

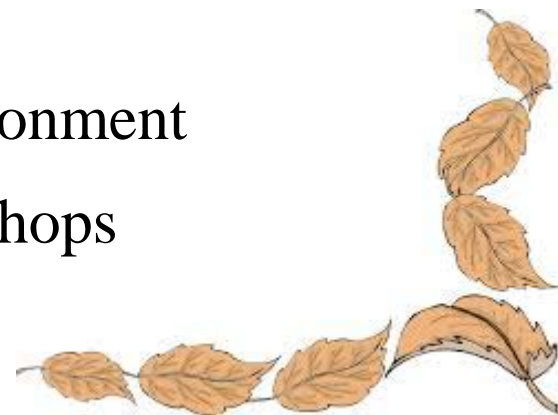
Updates and Actions for Forging Ahead



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Maryland Department of the Environment

Fall 2014 Regional WIP Workshops



Presentation Topics

- Local 2-Year Milestones
 - Historical Data Cleanup
 - Tracking & Reporting
 - Other Topics
- } Note the consistent theme



Local 2-Year Milestones

ENSURING RESULTS

Set Two-Year
Milestones



2012-2013 Milestone Evaluation

Ratings: (Out of 100 Max)

- 15 Counties rated 89 – 100
- 2 Counties rated 80 – 88
- 3 Counties rated 50 – 79
- 4 Counties not rated**

Great Job!

* The term “County” is often shorthand for an amalgam of county, municipal and other partners.

** Two either did not submit milestones or status reports. One has very little reduction responsibility. One only submitted BMP milestones.

Local 2-Year Milestones

2014-2015 Milestones

Initial Participation: 20/24 Counties*

Participation after Grant: 22/24 Counties**

Some Milestone Refinements Prompted by Grant:

- New categories of Activity
- Specific Projects
- Enhanced Partnerships

ENSURING RESULTS

Set Two-Year
Milestones



* The term “County” is often shorthand for an amalgam of county, municipal and other partners.

** New 2-Year Milestone Grant. EPA Bay Program funds administered by Chesapeake Bay Trust.

2014-2015 Milestones

Good Programmatic Milestones*:

- Sequentially Related Planning/Studies:
 - Candidate Project Site Identification
 - Site Feasibility Evaluations & Concept Drawings
 - Restoration Project Engineering Designs

ENSURING RESULTS

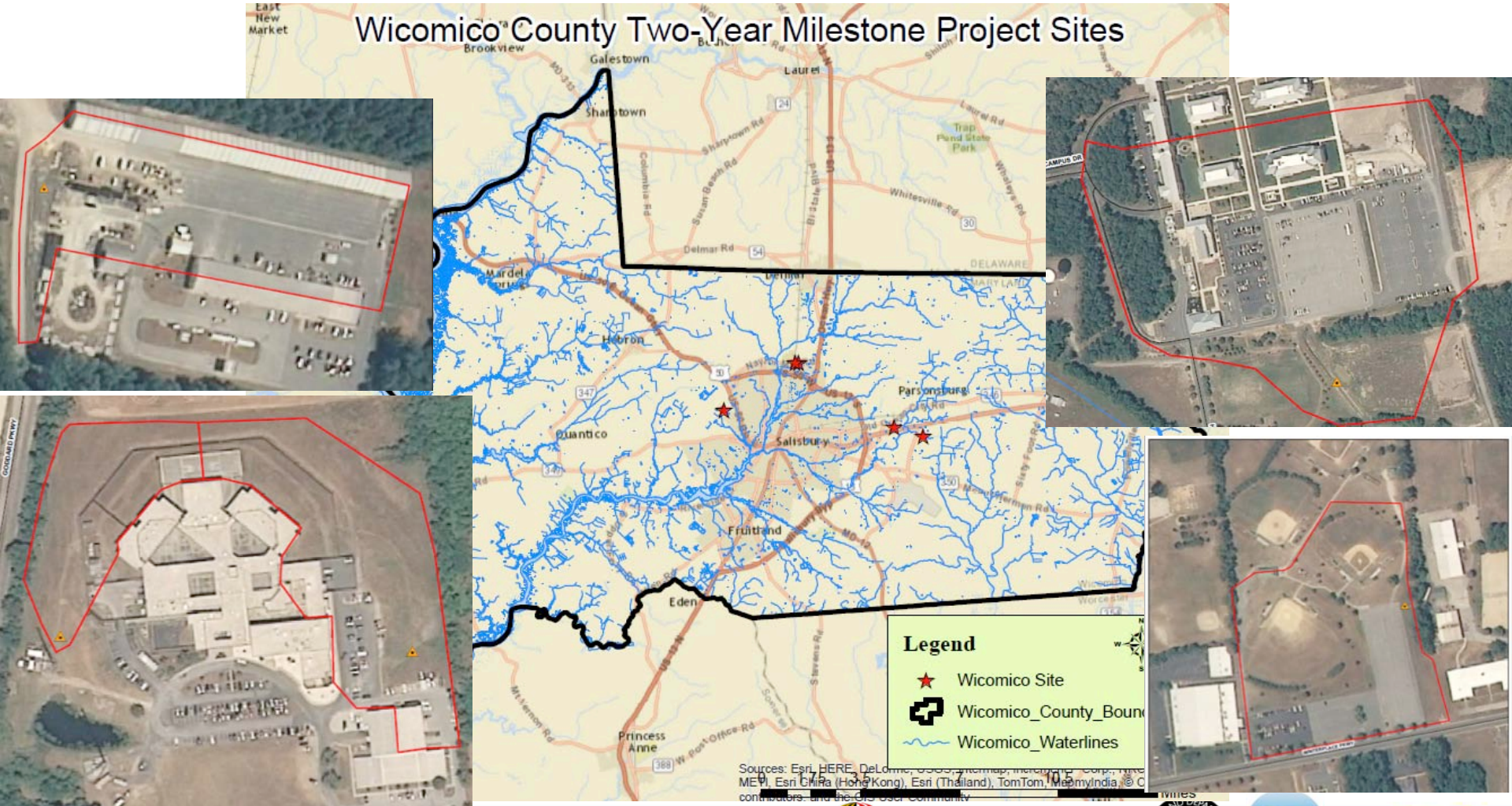
Set Two-Year
Milestones



* Good in terms of securing 2-Year Milestone Grant funding.

Sequential Planning Milestones

Table-top and Field Study to Identify Candidate Project Locations



Sequential Planning Milestones

For Example:
Parking lots of
a recreation
area.



Source: Center for Watershed Protection,
Wicomico County

Specific Project Elements on the Site



Figure 1



Figure 2

Source: Center for Watershed Protection, Wicomico County

Sequential Planning Milestones

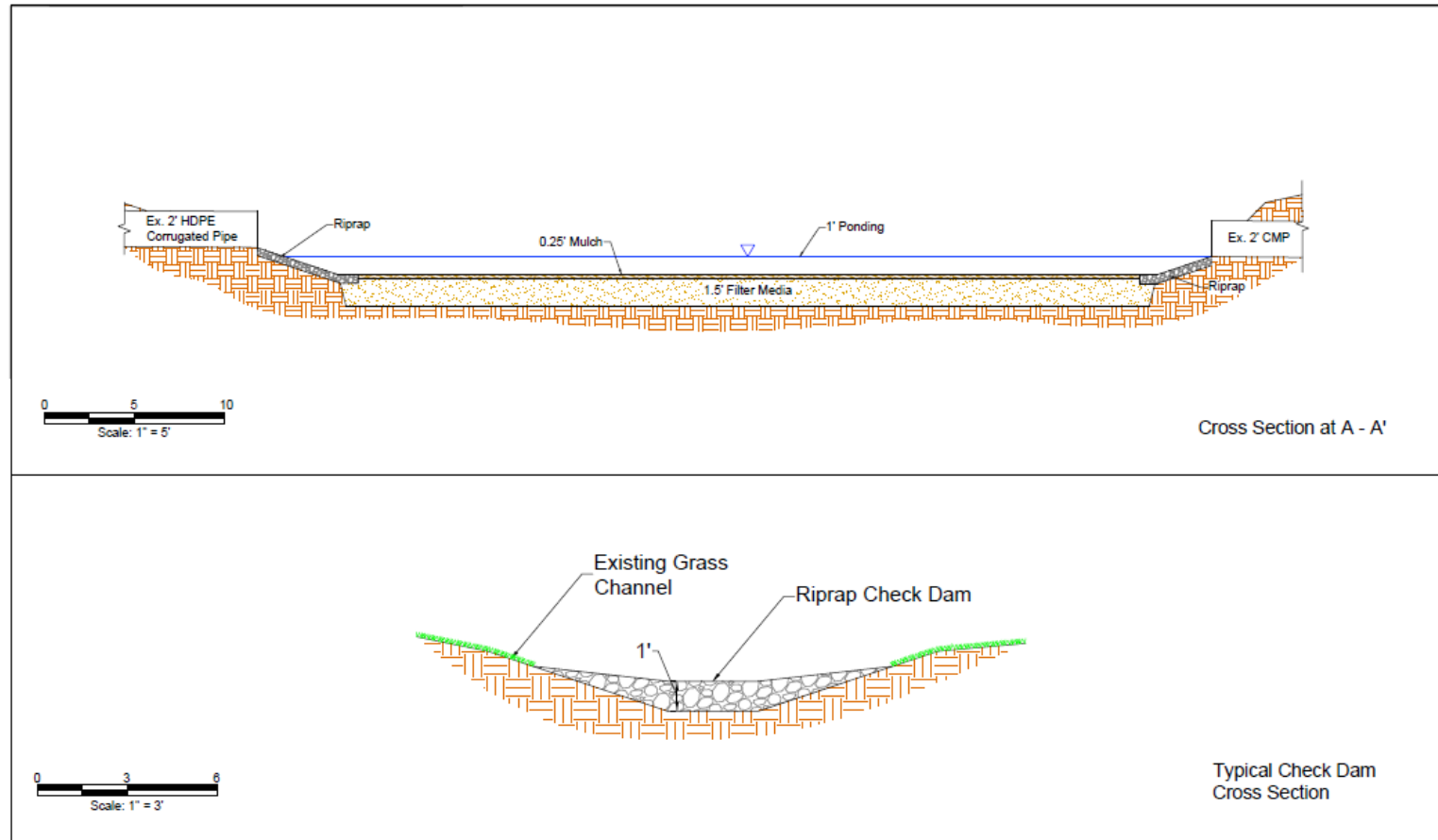
Concept Design Sketches



Source: Center for Watershed Protection, Wicomico County

Sequential Planning Milestones

Concept Design Drawings



Source: Center for Watershed Protection, Wicomico County

Key Local Milestone Dates

- **1/31/15:** Interim Status Report
- **1/31/16:** Final Status Report on 2015 Milestones
- **1/31/16:** 2016 - 2017 Milestones

ENSURING RESULTS

Set Two-Year
Milestones

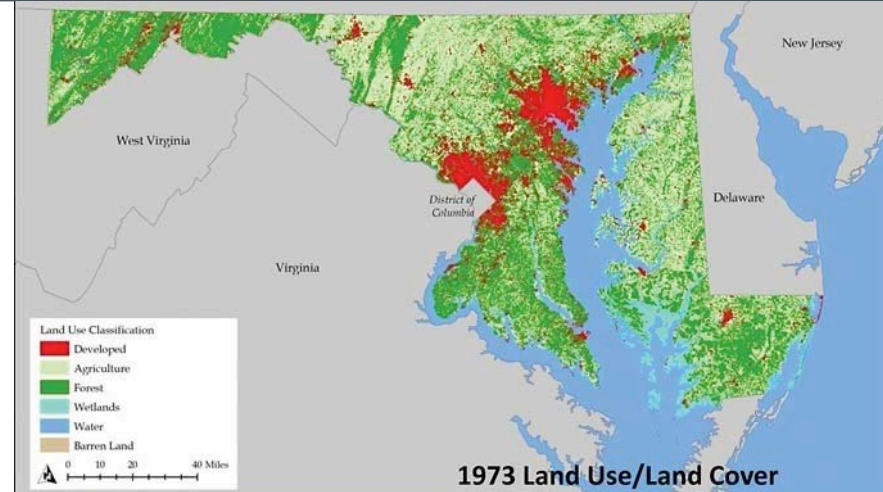


Historical Data Cleanup



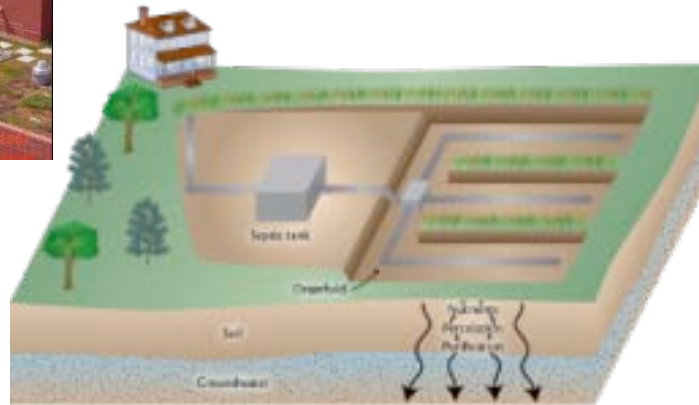
Source: Chesapeake Stormwater Network

Best Management Practices



Source: MD Dept. Planning

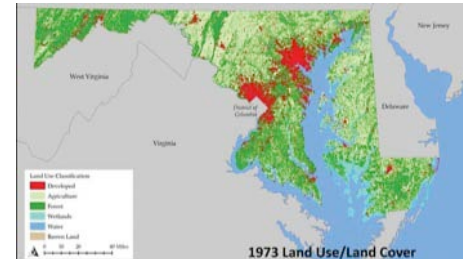
Land Use/Cover

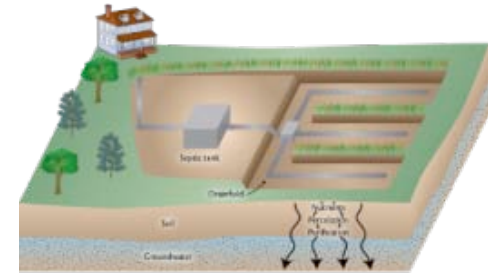


Septic Systems

Land Use/Cover:

- Key to Watershed Pollution Loading Model
- Key to Accurate Accounting of Implementation
- Strong Participation by Local Partners
- Final Local Submittal Date: May 29, 2015
- MDE Contact: Jeff.White@Maryland.Gov





Septic Systems:

- Estimated Numbers voiced as a concern in Phase II WIP
- Modest Participation by Local Partners
- Final Local Submittal Date: May 29, 2015
- MDE Contact: Jeff.White@Maryland.Gov

Best Management Practices:

- Key to Watershed Pollution Loading Model
 - Model Calibration through 2012
 - Focus on BMPs implemented between 2000 – 2012
- Key to Accurate Accounting of Implementation
- Modest Participation by Local Partners
- Final Local Submittal Date: May 29, 2015
 - MS4 Geodatabase will not be ready in time. Direct Reporting Needed.
- MDE Contact: Gregorio.Sandi@Maryland.Gov

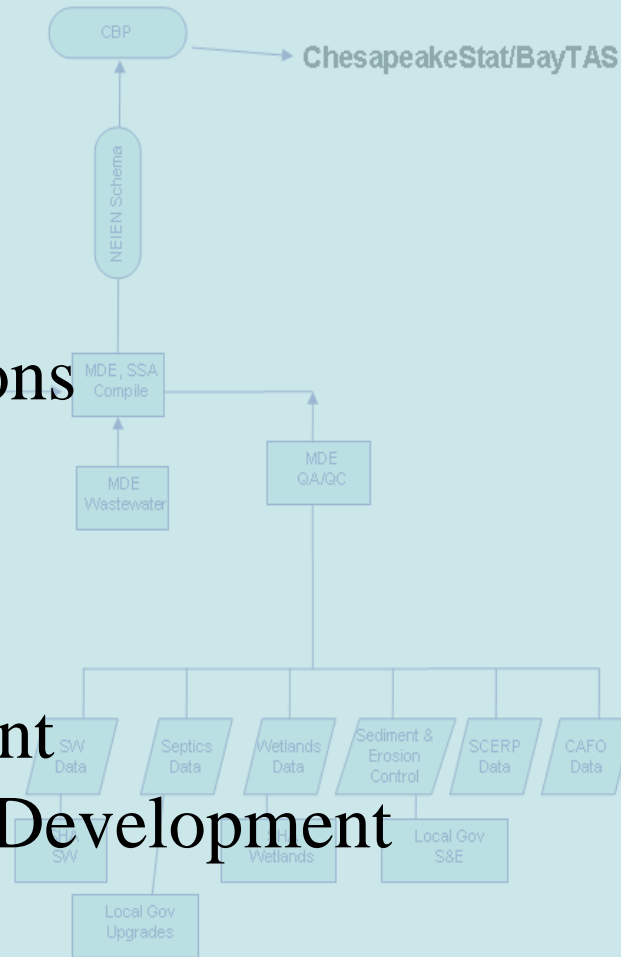


Agriculture Sector has a separate Historical BMP Cleanup initiative

BMP Tracking & Reporting

Topics Covered:

- Septic Systems
 - OSDS Upgrades
 - OSDS Connections
- Tree Plantings
- Stormwater
 - New Development
 - Retrofitting Old Development
- BMP Verification



On-Site Sewage Disposal Systems (Upgrades)

- What to Track?
 - Upgrade: Date, Location, Upgrade Type, Etc.
 - Maintenance status
- New Online Database
 - Data Input by Installers & Inspectors (Service Providers)
 - Access by Service Providers, Counties, State
 - Beta-testing in early 2015
- Local Roles – Three Potential Levels set by MOUs
 1. Standard Septic System management
 2. Managing BRF Upgrades & Associated Tracking
 3. Enforce Maintenance Requirements for BAT Systems

On-Site Sewage Disposal Systems (Connections)

- What to Track?
 - Connection: Date, Location, WWTP
 - Septic Zones
 - Purpose of Connection:
 - Transfer Allocation to WWTP, or
 - Nitrogen Reduction to Bay
- Spreadsheet for Reporting is Available
 - Contact: Gregorio.Sandi@Maryland.Gov
- Standardized Reporting System Under Consideration

Tree Plantings: (Harvesting BMPs Aside)

- Urban/Suburban Sector - Stormwater (Agri Sector Aside)

- **Basic Rule:**

Entity receiving credit is responsible for reporting the BMP, i.e, jurisdiction in which trees are planted.

(Generating trading credits & fee rate reductions aside)

- **Example:**

- NGO receives grant to plant trees on a church property in Name-Your-City.
- How does City Know? It should be a supporting partner in the grant. Granting entity should help make this connection.
- City should report BMP to via stormwater reporting avenue

Stormwater BMPs

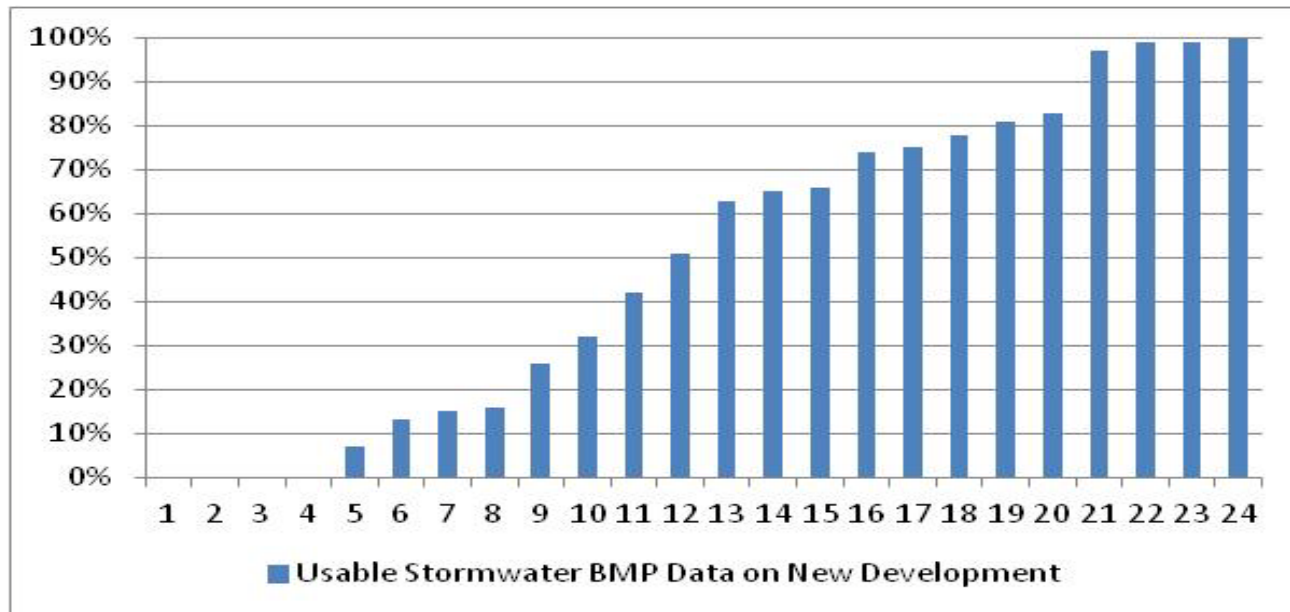
- Two Broad Categories
 - New Development
 - Determines Load Increase on New Developed Land
 - Old Development Retrofit
 - Determines Bay Load Reduction Credit toward meeting WIP



Stormwater BMPs on New Development

- Required in 1985 State Stormwater Regulations
 - NOCC Forms
1. **Under Reporting:** Less than 5% for New Acres each year
 2. **Incomplete Data:** Only 44% of data is usable (Statewide)

Usable Records
by County



1. Under Reporting on New Development

- Currently receive BMP credit on all new development
- Starting in 2015 No Credit unless reported explicitly.

Implications for Nitrogen Loads statewide:

~ 38,000 lbs/year increase with BMP Credit

~ 77,000 lbs/year increase w/out BMP Credit

Assumes:

11,000 acres/yr new developed land

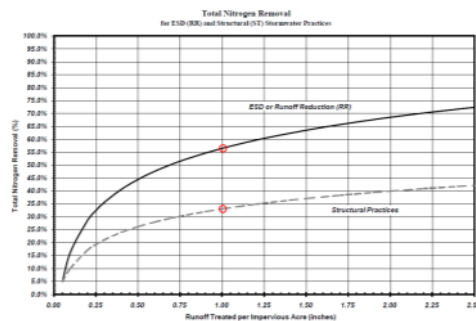
7.0 lbs/ac Urban loading rate w/o BMPs (del)

3.5 lbs/ac Urban loading rate w/ BMPs (del) = 50% TN reduction efficiency

2. Incomplete Data:

- Minimum Required Information:
 - ✓ BMP Type (matching MDE BMP codes)
 - ✓ Drainage Area or Length of practice (Stream Restoration)
 - Unique ID
 - Spatial Location (Lat/Long or State plane 83 MT)
 - Construction completion date (mm/dd/yyyy)

To report according to newer performance approach, additional information is required, e.g., inches of rain treated, area of impervious cover.



According to a study by the Institute of incomplete information 9 out of every 10.

Reporting ESD Practices

- Point(s) of Investigation (POI): Outlet(s) of drainage area(s) where runoff leaves the project site.
- BMP Type is 'ESD' (multiple non-structural & micro-practices)
- Report inches of rainfall treated
- Total drainage area and impervious area
- Comment: List inventory of micro-practices

Notes:

- ESD practices may be reported for retrofits of old development.
- Structural BMPs may be reported as “inches treated.” Should result in more accurate estimate of BMP efficiency.

MS4 Guidance, August 2014:

<http://www.mde.state.md.us/programs/Water/StormwaterManagementProgram/Documents/NPDES%20MS4%20Guidance%20August%2018%202014.pdf>

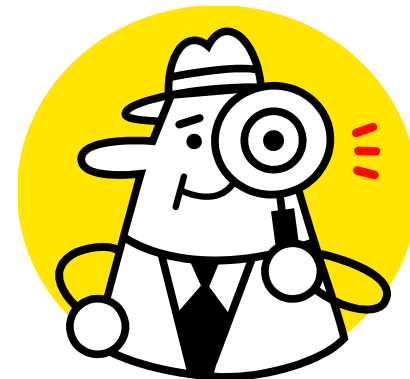
BMP Verification Protocols

- Greater confidence of practices in the Bay model
- Confirms BMPs are functioning according to design
- Documented Procedures from State to EPA by July 2015
- Implementation of Procedures by 2018

Will Require Additional Data Reporting Elements*:

- Maintenance Inspection Dates
- Inspection Results
- Re-inspection Dates (for failed inspections)

* Pollution Reduction credit lost if not maintained



Recorded Webinar: <https://epa.connectsolutions.com/p3kbjw13nhd/?launcher=false&fcsContent=true&pbMode=normal>

Grab Bag



Conowingo Dam

- FERC Environmental Impact Statement:
 - Public Review Conducted July 30 – September 29, 2014
- Lower Susquehanna River Watershed Assessment (LSRWA):
 - November 13, 2014: Available for Public Comment.
 - December 9, 2014: Public Meeting/Webinar.
- 401 Water Quality Certification by Maryland:
 - MDE intends to deny WQC due to insufficient information.
 - Public Hearing: January 7, 2015 at MDE' Baltimore Office.
 - Public Comments Due: January 7, 2015
 - Final decision by MDE due January 2015.



Nutrient Trading

- 2008 Trading Policies to Address Wastewater Cap
 - WWTP Policy Procedures
 - Agriculture Nutrient Credit Generation Procedures
 - Agriculture Credit Exchange (Buying/Selling) Procedures
- WIP Trading Policy Direction:
 - 2012 WIP Allocations Founded on Expectation of Trading
 - 2012 WIP Commits to Accounting for Growth (AfG) Procedures
- Current Status Overview:
 - Agriculture Trading Regulations are moving forward
 - AfG Focus: Offsetting septic system loads & loss of trees
 - Cross-Sector Trading to Reduce Cost of Meeting Reductions

Nutrient Trading

Benefits of Adopting Cross-sector Trading:

- Promotes a financially feasible approach for high-cost sectors to meet their fair share toward reducing pollution.
- Accelerates water quality restoration by providing practical, cost-effective pollution control alternatives.
- Leverages funding from the urban sector for agricultural conservation practices.
- Supports more jobs by accelerating Bay restoration.
- Provides pollution credit generators with added income.
- Provides near-term experience with trading to support the Phase III WIP strategy development process in 2017-2018.

Nutrient Trading

Trading to Meet Bay Load Reduction Target (Cross-sector Trading)

- Trading to achieve nutrient pollution reductions is a change from past trading policy.
- Cross-sector Trading Policy
 - Being Finalized
 - Brief statement of motivations, principles and how to get started.
 - Identifies:
 - a. Which sub-sectors may trade to meet their Chesapeake Bay goals
 - b. How much of their reduction may be achieved via trading

Nutrient Trading

Trading to Meet Load Bay Load Reduction Target (Cross-sector Trading)

- Next Steps

- Adoption of MDA's Nutrient Trading Regulations
- Update policy & procedure documents
 - Address details in coordination with US EPA
 - Consistency with Bay TMDL Appendix S
 - Consistency with EPA Technical Memos
- Outreach and Technical Support to Local Partners
- Develop Accounting systems for tracking & reporting progress to the EPA Chesapeake Bay Program

Key due dates for Local Partners involved in Chesapeake Bay restoration

- **January 31, 2015:** Interim Status Reports for 2015 Milestones
- **Spring 2015:** Look for 2-Year Milestone Support Grant RFP
 - Think of 2016-2017 Milestone(s) to fund in advance
- **May 29, 2015:** Final Historical Data Cleanup Submittal to MDE
- **September 30, 2015:** Annual BMP Progress Data Submittal
- **January 31, 2016:** Final Status Reports for 2015 Milestones
- **January 31, 2016:** New 2016-2017 Milestones
 - Plan in Advance

Questions?

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