

Maryland’s 2016 – 2017 Programmatic Two-Year Milestones

Target Date	Milestone	Deliverable	Lead Agency	Comments/Status Updates
Point Sources				
2016-2017	Improve point source data quality through NetDMR implementation. -Advocate NetDMR reporting to all NPDES permittees. -Train NPDES permittees on using web-based NetDMR system. - Facilitate creation of NPDES and outfall specific NetDMR accounts, approval of administrator authority and going “live” with data entry.	Report NetDMR implementation	MDE - WMA	
Point Sources/Major Municipal				
2016-2017	Upgrade Major WWTPs to ENR with State grant/loan support.	A cumulative total of 63 of 67 major WWTPs will have completed construction.	MDE - WQFA	Maryland’s Phase II WIP called for upgrading 67 major WWTP plants with State funds*. MDE is on track to meet this goal. State funds are available and MDE seeks Maryland Board of Public Works approval upon initiation of construction. Current status: 42 of the 67 WWTPs are in operation 21 are under construction 3 in design 1 in planning * 9 additional federal and privately owned plants, being upgraded at their own expense, are not included in this accounting.

Maryland 2016-2017 Programmatic Milestones
 Document version: FINAL 4/29/16

Target Date	Milestone	Deliverable	Lead Agency	Comments/Status Updates
Point Sources/Minor Municipal				
2016-2017	Upgrade minor WWTPs to ENR with State grant/loan support.	A cumulative total of 8 minor WWTPs will have completed construction; the Phase II WIP goal requires 5 minor plant upgrades. MDE will provide an inventory of WWTPs that have been upgraded and those scheduled for upgrades based on EPA template.	MDE - WQFA	Maryland's Phase II WIP called for upgrading 5 large minor WWTPs to achieve about 50,000 pounds of nitrogen reduction. MDE is on track to exceed the goal for minor WWTP upgrades. Currently State funding is being allocated to 15 minor plants. Current Status: 3 WWTPs are in operation 4 are under construction 4 in design 4 in planning
Point Sources/Minor Industrial				
2016-2017	Update minor industrial nutrient load data.	Summary of the minor industrial load data updates.	MDE - WMA/SSA	
Septic Systems				
2016-2017	Facilitate implementation of septic connections to ENR facilities in Critical Area and other areas of Maryland with funding support of BRF funds. - Provide technical and policy assistance to local governments to facilitate connections of septic tanks to WWTPs. -Market recent changes in the eligible use of BRF as a funding source for septic connections to ENR facilities.	Report number of Septic Connections to ENR facilities. New programs will be part of the December 2015 and future solicitations.	MDE WMA/ MDP MDE - WQFA	This program will start in FY 2018 (7/1/2017)
2016-2017	Improve tracking and reporting	Reports to SSA (Bay	MDE -	

Maryland 2016-2017 Programmatic Milestones
 Document version: FINAL 4/29/16

Target Date	Milestone	Deliverable	Lead Agency	Comments/Status Updates
	of O&M and BAT upgrades via newly developed and launched net-based BAT data tracking database.	Program) on BAT implementation and O&M.	WMA	
2016-2017	Review and expand a range of new, innovative, cost-effective nutrient removal BAT technologies to be available for upgrade of septic systems in Maryland.	Develop criteria for evaluation and selection of new BAT systems utilizing national peer reviewed BMPs (soil distribution and other innovative practices.)	MDE - WMA	
Urban Stormwater/Phase I MS4				
2016	Phase I MS4 Financial Assurance Plans. - Analyze all financial assurance plans based on the specific criteria in Maryland law for what constitutes an adequate financial assurance plan.	Report on the status of Phase I MS4 Financial Assurance Plans by September, 2016.	MDE - WMA	
2017	Report Phase I MS4 BMP implementation for Progress via newly developed GIS database	Database output	MDE - WMA/ SSA	
2017	Montgomery County Phase I MS4 Permit	Current Montgomery County permit will be administratively continued. MDE will enter into Consent Agreement with Montgomery County.	MDE/ WMA	MDE is negotiating a Consent Agreement with Montgomery County.
2016-2017	Review and approve as	Provide MDE review	MDE/	

Maryland 2016-2017 Programmatic Milestones
 Document version: FINAL 4/29/16

Target Date	Milestone	Deliverable	Lead Agency	Comments/Status Updates
				MDE has developed a database structure for Phase II MS4 permittees to use for reporting stormwater best management practice (BMP) data.
Agriculture				
2016-2017	Solicit proposals for funding that will support demonstrations for alternative technologies that use and manage animal waste, including manure-to-energy technologies.	Solicitations will be forthcoming in FY2016 and FY2017.	MDA/ DNR	Chesapeake and Atlantic Coastal Bays Trust Fund: Animal Waste Technology Fund MDA has approved 5 projects for use of FY14 and 15 funds. Three projects utilize poultry litter, one dairy manure and on horse manure. Four different technologies are being demonstrated. Grant solicitation for FY2016 issued 12/15/15 and proposals due 3/15/16.
2016-2017	Facilitate and provide continued service in FY2016 and 2017 for the Manure Matching Service in support of the Maryland Phosphorus Initiative.	Connect livestock producers who have excess animal manure with other farmers or alternative use projects that can use the product as a valuable resource	MDA	
2016-2017	Certify the verifiers for the Agricultural Certainty program.	Work closely with the Nutrient Trading Program and anticipate future trades will be used in conjunction with the Certainty Program. Continued outreach to local farm community	MDA	As of April 2016, MDA has certified four verifiers.
2016-2017	Accounting for growth in the Poultry Industry	Document current and future growth in the poultry industry through CAFO/MAFO permits numbers and reconcile those against NASS	MDA	Data is submitted to CBPO modelers to align with Poultry Litter Subcommittee Report for inclusion in the model

Maryland 2016-2017 Programmatic Milestones
 Document version: FINAL 4/29/16

Target Date	Milestone	Deliverable	Lead Agency	Comments/Status Updates
		annual numbers. Estimate nutrients associated with manure incrementally over two year milestone period		Data is submitted to CBPO modelers to align with Poultry Litter Subcommittee Report for inclusion in the model
2016-2017	Phosphorus Management Tool using a phased-in approach through 2022 with potential to extend to 2024 for reasons of resource shortfalls.	Conduct a two year study (2015-2016) "PMT On-Farm Economic Analysis Project" to better understand outcomes and impacts of requirements. Collecting soil analysis data to better understand the scope of farm fields with phosphorus FIV levels above 150. Collect information to track operations according to the appropriate Tier that will govern PMT implementation schedule.	MDA	Regulation took effect June 8, 2015, restricting all farms with phosphorus FIV levels over 500 from applying manure.
2016-2017	CAFO Permit/Registration	Increased registrations	MDE	Maryland will make its best effort to ensure all new CAFO/MAFOs receive permit coverage by December 2018 and all renewal registrations that are administratively extended are also processed.
Nutrient Trading Policy				
2016-2017	Finalize Draft Maryland Trading and Offset Guidance Manual	Final Maryland Trading and Offset Guidance Manual –	MDE/ MDA	The Draft Maryland Trading and Offset Guidance Manual is being reviewed by

Maryland 2016-2017 Programmatic Milestones
 Document version: FINAL 4/29/16

Target Date	Milestone	Deliverable	Lead Agency	Comments/Status Updates
	Explore potential for pilot projects. Finalize actions/recommendations of the Maryland Water Quality Trading Advisory Committee (WQTAC).	January 2017. 2017-Report on status of the Pilot Projects. .		WQTAC. It consolidated MDE's 2008 point-to-point trading policy, MDA's trading policy documents and incorporated new trading policy for MS4 jurisdictions. WQTAC is completing the review of the Draft and will identify any needed amendments to State law and regulations, actions to implement trading.
2016-2017	Accounting for Growth	Policy on AfG	MDE	Continue formulation of an accounting for growth policy and regulations if appropriate
2016	Regulations that establish the requirements and standards for the generation and certification of nutrient and sediment credits on agricultural land.	Final Regulations	MDA	Regulations were adopted as proposed and amendments were simultaneously proposed on 04/15/16. Revisions are expected to be published in the <i>Maryland Register</i> of 05/13/16.
Sector Growth Demonstration				
2016-2017	Sector Growth Demonstration	Sector Growth Demonstration Documentation	MDE - SSA	From EPA Interim Evaluation (June 2015): EPA expects Maryland to continue to identify new or increased sector loads and offset these within the appropriate timeframe and to continue to track and account for new or increased loads identified in sector growth demonstrations. The demonstration should address how to quantify and offset any increase of nutrients from increases in poultry houses that are projected for the Delmarva region.
Other				
2016-2017	Market recently approved	WQFA has already started	MDE -	Please see minor WWTPs status above.

Maryland 2016-2017 Programmatic Milestones
Document version: FINAL 4/29/16

Target Date	Milestone	Deliverable	Lead Agency	Comments/Status Updates
	eligible uses of BRF and other State Funding Programs to increase implementation of Septic Strategies, SWM retrofits, Minor WWTP upgrades.	with the solicitation to fund minor WWTPs. New programs will be part of December 2015 funding solicitation and every year thereafter, which will introduce these funding programs to over 600 eligible applicants.	WQFA	
2016 – 2017	Chesapeake and Atlantic Coastal Bays Trust Fund: Cost-Effective Non-Point Source Pollution Reduction Projects	Increase funding available for competitive solicitations of the most cost-effective, efficient nonpoint source pollution reduction projects by exploring opportunities for private capital and continued leveraging of public funds.	DNR (Bay Agencies)	The SFY 16 Trust Fund budget allowed for \$9.8 M of special funds (tax revenue) to be competitively awarded based on a ‘pay for performance’ model. SFY 17 Trust Fund budget for competitive projects is \$20 M. Trust Fund managers will continue to target the funds on a cost-effective basis while exploring legislative and grant mechanism changes to leverage more private capital and investment in non-point source pollution reduction.
2016-2017	Chesapeake & Atlantic Coastal Bays Trust Fund: Strategic & Targeted Monitoring	Continue to monitor targeted Trust Fund projects sites for efficacy and annually issue a Restoration Research grant in partnership with Chesapeake Bay Trust to answer key scientific questions about Non-point Source pollution reduction projects.	DNR	The Restoration Research grant was initiated in SFY15 with roughly \$880,000 awarded to four projects focused on discovering additional scientific data on stream restoration. The SFY16 budget of \$550,000 will also focus on stream restoration to help inform restoration specialists, regulators, and legislators. Five projects have been selected but not awarded. In addition to these stream restoration monitoring sites, Resource Assessment Service continues to provide long-term monitoring of three subwatersheds to evaluate

Maryland 2016-2017 Programmatic Milestones
 Document version: FINAL 4/29/16

Target Date	Milestone	Deliverable	Lead Agency	Comments/Status Updates
				BMP implementation.
2016 – 2017	Chesapeake & Atlantic Coastal Bays Trust Fund: Technical Support through Restoration Specialists	Provide continued hands-on landscape level technical assistance to local governments and non-governmental organizations implementing restoration projects in the watershed	DNR	Five restoration specialists continue to provide technical assistance.
2016 – 2017	Chesapeake & Atlantic Coastal Bays Trust Fund: Technical Support through Soil Conservation District staff	Provide continued technical support to evaluate, design, and assist farmers with the installation of BMPs.	DNR/ MDA	Supports 50 SCD technical positions
2016 - 2017	Chesapeake and Atlantic Coastal Bays Trust Fund: Innovative Technology Fund	Develop new non-point source BMPs for nitrogen, phosphorus and sediment reduction by: (1) Annually fund 2-6 research and development projects, and invest in one commercial project; (2) Develop and implement a new program for pilot scale demonstrations of technologies, providing greater confidence that the technologies will function when implemented under operational conditions; (3) Applicable new innovative BMPs will be reviewed using the Bay Partnership approval process.	DNR	(1) SFY16 & 17 budget sufficient to sustain this level of implementation; (2) Limited funds for one project are available in SFY16. DNR will continue to pursue partnerships with state, federal, and local government partners, as well as private parties, to enhance field testing of promising Bay restoration technologies; helping to close the gap between research and commercialization; (3) Working with the Bay Program Partnership, MD will continue to offer support for review of various new BMPs. Potential BMPs are: Agricultural Cascading Systems, Floating Treatment Wetlands. Algal Flow-way Technologies was approved by the Bay Program in winter 2016.
2016	BMP Calculator	Design and develop a	DNR	CBIG funds are available for Chesapeake

Maryland 2016-2017 Programmatic Milestones
 Document version: FINAL 4/29/16

Target Date	Milestone	Deliverable	Lead Agency	Comments/Status Updates
		publicly available open-source application that enables applicants and grantees to estimate the nitrogen, phosphorus and sediment reductions expected from their implementation projects.		Commons to develop the tool for the Chesapeake and Atlantic Coastal Bays Trust Fund. The tool is available at FieldDoc.com for calculating BMP reductions.
2016-2017	Chesapeake and Atlantic Coastal Bays Trust Fund: Watershed Assistance Collaborative	Provide leadership with a dedicated DNR staff and continue funding for Maryland's Watershed Assistance Collaborative's (WAC) effort to expand the communities it works with and improve outreach. Fund and manage two Watershed Specialists' outreach in 9 counties.	DNR	In addition to the five restoration specialists, long-term financing strategy development is provided by the Environmental Finance Center to local communities. These strategies will address local community stormwater financing and help craft strategies that best meet local needs.
2016-2017	Local 2-year Milestone Support Funding	Annually provide at least \$1 million in funding to support local two-year milestone implementation.	DNR/ MDE	Beginning in FFY14 MDE, DNR and the Chesapeake Bay Trust (CBT) began a collaborative process of administering federal funds to support local 2-year milestone implementation. This is an extension of the Watershed Assistance Grant Program (WAGP) initiated by DNR and CBT. This funding goes toward program development planning and the design of urban stormwater projects. The later leads to shovel-ready projects for larger capital grant funding of restoration. Funding continued in SFY16 and is in the SFY17 budget.
2016-2017	Create a Maryland Stream	Maryland Stream ReLeaf	DNR	Membership is being updated, and the Stream

Maryland 2016-2017 Programmatic Milestones
 Document version: FINAL 4/29/16

Target Date	Milestone	Deliverable	Lead Agency	Comments/Status Updates
	ReLeaf Implementation Plan for 2015-2020 through the multi-stakeholder Stream ReLeaf Coordinating Committee	Implementation Plan for 2015-2020		ReLeaf Coordinating Committee will be meeting in September 2015 to outline goals. Plan should be drafted by early 2016.
2016-2017	Stormwater and Nutrient Abatement Program (SNAP)	Implementation of a program to identify, evaluate, prioritize and implement restoration projects on DNR lands to assist the State Highway Administration in reaching its allocated TMDL reduction.	DNR/SHA	A Memorandum of Understanding between DNR and SHA is under revision to provide restoration projects on DNR lands funded by SHA. The MOU will be signed in the fall of 2015 with one project implemented by the end of 2015 and additional projects coming on-line throughout the milestone period.
2016	SMART Homeowner BMP Tracking Tool	Statewide release in fall 2015/winter 2016 of an on-line tracking tool to quantify the contribution of small scale community and homeowner BMPs	UME/DNR	