

January 1, 2022 – December 31, 2023, Delaware Programmatic Two-Year Milestones

Per the Principal Staff Committee’s Climate Change Directive, “Preliminary estimates for the climate impact through 2035 indicate a doubling of the 2025 load effect. The effect of climate change on our ability to meet the Bay’s water quality standards is a significant and increasing concern.” Delaware’s Phase III Watershed Implementation Plan (WIP) established nutrient and sediment numeric reduction goals that more than accounted for climate reductions expected through 2025. In addition, through Governor Carney’s commitment to the U.S. Climate Alliance, Delaware has adopted a goal of reducing the state’s greenhouse gas emissions by 26% to 28% by 2025 from 2005 levels further supporting the implementation of best management practices in Delaware’s WIP efforts.

Target Date	Programmatic Milestone Commitment(s) / BMP Implementation Target(s) ¹ [Reference WIP page and (to extent possible) number/type of BMPs in CAST scenario ² if applicable]	Deliverable	Lead Agency	Comments/ Status Updates
Agricultural Sector				
2022-2023	Project - Continue to support research with the USGS to investigate the use of remote sensing for verification of winter cover crop planting and termination on the Delmarva Peninsula. [WIP Section 4.2]	Research	DNREC, DDA, DACD, USGS	Provided funding for research. Next steps to be determined.
2022-2023	BMP - Cover Crop implementation goal is 142,508 acres annually. [WIP Section 4.2]	Numeric BMP-Cover Crops	DNREC, DDA, Conservation Districts	Complete for 2022 - 160,691 acres reported.
2022-2023	Project - The Sussex Conservation District will restore 2,200 linear feet of the Bridgeville Branch Tax Ditch. [WIP Section 4.3.2.6]. This project contributes to the Numeric BMP Goal for Stream Restoration.	Project	Sussex Conservation District	As of December 2022, 750 feet have been restored. Remaining 1,450 feet scheduled for

¹ BMP implementation targets are 2-year numeric projections of specific BMPs that are key to achieving the 2025 Phase III Planning Targets. Providing these targets is an alternative to providing the numeric CAST scenario, as agreed to at the January 24, 2020 PSC meeting. See:

https://www.chesapeakebay.net/channel_files/40423/iv.b.numeric_milestones_wqgit_approved_january_2020_clean.pdf

² 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. To the extent possible, jurisdictions to indicate the number and type of BMPs in the milestone CAST scenario (if applicable) that correspond to programmatic milestones.

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				completion in early 2023.
2022-2023	BMP – Non-Urban Stream Restoration – restore and/or verify 6,803 feet of non-urban streambanks during the milestone period.	Numeric BMP – Non-Urban Stream Restoration.	DNREC	300 linear feet of new non-urban stream restoration was reported in 2022 progress. An additional 750 feet completed in Fall 2022 with additional 1,450 expected to be completed in 2023.
2023-2023	BMP - Manure Transport of 72,000 dry tons off farms annually. [WIP Section 4.3]	Numeric BMP – Manure Transport	DDA	59,769.71 tons reported in 2022.
2022-2023	BMP - Nutrient Management – Core Plans: Implement 132,000 acres annually. [WIP Section 4.3]	Numeric BMP – Nutrient Management	DDA	139,141.45 acres reported in 2022.
2022-2023	BMP - Nutrient Management –Rate Nitrogen: 80,000 acres annually. [WIP Section 4.3]	Numeric BMP – Nutrient Management	DDA	139,141.45 acres reported in 2022.
2022-2023	BMP- Nutrient Management Precision Timing Nitrogen: 80,000 acres annually. [WIP Section 4.3]	Numeric BMP – Nutrient Management	DDA	0 acres reported in 2022.
2022-2023	BMP - Animal Waste Storage (livestock and poultry) of 884,176 animal units. [WIP Section 4.3]	Numeric BMP – Animal Waste Storage	DDA	Cumulatively we have 1,055,017 AWMS installed including 16 new units installed in

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				2022. The increase was due to inspections/verification.
2022-2023	BMP – Forest Buffers – Install and/or demonstrate through verification at least 275 acres of forest buffers during the milestone period.	Numeric BMP – Forest Buffers	DNREC	0 acres of new forest buffers reported for 2022.
2022-2023	BMP – Afforestation/Tree Planting – Install and/or demonstrate through verification at least 254 acres of tree plantings/afforestation during the milestone period.	Numeric BMP – Afforestation/Tree Planting.	DNREC	7.20 acres of trees planted in 2022.
2022-2023	BMP – Grass Buffers - Install and/or demonstrate through verification at least 4,100 acres of grass buffers during the milestone period.	Numeric BMP – Grass Buffers	DNREC /Conservation Districts	0 new acres of new grass buffers reported in 2022.
2022-2023	BMP – Wetland Restoration – Restore and/or demonstrate through verification at least 1,380 acres of wetland restoration during the milestone period.	Numeric BMP – Wetland Restoration	DNREC/ Conservation District/NRCS	0 new acres reported in 2022.
2022-2023	BMP – Wetland Enhancement and Rehabilitation - Install and/or demonstrate through verification at least 19,649 acres of wetland enhancement and/or rehabilitation during the milestone period.	Numeric BMP – Wetland Enhancement/Rehabilitation	DNREC, Conservation Districts, NRCS	120 new acres installed reported in 2022.
2022-2023	BMP – Wetland Creation - Install and/or demonstrate through verification at least 563 acres of wetland creation during the milestone period.	Numeric BMP – Wetland Enhancement/Rehabilitation	DNREC, Conservation Districts, NRCS	5.80 new acres installed reported in 2022.
2022-2023	Program - DNREC has received funding through the United States Forest Service to increase conservation practice outreach efforts and assist landowners interested in conservation practices but may not qualify for USDA programs like CRP, CREP, or	Program	DNREC	On-going. Partnered with Delaware Wildlands for assistance with

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	<p>EQIP. This funding supports a part time position to work with landowners to target implementation, conduct outreach for BMP implementation, and provide technical assistance for conservation practice design and implementation. DNREC will implement targeted strategies to increase landowner engagement, implementation, and maintenance of conservation practices.</p> <p>This effort is expected to contribute up to 100 acres of the BMP forest buffer and up to 50 acres of the BMP Afforestation numeric goals provided in this document.</p>			<p>Outreach and landowner engagement. Established the Delaware Community Conservation Assistance Program (DeCAP) to focus on implementation of BMPs in urban areas within the Chesapeake Bay Watershed. BMPs include Rain Gardens Conservation Landscaping Tree Planting Stormwater Facility Enhancements</p>
2022-2023	<p>Project - Development of a best management practice guidebook for tax ditch officers to guide decisions for tax ditch management. Conservation drainage BMPs will be included in the guidebook.</p> <p>This project contributes towards the numeric BMP goals provided in this document. This effort is expected to contribute up to 600 acres towards BMP milestone goals for grass buffer and 10 acres</p>	Project	DNREC, NWA, NRCS	<p>Outlined and preliminary draft of BMPs developed by NWA.</p>

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	of BMP wetland enhancement/creation goals along tax ditches during this milestone period.			
2022-2023	Project - Conduct Tax Ditch system assessments to identify opportunities for implementation of conservation drainage practices. This project contributes towards the numeric BMP goals provided in this document.	Project	NRCS	Completed analysis of tax ditch systems identified on the Resource Conservation and Development (RC&D) list, that could incorporate water quality projects and provide drainage relief to an undeserved community.
2022-2023	Project – Implement 1 acre of wetland restoration and a 60-foot grass buffer in the Broad Creek Watershed. This project contributes towards the numeric BMP goals provided in this document.	Project	SCD	Fisher Park Project in Laurel completed in CY2022. Funded through CBIG.
2022-2023	Project – Implement 24 acres of riparian forest buffers in Blackbird State Forest – Cypress Creek. This project contributes towards the numeric BMP goals provided in this document.	Project	DNREC	On-going
2022-2023	Project – Implement 5 acres of Tree Plantings in Blackbird State Forest – Cypress Creek.	Project	DNREC, DDA	Completed in 2022.

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	This project contributes towards the numeric BMP goals provided in this document.			
2022-2023	<p>Funding - Provide funding to assist in relocating a minimum of 4,500 tons of manure annually from areas of excess generation to areas outside of the Chesapeake Bay watershed and/or within the watershed where nutrients are needed for agronomic crop production needs [WIP Section 4.3.1.10].</p> <p>This project contributes towards the numeric BMP milestone goals provided in this document.</p>	Funding	DNREC	2022 Funds provided through CBIG and Clean Water Act Section 319 funds as well as State General funds through the Department of Agriculture.
2022-2023	<p>Funding – Annual funding to support implementation of cover crops through cover crop cost share programs in-part funded through the CBIG grant. Additional cover crop implementation acres will be achieved through state cost share programs, special appropriations, Conservation District funding, and verification through transect surveys. [WIP Section 4.2 and 4.2.8].</p> <p>This project contributes towards the numeric BMP goals provided in this document.</p>	Funding	DNREC, DDA, NRCS, Conservation Districts	\$515,740 expended using CWA Section 319 and CBIG program funds for 2022. Additional State funds through Conservation Cost Share Program, Department of Ag Cover Crop Program, and NRCS EQIP funds were also expended.
2022-2023	Permits - Bring percentage of issued CAFO General Permit 2 to 50%. Process incoming NOIs and assist farmers with accurately completing them. Host workshops to provide information and assistance with the permitting process. [WIP Section 4.2.4]	Permits	DDA/DNREC	On-going

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2022-2023	Program - Inspect each permitted farm at least once every five years. With a goal to meet or exceed 20% of permitted facilities inspected annually. In addition, routine inspections will include new or problem facilities. This goal is dependent on ability to access farms, which has been impacted by the COVID-19 pandemic. [WIP Section 4.2.4]	Inspections	DDA/DNREC	On-going. Impacted by Avian Influenza restrictions in 2022.
2022-2023	Permit - Reissue CAFO General Permit 1. [WIP Section 4.2.4]	Permit	DNREC/DDA	In process
2022-2023	Permit – Issue CAFO General Permit 3. [WIP Section 4.2.4]	Permit	DNREC/DDA	In Process
2022-2023	<p>Program - Delaware has over 1,500 miles of tax ditches within the Chesapeake Bay portion of the state. Many of the ditches are currently being maintained as an herbaceous grass buffer. Delaware will further explore opportunities to develop and implement a cost share program related to drainage way maintenance and work towards developing inspection and verification protocols for maintained ditches as grass buffers and additional implementation of grass buffers along tax ditches that meet BMP specifications. [WIP Section 4.3.2.1]</p> <p>This project is expected to contribute towards the numeric BMP goals for Grass Buffers provided in this document.</p>	Program	DNREC Drainage Program	On-going. The Drainage Program is coordinating with the Sussex Conservation districts and other partners to evaluate tracking and reporting methods.
2022-2023	Project - Update previous analysis using updated land use data to identify and prioritize, via GIS mapping, tax ditch segments that are opportunities for BMPs, including grass buffers, forest buffers, urban and non-urban stream restoration, etc. Prioritization will be based on factors including pollutant load reduction potential (N, P, TSS), ecological benefit, cost, and sub-watershed effectiveness. [WIP Section 4.3.2]	GIS priority map	DNREC	Completed analysis of tax ditch systems identified on the Resource Conservation and Development (RC&D) list, that could incorporate

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				water quality projects and provide drainage relief to an undeserved community.
2022-2023	Outreach - The Sussex Conservation District will continue implementing promotional videos and TV advertising campaigns to increase the implementation of cover crops and other agriculture BMPS to improve water quality. [WIP Section 4.2.1]	Outreach	Sussex Conservation District	Sussex Conservation District continues to utilize social media and television to promote water quality BMPs and cover crops using videos, newsletters, etc. A K-12 Soil Health Poster Contest was held for students in Fall 2022.
2022	Outreach - The Sussex Conservation District will continue to host Caffeine for Cover Crops workshop in 2022 and support the Soil Health Summit in February 2022. These efforts are intended to educate farmers on soil health techniques such as no-till, crop rotations, and planting cover crops. [WIP Section 4.2.8]	Outreach	Sussex Conservation District	Sussex Conservation District hosted several “Caffeine for Cover Crops” workshops in 2022 and has more scheduled for 2023. The Delmarva Soil Summit was held February 6-7, 2022 in Salisbury, MD.

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2022-2023	Project - The Kent and New Castle Conservation Districts intend to partner to host at least one in-person Soil Health Workshop/Field Day in the milestone period to educate farmers on soil health techniques. [WIP Section 4.2.8]	Outreach	Kent Conservation District/New Castle Conservation District	The Delaware Healthy Soils Partnership hosted a Soil health field day on August 16, 2022. A Soil Health and Cover Crops workshop and dinner is planned for February 3, 2023.
2022-2023	Program - The Delaware Department of Agriculture has a goal of capturing supplemental nutrient management practices in annual reporting from the State’s producers. DDA has worked with the 4R Alliance to develop a survey to include along with annual reports. This survey was approved by the Nutrient Management Commission. Subsequent regulatory compliance checks will include verification of this reporting. This supports Nutrient Management enhancement goals. [WIP Section 4.2.2]	Reporting and Outreach	DDA	On-going
2022-2023	Program – Evaluate staffing needs and increase staff as needed to adequately support CAFO, BMP verification such as through transect surveys, and/or other programmatic inspection and audit requirements as required by the program to support Chesapeake Bay reporting and implementation efforts [WIP Section 4.2.2].	Program	DDA	On-going. Several positions filled in 2022 – including staffer to focus on Community Conservation efforts.
2022-2023	Program - DNREC will explore the opportunity to work with NRCS to help fund lower ranking EQIP applications through Delaware’s CBIG grant program.	Program	DNREC & NRCS	NRCS received an additional \$990,000 in 2022 and was able to clear a backlog of

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	This project may contribute towards the numeric BMP goals provided in this document.			previously unfunded projects. This project was no longer needed due to clearance of that backlog.
2022-2023	Reporting and Inspections - The Conservation Districts will continue to conduct BMP Inspections as part of BMP Verification Program. The districts will inspect expired BMPs and provide inspection reports annually. The intent is to ensure proper and continued function of the agricultural BMPs. The districts will continue to utilize the mobile application Collector to track BMP implementation and compliance inspections. [WIP Section 4.4.4] This project may contribute towards the numeric BMP goals provided in this document.	Inspections	Conservation Districts	On-going. Delaware was able to update a significant amount of inspection data related to expiring BMPs in 2022 Annual BMP progress report.
2022-2023	Projects – Kent Conservation District expects to implement at least one drainage and/or ditch improvement project annually. Where possible, eligible BMPs may be implemented into those projects and reported. BMPs implemented as part of previous projects will be verified and reported annually. This project may contribute towards the numeric BMP goals provided in this document.	Projects	Kent Conservation District	On-going
2020-2021	Project - The Sussex Conservation District is advocating for whole-farm conservation plans rather than plans for only a portion of a farm. This approach would capture all existing BMPs on that farm (including BMPs that are not cost-shared). SCD has an ongoing incentive program that offers \$250 cost-share for the first 100 whole-farm plans submitted. [WIP Section 4.4.3] This project may contribute towards the numeric BMP goals provided in this document.	Plans	Sussex Conservation District	On-going.

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Developed Sector				
2022-2023	BMP –Urban Stream Restoration – restore or verify 17,633 feet of urban streambanks during the milestone period.	Numeric BMP – Urban Stream Restoration	DNREC	0 new linear feet reported in 2022.
2022-2023	BMP – Runoff Reduction Performance Standard – implement and/or verify at least 1,025 acres treated through runoff reduction performance standard practices during the milestone period.	Numeric BMP – Runoff Reduction Performance Standard	DNREC	8.29 new acres reported in 2022.
2022-2023	BMP – Stormwater Treatment Performance Standard – implement and/or verify at least 5,560 acres treated through stormwater treatment performance standard during the milestone period.	Numeric BMP – Stormwater Treatment Performance Standard	DNREC	293.83 new acres treated reported in 2022.
2022-2023	BMP – Conservation Landscaping Practices – implement and/or verify at least 1,602 acres of Conservation Landscaping practices during the milestone period.	Numeric BMP – Conservation Landscaping Practices	DNREC, DeIDOT	0 acres reported in 2022.
2022-2023	BMP – Urban Tree Planting – implement and/or verify at least 177 acres of urban tree plantings during the milestone period.	Numeric BMP – Urban Tree Planting	DNREC	0 acres reported in 2022.
2022-2023	BMP – Septic Connections – Verify the previously reported 600 septic systems that were previously connected to sewer and report any additional sewer connections.	Numeric BMP-Septic Connections	DNREC	20 septics connected to sewer in 2022.
2022-2023	BMP – Septic Denitrification – Install at least 100 new advanced treatment denitrification systems during the milestone period and verify previously installed systems.	Numeric BMP – Septic Denitrification	DNREC	0 new systems installed in 2022.
2022-2023	BMP – Septic Pumping – Verify septic pump-outs on at least 4,000 septic systems annually within the Chesapeake Bay Watershed and report through NEIEN.	Numeric BMP – Septic Pump-outs	DNREC	2,899.00 systems pumped in 2022
2022-2023	BMP – Street Sweeping – Verify annually street sweeping on 403 acres annually and report through NEIEN.	Numeric BMP – Street Sweeping	DNREC	285.20 miles of street sweeping reported in 2022.

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2022-2023	BMP – Urban Nutrient Management – Verify annually 23,556 acres are treated under urban nutrient management and report through NEIEN. [WIP Section 3.3.2.4]	Numeric BMP – Urban Nutrient Management	DNREC	3,153.82 acres treated (new) reported in 2022.
2022-2023	Program – Work with partners to build capacity for implementing, tracking, and reporting Conservation Landscaping practices throughout the watershed.	Program	DNREC	Ongoing – working with Nanticoke Watershed Alliance and UD Cooperative Extension to build capacity.
2022-2023	BMP - Erosion and Sediment Control – verify annually 529 acres of erosion and sediment control and report through NEIEN.	Numeric BMP – Erosion and Sediment Control	DNREC	Reported 99% in 2022.
2022-2023	Project - Restore 290 feet of shoreline within the City of Seaford. [WIP Section 3.3.2] This effort supports BMP – Urban Stream Restoration goals listed in this document.	Project	Sussex Conservation District	Completed: Riverview Park shoreline project. Funded through CBIG, NFWF. On-going maintenance and training with Town staff planned for 2023.
2022-2023	Permit - Reissue Seaford NPDES permit by Q2 2023, which expired on 10/31/2020 but has been administratively extended. [WIP Section 3.3.2.10]	Permit	DNREC	Underway/On-going.
2022-2023	Permit - Reissue Laurel’s NPDES permit by Q2 2023, which expired on 10/31/2021 but has been administratively extended. [WIP Section 3.3.2.10]	Permit	DNREC	Underway/On-going
2022	Project/Permit – Bridgeville NPDES permit will be terminated upon demolition of the WWTP. [WIP Section 3.2]	Project/ Permit	DNREC	On-going. Expected to be completed by 2023.
2022-2023	Funding - Provide funding support through DNREC’s Environmental Finance program to assist disadvantaged individuals or communities upgrade or repair failing septic systems. [WIP Section 3.3.2.7, Section 3.3.2.8, and Section 3.3.2.9].	Funding	DNREC	On-going Funds are available through Environmental Finance with additional funds

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	This project supports implementation of the BMP – Septic Denitrification and/or BMP -Septic Connections.			provided through CBIG grant.
2022	Clean Water Funding - Governor Carney signed House Bill 200 – the Clean Water for Delaware Act which creates a Clean Water Trust to protect Delaware waterways and rebuild Delaware’s drinking water infrastructure with a focus on underserved communities. Funding - The Trust is supported by \$50M in the fiscal year 2022 budget as a funding source for water quality projects.	Funding	State Legislature, DNREC	Development of Strategic Plan is underway and in development. Expected to be completed in 2023.
2022-2023	Between ARPA, state funding, the Clean Water Initiative, and potential funds from the federal infrastructure bill, DNREC has a list of priority projects to enhance and improve the surface waters of Delaware, including stream and waterway restoration, drainage projects, and tax ditch improvements.	Funding	State Legislature, Federal Sources, DNREC	On-going
2022-2023	Community Redevelopment/Reinvestment Fund – The Fiscal Year 2022 Bond and Capital Improvements Act (Senate Bill 200) allocated Community Reinvestment/Redevelopment funds to be used for community redevelopment, revitalization and investment capital projects which will improve the economic, culture, historical, and recreational health of Delaware communities. In the CBWS, the Oyster House Park project was identified for Seaford Community Development. The project is located along the shoreline of Seaford, Delaware. The Park includes an extension of the Riverwalk for pedestrian traffic from nearby housing developments, stabilization of the shoreline to mitigate against erosion and sea level rise, habitat restoration for green infrastructure, site improvements for boating infrastructure, and community educational facilities and meeting spaces (indoor and outdoor).	Funding	State Legislature	On-going. Additional funds may be requested for projects in FY2023.
2022	Project - The Nanticoke Watershed Alliance will host a minimum of 2 homeowner workshops targeting homeowners and HOAs. NWA will design and install two demonstration stormwater BMP	Outreach	Nanticoke Watershed Alliance	Ongoing – NWA completed the Conwell Street

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	<p>projects on religious organization campuses, civic association properties, or other organizations’ properties. [WIP Section 3.2]</p> <p>This project may contribute towards the numeric BMP goals provided in this document.</p>			<p>demonstration Project in Seaford in 2022 which involved bioretention areas and plantings; they have been approved for funds to design a green parking lot for a church in Laurel.</p>
2022	<p>Project - The Nanticoke Watershed Alliance will plant 300 trees in the Nanticoke Watershed. [WIP Section 3.4]</p> <p>This project contributes towards the numeric BMP goals provided in this document.</p>	Project	Nanticoke Watershed Alliance	<p>NWA completed plantings for Stormwater basin at our Lady of Lourdes in Seaford, planted 150+ trees at Crossroads Community Church, and planting plans were made for Mt. Olivet in Seaford, DE.</p>
2025	<p>Project - The Delaware Environmental Navigator (DEN) is a widely used in Delaware for tracking all permitted on-site wastewater treatment and disposal systems (OWTDS). The DNREC Ground Water Discharges Section (GWDS) has been working with Delaware Department of Technology and Information (DTI) personnel to upgrade the system for better management of our permitting and monitoring data. The upgrades include using EQIS (Environmental Quality Information System) to manage Large OWTDS operations and groundwater monitoring data and utilize business intelligence software (such as Power BI) to analyze data from DEN for permit tracking, compliance checking and enforcement. [Section 3.4.5]</p>	Data	DNREC & DTI	<p>DNREC Division of Water and DTI continue to implement technology and system upgrades for permit tracking and reporting purposes. This is an on-going project.</p>

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2022-2023	Program/Inspections – Review available data records for large onsite wastewater systems and spray irrigation facilities. Develop reporting and inspection criteria if needed. [WIP 3.3]	Inspections	DNREC	On-going
2022	Outreach/Training - The Nanticoke Watershed Alliance will host a training program targeting landscapers to encourage native tree plantings. Certification program has been developed and the next session is scheduled for February 2022. [WIP Section 3.4] This program supports Urban Nutrient Management implementation efforts.	Outreach	Nanticoke Watershed Alliance	Nanticoke Watershed Alliance held training in winter 2022 with over a dozen participants.
2022 - 2023	Permit - Issue Delaware’s MS4 Phase II General Permits. The Phase II MS4 General Permits have been through a first round of public comments. Based on the comments received, modifications were made which requires a second round of public notice. [WIP Section 3.2.2.2]	Permits	DNREC	On-going. Public Hearing scheduled January 2023.
2022-2023	Permit - Reissue the Phase I MS4 permit for New Castle County. The permit is currently being redrafted to be consistent with the Phase II permits where applicable. This effort is expected to be completed by the end of 2022. [WIP section 3.2]	Permits	DNREC	Extended, expected to be issued early 2023.
2022-2023	Permit - DNREC’s Surface Water Discharges Section will issue an Industrial Stormwater General Permit that more effectively addresses TMDL requirements and is consistent with EPA’s revised Multisector General Permit. Staff are scheduling public outreach workshops on the program in January 2022 followed by a 30-day public notice. Permit issuance is anticipated by end of Q4 2022. [WIP Section 3.2.2]	Permits	DNREC	On-going. Staffing has been a challenge and Division has undergone significant reorganization in 2022. Program expected to be staffed in 2023 and permit drafted.
2022-2023	Program – Sussex Conservation District will work with communities and entities in Sussex County permitted through the MS4 program. Specifically, SCD expects to support planning efforts with Seaford and Laurel to implement MS4 permits once issued. SCD already addresses 3/6 elements through Stormwater	Program	Sussex Conservation District	On-going. Implementation of this activity is dependent on issuance of MS4 permits.

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	Program. In partnership with the impacted towns, SCD will address additional 3 elements.			
2022-2023	Program - DNREC’s Sediment and Stormwater Program, will continue to evaluate, develop and offer online training programs to be available 365 days/year to enhance compliance assurance for Contractor Certification: Certified Construction Reviewer, Recertification, and/or Stormwater Design Engineers. The development of an on-line, on-demand Contractor Training Program certification was completed and launched in March 2021. The course is integrated into Delaware’s Learning Center platform and consists of interactive training modules and an exam. The Program is evaluating other training and certification offerings to determine the feasibility of converting those to on-line or hybrid trainings. [WIP Section 3.2.2.1]	Program	DNREC	On-going
2022-2023	Project – Planning - Working with USFWS and DeIDOT on culvert pilot project in the Choptank Watershed. Planning stages currently. Replacing culverts and improving habitat for anadromous fish. Additional funds will be needed to implement.		DeIDOT and USFWS	On-going
2022-2023	Project – Planning – Develop a demonstration project to improve ditches or swales at the Bridgeville Maintenance yard (DeIDOT).	Project	DeIDOT, Nanticoke Watershed Alliance	Completed 2022
2022-2023	Program – Sussex County has introduced a draft Buffer Ordinance requiring riparian buffers in new residential subdivisions. Pending the approval of the ordinance, DNREC will work with the county to establish tracking and reporting mechanism as necessary. This effort supports WIP Section 6: Accounting for Growth.	Program	Sussex County and DNREC	Sussex County Council approved the County’s Drainage and Resource Buffer ordinance in May 2022. https://sussexcountydela.gov/drainage-and-resource-buffer-ordinance
2022-2023	Program – Livable Lawns - The Livable Lawns Program certifies lawn care companies that follow environmentally-friendly	Program and Outreach	DNREC and Delaware	On-going

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	<p>practices in fertilizer application while educating property owners. [WIP Section 6.1.4]</p> <ul style="list-style-type: none"> • Continue to work towards increasing the number of certified applicators in the state; and • Continue to increase acreage enrolled in the Livable Lawns Program annually. <p>This effort supports BMP – Urban Nutrient Management goals listed in this document.</p>		Nursery and Landscaping Association	
2022-2023	<p>Program - The Delaware Department of Agriculture will continue to coordinate efforts for the development of a Turf Nutrient Management Plan for Delaware. Once the plan has been developed, efforts will focus on increasing enrollment in the certification program and verification of urban nutrient management compliance.</p> <p>This effort supports BMP – Urban Nutrient Management goals listed in this document. [WIP Section 3.3.2.4]</p>	Program	DDA, DNREC, UD	On-going
Natural Sector				
2022-2023	<p>Program - DNREC will host a restoration workgroup that focuses on finding opportunities for increased implementation of wetland restoration practices and grass buffers. This project supports efforts towards implementation of numeric BMP goals provided in this document. [WIP Section 4.3.2.2]</p>	Program	DNREC	Restoration Workgroup met in November 2022 and will continue meeting in 2023. Developed a Wetland Restoration Action Plan. Nanticoke Restoration Workgroup also formed.
2022 -2023	<p>Project - The Delaware Wetlands Monitoring and Assessment Team is taking a closer look at the success of wetland restoration and wetland mitigation projects in effort to identify barriers to these wetland projects only reaching limited functional potential. This will include considering problems with site</p>	Project	DNREC	Extended

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	<p>selection, determining metrics for ecological uplift, and a realistic maturity progression analysis. Funding for this project was secured in Oct. 2020 and runs through 2022. Progress includes gathering information and conducting interviews about current performance requirements. Also evaluating in-house data to determine standards for naturally occurring wetlands. Seeking input and discussing appropriate metrics to evaluate functional progression. [WIP Section 4.3.2.2]</p> <p>This project supports efforts towards implementation of numeric BMP goals provided in this document.</p>			
2022-2023	<p>Program - DNREC will explore opportunities to collect data for grass buffers that are installed and being maintained along tax ditches. [WIP Section 4.3.2.1] This project supports efforts towards implementation of numeric BMP goals provided in this document.</p>	Program	DNREC	On-going. Working with Sussex Conservation District to evaluate weed wiper maintenance practice as a tracking and verification tool for grass buffers.
2022-2023	<p>Project - Plant 3.5 acres of trees in Blackbird State Forest - Cypress Complex Tract [Section 4.3.2.4] This project supports efforts towards implementation of numeric BMP goals provided in this document.</p>	Project	DDA – Forest Service	On-going
General				
2022-2023	<p>Program - Delaware will continue to incorporate diversity and environmental justice goals into projects and programs. [WIP Section 3.4 and 4.4]</p>	Program	DNREC	DNREC continues to incorporate diversity and environmental justice goals into projects and programs and have integrated it into the culture and climate of the agency.

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				Partner agencies also support projects and goals focused on providing support for underserved or disadvantaged communities.
2022-2023	Outreach - Improve coordination and collaboration for agriculture, drainage, and restoration projects in Kent County between conservation partners and watershed organizations working within the watershed.	Outreach	Kent Conservation District and DNREC	Delaware’s Conservation Partnership meets regularly to collaborate and improve coordination, usually through monthly lunches.
2022-2023	<p>Program – Delaware’s Climate Action Plan was completed in November 2021 and outlines strategies for addressing climate change that can be implemented through a variety of actions over time, as resources, data and partnerships develop. As our collective understanding of climate impacts, emissions reduction strategies and resilience and adaptation measures grow, actions to advance strategies can evolve and change.</p> <p>An important strategy identified in the Climate Action Plan includes offsetting carbon emissions through support of best management practices on agriculture lands, supporting conservation and restoration of forest lands, supporting local communities’ enhancement of urban greenspaces, and improving methods for measuring and tracking carbon sequestration. We will continue to track and support the implementation of this plan and document and report efforts as we work towards accounting for climate change goals in the Chesapeake Bay.</p>	Program	DNREC	<p>Implementation of Delaware’s Climate Action Plan is on-going.</p> <p>Outreach activities highlighting climate smart agriculture hosted were by Department of Agriculture, UD Cooperative Extension, and USDA Climate HUBS in 2022, with additional events planned in 2023.</p>

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	<p>Delaware’s Climate Action Plan can be found here: https://dnrec.alpha.delaware.gov/climate-plan/</p> <p>This project supports efforts towards implementation of numeric BMP goals provided in this document, including additional implementation to account for additional load due to climate change.</p>			
2022-2023	<p>Project - The Tree for Every Delawarean Initiative is a partnership that includes the Urban and Community Forestry (UFC) programs in the Department of Agriculture’s Delaware Forest Service, the Delaware Department of Natural Resources and Environmental Control’s Division of Climate, Coastal and Energy and other stakeholders that was initiated in November 2021. DNREC and the Delaware Department of Agriculture partnered to develop a new website where residents can access information on selecting, planting, and caring for their trees. In addition, residents, non-profit organizations, and municipalities can visit www.de.gov/tedi to enter information and photos of their tree plantings to help count the trees planted throughout the state.</p> <p>We will continue to monitor this effort and track progress during the milestone period. This effort supports implementation of BMPs to account for climate change.</p>	Outreach	DDA, DNREC	<p>On-going. Approximately 20 sites have been planted since the inception of this program. Data tracker available at https://dnrec.alpha.delaware.gov/tedi/</p>
2022-2023	<p>Program – Toxic Contaminants – Collection and interpretation of up-to-date data, including Characterization of current conditions; Characterization of changes since previous sampling; Understanding spatial patterns of contamination; Understanding partitioning behavior and bioavailability; Evaluating relationships between sources and in-stream response; Filling critical data gaps; and Calibrating/validating water quality models. Creation of a priority list for sources that need clean-up and restoration. This effort supports implementation of Developed and Agriculture Sector BMPs [WIP [Section 5.9].</p>	Data	DNREC	On-going

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<p>2022-2023</p>	<p>Program - Continue to provide support to the Nanticoke Watershed Alliance to implement the Creekwatcher Program. The NWA will:</p> <ul style="list-style-type: none"> • Train 35 Creekwatcher volunteers. • Support data collection at approximately 20 stations on the Nanticoke River in Delaware are monitored every two weeks from March through November by Creekwatcher volunteers. • Support monitoring data updated as received - http://demac.udel.edu/waterquality/; • Coordinate the annual Nanticoke Wade-In, press release, and report card. <p>[WIP Sections 2 and 3.2]</p>	<p>Outreach</p>	<p>DNREC and Nanticoke Watershed Alliance</p>	<p>Creekwatchers celebrates 15 years in 2023. 15 Year report card is planned for Summer 2023. New 2023 season kicks off in March 2023. The 2022 season wrapped up in November 2022. 2021 Report Card was released in fall 2022. https://nanticokeriver.org/creekwatcher/creekwatcher-reports/</p>
<p>2022-2023</p>	<p>Program - DNREC will continue to update and expand Delaware’s BMP Tracking and Reporting Tool to improve and support annual reporting through NEIEN as well as tracking verification. [WIP Section 3.4.5 and 4.4.4]</p>	<p>Program/Reporting</p>	<p>DNREC</p>	<p>Continued working with contractors to improve reporting tool and data reporting through CAST and NEIEN.</p>
<p>2022-2023</p>	<p>Program - Delaware is losing many acres of BMPs due to the requirements of the BMP Verification Program. The State will continue to work towards improving data tracking and reporting as well as verification inspection efforts with partners. [WIP Section 3.4.5 and 4.4.4]</p>	<p>Program/Reporting</p>	<p>DNREC</p>	<p>Working with data partners, we were able to provide updated inspection data in 2022. We continue working with partners to strengthen data reporting.</p>