplies, maintenance.



MS4 Jurisdiction Benefits

- Jurisdiction obtains credit towards their permit goal at the published rate of 0.38 impervious equivalent acres per 1.0 acres of reforestation;
- Cost-effective method of attaining credit;
- Long term maintenance is landowner's responsibility, decreasing long-term maintenance costs;
- Public is accepting of tree plantings;
- Jurisdiction decides the easement restrictions;
- Quick implementation process compared to other BMP types.
- Multiple environmental benefits, addresses portion of forest loss.



Landowner Benefits

- Receives compensation for an easement placed on the reforestation area at 75% of fair market value;
- Receives free trees and free pre-planting maintenance as needed;
- Receives first 5 years of maintenance at no cost;
- Owner has input of tree species planted;
- Retains ownership of the land to use within the terms of the easement (recreation, selective logging, etc.);
- Ecological benefits for the property of the environmentally minded applicants.

Before



County performs pre-planting maintenance.

After



Trees spaced for ease of mowing.





Success to Date

- Round 1: Planted 26.8 acres of public land and scheduled to plant 120 acres of private land and 15 acres of public land fall 2018.
- Round 2: Received over 150 acres of interest prior to the official application period that opened August 1; 75 acres of application on the first day.
- The program is very popular with the public and great public relations for the County.

ASK QUESTIONS,
if ye dare

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