

Maryland Chesapeake Bay **WIP Webinar**

Kick-off Following Phase II WIP Development

November 28, 2012















Webinar Overview

- Current Status
- Overview of Future Steps
- Future Assistance and Coordination
- Technical Topics











Current Status Maryland Phase II WIP

- March 2012 Version of WIP to EPA
- Local WIP Updates July 2012:
 - 9 New or Updated MAST Scenarios
 - 13 Updated Narrative Strategies
- MDE Processed and Posted the WIP
 - March version Replaced Oct. 2012
 - EPA webpage links to Oct. version











Current Status

- Federal & State Agency Facilities
 - State Lands
 - 1,260 Acres of Natural Stream Filters Since 2008
 - Program Open Space at 358,000ac of 362,000 goal
 - CREP Easements exceed goal at 7,580 acres
 - Rural Legacy nearly meets goal of 75,855 acres
 - MD Environmental Trust at 128,000ac of 132,500 goal
 - MD Ag Land Preservation exceeds go at 283,550 ac











Current Status

MS4 Permits

- Phase I
 - Baltimore City
 - -Others
- Phase II
 - -State & Federal Facilities
 - Municipal











Current Status

Other Stormwater Activities

- Industrial Stormwater General Permit
 - 20% Retrofit Requirement
 - Hearing Nov. 30 at MDE
 - Comments by Jan. 4, 2013
- HB 987 Watershed Protection and Restoration Act
 - System of charges in place by July 1, 2013











Current Status Other Stormwater Activities

- FY13 Chesapeake and Coastal Trust Fund
 - \$27.8M in General Obligation bond funding
- Bay Restoration Fund
 - 2012 Amendments Allow funding of Stormwater
 - Funds available in 2018











Current Status Agricultural Activities

- FY13 Chesapeake and Coastal Trust Fund
 - Staff increase from 19 to 39 (\$1.2M to \$2.4M)
- Voluntary Credit Certification Program, conducting training in accounting and verification procedures
- Revised Nutrient Management Regulations adopted in November 2012











Current Status Agricultural Activities

Phosphorus Site Index

- UM research completed in fall 2012
- MDA develops regulatory changes in 2013
- Training in winter and spring 2013
- On farm implementation begins in 2014 fall cropping season

Fertilizer Use Act

- 2012 Fertilizer formulation changes
- 2013 MDA regulations
- 1. Lawn care professional training, certification, licensing
- 2. Homeowner requirements, pre-empts existing local ordinances











Current Status Septic Systems

- Bay Restoration Fund (BRF)
 - Fee doubled from \$30 to 60/yr July 2012
 - Doubles Upgrades to 1,200 systems/year
 - Increase of Available Funding in 2018
- Sustainable Growth & Ag Preservation Act
- Septic System Regulations
 - Adopted September, 2012: Requires BAT
 - Effective January 1, 2013









Current Status Treatment Plants

- Bay Restoration Fund (BRF)
 - Fee doubled from \$30 to 60/yr July 2012
 - Major ENR Upgrades to be Completed in 2017
 - Minor Upgrades beginning 2018
 - Select Candidate Plants by 2014











Current Status Accounting for Growth (AfG)

- Accounting:
 - Future Allocations provided for WWTPs in WIP
 - New or expanded sources of waste water, storm water, and air emissions must secure an allocation
- Coordination with Section 8 of SB 236
 - Draft Offset Regulations for Tier III areas by Dec 2012
- Discussion Draft Policy July 12
- Discussion Draft Regulation Aug 27
- Reg Development Process to Extend into 2013













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Future Steps

- Continue Program Development and Implementation (AfG, SW fees, etc.)
- Complete & Evaluate 2013 Milestones
- Develop 2015 Milestones
- Technical Meeting Series
- Bay Program Midpoint Assessment





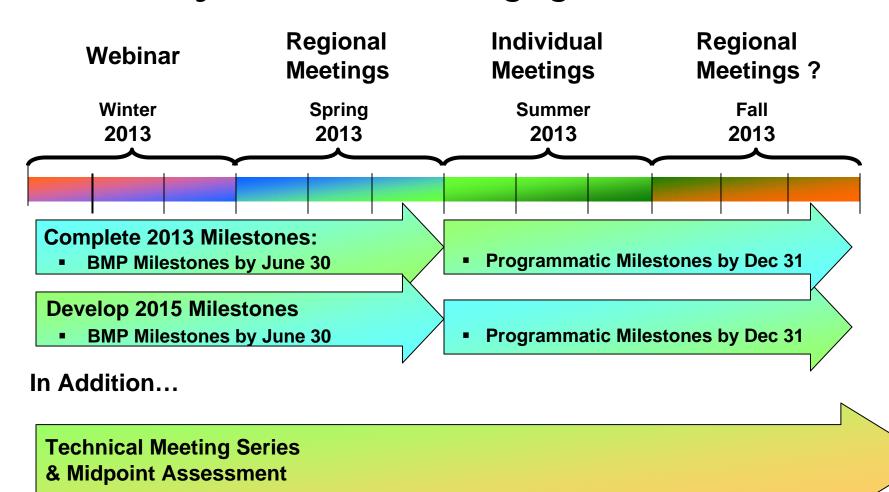






2013 Time Line

Quarterly State/Local Engagement:





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Assistance and Coordination Overview

- Reflections on WIP Development and Future Needs
- Costs and Funding Issues
 - General
 - Federal Funds
 - Chesapeake & Coastal Trust Fund
- Assistance & Coordination
 - Watershed Assistance Collaborative
 - WIP Liaisons & Communications



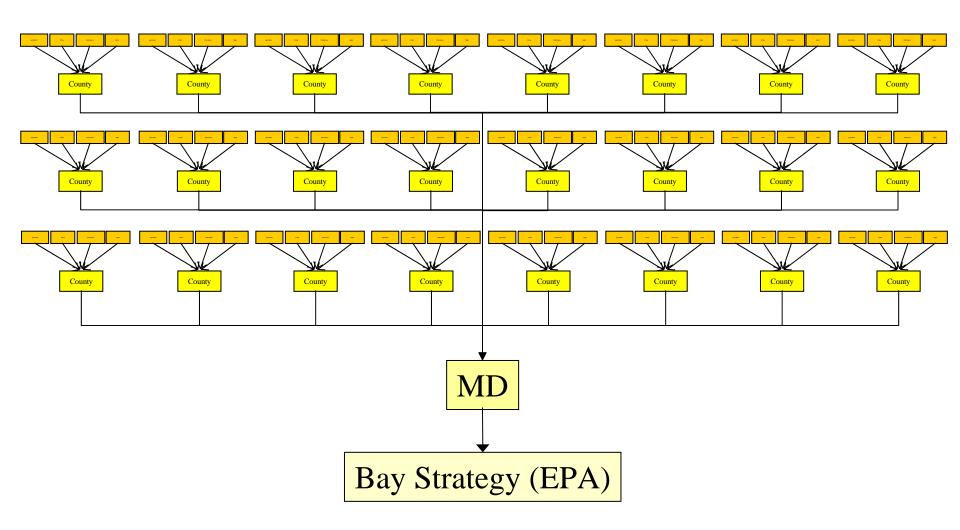








Reflections on WIP Development (AKA "Lessons Learned")



Assistance and Coordination

Reflections on WIP Development

- MDE: More Timely Responses (capacity)
- BMP Costs & Effectiveness
- Deeper Technical Understanding
- Issues with MAST BMP Analyses
- Clarity on "Consequences"









Assistance and Coordination

Future Needs

- Issues from Previous Slide Carry Over
- Help Funding WIP Actions
- Consistent BMP Tracking System
- Periodic Forums to Exchange Info/Ideas among **Jurisdictions**
- Communications Strategy & Tools
- State Leadership Engagement with Local Leadership
- Grant-writing Assistance













Assistance and Coordination Help Funding WIP Actions

In General:

- Funding Issues are a Very High Priority
- Federal Cost Estimate Process Underway
- BMP Cost-Effectiveness Analysis Underway
- Section 1.10.2 of WIP Overarching Strategy
- Progress by Maryland General Assembly
- Commitment to Seek Substantial Federal Funds









Assistance and Coordination

Help Funding WIP Actions

Maryland 2013 Milestone (Under Stormwater):

- Work directly with federal agency representatives to refine cost estimates.
- Conduct local financial feasibility analyses.
- Determine the federal share of stormwater costs*
- Develop a strategy with a time line to secure federal share of funds.

^{*} Note: Blue Ribbon Finance Panel recommended a capitol fund with an 80/20 federal/local split.













Help Funding WIP Actions

Chesapeake & Atlantic Coastal Bays Trust Fund

- State Funds dedicated to nonpoint source pollution reduction:
 - Agricultural, Stormwater, and Natural Filters
- \$63M in SFY13 (\$25M in TF + \$38M in GO Bonds)
- http://www.dnr.state.md.us/ccp

Trust Fund

Natural Filters

Who? Local Governments and NGOs

What? Riparian Buffer, Reforestation, Wetlands on public

land

When? Rolling Deadline- Contact us today!

How Much? Varies

Contact: Kristen Fleming

kfleming@dnr.state.md.us; 410.260.8813

Trust Fund

Capital Improvement Stormwater

Who? Local Governments and NGOs

What? Implementation of Shovel Ready Stormwater

Retrofits

When? Currently generating list for SFY15

How Much? Varies

Contact: Jenn Raulin

jraulin@dnr.state.md.us; 410.260.8745

A Partnership Committed to Advancing

Restoration at the Local Level...



Chesapeake Bay Program

A Watershed Partnership









noaa

Services Offered...

...On-the-Ground Capacity

- 3 Specialists working since2009
- 2 New Positions starting end of 2012



Services Offered...

...Watershed Assistance Grant Program



- Planning and Design Grants
- •Up to \$35,000 per award
- Offered twice per year
- Direct grant assistance

Services Offered...

...Financing Strategies and Stakeholder Development

...Stormwater Financing & Outreach Unit



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Caster for Watershot Protection 2000 Main Rend, Ellison Chy, MC 2004 (201) 481-5023 centre@cmp.org Improving Local Government Capacity for Watershed Planning and Implementation Efforts

Sassafras Watershed Action Plan (SWAP) Financing Recommendat

Prepared for the Sassafras River Association

Prepared by the Environmental Finance Center (EFC) through the Mayland Department of Natural Resources Watershed Assistance Collaborative



Improving Watershed Planning Capacity: Middle Chester Partnership

Final Report

A Sustainable Implementation Strategy for the Middle Chester Watershed, Kent County, Maryland

Prepared by the Environmental Finance Center for the Maryland Department of Natural Resources and the Watershed Assistance Collaborative



Services Offered...

...Stormwater Training Series

- 7 jurisdictions selected
- Three part training series
 - Stormwater Management
 - Stormwater Financing
 - Meeting with the Experts
- Seeking additional funding through Town Creek
 - Provide another round of trainings in 2013

Contact Information...

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410.260.8734

cbecraft@dnr.state.md.us

http://www.dnr.state.md.us/ccp

Assistance and Coordination

Wrap-Up

- In General: Quarterly State/Local Engagement
- Communications: Via WIP Local Contacts
 - WIP Liaisons: Under Consideration
 - New or Updated WIP Web Page
 - Means of Elevating Issues
- Technical: Meeting Series
- Funding: Do we need a State/Local Initiative?
- Technical Assistance:
 - Watershed Assistance Collaborative (also financial)
 - Direct State Agency Assistance













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Technical Topics Overview

- **Annual Progress Reporting**
 - BMP Tracking, Reporting
 - Example: Septic System Upgrades
 - Example: Agricultural Sector
 - Example: Urban Stormwater
 - BMP Verification
- Technical Meeting Series
- Bay Program Midpoint Assessment





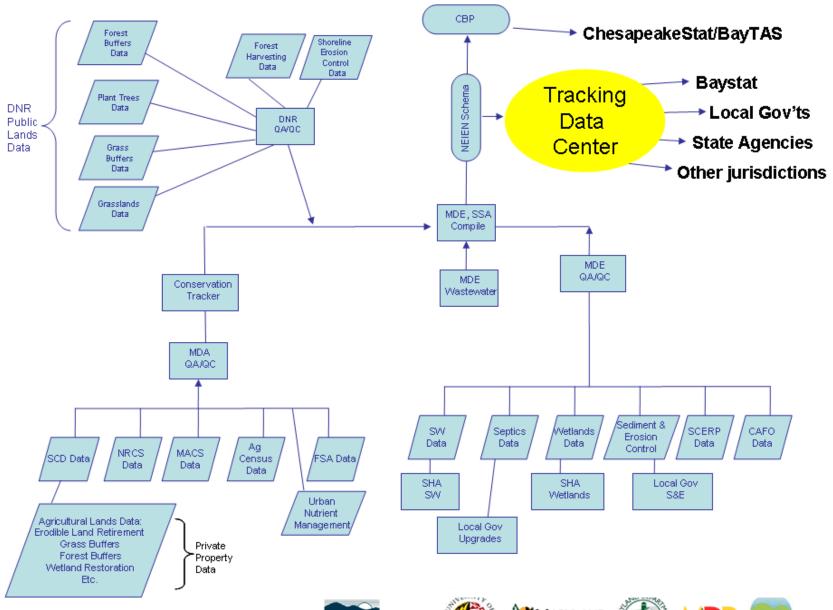






Annual Progress Reporting

Maryland Chesapeake Bay BMP Reporting System







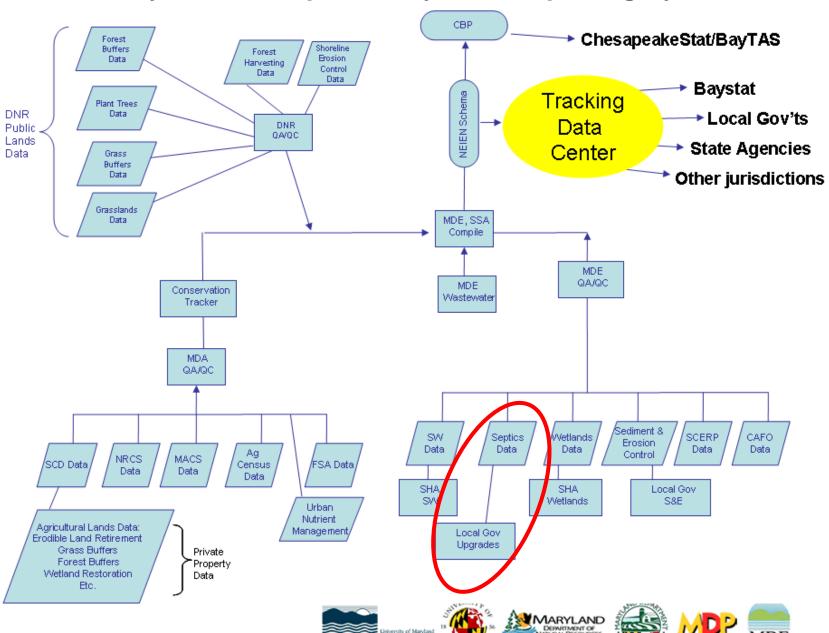


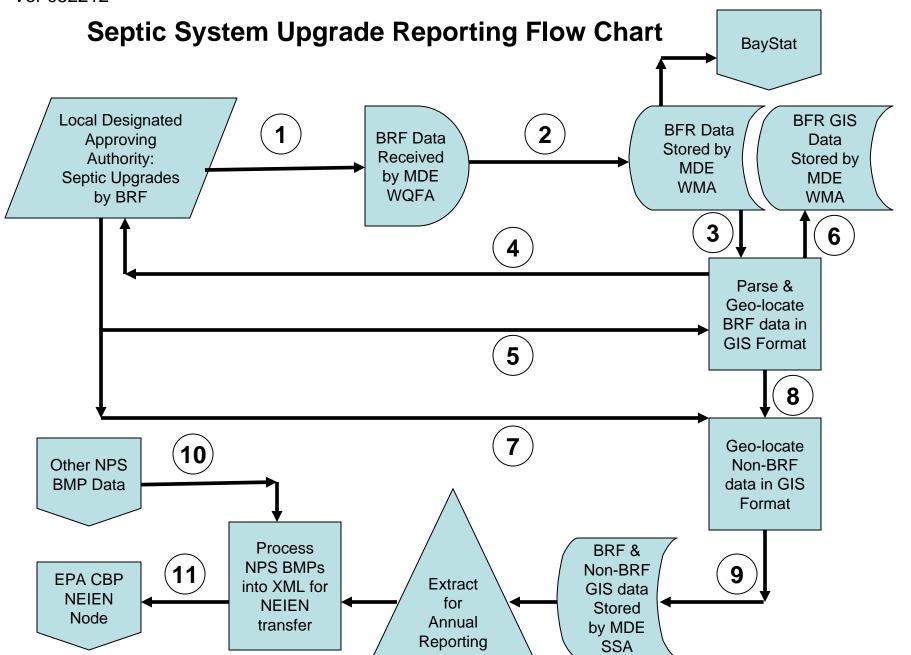






Maryland Chesapeake Bay BMP Reporting System







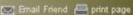


DEPARTMENT OF

AGRICULTURE

Search





LICENSES & PERMITS

PLANTSIPESTS

CONSERVATION

CONSERVATION

Regulatory **Information Center**

> **Nutrient** Management

> > Financial **Assistance**

Technical **Assistance**

TMDL/Watershed Implementation Plan

WIP Strategies

Public Drainage and Watershed Assoc.

Special Projects

Education and Homeowner Tips

Committees

Links

MDA INFORMATION

About MDA

News Room

Calendar

Publications

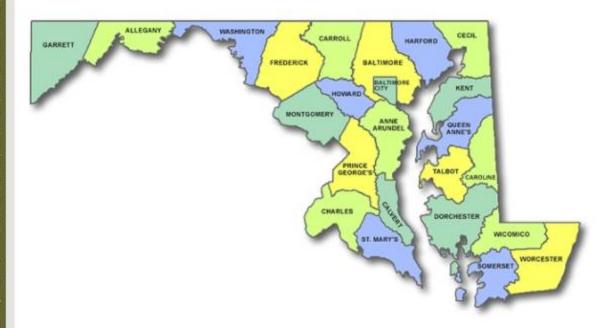
Site Map

Contact Us

Chesapeake Bay TMDL/WIP Resource Map

Click on a county to view local implementation progress, strategies, and meeting information.

Maryland Statewide Data



- Agricultural TMDL/WIP Summary
- MDE TMDL/WIP Website
- Maryland BayStat Website



Agriculture WIP II Plan Goals



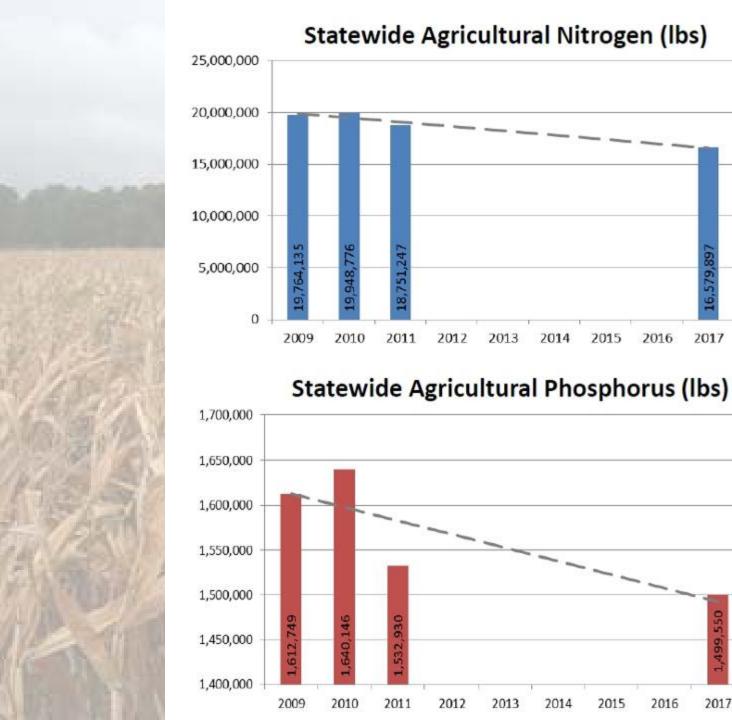
		2017			
ВМР	Unit	2013 Milestones	Goal	2025 Goal	
10' Fertilizer Setback	Acres		3168	5,280	
Alternative Crops	Acres	200	498	830	
Barnyard Runoff Control	Acres	168	219	1,180	
CAFO Manure Application Setback	Acres	2,500	1500	2,500	
Conservation Tillage	Acres	704,198	764,630	765,487	
Cover Crop	Acres	355,000	424,086	424,086	
Cropland Irrigation Management	Acres	92,000	119,728	119,728	
Dairy Manure Incorporation	Acres	3,976	16,703	27,838	
Decision Agriculture - Cropland	Acres	84,920	356,665	594,441	
Enhanced Nutrient Management - Tier I	Acres	14,285	60,000	100,000	
Enhanced Nutrient Management - Tier II	Acres	14,285	60,000	100,000	
Enhanced Nutrient Management - Tier III	Acres	25,000	105,000	175,000	
Grass Buffers, Vegetated Open Channel -	Acres	335	1,406	2,344	
Agriculture	Acres	538	2,258	3,763	
Heavy Use Poultry Area Concrete Pads	Operations	19	81	136	
Horse Pasture Management	Acres	712	2,994	4,990	
Irrigation Water Capture Reuse	Acres	1,000	2,120	3,533	
Land Retirement to hay without nutrients (HEL)	Acres	2,030	8,536	14,226	
Land Retirement to pasture (HEL)	Acres	5,285	22,200	37,000	
Loafing Lot Management	Acres	34	145	241	



Agriculture WIP II Plan Goals



ВМР	Unit	2013 Milestones	2017 Goal	2025 Goal
Manure Transport - Out of Watershed	Tons	37,000	51,000	85,000
Mortality Composters	Operations	20	87	145
Non Urban Stream Restoration	Linear Feet	6,919	29,061	48,435
Nutrient Management - Cropland	Acres	685,000	211,036	351,726
Nutrient Management - Hayland	Acres	75,000	11,207	18,679
Nutrient Management - Nursery	Acres	1,836	1,836	3,060
Off Stream Watering Without Fencing	Acres	655	2,500	4,167
Poultry Litter Incorporation	Acres	23,876	100,283	167,138
Poultry Litter Treatment	Operations	64	270	450
Precision Intensive Rotational Grazing	Acres	398	1,671	2,785
Prescribed Grazing	Acres	2,614	10,982	18,304
Shallow Wildlife Wetland Habitat Management	Acres	35	150	250
Shoreline Erosion Control	Linear Feet	3,649	15,326	25,543
Soil Conservation and Water Quality Plans	Acres	826,000	1,026,413	1,145,326
Sorbing Materials in Ag Ditches	Acres	737	3,097	5,162
Stream Access Control with Fencing	Acres	5,050	20,956	35,355
Tree Planting; Vegetative Environmental Buffers - Poultry	Acres	118	500	830
Water Control Structures	Acres	2,453	10,289	17,173
Wetland Restoration	Acres	502	2,110	3,516
Phytase	%	24%	31%	31%
Poultry Waste Structures	Operations	7	31	52
Livestock Waste Structures	Operations	20	87	145





Maryland Statewide Agricultural Phase II Watershed Implementation Plan

Vegetative Environmental Buffers on Poultry Operations

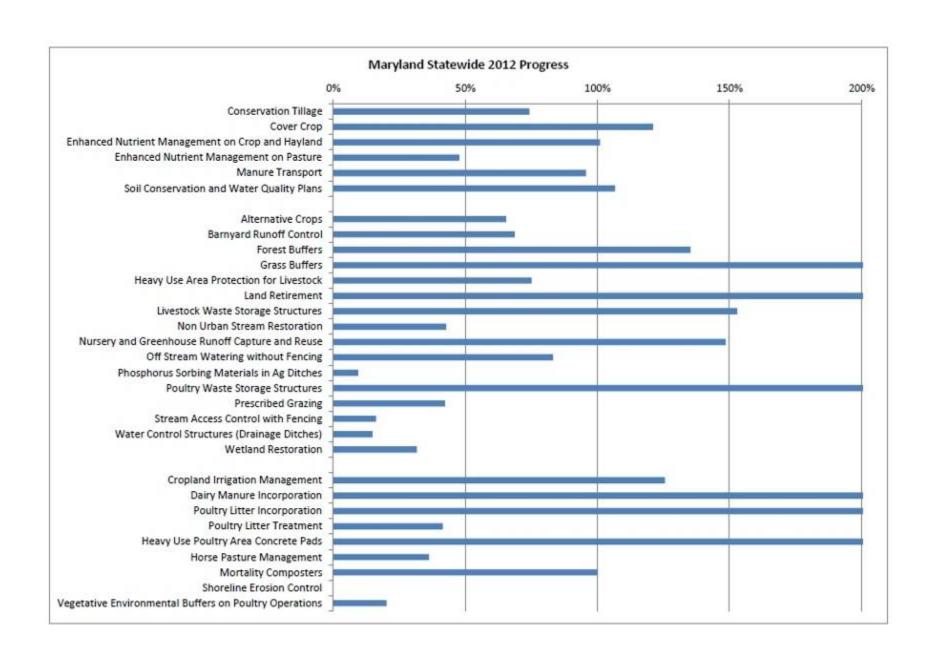
Agricultural Phase II Watershed Implementation Plan				
		7/1/11-6/30/12		
BMPs to be Implemented Annually	Unit	Progress	2013 Milestone	Percentage
Conservation Tillage	Acres/Year	567,758.1	764,629.6	74%
Cover Crop	Acres/Year	429,818.2	355,000.0	121%
Decision Agriculture	Acres/Year	-	-	-
Enhanced Nutrient Management on Crop and Hayland	Acres/Year	1,057,922.2	1,047,547.2	101%
Enhanced Nutrient Management on Pasture	Acres/Year	82,075.6	172,018.6	48%
Manure Transport	Tons/Year	35,380.3	37,000.0	96%
Soil Conservation and Water Quality Plans	Acres/Year	881,452.1	826,000.1	107%
Additional BMPs to be Implemented	Unit	Progress	2013 Milestone	Percentage
Alternative Crops	Acres	130.9	200.0	65%
Barnyard Runoff Control	Projects	105.0	153.0	69%
Forest Buffers	Acres	298.7	220.8	135%
Grass Buffers	Acres	1,599.4	537.7	297%
Heavy Use Area Protection for Livestock	Acres	25.9	34.4	75%
Land Retirement	Acres	1,308.0	608.0	215%
Livestock Waste Storage Structures	Projects	52.0	34.0	153%
Non Urban Stream Restoration	Linear Feet	2,960.2	6,919.3	43%
Nursery and Greenhouse Runoff Capture and Reuse	Acres	1,484.9	1,000.0	148%
Off Stream Watering without Fencing	Acres	953.0	1,145.0	83%
Phosphorus Sorbing Materials in Ag Ditches	Acres	36.4	386.4	9%
Poultry Waste Storage Structures	Projects	17.0	7.0	243%
Precision Intensive Rotational Grazing	Acres	-	397.9	-
Prescribed Grazing	Acres	1,105.8	2,614.8	42%
Stream Access Control with Fencing	Acres	58.2	359.3	16%
Water Control Structures (Drainage Ditches)	Acres	364.0	2,453.3	15%
Wetland Restoration	Acres	204.0	645.2	32%
BMPs Pending Model Efficiency	Unit	Progress	2013 Milestone	Percentage
Cropland Irrigation Management	Acres/Year	115,528.5	92,000.0	126%
Dairy Manure Incorporation	Acres/Year	19,526.0	3,976.9	491%
Poultry Litter Incorporation	Acres/Year	85,363.7	23,876.8	358%
Poultry Litter Treatment	Operations/Year	27.0	65.0	42%
Heavy Use Poultry Area Concrete Pads	Operations	131.0	19.4	677%
Horse Pasture Management	Acres	258.5	712.8	36%
Mortality Composters	Projects	21.0	21.0	100%
Shoreline Erosion Control	Linear Feet	-	3,648.9	0%

Acres

29.6

6.0

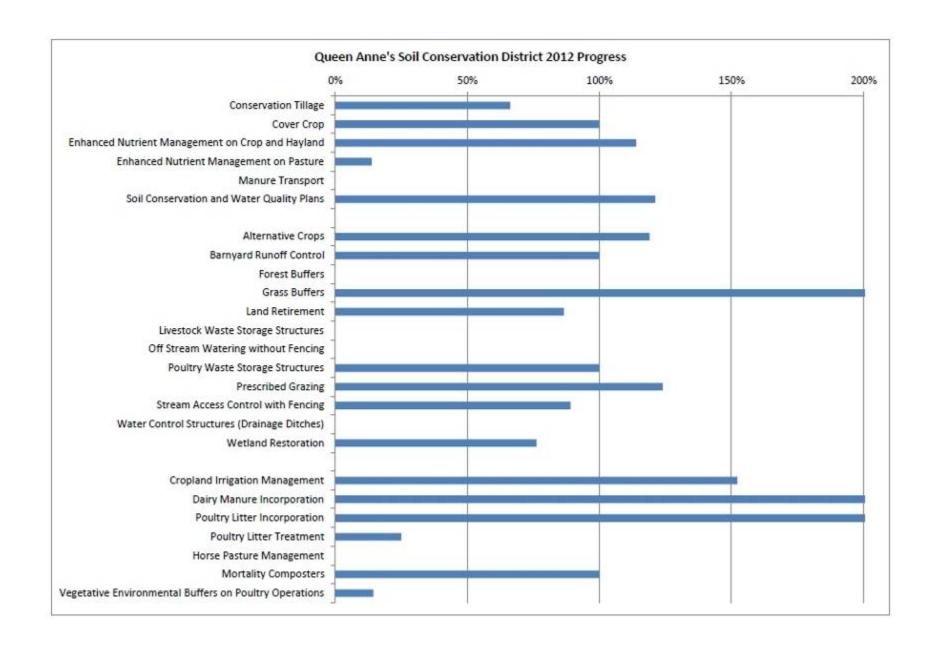
20%



Queen Anne's Soil Conservation District Agricultural Phase II Watershed Implementation Plan

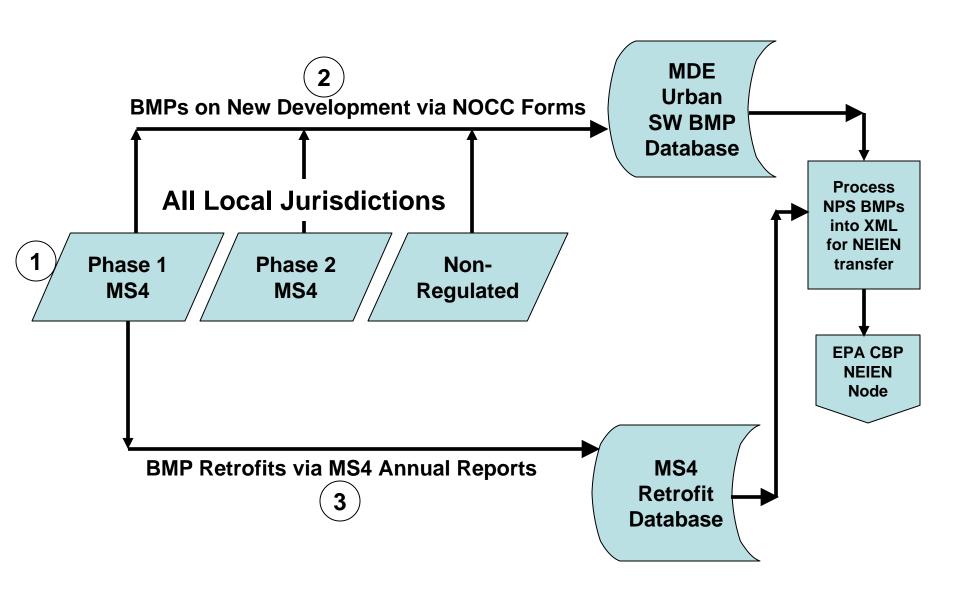
7/1/11-6/30/12

	7/1/11-6/30/12		
Unit	Progress	2013 Milestone	Percentage
Acres/Year	67,429.1	101,776.9	66%
Acres/Year	46,056.4	46,040.2	100%
Acres/Year	-	-	-
Acres/Year	109,413.4	96,011.1	114%
Acres/Year	940.4	6,826.7	14%
Tons/Year	-	1,088.2	0%
Acres/Year	76,903.8	63,464.9	121%
Unit	Progress	2013 Milestone	Percentage
Acres	130.9	110.0	119%
Projects	1.0	1.0	100%
Acres	-	18.3	0%
Acres	249.4	52.6	474%
Acres	-	-	-
Acres	16.2	18.7	87%
Projects	-	1.0	0%
Linear Feet	-	-	-
Acres	2.0	-	-
Acres	-	14.3	0%
Acres	4.5	-	-
Projects	1.0	1.0	100%
Acres	-	-	-
Acres	71.1	57.4	124%
Acres	1.6	1.8	89%
Acres	-	457.1	0%
Acres	111.8	146.8	76%
Unit	Progress	2013 Milestone	Percentage
Acres/Year	19,643.0	12,900.0	152%
Acres/Year	651.0	128.6	506%
Acres/Year	11,485.1	2,672.3	430%
Operations/Year	1.0	4.0	25%
Operations	8.0	-	-
Acres	-	14.3	0%
Projects	1.0	1.0	100%
Linear Feet	-	-	-
Acres	0.4	3.0	14%
	Acres/Year Acres/Year Acres/Year Acres/Year Acres/Year Acres/Year Tons/Year Acres/Year Unit Acres Projects Acres	Acres/Year 46,056.4 Acres/Year 46,056.4 Acres/Year 109,413.4 Acres/Year 940.4 Tons/Year - Acres/Year 76,903.8 Unit Progress Acres 130.9 Projects 1.0 Acres - Acres 249.4 Acres 16.2 Projects - Linear Feet - Acres 2.0 Acres - Acres 1.0 Acres - Acres 1.0 Acres - Acres 1.0 Acres 1.1 Acres 1.6 Acres 1.6 Acres 1.6 Acres 1.1 Acres	Unit Progress 2013 Milestone Acres/Year 67,429.1 101,776.9 Acres/Year 46,056.4 46,040.2 Acres/Year - - Acres/Year 109,413.4 96,011.1 Acres/Year 940.4 6,826.7 Tons/Year - 1,088.2 Acres/Year 76,903.8 63,464.9 Unit Progress 2013 Milestone Acres/Year 76,903.8 63,464.9 Unit Progress 2013 Milestone Acres 130.9 110.0 Projects 1.0 1.0 Acres 1.0 1.0 Acres 249.4 52.6 Acres 16.2 18.7 Projects - - Acres 16.2 18.7 Projects - - Acres 1.0 1.0 Acres 1.0 1.0 Acres 1.0 1.0 Acres

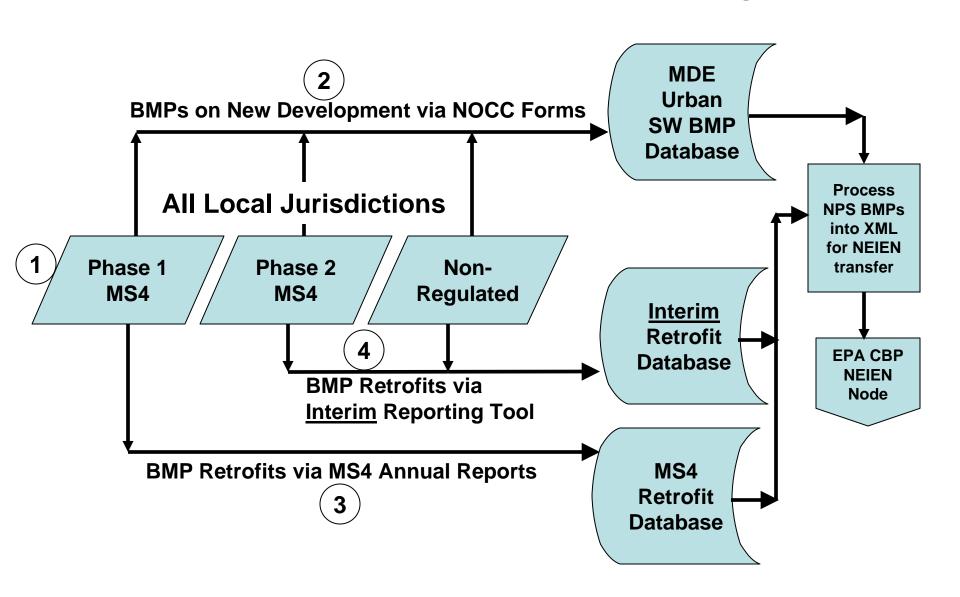




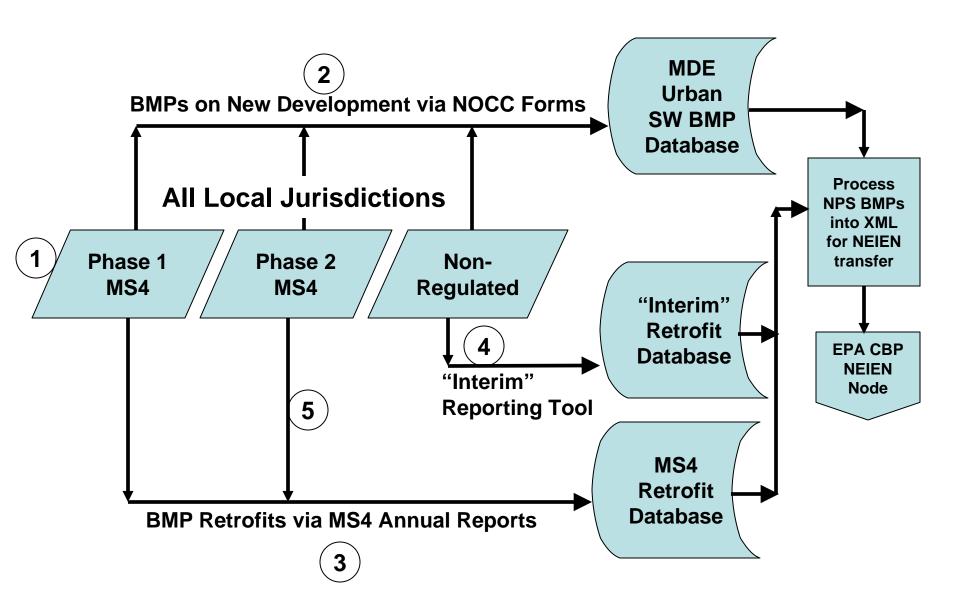
Stormwater BMP Reporting



Stormwater BMP Reporting



Stormwater BMP Reporting



Technical Topics Stormwater Interim Reporting Tool

- 2012 Progress = July 1, 2011 June 30, 2012
- Simple Interim Stormwater Reporting Tool
 - On-line Reporting http://tinyurl.com/Simple-SW-MD
 - For Non-regulated & Phase II MS4 jurisdictions
 - For Retrofits (Not for Controls on New Development)
 - Due Date: December 15, 2012
 - Contact: <u>GSandi@mde.state.md.us</u>
- Opportunity to Revise BMP Record by Dec 2014











Technical Topics BMP Verification Initiative

- Purpose:
 - Ensure BMPs are Implemented and Maintained
 - Ensure Credit for Implementation
- Consistent Protocols for each Source Sector
- Developed via an Open Process
- June 2013 Adopt BMP Verification Framework
- Summer & Fall 2013 State Verification Programs Reviewed by "BMP Verification Review Panel"











Technical Topics Technical Meeting Series

Purposes:

- Deeper Look at WIP Technical Issues, e.g.,
 - Landuse, MAST, BMPs, Bay Model, Allocations...
- Support Local Involvement in Bay Program's Midpoint Assessment

Process:

- Begin in January 2013
- Meetings conducted at MDE
- Agendas to be set by participants













Midpoint Assessment

Basic Concept: Revise model and data in advance of Phase III WIP planning.

Key Guiding Principle:

•PRINCIPLE 2: Enhance decision support and assessment tools to enable successful engagement of local partners.











Midpoint Assessment

Priorities:

- Incorporate local land use/cover information
- Consider additional urban land use categories
- Improve manure modeling
- Revisit Model Calibration: Regional Factors, decreased trapping behind Susquehanna dams, input data (BMPs, septic numbers, etc.)
- Adjust Phase III WIP Deadline











Midpoint Assessment Schedule

- Thru Dec 2014 Collect Updated Data
- Spring 2015 Initial Model Calibration
- Thru Sept 2016 Model Updates
- Fall 2016 Spring 2017 Partnership reviews "proposed final" model
- December 1, 2017: Complete final changes to model based on Partner review and set Phase III WIP targets
- Spring 2018: 2017 progress run complete. Determines whether jurisdictions met 60% of Final Target by 2017
- Spring Fall 2018: Draft and Final Phase III WIPs due
- Based on Phase III WIPs and Midpoint Assessment, EPA determines whether to modify Bay TMDL

Guide to Bay Program Activities

Key TMDL-related Teams/Committees/Workgroups:

- Water Quality Goal Implementation Team (GIT)
 - Watershed Technical Workgroup
 - Urban Stormwater Workgroup
 - Wastewater Treatment Workgroup
 - Agriculture Workgroup
 - Land Use Workgroup (newly established)
 - Trading and Offsets Workgroup
- BMP Verification Committee
- Modeling Group (Modeling Quarterly Meetings)

Bay Program Meeting Calendar:

http://www.chesapeakebay.net/calendar

End

