## January 1, 2014 – December 31, 2015 Delaware's Programmatic Milestones

Target Date	Milestone (Phase 2 WIP Section Reference)	Deliverable	Lead Agency	Comments/Status Updates
Stormwater				
12/2014	Provide training to the regulated community on revised sediment and stormwater regulations (Section 7.1.1.4)	Minimum 12 Training Sessions	DNREC, SSP	More training sessions are planned through 2014, though no dates have been established yet. It is expected 4-6 additional Level 1 sessions will be offered. In addition, 8-10 Level 2 sessions covering more advanced technical topics will be offered. This project is funded through the Chesapeake Bay Regulatory and Accountability Grant.
7/2014	Provide technical support to Delegated Agencies for implementing the revised sediment and stormwater regulations (Section 7.1.1.4)	Staff Support	DNREC, SSP	Technical staff from the Sediment & Stormwater Program will attend project applicationmeetings for the first 6 months of 2014 to ensure consistency in implementing the new planreview procedures under the revised sediment and stormwater regulations. An assessmentwill then be conducted to determine whether it will be necessary to continue this support.This project is funded through the Chesapeake Bay Regulatory and Accountability Grant.
7/2014	Develop training videos for the Delaware Urban Runoff Management Model (Section 7.1.1.4)	On-Line Videos	DNREC, SSP	The SSP has contracted with Tetra Tech to develop two (2) training videos for using the new version of the Delaware Urban Runoff Management Model (DURMM). These videos would be delivered through the SSP website to supplement the formal training sessions. This project is funded through the Chesapeake Bay Regulatory and Accountability Grant.
2014-2015	Maintenance Inspections as part of Verification Program (Section 4.2.2)	Inspect 200 BMPs	Conservation Districts	Districts will continue to inspect closed-out projects and provide inspection reports. The intent is to ensure proper and continued function of the stormwater facilities and look for ways to gain additional water quality improvements. This project is funded through the Chesapeake Bay Regulatory and Accountability Grant.
12/2015	Construction Inspections (Section 4.2.2)	Inspect 60 active construction sites	Conservation Districts	Districts will continue to provide construction inspection of projects and monitor for compliance with approved sediment and stormwater management plans. This project is funded through the Chesapeake Bay Regulatory and Accountability Grant.
2014-2015	Stormwater Water Quality Projects/Stormwater Retrofits for Town of Blades (Section 4.2.2)	1 BMP	Sussex Conservation District	The District will implement a water quality projects or stormwater retrofits in the Town of Blades. This project funded by the Chesapeake Bay Implementation Grant.
10/2014	Town of Greenwood Urban Restoration Project (Section 7.1.1.4)	Project	DNREC, Conservation District, Town of Greenwood	The Town of Greenwood received a NFWF Small Watershed Grant to complete an urban restoration project to remove channelized ditches, install urban buffers and install a new half-acre wetland and other features to address stormwater runoff within the town. The project has been designed, all permits issued, all court order changes approved. Construction

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				is expected to begin in May 2014 with plantings to occur in spring and fall 2014. Additional funding provided by Chesapeake Bay Implementation Grant.
9/2014	Stormwater retrofit for the City of Seaford (Section 7.1.1.4)	1 BMP/Project	DNREC, SSP	Sussex Conservation District has had a pre-application meeting with GMB who is developing a plan for this project. Plans submitted for review October 2013; comments sent 11/19/13. Spring 2014 anticipated construction date. This project is funded through the Chesapeake Bay Implementation Grant.
6/2014	Stormwater retrofit for Seaford Central Elementary (Section 7.1.1.4)	1 BMP/Project	DNREC, SSP	Sussex Conservation District has had a pre-application meeting with GMB who is developing a plan for this project. Plans submitted for review October 2013; comments sent 11/19/13. Spring 2014 anticipated construction date. This project is funded through the Chesapeake Bay Implementation Grant.
12/2015	Implement Bethel Green Infrastructure Project (Section 8.2.4)	1 BMP/Project	DNREC, Town of Bethel	The Town of Bethel, in partnership with the Town of Laurel, received technical assistance funding from the NFWF to design and engineer a green infrastructure project in the tiny town to address stormwater issues. The engineering and design was completed in winter 2014. Total cost to implement the project is \$456,420. The Town, with assistance from DNREC and their engineer, has submitted a grant proposal to the Chesapeake Bay Trust for \$250,000 to begin the project. They are also actively seeking funding from other state, local and federal sources to complete the project. The project includes the installation of several bio-retention areas, installation of up to 6 Filterra units, a step pool conveyance system, and a 300+ foot living shoreline. DNREC is completing the design for a second project in Bethel to install buffers, swales and other practices to address stormwater runoff from an agriculture field within the town. The town received \$100,000 from the Chesapeake Bay Trust towards this project. Additional funding TBD in the future.
12/2015	Implementation of Green Infrastructure improvements along 6th Street and the Rossakatum Branch in Laurel (Section 8.2.4)	Implementation of Green Infrastructure Improvements	Town of Laurel and George, Miles and Burh, Inc.	Plan and Cost assessment for 6th Street is complete. Cost to implement Green Infrastructure improvements to 6th Street in Laurel is approximately \$1.175 million. The town is seeking the funding needed to implement the project, which can be completed in phases. The Town is planning to submit a grant proposal for the 2014 NFWF Innovative Nutrient and Sediment Reduction grant as well as funding from the Delaware Clean Water State Revolving Fund to complete the assessment of the Rossakatum Branch which was fully assessed in the original project. Implementation depending on availability of funding.
12/2015	Urban Watershed Rapid Assessment (Section 8.2)	Report	DNREC	DNREC may contract with a consultant to assess urban communities to identify opportunities for stormwater practices in urban areas using methodology developed by the

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				Center for Watershed Protection.
3/2015	Finalization of Phase II MS4 General Permit for the State of Delaware (Section 7.1.2.2.3)	Fully developed and fully reviewed Phase II MS4 Permit	DNREC, SWDS	Comments were received back from EPA on the DRAFT Phase II MS4 General Permit for Delaware (MS4 GP) on September 13, 2013. EPA's comments were subsequently addressed and the MS4 GP is currently in internal review within the Surface Water Discharge Section at DNREC. Once internal review is complete, the DRAFT Phase II MS4 Permit will then be posted on the DNREC SWDS website for public review. SWDS expects to address preliminary comments and send it for official public notice by March of 2015. Several municipalities that drain to the Chesapeake Bay Watershed have been newly identified (through 2010 census data) as requiring a Phase II MS4 permit.
12/2015	Evaluate the need for further MS4 coverage within the Chesapeake Bay and throughout the state and work with local communities to achieve coverage as warranted (7.1.2.2.4)	Identify municipalities needing coverage, Outreach	DNREC, SWDS	Through 2010 census data, fifteen additional municipalities in Delaware were newly identified as requiring a Phase II MS4 permit; several of the newly identified MS4s drain to the Chesapeake Bay Watershed. Five of the fifteen newly identified MS4s may be eligible to submit a waiver request. Upon issuance of the Draft Phase II MS4 General Permit (MS4 GP) for public comment, Loss of our MS4 Technical lead has delayed roll out of the MS4 GP, but SWDS will notify newly identified MS4s of requirement for permit coverage and initiate outreach efforts to educate permittees on MS4 GP. SWDS has the goal of transitioning all Phase II MS4 permittees (newly identified and exiting) to the Phase II MS4 General Permit by 2015.
6/2016	Revise regulations for industrial storm water sites that addresses not only the Chesapeake Bay TMDLs, but also other TMDLs established within the State of Delaware. The new regulations will also establish new guidelines that reflect new federal mandates, implement stricter standards such as the inclusion of effluent limitations, and may require stricter reporting and monitoring requirements. (Section 7.1.2.1.4)	Revised Regulations	DNREC, SWDS	The revised Regulations were drafted under contract by Tetra Tech under the direction of former program staff. EPA has since released their new multi-sector general permit and staff is trying to make sure the regulations are consistent. So as of right now we are still working on fine tuning our draft and making sure it is consistent with EPA's multi-sector General Permit. We have not yet re-convened the RAC. We anticipate reconvening the RAC in late summer to early fall 2015. This project is funded through the Chesapeake Bay Regulatory and Accountability Grant.

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6/2016	Develop a BMP manual for Industrial Stormwater facilities (Section 7.1.2.1.4)	BMP Manual	DNREC, SWDS	Draft BMP manual completed July 2012. Final version will be complete once regulations are promulgated. This project is funded through the Chesapeake Bay Regulatory and Accountability Grant.
12/2015	Ensure compliance with "Regulations Governing the Control of Water Pollution" for 55 industrial facilities in the Chesapeake Bay Watershed. Conduct industrial storm water inspections at a minimum of biannually, with a goal of annually (Section 7.1.2.1.4)	55 Inspections	DNREC, SWDS	The Industrial Stormwater Program currently requires that sites be inspected once every three years; the Surface Water Discharges Section has a goal of inspecting each site located within the Chesapeake Bay at least annually to provide updated data to the Chesapeake Bay Program. An Industrial Stormwater Compliance Inspector was hired in March 2011. Between March 2011 and March 2012, all 55 sites in the Chesapeake Bay Watershed were inspected. 46 were found to be in compliant and 9 were non-compliant. Those out of compliance had follow up inspections. Five of the nine sites were brought into compliance as a result of the re-inspections by March 2012. The four remaining facilities were working to come into compliance – one received a notice of violation and one was under investigation. Between April 2012 and April 2013 43 out of 55 sites were inspected where 38 were in compliance with the regulations and 5 were out of compliance. Re-inspections were completed on those out of compliance to bring them into compliance. Between April 2013 and April 2014 inspections continued – a report will be included in the CBRAP semi-annual report for 2013 progress. This project is funded through the Chesapeake Bay Regulatory and Accountability Grant.
6/2016	<ul> <li>Work with industrial facilities to collect historic water quality data (TSS, nitrogen, phosphorus), for all industrial sites within the Chesapeake Bay</li> <li>Watershed allowed per the current regulations which meets QAPP and QMP standards ; acquire storm water quality data for all Chesapeake Bay industrial storm water sites which meets QAPP and QMP standards ; analyze and track storm water quality data which meets QAPP and QMP standards ;</li> <li>Using historic data collected,</li> </ul>	Water quality data, inspections	DNREC, SWDS	Program intends to "reinvigorate" this historic data collection effort in 2014 now that facilities that are required to do so under the permit should have a couple years of benchmark monitoring under their belt. Staff is assessing options for stormwater sample collection and processing and will develop a QAPP and/or utilize the DNREC Lab QAPP as appropriate. This project is funded through the Chesapeake Bay Regulatory and Accountability Grant.

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	develop stricter standards associated with TSS, nitrogen, and phosphorus in the new industrial storm water regulations. (Section 7.1.2.1.4)			
6/2016	Up to five Sussex County communities (Blades, Bridgeville, Delmar, Laurel and Seaford) with a total population of 15,522 (2010 census) may be required to obtain an MS4 permit. We will primarily be working with municipal officials (estimate of 4-5 people per community) to aid them in understanding the requirements within the Phase II MS4 General Permit. Up to seven training sessions may be held for municipal officials and others as well development and provision of educational guides. In addition to the training sessions, each community will get one-on-one assistance in creating educational programs (including web based material), illicit discharge detection and elimination programs, municipal good housekeeping programs, wet and dry weather monitoring plans, as well as specific instructions on impaired water bodies and TMDLs (Section 7.1.2.2.4)	5 MS4 Phase II General Permits; 7 training sessions; technical assistance.	DNREC, SWDS	The completion of this task is dependent on filling the Department's MS4 Technical Lead position. The position has been posted, however due to the State Budget there may be a delay in filling this position. This project is funded through the Chesapeake Bay Regulatory and Accountability Grant and is required to be completed by June 30, 2016.
6/2016	Working with conservation partners, assess nitrogen loads from urban nutrient management (Section 8.6.1)	Urban nutrient management plans for up to 5 communities	DNREC, TBD	The Department is currently working on a proposal to develop an urban nutrient management program and to provide staffing for this task. We also intend to expand the Livable Lawns program to Sussex County and the Chesapeake Bay Watershed which will help us assess the urban nutrient issues. This project to be funded through the Chesapeake

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				Bay Regulatory and Accountability Grant and Implementation Grant.
6/2016	DNREC Division of Watershed Stewardship will modify an existing database, to house an enforcement tracking system component to track compliance issues at construction sites (Section 7.1.1.4)	Completion of an automated enforcement tracking system module with the existing database, Mud Tracker.	DNREC and DTI	An enforcement tracking system is desired to more easily track compliance status, enforcement actions, and deadline dates for construction activities within the State of Delaware. All construction activities in the state are currently reviewed on a regular basis during construction, but sites requiring compliance assistance, or those for which enforcement actions have been taken, are not tracked in an easily reportable tracking system and requires excessive resources to track. The existing database that is to be modified is currently called Mud Tracker and is used by DNREC and a few local agencies which have been delegated review authority (New Castle Conservation District, Kent Conservation District, and Sussex Conservation District). Currently, Mud Tracker captures all data pertaining to plan review, construction, maintenance, BMPs, contacts, and fees; this equates to capturing approximately 2/3 of the construction data within the state. To develop a stand- alone enforcement tracking system would cost approximately \$50,000 to \$100,000 and it would require double data entry by the users and not be cost effective or efficient. This project is funded through the Chesapeake Bay Regulatory and Accountability Grant.
12/2015	Refine Sediment & Stormwater Program (SSP) offset program (Section 7.1.1.4)	Policy & Procedural Guidelines	DNREC, SSP	The SSP will develop formal policies and procedural guidelines to further refine the offset program under the revised Delaware Sediment & Stormwater Regulations. This will involve coordinating with the Water Infrastructure Advisory Council as well as various stakeholders to expand the list of eligible offsets beyond the current fee-in-lieu process.
6/2016	Technical assistance will be provided by the Kent and Sussex Conservation Districts to develop general construction stormwater management plans for new agricultural structures to ensure compliance with State stormwater permit requirements in Kent and Sussex Counties. Assistance will be provided for development of up to 40 plans.	40 Conservation Plans	KCD, SCD	Kent and Sussex Conservation Districts continue to work with poultry producers to develop conservation and stormwater plans for new and replacement facilities. This program has been heavily used and we are seeing more demand than funding is available, which has forced the Districts to place some limitations on the services that can be provided. DNREC and the conservation districts are also discussing how to phase out subsidies for this activity in the future. This project is funded through the Chesapeake Bay Regulatory and Accountability Grant.
12/2014	Set new tree canopy goals (Section 8.6.2)	1 new community/year	DFS	Work with local governments to increase urban tree canopy by implementing urban tree canopy goals.

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2014-2015	Increase street sweeping implementation (Section 7.3)	Increase implementation in 2 towns/year	DNREC	Work with local governments to increase street sweeping frequency. This project will be funded through the Chesapeake Bay Implementation Grant.
On-Site Wa	stewater			
1/2014	Promulgate revised and updated on-site wastewater regulations (Section 6.4)	Regulations	DNREC, Ground Water Discharge Section (GWDS)	GWDS held a workshop on October 14, 2013 and a Public Hearing on November 21, 2013. State Law requires that the record stay open for 15 days. The closing date is December 6, 2013. Once the record closes the hearing officer prepares a report that addresses the comments received and forwards to the Secretary. Delaware's onsite regulations were adopted January 11, 2014 and implementation is ongoing. The regulations can be found: http://www.dnrec.delaware.gov/wr/Information/GWDInfo/Documents/DelawareFinalOnSite Regulations_01112014.pdf
1/2014	Revising and updating on-site and spray irrigation regulations (Section 6.1.1.2)	Regulations	DNREC, GWDS	GWDS held a workshop on October 14, 2013 and a Public Hearing on November 21, 2013. State Law requires that the record stay open for 15 days. The closing date is December 6, 2013. Once the record closes the hearing officer prepares a report that addresses the comments received and forwards to the Secretary. Spray regulations were combined with On-site regulations and were adopted January 11, 2014. Implementation is ongoing.
2014-2015	Review Wastewater Treatment Workgroup protocol for advanced onsite systems (Section 6.6)	Protocol Review and Approval	DNREC, GWDS	Review and approve protocol for advanced onsite wastewater treatment systems across all of the Bay Watershed jurisdictions. The protocol, once approved, could be used to streamline the current process, which requires each state to individually approve a manufacturers system prior to installation. This milestone contingent on WWTWG progress.
1/2015	Begin the implementation of Amended Regulations Governing the Design, Installation and Operation of On-Site Wastewater Treatment and Disposal systems (Section 6.4)	Septic Pumpout Tracking Database	DNREC, GWDS	Performance standards (nitrogen removal systems) for on-site systems 1,000 feet from tidal waters of the Chesapeake go into effect one year from the adoption of the Regulations January 2014. Requirement for waste haulers to report all pumpouts statewide to DNREC January 2016. Implementation of inspections and pumpouts prior to the sale of a property January 2014. Pumpouts are reported to tracking database for inclusion in CBWSM.
7/2014	Update permit fee schedule (Section 6.3)	New fees for wastewater permitting and operation	DNREC	Must be approved by Delaware's General Assembly and signed by Governor. Fees have not been updated since 1991.

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Wastewater	r			
2014	Current INVISTA permitted nitrogen load reduced by 60% (Section 5.4)	Permitted load reduction	DNREC, SWDS	Amended NPDES permit application was received in April 2013. The facility is evaluating switching intake from river water to well water. In addition, efforts are underway to incorporate a nutrient trade agreement between Seaford and INVISTA into their respective NPDES permit renewals. The proposed trade agreement would allow Seaford to exchange some of its phosphorous Waste Load Allocation (WLA) for some of INVISTA's remaining nitrogen WLA following the 60% reduction in INVISTA's nitrogen load. The trade agreement was drafted in September 2013 and currently, SWDS is working to incorporate this nutrient trade into the special conditions of the NPDES permits for both the Seaford Waste Water Treatment Plant (WWTP) and INVISTA. It is anticipated that the NPDES permits for both INVISTA and the Seaford WWTP will be issued in 2014.
2014	Revise the NPDES permits for the towns of Bridgeville and Seaford. Revised permits will include a compliance schedule with measurable goals to meet the new waste load nutrient requirements of the WIP (Section 5.4)	Revised permits	DNREC, SWDS	Bridgeville's revised NPDES permit came off public notice 4/6/2013 and is expected to reduce nutrient loads by implementing spray irrigation. The permit includes a compliance schedule that was reviewed by EPA. SWDS is currently drafting the revised Seaford WWTP NPDES permit. Efforts are underway to incorporate a nutrient trade agreement between Seaford and INVISTA into their respective NPDES permit renewals; the proposed trade agreement would allow Seaford to exchange some of its phosphorous WLA for some of INVISTA's remaining nitrogen WLA following the 60% reduction in INVISTA's nitrogen load. It is anticipated that the NPDES permits for both INVISTA and the Seaford WWTP will be issued in 2014.
10/2015	Revise the NPDES permit for the Town of Laurel. Revised permits will include a compliance schedule with measurable goals to meet the new waste load nutrient requirements of the WIP (Section 5.4)	Revised permit	DNREC, SWDS	The NPDES permit for the Laurel Waste Water Treatment Plant (WWTP) will expire on May 31, 2014. A permit renewal application was received by SWDS on October 21, 2013. The SWDS will work on revising the NPDES permit for the Laurel WWTP in accordance with WIP requirements with the goal of placing the permit on public notice in October 2015.
7/2014	SWDS remains committed to reducing the NPDES permitting backlog in Delaware (Section 5.4)	New Staff	DNREC, SWDS	The SWDS will be hiring a part time seasonal engineer in the 3rd quarter of CY2014 to assist with writing and reviewing permits in order to address the permit backlog.

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Agriculture	Agriculture							
12/31/2015	Education and Outreach Cost-Share Policy (Section 9.3.6)	Installation of agricultural BMPs at 2 schools	Sussex Conservation Districts	The Sussex Conservation District implemented a cost-share policy for school districts, FFA programs, 4-H programs, etc. to assist with implementation of water quality BMPs. In 2014, 7 BMPs will be installed at Woodbridge High School's FFA Farm. In 2015, additional BMPs to be installed at Sussex Technical High School's. Sussex Conservation District anticipates other school districts or Ag education programs may take advantage of these funds in FY 15 and FY 16.				
7/1/2014 & 7/1/2015	Seek Cost-Share Funding from Alternative Sources (Section 9.7)	Procurement of Funds to close BMP implementation gap of 1.5 M	Sussex Conservation District	The District will seek alternative funding sources to assist with implementation of water quality BMPs, specifically cover crops. The Districts will also seek alternative practices that are proven to improve water quality and will provide cost-share assistance if funding is available. Such practices include but are not limited to denitrifying bioreactors and soil health management practices.				
8/1/2014 & 8/1/2015	Agriculture Conservation Plans for Poultry Construction	15 more plans for 2014 (40-60 Houses)	Sussex Conservation District	The Sussex Conservation District will continue to develop Standard Plans for the construction of Poultry Houses. The plan addresses sediment and erosion control and provides the landowner with a SWPP during construction activity. The District has consistently designed plans for approximately 15 property owners annually with a range of 40-60 Poultry Houses. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.				
8/1/2014 & 8/1/2015	Agriculture Conservation Plans for Poultry Construction	10 more plans for 2014 (30-40 Houses)	Kent Conservation District	The Kent Conservation District will continue to develop Standard Plans for the construction of Poultry Houses. The plan addresses sediment and erosion control and provides the landowner with a SWPP during construction activity. The District has consistently designed plans for approximately 10 property owners annually with a range of 30-40 Poultry Houses. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.				
8/1/2014 & 8/1/2015	Agricultural Water Quality BMP Inspections as part of Verification Program (Section 9.3.6)	100 Structural Ag BMP inspections and all cover crop acres	Kent & Sussex Conservation Districts	The Districts will inspect new structural Ag BMPs for compliance to ensure that the practice is properly used. All cover crop acres planted will be inspected to ensure planting and destruction, tracking planting dates, species, planting method, destruction dates, and destruction methods. Any non-cost shared practices will be verified using the Resources Improvement Practices Protocol. This project funded through Chesapeake Bay Implementation Grant.				

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12/31/2015	Animal feeding operations in Ches. Bay Watersheds to be covered by a Concentrated Animal Feeding Operation permit (Section 9.3.2)	150 General CAFO permits; OR 100 Individual Permits	Delaware Dept. of Agriculture/DNREC	Identification of potential regulated community complete. Permit process will begin when CAFO permit templates are approved by DNREC & EPA.DNREC is now considering using a general permit. Staffing funded through Chesapeake Bay Regulatory and Accountability Grant Program.
12/31/2014	Develop a method to track and report Crop Residue Management and Tillage (Section 9.6.1.5)	Tracking tool; Acres of conservation tillage for progress submission	DNREC, UD, Delaware Dept. of Agriculture, Districts, NRCS, FSA, CBPO	Delaware will meet with Agriculture Partners to discuss methods of tracking and reporting tillage. Delaware will begin transect survey in June 2014. New acres will be reported in the progress submission. This project funded through Chesapeake Bay Implementation Grant.
2014-2015	Lead efforts to correctly determine the quantity and nutrient content of Delmarva poultry litter (Section 9.6.4.10)	Participation in Poultry Litter Subcommittee; possible future load reductions in CBWSM; PLS Report.	DNREC, DDA, UD	UD and DDA assisting with the development of industry data through partnership.
2014	Assess Nutrient Management Tiers for Delaware (Section 9.6.1.7)	Evaluate cropland acres for new nutrient management tier definitions	DNREC, DDA	Upon decision of the CBPO's approval Nutrient Management Expert Panel report, DDA will re-evaluate all tiers of nutrient management and inspect farms for compliance.
12/31/2015	DNREC will commission a pilot watershed assessment to help characterize and assess the status of a small, agriculturally impaired subwatershed (Section 9.6)	Assessment Report	DNREC, DDA, USDA, Conservation Districts	This assessment will guide implementation efforts of AG BMPs to reduce nitrogen and phosphorus loadings. Assessments will be conducted on every farm in the subwatershed. Emphasis will be placed on crop residue management, AWMS, cover crops, buffers, and nutrient management planning. Any non-cost shared practices identified will be assessed using the Resources Improvement Practices Protocol. Results of the pilot assessment will assess the efficacy of existing agricultural programs. This project funded through Chesapeake Bay Implementation Grant.
12/1/2015	Develop a 1619 Data Sharing Agreement	Agreement	DNREC, NRCS	Delaware will work with NRCS to develop a 1619 data sharing agreement between the two agencies to submit NRCS cost shared agricultural practices for inclusion in CBWSM. This project funded through Chesapeake Bay Implementation Grant.

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FY 2015- 17	Sussex Conservation District submitted NRCS CIG Grant Proposal (Section 9.6)	Air Seeder Purchase 5 Soil Health Workshops; Increase in cover crop participation	Sussex Conservation District	Promoting Soil Health through Outreach, Education, and the Introduction of the New Technology – Air Seeder for Planting Cover Crops – FY 2015, FY 2016, FY 2017 The Sussex Conservation District has applied for a NRCS Conservation Innovation Grant to promote soil health through four workshops, field days, demonstrations utilizing the air seeder which allows the farmer to aerial seed a cover crop in a standing corn or soybean crop which will improve the stand of crop planted because of increased seed to soil contact. This will maximize uptake of nutrients and increase residuals in the soil. Approval of this grant will increase participation by farmers in implementing cover crops, no-tillage, and crop rotation. The increased acres will be reported to DNREC and the Chesapeake Bay Program.
FY2014	Conduct Soil Health Workshops in the Chesapeake Bay Watershed (Section 9.6)	3 workshops: 2 in Sussex, 1 in Kent	Kent and Sussex Conservation Districts	Kent and Sussex Conservation Districts will hold three workshops for farmers to educate them on soil health techniques such as no-till, crop rotations, and planting cover crops. In order to change the mindset of the farming community, these proven technologies need to be shared with farmers and show them by using these soil health management practices will improve soil health, increase crop yields, and the bottom line. This project funded through Chesapeake Bay Implementation Grant.
12/2014	Increase Manure Transport (Section 9.6.1.14)	47,515 tons outside of CBWS; 13,402 tons within CBWS	DDA	Cost share rates were increased in July 2013 from .16 per ton mile to .18 per ton mile. Increasing cost share rates may incentivize participation in the program. Portions of this project may be funded through the Chesapeake Bay Implementation Grant Funds.
12/2015	Update Delaware's cropland irrigation records (Section 9.6.3.2)	Acres of cropland irrigation management for progress submission	DNREC	Currently, cropland irrigation is an Interim BMP in the Model. DNREC is seeking a refined irrigation dataset to capture large pivot systems and small drip tape systems. The information gathered will aid Delaware in seeking approval of this BMP and receiving credit in the future. This project funded through Chesapeake Bay Implementation Grant.
12/2014	Update historical water control structure data (Section 9.6.1.10)	Acres of Water Control Structures for progress submission	DNREC, NRCS, Conservation Districts	As part of the state's approach to cleaning up historical BMP data for the 2017 Phase 6 Watershed Model calibration. Water control structures not previously reported will be added to historical data. This project funded through Chesapeake Bay Implementation Grant.

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06/2015	Develop and implement a tracking and reporting system for agricultural non-cost shared BMPs (Section 9.9)	Database developed	DNREC, DDA, Conservation Districts	Data collection efforts will be undertaken that utilize conservation district technicians on a site-by-site approach once verification protocols and resource improvement determinations have been agreed upon by the CBP. This project funded through Chesapeake Bay Implementation Grant.
12/2015	Research conducted by UD in conjunction with USGS and DNREC on the effectiveness of irrigation on Ag BMPs (Section 9.6)	Research Phase of Project Completed; Final Report (2016)	UD, DNREC, USGS	This research evaluates irrigation as a BMP. Knowledge gained from this research will be presented to AGWG and pending expert panel evaluation. Data Collection completed Fall 2015. Final report and publication to be prepared in 2016. This project funded through Chesapeake Bay Implementation Grant.
12/2015	Evaluate the effects tax ditch dip out practices and impacts on water quality (Section 9.6)	Research Phase of Project Completed; Final Report (2016)	UD, DNREC	Recommendations will guide future management practices to improve environmental benefits. Last samples collected December 2015. Preparing and submitting final report to DNREC by June 2016. Pending results of this investigation, the final report may be presented to the CBPO for consideration as a BMP in the CBWSM. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.
2014-2015	Participation on the Chesapeake Riparian Forest Buffer Initiative (Section 9.6)	State Task Force Meeting (September 2014); White paper	DNREC, DDA, NRCS, FSA	The task force meeting will identify barriers to progress and local opportunities to accelerate riparian forest buffer adoption and address a range of issues. Invited groups will include relevant federal and state agency personnel and key interest and partner groups. As a result of the meeting a white paper will be created to determine the actions needed to accelerate RFB adoption. This project to be funded through Chesapeake Bay Implementation Grant.
2014	Examine potential for non-cost shared cover crop transect survey (Section 9.6)	Tracking Tool; Acres of cover crop for progress submission	DNREC, Conservation Districts, NRCS, FSA	Delaware will assess the efficacy of a transect survey to cover crop data in the Chesapeake Bay watershed. This project funded through Chesapeake Bay Implementation Grant.
2015	Work with AG partners to pilot a woodchip bioreactor and denitrification wall (Section 9.6)	Implementation of BMP	NRCS, Conservation Districts	
12/2014	Development of online reporting tool (Section 9.9)	Website; Trainings; NEIEN data submission	DNREC, Watershed Assessment Section	DNREC has worked with Tetra Tech Inc. to develop an online database for the reporting and tracking of NPS BMPs in DE, including agricultural practices. This tool will be finalized in early 2014 and will be utilized for 2014 National Environmental Information Exchange Network (NEIEN) submissions. Individuals responsible for reporting practices from their

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				organizations will be given login credentials. Training, hosted by Tetra Tech, was held April 29, 2014. Future trainings, conducted by DNREC, will be held in August and September 2014. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.
Planning &	Landuse			
6/2014	Master Plans and/or validate build out scenarios for Bridgeville Sewer District; (Section 8.2.1)	1 Plan	University of Delaware (UD)/Office of State Planning Coordination (OSPC)	The Wastewater Infrastructure Study needed to complete the Master Plan/build out scenario was completed in October 2013. The infrastructure plan also impacts the build out scenario approved by the Town in early 2013. A Draft Master Plan has been written and presented to the communities for review and public comment. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.
12/2014	2 <sup>nd</sup> Annual Workshop for Local Governments addressing Water Resources and Green Infrastructure Planning	Workshop	DNREC	A second annual workshop is being planned for local governments to focus on topics such as integrated planning; MS4s; and financing the implementation of green infrastructure improvements as well as lessons learned from other Chesapeake Bay communities. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.
5/2015	Validate build out scenarios for Laurel Sewer District; (Section 8.2.1)	1 build out scenario maps approved by the Town of Laurel	University of Delaware (UD) Sustainable Coastal Communities Initiative	UD has met with and is finalizing a build out scenario map for the Town of Laurel. A plan will be developed to address and account for future growth in the community based on the selected build out scenario. The plan will also address, where possible, the redevelopment design plans or concepts (see below) along Broad Creek, implementation of the Green Infrastructure Improvements along 6 <sup>th</sup> Street and those needed along the Rossakatum Branch. This plan may be impacted by the Bethel Wastewater Study, as treatment by Laurel's Wastewater Treatment Plant is one treatment option for the Town of Bethel. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.
5/2015	Laurel Waterfront Redevelopment Plan for Broad Creek (Section 8.2.11)	Plan	University of Delaware Landscape Design Program	Develop a waterfront redevelopment plan incorporating green infrastructure and sustainable design principals along the Broad Creek in Laurel from Delaware Avenue to Roger G Fisher Park. The plan and project will be used as a case study to engage students enrolled in an undergraduate design course beginning to learn about master planning and planning processes. This project funded by University of Delaware Sea Grant.
12/2015	Implementation of Green Infrastructure improvements along 6 <sup>th</sup> Street and the	Implementation of Green	Town of Laurel and George, Miles and	Plan and Cost assessment for 6 <sup>th</sup> Street is complete. Cost to implement Green Infrastructure improvements to 6 <sup>th</sup> Street in Laurel is over \$800,000. The town is seeking the funding

Target Date	Milestone (Phase 2 WIP Section Reference)	Deliverable	Lead Agency	Comments/Status Updates
	Rossakatum Branch in Laurel (Section 8.2.11)	Infrastructure Improvements	Burh, Inc.	needed to implement the project and to complete the assessment of the Rossakatum Branch which was not included in the initial study. Planning and engineering funded through NFWF.
12/2014	Validate build out scenarios Bethel (Section 8.2.1)	1 build out scenario map approved by the Town and Bethel	University of Delaware (UD) Sustainable Coastal Communities Initiative	A Wastewater Study has kicked off in Bethel which will identify potential future growth areas. Build out scenarios will be developed in conjunction with the wastewater study. Maps and a Plan will be developed following the completion of the study. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.
8/2014	Wastewater Study for the Town of Bethel (Section 8.2.4)	Study	Sussex County and DNREC	Conduct a wastewater study for the town of Bethel to evaluate 4 options for wastewater treatment including treatment provided by the Town of Laurel or the City of Seaford; a local plant; or upgrades to alternative on-site septic systems. The community lies within 1000 feet of tidal Broad Creek and will be impacted by the revised On-Site Wastewater Regulations scheduled to go into effect in 2014. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.
12/2015	Implementation of Green Infrastructure Improvement Plan and design to address stormwater in Bethel (Section 8.2.4)	Implementation of Green Infrastructure Improvements	Town of Bethel and George, Miles and Burh, Inc.	The Town of Bethel, along with Laurel, received technical assistance funding from the National Fish and Wildlife Foundation to develop design plans and engineering for Green Infrastructure Improvements with in the community. The design plans and cost assessment are complete. The total cost to implement the green infrastructure project is approximately \$460,000. DNREC, Bethel and GMB are working together to identify potential funding sources to implement the plan. The town successfully submitted a grant proposal through the Chesapeake Bay Trust Green Streets Program for partial funding. They are also considering other funding sources through Clean Water State Revolving Fund and local sources.
12/2014	Validate build out scenarios for Seaford Sewer District (Section 8.2.1)	2 build out scenario maps approved by the City of Seaford and the Town of Blades	University of Delaware (UD) Sustainable Coastal Communities Initiative	An initial meeting was held in Spring 2013, however due to turnover follow up will occur in spring/summer 2014. The outcome of this buildout scenario is also dependent on the outcome of the Bethel Sewer Study, as Seaford is one treatment option being evaluated for the Town of Bethel. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.
4/2015	Validate build-out scenarios for Delmar. (Section 8.2.1)	1 build out scenario map approved by the	University of Delaware (UD) Sustainable Coastal	Scheduled. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.

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		Town of Delmar	Communities Initiative	
12/2014	Validate Build out scenarios for the Chesapeake Bay portion of Kent County (Section 8.2.1).	Build out scenario maps for Kent County, Harrington, Farmington, and Hartly.	DNREC, University of Delaware (UD) Sustainable Coastal Communities Initiative, Office of State Planning Coordination, Kent County	Scheduled to kick off in May 2014. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.
12/2015	Validate Build out scenarios for the unincorporated Chesapeake Bay portion of Sussex County (Section 8.2.1).	Build Out Map(s)	DNREC, University of Delaware (UD) Sustainable Coastal Communities Initiative, Office of State Planning Coordination, and Sussex County	Scheduled. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.
12/2015	Validate Build out scenarios for the Chesapeake Bay portion of New Castle County and Middletown (Section 8.2.1).	Build Out Map(s)	DNREC, University of Delaware (UD) Sustainable Coastal Communities Initiative, Office of State Planning Coordination, New Castle County and Middletown.	Scheduled. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.

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12/2015	Develop conservation and management plans for tax ditches systems to improve water quality management and identify opportunities for offsets. (Section 9.6.1 or 9.6.2)	Up to 18 Plans	Sussex Conservation District	Sussex Conservation District in coordination with DNREC staff and local Tax Ditch Associations will develop up to 18 conservation/management plans for the tax ditch organizations to address water quality and maintenance concerns over the two year milestone period. The conservation plans will have recommendations for water quality BMPs that can be placed along/in tax ditches or on adjacent land. Plans may be used to identify potential offsets for new development. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.
12/2015	The Office of State Planning and Coordination, Sussex County and local municipalities will review approved development projects to determine which projects may be sun-set. This information will be provided to EPA's Chesapeake Bay Program to be considered in nutrient loading calculations for Delaware's TMDL allocation.	Land Use Data	OSPC/Sussex County	Sussex County has approved a third extension to extend the life of proposed development projects for an additional three years – through 2016; however several large scale development projects have requested to revert back to Agriculture use, become permanently protected by easements, or have communicated they are not going to develop. We continue to work with our county and local partners to identify those projects and will provide updated information.
Restoration	n & Public Lands			
4/2014	Analyze all State owned lands for reforestation/afforestation opportunities (Section 11.1.1.2)	Internal review	DNREC	An analysis was completed for tax ditch areas on state owned lands. Meetings will be held in spring 2014 with public land owners to discuss restoration efforts. DNREC's Watershed Assessment & Management Section, Delaware Forest Service, DNREC's Division of Fish & Wildlife, the Conservation Districts, and US Forest Service will be in first quarter 2014 to discuss implementing riparian forest buffers with potential incentives.
12/2015	Cover crops (Section 9.2.3)	Policy; increased acreage in progress submission	DNREC, Division of Fish & Wildlife	As cover crop leases are renewed/ rebid, farmers will be required to plant cover crops on all fields not planted as double crop soybeans. All lands in New Castle County will be covered under this new policy in 2014, Kent County in 2015, and Sussex County in 2016. New acreage will be provided in progress submissions.

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4/2014	Development of online reporting tool NEIEN data submission (Section 10.5)	Website	DNREC, Watershed Assessment Section	DNREC has worked with Tetra Tech Inc. to develop an online database for the reporting and tracking of NPS BMPs in DE, including restoration practices. This tool will be finalized in early 2014 and will be utilized for 2014 National Environmental Information Exchange Network (NEIEN) submissions. Individuals responsible for reporting practices from their organizations will be given login credentials to do so. This milestone was previously reported as "establishing a BMP tracking database" and "establishing restoration database", but it's been decided that these efforts should be combined and an online NPS BMP reporting/tracking tool would be more beneficial. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.
12/2015	Improving tax ditch management (Section 10.4.1)	New staff	DNREC	A water resources planner has been hired by Sussex Conservation District to work with tax ditch managers and our drainage program in Sussex County to identify restoration opportunities on tax ditches, develop conservation plans and improve management plans, and track and verify implementation of BMPs and plans with tax ditch associations in Sussex County. Kent Conservation District is already providing this service and has been for the last two years, as demonstrated in our CBRAP semi-annual reports. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program. Project implementation funded through Chesapeake Bay Implementation Grant.
2014	Implementation of Nanticoke Restoration Plan (10.4.1)	Implementation	DNREC, USFWS, DU	Projects have been identified through the Nanticoke Restoration Plan. The Nanticoke Restoration Group will be meeting in early 2014 to prioritize potential projects for funding and landowner outreach objectives. The USFWS are waiting on Court order changes to alter sections of the Nanticoke Tax Ditch. This project funded through Chesapeake Bay Implementation Grant
12/2015	Per SB 78, Develop recommendations for non-tidal wetlands	Recommendations	DNREC	Develop comprehensive recommendations for conserving and restoring non-tidal wetlands in Delaware, including evaluating national best practices and standards, evaluating incentive- based programs, and reviewing state and federal wetland permitting processes to identify opportunities to improve efficiency and eliminate redundancy.
3/2014 & 3/2015	Train 35 Creekwatcher volunteers for the 2014/2015 season (Section 14.4.2)	Trained Creekwatcher Volunteers	Nanticoke Watershed Alliance	Train 35 volunteers covering 36 field sites. Portions of this project funded through Chesapeake Bay Implementation Grant.
3/2014 & 3/2015	Develop Creekwatchers kits for water quality analysis (Section 14.4.2)	Prepared water quality analysis	Nanticoke Watershed Alliance	21 equipment kits prepared. New to this year is the testing for Chlorophyll a. This testing is necessary because it examines the presence of algal blooms and therefore nitrogen pollution.

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		kits		This project funded through Chesapeake Bay Implementation Grant.
12/2014	Review Tributary Action Teams recommendations for consistency (Section 11.1.1.2)	Internal review	DNREC	The Watershed Assessment Section of DNREC along with NonPoint Source Program staff are currently reviewing all watershed based plans statewide (Whole Basin, Pollution Control Strategies and Tributary Team Recommendations; 319 Program Watershed Plans, etc for consistency and improved prioritization. This is an internal review process that is expected to be completed by the end of 2014.
Third Quarter 2014	NPS Watershed plans meeting EPA's A-I criteria	4 Watershed Plans	DNREC NPS Program	Upper Chesapeake completed and approved by EPA in 4 <sup>th</sup> quarter 2013. Pocomoke/Wicomico plan submitted in 2 <sup>nd</sup> quarter 2014. Lower Chesapeake and Nanticoke/Marshyhope are due third quarter 2014.
Communica	ations			
3/2014	Septic Rehabilitation Loan Program and Septic Extended Funding Option advertising campaign (Section 14.5.2- 14.5.3)	Advertising campaign	DNREC	Printing advertising in Kent & Sussex County for Septic Loan Rehabilitation Program. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program and Implementation Grant.
11/2014	Host Center for Watershed Protection Webinars (Section 14.5.1-14.5.3)	Webinars	DNREC and Center for Watershed Protection	DNREC will host viewings of webinars that are being put together by the Center for Watershed Protection. Webinar topics include "Reimagining the parking lot & roadway as a stormwater practice", "The role of local codes", "Design & construction of BMPS", "BMP maintenance", "How to pick the right vegetation for bioretention & its cousins", "stream restoration as a pollutant reduction strategy", "Local TMDLs & Regional/River Basin TMDLs: a happy engagement or shotgun wedding?", "Retrofitting existing stormwater ponds & basins". The webcasts will be offered for free by DNREC. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.
12/2014	Hold public outreach events to promote WIP efforts (Section 14.5.3)	Public outreach	DNREC	Participate/exhibit/host/present/provide materials for at least 18 outreach events or presentations throughout the State including all major outreach events throughout the Chesapeake Bay Watershed. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.

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12/2014	Participate/host 6 workshops (Section 14.5.3)	Public outreach through workshops	DNREC	Workshops that focus on the efforts of the WIP will be organized and held throughout the year. The workshops will discuss various topics but all will focus on what the public can do to help improve water quality within the Chesapeake Bay watershed. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program and Implementation Grant.
12/2014	BMP displays in local hardware store (Section 14.5.3)	Public outreach through displays	DNREC	Three different stormwater BMP displays will be installed throughout the year in a local hardware store within the Chesapeake Bay watershed. The displays will educate the public on how to reduce their impact on water quality. Supplies to build the BMPs will be available within the store. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.
12/2014	6 outreach/educational videos (Section 14.5.3)	Public outreach through videos	DNREC	Six new videos focusing on BMPs and other WIP related information will be created and posted on DNREC's website. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.
Spring 2014	Rain Barrel contests (Section 14.5.1- 14.5.3)	Public outreach through contest	DNREC & DelDOT	DNREC & DelDOT will be sponsoring a contest to educate the community on the benefits of using rain barrels to reduce rainwater runoff and improve water quality. Selected children's groups and artists will be invited to paint creative designs on a rain barrel. The rain barrels will be judged and displayed in prominent locations in Delaware. This project funded through NPS 319 Program and Chesapeake Bay Implementation Grant.
9/2014	Race for Our Rivers 5k Run and Fun Walk (Section 14.5.1-14.5.3)	Public event	DNREC	Monthly series of workshops, events and other efforts in the Nanticoke Watershed culminating in a celebration in September along with the 2014 Race for Our Rivers 5k Run and Fun Walk. Individuals will be encouraged to participate in multiple portions of the series and those who attend 3 or more events will be recognized at the 2014 celebration event as "Nanticoke River Rescuers/Heroes". This project funded through Chesapeake Bay Regulatory and Accountability Grant Program and Implementation Grant.
12/2014	Promote public pledges to improve water quality in Delaware (Section 14.5.3)	2,000 new pledges	DNREC	2,000 New Pledges (Promises to take action to improve water quality in Delaware). This project funded through Chesapeake Bay Regulatory and Accountability Grant Program.
12/2014	Update and create new promotional materials (Section 14.5.1-14.5.3)	New/Updated promotional materials; social media	DNREC	Monthly Delaware Watersheds social media promotions/giveaways; daily updates; quarterly Delaware Watersheds newsletter; email blasts as needed; media releases as needed; Update existing promotional materials; create new materials for upcoming Septic Pumpout and Inspection Program; delivery of displays and brochures to state service centers, libraries,

Target Date	Milestone (Phase 2 WIP Section Reference)	Deliverable	Lead Agency	Comments/Status Updates
		announcements		churches, etc. This project funded through Chesapeake Bay Regulatory and Accountability Grant Program and Implementation Grant.