	Watershed Implement	ntation Plan (WIP) Plannii	ng and Progress	Reporting Te	mplate						
Date:											
	<u>Gre</u>	en - action has been completed of	or is moving forward	as planned Y	ellow - action	has encountered mino	or obstacles	Red - action h	as not been taken or ha	s encountered a serious barrier	
Action #	Description	Performance Target(s)	Responsible Party(ies) and Partnerships	Geographic Location	Expected Timeline	Potential Implementation Challenges or Recommendations	Resource	es <u>Available</u>	Resources <u>Neede</u>	<u>d</u> Progress to Date	Justification for Change to Action Item
							Technical	Financial	Technical Financi	ial	
Priority	y Initiative 1: Commu	unications and Outreach	1								
Section 2	, State Action, Numeric Co	mmitments									
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/Conservan cies, PA Farm Bureau	Chesapeake Bay	December 2025						
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/Conservan cies, 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.					
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.					
2.1.1F	Implement a comprehensive communication/outreach strategy to engage farmers/landowners in	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.	PA Bay-Wide	By 2022	Coordination, scheduling, lack of funding for marketing/communi cations/outreach/e ducation, etc.					

	planting and maintaining										
	riparian forest buffers.										
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.	PA Bay-Wide	By 2023	Brand new program- Coordination, scheduling, lack of funding, etc.					
2.1.3F	Communicate the importance and values of forests 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.	PA Bay-Wide	By 2023	Coordination, scheduling, lack of funding.					
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.	PA Bay-Wide	By 2023	Coordination, scheduling, lack of funding.					
Section 3	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	October- December 2019	Participation and engagement from Tier 3 & 4 counties. DEP/state staffing limitations	See Funding and Resources Section, Resources Needed Phase 2 columns below	See Funding and Resources Section, Resources Needed Phase 2 columns below	See Funding and Resources Section, Resources Needed Phase 2 columns below	See Funding and Resources Section, Resources Needed Phase 2 columns below	
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 February 2020 (following the completio n of Tier 2 county planning)	Regionalized planning still requires counties to submit an individual county plan. State staffing support	See Funding and Resources Section, Resources Needed Phase 2 columns below	See Funding and Resources Section, Resources Needed Phase 2 columns below	See Funding and Resources Section, Resources Needed Phase 2 columns below	See Funding and Resources Section, Resources Needed Phase 2 columns below	
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,	Tier 2 Counties	Begins July 2019	State staffing support Internal and External Coordination	See Funding and Resources Section, Resources	See Funding and Resources Section, Resources Needed	See Funding and Resources Section, Resources Needed	See Funding and Resources Section, Resources Needed	

3.1.4	Seek staffing to support	An external coordinator will	Communication and Engagement Workgroup, External Contractor DEP, Technical	Pilot	Begins	State staffing	Needed Phase 1 & 2 columns below See	Phase 1 & 2 columns below See Funding	Phase 1 & 2 columns below See Funding	Phase 1 & 2 columns below See Funding	
	this large-scale coordination and support effort.	work one on one with the pilot counties to begin the implementation of their countywide action plan.	Coordinator, Bay office, Agencies Outreach, Communication contractor, Communication and Engagement Workgroup, External Contractor	Counties	July 2019	support Internal and External Coordination	Funding and Resources Section, Resources Needed Phase 1 columns below	and Resources Section, Resources Needed Phase 1 columns below	and Resources Section, Resources Needed Phase 1 columns below	and Resources Section, Resources Needed Phase 1 columns below	
Section 1	LO, Communication and Eng	gagement Strategy									
10.1.1	Complete the public comment period and provide a response to comments received.	Comment Response Document will be attached to the final Phase 3 WIP	DEP CBO		August 2019						
10.1.2	Develop the outreach materials, webinars, templates for letters and mailings and success stories identified by the Communications and Engagement 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			
10.1.3	Finalize the DEP Webbased StoryMap.	Final StoryMap	DEP Communication Office		Summer 2019			\$20,000			
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						
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						

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Duianit	. In this time 2. From alice	a and Dasayman							
	y Initiative 2: Fundin								
2.2.1	Pass legislation providing a funding source or combination of funding sources for the implementation of the Phase 3 WIP.	tic and Narrative Commitments	PDA, DCNR,DEP, State Legislature, Governor's Office		2019- 2020 Session				
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				
	2, State Action, Numeric Co		DDA CCC DED	Counting that	Docomba	Conital investment			
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	Counties that are identified to have excess manure generated for crop need		Capital investment and cost effectiveness is of concern.			
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, and private programs (esp. underutilized programs such as REAP).	DEP (GG, 319), UDSA (CREP+), SCC (REAP), DCNR (C2P2) TreePennsylvania (TreeVitalize) CBF (K10), etc.	PA Bay-Wide	By 2025	Rigid programs, existing restrictions, coordination, lack of understanding about all individual programs, etc. Lack of funds to start a new program.			
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.	PA Bay-Wide	By 2022	Coordination, scheduling, lack of funding.			
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,	All agencies and partners	Bay	Ongoing/ ASAP	Innovation, Funding, Coordination, etc.			

		etc. Streamline funding source							
		similar to DCNR's NFWF-							
		Funded Stream ReLeaf							
2.2.4F	Ensure that riparian	program. Develop a Riparian Forest	All agencies and	PA Bay-Wide	Ongoing	Lack of interest in			
2.2.46	forest buffers are	Buffer Maintenance funding	partners involved	PA Bay-vviue	Origoning	funding			
	adequately maintained	source to create the capacity	in riparian forest			maintenance from			
	to ensure survival by	for NGOs to develop their	buffer			traditional funding			
	developing a Maintenance funding	own maintenance programs for new and already-	implementation			sources as it does not result in "new"			
	source for NGOs to	implemented buffers (up to 5				load reductions.			
	develop their own	years after initial planting).							
2.2.5F	maintenance programs. Continue and Increase	Utilize and increase funding	DCNR, Tree	PA Bay-Wide	Ongoing	Current Funding			
2.2.31	Urban Tree Canopy	available through the	Pennsylvania,	TA Bay Wide	Origonia	does not meet			
	Grants to Communities	TreeVitalize annual grant	PRPS			demand. Processes,			
	and non-governmental	program. Encourage tree				procedures, and			
	organization Partners	planting and/or conservation of existing tree canopy in				administration.			
		existing DCNR Grant							
		programs, other agency grant							
		programs as appropriate (grants to community parks,							
		etc.) Connect this work to							
		DCNR's Climate Plan.				6.1.			
2.2.6F	Leverage existing funding sources for Stream and	Explore potential to improve leveraging of EQIP, CFA and	DEP, NRCS, SCC, NGOs, DCNR,	PA Bay-wide	Ongoing	Strict program regulations, lack of			
	Wetland Restoration.	REAP programs to support	Universities, etc.			knowledge about			
		creditable/conforming stream				existing programs			
		and wetland restoration implementation, management				and creditable BMPs, etc.			
		and monitoring.				Divir 3, etc.			
2.2.7F	Develop funding	Include Conservation	DCNR,	Bay-wide	By 2021	Time, finding			
	opportunities for turf conversion programs.	Landscaping as an eligible BMP in existing conservation	TreePennsylvania, TreeVitalize, DEP,			funding sources, etc.			
	conversion programs.	grant programs. Seek new	etc.			Ctc.			
		innovative funding sources							
		and mechanisms. Explore funding opportunities tied to							
		flood mitigation.							
2.2.8F	Continue to implement	Identify areas that would	DEP, CDs,			Capital investment			
	stream restoration, emphasizing creditable,	benefit from Legacy Sediment Removal and Ecosystem	Watershed			for design/implementat			
	load-reducing projects.	Restoration throughout	Organizations, Private sector			ion is of concern.			
	Pair stream restoration	priority areas of the	companies or			_			
	projects with tree	watershed	NGOs working on						
	planting BMPs whenever possible. Identify areas		remote sensing tools						
	that may have a high								
	cost-to-benefit ratio for								
	load reductions from legacy sediment removal								
	regacy scannent removal		<u> </u>						

	1		T			1	ı		
	and associated								
0 .: 0	ecosystem restoration.								
	3, Countywide Actions	5 to a distribution of the	050	D	Di 4	Chalanda (Cha	~ 1	-	l
3.2.1	Phase 1 (Pilot and Tier 2	External coordinating staff	DEP	Bay counties	Phase 1:	State staffing	Total:	Total:	
	counties):	would be assigned to			Begins in	support	21 –	21 –	
	Provide 8 – Community	individual Tier 1 & 2 counties	External		July 2019		Community	Community	
	Clean Water	in phase 1, and to regionalized	Contractor			Internal and	Clean Water	Clean Water	
	Coordinators (External	Tier 3 & 4 counties in phase 2.			Phase 2:	External	Coordinator	Coordinators	
	Full Time position)	External Coordinators would	County Planning		Begins in	Coordination	s (External	\$2,100,000	
		be DEP contractors reporting	Offices		February		Full Time	(\$100,000 per	
	Phase 2 (Tier 3 & 4	to the DEP Internal			2020		position)	coordinator)	
	counties):	Coordinators. Serve as the	County				Phase 1:	Phase 1:	
	Provide 13 – Community	point of contact to their	Conservation				8 –	8 –	
	Clean Water	assigned county(ies). They	Districts				Community	Community	
	Coordinators (External	would support county efforts					Clean Water	Clean Water	
	Full Time position)	to develop and implement	Other County				Coordinator	Coordinators	
		countywide action plans.	Partners				s (External	\$800,000	
							Full Time)	Phase 2:	
							Phase 2:	13 –	
							13 –	Community	
							Community	Clean Water	
							Clean Water	Coordinators	
							Coordinator	\$1,300,000	
							s (External		
							Full Time)		
3.2.2	Phase 1:	Internal Coordinators: Would	DEP		Phase 1:	State staffing	Total:	Total:	
	Provide 3 – Community	be DEP employees. Internal			Begins in	support	10 –	10 –	
	Clean Water Coordinator	Coordinators would serve as			July 2019		Community	Community	
	(Full Time Internal	the point of contact and			·	Internal and	Clean Water	Clean Water	
	Coordinator Position)	provide WIP coordination for			Phase 2:	External	Coordinator	Coordinator	
	·	DEP and all other state			Begins in	Coordination	(Full Time	\$1,000,000	
	Phase 2:	agencies for external			February		Internal	(\$100,000 per	
	Provide 7 – Community	coordinator and technical			2020		Coordinator)	coordinator)	
	Clean Water Coordinator	coordinators.					Phase 1:	Phase 1:	
	(Full Time Internal						3 –	3 –	
	Coordinator Position)						Community	Community	
							Clean Water	Clean Water	
							Coordinator	Coordinator	
							(Full Time	\$300,000	
							Internal	Phase 2:	
								7 –	
							Phase 2:	Community	
							7 –	Clean Water	
							Community	Coordinator	
							Clean Water	\$700,000	

						Coordinator		
						(Full Time		
						Internal		
						Coordinator)		
3.2.3	Phase 1:	Technical Coordinator: A DEP	Technical	Phase 1:	State staffing	Total:	Total:	
	Provide 2 – Clean Water	contractor reporting to the	Contractor	Begins in	support	10 – Clean	10 – Clean	
	Technical Assistance	DEP Internal Coordinator. The		July 2019		Water	Water	
	Coordinators (Full Time	Technical Coordinator would			Internal and	Technical	Technical	
	Technical Coordinator	be responsible for: for		Phase 2:	External	Assistance	Assistance	
		providing information and		Begins in	Coordination	Coordinator	Coordinators	
	Phase 2:	facilitation of planning tools		February		s (Full Time	\$900,000	
	Provide 8 – Clean Water	through the planning and		2020	Technical	Technical	(\$90,000 per	
	Technical Assistance	implementation process,			coordinators will	Coordinator)	coordinator)	
	Coordinators (Full Time	assist with reporting and			have varied	Phase 1:		
	Technical Coordinator	tracking of milestones annual			workloads.	2 – Clean		
		progress, assist in model runs				Water		
		for plan development and				Technical		
		during annual milestone				Assistance		
		updates.				Coordinator		
						s (Full Time		
						Technical)		
						Coordinator		
						Phase 2:		
						8 – Clean		
						Water		
						Technical		
						Assistance		
						Coordinator		
						s (Full Time		
						Technical		
						Coordinator)		
3.2.4	Phase 1:	Facilitation Coordinator: A	Facilitation	April	State staffing	1 – Clean	1 – Clean	
	Provide 1 – Clean Water	DEP contractor reporting to	Coordinator	2019.	support	Water	Water	
	Facilitation Coordinator	the DEP Internal Coordinator.				Facilitation	Facilitation	
	(Full Time Facilitation		DEP		Internal and	Coordinator	Coordinator	
	Coordinator Position)				External	(Full Time	\$100,000	
					Coordination	Facilitation		
						Coordinator)		
3.2.5	Phase 1:	Outreach Coordinator: A DEP	Outreach	April	State staffing	1 – Clean	1 – Clean	
	Provide 1 – Clean Water	contractor reporting to the	Coordinator	2019.	support	Water	Water	
	Outreach Coordinator	DEP Chesapeake Bay Office, in				Outreach	Outreach	
	(Full Time Outreach	coordination with WIP	DEP		Internal and	Coordinator	Coordinator	
	Contractor)	Communication and			External	(Full Time	\$100,000	
		Engagement Workgroup and			Coordination	Outreach		
		DEP Communication Office.				Contractor)		
						<u> </u>		

Priority	/ Initiative 3: Expand	ing Capacity for Technic	cal Assistance						
Section 2	, State Actions, Programma	atic and Narrative Commitment	s						
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.	DEP, Pennvest	Lancaster and York	RFP done Summer 2019 Pilot done Summer 2021				
Section 9	, Climate Change						<u>'</u>		
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	December 2019				
Section 2	, State Actions, Numeric Co	ommitments					·		
2.3.1A	Initiate Implementation of Pennsylvania's Agriculture Conservation Stewardship Program	Finalize draft program guidance, application, and onfarm assessment tools; 3 rd party verification process, pilot program; and release program for initial implementation	Certified Third Parties, CDs, DEP, SCC, PDA	Chesapeake Bay	January 2020				
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				
2.3.3A	Implementation of Animal Waste Management Systems	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.			
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	January 2020	_			
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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.	PA Bay-wide	Ongoing	Funding, overhead, space, capacity, available candidates, onboarding process, hiring process, etc.		
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.	PA Bay-wide	Ongoing	Funding, overhead, space, capacity, available candidates, onboarding process, hiring process, etc.		
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.		
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.		
2.3.5F	Look into feasibility of expanding 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	Hiring additional staff for PFBC.		

2.3.15	Complete revisions to the Pennsylvania Stormwater BMP Manual		DEP, Villanova University and subcontractor	Statewide	2021	Villanova University			
Priority	/ Initiative 4: Reporti	ng and Tracking		I					
Section 2	, State Actions, Programma	itic and Narrative Commitment	S						
2.4.1	Pass legislation to revise Pennsylvania's Right to Know Law to allow for additional confidentiality of landowner records.				2019- 2020 Legislative Session				
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				
2.4.3	Release a request for proposals for a contractor to begin the pilot project for the use of Lidar and remote sensing technology to identify BMPs installed for the control of stormwater as part of development activities.		DEP, DCNR	Chesapeake Bay	January 2020				
2.4.4	Continue enhancements to PracticeKeeper.		DEP	Statewide					
2.4.5	Finalize the revised draft Pennsylvania BMP Verification Plan and receive EPA's approval of the plan.	Implementation of a final approved plan.	DEP and approved verifiers	Chesapeake Bay	Begin Summer 2019				
2.4.6	Work with the EPA 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.	DEP, Bay Program Partnership		January 2022				
2.4.7	Install additional monitoring station(s) and begin to collect "realtime water quality data on the Susquehanna River to further document the story of progress made by Pennsylvania's efforts to	Monitoring station(s) and water quality results.	DEP Bureau of Clean Water	Susquehanna River	January 2021		1 person	\$600,000	

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	restore local streams and										
	the Chesapeake Ba as										
	part of implementation										
0	of the Phase 3 WIP										
	2, State Actions, Numeric Co	pmmitments					1	1	I	I	
2.4.1A	Work with the		DEP, PDA, SCC	Januar		Buy in from the					
	Chesapeake Bay Program			2021		Chesapeake Bay					
	Partnership to establish a					Program					
	creditable practice or				P	Partnership					
	combination of practices										
	for implementation of										
	advanced soil health										
	strategies or plans on farms in the Chesapeake										
	Bay Watershed Model for										
	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	Assess and report	PDA, Dairy Co-	Decem	iber V	Voluntary program.					
	precision feeding	implementation of dairy	ops, PACS	2025	N	Need to have the					
		precision feeding for 175,000	Program, Dairy			ability to track and					
		Animal Units (approximately	Nutritionists, PA			report what dairy					
		152,000 milking cows)	Dairyman's			farmers are already					
			Assoc., CDs, NRCS			doing.					
2.4.3A	Expand reporting of	64,640 acres with no manure	4R Nutrient	Decem		Voluntary program.					
	Enhanced Nutrient	applied would be managed	Stewardship	2025		Need to have the					
	Management	based on a nitrogen and	Alliance, PACS,			ability to track and					
		phosphorus based nutrient	CCAs, CDs, SCC,			report what farmers					
		management plan;	DEP		a	are already doing.					
		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									

2.4.4A	Expand reporting of grass buffers	requirements as well as supplemental practices based on rate, timing, and placement for nitrogen and phosphorus 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			
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.			
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.			
2.4.15	Collect Municipal Separate Storm Sewer System (MS4) BMP data using the new reporting system for electronic submission for annual reports	Complete reporting system by July, 2019, Enhancements to the system through 2020	Penn State, DEP, MS4s	Statewide	2020		EPA grant funding		
2.4.2\$	Initiate and collect stormwater BMP data from other DEP programs implementing provisions of the Chapter 102 regulations.								
2.4.1W	Explore the feasibility of developing a GIS based online monitoring and		DEP						

			I	I		I					
	reporting program that municipalities can use to										
	report on-lot system										
	operation and										
	maintenance.										
Section 3	Section 3. Countywide Actions										
3.4.1	Track and report progress	Development of Countywide	DEP, Local	All Counties	Phase 1	State staffing					
0	in Phase 3 WIP planning	Action Plans (CAPs) in all	planning leaders,	in CBWS	Begins	support					
	and implementation in all	counties in Pennsylvania's	External	III CDVV3	July 2019	зарроге					
	•	·	Coordinators		-	Internal and					
	counties.	Chesapeake Bay Watershed.			Phase 2						
					Begins	External					
					Feb 2020	Coordination					
3.4.2	Update reductions in the	Completion of Countywide	DEP, Local	All Counties	Phase 1	State staffing					
	County Planning Progress template upon	Action Plans (CAPs) in all counties in Pennsylvania's	planning leaders, External	in CBWS	Begins	support					
	completion of each	Chesapeake Bay Watershed.	Coordinators		July 2019						
	county plan.	chesapeake bay watershea.	Coordinators			Internal and					
	ν μ					External					
						Coordination					
3.4.3	Track and report progress	Completion of Countywide	DEP, Local	All Counties	Phase 2	State staffing					
	to continue	Action Plans (CAPs) in all	planning leaders,	in CBWS	Begins	support					
	implementation of the	counties in Pennsylvania's	External		Feb 2020						
	Phase 3 WIP State	Chesapeake Bay Watershed.	Coordinators			Internal and					
	Numeric Commitments described in Section 4,					External					
	State Actions in the					Coordination					
	counties with minimal										
	reductions.										
Priority	/ Initiative 5: Complia	ance		'				'			
	•	itic and Narrative Commitments	•								
2.5.1	Pass the Fertilizer Bill to				2019-						
2.3.1	achieve the identified				2019-						
	nutrient reductions on				Legislative						
	urban and agriculture				Session						
	lands.										
2.5.2	Review, consider and	Incorporate revised P index	SCC, Penn State,	Statewide	July 2020						
	potentially incorporate a	tool into future nutrient	DEP, NRCS								
	revised Phosphorus Index	management planning efforts									
	into the planning	where approved for use									
	requirements for land										
2.5.3	application of biosolids. Develop State Agency	Completed State Agency	DEP, DCNR, Other	Watershed-	January						
2.5.5	nutrient reduction	Action Plans for the reduction	Agencies	wide	2021						
	planning goals and the	of nutrients on lands owned	responsible for	Wide	2021						
	associated Action Plans	and operated by state	the management								
	for meeting those	agencies.	of state lands,								
	planning goals for the	_	Governor's Office								
	installation of practices										
	on lands owned and										
	maintained by state										
	agencies.										

2.5.1A	Implement NPDES	Permit 100% of all CAFOs	DEP								
2.3.10	Concentrated Animal Feeding Operation (CAFO) Program Delegation	(350+ operations in Chesapeake Bay Watershed); Inspect 20% of all permitted CAFO operations annually, per CMS	JEI .								
2.5.2A	Complete complaint follow-up for CAFO and non-CAFO facilities		DEP, SCC, CDs								
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. 50 inspections will be performed per CD Bay Technician; 100 inspections will be performed per DEP Regional Office Water Quality Specialist per year.	DEP, CDs	Chesapeake Bay	Ongoing						
2.5.4A	Implement Chesapeake Bay Agriculture Inspection Program, Phase 2, with an emphasis on meeting both state planning and implementation requirements on non- CAFO operations.		DEP, SCC, CDs, NRCS, Private Consultants	Chesapeake Bay	Ongoing	Available funding for Technical Assistance and construction of BMPs remains a concern.					
2.5.15	Complete the Pollutant Reduction or Total Maximum Daily Load Plan Reviews for the 2018 Municipal Separate Storm Sewer System (MS4) permits	Complete technical review and issue permits	DEP, MS4 permittees	Statewide	2019	MS4s not addressing DEP review comments, staff shortages	Existing DEP regional office staff	-	Additional DEP regional office staff	-	
2.5.2S	Develop the 2023-2028 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						
2.5.3\$	Develop the Industrial Stormwater Permit		DEP	Statewide	2019 through 2021						
2.5.4\$	Develop of 2019-2024 Construction Stormwater Permit		DEP	Statewide	2019						

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).