

## Virginia

### January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
<b>Agriculture including CAFO/AFO</b>				
6/30/2014 6/30/2015	<b>A.1.</b> Conduct continuing education classes relative to nutrient management	6 classes each year	DCR	1/15/15 - Six continuing education classes on nutrient management were conducted in 2014.
11/1/2014 11/1/2015	<b>A.2.</b> Determine resource needs for agricultural BMP implementation through Soil and Water Conservation Districts (Phase I WIP, pg. 65-66, Phase II WIP, pg. 18)	Annually	DCR	1/15/15 - The VA Agricultural Needs Assessment for program year 2016 (July 2015-June 2016) was completed.
12/31/2014	<b>A.3.</b> Develop specific, targeted educational program for unpermitted dairies (Phase I WIP, pg. 66)		DCR	Direct mailings are being sent to licensed dairies and five additional educational meetings are being planned. 1/15/15 – Direct mail campaign completed and educational meetings continue to be offered quarterly.
6/30/2015	<b>A.4.</b> Advance Healthy Waters program geo-referenced data sets	Update Bay watershed data sets	DCR	Endeavor to update 10-year old data in Bay Watershed portions of the state and develop an on-going maintenance plan. 1/15/15 - Updates to 10-year old data in Bay Watershed portions of the state is well-underway with the first phase of assessment reaching completion. The development of an on-going maintenance plan has begun. 187 Ecologically Healthy Water Natural Heritage Element Occurrences have been added to DCR Natural Heritage Biotics Database for use in conservation planning and land conservation efforts.

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12/31/2015	<b>A.5.</b> Enhanced funding for livestock exclusion (Phase I WIP, pg. 63)	Fund qualified stream exclusion practices at 100% through FY15	DCR	1/15/15 - Additional funding has been budgeted for stream exclusion in the Chesapeake Bay watershed from both re-programmed CBIG (\$985,000) and new EPA allocations from federal FY 2014 (\$750,000).
12/31/2015	<b>A.6.</b> Continue development of the Resource Management Program and promote adoption in coordination with industry partners (Phase I WIP pg. 59, Phase II WIP pg. 19)	RMPs on at least 40 agricultural operations	DCR	DCR has assembled a marketing workgroup and developed educational materials. The regulations defining compliance have been adopted and outreach efforts have begun headed by a staff person whose time is dedicated to the program 1/15/15 - DCR has staffed the RMP Program with three full-time positions. RMP plan development and implementation cost-share specifications have been developed and are part of the current FY 15 VACS program. \$60,000 in VACS funding has been made available in the Bay drainage. An additional \$472,000 has been contracted for RMP development through private developers. This contract should result in approximately 270 RMPs developed by the end of the milestone period. Since July 2014, when the program went into effect, eight individuals have been certified as RMP developers and three RMPs have been submitted and

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				approved. Also, \$780,000 has been contracted for the development of computer applications to assist in the tracking and development of RMPs. The software program is expected to be completed in the 1 <sup>st</sup> quarter of 2015.
12/31/2015	<b>A.7.</b> Increase the number of nutrient management plans on unpermitted dairies (Phase I WIP, pg. 76)	75% of facilities participating	DCR	DCR expects to execute contracts with plan writing contractors to further this milestone. 1/15/15 - DCR issued a competitive Request for Applications (RFA) in June 2014 for private plan writing on unpermitted dairy operations. Three private certified NM planners were awarded a total of \$118,900 combined CBIG and NPS§319 funding to develop plans on a targeted acreage of 18,612 acres.
12/31/2015	<b>A.8.</b> Track voluntary best management practice collection statewide (Phase I WIP, pg. 54)	BMP dataset for input to EPA-CBPO Watershed Model Progress Run	DCR	1/15/15 - All SWCD have the ability to enter voluntary BMPs through the Agricultural BMP Tracking Program. A new grant initiative to provide SWCDs incentives to re-inspect structural BMPs that are approaching or recently reached the end of their contract to recertify that they are still functioning. This grant will also initiate a tillage survey in the Bay watershed in 2015 to capture conservation tillage acres for nutrient and sediment reductions.

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12/31/2015	<b>A.9.</b> Renew relationship with fertilizer companies to encourage and track precision agricultural application (Phase I WIP, pg. 65)	45,000 acres of precision agriculture each year	DCR	1/15/15 - DCR is continuing with this effort
12/31/2015	<b>A.10.</b> Increase nutrient management planning to include 85% of all applicable state-owned land (Phase I WIP, pg. 61)	780,000 acres agricultural nutrient management each year	DCR	1/15/15 - Annual planned acreage on pace to achieve in 2015. 87% of the 7,600 acres of state owned agricultural lands where nutrients are applied have plans.
12/31/2015	<b>A.11.</b> Report competitive grant project achievements, including BMP data to be credited in the Bay model	Reportable 2007-2014 BMP data digitized, analyzed and included for VA accomplishments.	DCR	1/15/15 - This project will continue through 2015 with a targeted completion date for reportable data of December 2015.
12/31/2015	<b>A.12.</b> Develop agricultural nonpoint source assessment data to be used for Ag needs assessment, 305(b) report, NPS Management Plan, Chesapeake Bay and Virginia Waters Clean Up Plan and other reports	Data developed, analyzed and reported to DEQ	DCR	1/15/15 - 2014 Nonpoint Source Assessment produced estimated nitrogen, phosphorus, and sediment loads for 1,236 6 <sup>th</sup> order hydrologic units. NPS Chapter for Draft 2014 Integrated Assessment Report (303(d)/305(b) Report) completed. Agricultural NPS ranking of HUCs produced from these results.
12/31/2015	<b>A.13.</b> Spatial reporting of nutrient management plan data	Tracking module to report spatially	DCR	1/15/15 - On pace to achieve this level of specificity with NutMan 4 software roll out in 2015.
10/31/2014	<b>A.14.</b> Assess 48 VPA permitted facilities that have applied for VPDES CAFO permits to determine if they require VPDES permits (Phase I WIP pg. 74, Phase II WIP pg. 18)	Assess 48 facilities	DEQ	1/15/15 - All facilities which have applied for a VPDES CAFO permit have been assessed to determine if a permit is necessary. Based on the review, DEQ will be processing VPDES CAFO permits

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				for five facilities located in the Bay watershed.
12/31/2015	<b>A.15.</b> Convert applicable CAFO VPA permits to VPDES permits (Phase I WIP pg. 74, Phase II WIP pg. 18)	3 VPDES permits issued	DEQ	1/15/15 - The VPDES CAFO permit template is complete and has been accepted by EPA. The template will be used to draft the three VPDES CAFO permits.
12/31/2015	<b>A.16.</b> Complete evaluations of the remaining small AFOs in Virginia's portion of the Chesapeake Bay watershed in accordance with the Small AFO Strategy developed in cooperation with VDACS (Phase I WIP, pg. 76)	Completion of evaluation and, if necessary appropriate remedies initiated	DEQ/ VDACS	1/15/15 - Approximately 426 small AFOs remain to be evaluated out of the 800 identified in the WIP.
<b>Urban including MS4</b>				
7/1/2014	<b>U.1.</b> Continue development of the Construction General Permit Coverage System as a management tool for the Virginia Stormwater Management Program (VSMP) regulations. The system will allow local entry of Construction General Permit registration statement and notice of termination information, including urban and suburban BMPs, into the database for regulated land-disturbing activities. This will allow DEQ to consolidate locality data for submission to EPA through the NEIEN (Phase I WIP, pg. 96)	Construction General Permit Coverage System	DEQ	Beta testing to begin no later than June 1, 2014 by selected localities representing a cross section of Virginia local governments 1/15/15 - Phase 1 of the Stormwater Construction General Permit System was placed into production in June 2014. This system allows DEQ and local government entry of Construction General Permit registration statements and notices of terminations, including post-development BMPs for regulated land-disturbing activities.
7/1/2014	<b>U.2.</b> Issue TMDL Action Plan Guidance for MS4s	Guidance Memorandum	DEQ	1/15/15 - Guidance document (GM14-2012) finalized in August 2014.

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12/31/2014	<b>U.3.</b> Continue development of the Construction General Permit Coverage System as a management tool for the Virginia Stormwater Management Program (VSMP) regulations. Update the system to allow local entry of urban and suburban BMPs for unregulated land-disturbing activities. This will allow DEQ to further consolidate locality data for submission to EPA through the NEIEN (Phase I WIP, pg. 96)	Enhanced Construction General Permit Coverage System	DEQ	1/15/15 - DEQ is currently in the process of finalizing the Phase 2 Stormwater Construction General Permit System requirements, and it is anticipated that this Phase will be released to production during calendar year 2015. Once completed, the system will allow DEQ and local government entry of Construction General Permit modifications and transfers, and basic inspection information for regulated land-disturbing activities.
12/31/2014  10/1/2015	<b>U.4.</b> Complete development of a system to track, verify and report homeowner installed BMPs. The system will capture and report data in a format suitable for state Bay Model progress submissions	Homeowner BMP Tracking System – “SMART” Stormwater Management and Restoration Tracker  Report Homeowner BMPs for 2015 progress	Alliance for the Chesapeake Bay - Virginia Office/DEQ	1/15/15 - System development has experienced some delays due to contractual and technical issues. Development and testing of the system will continue in 2015 with deployment anticipated by year’s end.
12/31/2014  12/31/2015	<b>U.5.</b> Issue 3 final MS4 individual permits and draft the remaining individual permits with the cooperation of the permittee, EPA, and other stakeholders.  Reissuing all remaining MS4 permits by the end of 2015	3 final Phase I MS4 permits issued, all remaining individual MS4 permits in draft  All final permits issued	DEQ	1/15/15 - Final MS4 Phase I individual permits for Chesterfield County and Prince William County effective in December 2014. Draft MS4 Phase I individual permits for Henrico County and Fairfax County sent to EPA in December 2014. DEQ is currently

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	(Phase I WIP, pg. 93)			drafting the remaining six Phase I individual permits for EPA review. All MS4 Phase I individual permits will be reissued by the end of the Milestone period.
7/1/2014	<b>U.6.</b> Review MS4 program plans and issue permit coverage to the small MS4s newly designated based on the 2010 census	8 new localities or municipally owned facilities covered	DEQ	1/15/15 - Coverage provided under the small MS4 general VPDES permit to eight newly designated small MS4s by May 15, 2014.
9/30/2014		Remaining 8 newly designated MS4s covered		1/15/15 - Coverage provided under the small MS4 general VPDES permit to the remaining eight newly designated small MS4s by September 1, 2014.
12/31/2014	<b>U.7.</b> Achieve reductions from new development and redevelopment using urban BMPs through ramped up compliance with the Virginia Stormwater Management permit (VSMP) and the stormwater provisions of the Chesapeake Bay Preservation Act (CBPA)	Compliance strategy, audit and inspection guidance	DEQ	Strategy will be consistent with the national strategy (i.e., 2007 Clean Water Act National Pollution Discharge Elimination System Compliance Monitoring Strategy for the Core Program and Wet Weather Sources) 1/15/15 - A draft Construction Stormwater Compliance Monitoring Strategy has been developed. The document is due to be completed in January 2015. No new Chesapeake Bay Preservation Act compliance reviews were initiated, as the agency's focus has been on development and adoption of local stormwater ordinances. As of January 2015, 92 localities have approved

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				local stormwater programs which require the installation and maintenance of BMPs to reduce pollutants from new development and redevelopment.
12/31/2015	<b>U.8.</b> Continue to implement contractor-applicator training and certification regulation, including a training and certification program for the proper handling, use, and application of fertilizer to nonagricultural lands. Establishes recordkeeping requirements for certified applicators (Phase I WIP, pg. 90)	Implement regulations	VDACS	2 VAC 5-405, <i>Regulations for the Application of Fertilizer to Nonagricultural Lands</i> , became effective February 1, 2012. Four (4) courses of training have been approved. One such course was developed jointly by Virginia Cooperative Extension (Virginia Tech), VDACS, and DCR, and it is available online at no cost to participants. 1,219 individuals have received credentials as Certified Fertilizer Applicators. 1/15/15 - 1,634 individuals have received credentials as Certified Fertilizer Applicators (CFA).
12/31/2015	<b>U.9.</b> Nutrient Management on Urban Turf – update standards and criteria per 2013 legislation (Phase I WIP, pg. 90)	Train 110 urban nutrient management planners, 35 VT extension specialists and 600 VDACS-certified fertilizer applicators	DCR	1/15/15 - Standards and Criteria updates went into effect March 13, 2014. Four training sessions were held around the state for 80 certified planners, including multiple extension specialists who deal with urban nutrient management. DCR, with VDACS and VT, is working to update the CFA online training modules to reflect changes. Previously trained CFA's will be updated through continuing education opportunities.

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12/31/2015	<b>U.10.</b> Nutrient management on urban turf – residential sector	Implement pilot project in 6 Phase II MS4-targeted communities	DCR	1/15/15 - 6 Phase I/II MS4 communities with pilot programs have certified urban nutrient management planners on staff. Planned acreage during the 2014 progress year was reported. Continued technical and funding support is needed to expand outreach of these programs.
12/31/2015	<b>U.11.</b> Nutrient management on urban turf – golf courses; begin development of cost-share program for golf course nutrient management (Phase I WIP, pg. 90)	Urban nutrient management plans completed on 11,000 acres of golf courses during the milestone period	DCR	Grants have been awarded for nutrient management plans on up to 100 golf courses. Another grant will be awarded to increase golf course plans in mid August of 2014. 1/15/15 - The first round of Golf Course Nutrient Management Plan Writing grants was completed in December 2014. Over 7,800 acres of golf course plans have been completed. A second RFA was issued in October 2014 and a total of \$148,870 is being awarded to 13 private certified urban NM plan writers across the Commonwealth starting January 2015 for over 14,000 additional acres.
12/31/2015	<b>U.12.</b> Nutrient management on urban turf – state-owned facilities (Phase I WIP, pg. 90)	85% of state owned facilities with active plans	DCR/ VDACS	A nutrient management plan has been adopted for Department of Transportation properties. VDOT will assess the acreage that receives nutrients in new constructions and maintenance and will report such acreage. 1/15/15 - DCR worked with the DGS Division of Real Estate Services to obtain

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				a database of all state-owned land. DCR is in the process determining which properties apply fertilizer. State-owned lands that currently have and previously had plans will continue to be renewed, tracked and reported.
12/31/2015	<b>U.13.</b> Improve tracking and reporting of urban nutrient management including state-owned facilities and local government lands (Phase I WIP, pg. 90)	60,000 acres of urban nutrient management each year	DCR/ VDACS	1/15/15 - Updated UNM plan reporting system is being developed. System will allow real-time data collection. Combining DCR acreage data with VDACS's CFA acreage data will meet deliverable.
7/1/2014 12/31/2015	<b>U.14.</b> Continue to implement amendments to the Virginia Fertilizer Law to protect water quality (Phase I WIP, pg. 90)	Implement new provisions	VDACS	Provisions regarding zero phosphorous in lawn maintenance fertilizer, as well as certain deicing agents containing various forms of nitrogen or phosphorous became effective December 31, 2013. VDACS is seeking to ensure compliance through label review at the time of product registration, and through marketplace inspections.  As of mid-March 2014, inspectors in VDACS' Office of Plant Industry Services have visited 87 different retail locations and inspected 72 different products. Only three deicing products were found to contain urea, and those products were grandfathered under the statute.

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				<p>1/15/15 - During November and December 2014, inspectors visited multiple retailers ahead of the cold winter months to ensure compliance with the deicing agent provisions. As of mid-December 2014, at least three large retailers that had taken delivery of non-compliant product had pulled the product off the floor at all of their Virginia locations. To date, over 600 tons of non-compliant product has been recalled, diverted or placed under stop sale.</p> <p>Provision regarding the slowly-available nitrogen content of lawn maintenance fertilizer and the application thereof became effective July 1, 2014.</p>
12/31/2015	<b>U.15.</b> Establish pollutant removal efficiencies for typical roadway vegetated shoulders and drainage conveyances thereby promoting the use of such practices over those employing impervious materials		VDOT	<p>VDOT will continue its interest in establishing pollutant removal efficiencies for these practices.</p> <p>1/15/15 - This activity is ongoing.</p>
12/31/2015	<b>U.16.</b> Provide DEQ stormwater management training to relevant VDOT stormwater personnel and contractors performing BMP review and inspection tasks		VDOT	<p>1/15/15 - VDOT provided DEQ Basic and Inspector SWM training to 950 VDOT internal personnel and consultant personnel working under contract to VDOT (equivalent to 2,612 training days).</p>

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12/31/2015	<b>U.17.</b> Revise VDOT guidance documents to incorporate and promote the use of low impact development techniques and other innovative stormwater BMPs in roadway projects	Multiple guidance documents	VDOT	1/15/15 - This activity continues as guidance documents are updated.
12/31/2015	<b>U.18.</b> Continue “Stormwater Management Comparative Study of Porous Asphalt for I-66 and Route 234 Bypass Park & Ride Facility” to determine /develop maintenance requirements for permeable asphalt pavement	Study	VDOT	1/15/15 - This activity continues with monitoring and the collection of data.
<b>Onsite Sewage Systems</b>				
12/31/2014	<b>OSS.1.</b> Implement operation and maintenance (O&M) portions of final <i>Alternative Onsite Sewage Systems (AOSS) Regulations</i> (12VAC5-613) (Phase I WIP, pg. 106)		VDH	Implementation of the O&M requirements is underway. VDH is finalizing an implementation manual to improve consistency in application of the regulations. 1/15/15 - New staff additions have allowed work to begin on an enforcement policy.
12/31/2014	<b>OSS.2.</b> Train agency staff on new inspection, compliance, and enforcement procedures for alternative onsite sewage systems		VDH	1/15/15 - Upper level staff training on inspections will be completed Spring 2015. Training will be offered to remaining staff when the implementation and enforcement manual is completed.
12/31/2014	<b>OSS.3.</b> Develop a Global Positioning System (GPS) guidance policy for VDH staff in order to facilitate a consistent approach to geolocating onsite sewage systems in the Bay watershed	Capture location of all new AOSS installed in the Bay watershed during the milestone period	VDH	VDH will focus on geolocating alternative onsite sewage systems installed in the Bay watershed. 1/15/15 - New AOSS installed in the Bay watershed that meet an approved BMP are

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				geolocated. This work will be expanded to include all new AOSS. Approval of a GPS guidance policy was delayed to address stakeholder concerns, but is on track for approval in 2015.
12/31/2015	<b>OSS.4.</b> Work with DEQ and local governments to capture and report the number of septic tank pump-outs that occur as a result of the Chesapeake Bay Preservation Act requirements (local ordinances), voluntary efforts and repairs throughout the Bay watershed	36,000 septic tank pump-outs each year	VDH/ DEQ	The target values are a combination of the annual pump-out data submitted to DEQ by the localities within the Chesapeake Bay Preservation Act area, and an annual estimate based on VDH data of the pump-outs performed voluntarily or as part of permitted repair activities outside Bay Act localities. 1/15/15 - This information is provided annually to DEQ for Bay progress reporting. For 2014 progress, VDH reported 1,986 pump-outs in the Bay watershed outside of the DEQ-managed CBPA areas. 26,557 pump-outs occurred in the Bay Act area.
12/31/2015	<b>OSS.5.</b> Work with DEQ and local governments to capture and report the number of connections to public sewer	600 sewer connections during the milestone period	VDH/ DEQ	The Virginia Environmental Information System (VENIS) database is capable of tracking onsite facilities that are connected to public sewer when the information is received from the locality. However, there is no requirement for the information to be reported to VDH. Discussions are planned to solicit the information from the wastewater authorities.

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				1/15/15 - Where available, this information is provided annually to DEQ for Bay progress reporting. For 2014 progress, VDH reported 168 sewer connections in the Bay watershed.
12/31/2015	<b>OSS.6.</b> Report the number of alternative onsite sewage systems (AOSS) meeting the current BMP for 50% reduction, and the new BMPs for 20%, 38%, and 69% reduction, pending their final approval by the Chesapeake Bay Program	2,870 lbs TN load reduction over baseline conditions at the edge of drainfield during the milestone period	VDH	The nitrogen requirements in the Virginia AOSS regulation became effective in December 2013. 1/15/15 - New BMP categories of 20%, 38%, and 69% nitrogen reduction were approved for use by the Bay Program partnership. This information is provided annually to DEQ for Bay progress reporting. For 2014 progress, VDH reported 707 AOSS meeting one of the approved BMPs. This equates to approximately 2,074 pounds of nitrogen reduced over baseline conditions in the fiscal year.
12/31/2015	<b>OSS.7.</b> VDH continues to operate the VENIS database and look for ways to improve functionality		VDH	VDH continues to conduct extensive quality assessment and quality control of the data within the VENIS database in order to improve our ability to deliver reliable information and to better track progress. 1/15/15 - QA/QC work is ongoing. Programming changes have been made to the VENIS database, and more are planned, to incorporate tracking for the new BMPs that were approved in July

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				2014, and to more accurately count all the onsite sewage BMP categories.
12/31/2015	<b>OSS.8.</b> Work with EPA and other TMDL stakeholders to better predict nitrogen losses through various soil types and treatment unit combinations in order to improve the accuracy of the Chesapeake Bay Watershed Model predictions for the onsite sector, especially for systems located above the geologic fall line		VDH	VDH commits to participation in workshops and stakeholder group meetings to advance the initiative. 1/15/15 - VDH staff participates in the CBPO Soil Attenuation Expert Panel, the CBPO Wastewater Technology Workgroup (WWTWG), the CBPO Water Quality Goal Implementation Team (WQGIT), the Virginia Chesapeake Bay Stakeholder Advisory Group (CBSAG), the Virginia Sewage Handling and Disposal Advisory Committee (SHADAC), and the VDH Environmental Health Managers meetings. VDH staff also participated in the CBPO On-Site Wastewater Treatment Systems Nitrogen Reduction Technology Expert Review Panel until the objective was completed and a final report was published.
<b>Forest</b>				
12/31/2015	<b>F.1.</b> Continue with BMP training sessions for forest harvesting contractors, Professional Foresters and forest landowners	4 training sessions each year	VDOF	Through VDOF programs, cooperation with the SHARP Logger Program and Cooperative Extension. 1/15/15 - For FY 2014, VDOF worked within the SHARP Logger Program to offer 14 training Programs with 307 participants present. Five of these programs were in the core program area

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				with 126 attendees and the remaining 9 programs were for continuing education.
12/31/2015	<b>F.2.</b> Develop new on-line BMP training program for harvest contractors through VT Sustainable Harvesting And Resource Professional (SHARP) Logger Program focusing on underutilized harvesting BMPs and considerations for biomass harvesting practices	1 on-line training program each year	VDOF	1/15/15 - Developed a new logger training on-line course showing the beneficial use of harvesting slash (tree tops and limbs) in the stabilization of skid trails and bare soil areas.
12/31/2015	<b>F.3.</b> Continue BMP implementation monitoring to determine BMP rates being applied to forest harvest sites within the Bay Watershed through funding provided by a CBRAP Grant		VDOF	Monitoring meets the criteria set out in the Southern Group of State Foresters BMP Implementation Monitoring Protocol. 1/15/15 - This has been accomplished for calendar year 2013 with results showing on a random sampling of 240 sites across Virginia and a specific subsample taken within the Bay Watershed a tract average of 91% of appropriate BMPs being utilized on tracts harvested within the Bay Watershed. Monitoring is wrapping up for calendar year 2014 in December with reporting available in February 2015.
12/31/2015	<b>F.4.</b> Provide cost-share to forest harvesting contractors to implement BMPs (Phase I WIP, pg. 110)	90% of harvested area treated	VDOF	1/15/15 - Funding in the amount of \$250,000 was received from the Commonwealth's Water Quality Improvement Fund. At total of \$150,000 has been allocated to the Logger BMP Cost-Share Program that is cost-sharing

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				BMPs on those areas of impaired streams that are directly impacted by the timber harvest.
12/31/2015	<b>F.5.</b> Continue enhanced enforcement of the Virginia Silvicultural Water Quality Law in the Chesapeake Bay Watershed utilizing CBRAP grant funding	Enforcement on 100% of harvest sites based upon agency established procedures and harvest inspection of each harvest site	VDOF	1/15/15 - VDOF has been actively engaged in enforcement of the Commonwealth's Silvicultural Water Quality Law. 95 WQ Law Actions took place on timber harvest operations within the Bay Watershed.
12/31/2015	<b>F.6.</b> Provide cost-share funding to those landowners to establish riparian forest buffers that would not otherwise qualify for cost-share funding through federal programs (Phase I WIP, pg. 62)		VDOF	1/15/15 - A \$250,000 grant was received from the Commonwealth's Water Quality Improvement fund for FY2015. \$100,000 of this grant has been allocated to this program and all funding has been committed for projects to be completed in the Spring of 2015.
12/31/2015	<b>F.7.</b> Slow the loss of forestland conversion and associated water quality benefits resulting from necessary municipal infrastructure development (Phase II WIP, pg. 33)	2000 acres of avoided forestland conversion achieved by integrating DOF forestland loss mitigation assessments of proposed development projects into state environmental impact review (EIR) processes	VDOF	VDOF initiated a voluntary mitigation program in November 2012 funded by a USFS grant that includes broader, more comprehensive participation in DEQ and VDOT EIR processes. 1/15/15 - VDOF estimates approximately 4000 acres of forestland loss was avoided in 2013 and 2014 by integrating DOF forestland loss mitigation assessments of proposed development projects into the state environmental impact review (EIR) processes of both DEQ and VDOT.

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12/31/2015	<b>F.8.</b> Open Field Targeting Initiative – target open lands in Central Virginia that are not currently being used in an agricultural capacity or are otherwise abandoned. Identify landowners and contact for tree planting (Phase I WIP, pg. 62)		VDOF	Working in a 4 county area of Central Virginia to identify and contact landowners that have been targeted for tree planting projects. 1/15/15 - This project has been completed in the counties of Greene, Madison, Culpepper and Orange and has been expanded to include the counties of Albemarle, Louisa, Goochland and Rappahannock in the Central Piedmont. In addition, some funding for abandoned open-land planting projects has been received from the Alliance for the Chesapeake Bay to assist in covering 100% of tree planting costs and maintenance for landowner establishment of trees on open land. There have been 17 projects approved for 133.2 acres of tree planting for a total cost of \$136,945. All funding for this program has been allocated and planting projects will be completed in the Spring of 2015.
12/31/2015	<b>F.9.</b> Identification of incentives and drivers to assist communities directing growth away from key forestland assets such as groundwater recharge areas, intact and productive forests, and wildlife corridors to ensure forestland economic and ecosystem values are considered and weighed against competing land use options in land	List of incentives and drivers with action plan for implementing vetted through discussion with communities	VDOF	1/15/15 - A proposal has been submitted requesting 2015 funding and a partnership team headed by DOF with participation from DEQ, PDCs and others has been created to move forward if the funding request is granted.

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	development decisions (Phase II WIP, pg. 34)			
12/31/2015	<b>F.10.</b> Initiation of dialogue with EPA, Bay jurisdictions, and others to determine the feasibility of achieving credited TMDL nutrient or sediment reductions from conserving existing forestland in the context of the Chesapeake Bay model (Phase II WIP, pg. 34)	Convene a group comprised of EPA, Bay jurisdictions, state agencies, and other stakeholders to initiate a dialogue that focuses on valuing conservation of existing forestland in the Chesapeake Bay model	DEQ/VDOF	This would have to be a collaborative effort contributed to and funded by multiple sources and coordinated with the other Bay partners. VDOF role would be as technical assistance and project management provider. 1/15/15 - A first module project aimed at achieving this objective was proposed in 2014 by a consortium of Virginia agencies and NGOs and approved by EPA and the CBP for implementation in 2015.
12/31/2015	<b>F.11.</b> Continue to focus riparian forest buffer establishment efforts in Potomac River Watershed and expand these efforts to the northern piedmont through the establishment of “Buffer Teams” composed of NRCS, FSA, DCR, VDOF, SWCD and other partners through a focused riparian forest buffer - GIS targeting / marketing initiative (Phase I WIP, pg. 62)	Work through a new 4 County area in Central Virginia in the same way targeting was accomplished in a 4 county Shenandoah Valley area	VDOF	Funding is currently being provided through a U. S. Forest Service Bay Grant. 1/15/15 - This initiative is on-going and the targeting portion has been expanded to the Central Piedmont counties of Rappahannock, Greene, Madison, Culpepper, Orange, Albemarle, Fluvanna, Louisa and Goochland. A direct mailing program will be initiated upon completion of the identification of targeted landowners.
12/31/2015	<b>F.12.</b> Permanently conserve forestland through permanent conservation easements or acquisition (Phase II WIP, pg. 34)	Conserve 6000 acres across the Virginia portion of the Watershed	VDOF	VDOF currently administers a robust conservation easement and land acquisition program focused on keeping the forestland intact and undivided, enabling landowners to manage their forestland for timber products and

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### January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
				environmental values. 1/15/15 – Efforts are ongoing.
<b>Industrial Stormwater</b>				
7/1/2014	<b>IS.1.</b> Provide coverage for an estimated 900 facilities under reissued industrial stormwater GP including effluent nutrient monitoring and offsetting of new or expanding industrial SW nutrient loads	Permit registrations	DEQ	1/15/15 - Issued coverage to 757 facilities in the Bay watershed under the 2014 Industrial Stormwater General Permit, which became effective 7/1/14. Still working on permit coverage issued to approximately 30 additional facilities.
7/1/2014	<b>IS.2.</b> Begin 2 year program of effluent nutrient monitoring at permitted industrial stormwater facilities in the Bay watershed	Industrial stormwater effluent monitoring program	DEQ	Activity extends beyond this milestone period. 1/15/15 - All facilities in the Bay watershed have a permit condition that requires them to monitor their stormwater discharges for TN, TP and TSS.
<b>Wastewater</b>				
12/31/2014	<b>W.1.</b> Initiate reissuance of watershed GP including reduced WLAs in the James River basin as indicated in TMDL Appendix X	Publish NOIRA	DEQ	1/15/15 - NOIRA to be published in first quarter of 2015.
<b>Extractive</b>				
12/31/2014 12/31/2015	<b>E.1.</b> Enhance coordination between DEQ and DMME to collect and report BMPs installed on active mine sites as well as reclamation of active and orphaned mines		DMME/DEQ	1/15/15 - DMME and DEQ have established procedures for reporting BMPs on extractive lands. Currently, only mine reclamation is creditable in the Bay Model. Erosion and Sediment Control is available for use in planning scenarios but is not currently approved for credit in progress reporting. DEQ will seek such Bay Program approval in 2015.

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Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
12/31/2015	<b>E.2.</b> Ensure compliance with permit conditions for proper site planning and best management practice implementation	24,000 acres of Erosion and Sediment Control on Extractive Lands each year	DMME	1/15/15 - There are 47,335 acres of permitted mine sites in the Bay watershed. 25,274 of those acres are disturbed and have BMP's installed on them. 2,456 of the permitted acres have had reclamation completed.
12/31/2015	<b>E.3.</b> Document and report reclamation of active and orphaned mine sites	1,000 acres of mine reclamation during the milestone period	DMME	1/15/15 - For 2014 progress 401 acres of mine reclamation was credited in the Bay watershed.
<b>Local Engagement</b>				
12/31/2014	<b>LE.1.</b> Develop a communications strategy for engaging local stakeholders in WIP implementation, milestone planning and progress reporting (Phase II WIP, pg. 42)		DEQ	1/15/15 - Established the Chesapeake Bay Stakeholders Advisory Committee to provide advice and feedback on milestones, implementation, the Bay Watershed Agreement and other topics of interest to the Bay Program partnership. The group is also used as a communications conduit to share information with stakeholders more broadly.
12/31/2015	<b>LE.2.</b> Complete comprehensive evaluation of historical implementation data to assess data quality and update accordingly for use in v6.0.model calibration		DEQ	1/15/15 - \$1.5M in CBRAP funding will be made available to localities in 2015 to cover cost associated with collecting, formatting, and submitting quality BMP data for urban/developed lands and any available local land use/land cover data.
<b>Federal Facilities</b>				
10/1/2014 10/1/2015	<b>FF.1.</b> Engage federal agencies with facilities in Virginia to encourage participation in Bay	Participation by all federal facilities	DEQ	1/15/15 - The Bay Program has developed and approved a process for States to

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### January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
	TMDL planning, implementation and reporting as outlined in EPA guidance	larger than 500 acres		<p>establish load targets for Federal Facilities. The process includes procedures for Federal Facilities to provide data to inform the development of two-year milestones and report BMP implementation.</p> <p>There are more than 200 federal facilities in Virginia, 74 are larger than 500 acres in size.</p>
<b>Trading and Offsets</b>				
6/30/2015	<b>TO.1.</b> Expansion of Existing Nutrient Credit and Stormwater Offset program (Phase I WIP, Page 12)	Promulgate nonpoint source credit certification regulation	DEQ	1/15/15 - Public hearings scheduled for February 2015. Written public comments to be received through March 16, 2015.
12/31/2014	<b>TO.2.</b> Begin development of online nutrient credit registry		DEQ	1/15/15 - Initial discussions on the scope of the online registry held. Anticipate more development of the registry effort in first half of 2015. Current registry maintained manually and made available on DEQ website.
2/1/2016	<b>TO.3.</b> Conduct study on the cost-effectiveness of nutrient credit use as an option for VDOT stormwater permitting requirements	Report	VDOT	<p>Activity extends beyond this milestone period.</p> <p>1/15/15 - Initial study completed by the Virginia Center for Transportation Innovation and Research and published in August 2014. Potential for additional study being evaluated.</p>

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### January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
4/1/2014 4/1/2015	<b>TO.4.</b> Report results of wastewater nutrient monitoring and credit availability for the prior year's annual loads. Reports will be made available on DEQ's nutrient trading webpage	Report	DEQ	1/15/15 - 2013 Nutrient Loads Report published on DEQ website in April 2014.
7/1/2014 7/1/2014	<b>TO.5.</b> Publish notice of all nutrient credit exchanges and purchases for the previous calendar year and make all documents relating to the exchanges available to any person requesting them. Reports will be made available on DEQ's nutrient trading webpage	Report	DEQ	1/15/15 - 2013 Nutrient Trades Report published on DEQ website in July 2014.
<b>James River Phased Implementation/Chlorophyll Study</b>				
12/31/2015	<b>JR.1.</b> Define relationships between harmful algal blooms (HAB), indicators and designated use (DU) attainment (Phase I WIP, pg. 7 – 11)	Principal Investigator reports	DEQ	1/15/15 - Work ongoing. In fall 2014, closed-out VCU's water quality monitoring contract; 3 years of enhanced sampling data collected throughout the James estuary. Also completed laboratory bioassay experiments. Principal Investigators continue data analysis and research.
12/31/2015	<b>JR.2.</b> Continue to hold annual meetings of the Stakeholder Advisory Group (SAG)		DEQ	1/15/15 - Third SAG meeting held in September 2014; agenda included study background, DEQ staff risk assessment of microcystin in blue crabs, and current status of Scientific Advisory Panel work on criteria protectiveness, lines of evidence, bioassay results, and literature reviews.

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### January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
11/30/2014 5/31/2015	<b>JR.3.</b> Continue development of empirical relationships between HAB measures and designated use attainment	Science Advisory Panel (SAP) recommendations	DEQ	1/15/15 - Most recent SAP meeting held in November 2014; agenda included preliminary draft empirical relationships report, status report on James River HAB model development, Algal Growth model, and effects of river discharge on seasonal algae bloom patterns in the Upper James. Principal Investigators due to submit preliminary final draft reports in January 2015 for DEQ review/comment.
7/31/2015	<b>JR.4.</b> Utilize model to assess chlorophyll-a criteria alternatives, including the existing standards	Scenario and Alternatives Analysis Report	DEQ	1/15/15 - Model utilization for scenario runs will begin after model calibration and verification has been deemed satisfactory. Model development schedule extended to end of 2015 to allow for inclusion of additional monitoring results from 2011-13 in calibration dataset.
12/31/2015	<b>JR.5.</b> Continue development of models for indicators, nutrient inputs and HABs (Phase I WIP, pg. 9)	Final Model Study Report	DEQ	1/15/15 - Planning for a January 2015 meeting to review model calibration to-date; will include select SAP members, contractors as well as representatives from EPA-CBPO modeling team and STAC.
<b>Additional Activities not Included in Original 2014-2015 Milestones</b>				
	Develop online application to allow distributors of fertilizer to submit the required tonnage reports	Online application is moved to production	VDACS	1/15/15 - Virginia Code § 3.2-3610 requires commercial distributors of fertilizer to file annual reports to the Commissioner of VDACS showing the city or county where the product was distributed, the amounts (expressed in

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### January 1, 2014 – December 31, 2015 Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
				tons, or decimal portions) of each grade of fertilizer, and the form of the product, e.g., in bags, bulk, or liquid). This information is currently reported in hardcopy forms and must be subsequently entered by hand, a time-consuming process that takes months to complete.
	Issue Request for Applications for the distribution of \$28 million in Stormwater Local Assistance Funds		DEQ	1/15/15 – DEQ solicited applications for FY 2015 SLAF grant assistance and evaluated the 65 projects received from 25 localities totaling \$21,613,776. After an evaluation of funding availability, project eligibility, priority ranking, and analyses of the cost effectiveness of the eligible projects, the recommended projects for this second phase of SLAF funding includes 64 projects in 25 localities totaling \$21,488,776. The remaining \$6,511,224 will be carried over for a future solicitation in 2015.
* As part of the adaptive management process for achieving water quality goals, jurisdictions may submit programmatic milestones that modify, are in place of, or are in addition to milestones listed in their WIPs so long as the jurisdiction can demonstrate that they will be as effective toward meeting water quality goals.				