

Virginia

January 1, 2016 – December 31, 2017 Draft Programmatic Two-Year Milestones

Target Date	Milestone (WIP page reference)*	Deliverable	Lead Agency	Comments/Status Updates
Agriculture including CAFO/AFO				
12/31/2017	A.1. Track and report the progress of the 100% funded stream exclusion initiative (Phase I WIP, pg. 63)	Report number of acres of vegetative buffers established, linear feet of stream banks protected, and number of animal units excluded	DCR	DCR, in consultation with Soil and Water Conservation Districts, agricultural producers and other stakeholders will continue to advocate for funds to implement existing SL-6 pending cost-share applications.
12/31/2017	A.2. 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 10,000 acres of agricultural operations per year	DCR	DCR will continue to enter into contracts to develop Resource Management Plans.
12/31/2017	A.3. Tabulate the number of cost shared and voluntary agricultural BMPs both existing and planned in RMPs	Produce an annual RMP report that tabulates existing and scheduled BMPs	DCR	
12/31/2017	A.4. Project the necessary pace of agricultural BMP implementation needed to meet 2025 WIP reduction targets	Produce an Agricultural Needs Assessment report at least bi-annually	DCR	
12/31/2017	A.5. Increase the number of nutrient management plans on unpermitted dairies (Phase I WIP, pg. 76)	20 new small dairy plans per year WIP Goal 75% of facilities participating	DCR	Issue/re-issue contracts to develop nutrient management plans on unpermitted dairies and employ additional strategies

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6/30/2017	A.6. Increase the number of nutrient management plans on unpermitted beef operations	Survey to determine the number of unpermitted beef operations	DCR	
12/31/2017	A.7. Increase nutrient management plans on small farms	15,000 new acres on small farms under nutrient management. These will include a number of small dairies and beef operations related to Milestones A.5. and A.6.	DCR	
12/31/2017	A.8. Project the number of additional/expanded poultry houses and plan to offset any resulting increase in nutrients	Annually report additional or expanded poultry houses and evaluate impacts	DEQ/DCR	
12/31/2017	A.9. Conduct continuing education classes and administer nutrient management certification examinations	6 classes and two exams each year	DCR	
12/31/2017	A.10. 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	
12/31/2017	A.11. Spatial reporting of nutrient management plan data	Tracking module to report spatially	DCR	
6/30/2015	A.12. Advance Healthy Waters program geo-referenced data sets	Update Bay watershed data sets	DCR	

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8/31/2016	A.13. Convert applicable CAFO VPA permits to VPDES permits (Phase I WIP pg. 74, Phase II WIP pg. 18)	4 VPDES permits issued in the Bay watershed	DEQ	Four draft permits are being processed in the Bay watershed; DEQ expects to complete the draft permit packages for EPA review by April 2016.
2/15/2016	A.14. 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	DEQ/ VDACS	
12/31/2017	A.15. Follow up with small AFO owners that are implementing remedies as initiated under the Small AFO Strategy.	Follow-up where necessary	DEQ/VDACS	Continue to follow up with the small AFOs owners that are implementing remedies as initiated under the Small AFO Strategy.
12/31/2017	A.16. Provide outreach opportunities related to the Small AFO Strategy.	Outreach opportunities	DEQ/VDACS	Provide opportunities for education and promote the Small AFO Strategy.
7/1/2016	A.17. Develop a spatial database to track Agricultural Stewardship Act (ASA) complaints.	ASA complaint tracking module	VDACS/DCR	

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Urban including MS4				
6/30/2016	U.1. Reissue 6 final MS4 individual permits (Phase I WIP, pg. 93)	All final permits issued	DEQ	
6/30/2016	U.2. Implement Virginia Conservation Assistance Program (VCAP) residential scale urban BMP cost share program.	Report installed practices in annual progress	DEQ/SWCDs	
9/1/2016	U.3. Initiate reissuance of the Phase 2 MS4 general permit	NOIRA	DEQ	
9/1/2017	U.4. Initiate reissuance of the Construction general permit	NOIRA	DEQ	
12/31/2017	U.5. Review four Phase 1 MS4 TMDL Action Plans	Final Approval	DEQ	
12/31/2017	U.6. Move SLAF projects that are awarded and underway towards completion and closeout. Guide projects that are presently un-awarded to award and into the construction phase.	Shorten time from project selection to project completion	DEQ	
10/1/2016 10/1/2017	U.7. Complete testing and deployment of the “SMART” Stormwater Management and Restoration Tracker, a system to track, verify and report homeowner installed BMPs.	Report Homeowner BMPs beginning in 2016 progress	Alliance for the Chesapeake Bay - Virginia Office/DEQ	

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6/30/2017	U.8. Nutrient management on urban turf – golf courses; develop and promote golf course nutrient management	Urban nutrient management plans completed on 330 golf courses	DCR	Deadline established in state law
12/31/2017	U.9. Promote Nutrient Management on Urban Turf	Certify 6 new UNM planners; implement 6 new VA Grass roots programs; increase volunteer capacity by 60 new Master Gardeners	DCR	
7/1/2016	U.10. Complete development of online fertilizer sales data tracking system.	Automated fertilizer sales data tracking	VDACS	
10/1/2016 10/1/2017	U.11. Utilize improved fertilizer sales data. Updated fertilizer sales data will be compared to historic fertilizer sales data and/or baseline as basis for continued credit for Urban Phosphorus fertilizer legislation.	Data developed, analyzed, and reported to DEQ	VDACS	
10/1/2016 10/1/2017	U.12. Utilize annual fertilizer application data for reporting of acres of nonagricultural lands per county under management by Certified Fertilizer Applicators (CFA) receiving fertilizer in accordance with Urban Nutrient Management standards.	Acres of nonagricultural land under management by Certified Fertilizer Applicators (CFA) reported to DEQ	VDACS	

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12/31/2017	U.13. Establish pollutant removal efficiencies for typical roadway vegetated shoulders and drainage conveyances thereby promoting the use of such practices over those employing impervious materials	Efficiencies established and distributed to relevant contractors and government agencies	VDOT	
12/31/2017	U.14. 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	
12/31/2017	U.15. 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	
Onsite Sewage Systems				
12/31/2017	OSS.1. Train agency staff on new inspection, compliance, verification and enforcement procedures for alternative onsite sewage systems.		VDH	Staff will develop policy to implement civil penalties and start tracking civil penalties for every owner who fails to properly operate and maintain his or her alternative onsite sewage systems. Staff will be trained on the new policy and

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				procedures. VDH will transition to reporting TN reductions based on submitted annual operation and maintenance (O&M) inspection reports that confirm the alternative onsite sewage systems meet the approved BMPs for nitrogen reduction.
	OSS.2. Implement a Global Positioning System (GPS) guidance policy for VDH staff in order to assign spatial location information to onsite sewage systems in the state.	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 that meet an approved BMP. Training on the GPS units distributed to local health departments will be provided to facilitate a consistent approach to GPS data collection.
12/31/2017	OSS.3. 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.

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13/31/2017	OSS.4. Report the number of alternative onsite sewage systems (AOSS) meeting the current BMPs for 20%, 38%, 50%, and 69% reduction.	13,500 lbs TN load reduction over baseline conditions at the edge of drain field during the milestone period	VDH	The nitrogen requirements in the Virginia AOSS regulation became effective in December 2013. Edge of drain field conditions will be converted to delivered loads in model reports.
13/31/2017	OSS.5. VDH continues to operate the VENIS database and look for ways to improve its functionality.		VDH	VDH continues to conduct extensive quality assessment and quality control of the data within the Virginia Environmental Information System (VENIS) database in order to improve our ability to deliver reliable information and to better track progress. A Request for Proposals will be developed to update or replace the existing database. The updated database will include tracking procedures for all BMPs for nutrient reductions from onsite sewage systems. VDH also plans to update reporting capabilities to better track GPS data collected according to Milestone OSS.2. above.

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13/31/2017	OSS.6. 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.
12/31/2017	OSS.7. Reduce repair time for failing onsite sewage systems to fewer than 60 days.	Repair at least 40% of all failing sewer systems in each health district within 60 days of when VDH becomes aware of the failure. Current estimates are that an average of 47% statewide are repaired within 60 days, with individual health districts ranging from 0% to 100%.	VDH	VDH tracks repair time for failing sewage systems through repair permits in the VENIS database.
12/31/2017	OSS.8. 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 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

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				to be reported to VDH. Discussions are planned to solicit the information from local wastewater authorities and develop a central spatial dataset of all sewered areas in the state.
Forest				
12/31/2017	F.1. 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.
12/31/2017	F.2. 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	
12/31/2017	F.3. 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	Annual Monitoring Report due in February of each year	VDOF	Monitoring meets the criteria set out in the Southern Group of State Foresters BMP Implementation Monitoring Protocol.

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12/31/2017	F.4. Provide cost-share to forest harvesting contractors to implement BMPs (Phase I WIP, pg. 110)	Individual Stream crossings and approaches treated, 30 projects funded annually	VDOF	Dependent on funding from the Water Quality Improvement Fund
12/31/2017	F.5. 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	
12/31/2017	F.6. 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	Dependent on funding from the Water Quality Improvement Fund
12/31/2017	F.7. Slow the loss of forestland conversion and associated water quality benefits resulting from necessary municipal infrastructure development (Phase II WIP, pg. 33)	Integrating DOF forestland loss mitigation assessments of proposed development projects into ongoing state environmental impact review (EIR) processes	VDOF	2000 acres of avoided forestland conversion goal achieved
12/31/2017	F.8. Continue to focus riparian forest buffer establishment efforts in Potomac River Watershed and expand these efforts to the northern piedmont	Target three specific watersheds to concentrate RFB CREP establishment two in the Shenandoah Valley and one in the	VDOF	Funding for the positions is being provided through a grant from FSA through USDA Forest Service Region 8

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	through the hiring of Buffer Specialists to work with NRCS, FSA, DCR, VDOF, SWCD and other partners through a focused riparian forest buffer - GIS targeting and CREP initiative (Phase I WIP, pg. 62)	Central Piedmont of Virginia		
12/31/2017	F.9. Permanently conserve forestland through permanent conservation easements or acquisition (Phase II WIP, pg. 34)	Conserve 1200 acres annually across the Virginia portion of the Bay Watershed	VDOF	Dependent on federal funding and easement donations from private landowners
12/31/2017	F.10. 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 development decisions (Phase II WIP, pg. 34)	Discussions with pilot area localities to encourage adoption of policies directing growth away from key forestland assets	VDOF	
12/31/2016	F.11. Initiation of dialogue with EPA, Bay jurisdictions, and others to determine the feasibility of achieving credited TMDL nutrient or sediment	Convene a group comprised of EPA, Bay jurisdictions, state agencies, and other stakeholders to initiate a	DEQ/VDOF	

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	reductions from conserving existing forestland in the context of the Chesapeake Bay model (Phase II WIP, pg. 34)	dialogue that focuses on valuing conservation of existing forestland in the Chesapeake Bay model		
Industrial Stormwater				
9/1/2017	IS.1. Initiate reissuance of the Industrial Stormwater General Permit	NOIRA		
Wastewater				
7/1/2016	W.1. Compete reissuance of the Watershed General Permit	Final Permit	DEQ	
1/1/2017	W.2. Process Registrations for reissued Watershed General Permit		DEQ	
6/30/2017	W.3. Implement sampling plan for non-significant dischargers	2000 effluent nutrient samples from a stratified random sample of 541 non-significant permittees	DEQ	
Local Engagement				
6/30/2016	LE.1. Complete the development of 1-meter land cover classification for the Bay watershed	Publicly available land cover dataset	DEQ/VGIN	
6/30/2016	LE.2. Develop a communications strategy for engaging local stakeholders in WIP 3 planning, implementation and progress reporting (Phase II WIP, pg. 42)		DEQ	

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Federal Facilities				
12/31/2017	FF.1. NASA Langley Research Center plans to implement several land conversion projects and a street sweeping program in the milestone period.	7.4 acres impervious converted to unfertilized grass 3 acres of turf converted to hardwood forest	NASA Langley Research Center	
12/31/2017	FF.2. Continue to work closely with federal facilities implementing the “Chesapeake Bay Program Protocol for Setting Targets, Planning BMPs and Reporting Progress for Federal Facilities and Lands”	Engagement of federal facilities in Bay planning, implementation and progress reporting	DEQ/Federal Facilities	
Trading and Offsets				
9/30/2016	TO.1. Expansion of Existing Nutrient Credit and Stormwater Offset program (Phase I WIP, Page 12)	Promulgate nonpoint source credit certification regulation	DEQ	
12/31/2016	TO.2. Continue development of online nutrient credit registry		DEQ	
Verification				
6/30/2016	V.1. Update Verification Program Plan (DEQ QAPP) for EPA Approval.	EPA Approved Plan	DEQ	
9/30/2016	V.2. Complete comprehensive evaluation of historical implementation data to assess data quality and update	Final data sets reflecting on-the-ground implementation levels through time	DEQ	

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	accordingly for use in Phase 6.model calibration			
12/31/2017	V.3. Update DCR QAPP to align with Verification Program Plan.	Approved QAPP	DCR/DEQ	
12/31/2017	V.4. Develop QAPPs or SOPs for state agency data providers to align with Verification Program Plan.	Links to documents added to Verification Program Plan	VDH/VDACS/DEQ	
12/31/2017	V.5. Work with non-state data providers to document SOPs in accordance with Verification Program Plan	Links to documents added to Verification website	DEQ	
10/1/2016	V.6. Develop and implement a 1619 work around to allow reporting of NRCS/FSA data for annual progress and Phase 6 model calibration	Resume reporting of NRCS/FSA implementation data	DEQ/DCR	
12/31/2017	V.7. Seek 2016 WIP Assistance Funding for the development of a Verification SOP template that can be completed by non-state data providers to satisfy Verification Program Plan requirements		DEQ	
12/31/2017	V.8. Seek 2016 WIP Assistance Funding for the development of practice specific BMP inspection guidance and checklists for use		DEQ	

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	by data providers			
12/31/2016	V.9. Hire and train 4 additional DEQ water compliance inspectors		DEQ	
6/30/2016	V.10. Agricultural BMP verification	Complete 34 conservation tillage surveys, and 1400 or more voluntary structural BMP inspections	DCR	
12/31/2017	V.11. Verify agricultural nutrient management plan consistency	Annually Survey and report on $\geq 10\%$ /year of all active DCR agricultural nutrient plans for consistency	DCR	
James River Phased Implementation/Chlorophyll Study				
12/31/2017	JR.1. Continue to hold meetings of the Stakeholder Advisory Group (SAG) to serve the role of the Regulatory Advisory Panel for potential changes to water quality standards		DEQ	
1/31/2016	JR.2. Continue development of empirical relationships between HAB measures and designated use attainment	Final Draft <i>Empirical Relationships Linking Algal Blooms with Threats to Aquatic Life Uses in the James River Estuary</i> Report	DEQ	
2/29/2016	JR.3. Utilize model to assess	<i>Scenario and Alternatives</i>	DEQ	

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	chlorophyll-a criteria alternatives, including the existing standards	<i>Analysis Report</i>		
2/29/2016	JR.4. Continue development of models for indicators, nutrient inputs and HABs (Phase I WIP, pg. 9)	<i>Final Model Study Report</i>	DEQ	
12/31/2017	JR.5.. Initiate establishment of facility-specific wasteload allocations necessary to achieve the remaining load reductions needed to meet the applicable Chlorophyll-a criteria		DEQ	
* 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.				