Phase 3 Watershed Implementation Plan (WIP) Planning and Progress Reporting						Progress Reporting Period: January 1, 2020 – December 30, 2020				
Action #	Description	Performance Target(s)	Responsible Party(ies) and Partnerships	Geographic Location	Expected Timeline	Potential Implementation Challenges or Recommendations	Resources Available	Resources Needed	Progress to Date	Justification for Change to Action Item
							Technical and Financial	Technical and Financial		
Priority Initiative 1: Communications and Outreach										
Section 2, State Action, Numeric Commitments										
2.1.1A	Continue communication, outreach and stewardship programs to increase the use of conservation tillage and no-till practices.	306,196 acres in conservation tillage; 805,778 acres in no-till	PDA, SCC, CDs, CCAs, Private Consultants, Penn State Extension, No Till Alliance, Farmland Preservation, Local Farmland Trusts/Conservancies, PA Farm Bureau	Chesapeake Bay	December 2025				All state agencies, WIP action leaders and partner organizations continue to communicate the message and the availability of funding (technical or financial). This BMP is encouraged and emphasized. PA has invested significant resources through the REAP tax credit program to assist PA farmers in purchasing No-till equipment.	
2.1.2A	Continue communication, outreach and stewardship programs to increase implementation of cover crops.	547,695 acres with fall nutrients, traditional cover crop; 161,601 acres of land without fall nutrients, traditional cover crop; 124,106 acres no fall nutrients and harvested crop	PDA, SCC, CDs, CCAs, Private Consultants, Penn State Extension, No Till Alliance, Farmland Preservation, Local Farmland Trusts/Conservancies, PA Farm Bureau	Chesapeake Bay	December 2025	Challenges include CBP definition of cover crop and the inability to report commodity cover crop via transect survey methodology.			All state agencies, WIP action leaders and partner organizations continue to communicate the message and the availability of funding (technical or financial). This BMP is encouraged and emphasized. REAP made some changes to the cover crop BMPs for FY 2019-20 and beyond. Also,	

						Cover Crops are eligible for 90% Tax Credit in any area covered by an agricultural TMDL.		
2.1.3A	Continue communication, outreach and stewardship programs to increase implementation of pasture management.	180,201 acres of land used for pasture would follow NRCS Prescribed Grazing Plan or Resource Improvement Practice.	NRCS, Penn State Extension, Private Consultants, CDs			Challenges include CBP definition of Prescribed Grazing and non-alignment with PA State regulatory requirements under Chapter 91 Manure Management and Chapter 102 Ag E&S.	All state agencies, WIP action leaders and partner organizations continue to communicate the message and the availability of funding (technical or financial). This BMP is encouraged and emphasized	
2.1.4A	Communicate with EPA Region 3 Agricultural Liaison, Ag Permitting, Compliance and Enforcement Staff	Provide status updates related to agricultural programs and BMP implementation	DEP, SCC, EPA	Statewide	Quarterly		Initial call held with EPA permitting, compliance, and agriculture staff on November 24, 2020 to discuss the Key Areas to Address in EPA's Milestone Evaluation.	
2.1.1F	Implement a comprehensive communication/outreach strategy to engage farmers/landowners in planting and maintaining riparian forest buffers.	85,000ac. of forest buffers planted on agricultural lands, and 3,100 acres of forest buffers on developed/non-ag lands.	DCNR, DEP, PSC, RFBAC, PA WIP III Forestry Workgroup, SCC, PDA, PSU, etc.	Chesapeake Bay	By 2022	Coordination, scheduling, lack of funding for marketing/communications/outreach/education, etc.	DCNR, in cooperation with its partners via the RFBAC (Riparian Forest Buffer Advisory Committee), launched a two-fold outreach effort in June 2020 that included a direct mailing to riparian area landowners and a public media campaign: https://www.dcnr.pa.gov/Conservation/Water/RiparianBuffers/BufferMyStream/Pages/default.aspx Collaboration	

									continues with RFBAC and DCNR, and has discussed with PA Farm Bureau opportunities to enhance outreach and communications with PA farmers.	
2.1.2F	Implement a communication/outreach program to engage a variety of turf owners to plant trees and meadows on their properties.	5K acres of "Urban Forest Expansion" (turf to trees) + 5K acres of "Conservation Landscaping" (turf to meadow).	PRPS, DCNR, DEP, agencies and partners, municipalities and parks, etc.	Chesapeake Bay	By 2023	Brand new program- Coordination, scheduling, lack of funding, etc.			DCNR, in cooperation with its partners, formed a new Lawn Conversion Advisory Committee in early 2020. This committee includes a variety of partners and stakeholders who will work together to inform future outreach and communications efforts. DCNR also launched a dedicated lawn conversion website in 2020 https://www.dcnr.pa.gov/Conservation/Water/LawnConversion/Pages/default.aspx, and has dedicated a staff person to coordinate this work.	
2.1.3F	Communicate the importance and values of forests and farmland to facilitate and encourage state and local land conservation programs.	Increase conserved lands both in the headwaters of the PA Chesapeake Bay watershed and near developing areas.	DCNR, DEP, PALTA, etc.	Chesapeake Bay	By 2023	Coordination, scheduling, lack of funding.			DCNR Bureau of Forestry celebrated its 125th anniversary in 2020; finalized the statewide Forest Action Plan, and is currently drafting a revised strategic plan with a 30-year planning horizon. As part of these planning efforts, DCNR conducted public polling on the importance of forests to people, and will	

									incorporate these results into future work.
2.1.4F	Emphasize the full range of benefits & co-benefits of stream and wetland restoration to facilitate additional implementation.	Increased acres of wetlands created and restored to approximately 400 acres annually; increased feet of stream restoration projects implemented to approximately 60,000 linear feet annually.	DEP and appropriate NGO partners.	Chesapeake Bay	By 2023	Coordination, scheduling, lack of funding.			No additional staff have been added to program complement. The Pennsylvanian's Guide to Permitting for Watershed Improvement Projects was published in December 2020. Program staff participated in CBP's efforts to improve stream and wetland restoration definitions and crediting for Legacy Sediment Removal (LSR) projects (2020 Consensus Recommendations to Improve Protocols 2 and 3 for Defining Stream Restoration Pollutant Removal Credits.) Reviewed and approved three compensation banking projects completed since last data reporting. Wetland acres and stream linear footage will be reported. Initiation of one In-lieu Fee (ILF) project began in 2020. Compensation crediting guidance

									and submission of Draft ILF Instrument is to occur at the end of the 2020 reporting period.	
2.1.1S	Continue to engage with municipalities and others on the benefits of implementing and maintaining stormwater management practices through web-based trainings, in-person meetings, workshops, etc.	Implementation of stormwater BMPs within MS4 PRPs, construction stormwater permits, and developed areas outside of the scope of the permitting programs	DEP, PMAA, CCAP, Conservation Districts, Penn State	Chesapeake Bay	Ongoing				DEP continues to assist MS4s with permit implementation. DEP has worked with Penn State Extension to produce "Urban Stormwater Basics" training courses that will be published to DEP's Clean Water Academy for public use. The Pennsylvanian's Guide to Permitting for Watershed Improvement Projects was published in December 2020.	
2.1.2S	Provide more awareness of the expanded opportunities for BMP implementation in connection with the MS4 permit requirements	Demonstrate success in improvements to local water quality using the MS4 Flexibilities	DEP, EPA	Statewide	Begins October 2019				DEP has been in discussions with partners in Lancaster County for several potential projects that may utilize the flexibilities DEP has provided MS4s to work with the agricultural sector.	
2.1.3S	Track and incentivize MS4 and nonpoint source coordination and collaboration	Document utilization of MS4 and nonpoint source flexibility through PRPs and Annual Reports Incentivize collaborative approaches through Countywide Action Plan (CAP) development and	DEP, Chesapeake Bay Counties, MS4s	Statewide	Begins October 2019				MS4s submitted annual reports on or before 9/30/2020 and revisions to PRPs to incorporate flexibilities are possible in the future.	

		implementation funding and support									
2.1.4S	Continue dialogue with EPA regarding expanding opportunities for MS4 implementation		DEP, EPA	Statewide	Ongoing					This collaboration with EPA is ongoing.	
Section 3, Countywide Actions											
3.1.1	Develop communications and outreach strategy for staged approach to WIP planning and implementation in all counties.	Webinars and calls to provide overview of WIP, define the expectations, and discuss next steps with Tier 3 & 4 counties. Designed to prepare these counties for the second phase of the WIP process.	DEP, Technical Coordinator, Bay office, Agencies Outreach, Communication contractor, Communication and Engagement Workgroup, External Contractor	Tier 3 & 4 counties	Begins August 2020	Participation and engagement from Tier 3 & 4 counties. DEP/state staffing limitations Federal funding for Tier 2 and Pilot Counties was not provided in a timely manner, thereby pushing our schedule with Tier 3 and 4 counties back.	See Funding and Resources Section, *Resources Needed Phase 2* columns below	See Funding and Resources Section, *Resources Needed Phase 2* columns below	DEP created DEP Regional CAP Support Teams in the Northeast, Northcentral, and Southcentral regions to aid DEP Chesapeake Bay Office (CBO) in outreach and support to the Tier 3 and 4 Counties. With their support, CBO conducted webinars and extensive outreach to Tier 3 and 4 conservation districts, planning commissions, and county commissioners. The CBO conducted a Region CAP Support Team Workshop to educate DEP region staff on the WIP and CAP project. CBO and the Region CAP Support Teams conduct weekly calls to address concerns and questions that arise from the outreach to the Tier 3 and 4 counties, as well as calls with county leaders. The CBO created an extensive library of	

									resources and courses on DEPs Clean Water Academy that serves as an information and document sharing portal for the Tier 3 and 4 counties.	
3.1.2	Conduct outreach via webinars and one-on-one meetings to provide overview of WIP, define the expectations, and discuss next steps to prepare counties for the WIP planning process.	Tier 3 & 4 counties will explore the potential of forming regionalized planning groups of 2-4 counties. Regional planning groups will begin their regionalized planning process with an assigned external coordinator for focused outreach and engagement to county stakeholders.	DEP, Technical Coordinator, Bay office, Agencies Outreach, Communication contractor, Communication and Engagement Workgroup, External Contractor	Tier 3 & 4 counties	Begins August 2020 (following the completion of Tier 2 county planning)	Regionalized planning still requires counties to submit an individual county plan. State staffing support Federal funding for Tier 2 and Pilot Counties was not provided in a timely manner, thereby pushing our schedule with Tier 3 and 4 counties back.	See Funding and Resources Section, *Resources Needed Phase 2* columns below	See Funding and Resources Section, *Resources Needed Phase 2* columns below	The DEP Regional Support Teams, with the assistance from DEP's CBO, has conducted several outreach meetings with each of the 26 Tier 3 and 4 counties, to present the Countywide Action Planning (CAP) process, answer questions, troubleshoot issues, present materials, and work through next steps. The Susquehanna River Basin Commission (SRBC) conducted meetings with each county to review their Clean Water Technical Toolbox and answer technical questions. CBO has developed several Tier 3 and 4 and Coordinator Grant FAQs to assist the Tier 3 and 4 counties. The Tier 3 and 4 counties have organized into 10 regional groups. Each	

									of these 10 groups will share a coordinator position. Grant applications for each coordinator position have been submitted.	
3.1.3	Begin implementation of WIP plans completed by four pilot counties.	Assign an external coordinator to each Tier 2 county to assist with WIP planning and implementation efforts.	DEP, Technical Coordinator, Bay office, Agencies Outreach, Communication contractor, Communication and Engagement Workgroup, External Contractor	Tier 2 Counties	Begins January 2020	State staffing support

Internal and External Coordination

Federal funding for Tier 2 and Pilot Counties was not provided in a timely manner, thereby pushing our schedule with Pilot counties back. | See Funding and Resources Section, *Resources Needed Phase 1 & 2* columns below | See Funding and Resources Section, *Resources Needed Phase 1 & 2* columns below | Pilot Counties have begun implementation of their Countywide Action Plans (CAPs). Counties were able to apply for CAP Implementation Grant Funds to support CAP implementation.

Lancaster, York, Cumberland and Franklin County received Conservation Excellence Grant (CEG) funding to support implementation efforts.

Community Clean Water Action Plan Coordinators were hired to support implementation. Tier 2 counties each hired a Community Clean Water Action Plan Coordinator to support plan development. Tier 2 counties are in the final stages of finalizing their CAPs. | |

3.1.4	Seek staffing to support this large-scale coordination and support effort.	An external coordinator will work one on one with the pilot counties to begin the implementation of their countywide action plan.	DEP, Technical Coordinator, Bay office, Agencies Outreach, Communication contractor, Communication and Engagement Workgroup, External Contractor	Pilot Counties	Begins January 2020	State staffing support Internal and External Coordination Federal funding for Tier 2 and Pilot Counties was not provided in a timely manner, thereby pushing our schedule with Tier 3 and 4 counties back.	See Funding and Resources Section, *Resources Needed Phase 1* columns below	See Funding and Resources Section, *Resources Needed Phase 1* columns below	Each Pilot County and Tier 2 County received $100,000 in state Environmental Stewardship Funds to hire a Community Clean Water Action Plan Coordinator to support CAP implementation. The Community Clean Water Action Plan Coordinator application has been released for Tier 3 and 4 counties. Two additional Chesapeake Bay Office Coordinators were hired to support efforts.	
Section 10, Communication and Engagement Strategy										
10.1.2	Develop the outreach materials, webinars, templates for letters and mailings and success stories identified by the Communications and Engagement (C&E) Workgroup for their use in message delivery and outreach.	Final materials will be distributed to the C& E Workgroup materials as they are finished for their use.	DEP/DCNR/PDA Communication Office, DEP CBO		As needed		$200,000		Outreach efforts for C&E Workgroup: DEP's contractors, Consulting with a Purpose and Water Words That Work, worked with the C&E Workgroup to identify outreach and engagement needs for local partners in different sectors and geographies, and then worked in coordination with the C&E Workgroup to develop county leader invitation to participate letters and documents, webinars and social media campaigns that were used to	

								explain the WIP and CAP efforts. These materials built the foundation for outreach and engagement for Tier 1, 2, 3 and 4 outreach. Outreach efforts for CAP county coordinators: DEP maintains a contract with Water Words That Work to provide communication support to the Phase 3 WIP. Water Words That Work has produced communication templates, PPTs, brochures and training to county coordinators to support local efforts. Water Words That Work continues to provide communication support for state lead efforts. DEP Communications Office developed talking points document for integrated messaging at county and state levels. Used by all counties.	
10.1.3	Finalize the DEP Web-based StoryMap.	Final StoryMap	DEP Communication Office		March 2020		$20,000		Launched storymap focused on public education during Chesapeake Bay Watershed

									Awareness Week in June. Promoted via press release, a social media campaign, and stakeholder outreach. Over 3,500 views since launch. https://www.depgis.state.pa.us/chesapeakebaywatershed/index.html
10.1.4	Schedule and participate in focus groups, forums and workshops, as appropriate.	Presentations and summaries of such events and the input provided will be shared as appropriate.	C & E Workgroup members; DEP/DCNR/PDA Communication Offices, DEP CBO	Chesapeake Bay	As needed				DEP worked with the Bay Local Government Advisory Committee and participated in WIP listening sessions conducted by LGAC. Outreach was also conducted with nonprofit partners. WIP Steering Committee Workgroup chairs participated in sector-specific outreach to the agriculture community and webinars were held with local leaders.
10.1.5	Communications and Engagement Workgroup members will use the delivery tools developed to reach their respective constituents through mailings, newsletters, their respective websites, conferences, workshops, etc. about the importance of clean water and the goals of the Phase 3 WIP.	Mailings, newsletters, websites, conferences and workshops of C&E Workgroup are utilized as appropriate to convey the message developed.	C & E Workgroup members; DEP/DCNR/PDA Communication Offices, DEP CBO	Chesapeake Bay	Between now and 2025				DEP Communications Office launched the Phase 3 WIP News monthly newsletter: a go-to resource for the latest updates at the state and county levels and in funding, data and reporting, and other areas of the Phase 3 WIP effort. Through promotion and

								outreach, subscriptions have increased from about 90 in June to 278 in December. C&E Workgroup members, as well as WIP action leaders utilized above-mentioned outreach tools in organization publications and mailings (member letters, magazines, newsletters, etc) and on organization websites and presented at meetings and conferences.

Priority Initiative 2: Funding and Resources

Section 2, State Action, Programmatic and Narrative Commitments

2.2.1	Pass legislation providing a funding source or combination of funding sources for the implementation of the Phase 3 WIP.	PA Farm Bill - The Conservation Excellence Grant provides grants, loans, and tax credits to incentivize agricultural BMPs in priority geographies as found within the WIP. Keystone Tree Fund – This fund will go toward DCNR's tree planting initiatives	PDA, DCNR, DEP, State Legislature, Governor's Office		2019-2020 Session			DCNR continues to make state funding available for forestry BMP implementation including riparian forest buffers, urban tree canopy, urban forest expansion, conservation landscaping, and forest conservation through easements and acquisition. DCNR provides funding through three primary mechanisms: C2P2 grant program, TreeVitalize grants, and on-demand funding for forest buffers via partnership with

							Western PA Conservancy. The Keystone Tree Fund is still building; implementation funding is not yet available to DCNR. Secretary Dunn and State Forester Shultzabarger intend to strategize on other potential funding sources. Conservation Excellence Grant Program (CEG): The State Conservation Commission (SCC) entered into delegation agreements with four county conservation districts – Tier 1 - Lancaster and York counties and Tier 2 - Cumberland, Franklin counties for the implementation of the CEG Program created under the 2019 PA Farm Bill Initiative. Funding for the delegation agreements is provided by state appropriations and a Chesapeake Bay Implementation Grant (CBIG) sub-award to the Commission. The Lancaster and York county	

conservation districts have been accepting CEG applications since July 2020. The LCCD awarded three CEG grants totaling $158,000 for grassed waterway and diversion BMPs, animal waste storage facility, heavy use area protection and streambank fencing BMPs. The YCCD awarded five CEG grants totaling $37,857 for grassed waterway and cover crop BMPs (360 acres). Both conservation district outreach efforts include posting CEG information on the conservation district's websites and newsletter and flyers distributed to agricultural support program organization in the counties Cumberland and Franklin county conservation districts will begin accepting CEG application in January 2021.

Expansion of REAP Program: An additional $3 million was included in the annual REAP allocation for tax credits providing a total of $13 million.

									Prioritization of tax credits in the Chesapeake Bay Watershed has not been initiated with the expanded allocation; however, approximately 70% of the annual allocation of tax credits is awarded to eligible producers and projects in the Chesapeake Bay watershed.	
2.2.1(i)	Incentivize implementation of Agriculture BMPs that comprise 60% and/or 10-fold increase of the nitrogen reductions through complementary local, state, federal, non-profit and private funding programs	Initiate Conservation Excellent Grant Program, to include bundling grants with REAP tax credits and low-interest loans in Tier 1 Counties. Expand funding of REAP tax credits and prioritize in Chesapeake Bay Watershed. Initiate Chesapeake Bay Ag Inspection Program – Phase 2, to include providing cost-share to farmers that are yet to be or have been inspected, in select counties. Continue Agriculture Plan Reimbursement Program to cost-share the development of privately written agricultural plans (Agriculture Erosion and Sediment Control, Manure Management). Coordinate with NRCS to identify and prioritize funding through RCPP,	PDA, SCC, DCNR, DEP, PENNVEST, EPA, NRCS, Pilot, Tier 1 and Tier 2 counties, non-profit and private entities		Beginning July 2020					The vendor for the Center for Water Quality Excellence has been selected and is Keystone Safety Services, Inc. d/b/a Land Logics Group. Contracts have been finalized and a Notice to proceed was issued on November 12, 2020. Next step is to get the virtual center component up and running which is anticipated by May 2021. Also, between now and May 2021 and beyond, the vendor will be doing outreach at events, assuming those events happen, and appropriate COVID-19 safety protocols can be maintained. The physical center should be opening June/July 2021. The Pilot will focus on	

		EQIP, CREP, and other federal funding programs. Prioritize up to 50% of Growing Greener funding to nutrient and sediment reducing practices in the Chesapeake Bay Watershed. Pilot Center for Water Quality Excellence, which will provide financial assistance and technical guidance, in Tier 1 Counties. Prioritize EPA CBIG funds for riparian forest buffer and agriculture BMP implementation in Tier 1 and 2 counties. Utilize EPA "Most Effective Basin" (MEB) funds to cost-share implementation of agriculture BMPs in geographic areas of highest impact in the Chesapeake Bay Watershed.						Lancaster and York Counties initially. SCC staff continues to work with staff from the Treasury Department to reinvigorate the AgriLink Loan Program. This existing program previously made more than $5 million in low interest loans, but has been inactive for approximately 8 years due to lack of funding to "subsidize" these linked deposit loans. This discussion was sidetracked in 2020 due to the challenges presented by COVID. PennVEST has also recently expressed an interest in exploring a linked deposit low interest loan program for agricultural BMPs. The SCC is actively implementing its new Conservation Excellence Grant (CEG) program through agreements with Lancaster, York, Cumberland and Franklin Conservation Districts, as well as a pending agreement with Lancaster Farmland Trust and Salisbury Township (Lancaster County) as

										a public private partnership pilot. Total funding for these five CEG agreements is nearly $6 million, and the SCC received an additional $2 million in state funds in November to continue this effort. Pennsylvania DEP announced the Growing Greener Plus awards on December 30, 2020. More than $16 million has been awarded to projects in the Chesapeake Bay Watershed, with many of those projects focused on agricultural Best Management Practices and forested riparian buffer implementation.	
2.2.2	Identify the process and develop specific procedures for the award of "block grants" to the lead planning teams for the implementation of the CAPs.	Policy and procedures and a grant agreement developed for use in the development and award of grants to counties in the implementation of the CAPs	DEP, Comptroller's Office		Fall 2019				Allocation-based funding program (Community Clean Water Coordinator and CAP Implementation Grants) were developed and approved in Fall 2019	
2.2.3	Initiate allocation of funding utilizing "block grants" to the lead planning and implementation teams of the CAPs	Allocate state and federal funding to Pilot and Tier 2 counties to fund coordinators as well as to accelerate the implementation of their CAPs.	DEP, Comptroller's Office		Begins January 2020				Eight Community Clean Water Coordinator Grants for the Pilot and Tier 2 Counties were provided via PA state Environmental Stewardship Funds (ESF), totaling	

| | | Allocate state and federal funding to Tier 3 and 4 counties once CAPs are developed.

Best Management Practices in the CAPs focus on reductions for agricultural, stormwater, and forestry/natural sectors. | | | | | | | $800,000 in the initial year (January-December 2020) and $1.8 million for Pilot, Tier 2, 3 and 4 counties in second year (January – December 2021).

CAP Implementation Grants were provided to the Pilot Counties via CBIG2 in the initial year (January-December 2020) and to the Pilot and Tier 2 Counties via ESF the second year (January-December 2021).

Applications for both rounds were submitted by the counties in a four-week open round and awarded in less than six weeks thereafter. | |
| 2.2.4 | Continue to work with NFWF to fund the Local Government Implementation (LGI) grants | Assist with the development of RFP and review of applications | DEP | | | Begins February 2020 | | | | On February 2, 2020, representatives from EPA, DEP, and NFWF met to discuss the PA LGI RFP. Some annual practices were added to the list of Priority practices that could be funded through this grant. NFWF hosted a webinar for LGI grant applicants, which reviewed the RFP and application process on March 17, | |

									2020. Due to the pandemic, the application deadline was extended from April 16, 2020 to April 30, 2020. On June 5, 2020 Staff from EPA, DEP and NFWF took part in a grant review meeting.	
2.2.5	Engage with other jurisdictions regarding interstate trading and cross-jurisdictional financing (e.g. Conowingo)		DEP, PennVest		2021				PA continues to co-chair the Conowingo WIP Steering Committee and has been in discussions with other jurisdictions regarding the CWIP Finance Structure, as well as potential partnerships related to pay-for-performance strategies.	
2.2.6	Investigate the potential for and implementation of short-term, low-interest, loans and other financing streams for agricultural projects		PennVest, PDA, DEP		2021				Meeting held with AG Choice to determine interest in a Link Deposit style program utilizing PENNVEST funds. General support and interest exist among all parties. Structure of a program is being further investigated with a second meeting planned upon gathering of additional information.

Additionally, a sublevel revolving loan fund is under discussion with regional planning agencies to provide | |

| | | | | | | | | low interest loans directly to eligible applicants including agriculture in cooperation with local County Conservation Districts. Initial meetings have been held with interest from all parties. Regional planning agencies is assembling terms that can work for them for further discussion. SCC staff continues to work with staff from the Treasury Department to reinvigorate the AgriLink Loan Program. This existing program previously made more than $5 million in low interest loans, but has been inactive for approximately 8 years due to lack of funding to "subsidizes" these linked deposit loans. This discussion was sidetracked in 2020 due to the challenges presented by COVID. PennVEST has also recently expressed an interest in exploring a linked deposit low interest loan program for agricultural BMPs. | |

										The SCC is actively implementing its new Conservation Excellence Grant (CEG) program through agreements with Lancaster, York, Cumberland and Franklin Conservation Districts, as well as a pending agreement with Lancaster Farmland Trust and Salisbury Township (Lancaster County) as a public private partnership pilot. Total funding for these five CEG agreements is nearly $6 million, and the SCC received an additional $2 million in state funds in November to continue this effort.	
Section 2, State Action, Numeric Commitments											
2.2.1A	Investigate the incorporation of alternative manure treatment technologies and other potential strategies to address areas of excess manure nutrient generation and capital investment required for implementation of manure treatment systems.	Identify various strategies to minimize nutrient imbalances in areas of excess manure nutrient generation, including the incorporation of manure treatment technologies and manure transport, as they are determined to be feasible.	PDA, SCC, DEP Nutrient Trading Program, NRCS	Chesapeake Bay counties that are identified to have excess manure generated for crop need	December 2025	Capital investment, cost effectiveness, and modeled nutrient reduction effectiveness is of concern.				DEP, PDA and SCC staff continue to work with Energy Works and other proposed manure treatment technologies to have treatment technologies properly recognized and credited under the CB Model. In addition, several counties have identified and prioritized manure transport as a component of their County Action Plans (CAPs).	

									SCC and DEP have held discussions with and provided information pertaining to animal density and manure production to PennAg Industries and other consultants have occurred as it relates to the transport of manure from two Tier 2 counties. SCC and DEP have been in discussions with one Tier 1 county as it relates to better tracking of manure transport within and outside of that county.	
2.2.1A(i)	Prioritize and/or incentivize increased manure transport and manure transport implementation and tracking in counties, such as Lancaster County, that have been identified through CBPO Modeling Tools to be in excess of organic nutrients		DEP, SCC, PDA, Lancaster County		Beginning 2020	Tracking and auditing of manure hauler/broker records			Tracking tools were updated in PracticeKeeper and Nutrient Balance Sheets from manure brokers, received by Conservation Districts, are to be entered. Continue to reinforce with manure brokers that NBS are to be submitted to conservation districts by regulation.	
2.2.1F	Maximize existing funding sources for riparian forest buffer implementation in Pennsylvania.	Fully utilize existing funding sources for buffer implementation and maintenance annually, including federal, state,	DEP (GG, 319), UDSA (CREP+), SCC (REAP), DCNR (C2P2) TreePennsylvania	Chesapeake Bay	By 2025	Rigid programs, existing restrictions, coordination, lack of understanding about all individual programs, etc. Lack			See above under 2.2.1. DCNR leadership intends to explore additional	

		and private programs (esp. under-utilized programs such as REAP).	(TreeVitalize) CBF (K10), etc.			of funds to start a new program.			opportunities in early 2021.	
2.2.2F	Expand TreeVitalize and utilize other programs to facilitate community tree planting and maintenance.	50 New Acres of New Urban Trees (300 trees = 1 acre)	Tree Pennsylvania, DCNR, PSU, municipal partners, etc.	Chesapeake Bay	By 2022	Coordination, scheduling, lack of funding.			DCNR named a new TreeVitalize Leader in 2020 and is currently exploring opportunities to both solidify and expand the TreeVitalize program.	
2.2.3F	Create additional, flexible funding options for riparian forest buffers.	Develop new, innovative PA (or Ches. Bay) funding source and mechanism for Buffers, including incentive programs for landowners utilizing buffer co-benefits such as wildlife habitat, income/product potential, flood mitigation, etc. Streamline funding source similar to DCNR's NFWF-Funded Stream ReLeaf program.	All agencies and partners	Chesapeake Bay	Ongoing/ASAP	Innovation, Funding, Coordination, etc.			In cooperation with Western PA Conservancy, DCNR has established a mechanism to provide on-demand, flexible funding to partners for buffer implementation. We plan to seek additional funding for this program. We have also been actively engaged in numerous discussions with NGO partners, consultants, and USFS on alternative conservation financing strategies to leverage private capital.	
2.2.4F	Ensure that riparian forest buffers are adequately maintained to ensure survival by developing a Maintenance funding source for NGOs to develop their own maintenance programs.	Develop a Riparian Forest Buffer Maintenance funding source to create the capacity for NGOs to develop their own maintenance programs for new and already-implemented buffers (up to 5 years after initial planting).	All agencies and partners involved in riparian forest buffer implementation	Chesapeake Bay	Ongoing	Lack of interest in funding maintenance from traditional funding sources as it does not result in "new" load reductions.			Most DCNR funding sources provide for establishment and maintenance; but we do not currently have a dedicated source for maintenance. The Riparian Forest Buffer Advisory Committee will be launching an Action Team focused on Maintenance in 2021 to explore options on	

								how to address this and other RFB maintenance concerns. The SCC recently included maintenance on riparian forest buffers as a new qualifying reimbursable expense through the REAP program, which pays farmers back in tax credits for out-of-pocket expenses related to best management practices that promote on-farm conservation. In FY 19-20, the enabling legislation for the REAP Tax Credit Program was amended to provide a 90% tax credit for a number of priority BMPs in areas with a TMDL with impairments from agricultural nutrients and sediments (entire PA Bay watershed). Included in this amendment is a 90% tax credit for the installation and maintenance of forest riparian buffers. Changes were made to the REAP guidelines for FY20-21 and is now available.	

2.2.5F	Continue and Increase Urban Tree Canopy Grants to Communities and non-governmental organization Partners	Utilize and increase funding available through the TreeVitalize annual grant program. Encourage tree planting and/or conservation of existing tree canopy in existing DCNR Grant programs, other agency grant programs as appropriate (grants to community parks, etc.) Connect this work to DCNR's Climate Plan.	DCNR, Tree Pennsylvania, PRPS	Chesapeake Bay	Ongoing	Current Funding does not meet demand. Processes, procedures, and administration.			Please refer to 2.2.2.F.	
2.2.6F	Leverage existing funding sources for Stream and Wetland Restoration.	Explore potential to improve leveraging of EQIP, CFA and REAP programs to support creditable/conforming stream and wetland restoration implementation, management and monitoring.	DEP, NRCS, SCC, NGOs, DCNR, Universities, etc.	Chesapeake Bay	Ongoing	Strict program regulations, lack of knowledge about existing programs and creditable BMPs, etc.			Utilization of CAP Implementation Grants for stream and wetland restoration projects. Also, please refer to 2.1.4.F	
2.2.7F	Develop funding opportunities for turf conversion programs.	Include Conservation Landscaping as an eligible BMP in existing conservation grant programs. Seek new innovative funding sources and mechanisms. Explore funding opportunities tied to flood mitigation.	DCNR, TreePennsylvania, TreeVitalize, DEP, etc.	Chesapeake Bay	By 2021	Time, finding funding sources, etc.			DCNR allocated $50,000 for implementation as part of its Lawn Conversion Program launch in 2020. An additional $75,000 was made available for 2021, and a portion of DCNR's EPA CBIG award for 2021 will be available for Lawn Conversion practices. The Alliance for the Chesapeake Bay received a NFWF SWG grant to fund Lawn Conversion practices in 2020 and 2021. DCNR is also working with partners to explore options for funding	

									Lawn Conversion practices via the existing C2P2 grant opportunities in 2021, and DCNR plans to apply for a NFWF INSR grant in early 2021 that would also make Lawn Conversion implementation funding available to partners.	
2.2.8F	Continue to implement stream restoration, emphasizing creditable, load-reducing projects. Pair stream restoration projects with tree planting BMPs whenever possible. Identify areas that may have a high cost-to-benefit ratio for load reductions from legacy sediment removal and associated ecosystem restoration.	Identify areas that would benefit from Legacy Sediment Removal and Ecosystem Restoration throughout priority areas of the watershed	DEP, CDs, Watershed Organizations, Private sector companies or NGOs working on remote sensing tools		Beginning 2020	Capital investment for design/ implementation is of concern.			1. Data published to PASDA PA's GIS data clearing house. Discussed with DEP Water Quality/TMDL program and consultants. 2. Ongoing EPA Wetland Program Development Grant project is focusing on developing a Watershed Legacy Alteration Index. Grant extension, contracts and revised work plan in place. 3. Scientific research and monitoring of restoration projects in several watersheds across PA was accomplished with assistance from Federal, State and Private funding sources. These scientific research and monitoring efforts provide credible results and a basis for developing cost-effective aquatic	

									resource restoration projects.	
Section 3, Countywide Actions										
3.2.1	**Phase 1 (Pilot and Tier 2 counties):** Provide 8 – Community Clean Water Coordinators (External Full Time position) **Phase 2 (Tier 3 & 4 counties):** Provide 13 – Community Clean Water Coordinators (External Full Time position)	External coordinating staff would be assigned to individual Tier 1 & 2 counties in phase 1, and to regionalized Tier 3 & 4 counties in phase 2. External Coordinators would be DEP contractors reporting to the DEP Internal Coordinators. Serve as the point of contact to their assigned county(ies). They would support county efforts to develop and implement countywide action plans.	DEP External Contractor County Planning Offices County Conservation Districts Other County Partners	Chesapeake Bay	**Phase 1:** Begins in January 2020 **Phase 2:** Begins in August 2020	State staffing support Internal and External Coordination Federal funding for Tier 2 and Pilot Counties was not provided in a timely manner in order to begin Phase 1. This pushed the schedule back for both Phase 1 and Phase 2.		**Total:** 21 – Community Clean Water Coordinators $2,100,000 ($100,000 per coordinator) **Phase 1:** 8 – Community Clean Water Coordinators $800,000 **Phase 2:** 13 – Community Clean Water Coordinators $1,300,000	Phase 1 implementation is in progress. 8 – Community Clean Water Action Plan Coordinators were hired in Tier 1 & 2 Counties. PA state Environmental Steward Funds were used to fund these positions. Phase 2 planning is in progress. 10 – Community Clean Water Action Plan Coordinator positions are provided, and the application is open. Environmental Steward Funds will also be used to fund these positions. No federal funding received for these positions.	
3.2.2	**Phase 1:** Provide 3 – Community Clean Water Coordinator (Full Time Internal Coordinator Position) **Phase 2:** Provide 7 – Community Clean Water Coordinator (Full Time Internal Coordinator Position)	Internal Coordinators: Would be DEP employees. Internal Coordinators would serve as the point of contact and provide WIP coordination for DEP and all other state agencies for external coordinator and technical coordinators.	DEP		**Phase 1:** Begins in January 2020 **Phase 2:** Begins in August 2020	State staffing support Internal and External Coordination Phase 1 – internal coordinators were on-boarded beginning January 2020		**Total:** 10 – Community Clean Water Coordinator $1,000,000 ($100,000 per coordinator) **Phase 1:** 3 – Community Clean Water Coordinator $300,000 **Phase 2:**	DEP Chesapeake Bay Office hired one internal Coordinator. This makes a total of three internal coordinators to support Phase 3 WIP efforts. The three internal coordinators are currently supporting the coordination of all state agencies, WIP action leaders and 35 active counties.	

								7 – Community Clean Water Coordinator $700,000	
3.2.3	Phase 1: Provide 2 – Clean Water Technical Assistance Coordinators (Full Time Technical Coordinator

Phase 2: Provide 8 – Clean Water Technical Assistance Coordinators (Full Time Technical Coordinator | Technical Coordinator: A DEP contractor reporting to the DEP Internal Coordinator. The Technical Coordinator would be responsible for: for providing information and facilitation of planning tools through the planning and implementation process, assist with reporting and tracking of milestones annual progress, assist in model runs for plan development and during annual milestone updates. | Technical Contractor | Phase 1: Begins in July 2019

Phase 2: Begins in August 2020 | State staffing support

Internal and External Coordination

Technical coordinators will have varied workloads.

Phase 1: preparation for Phase 1, to include development of tools (guides, toolboxes, web-based reporting systems, training) was on schedule. | Total: 10 – Clean Water Technical Assistance Coordinators $900,000 ($90,000 per coordinator) | DEP Chesapeake Bay Office hired one internal Technical Coordinator. Additionally, DEP maintains a contract with the Susquehanna River Basin Commission (SRBC) to provide additional technical support to Phase 3 WIP efforts. Support was provided to Phase 1 counties for CAP development and implementation support. Phase 2 support was provided with CAP technical toolbox development and technical assistance at stakeholder meetings. | |
| 3.2.4 | Phase 1: Provide 1 – Clean Water Facilitation Coordinator (Full Time Facilitation Coordinator Position) | Facilitation Coordinator: A DEP contractor reporting to the DEP Internal Coordinator. | Facilitation Coordinator

DEP | April 2019 | State staffing support

Internal and External Coordination | 1 – Clean Water Facilitation Coordinator $100,000 | DEP maintains a contract with Consulting With a Purpose to provide facilitation and planning support for Phase 3 WIP efforts. Consulting With a Purpose continues to provide facilitation for internal and external coordination and county support. | |
| 3.2.5 | Phase 1: Provide 1 – Clean Water Outreach Coordinator (Full Time Outreach Contractor) | Outreach Coordinator: A DEP contractor reporting to the DEP Chesapeake Bay Office, in coordination with WIP Communication | Outreach Coordinator

DEP | April 2019 | State staffing support

Internal and External Coordination | 1 – Clean Water Outreach Coordinator $100,000 | DEP maintains a contract with Water Words That Work to provide outreach and communication | |

		and Engagement Workgroup and DEP Communication Office.								coordination support for the Phase 3 WIP. Water Words That Work continues to provide support for communication tools and support for both internal and external needs.	

Priority Initiative 3: Expanding Capacity for Technical Assistance

Section 2, State Actions, Programmatic and Narrative Commitments

2.3.1	Implement a pilot of the Center for Water Quality Excellence concept in the four pilot counties of Lancaster, York, Adams and Franklin Counties.	A Request for Proposals will be released and awardee put in place. Assistance will be provided to landowners and municipalities to complete projects. Assistance includes outreach and resources (both technical and financial) to municipalities and farmers to implement BMPs.	DEP, Pennvest	Lancaster and York	RFP done April 2020 Pilot done Summer 2021					The vendor for the Center for Water Quality Excellence has been selected and is Keystone Safety Services, Inc. d/b/a Land Logics Group. Contracts have been finalized and a Notice to Proceed was issued on November 12, 2020. Next step is to get the virtual center component up and running which is anticipated by May 2021. Also, between now and May 2021 and beyond the vendor will be doing outreach at events, assuming those events happen and appropriate COVID-19 safety protocols can be maintained. The physical center should be opening June/July 2021. The Pilot will focus on Lancaster and York Counties initially.	

Section 9, Climate Change

9.3.1	Complete the Penn State Study, *Climate Change Impacts on Pennsylvania's Watershed Management Strategies and Water Quality Goals*	Study will answer some key questions that will be used to more effectively select and target practices that will address climate resiliency goals.	DEP, Penn State	Statewide	July 2020				Completed as part of Climate Impacts Assessment, press release issued 4/20/2020. Posted on DEP Climate Change Impacts page: https://www.dep.pa.gov/citizens/climate/Pages/impacts.aspx	
Section 2, State Actions, Numeric Commitments										
2.3.1A	Initiate Implementation of Pennsylvania's Agriculture Conservation Stewardship Program (ACSP)	Finalize draft program guidance, application, and on-farm assessment tools; 3rd party verification process, pilot program; and release program for initial implementation	Certified Third Parties, CDs, DEP, SCC, PDA	Chesapeake Bay	July 2020				Development of the PA ACSP is on hold until early 2021 due to COVID challenges and staffing challenges. A pilot conducted in Fall/Winter 2019 indicated a need to investigate additional methods and alternatives to incentivize participation by farmers and third party verifiers.	
2.3.2A	Work with third-parties, integrators, and co-ops to identify alternative methods to support and assess compliance with regulations without use of regulatory entities	Assess/increase implementation of agricultural plans and BMPs using programs such as those developed by Turkey Hill, Alliance for Chesapeake Bay, and MD/VA Cooperative	Certified Third Parties, Integrators and Cooperatives, DEP	Chesapeake Bay – Animal Producers	December 2025				Ongoing efforts to fund Penn State College of Agriculture's AG BMP survey. Continue Turkey Hill/ PennAG Industries efforts to get certain practices credited. Funding and support of OneStop … (alternative method to "support" compliance, mapping	

						balance sheet development, set backs, etc.).			
2.3.3A	Implementation of Animal Waste Management Systems (AWMS)	Adequate manure storage for 90% of swine/poultry operations; 75% of all other animal types	NRCS, CDs, Private Consultants, Swine and Poultry Integrators	Chesapeake Bay – Animal Producers	December 2025	Need to amount of licensed P.E's and those with job approval authority in order to meet PA regulatory requirements for liquid storages. Need to increase number of qualified engineers for solid storages.			Continue to meet with NRCS and other ag partners during the Quarterly Technical Committee meetings. Continued funds via CBIG for Chesapeake Bay Engineering Specialists and Engineer Assistants, as well as state funds for joint funding with NRCS for PA Association of Conservation Districts Engineer Specialists in the four pilot counties. NRCS continues to provide training and Job Approval Authority for Conservation District ag technician staff. Penn State University has initiated a conservation training curriculum to prepare graduating students for a career in ag conservation. CEG and CAP Implementation Grants, for instance, are available for pilot and Tier 2 counties to allocate for AWMS implementation. However, further funds are needed to meet the needs for

						technical assistance and engineering design of liquid and semi-solid storages.			
2.3.4A	Develop web-based and in-person training for Manure Management Planning and Agriculture Erosion and Sediment Control Planning	Finalize Soil Erosion and Sedimentation Control Manual for Agricultural Operations technical guidance (383-4200-002) and train conservation districts and consultants.	DEP, Penn State Extension, SCC, NRCS	Statewide	September 2020	TGD finalized and released October 2019. Training in development.			Four web-based training modules for the Ag E&S Manual were developed by DEP staff and opened for public consumption on DEP's Clean Water Academy. Entered into agreement with Penn State Extension to create additional in-person curriculum as well as to ensure consistency between PAOneStop and the Ag E&S Manual.
2.3.5A	Focus agricultural technical assistance and financial resources in areas of highest need and impact to the Chesapeake Bay, to include targeted watershed approach		DEP, SCC, PDA	Chesapeake Bay	Beginning July 2020				Both CEG and the new DEP phase 2 inspection funding (for BMPs) is being rolled out based on the Phase 3 WIP Tiered Counties priority status. See the CEG discussion at 2.2.1.
2.3.1F	Increase technical assistance available to landowners interested in implementing riparian forest buffers.	Create both new Commonwealth staff positions and new positions at partner organizations, and increase entrepreneurial opportunities for forest buffer work.	DCNR, PDA, DEP, SCC, DCED, etc.	Chesapeake Bay	Ongoing	Funding, overhead, space, capacity, available candidates, on-boarding process, hiring process, etc.			DCNR is currently in the process of filling a new Commonwealth position that would focus partly on riparian forest buffers, and continued to make C2P2 grants available to help partner organizations fund positions for buffer outreach and implementation

									work with landowners. Further, various implementation funding for buffers made available by DCNR can be utilized in some fashion to provide money to buffer contractors/entrepreneurs to implement buffers. DCNR and the Alliance for the Chesapeake Bay continue to work with individuals with barriers to employment to encourage new buffer planting and maintenance entrepreneurs through the Correctional Conservation Collaborative program.	
2.3.2F	Increase Urban Forestry Technical Assistance Available to Communities and Citizens.	Fund positions within the Commonwealth system and with partner organizations.	DCNR, TreePennsylvania, Penn State Extension, PHS, etc.	Chesapeake Bay	Ongoing	Funding, overhead, space, capacity, available candidates, on-boarding process, hiring process, etc.			Nothing new to report.	
2.3.3F	Create a turf-conversion technical assistance program.	Identify existing subject matter experts in native grassland and meadow establishment to evaluate and design a new program, technical guidance/specifications, etc. then create new Commonwealth positions to provide technical support to landowners.	DCNR, Alliance for the Chesapeake Bay, Pheasants Forever, PGC, TreePennsylvania, PSU, etc.	PA Bay-wide	By 2022	Creating a new program- start-up costs, time, approvals, budgets, etc.			See above on launch of new Lawn Conversion Program. The Lawn Conversion Advisory Committee is working on technical guidance documents and trainings for landowners and contractors, as well	

									as local government and NGO partners.
2.3.4F	Provide informed technical assistance for stream and wetland restoration projects to ensure they are completed in an adequate, reportable manner.	Ensure that county and agency field staff are trained to support potential creditable wetland restoration opportunities. Integrate trainings into existing, well-attended courses.	NRCS, CCDs, SCC, PDA, DEP, DCNR, TNC, and other NGOs.	PA Bay-wide	Ongoing	Training, staff capacity, etc.			1. General Permit processing training sessions completed. Additional training sessions under development for late 2020 and 2021 targeting compensation determinations and environmental assessment restoration plan approvals. 2. WET staff participated in Chesapeake Bay Program's 2020 efforts to improve stream and wetland restoration definitions and crediting for Legacy Sediment Removal projects.
2.3.5F	Expand the PFBC Stream Restoration Initiative, implementing stream restoration projects resulting in load reductions with habitat co-benefits, to counties in the southcentral region of the state, starting with one or more of the four pilot counties to include Adams, Franklin, Lancaster and York.	Expand model in Northcentral Region and work with partners in Franklin County to start a similar initiative in the Southcentral Region. This starts with the creation of new positions within the PFBC.	DEP, PFBC	NC, SC regions	January 2020	EPA diverted funds to PFBC in order to hire additional staff.			Completed: Four Fisheries Biologists were hired in 2020 to expand the Northcentral stream restoration model in the NC region and move into the SC region.
2.3.1S	Complete revisions to the Pennsylvania Stormwater BMP Manual		DEP, Villanova University and subcontractor	Statewide	2021				A preliminary draft is nearly complete and will be shared with an internal workgroup for review and comment in the near future.

2.3.1W	Wastewater Plant Performance Technical Assistance	Perform enhanced technical assistance to wastewater treatment facilities to support reduced nutrient loadings from these facilities. DEP reports progress every 6 months to EPA for grant outputs and outcomes.	DEP	Chesapeake Bay	December 2020				Existing Wastewater Technical Assistance program continues. Funds have been provided by EPA to purchase necessary supplies and equipment.	
2.3.1W(i)	Wastewater Plant Performance Technical Assistance	Purchase of equipment and supplies to provide enhanced technical assistance and perform servicing and calibration of equipment	DEP		September 2021				Existing Technical Assistance program continues.	
2.3.1W(ii)	Wastewater Plant Performance Technical Assistance	Provide training related to reducing nutrient loads for wastewater treatment facility staff for a total of eight facilities			September 2021				Existing Technical Assistance program continues.	

Priority Initiative 4: Reporting and Tracking

Section 2, State Actions, Programmatic and Narrative Commitments

2.4.1	Pass legislation to revise Pennsylvania's Right to Know Law to allow for additional confidentiality of landowner records.				2020-2021 Legislative Session				Action hasn't started	
2.4.2	Develop a planning and prioritization tool for use in the development and refinement of the CAPs.	A final tool available to county planning teams for use in the prioritization and tracking of practices and future planning	DEP, EPA, Chesapeake Conservancy	Chesapeake Bay	2020				FieldDoc was customized to meet the needs of local stakeholders. The Data Tools Review Team, lead by Tier 1 and 2 County Coordinators, provided extensive recommendations on enhancements needed to FieldDoc. This review process was completed from March 2020 to August 2020. All critical enhancements were	

									completed by the FieldDoc development team. FieldDoc was introduced for public use in August/September of 2020. Counties are strategizing plans to increase the use of FieldDoc. Additional non-critical enhancements were identified by the Data Tools Review Team and will begin in 2021.	
2.4.3		Work with the Chesapeake Bay Program Partnership, Water Quality Goal Implementation Team, to elicit support for a joint remote sensing project with other jurisdictions		DEP, EPA, Chesapeake Bay Program Partnership	Chesapeake Bay	Begin March 2020				Met with WQGIT chairs and BMP Verification Ad Hoc Committee Chairs as it pertains to coordinating and broadening remote sensing opportunities across the watershed. Discussions are ongoing.	
2.4.4		Continue enhancements to PracticeKeeper to capture agricultural and other source sector BMPs as well as compliance and inspection tracking and reporting.		DEP	Statewide	Ongoing				1. Ag Inspection Module updates complete. 2. NMP Module updates in progress. 3. BMP Module (Inspection/verification) updates nearly complete. 4. CEG enhancement in progress. 5. 319/Growing Greener enhancement in progress.	
2.4.5		Update the Pennsylvania BMP Verification Plan and Quality Assurance Program Plan (QAPP)		DEP, EPA	Chesapeake Bay	Annually, as needed				Both were updated and sent to EPA on 12/01/2020 - there may be updates if	

									additional progress information is presented from the Penn State Survey.
2.4.6		Work with EPA and the Chesapeake Bay Program Partnership to enhance the existing crediting protocols for programs and practices that improve water quality in Pennsylvania not currently getting full credit in the Chesapeake Bay Watershed Model.	Finalized crediting protocol that considers all aspects of practices and programs not currently getting credit in the Chesapeake Bay Watershed Model that improve water quality in Pennsylvania. This includes but is not limited to compensatory mitigation, land conservation practices related to mine reclamation, dairy precision feeding, etc.	DEP, Bay Program Partnership		January 2021	Buy in from the Chesapeake Bay Program Partnership		Presented to the Management Board in April 2020 as it related to stream and wetland compensatory mitigation and mitigation banks. Requested responses from EPA CBPO in early summer 2020 as it related to wetland and stream compensatory mitigation and mitigation banking. Received EPA CBPO draft response on 12/1/2020. Next steps are currently under consideration.

Working with DEP Bureau of Abandoned Mine Reclamation (BAMR) on strategies for accounting for and crediting water quality improvements as it relates to mine reclamation/AMD projects.

Pulled together a group of internal and external subject matter experts (DEP, SCC, Penn State Extension, Consulting entities) to better account for and |

									credit Dairy Precision Feeding.	
2.4.7		Install additional monitoring station(s) and begin to collect "real-time water quality data on the Susquehanna River to further document the story of progress made by Pennsylvania's efforts to restore local streams and the Chesapeake Ba as part of implementation of the Phase 3 WIP	Monitoring station(s) and water quality results.	DEP Bureau of Clean Water	Susquehanna River	January 2021			1 person $600,000	Ongoing monitoring at 77 Water Quality Network Stations in the Bay watershed continues at up to monthly frequency. This includes 36 Bay nutrient Loading stations that are sampled monthly and are also included in the bay non-tidal network that includes an addition stormwater sediment sampling events per year. Data is uploaded annual to the DUET database and select stations were included in trends analysis to measure progress in the 2020 Integrated Report. The results of the trends analysis of mainstem Susquehanna and select tributaries is generally a reduction in total N, P and Suspended Sediment throughout the basin over the past 10 years.	
2.4.8		Updates to the Nutrient Credit Trading Program – Nutrient Trading Tool	Incorporate performance-based credit trading tool through the Chesapeake Bay Nutrient Trading Tool (CBNTT) for transparent,	DEP Bureau of Clean Water	Chesapeake Bay	Beginning January 2020				CBIG3 and NEIEN funding sources for the work have been identified and are available, and the	

		interactive, site-specific, and regionally consistent methodology linked to the Chesapeake Bay modeling tools, for calculating nutrient credits that can be generated from nonpoint sources and used by point sources to meet NPDES permit obligations in a cost-effective way More detail can be found in DEP's workplan for the Chesapeake Bay Implementation Grant. DEP reports progress every 6 months to EPA for grant outputs and outcomes.							vendors are ready to proceed, but approval to proceed with the work contracts has not been granted.	
2.4.8(i)	Continue to implement 3:1 trading ratio for nonpoint source (NPS) credit generation and trading until performance-based or other method-based tool (e.g. CBNTT) is established	This interim policy has been in use and is documented in the Phase 2 WIP Nutrient Trading Supplement found on DEP's Nutrient Trading website	DEP Bureau of Clean Water	Chesapeake Bay	Ongoing				The 3:1 ratio continues to be implemented until the program has moved to CBNTT and uses a performance-based calculation methodology	
2.4.9	Continue to work with the Federal Facilities Workgroup and Federal Facilities to report BMPs installed and maintained and finalize local planning goals		EPA, DEP, DoD	Chesapeake Bay	Ongoing				The federal BMPs were reported to EPA for 2020 Progress.	
Section 2, State Actions, Numeric Commitments										
2.4.1A	Work with the Chesapeake Bay Program Partnership to establish a creditable practice or combination of practices for implementation of advanced soil health strategies or plans on farms in the Chesapeake Bay Watershed Model for		DEP, PDA, SCC		January 2021	Buy in from the Chesapeake Bay Program Partnership			Action has not started	

	future crediting of these initiatives. Once established as a practice or set of practices that can be credited for progress in the model, commit additional funding or the technical and financial assistance necessary to implement these practices.								
2.4.2A	Expand reporting of dairy precision feeding	Assess and report implementation of dairy precision feeding for 175,000 Animal Units (approximately 152,000 milking cows)	PDA, Dairy Co-ops, PACS Program, Dairy Nutritionists, PA Dairyman's Assoc., CDs, NRCS		December 2025	Voluntary program. Need to have the ability to track and report what dairy farmers are already doing.			Action is moving forward as planned, workgroup discussing and will be presenting to the CBP Ag Workgroup in January 2021
2.4.3A	Expand reporting of Enhanced Nutrient Management	64,640 acres with no manure applied would be managed based on a nitrogen and phosphorus based nutrient management plan; 64,640 acres with no manure applied would be managed with nutrient management plans to meet nitrogen and phosphorus requirements as well as supplemental practices based on rate, timing, and placement for nitrogen and phosphorus. Tracking of acres with manure applied, where the land would be managed with nutrient management plans to meet nitrogen and phosphorus requirements as well as supplemental practices based on rate, timing, and placement for nitrogen and phosphorus	4R Nutrient Stewardship Alliance, PACS, CCAs, CDs, SCC, DEP		December 2025	Voluntary program. Need to have the ability to track and report what farmers are already doing.			1. Working on the incorporation of verification of Supplemental nutrient management (NM) BMP implementation during annual Act 38 Status Reviews. 2. CBAIP – Standard Operating Procedure and training materials released to support the tracking of Supplemental NM BMPs verified during inspections. 3.Counties have included these BMPs into their CAPs and are actively working to verify them through CAP Implementation Grants and other funding sources and partnerships (e.g. NFWF and 4R Alliance).

									Action is moving forward as planned, workgroup discussing and developing forms
2.4.4A	Expand reporting of grass buffers	50,000 acres of land adjacent to streams for establishment of grass buffers at least 35 feet in width	NRCS, DEP, CDs		December 2025	Costs associated with on-site inspection to determine grass buffers; use of aerial imagery a potential			Agricultural Grass Buffers are being reported through PracticeKeeper, as well as the BMP Partner submission module through the Agricultural Plan Reimbursement Program. Grass buffers are also being reported through Penn State survey, that is scheduled to report by the end of 2020.
2.4.5A	Inventory existing agricultural BMPs and BMP needs through survey, agricultural planning, and inspection programs, focusing on geographic areas through the Tiered approach		PDA, SCC, DEP, CDs, Penn State Extension, NRCS, USGS, EPA		Beginning Spring 2020				1. PA Farm Conservation Practices Inventory was voluntarily submitted by agricultural operators in Adams, Franklin, and York Counties. Verifications were completed by Penn State Extension professionals, and data analysis is on-going. 2. MOU is finalized, and data analysis and comparison is ongoing across DEP PracticeKeeper and USDA datasets in Franklin, Juniata, Lancaster, and York Counties.

									3. The Chesapeake Bay Ag Inspection Program (CBAIP) continues to collect and report BMP data across the PA Bay watershed as part of initial and follow-up inspections. 4. CBAIP has initiated Phase 2 (Plan and BMP Implementation) inspections in Adams, Chester, and Lancaster Counties. PA's Agricultural Plan Reimbursement Program BMPs are continuing to be reported to Practice Keeper by Team Ag and Larson (APRP contractors) through the BMP Partner Module.	
2.4.1F	Ensure adequate tracking of partner-implemented forestry BMPs including forest buffers, tree canopy, conservation landscaping, urban forest expansion, stream wetland restoration.	Develop mechanism to capture partner reported and privately funded buffers and other BMPs, with appropriate QA/QC processes, enabling those BMPs to be properly credited.	DEP, DCNR, PDA, SCC, EPA, PACD, NGOs, Farm Organizations, NRCS, PSU	PA Bay-wide	Ongoing	QA/QC of partner data, system access, etc.			DCNR Forestry entered BMPs into Practice Keeper from 2017 – 2020 and they were reported as part of 2020 Progress to EPA. Chesapeake Bay Foundation's (CBF) Keystone 10 Million Trees Program reported their tree plantings from 2018 – 2020 and was submitted to EPA. DEP is working with DCNR Recreation to	

									report their BMPs in Practice Keeper. FieldDoc, in partnership with Chesapeake Commons, was launched in October 2020 to capture BMPs that are not part of a Commonwealth cost share or regulatory program. NFWF BMPs are going to reported through FieldDoc. DCNR's TreeVitilize program submitted tree planting BMPs from 2015 – 2019 for 2020 Progress.	
2.4.2F	Celebrate successful implementation and maintenance of forestry BMPs through reporting successful efforts.	Generate broad understanding and acceptance of watershed restoration efforts and how they improve quality of life in PA communities through reporting successful efforts, resulting in a greater appetite for forestry and all BMPs. Broader acceptance and appetite for these BMPs will make outreach and implementation less time-intensive, less expensive processes.	All agencies and partners.	PA Bay-wide	Ongoing	Report generation, digestible messaging, continual messaging, etc.			DCNR included forest buffers and lawn conversion practices in its monthly e-newsletter, *The Resource*, and celebrated forestry BMPs through the USFS Shared Stewardship agreement signing committing to the Bay Forest Restoration Strategy. Teddi Stark received the 1st Annual Watershed Leadership Award which will be given annually during the Riparian Forest Buffer Summit.	

									The Buffer Vocational Training at Huntingdon State Correctional Institute was a part of the Correctional Conservation Collaborative and received a Governor's Environmental Excellence Award in 2020, as well as local news coverage.	
2.4.1S	Collect Municipal Separate Storm Sewer System (MS4) BMP data using the new reporting systems for electronic submission for annual reports and inspections	Implement use of MS4 e-Inspection application. Complete e-reporting system for annual reports by December 2020	DEP, MS4s	Statewide	2020				DEP is initiating a new project to develop a web-based system for MS4 annual reports to collect BMP data. DEP is utilizing an electronic system for recording MS4 inspections ("eInspection").	
2.4.2S	Initiate and collect stormwater BMP data from other DEP programs implementing provisions of the Chapter 102 regulations, to include required post-construction stormwater management.			Statewide	2020				DEP is anticipating the launch of the Chapter 102 ePermit system on January 25, 2021, to allow the regulated community to submit Notices of Intent (NOIs) electronically for PAG-02 NPDES General Permit coverage for stormwater discharges associated with construction activities. The ePermit system will be built in phases, in which new and	

									amendment PAG-02 NOIs will be released first, followed by individual NPDES permit applications and then erosion and sediment control (E&S) permit applications. Use of Chapter 102 ePermit will be voluntary at first, but is expected to be required in the future. The system represents a significant step forward in DEP's ability to collect information on earth disturbance activities and BMPs across Pennsylvania.	
2.4.3S	Continue to track MS4 PRP submission, review, and approval.	Internal report is updated and maintained on a quarterly basis and provided to regional staff as well as DEP executive team	DEP Bureau of Clean Water		Ongoing				DEP's Bureau of Clean Water continues to track MS4 PRPs. Here are the numbers: 1. Percentage of PRPs reviewed of those received: 100% (178 total, there are multiple joint PRPs that include about 250 MS4s) 2. Percentage approved of those reviewed: 87% (155 of 178) 3. Total PRPs not received: 8 4. Total PRPs not yet approved: 31 Note this is being tracked in terms of PRPs instead of MS4s, since there are multiple joint PRPs	

									that involve many jurisdictions. The York County PRP includes more than 40 MS4 which will be approved shortly.
2.4.1W	Explore the feasibility of developing a GIS based online monitoring and reporting program that municipalities can use to report on-lot system operation and maintenance.		DEP						Project has been scoped with the help of DEP IT. Until funds are available to support the development, the system cannot be further developed and implemented.
Section 3. Countywide Actions									
3.4.1	Track and report progress in Phase 3 WIP planning and implementation in all counties.	Development of Countywide Action Plans (CAPs) in all counties in Pennsylvania's Chesapeake Bay Watershed.	DEP, Local planning leaders, External Coordinators	All Counties in CBWS	Phase 1 Begins July 2019 Phase 2 Begins Feb 2020	State staffing support Internal and External Coordination			Pilot counties submitted annual progress templates to DEP for their Countywide Action Plan in October. DEP met and discussed progress templates with each of the pilot counties. Tier 2 counties submitted their Draft Plans in October and are in the final stages of finalizing their CAPs. Tier 2 counties will submit their first annual progress report in 2021.
3.4.2	Update reductions in the County Planning Progress template upon completion of each county plan.	Completion of Countywide Action Plans (CAPs) in all counties in Pennsylvania's Chesapeake Bay Watershed.	DEP, Local planning leaders, External Coordinators	All Counties in CBWS	Phase 1 Begins January 2020	State staffing support Internal and External Coordination			Tier 2 counties are in final stages of finalizing their CAPs. The Phase 3 WIP input file will be updated in 2021 to represent the Tier 2 CAPs.
3.4.3	Track and report progress to continue implementation of the Phase 3 WIP State Numeric Commitments	Completion of Countywide Action Plans (CAPs) in all counties in Pennsylvania's	DEP, Local planning leaders, External Coordinators	All Counties in CBWS	Phase 2 Begins August 2020	State staffing support			Conservation Districts continue to use the PracticeKeeper

	described in Section 4, State Actions in the counties with minimal reductions.	Chesapeake Bay Watershed.				Internal and External Coordination			system, as required by their Nutrient/Manure Management and Bay Technician agreements. PennDOT was added as a new reporting program for stormwater BMPs for 2020 progress. DCNR Recreation is working to report stormwater BMPs on non-MS4 land through PracticeKeeper.
3.4.4	Amend the Phase 3 WIP to incorporate the additional CAPs that are developed (Phase 1 and 2)	Completion of Countywide Action Plans (CAPs) in all counties in Pennsylvania's Chesapeake Bay Watershed	DEP	Phase 1: Tier 2 Counties Phase 2: Tier 3 and 4 Counties	Phase 1: December 2020 Phase 2: December 2021	State staffing support Internal and External Coordination			Phase 1 CAPs are completed.

Priority Initiative 5: Compliance

Section 2, State Actions, Programmatic and Narrative Commitments

2.5.1	Pass the Fertilizer Bill to achieve the identified nutrient reductions on urban and agriculture lands.				2019-2020 Legislative Session				Fertilizer Bill was not passed in the 2019-2020 Legislative Session.
2.5.2	Review, consider and potentially incorporate a revised Phosphorus Index into the planning requirements for land application of biosolids.	Incorporate revised P index tool into future nutrient management planning efforts where approved for use	SCC, Penn State, DEP, NRCS	Statewide	July 2020				DEP is on track and currently developing draft permits to reissue for the beneficial use of sewage sludge, PAG-07, PAG-08, and PAG-09. One of the items for consideration is incorporation of the management of sewage sludge with the consideration of the total phosphorus content of the sewage sludge. No decisions have been

										made on what will or will not be in these draft permits to date.
2.5.3	Develop State Agency nutrient reduction planning goals and the associated Action Plans for meeting those planning goals for the installation of practices on lands owned and maintained by state agencies.	Completed State Agency Action Plans for the reduction of nutrients on lands owned and operated by state agencies.	DEP, DCNR, Other Agencies responsible for the management of state lands, Governor's Office	Watershed-wide	January 2021					The Pennsylvania Fish and Boat Commission (PFBC) is partnering with DCNR's Bureau of Forestry to conduct a pilot riparian forest buffer implementation project along the Juniata River on four parcels owned by PFBC, which will total approximately eight acres of buffer planting. These plantings are scheduled to take place in April 2021. If all goes well with these pilot plantings, PFBC will look into additional parcels owned by the Commission for potential riparian forest buffer implementation.
Section 2, State Actions, Numeric Commitments										
2.5.1A	Implement NPDES Concentrated Animal Feeding Operation (CAFO) Program Delegation	Permit 100% of all CAFOs (350+ operations in Chesapeake Bay Watershed); Inspection metrics and results are provided to EPA annually per the required Compliance Monitoring Strategy. EPA also requires NPDES permitting and compliance information to be provided by DEP for ICIS database inclusion.	DEP		Ongoing					A modification of the PAG-12 General Permit was issued by DEP on 10/31/2020 requiring the submission of NOIs to remain covered under PAG-12. DEP has submitted an end of year CMS report and will continue to provide CAFO permit and compliance information to ICIS.

2.5.2A	Complete complaint follow-up for CAFO and non-CAFO facilities		DEP, SCC, CDs		Ongoing				DEP's regional offices complete this activity on an ongoing basis.	
2.5.3A	Implement Chesapeake Bay Agriculture Inspection Program, Phase 1, with an emphasis on meeting state planning requirement on non-CAFO operations.	Inspect 10% of the agricultural acreage annually. More information can be found in our Standard Operating Procedure published on DEP's website. Additionally, progress is reported to EPA every 6 months per the Chesapeake Bay Regulatory and Accountability Program grant.	DEP, CDs	Chesapeake Bay	Ongoing				Chesapeake Bay Ag Inspection Program (CBAIP) Standard Operating Procedure was updated in May 2020. The 2019-2020 Annual Inspection Summary has been developed and published to the DEP Ag Compliance website.	
2.5.4A	Implement Chesapeake Bay Agriculture Inspection Program, Phase 2 Pilot, with an emphasis on meeting both state planning and implementation requirements on non-CAFO operations.		DEP, SCC, CDs, NRCS, Private Consultants	Chesapeake Bay	Beginning July 2020	Available funding for Technical Assistance and construction of BMPs remains a concern.			Chesapeake Bay Ag Inspection Program – Phase 2 Standard Operating Procedure was finalized June 2020 along with the Phase 2 Inspection Program Funding Guidelines (provided via DEP Environmental Stewardship Funds). Phase 2 Inspections have been/will be conducted in Lancaster, Chester, and Adams counties by the conservation districts, and in York County by the DEP Southcentral Regional Office beginning in July 2020.	
2.5.1S	Complete the Pollutant Reduction or Total Maximum Daily Load Plan Reviews for the 2018 Municipal Separate Storm	Complete technical review and issue permits	DEP, MS4 permittees	Statewide	2020	MS4s not addressing DEP review comments, staff shortages			DEP has reviewed and approved the majority of PRPs and TMDL Plans submitted in 2017.	

	Sewer System (MS4) permits								There are a few complicated cases, including cases under litigation, that have delayed completion of reviews.	
2.5.2S	Develop the 2023-2028 NPDES MS4 Permit	In the development of this permit, provide opportunities for input from stakeholders, including but not limited to the Phase 3 WIP Stormwater Workgroup, as part of the normal public participation process.	DEP	Statewide	2019 through 2022				DEP has prepared conceptual plans for the next permit term and has solicited and received input from the regulated community and other stakeholders.	
2.5.3S	Continue to implement the NPDES Municipal Stormwater Program Delegation, to include permitting, compliance, inspection, and enforcement.	Inspection metrics and results are provided to EPA annually per the required Compliance Monitoring Strategy. EPA also requires NPDES permitting and compliance information to be provided by DEP for ICIS database inclusion.	DEP	Statewide	Ongoing				An end of year CMS report has been submitted, and DEP will continue to provide permit and compliance information to ICIS.	
2.5.4S	Develop the NPDES Industrial Stormwater Permit		DEP	Statewide	2019 through 2021				A draft of the PAG-03 general permit for reissuance has been developed and is under legal review.	
2.5.5S	Continue to implement the NPDES Industrial Stormwater Program Delegation, to include permitting, compliance, inspection, and enforcement.	Inspection metrics and results are provided to EPA annually per the required Compliance Monitoring Strategy. EPA also requires NPDES permitting and compliance information to be provided by DEP for ICIS database inclusion.							An end of year CMS report has been submitted and DEP will continue to provide permit and compliance information to ICIS.	
2.5.6S	Continue to implement the NPDES Construction Stormwater Program Delegation, to include permitting, compliance, inspection, and enforcement.	Pennsylvania's Chapter 102 requires NPDES permitting for an acre or more of earth disturbance related to construction activities. The requirements also include	DEP	Statewide	Ongoing				DEP continues to implement the NPDES program under Chapter 102 with the assistance of delegated conservation	

		post-construction stormwater management on all permitted sites. Inspection metrics and results are provided to EPA annually per the required Compliance Monitoring Strategy. EPA also requires NPDES information to be provided by DEP for ICIS database inclusion.							districts. An end of year CMS report has been submitted and DEP will continue to provide permit and compliance information to ICIS.	
2.5.1W	Continue to implement the NPDES Sewage and Industrial Waste Program Delegation, to include permitting, compliance, inspection, and enforcement	Inspection metrics and results are provided to EPA annually per the required Compliance Monitoring Strategy. EPA also requires NPDES permitting and compliance information to be provided by DEP for ICIS database inclusion.	DEP	Statewide	Ongoing				DEP continues to implement the NPDES program. An end of year CMS report has been submitted and DEP will continue to provide permit and compliance information to ICIS.

Phase 3 Watershed Implementation Plan (WIP) Planning and Progress Reporting Template

Each county-based local area will use this template to identify:

1. Inputs – These are both existing and needed resources, public and private, to implement the identified priority initiative. These include both technical and financial resources, such as personnel, supplies, equipment and funding.

2. Process – what is each partner able to do where and by when. These are the action items listed under each priority initiative.

3. Outputs and outcomes – both short and long-term. These are the priority initiatives identified by each county.   The performance targets are the intermediate indicators that will measure progress.

4. Implementation challenges – any potential issues or roadblocks to implementation that could impede outputs and outcomes.

Asterisk: Place an asterisk next to the action number(s) for action items that appear in both the County Planning and Progress Template and the Programmatic Recommendations Template.

For each Priority Initiative or Program Element: Use the fields, as defined below, to identify the inputs and the process that will be followed to achieve each priority initiative. This is the "who, what, where, when and how" of the plan:

Description = What. This may include programs that address prevention, education, or as specific as planned BMP installations that will address the Priority Initiative. A programmatic or policy effort will require some ability to quantify the anticipated benefits which will allow calculation of the associated nutrient reductions.

Performance Target = How. This is an extension of the Description above. The Performance Target details the unique BMPs that will result from implementation of the Priority Initiative and serves as a benchmark to track progress in addressing the Priority Initiative. Performance Targets may be spread across multiple Responsible Parties, Geographies, and Timelines based on the specifics of the Initiative.

Responsible Party(ies) = Who. This is/are the key partner(s) who will implement the action items though outreach, assistance or funding, and who will be responsible for delivering the identified programs or practices.

Geographic Location = Where. This field identifies the geographic range of the planned implementation. This could extend to the entire county or down to a small watershed, based on the scale of the Priority Initiative, range of the Responsible Party, or planned funding/resources. *NOTE: Resource limitations alone should not limit potential implementation as additional funding may become available in the future.*

Expected Timeline = When. Provide the expected completion date for the planned activity. This should be a reasonable expectation, based on knowledge and experience, that will aid in tracking progress toward addressing the Priority Initiative.

Resources Available: Technical & Funding = This field will note technical and financial resources secured/available to implement the program (Description). This is the total of the resources identified in the County Resources Inventory Template below allocated to the priority initiative as a whole; or, if available, to each action.

Resources Needed: Technical & Funding = This field will note technical and financial resources needed/outstanding to implement the program (Description). This is the total of the additional resources projected and identified as needed in the County Resources Inventory Template below allocated to the priority initiative as a whole; or, if possible, to each action.

Potential Implementation Challenges/Issues = This field will note challenges and issues that may delay program implementation (Description).