

Maryland's 2014 - 2015 Programmatic Two-Year Milestones

Target Date	Milestone	Deliverable	Lead Agency	Comments/Status Updates
(Point Sources/Major Municipal)				
2015	Cumulative Number of Major WWTP Upgrades to ENR Competed.	51 of 76 Plants	MDE	ENR construction for 41 of the original 67 plants identified for ENR upgrades has been completed. In addition to these, 4 of 9 federal/private (non-BRF funded) facilities, were upgraded for a total of 45 of 76 plants. 6 additional plants scheduled to be completed, are in fact >90% construction complete, however, are not counted yet due to ongoing performance testing. Note: The effect on nutrient loads of plants upgraded in calendar year 2015 may not be reflected in load changes in the 2015 Annual Progress evaluation, because the Annual Progress evaluation reflects activities in fiscal year 2015.
(Point Sources/Minor Municipal)				
2014-2015	Upgrades of Minor WWTPs: –Evaluate feasibility, cost effectiveness, permitting, and funding options. –Coordinate with local governments. –Execute grant agreements for BNR and ENR funding. –Include BRF, state cost-share funds and low interest loans request into State annual budgets.	List of candidate plants*: Betterton, Galena, Greensboro, Rising Sun, Queenstown, Rock Hall, Sudlersville, Twin Cities/Secretary-East New Market, and Oxford	MDE	In 2012 the Maryland General Assembly approved legislation to double the BRF fee starting July 1, 2012. In addition, the legislative amendment approved in the 2012 General Assembly session, HB 446 established additional authorized uses for BRF. Increased fee and expanded BRF uses will allow Maryland to begin funding planning, design and construction of ENR upgrades of minor WWTPs seeking state funding, while completing the upgrade of major plants.

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	–Modify NPDES permits for minor WWTPs upgrading with BRF funding to include WLA.	* list subject to change		MDE issued discharge permits with WLA and ENR requirements for three (3) minor WWTPs that executed grant agreements for BNR and ENR funding (Queenstown, Greensboro Regional WWTP and Galena WWTP). Five (5) other minors have applied for NPDES permit renewal and/or modification (Rock Hall, Rising Sun, Sudlersville, Twin Cities and Boonsboro) 3 minor plants previously completed the ENR upgrade (ECI, Boonsboro, and Worton) using other state and federal fund sources included State BNR and supplemental grants, SRF loan, and USDA loan and grant. At least 2 plants will be completed by 2017 (Rising Sun and Queenstown)
(Point Sources/Minor Industrial)				
2014-2015	Update minor industrial nutrient load data: –Evaluate minor industrial permits to determine if significant quantity of nutrients might be produced. –Require, where considered necessary, appropriate combinations of effluent data and/or material balance for nutrients. –Require, where considered necessary, monitoring and/or nutrient reductions. –Update minor industrial	Summary of the update Survey requirements are being implemented in minor permits as they are renewed: – MDE continues to review, evaluate and implement survey requirements in minor industrial permits. – Since February 2013, MDE completed 97 reviews.	MDE	Existing facilities will be required, as needed, to provide appropriate combinations of effluent data and/or material balance for nutrients.

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	facilities lists, input decks to reflect permit evaluation, findings, permit requirements.			
Septic Systems				
2015	Historical Data Cleanup (Septic Systems)	2015 Submittal to EPA Bay Program	MDE/ MDP	In collaboration with MDP, MDE SSA will facilitate local septic system inventory refinements and submittals to the Chesapeake Bay Program. The 2015 submittal will be an opportunity for local partners to provide their most accurate septic system inventories for use in calibrating the Phase 6 watershed model. Initial data was provided to CBPO in September 2015; data refinements will continue into 2016.

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2014-2015	<p>Develop and launch net-based BAT data tracking /reporting system for new and replacement systems (to be tracked separately).</p> <p>Outreach to stakeholders representing the industry and local government on reporting BAT upgrades using new net-based system.</p>	Net-Based BAT tracking/reporting system.	MDE	<p>Meet with IT and stakeholders representing the industry and local government to outline and finalize database needs. Finalize scope of work.</p> <ul style="list-style-type: none"> - MDE met with MDE’s IT and stakeholders representing industry and local governments and finalized database needs. – MDE has completed the development of the new database. - The Management Network (online database) has been integrated and is being used by over 75 users with specific and unique login credentials. - All of the data has been migrated into the system and the entry of new information is entirely online. - The Management Network is being constantly updated as needed. – The next steps are: <ul style="list-style-type: none"> o Bring Operation and Maintenance Providers into Management Network
2014-2015	<p>Refine septic strategy to increase implementation and load reductions from the septic sector.</p> <p>When feasible and cost effective, encourage septic connection to ENR upgraded plant as an alternative to BAT upgrade.</p>	Revised septic implementation strategy	MDE	<p>Develop new options, strategies for reducing septic loads. Identify steps, potential legislation to increase implementation, level of reductions, gap closures to address septic load reductions. MDE SSA drafted a strategy options paper in 2015 and this is under review; to be completed in 2016</p>

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(Urban Stormwater/Phase I MS4)				
2014	Complete issuance of the Phase I MS4 Permits	MDE issued Final Determination for all Phase I MS4 jurisdictions by December 31, 2014 and SHA on October 9, 2015.	MDE	MDE worked with EPA and local jurisdictions to complete issuance of NPDES MS4 permits for Phase I jurisdictions.
2014 -2015	<p>Guidance to local governments on meeting MS4 permits requirements, Bay restoration requirements, tracking, monitoring, and verification procedures.</p> <ul style="list-style-type: none"> – Finalize the stormwater retrofit guidance; make it consistent with adopted recommendations from the CBP's Urban Stormwater Work Group - September 30, 2014. – Complete the development of an MS4 geodatabase that will aid MDE in the assessment of management programs and improve current Phase I data tracking, collection and validation of BMPs. 	Updated MS4 Guidance, Final Geodatabase and corresponding User's Guide.	MDE	<p>MDE has been updating an NPDES Geographic Information System (GIS) database, which is "Attachment A" of the permit. The geodatabase (GDB) will provide for better organization of the MS4 program data, remove redundancies and allow for important statewide data collection processes and assessments to be automated and shared with various community partners. The improved geodatabase design can be used to automate reports, aid in the assessment of MS4 management programs, and provide the necessary data for modeling implementation plans in response to total maximum daily loads (TMDLs), stormwater waste load allocation (WLA), and Chesapeake Bay Program milestones.</p> <p>The database will be accompanied by the Geodatabase User's Guide. Both are being developed with funding from the EPA's CBRAP grant. The User Guide will show how various implementation projects can be</p>

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				<p>graphically represented in the MS4 geodatabase to ensure that maximum credit is received under the Chesapeake Bay Program (CBP) when either approved or alternative BMPs are used for restoration or to meet SWM ESD to MEP requirements for new development.</p> <ul style="list-style-type: none"> - The MS4 geodatabase was completed earlier this year and shared with the MS4 Phase I permittees. -An on-line submittal application is being finalized by MDE in coordination with MES in order to better accept the data electronically. - MDE released an updated version of the guidance document, “Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated,” in August 2014. The document includes an Executive Summary, which provides a list of acceptable water quality and alternative best management practices (BMPs), and tabulates the credit granted toward meeting MS4 permit requirements.
(Urban Stormwater/Phase II MS4)				
February 2014	Submit draft Phase II MS4 permits to EPA	Draft Permits for Phase II MS4 jurisdictions	MDE	MDE has drafted Phase II MS4 permits with 20 percent restoration requirement and submitted them to EPA for review on February

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				7, 2014. – MDE incorporated EPA review comments from February 7, 2014 submittal and resubmitted the draft permits to EPA on September 18, 2014. – On November 24, 2014 MDE received EPA’s comments on September 18, 2014 Phase II permits submittal. – MDE reviewed EPA’s November 24 comments.
2014-2015	Complete issuance of Phase II MS4 permits based on the new and expanded urbanized areas identified in the 2010 Census.	Tentative Determination for Phase II MS4 permits	MDE	MDE was to issue: – Tentative Determination for Phase II MS4 permits. – Final Determination for Phase II MS4 permits by June 15, 2015. Phase II MS4 permits are currently expired; however, as allowed by the Code of Federal Regulations, both are administratively continued until new ones are issued. MDE will provide updated schedule for issuance of Phase II permits during the next milestone period. -MDE and EPA hosted a two-day Phase II Forum in November, 2015 in anticipation of issuing these permits. MDE continues to meet and work with the Phase II jurisdictions to prepare them for new requirements:

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				<p>-MDE has published a “Getting Started” fact sheet to advise the community of small MS4s of anticipated new requirements when the MS4 general permits are reissued. MDE encourages all small MS4s to begin preparing for restoration requirements by evaluating the level of water quality treatment provided on existing impervious areas within their jurisdiction. MDE calls for the collection of site data as the first phase of any planning effort, including:</p> <ul style="list-style-type: none"> -Development of an inventory of the total impervious area within the small MS4. Inventory stormwater BMPs within the permit area adequacy of treatment. -Evaluation of opportunities for BMP implementation and retrofitting on existing unmanaged or under-managed impervious areas, and -Development of a BMP database and documentation of routine maintenance and inspection activities for all new and existing BMPs. <p>- MDE has developed a database structure for Phase II MS4 permittees to use for reporting stormwater best management practice (BMP) data.</p> <p>- Phase II permittees are encouraged to use this database so that consistent information</p>

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				<p>is provided in all Phase II annual reports. At a minimum, Phase II jurisdictions are being requested to include the following information in future annual reports: BMP ID, BMP classification, type, and number, MD Grid coordinates, reporting year, as-built completion date, drainage area, impervious area, BMP design criteria (e.g. rainfall treated, or PE treated), and inspection status and dates.</p> <ul style="list-style-type: none"> - MDE posted a Fact Sheet on NPDES Phase II MS4 Permit restoration reporting and the database structure on MDE's website.
Stormwater – Other				
2014	Construction General Permit	Finalized Permit		<ul style="list-style-type: none"> – Tentative Determination by June 15, 2014 – Final Determination by December 31, 2014. – MDE published Notice of Final Determination on October 30 and 31, 2014. – The effective date of the new permit is January 1, 2015. – MDE is in the process of completing the development of a new electronic portal for submission of construction NOIs.
2014	General Permit for Industrial Stormwater Discharge will address restoration of impervious surfaces for a specific subset of facilities	Finalized Permit:	MDE	<p>Permit became effective on January 1, 2014. There are 1,144 facilities in Maryland requiring industrial stormwater coverage under General Industrial Stormwater Discharge permit. As of December 2015, 260 are required to perform restoration of</p>

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				impervious surfaces.
2014	Letter of Agreement with EPA	Signed Letter		Letter of Agreement with EPA responding to EPA's assessment of Maryland's stormwater program. – MDE reached agreement with EPA; – MDE/EPA Work Plan dated June 17, 2014 was received by MDE.
2014-2015	Outreach to non-MS4 jurisdictions on reporting SWM requirements, retrofit BMPs.	Documentation of outreach	MDE	– MDE SSA secured a CBRAP grant to support this outreach, part of Objective 26. – MDE summarized key reporting issues during the Fall 2014 WIP Regional meetings. (See: http://tinyurl.com/2014-WIP-Regional-Updates) – MDE plans to conduct a webinar in February 2015 to address further details.
2014 and 2015	Maryland will ask its Congressional delegation to work to pursue the authorization for federal funding to support urban/suburban stormwater restoration for the Chesapeake Bay jurisdictions through either pending or new legislation.	Annual Correspondence	MDE	– FFY15 Federal Priorities request from MDE to Office of the Governor included a priority entitled, "Funding Program for Stormwater Retrofits for Chesapeake Bay Watershed Implementation Plan." The request seeks assistance in filling an estimated \$124 million/yr gap in funding urban stormwater restoration. (full text available of priority document available on request)

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2014-2015	Chesapeake and Atlantic Coastal Bays Trust Fund: Green Streets, Green Towns, Green Jobs Initiative	The program will engage 15 communities to implement greening plans that reduce stormwater runoff through impervious surface removal and green infrastructure, increase tree canopy, improve air quality, improve local and Bay water quality, and enhance the quality of life in communities throughout the State of Maryland. DNR and the Trust Fund will identify additional funds to continue partnership.	DNR	<p>The Green Streets, Green Jobs, Green Towns (G3) Grant Program is administered by the Chesapeake Bay Trust, and jointly funded by the State of Maryland (Chesapeake and Atlantic Coastal Bays Trust Fund), the Chesapeake Bay Trust, and EPA.</p> <p>The first RFP was released in early November 2014, 19 recipients were awarded with the \$3M Trust Fund investment. The 2015 RFP funded 15 projects for \$727,500. The 2016 RFP is currently open and available here: http://www.cbtrust.org/site/c.miJPKXPCJnH/b.7735695/k.5E92/Green_Streets_Green_Jobs_Green_Towns.htm</p>
2014-2015	Chesapeake and Atlantic Coastal Bays Trust Fund : Urban non-point source solicitation	The Chesapeake & Atlantic Coastal Bays Trust Fund will solicit, review and fund proposals to 25 grantees to implement the most cost-effective nutrient and sediment reduction projects in areas of the State that have been heavily impacted by previous development	DNR	<p>A Request for Proposals was issued in fall 2013 to fund Capital Improvement projects to compliment previously identified projects in FY 14 and to identify projects for FY 15 funding. Awards were made based on cost-effectiveness (cost per unit of nutrients and sediments reduced), reduction efficiency, and readiness to proceed. Projects were also evaluated on geographic targeting that emphasizes urban and suburban watersheds demonstrating the highest nutrient loads to the main stem of the Chesapeake Bay. Seven proposals were accepted for FY 14 remaining dollars (~\$9M) and 15 proposals for the \$25M available in FY15. The SFY16 RFP was issued December 15, 2014 and 94 urban projects were funded.</p>

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2014-2015	Historical BMP Cleanup (Stormwater)	-2014 BMP Submittal to EPA Bay Program. -2015 BMP Submittal to EPA Bay Program	MDE	<p>MDE SSA will facilitate local stormwater BMP inventory refinements and submittals to the Chesapeake Bay Program. The 2014 submittal will be a “test” submittal. The 2015 submittal will be the final opportunity for local partners to provide their most accurate stormwater BMP inventories for use in final calibration of the Phase 6 watershed model.</p> <ul style="list-style-type: none"> - MDE provided Historical BMP Cleanup guidance in advance of the May 2014 deadline, which served as a “test” submittal (See: http://preview.tinyurl.com/BMP-Cleanup-Guide). - Local Partners were given the opportunity to discuss local BMP Cleanup during 1-on-1 meetings (Sample meeting agendas available upon request). - Historical BMP Cleanup noted in Fall 2013 & Fall 2014 WIP Regional Workshops. (See Slide 2: http://preview.tinyurl.com/2013-WIP-Regional-Intro . See: http://tinyurl.com/2014-WIP-Regional-Updates). - MDE SSA secured a CBRAP grant to support this milestone, part of Objective 26. - In December 2014, MDE SSA provided the current stormwater data that the State has for each local jurisdiction with statistics on missing data. This will support individualized technical assistance in support of BMP cleanup.

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2014-2015	Chesapeake and Atlantic Coastal Bays Trust Fund: Leadership by Example: Stormwater and Nutrient Abatement Program (SNAP)	The program will identify, evaluate, prioritize and implement stormwater management and nutrient reduction opportunities on State lands with \$12.3M dedicated in FY14 and \$6M in FY15	DNR	SNAP is needed because under the Bay TMDL the State, not counting SHA, must reduce nutrient loadings on State land by 34,623 lbs of Nitrogen and 3,907 lbs of Phosphorus. In addition to the State allocations, SHA has a further load reduction of 108,395 lbs of Nitrogen 12,390 lbs of Phosphorus. This program will help the State reach its allocated TMDL reduction and provide a great sense of leadership by example throughout the state.
2014-2015	SMART Homeowner BMP Tracking Tool	Statewide release in 2014 of an Online Tracking Tool to Quantify the Contribution of Small Scale Community and Homeowner Best Management Practices (BMPs) in the Chesapeake Bay Total Maximum Daily Load (TMDL).	UME/ DNR	Maryland Sea Grant Extension Partnered with The Center for GIS at Towson University in the development of an interactive mapping and tracking tool for counties and towns to account for small scale residential BMPs that will help them show nutrient reductions in compliance with TMDLs and NPDES and MS4 permit requirements. Three counties are currently testing the tool. The 2014 statewide release is delayed into 2016 because of funding shortfalls.
2015	Online BMP Reporting Tool for Non-MS4 local governments.	Online reporting tool	MDE (SSA) and DNR	MDE is developing an online reporting tool that will allow non-MS4 local governments to submit stormwater management information for new development and retrofits of existing development with little or no controls. This tool relates to the SMART Homeowner BMP tool as follows: Private property owners may report to local governments via the SMART Tool and the local governments report to the State via the Online BMP Reporting tools,

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				<p>including the Geodatabase tool being developed for MS4 jurisdictions.</p> <ul style="list-style-type: none"> - MDE SSA secured a CBRAP grant, Objective 26, to develop this tool. - MDE SSA secured a CBRAP grant, Objective 22, to support development of “Tracking and reporting system improvements...with respect to BMP implementation, trades and offsets.” - MDE SSA is in the process of securing consulting services to support this activity.
2014-2015	Chesapeake and Atlantic Coastal Bays Trust Fund : Watershed Assistance Collaborative/Stormwater Financing	Provide leadership with a dedicated DNR staff and continue funding for Maryland’s Watershed Assistance Collaborative’s (WAC) effort to work with 3 new communities.	DNR	One of the major barriers to implementation is a consistent and reliable funding stream to achieve restoration goals. As a member of the WAC, the Environmental Finance Center is working to address community’s stormwater financing questions and help craft a strategy that best meets local needs. EFC worked with the following three communities: Resiliency with Annapolis, Sustainability in Prince George’s County, and Community Stormwater and Flood Management in St. Michael’s.
FY14	Chesapeake and Atlantic Coastal Bays Trust Fund: GO Bonds for Stormwater Infrastructure past FY 15	Maintain GO Bonds support past SFY 15 to the Trust Fund to accelerate State and local efforts to improve the health of the Chesapeake Bay and support local economies.	DNR	GO Bonds have been used to leverage local projects in FY 13 & 14. Capital budget was used to support land conservation programs in FY 15, and the Hogan Administration has plans to fully fund the Trust fund for the first time beginning in SFY16.
Agriculture				

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FY14	Chesapeake and Atlantic Coastal Bays Trust Fund: Animal Waste Technology Fund	The Maryland Department of Agriculture (MDA) through the Advisory Committee for the Animal Waste Technology Fund is working to determine funding mechanisms as well as soliciting proposals for funding that will support pilots for alternative technologies that use and manage animal waste, including manure-to-energy technologies.	MDA	MDA issued an RFP for projects demonstrating innovative technologies to manage or repurpose manure during State Fiscal Year 2014. Four projects were funded for approximately \$2 million. These include two projects using poultry litter to generate heat or electricity and fertilizer by products and two in vessel composters reducing volume and nutrient content of horse and dairy manure and making a product useable for nursery plant medium or animal bedding. MDA has issued a FY2015 RFP to fund up to \$2.9 million in additional projects.
FY14	Manure Matching Service	Manure Matching Service that connects livestock producers who have excess animal manure with other farmers or alternative use projects that can use the product as a valuable resource.	MDA	Since 2011 the Manure Matching Service has been revitalize with additional outreach, updated materials, and promotion through the local Soil Conservation Districts and University of Maryland Extension offices. These activities have yielded less than expected results. During the fall of 2014 there were 31 participants, 10 sending operations and 21 receiving. However, activity in the Manure Transport Program more than doubled in FY2015.
FY14	Certainty	The Maryland Agricultural Certainty Oversight Committee is working to develop regulations by spring 2014 needed to implement the Agricultural Certainty Program passed by the	MDA	Regulations for the Certainty Program have been finalized and published in the Maryland Register on October 17, 2014 and were open for public comment until November 17, 2014. They will be published as final in mid-December 2014. Outreach is ongoing and full roll out of the program will begin January

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		General Assembly and signed by the Governor in 2013.		2015. - Worked closely with the Nutrient Trading Program and anticipate future trades will be used in conjunction with the Certainty Program. - Documented outreach to local farm community - Reported the number of farms participating in the Certainty Program annually on MDA's web page.
2014-2015	Chesapeake and Atlantic Coastal Bays Trust Fund: Innovative Technology Fund Manure to Energy Program	Working with the University of Maryland's Maryland Industrial Partnership and others, MD will advance implementation of manure to energy technologies and quantify their nutrient reduction benefits by funding 1-5 projects.	DNR	In SFY 14 and 15, \$0.5 million was allocated each year to the Innovative Technology Fund for particular use in developing nutrient reduction technologies compatible with manure-to-energy generation. This provides the opportunity to reduce nutrients through research and development. Five (5) manure-to- energy projects are currently underway.
2014	Promulgate regulations in 2014 to implement a new Phosphorus Management Tool using a phased-in approach.	Regulation	MDA	Proposed regulations for the PMT were sent to the AELR and published in the Maryland Register on December 1, 2014. MDA offered a 30-day public comment period on the proposal ending December 31, 2014. The proposal includes a six year phase-in to allow more time for infrastructure development and farming operations planning, with full implementation by 2021. Revised draft regulations promulgated by

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				<p>Governor Hogan's Administration were published in the Maryland Register on April 3, 2015, inaugurating a 30-day public review process. Maryland's Phosphorus Management Tool (PMT) regulations became effective June 8, 2015. They provide a multi-year process for farmers to transition from the Phosphorus Site Index to the PMT, The regulations require all farms to begin a phased implementation schedule starting in 2016, with full implementation scheduled for 2022. Farmers are allowed two full years to have nutrient management plans developed using both the existing Phosphorus Site Index (PSI) and the new PMT before management changes are required. Up to two one-year extensions in the schedule are provided based on manure handling and alternative use infrastructure being in place, establishing 2024 as the absolute deadline for full implementation of the PMT. Fields with a soil Fertility Index Value (FIV) of 500 or greater will be banned from receiving additional phosphorus until the PMT is fully implemented. Field-level soil test phosphorus results are scheduled to be reported in 2015 and every six years thereafter.</p> <p>An economic study is in the process of being completed for the first of two years and included:</p> <ul style="list-style-type: none"> • 8 farms <ul style="list-style-type: none"> ○ 4 dairy farms

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				<ul style="list-style-type: none"> ○ 4 farms using poultry litter (one of the four farms imports litter and the other three are poultry and crop farmers) ● MDA is working to collect and analyze the soils P FIV data as being reported by consultants and certified farmers. <p>The next step will be a reporting of soils data in 2016 to determine the tier group each farm falls into (this will be farms with fields over P FIV 150) and all NMP written for 2016 and 2017 should include both PSI and PMT</p>
2014-2015	Renew the general discharge permit for animal feeding operations.	Renew General Permit	MDE	Permit was renewed and became effective on December 1, 2014, subject to a 30-day period (ending December 25, 2014) during which people with standing can request judicial review.
Accounting for Growth and Nutrient Trading Programs				
	Adopt final Accounting for Growth regulations	Finally adopted regulations	MDE	There was opposition to regulations that would require development to offset its post-development load. The regulations have not been formally proposed or adopted. The incoming Administration will decide the future course.
	Communicate the roles and responsibilities of Accounting for Growth to local jurisdictions.	Documentation of meetings	MDE	In the absence of adopted regulations, the meetings did not go forward.
2014 - 2015	Complete the development of a tracking system for accounting for new growth.	Tracking system	MDE/ MDA/ MDP	Maryland has completed development of the web-based trading/tracking platform for agriculture. Current efforts focus on the development of a complementary online tool

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				to assess urban offset needs and the enhancement of the registry, marketplace, and administrative modules to meet expanded data collection needs and reporting requirements. Most of the development, modification, and customization costs continue to be funded through a series of USDA/NRCS Conservation Innovation Grants although additional monies have been provided by a State Conservation Innovation Grant, an EPA 319 Grant, and a current Chesapeake Bay Implementation Grant.
2015	Revise the Policy Documents for trading to harmonize with the Accounting for Growth program.	Revised policy documents	MDE/ MDA	Among other things, this process will address EPA's nine elements of trading programs common to all Bay jurisdictions.
2015	Enhance Implementation through Nutrient Trading.	Trading among the sectors is being researched and developed by MD state agencies to potentially offset growth and help lower implementation costs	MDE/ MDA	<p>In 2014, the Bay Cabinet approved the proposal to allow cross-sector trading to reduce costs. MDA and MDE will be cooperating to develop the policies, guidelines, and mechanics for cross-sector compliance transactions:</p> <p>MDE and MDA</p> <ul style="list-style-type: none"> - Released a three page trading policy document on 10/23/15 - MDE and MDA created a draft revised Policy Document (Manual) in December 2015, which was shared with EPA. The document will be the subject of a review process by a newly re-constituted Trading Advisory Committee beginning in January

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				<p>2016. The Advisory Committee is scheduled to complete its review in April 2016.</p> <p>- Elements of the manual include:</p> <ul style="list-style-type: none"> ▪ Consolidate the existing Point Source Nutrient Cap Management Policy, Phase I, and an Agricultural Policy and Guidelines, Phase II. ▪ Provide the framework for Phase I MS4 permittees to engage in trading to meet portion of the NPDES restoration requirement. <p>MDA Regulations have been approved by the joint Administrative, Executive and Legislative Review Committee and were published in the Maryland Register on December 28, 2015 to establish the requirements and standards for the generation, verification, and certification of nutrient and sediment credits on agricultural lands.</p> <p>The next steps include the creation of the Maryland Water Quality Trading Advisory Committee with a goal of finalizing Trading Policy document and identifying other necessary trading implementation actions.</p>
Other				
2015	Historical Data Cleanup (Landuse)	– 2015 Submittal to EPA Chesapeake Bay Program (CBP)	MDE/MDP	In collaboration with MDP, MDE will continue to facilitate local landuse inventory refinements and submittals to the Chesapeake

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				<p>Bay Program. The 2015 submittal was an opportunity for local partners to provide their most accurate landuse inventories for use in calibrating the Phase 6 watershed model.</p> <ul style="list-style-type: none"> - 19 of Maryland’s 24 counties, several municipalities, other state agencies, and one federal facility submitted data to MDE and MDP for incorporation into the Phase 6 watershed model. Maryland is currently developing methods for using local data to estimate the acres of impervious surfaces, turf grass, urban tree canopy, and forest in the Phase 6 watershed model. This work will be ongoing in 2016.
2015	BMP Tracking and Reporting Documentation	Update of the State’s documentation of dataflow for BMP reporting from local sources, through the State and to the CBP.	MDE	<ul style="list-style-type: none"> - Maryland’s overview graph of BMP reporting dataflow has been updated (Available upon request). - Draft data flow charts have been developed for the following: <ul style="list-style-type: none"> o Stormwater o Tree Planting o Erosion & Sediment Control - MDE SSA has reorganized staff to bolster tracking and reporting capacity, which will support this milestone activity. - MDE, in coordination with CBP, hosted a webinar on “BMP Verification” to initiate the multi-agency process of revising BMP Tracking and Reporting documentation (See: September 25, 2014 Presentation http://preview.tinyurl.com/BMP-Verification-Sep2014)

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2014	Application of Innovative Technologies	Develop a new program for pilot scale demonstrations of technologies, providing greater confidence that the technologies will function when implemented under operational conditions.	DNR	DNR will work with state and federal partners, and private parties, to enhance field testing of promising Bay restoration technologies; helping to close the gap between research and development and commercialization. Additional funding was provided to the Innovative Technology Fund to enhance demonstration scale research.
2014	Advance the adoption of innovative Natural Filter BMPs verified as options to accelerate Bay restoration	Two new innovative BMPs will be reviewed using the Bay Partnership approval process.	DNR	Working with the Bay Program Partnership, MD will continue to offer support to review various new BMPs. Specifically, DNR staff will work on innovative BMPs that would be considered natural filters. Natural filter BMPs are often the most efficient for nutrient and sediment reduction as they utilize biomimicry. Continue working with the Chesapeake Bay Program to define and estimate reductions of new BMPs. As more Innovative Technology Fund projects prove successful, staff will nominate the technology for a BMP review and continue to staff the expert panels. Algal Flow-way Technology has been approved at the workgroup level. Floating Treatment Wetlands are currently under review by an expert panel.
2014-2015	Develop Lawn-to-Woodland Program	Program rules and partners in place	DNR	The Lawn-to-Woodland pilot program was carried out in 2014 in partnership with National Arbor Day Foundation, planting 14 acres in 4 counties. It was expanded for 2015, and expected to plant 100+ acres statewide.
2014- 2015	Expanded cost-share for no-net-loss of forests	Program rules and partners in place	DNR	Sustainable Forestry Act of 2013 authorized expansion, and program rules are in place and

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Target Date	Milestone	Deliverable	Lead Agency	Comments/Status Updates
				in use.
2014-2015	Tracking expanded buffer planting through Backyard Buffers	Survival reports allow verified estimate of residential buffer tree planting	DNR	Participant surveys and spot checks are now being used. A survival rate of 65% was used to report a net 42 acres Backyard Buffer progress as urban forest buffers to the Chesapeake Bay model for 2014 progress.

DNR – Maryland Department of Natural Resources
 MDA – Maryland Department of Agriculture
 MDE – Maryland Department of Environment
 MDP – Maryland Department of Planning