	Phase 3 Water	rshed Implementatio	n Plan (WIP) P	rogress and 2	Year Milesto	nes Report- Adams	County 12/0)2/2024			
	<u>Green</u> - action ha	s been completed or is mo	oving forward as p	lanned <u>Yellow</u> -	action has enco	untered minor obstacles	Red - action	has not been t	taken or has enco	untered a serious b	arrier <u>Highlight</u> changes for 2023-2024 milestone period
Action #	Description	Performance Target(s)	Responsible Party(ies) and Partnerships	Geographic Location	Expected Timeline	Potential Implementation Challenges or Recommendations	Resources	<u>Available</u>	Resourc	es <u>Needed</u>	2020-2023 Progress to Date 2023-2024 Milestone Changes to Action Items (highlighted)
							Technical	Financial	Technical	Financial	
Priori	ty Initiative 1: Re	porting and Tracki	ng	•							
1.1	Initiate additional water quality monitoring sites that promote long-term trend evaluation at key locations in Adams County	Additional sites as needed to evaluate Adams County progress as well as progress for specific land uses or projects in the county Additional monitoring capabilities needed at monitoring station at East Berlin and Bridgeport Stations to analyze nitrogen and phosphorus Increase technical capacity to be able to evaluate loading trends Work w/ state so citizen stream monitoring data can be		Adams County	2025	Additional funding and coordination with USGS	*	cost savings may be realized if existing stations can be upgraded where possible	Year 1 equipment cost/setting up East Berlin & Bridgeport to collect N &P Annual costs maintaining equipment, developing regression models, calibration, displaying on the web	\$75,000/yr per site East Berlin & Bridgeport	 Still no significant funding towards monitor upgrades, and costs for such upgrades continue to rise. WACC volunteers continue water testing in local streams. Still no significant funding towards monitor upgrades, costs have only gone up since these initial estimates. WACC volunteers still continue local water testing throughout the county. 2022 Still not significant funding available for the monitor upgrades, which will be a significant cost. Still working with WACC volunteers doing water testing throughout the county.
		It is important to monitor implementation									 Discussions were held with USGS about installing the two monitors at the location listed. However, project ran into significant funding barriers.

		progress in terms of water quality, not just using the model							 DEP discussed the idea of SRBC getting more into water nutrient monitoring. Staff will be partnering with local WAAC volunteers to do targeted water monitoring in the Conewago Watershed. 2020 Reached out to York County to discuss how they pursued nutrient monitoring in their County. York County Commissioners agreed to a cost sharing agreement with USGS. Received information and will be reaching out to USGS to begin the conversation. Adams County has not found the same funding source that was utilized in York County.
1.2	Improve data collection on urban non-structural practices	Chapter 102 provide more credit for non-structural practices.	ACOPD, Conservation District, DEP, developers, municipalities	Adams County	Ongoing	Long-term compliance. Maintaining accurate BMP inventory.	*	*	 Some BMPs are being tracked when the Conservation District receives Notice of Termination (NOT) forms for National Pollutant Discharge Eliminations System (NPDES) sites. E&S Staff are evaluating using Practice Keeper and database for new E&S/NPDES Plan submissions. E&S staff have come to CAP Coordinator with potential projects found through site inspections. Some BMPs are being tracked when the Conservation District receives Notice of Termination (NOT) forms for National Pollutant Discharge Eliminations System (NPDES) sites. E&S Staff are evaluating using Practice Keeper and database for new E&S/NPDES Plan submissions. E&S staff have come to CAP Coordinator with potential projects found through site inspections.

									<u>2022</u>
									 Some BMPs are being tracked when the Conservation District receives Notice of Termination (NOT) forms for National Pollutant Discharge Eliminations System (NPDES) sites. E&S Staff are evaluating using Practice Keeper and database for new E&S/NPDES Plan submissions.
									2021Some BMPs are being tracked when the
									Conservation District receives Notice of Termination (NOT) forms for National Pollutant Discharge Eliminations System (NPDES) sites.
									 Some municipalities are beginning to implement on property BMP inspections. 2020
									Some BMPs are being tracked when Conservation District receives Notice of Termination forms (NOT) for National Pollutant Discharge Elimination System
									 (NPDES) sites. Coordinator/Urban Team can work with Municipalities to track non-structural BMPs through Field Doc.
1.3	Implement a documentation program for commercial and homeowner nutrient applications in developed lands	Required Urban Nutrient management plans	DEP, SCC, Landscape Industry	Statewide	2020	Commercial and * home use of nutrients should be evaluated in the CAST model, more data are needed on current application levels.	* *	*	 Z024 Template for Urban Nutrient Management has been established, working on gauging interest. However, interest has been sparse from most entities.
						ieveis.			<u>2023</u>
									 Coordinator and DEP have worked out a template to be used for Urban Nutrient Management
									We have gotten some interest from the Gettysburg National Park in writing an

								Urban Nutrient Management plan. Golf courses, small landowners, and schools
								have been less interested.
								<u>2022</u>
								 Still working with DEP on templates for Urban Nutrient Management Plans (Homes, Golf Courses, Schools, Parks, etc). Looking at utilizing a template for Urban Nutrient Management Planning used by Virginia National Parks, hoping to work with Gettysburg National Park on this
								effortLegislation has been passed regardingUrban Nutrient Management.
								<u>2021</u>
								 Statewide Urban Nutrient Management Legislation has been introduced but will need to be passed to see benefits. 2020
								 Senate Bill 915- Introduces statewide nutrient standards. It's good that this bill has been introduced, but we need it passed for us to see benefit from it.
1.4	Establish baseline of	Develop/implement a	DEP Adams County	Ongoing	Verification of *	* *Staffing	*	<u>2024</u>
	current practices	process for capturing current agricultural best management practices that are unreported	and Statewide		BMP's is time intensive. Identify the types of unreported, currently installed			 Have not attempted to discuss Precision Dairy Feeding with DEP or SCC in the last year. Adams County partnering with Franklin and Cumberland Counties as well as Capital RC&D and the Alliance for the Bay on a NFWF funded BMP Re-verification
		Create a systematic process and database			BMPs that would provide significant			program. This project is also looking to
		for inventorying			credit if verified.			install new BMPs.Adams County worked with an Ag BMP Re-
		stormwater management practices and facilities in MS4 and non-MS4			Focus on verifying those BMPs.			verification tech last year with funding provided through DEP and would be interested in participating again.
		municipalities			Privacy concern			

	<u>2023</u>
	 Very little progress to date on Precision Dairy Feeding still attempting to work with SCC/DEP on verification methods Adams County partnering with Franklin and Cumberland Counties as well as Capital RC&D and the Alliance for the Bay on a NFWF funded BMP Re-verification program. This project will also look to install new BMPs. Adams County worked with an Ag BMP Re- verification tech this year with funding provided through DEP.
	<u>2022</u>
	 No progress has been made on Precision Dairy Feeding. Adams partnered with Franklin and Cumberland Counties, as well as Capital RC&D on a NFWF Grant to fund a BMP Reverification program. Coordinator is assisting with Ag Plan entry on Practice Keeper. Adams County applied for Ag BMP verification assistance through CB Tech application. Manure Incorporation is now verifiable/reportable in Practice Keeper.
	<u>2021</u>
	 Coordinator's job is not necessarily to do verification, additional staffing could be helpful in this regard. Many BMPs are falling out of practice and are not able to be reverified for various reasons. DEP/Bay Program still unsure of verification on many BMPs such as Manure Incorporation and Dairy Precision Feeding. Coordinator is discussing a verification program with other county coordinators.

	However, there are issues such as practice
	keeper access and funding.
	<u>2020</u>
	Coordinator is working with DEP to
	develop standards verifications processes
	and standards.
	Coordinator sharing DEP/EPA acceptable
	reporting methods with planning team.
	Working with technical team to help
	develop new verification standards for
	Precision Dairy Feeding.
	DEP is unsure of how to verify Manure
	Incorporation and Dairy Precision Feeding.
	Coordinator role is not necessarily help
	with verification of practices.

Establish a set of	BMP Implementation	ACOPD,	Adams County	2025	There are	Resources	Resources	Substantial	Substantial	<u>2024</u>
BMPs that will achieve		Conservation			considerable	available for	available	staffing and	staffing and	Technical Appendix continues to be share
desired pollutant		District, NRCS,			resource	implementati	for	technical	technical	with new partners and local events,
reductions in an		Municipalities,			limitations to	on of existing	implement	resources will	resources will	meetings, and site visits.
efficient and cost-		DEP, EPA,			implement BMPs	programs	ation of	be needed to	be needed to	 Priority continues to be buffers and stream
effective manner		Stakeholders			as described		existing	fully	fully	restoration work as there is a lot of need
					throughout this		programs	implement	implement the	for that kind of work in Adams County.
					template.			the proposed	proposed	•
								BMPs	BMPs	<u>2023</u>
										Technical Appendix continues to be share
										with new partners and local events,
										meetings, and site visits.
										 Priority continues to be buffers and stre
										restoration work as there is a lot of need
										for that kind of work in Adams County.
										<u>2022</u>
										Technical Appendix continues to be share
										at local events and meetings.
										Buffers and Advanced Nutrient
										Management continue to be priority
										projects, Adams County is also moving in
										Ag Plan entry and a potential BMP re-
										verification program (Pending funding).
										<u>2021</u>

											 Technical Appendix has been shared with staff, and many local partner organizations. Priority projects continue to be Buffers (both Ag and Urban), Advanced Nutrient Management, and Stream Restoration (both Ag and Urban). Dairy Precision Feeding and Manure Incorporation will be priority once verification methods are understood. 2020 Set of BMPs has been compiled into a technical appendix, which is being evaluated by the Conservation District Staff (See Attached) Prioritizing BMPs based on our resources and county needs. Working with private sector to accomplish our county goals. Buffers continue to be a priority, as does Advanced Nutrient Management. 	
2.2	Identify key areas for installation of BMPs with greatest net effect on nutrients	Complete GIS analysis to identify priority areas. Support legislation as necessary to achieve reductions that make the most economic	ACOPD, Conservation District, DEP, WAAC, ICPRB, SRBC	Adams County	2025	This information is needed to prioritize key areas. Landowner buy-in.	GIS expertise	Resources available for ongoing GIS analyses	Technical resources needed to complete GIS analysis	Funding needed for staff time and/or funding for external organization to conduct analysis	 Multiple projects occurring in Opossum Creek, one of our priority watersheds. As of now the District is working with whoever comes to us with projects, rather than prioritizing watersheds as we have are not in a position to have to prioritize partners. 	r
		sense.									 Continue to identify projects in or below HQ/EV streams to be able to have quicker upgrade results. 	
											 Continue to identify projects in or below HQ/EV streams to be able to have quicker upgrade results. Coordinator looking to partner with Chesapeake Conservancy to work on 	
											 watershed prioritization	

2.4	Conduct pilot studies to identify and/or	Investigate opportunities to	DEP, Penn State, NRCS, Conservation	Adams Count, Statewide	2020/Ongoing	Financial and technical resources will be needed but	*	*	*	
2.4	Conduct wilet 1 11	In a phire he	DED Davis	Adams Court	2020/0	Financial and	*	*	* *	
										2020This has not yet been addressed.
										growing industry.
										 Held a meeting with Penn State Extension to begin working on new BMPs for the fruit
										<u>2021</u>
										Chesapeake Conservancy to work on watershed prioritization
										industry.Coordinator looking to partner with
										Extension on Nutrient Management opportunities within the Fruit Growing
										Continuing to work with Penn State
										<u>2022</u>
										Looking into potential for erosion control on orchard roads
										in the fruit growing industry did not reveal many opportunities for projects and BMPs.
										Our discussions with experts and operators
		nutrient reductions								<u>2023</u>
	enhance BMP's	improvements to practices to enhance nutrient reductions	Conservation District	Statewide		funding remains a challenge.				control projects in local orchards.
2.3	Evaluate new technologies to	Identify additional technology or	DEP, Penn State, NRCS,	Adams County,	2020/Ongoing	Farm operator buy- in as well as	•	T	*	2024ACAP Money is being used to fund erosion
			252.2		2022/0		.	*	* *	
										the heaviest loading areas to prioritize.
										 Working with ICPRB to evaluate ground water/stream nutrient data to determine
										watersheds. 2020
										 Coordinator has also started putting together landowners lists for other priority

	confirm efficiency of	improve efficiency of	District, Private			will not be able to					<u>2024</u>
	practices.	BMP's	Sector			be specified until pilots are introduced					 Coordinator is looking into the idea of a pilot study involving urban nutrient management.
						Landowner participation will be crucial					 Z023 The Rosetree Project was relatively successful. There were serious communication issues with Rosetree as well as missed deadlines.
											 The Rosetree Project has been fairly successful throughout the county and is something the Conservation District may look to expand on this program.
											<u>2021</u>
2.5				Chahanida	2040/00		*	*		*	 Contracted with Rosetree Consulting to test the efficiency of Advanced Nitrogen Management programs.
2.5	Provide support for necessary legislation and regulatory changes.	Support legislation and regulatory and policy changes that will support county initiatives. Support legislation for		Statewide, Adams County	2019/Ongoing	Support legislation and regulatory and policy changes that will provide the ability to utilize new and proven technology to reduce pollutant	*	*	*	*	Legislative video presentation was sent to legislator. However, beyond this county employees are not really supposed to advocate or support specific legislations.
		urban nutrient				levels.					<u>2023</u>
		management that will establish requirements									 Legislative video presentation was sent to local legislators and has also been posted

	for the application of fertilizer for commercial operations (including golf courses) and homeowners.				Support establishing requirements for urban nutrient management including planning for commercial operations (including golf courses) and homeowners regarding the application of fertilizer.			on our new/updated Conservation District Website. 2022 Coordinator recorded video presentation that was sent to local and state legislators. This video discussed potential legislative changes, and issues that legislators at both levels could assist with. 2021 Once the Legislative/Policy Team is fully established, legislative support will be their role. Supporting legislation could also be done by local groups such as ACTU and WAAC. 2020 Urban Nutrient Management legislation introduced, however it must be passed in order to see benefit. Looking for partners to support legislation, working with Policy/Legislation Team, which will include local legislators.
2.6 General Challenges with BMP implementation		Conservation District, NRCS, DEP, Army Corps, PDA, SCC, PAFB, FWS, PGC, NPS, landowners, Municipalities	Statewide	2019	Reduce administrative burdens of permits and current funding to better utilize our current resources: Simplify Chapter 105 permitting and create block grants for BMPs fixing existing resource concerns. Allow for MS4's to install BMPs outside of their MS4 area	\$15	50,000/yr	 Chapter 105 permits remain an extremely time consuming and burdensome process. Moving to a strictly electronic version has made the process even more complicated. Positions within the district have been shuffled around to create a new ACAP Coordinator position to handle the ACAP funding (again). Flexible block funding offered by DEP continues to be very helpful, it would be great to see this simplicity expand to other funding sources and permitting programs. Chapter 105 permits remain an extremely time consuming and burdensome process.

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annual/periodic sources and permitting programs.	'6
BMPs and 2021	
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Little progress has been made on I	
permitting process and it remains to	
containing surder	
Vermeation processes for many biv	
support. unknown, Coordinator continues to	work
with DEP and others on this issue.	
MS4s now have a 1-mile buffer rad	ıs to
Identify perform work outside their MS4 zo	e.
mechanism and ■ DEP, and other programs have offer	≥d
party to verify flexible block grants that have prov	n to
BMPs. be helpful.	
2020	
Getting proper • Permitting, specifically 105 is still a	orv
credit for current	
time-consuming burden, Conservation	

					BMPs if there is value. Need ability to implement BMPs on Nation Park Service property.			•	District staff have reached out to chapter 105 program and taken members of 105, and Bay Office to tour sites. Multiple meetings have been held on this topic with little progress being made. No funding for new Ag-Techs. Verification processes for many BMPs still. unknown, but Coordinator is working with DEP on this issue. MS4s now have a 1-mile buffer radius, a step in the right direction. CBF has offered a flexible buffer grant. Bay Office has offered block grants, and we have applied for funding through these grants. Continuing to have conversations with the Bay Office about 105 permitting. Partners in Adams County have applied for and received buffer resources through CBF.
2.7	Soil Health	High Residual Till - 55,000 acres annually	Conservation Adams County District, NRCS, RC&D, DEP,	2025	Need dedicated source of funding for Cover Crops.	verification of practices	\$1,800,000/yr for cover crops (\$45/acre)	•	2024 More staff required for a significant advancement in plan writing. Adams
		Conservation Till - 13,000 acres annually Cover Crop - 30,000 acres annually Cover Crop w/Fall Nutrients — 10,000 acres annually	PDA, SCC, Plan Writers, landowners and operators		Mechanism/staff to verifying plans and annual practices.		(verification cost not included) \$1,010,000 Ag		County does not have a designated plan writer, and private sector often has a packed schedule. NRCS funds continue to help fund many of these projects. See Practice Keeper/Field Doc for specific metrics.
		Prescribed Grazing – 3,500 total acres Soil Conservation/Water Quality Plans – 101,000 acres annually			Weather and soils severely impact feasibility of implementation.	Verification of plans	E&S plans (\$500 plan/50 acres) (verification of plans not included)	•	2023 District is looking at using ACAP to fund a temporary cover crop program in Adams County. However, the same issues
		Manure Incorporation – 10,000 acres annually			Determine where and how vertical tillage can be used in a farmer's conservation plan and for		тои че иј		(weather, timing of harvest, etc) will continue to affect these numbers. Coordinator participated in the RC&D Cover Crop Survey this year. More staff required for a significant advance in plan writing. Adams County does not have a designated plan writer.

incorporating	NRCS continues to help fund many of
manure.	
manure.	these projects • See Practice Keeper/Field Doc for BMP
	details
	2022
	2022
	Many issues can affect cover crop numbers
	that are beyond our control, (Weather,
	timing, etc.)
	The benefits of cover cropping are well understood by the Ag Community in
	understood by the Ag Community in
	Adams County. A more permanent funding source will be needed to
	consistently see higher numbers. This
	suggestion comes from Ag staff, and local
	farmers from our Cover Crops Advisory
	Team.
	 Only significant way to accelerate BMP implementation is through more staffing,
	and an increase in flexible grant funding.
	More staff also required for a significant
	advance in plan writing. Adams County
	does not have a designated plan writer.
	Coordinator is entering backdated plans into Practice Keeper
	into Practice Keeper.
	Manure Incorporation is now a reportable RMB in Practice Keeper
	BMP in Practice Keeper.
	 NRCS also helping to fund and implement these practices.
	See Field Doc/Practice Keeper for more detailed BMP information.
	2021
	To increase cover cropping in Adams County a permanent funding source is
	needed, similar to Maryland. This
	conclusion has been reached by our Ag
	staff, and our Cover Crops Advisory Team.
	Many uncontrollable issues such as timing
	and weather exist that hinder cover crop
	numbers.
	Staff is working on developing a grant-
	based cover crops program, but this
	program will be very costly to significantly
	increase numbers.
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							 Only way to accelerate BMP implementation without more staffing resources is to work with private sector on projects they implement almost completely on their own. Manure Incorporation is a BMP that Adams County wants to begin work on, but verification is not yet known. See Field Doc for more detailed BMP Numbers.
2.8 Nutrient	: Management Nutrient Management Core N&P - 104,000 N&P acres annually	Conservation Adams County District, NRCS, SCC, private agricultural	2025	Mechanism/staff Conserv to verifying annual and current can educe practices. about the recommend discrete.	staff practices cate lese ende	\$1,040,000 Ag Manure & Fertilizer plans (\$500 plan/50 acres)	• County has returned Nutrient Management Delegation to SCC. Still working to figure out other ways to accomplish these goals.

Nutrient Management contractors, Rate N&P - 10,000 N&P local farmers acres annually	Weather and soils during routine severely impact conversations feasibility of with	\$100,000/yr	See Practice Keeper/Field Doc for specific metrics.
acres annually		\$100,000/yr	
	implementation. farmers/lando		<u>2023</u>
Nutrient Management	wners		The Desetree Project was relatively
Time N&P -10,000 N&P acres annually	Wilcis	1 FTE	The Rosetree Project was relatively
acres annually	T I		successful. There were serious
	Three applications	Adams Co	communication issues with Rosetree as
	over the growing	Agronomist	well as missed deadlines.
	season rather than		 Adams County has given the Nutrient
	one impacted by		Management delegation back to SCC so we
	weather		will no longer be
			reviewing/inspecting/reporting on nutrient
			management plans as we have no one at
	Equipment to		the district to do that job.
	reduce overlap of		·
	fertilizer on fields		
	\$30K/per spreader		2022
	(not practical)		2022
	(mot practically		 Still no funding for Adams County
			Agronomist, but Conservation District has
	Currently no		been working with private sector
	·		(Rosetree) on Advanced Nutrient
	template plans for		Management.
	inorganic fertilizer		Adams County and Rosetree Consulting
	plans.		have met their acreage goals for the
			Advanced Nutrient Management program
			specified in our grant.
	Yields vary based		
	on soils and		Agriculture Conservation Assistance
	weather.		Program will be a significant source of
			funding over the next 3 years.
			<u>2021</u>
	Establishing soil		No. Co. Hard Co.
	specific, realistic		No funding for an Agronomist in Adams
	yield goals requires		County, Conservation District working with
	considerable one-		Private Sector on advanced nutrient
	on-one interaction		management to reduce the burden on CD
			Staff.
			District Staff have been working with DEP
	Several years of		on a way to implement fertilizer only plans
	results are needed		using nutrient balance sheets.
	for review and		Rosetree Consulting currently working on
	development of a		an Advanced Nutrient Management
	variable rate		program covering on numerous farms
			county wide.
	technology		2020
	program.		Verification still a hurdle.
			2 Vermediciti sun a naraic.

								 No funding for an Agronomist in Adams County, CD working with Private Sector on advanced nutrient management to reduce the burden on CD Staff. Adams County is not eligible for CEG. Private sector will provide incentive payments, and 1 on 1 consulting with landowners. Received funding through Implementation Grant for a nutrient management project in Adams County. Conservation District sending operators to states plan reimbursement program for manure management plans.
2.9	Riparian	Stream Restoration — 10,000 new linear feet Grass Buffers w/Exclusion Fencing — 200 new acres Forest Buffer w/Exclusion Fencing — 100 new acres Grass Buffers — 1,000 new acres Forest Buffers — 500 new acres Wetland Restoration — 25 new acres	Conservation District, USDA, DEP, Army Corps, DCNR, contractors, local farmers, nonprofits, PFBC, CBF, PACD, nonprofits	2025	Chapter 105 permitting a major hurdle for drainage and stream restoration projects. Prioritize grass waterways on areas of active field erosion to capture soil and nutrients and not based GIS database.	Third party maintenance of buffers	\$2,400,000 Forest buffer planting (\$4,000/ acre) \$7,150,000 Grassed buffers in eroding fields (\$6,500/ acre)	 More than 2 acres of buffer planted in partnership with the Gettysburg Municipal Authority. 4 Stream Restoration projects constructed this summer with 4 more planned for next year. Over 16,000 trees and shrubs were distributed to local landowners through the District's spring and fall Tree Distribution Events. See Practice Keeper/Field Doc for specific metrics.
					Prioritize forest buffers on 3rd order streams on agricultural lands and 1 st /2nd order in abandoned ag land. Buffers are a labor- intensive management practice.		\$937,500 fencing associated w/ buffers (\$3,125/ acre) \$880,000 stream restoration	 2 acres of buffer is being added to an existing buffer with the Gettysburg Municipal Authority, in partnership with the Alliance for the Bay. 5 Stream restoration projects being constructed this summer with CAP funds, with another 3 being explored for the future. Almost 25,000 trees and shrubs have been distributed to local landowners through the District's spring and fall Tree Distribution Events.

		(\$88/ linear ft) <u>2022</u>	
	Incentive program needed to compensate for long-term loss of crops. Remove buffered lands from tax parcels The ability to fix failing buffers is needed (e.g. stream movement over time undermines buffers and they cannot be fixed without permits	 \$156,250 wetland restoration (\$6,250/ acre) \$4,000/0.5 acre of saturated buffers \$4,000/0.5 acre of saturated buffers \$5 Ongoing stream restoration prowith more opportunities being ex One of these 5 is being constructed currently, 2 more are funded and begin construction late fall 2022, are shovel ready and looking for form over 12,000 trees will be distributed landowners at the District's Distribution Event. Over 10,000 to were distributed during the Spring Distribution Event. CAP Funds paid for a nearly 6-acre with a private landowner this sum that a private landowner this sum both Ag and Non-Ag lands. Nearly 3-acre buffer being installed. 	explored. ed d will the last 2 funding. eted to Tree trees ng Tree re buffer mmer. egoing in place on
	Need more research on value of saturated buffers.	 local business land in multiple local of some state of some	eing sident's ve been and NRCS hed for ed to downers rees
		2020	
		 Chapter 105 permitting still a maj hurdle. Coordinator working with Waters Specialist and advisory teams on a projects. 	shed

							 Over 2,000 seedlings distributed to local landowners by ACCD and partners through the CBF K10 program. 2.5 acres of new Riparian Buffer in 2020. Met with municipal engineers to discuss funding for urban stream restoration, from these meetings applied for, and received partial funding for a restoration project that will include buffers and exclusion fencing among many other BMPs. 1,000 acres of Grass Buffers, funding through EQUIP. 344 acres of Forest Buffers, many funded through DCNR, CREP, WPC, and CBF. * For Other BMP Numbers See Field Doc.
2.10	Other Ag BMPs Land Retirement – 1,500 new acres Forest Harvesting Practices – 100% Waste Storage Facilities – 4,000 new Animal Units Barnyard Runoff Controls – 15 new acres	Conservation District, NRCS, contractors, industry, local farmers, DCNR	Adams County	2025	Focus on small to mid-sized animal operations needing: well-placed fencing, dedicated sacrifice areas, and/or manure storage. Expand manure storage capacity for dairy	\$5,000,000 new waste storage (\$1,250/AU) \$1,875,000 Barnyard runoff controls (\$125,000/ acre)	 Solar is still not being counted as land retirement. 3 acres of land retirement planned for next year. At least 1 waste storage facility being funded with ACAP funding. NRCS continues to assist with funding for some of these BMPs. See Practice Keeper/Field Doc for specific metrics.
					operations to six months of storage: expand infrastructure, covering and/or digesters. Evaluate exporting or the reintroduction of existing technology (utilize local energy and nutrient reduction facility) to address local	Proposed cost for reduction of N - \$8-10/lb (1.1 M lb annual reduction = appx \$10M)	 Trying to work with DEP to get solar farms to be reported as land retirement. Waste storage facility applied for through CAP funds last year will be an ACAP project. NRCS is also assisting with funding and implementation of some of these BMPs. See Practice Keeper/Field Doc for more details.

	<u> </u>	<u> </u>	T					<u> </u>	
						poultry manure management Land retirement would be implemented when converted to solar farm Options for extending manure storages may be outside normal funding priorities Satellite storage facilities for manure may not be used for multiple purposes.			 Conservation District planning a new Waste Storage Facility, this will likely be a CAP Implementation Grant project. NRCS is also assisting with funding and implementation of some of these BMPs. See Field Doc and Practice Keeper for more detailed BMP information. 2021 NRCS has installed many barnyard runoff and other ag projects, with more planned for next year. 4 new Waste Storage Facilities have been constructed using EQIP funds with more planned for the near future. 2020 Conservation District is working with DEP to identify solar fields as retired ag land. * See Field Doc for BMP Numbers. Coordinator is working with ag techs to evaluate new waste storage facilities and innovative ways to find funding. Barnyard and Waste Management work being done by NRCS.
Urban S	ector								
			1	1	I				
2.11	Seek creative	Redefine MS4 area to	DEP, ACOPD,	Adams County	Ongoing	Policy or legislative *	* *	*	<u>2024</u>
	solutions to focus on the problem (pollution) within the contributing area (not just within the close vicinity of the MS4/Urban Area)	allow mitigating efforts to occur outside of the urbanized areas	municipalities			change required.			 DEP released guidelines that allow MS4 communities to work in a mile radius outside of their designated zones. We have not had a good project to utilize this buffer yet. 2023 DEP released guidelines that allow MS4 communities to work in a mile radius outside of their designated zones. We have not had a good project to utilize this buffer yet.

										<u>2022</u>
										 DEP released guidelines that allow MS4 communities to work in a mile radius outside of their designated zones. Coordinator will look to work with MS4s in order to see how best to utilize this buffer area.
										<u>2021</u>
										 DEP released guidelines that allow MS4 communities to work in a mile radius outside of their designated zones. MS4 engineers have suggested that 1 mile is still not enough. They suggest looking at more of a watershed approach. Allowing MS4s to do work within local watersheds would be more helpful than a small distance outside of their municipal boundary. 2020 DEP released guidelines that allow MS4 communities to work in a mile radius outside of their designated zones.
2.12	Create a	Support current		Statewide	2020	Legislation	*	* *	*	<u>2024</u>
	documentation program for urban nutrient management	proposed fertilizer legislation for nutrient applications in urban environments.	Landscaping Industry			required.				 Coordinator and DEP have worked out a template to be used for Urban Nutrient Management.
										<u>2023</u>
										 Coordinator and DEP have worked out a template to be used for Urban Nutrient Management.
										<u>2022</u>
										 No documentation program exists. Coordinator trying to work with DEP on this issue. Reaching out to local golf courses, and parks to gauge interest in Urban Nutrient Management
										<u>2021</u>

								 No real progress made. Legislation will be required for this initiative. 2020 Senate introduced statewide nutrient standard legislation. Benefits from the statewide nutrient management bill will not be realized until the bill is passed.
2.13	Install riparian buffers on public lands	Implement riparian buffers on public lands. Try to coordinate -100' buffers on public parcels greater than 10 acres (96 acres of riparian buffer)	ACOPD, Conservation District, WAAC, NRCS, landowners	Adams County	2025	Landowner cooperation and funding required for successful implementation. Security issues may be a constraint of planting trees on private properties.	\$500,000	 2024 1 Buffer project completed on Gettysburg Municipal land this year. 1st part of a 2-part stream restoration project on State owned land was completed this year, with the second part planned for next year.
		-50' buffers on public parcels less than 10 acres (14 acres of riparian buffer)				Forest buffer credit challenges – 20 years until tree maturity. Financial resources.		 Our next buffer project will be near a water treatment plant owned by Gettysburg Municipal Authority. Another buffer/stream restoration project is in the engineering phase currently at a local public park. Project should begin construction summer 2025, hopefully with CAP funds.
								 Buffers installed have all been on private land this year. Looking to work with public parks and schools on this initiative moving froward. 2021 2 acres of Riparian Buffers have been
								planted on public land in 2021, with another 5 planned for next year. 2020 Continuing work with local public partners, municipalities, and schools.

2.14	Create additional natural areas	Create forest buffers, meadowlands, and other natural areas that are not considered a nuisance	ACOPD, Conservation District, NRCS, municipalities, Alliance for the Bay	Adams County	2025	Coordination with municipalities will be needed to comply with ordinances and other planning tools.	* *	*	 In the process of completing agreements for a 5 plus acre tree planting in a local park. 2024 Much of the work on the PA Fish and Boat Commission land has been completed this year. With a farm field being retired to forest, a nature trail being cleared and built, and the first phase of a stream restoration project being completed. The second part is planned for next year.
									<u>2023</u>
									 The PA Fish and Boat Commission land, kept up by Adams County Trout Unlimited is being turned into a largely natural area. One retired farm field is being planted with trees, there is a stream restoration project on the Conewago Creek that flows through the property, and the partnership is also creating a nature trail to show off all of the work being done on the site.
									<u>2022</u>
									 Purchased 58 acres of farm/wetland/trout stream that will be preserved and protected in perpetuity.
									 ACCD is working with Alliance for the Bay and local business to implement 12.83 acres of lawn conversion on multiple properties across the county. A total of 47 acres of natural areas will be created this year between upland tree planting and lawn conversion, with another 20 plus planned for next year.

2.15	Establish more Shade Tree Commissions	Establish additional Commissions 50 acres tree planting.	ACOPD, Municipalities, community members	Adams County	2025	Funding is required to develop and implement these programs.	* *	*	•	on both public and private lands, funding through DCNR. 2024 Gettysburg Borough currently has an established Shade Tree Commission.
									•	This project was being handled by someone who has since retired. This initiative will be picked up once someone new has been hired for that position.
									•	2022 This project was being handled by someone who has since retired. This initiative will be picked up once someone new has been hired for that position.
									•	2021 One borough in the County has established a Shade Tree Commissions. ACOPD will be sending information regarding the establishment of Shade Tree Commissions to our other borough partners.
										No further Shade Tree Commissions have been established. Coordinator plans to reach out to municipalities across the county to garner interest in Shade Tree Commissions from local leadership.
2.16	Implement other urban initiatives	Full implementation of the municipal PRP plans:	ACOPD, Municipalities, community members	Adams County, municipalities	2025		Current resources being utilized		•	2024 CAP Funds are paying for 4 Stream Restoration covering over 4,500 linear feet of stream bank.

Datrofit runoff			c CAD Funds are also noting for a
Retrofit runoff			CAP Funds are also paying for a Charmonator Pasis Patrofit posicet in
reductions for 145			Stormwater Basin Retrofit project in
treated acres. 3,750			partnership with a local HOA.
linear feet of urban			Coordinator is in touch with Gettysburg
stream restoration. 16			Borough regarding their street sweeping
acres forest buffer.			program and how it can be counted in the
Install 2.5 acres of			bay model.
permeable pavement.			2022
Street sweep 109.43			<u>2023</u>
miles.			CAP funds are paying for 5 stream
			restoration projects in Adams County
			covering over 2,000 linear feet of stream
Dry detention ponds to			bank.
treat 100 acres. 50			Coordinator working with municipalities on
acres treated by rain			future Urban BMP Projects.
gardens and 25 acres			ididie orbair bivir riojects.
treated by bioswales.			
treated by bioswales.			
			<u>2022</u>
			Coordinator working with Municipalities to
			install Urban Stormwater BMPs.
			CAP Grant is funding multiple Basin
			Retrofits and Stream Restorations.
			Cumberland Township is also
			implementing a Retention Basin and other
			Stream Restoration Projects.
			<u>2021</u>
			Coordinator is currently working closely
			with multiple municipalities to implement
			many of these BMPs including Stream
			Restoration, Retrofit, Detention Ponds,
			Swales, and Raingardens.
			<u>2020</u>
			Reached out to Adams County MS4s, and
			other Municipalities.
			Met with municipal engineers to discuss
			project ideas and assisting them with
			getting funding.
			Creating a framework document to match
			projects with funding sources as they
			become available/are found.

2.17	Proper on-site septic ystem management	ACOPD, COG, Local municipalities	Adams County, municipalities	Ongoing	Current Staffing	•	There are currently 9 townships in Adams County with Sewage Management Districts. As of now there seems to be little interest in the creation of others, but coordinator will reach out to other municipalities to gauge further interest. 2023 This project was being handled by someone who has since retired. This initiative will be picked up once someone new has been hired for that position.
							2022 This project was being handled by someone who has since retired. This initiative will be picked up once someone new has been hired for that position. 2021 Currently 9 townships in Adams County
						•	have Sewage Management Districts. 2020 No action to date. Coordinator will be reaching out to municipal governments and urban landowners to gather interest in this initiative.

Prio	Priority Initiative 2: Research, Education, and Training											
3.1	Develop a strategy to	Nutrient Management	Conservation	Adams County	Ongoing	Financial	Annual No-till		<u>2024</u>			
	communicate parallel goals of the CAP and local goals such as water quality, public	Workshop or similar forum	District, ACOPD, Penn State Extension,	,	parti	resources, participant interest.	forum Adams County		The Adams County Soil Health Meeting was held this year in partnership with the Pennsylvania No Till Alliance. The meeting was attended by over 120 people.			
	and environmental health, economic	Annual No-till Forum	WAAC, Municipalities, School				State of the Waters forum		Coordinator has continued writing newsletters for DEP, as well as articles for			

development, and		Districts, Local		local newspapers discussing CAP goals and
others		farmers		progress.
Others	Adams County State of	Tarriers	Penn State	progress.
	the Waters forum		Extension	
			Training	2022
				<u>2023</u>
				The Adams County Soil Health Meeting
				was held this year in partnership with the
				Pennsylvania No Till Alliance. The meeting
				was attended by over 120 people.
				Coordinator has continued writing
				newsletters for the district and DEP, as
				well as articles for local newspapers
				discussing CAP goals and progress.
				and the same and progression
				<u>2022</u>
				Adams County Soil Health Meeting was
				held this year (both in person and virtual
				options) and dozens of farmers and agency
				staff attended. The topic of the meeting
				was organic farming of Corn and Soybean.
				Eric Rosenbaum from Rosetree presented
				his findings so far through the Advanced
				Nutrient Management Program, and
				gathered more interest for the program.
				<u>2021</u>
				The annual Adams County Soil Health
				Meeting was held virtually this year but was
				still attended by a couple dozen people.
				A member of Rosetree Consulting spoke
				about Adams County's Advanced Nutrient
				Management Program and began signing
				people up for the program.
				2020
				Held annual Soil Health Meeting in
				February of 2020, and plan on holding it
				virtually in February of 2021. The 2020
				meeting was attended by over 125
				farmers, topics discussed include advanced
				nutrient management, and the Adams
				County CAP.
				2021 Meeting will feature a representative
				from Rosetree LLC to speak about our
				Adams County, Advanced Nutrient
				Adams County, Advanced Nutrient

							 Management project, which we applied for CAP funds to complete. Act 220 process has made the Phase 3 WIP a priority and is being incorporated in those discussions, Potomac Regional Committee Prioritizing WIP, this puts a spotlight on the importance of the County CAP.
3.2		Nutrient reduction outside of agriculture	ACOPD Adams County including Conservation District, WAAC, Penn State, DEP	Ongoing	Legislation/regulati on required.	Nutrient Technician (1 FTE)	 Interest Levels from golf courses and schools remain low. Template does exist for Urban Nutrient Management and has been approved by DEP.
	Conduct education of commercial landscape industry, golf course owners, school districts, and homeowners regarding nutrient management						 No progress towards Nutrient Management Tech in Adams County. Interest level from golf courses and schools on nutrient management has thus far been marginal. The Gettysburg National Military Park has shown interest in working on a nutrient management plan for all of their non ag property. Coordinator and DEP have worked out a template to be used for Urban Nutrient Management
							 No progress towards Nutrient Management Tech in Adams County. Coordinator has reached out to many large landowners including all county golf courses, and Gettysburg National Military Park. Unfortunately, response/interest level has been marginal. Coordinator will also be reaching out to schools to see if they hold more interest in Urban Nutrient Management.

				<u>2021</u>
				 No progress towards a nutrient management tech in Adams County. Staff is looking into the possibility of getting voluntary NM plans written for large landowners such as golf courses, schools, and share other potential project ideas.
				<u>2020</u>
				 No progress towards a nutrient management tech in Adams County. Strategizing with staff about setting up a group meeting/call with golf course owners in the county to discuss use.

Phase 3 Watershed Implementation Plan (WIP) Progress and Milestones 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 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).

Progress to Date = This field will be used for annual reporting on priority initiatives. This is a description of the action(s) your county took toward achieving the priority initiative. Examples include education and outreach, programmatic changes, etc. For numeric priority initiatives your county can retrieve those numbers directly from *FieldDoc* or put in the column "See *FieldDoc*."

Justification for Change to Action Item = This field will be used for two-year milestone updates. This field allows for your county to adjust your original targets and goals based on progress to date. Your county may adjust goals and targets up or down based on your progress to date. This field requires a justification as to the reason of change, whether up or down.