

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

Green - action has been completed or is moving forward as planned **Yellow** - action has encountered minor obstacles **Red** - action has not been taken or has encountered a serious barrier

Action #	Description	Performance Target(s)	Responsible Party(ies) and Partnerships	Geographic Location	Expected Timeline	Potential Implementation Challenges or Recommendations	Resources Available				Resources Needed			
							Technical	Source	Financial	Source	Technical	Suggested Source	Financial	Suggested Source
Priority Initiative 1: County Programmatic Initiatives														
1.0*	Implement County Farmland Preservation Program with farmland preservation program incentives enhancement	Increase the financial and technical capabilities of the County Farmland Preservation Program - Other Preservation Grants applied for - 50-100 acre/year goal	Conservation District, Clearfield County Commissioners, County Planning, Farmland Preservation Board	Bay Portion of Clearfield County	2021 - 2025+	County budget restrictions inhibit additional funding for Farmland Preservation Program Continue to pursue budget funding/ other grants	Tech assistance and administration	Farmland Preservation Board, County Planning, Conservation District	\$3000	Clean and Green Penalties	Additional Staff Person in County Planning to handle workload	County	\$100,000/year for additional staff \$10,000+ for Easement purchase and closure costs	County
1.1*	Chesapeake Bay Technical Inspection/ Plan Data Gathering	Continue implementing Chesapeake Bay Technician contract to provide 38 farm compliance inspections per year, and report additional BMPs	Conservation District	Bay Portion of Clearfield County	2021 – 2025+	Challenge: Time constraints to complete additional BMP reporting under current contract. Recommendation: Increased funding for additional workload and mileage to report and reverify BMPs. Staff turnover	Tech assistance and planning	1 Chesapeake Bay Technician with ¾ funding	\$72,150	County/ State	Additional Staff Person to handle BMP reporting/tracking/reverification. Staff (see 3.0)	State Staff (see 3.0)	\$72,150	State
1.2*	Nutrient Management/Manure Management Delegation Agreement	Continue implementing Nutrient Management/Manure Management program to provide Act 38 and MMP planning, review, inspections, and technical assistance (2000 acres/year average) approximately 15,000 acres already verified in PK.	Conservation District	Bay Portion of Clearfield County	2021 – 2025+	VAO plan enrolment into Act 38 program is declining. Staff turnover	Technical assistance and planning	1 Technician with ¼ funding	\$24,050	County/ State	N/A	N/A	Implementation Funding \$100,000+ per plan for BMPs	State Conservation Commission

1.3*	Continue Development of Agricultural Plans	Continue planning assistance for CB inspection farms and Act 38 planning for project farms (Act 38 and MMP plans (3200 acres annually) Ag E&S Plans (3800 acres annually) NOTE: Over 25,000 acres already verified in PK	Conservation District	Bay Portion of Clearfield County	2021 – 2025+	Challenge: Time constraints for current technician Staff turnover	Technical assistance and planning	Technician funded through CBP and NM/MMP agreements	None	N/A	Seasonal Technician based on need Staff (see 3.0)	State Staff (see 3.0)	\$6,000 for seasonal technician Staff (see 3.0)	State
1.4	Develop and implement no-till verification from CD district rental program	Develop a verification component of acres planted with rental equipment (Report 1000 High residue tillage acres and 300 acres of cover crop annually, as well as Core NM Practices	Conservation District	Bay Portion of Clearfield County	2021	Challenge EPA/DEP acceptance of approach and verified data and time to field verify reported acres Survey will be added to no-till equipment invoices to collect annual NM and Tillage data. 10% discount on bill	Technical assistance and administration	Technician funded through CBP and NM/MMP agreements	N/A	N/A	PK reporting procedure for no-till and cover crop implementation Seasonal Technician based on need Staff (see 3.0)	State Staff (see 3.0)	\$6,000 for seasonal technician Staff (see 3.0)	State
1.5	Continue to implement and Increase capacity of no-till program	Sustain and increase annual no-till acreages planted with rental equipment and provide additional rental equipment to meet demand (1000 + High residue tillage acres and 300 + acres of cover crop annually)	Conservation District	Bay Portion of Clearfield County	2021 – 2025+	Maintenance and repair costs inhibit purchase of new equipment. Weather and time constraints of staff and farmer time. Storage of more equipment.	2 – 1006NT NT Drills 1 – 706NT NT Drill 1 – 1755 NT Corn Planter	Conservation District	Rental fees	Rental Program	More/update equipment Approximately \$30,000/5-10 years) On site storage needed	Conservation District	\$5,000/ year for maintenance \$30,000 every 5 years	State Bay Program / Conservation District
1.6	Increase amount of Chlorophyll testing and PSNT testing on corn acres	Increase adoption for supplemental NM BMPs on farms by increasing Chlorophyll and PSNT testing on corn acres (2,800 acres of N Rate, N Placement, N Timing annually)	Conservation District	Bay Portion of Clearfield County	2021 – 2025+	Time constraints of current technician and farmer participation.	Technical assistance and administration	Technician funded through CBP and NM/MMP agreements	\$25 / Farm Tested	Program Fees	Seasonal Technician based on need Staff (see 3.0)	State Staff (see 3.0)	\$6,000	State
1.7	Develop new Watershed Restoration Plans	Develop new plans for watersheds not already	Conservation District, Watershed	Countywide (where new	2021 – 2025+	Time and financial resources are limited	Technical assistance and project oversight	Watershed Specialist, and	None	N/A	Engineering/ Planning	State, Consultants	\$100,000/plan	State and Federal

		covered by a plan which leads to increased BMP installations -Over 20 more plans needed -1 plan / 2 year goal	organizations, WPC, TU	plans are needed)				technical expertise of engineers and others						
1.8	Update existing watershed restoration plans as needed	Update plans to re-evaluate restoration targets, document pollution reduction progress, and plan new BMP installations -20 plans needed -1 plan / 2 year goal	Conservation District, Watershed organizations, WPC, TU	Countywide	2021 – 2025+	Time and financial resources are limited	Technical assistance and project oversight	Watershed Specialist, and technical expertise of engineers and others	None	N/A	Engineering/ Planning	State, Consultants	\$100,000/plan Over 20 more plans needed	State and Federal
1.9	Update and Implement County Hazard Mitigation Plan	An updated plan will address flooding and identify flooding threats. Ideally the plan will identify project areas for hazard mitigation grants -Advocate for update based on CAP goals. (Stream Restoration, Culvert Replacements, Obstruction removals, and floodplain restoration.)	Clearfield County, EMA	Countywide	2021	Plans need to identify more specific projects to reduce hazards, including removal of dams, culverts, and other obstructions	Planning office technical assistance	County	None	N/A	Additional planning staff in County planning office	County	\$100,000 annually for staff	County, State or federal
1.10	Update County Comprehensive Plan	An updated plan will provide policy support for stormwater reduction efforts and achieve CAP initiatives. - Advocate for update based on CAP needs	Clearfield County	Countywide	2025+	Lack of financial and political support	Planning office technical assistance	County	None	N/A	Additional planning staff in County planning office and engineering/ consulting	County, Consultants and Engineers	\$100,000 annually for staff	County, State or federal
1.12*	Develop Countywide Act 167 Plan	A developed countywide 167 plan will result in municipal ordinances that reduce stormwater runoff - Advocate for update based on CAP needs	DEP, Clearfield County, Municipalities	Countywide Urban Townships, Clearfield Borough, Lawrence, Curwensville	2025+	Municipalities lack financial and staff resources to enforce plan. Customizable ordinances that are easier to enforce and use.	DEP Tech guidance Planning office tech assistance	DEP, County	None	N/A	Engineering assistance, Consulting	Engineers and Consultants	\$500,000 for plan development	State or Federal
1.13	Support PA AML campaign	Support will lead to financial resources to implement AMD BMPs such as:	Conservation District, County Commissioners, and	Countywide /Statewide	2021 – 2025+	N/A	Technical Assistance	Staff from WPCAMR EPCAMR and	None	N/A	None	N/A	None	N/A

		<ul style="list-style-type: none"> - Passive Treatment System construction and maintenance - AML reclamation that may include forest or riparian buffer restoration - Wetland creation/restoration as part of treatment layout 	watershed associations					Conservation District						
1.14*	Conservation Priority Plan for County	<p>Create a Conservation Priority Plan for County that identifies critical conservation areas for restoration and protection. Development of this plan will guide the implementation of the CAP</p> <p>Performance target: Development of GIS database overlays that can easily be accessed and analyzed for priority project area locations and which agencies could partner together.</p>	Conservation District, PFBC, TU, DCNR, WPC	Bay Portion of Clearfield County	2021 – 2025+	<p>Work with partners to identify critical conservation areas based on biologic, recreational, and pollution potential factors</p> <p>Develop priority list of streams for Clearfield County in which wild trout population could improve through habitat work</p> <p>Consider high angler use streams during the process</p> <p>Include existing and future watershed restoration plans (see 3.36 – 3.63)</p>	Data from all organizations to be consolidated and technical assistance	Conservation organizations	None	N/A	Access to other organization data	All partners	Staff time	State or Federal

Priority Initiative 2: Reporting & Tracking*

2.0*	Initiate additional water quality monitoring sites that promote long-term trend evaluation at key locations in Clearfield County	<p>Creation of multiple new monitoring sites that will provide long term improvements from BMP implementation</p> <p>Monitor 1 watershed per year</p>	USGS, SRBC, Watershed Organizations, DEP, Conservation District	Bay Portion of Clearfield County	2025+	Coordination with multiple organizations, long term funding, acceptance of volunteer collected data. Wishlist of	Tech Assistance	WPC, SRBC, DEP, Conservation District	DEP	WPC	Coordination between all partners and agencies	All partners and agencies	\$12,225 Annually	USGS
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						data points is needed for partner involvement. Water quality data has limits and it time intensive to collect								
2.1*	Establish baseline of current practices for comparison with future implementation	Develop an approach to find and report previously unreported BMPs - Increase reported BMPs	Conservation District, DEP	Bay Portion of Clearfield County	2025+	Time consuming, Privacy restrictions, difficult to identify previously implemented projects	District Knowledge	Conservation District	None	N/A	GIS Models or analysis to ID BMPS	State	Unknown	State or Federal
2.2*	Identify future ag/urban project opportunities using GIS Technologies	Utilize GIS to identify opportunity areas for BMPs using erosion prediction models, wetland restoration models, and SPARROW Restoration areas - Increased BMP placement efficiency - ID opportunity areas annually	Conservation District	Bay Portion of Clearfield County	2021 – 2025+	Current GIS software limitations, up to date elevation and aerial imagery Partner with other partners and Universities	Tech GIS Support assistance	WPC, Technician funded through CBP and NM/MMP agreements	None	N/A	New GIS Software. Updated Elevation and Aerial Imagery New computer with faster processing speeds.	State or Federal	\$15,000	State or Federal
2.3	Increase reporting of Nutrient management BMPs through Chlorophyll testing and PSNT testing on corn acres	Report supplemental NM BMPs based on data collected from testing visits. (2,800 acres of N Rate, N Placement, N Timing annually)	Conservation District	Bay Portion of Clearfield County	2021 – 2025+	Time constraints of current technician and farmer buy in. Acceptance of approach by EPA and DEP.	Tech assistance and administration	Technician funded through CBP and NM/MMP agreements	\$10 / Farm Tested	Program Fees	Seasonal Technician based on need Staff (see 3.0)	Conservation District Staff (see 3.0)	\$6,000	State
2.4*	Document water quality improvements and biological improvements downstream of BMP project sites	Documentation of water quality improvements that lead to delisting of waterways on Impaired Waters list. Utilization of citizen science to collect relevant data that will be accepted. Based on number of projects per year. Approximately 1-2	Conservation District, TU, Watershed groups, SRBC, DEP, WPC, PFBC	Bay Portion of Clearfield County	2021 – 2025+	Time and funding constraints, access to water quality equipment to perform surveys. Recommendation: Ensure DEP methodology for data collection is standard. Acceptance and including of volunteer collected data. Intensity of sampling and QA/QC will be challenging	Tech Assistance	Watershed Specialist, staff from TU, Watershed groups, SRBC, DEP, WPC, and PFBC	NFWF	WPC	Water quality sample analysis and macroinvertebrate ID	Labs	Funding for sample analysis, and interpretation	State and federal

Priority Initiative #3: Achieving New Pollutant Reduction Goals*

	<p>General Challenges with BMP implementation</p> <p>See programmatic recommendations section 1.7*</p>	<p>Inconsistent state funding sources for BMP funding</p> <p>Match requirements of NFWF and other non-profit grants are routinely unattainable.</p> <p>Prevailing wage requirements are utilizing limited resources paying labor when that money could be spent installing more BMPS</p> <p>Regulatory burdens are slowing the process and adding unnecessary requirements to projects</p> <p>Small farms have limited acreage to install BMPs Small farms do not see benefits of BMP installations</p> <p>Enforcement of BMP use and maintenance</p> <p>Working with resistant landowners – time constraints</p>												
<p>3.0*</p>	<p>Project Management Staff</p>	<p>Hire 1-2 additional staff in order to oversee and perform project and grant management tasks including reporting and tracking BMP information. (induces recommendations from section above)</p>	<p>Conservation District</p>	<p>Countywide</p>	<p>2021-2025+</p>	<p>Stabile future funding to support position is necessary</p> <p>Staff turnover would be extremely problematic</p>	<p>Clean Water Academy</p>	<p>DEP</p>	<p>None</p>	<p>None</p>	<p>1 on 1 trainings</p>	<p>State/DEP</p>	<p>1 @ \$50,000/year</p>	<p>State</p>
	<p>Agriculture</p>													
<p>3.1*</p>	<p>Develop and Implement Nutrient Management BMPs</p>	<p>Continue to write and review MMP and NMPs and enter associated data into PK. Provide cost share support</p> <ul style="list-style-type: none"> - NM Core N Manure and Fertilizer 26,100 acres - NM Core P Manure and Fertilizer 8,375 acres -NM Rate N 2800 acres -NM Rate P 2800 acres - NM Placement N 3600 acres NM Placement P 2800 acres - NM Timing N 4000 acres - NM Timing P 2800 acres 	<p>Conservation District, 4R Alliance, Private Consultants</p>	<p>Bay Portion of Clearfield County</p>	<p>2021-2025+</p>	<p>Time constraints of current technician and farmer participation.</p> <p>More farm 4R stewardship education is needed.</p> <p>Need more efficient way to collect farm data annually</p> <p>Inflexibility of Act 38 program makes it difficult for volunteers to transition MMPs to NMPs and maintain the plan</p>	<p>Data gathering through Bay Tech visits</p> <p>CD Technical Assistance</p> <p>NRCS Technical Assistance</p> <p>WPC Technical and Planning Assistance</p> <p>Headwaters-Financial Administration and Project Management</p>	<p>Technician funded through CBP and NM/MMP agreements</p> <p>WPC</p> <p>NRCS 590s</p> <p>Headwaters RC&D</p>	<p>PA Ag Planning Reimbursement Program \$900,000</p> <p>REAP</p> <p>EQIP</p>	<p>DEP</p> <p>SCC</p> <p>NRCS</p>	<p>4R Education Support</p>	<p>4R Alliance</p>	<p>NM Core N&P Manure and Fertilizer Plans \$305,448 annually</p> <p>NM Supplemental BMPs: Rate N&P, Placement N&P Timing N&P \$165,440 annually</p>	<p>Private Farm Cost Share with REAP</p>

						Terrain of fields in county inhibit effect field application of nutrients – More crops are run down by equipment during multiple passes. Farmer time is limited Cost share is needed to transition MMPs to Act 38								
3.2*	Implement BMPs in current Act 38 Plans	Utilize funding to implement and install BMPs identified in Act 38 Plans - Fund BMP installations of 1-2 Approved NMPs per year	Conservation District, NRCS, WPC	Bay Portion of Clearfield County	2021-2025+	Need direct funding to support BMP installations and assist landowners in BMP implementation	CD Technical Assistance NRCS Technical Assistance TU TAG WPC Tech assistance Headwaters-Financial Administration and Project Management	Technician funded through CBP and NM/MMP agreements WPC, TU, NRCS Headwaters RC&D	REAP and EQIP	SCC NRCS	Staff (see 3.0)	Staff (see 3.0)	Staff (see 3.0)	Staff (see 3.0)
3.3	Develop and Implement Soil Conservation Plans	Continue to write, update and review Ag E&S Plans and enter associated data into PK. Provide cost share support. Continue NRCS Conservation Planning Support - Soil Conservation Plans 26,800 acres	Conservation District, NRCS, Private Consultants	Bay Portion of Clearfield County	2021-2025+	Time constraints of current technician and farmer participation.	CD Technical Assistance NRCS Technical Assistance TU TAG WPC Tech assistance Headwaters-Financial Administration and Project Management	Technician funded through CBP and NM/MMP agreements WPC, TU, NRCS Headwaters RC&D	PA Ag Planning Reimbursement Program \$900,000 REAP EQIP	DEP SCC NRCS	N/A	N/A	Soil Conservation Plan Development \$701,088	State and Federal Programs

3.4*	Low and no-till tillage BMPs	Continue technical support and education to increase adoption of practices. Report current conservation tillage (2700 acres) Increase adoption and reporting of high residue tillage by (10,000 acres) Increase adoption and reporting of low disturbance manure incorporation (1700 acres)	Conservation District, NRCS, Private Consultants	Bay Portion of Clearfield County	2021-2025+	Farmer participation and implementation of practices is challenging due to the soils and climate of Clearfield County.	Data gathering through Bay Tech visits CD Technical Assistance NRCS Technical Assistance TU TAG Headwaters-Financial Administration and Project Management	Technician funded through CBP and NM/MMP agreements NRCS Technical Assistance PA No-till Alliance PA Soil Health Coalition Headwaters RC&D	REAP and EQIP	SCC NRCS	Annual Transect survey or Remote Sensing Survey for Clearfield County	Capital or Headwaters RC&D Council	Low disturbance manure incorporation \$34,391 annually	Private Farm Cost Share with REAP
3.5*	Cover Crops	Continue technical support and education to increase adoption of practices. Provide cost share support for beginner cover crop users Increase adoption and reporting of traditional cover crop (2000 acres) Increase adoption and reporting of cover crop with fall nutrients. (5000 acres) Increase adoption of early season interseeded cover crop (1000 acres)	Conservation District, NRCS	Bay Portion of Clearfield County	2021-2025+	Farmer participation and implementation of practices is challenging due to the climate of Clearfield County, and lack of time during harvest. Interseeding is also difficult due to the lack of specialized equipment and operating equipment on hilly terrain. In field verification and reporting is possible but requires funding for milage.	Data gathering through Bay Tech visits CD Technical Assistance NRCS Technical Assistance TU TAG Headwaters-Financial Administration and Project Management	Technician funded through CBP and NM/MMP agreements NRCS Technical Assistance TU TAG Headwaters RC&D	REAP and EQIP	NRCS SCC	Annual Transect survey or Remote Sensing Survey for Clearfield County	Capital or Headwaters RC&D Council	Planting Cover Crop \$604,080 annually Cover Crop Financial Assistance	Private Farm Cost Share with REAP. Future funding for CD cost share support Headwaters Cover Crop Funding
3.6	Plan and Install pasture management BMPs	Continue work identifying pastures through CBP Inspections in need of BMP installations and obtain funding to install practices.	Conservation District, NRCS	Bay Portion of Clearfield County	2021-2025+	Farmer participation and implementation of prescribed grazing is challenging due to the infrastructure and increase	Data gathering through Bay Tech visits CD Technical Assistance	Technician funded through CBP and NM/MMP agreements	REAP, EQIP, and state grants	SCC NRCS DEP	Need to create prescribed grazing planning offered through	State	Installation of prescribed grazing systems \$325,080	State, Federal, and Non-profit grants Headwaters RC&D

		<p>Increase adoption and reporting of Prescribed Grazing/Rotational Grazing Systems (4000 acres)</p> <p>Increase adoption of horse pasture management and rotational grazing (1000 acres)</p>				<p>management needed to maintain BMP</p> <p>NRCS 528 plan writing is slow and isn't keeping up with demand</p> <p>Horse owner participation is challenging due to the lack of knowledge about pasture BMPs Implementation of grazing practices of often difficult due to limited pasture acreage</p>	<p>NRCS Technical Assistance</p> <p>TU TAG</p> <p>Project Grass Tech assistance</p> <p>Headwaters-Financial Administration and Project Management</p>	<p>NRCS Technical Assistance</p> <p>Data gathering through Bay Tech visits</p> <p>TU TAG</p> <p>NC Conservancy</p> <p>Project Grass</p> <p>Headwaters RC&D</p>			<p>conservation districts with associated trainings and tools to write plans to meet standards</p>	<p>Installation of horse pasture management BMPs \$359,830</p>	
3.7*	Plan and Install Ag Riparian Buffer BMPs	<p>Identify agricultural land use and other areas in need of riparian buffers and install BMPs. Increase reporting of existing buffers</p> <p>Forested riparian buffers (285 acre goal)</p> <p>Forested riparian buffer with exclusion fencing (250 acre goal)</p> <p>Grass riparian buffer (285 acre goal)</p> <p>Grass riparian buffer with exclusion fencing (250 acre goal)</p> <p>Off stream water system development -100 acres</p> <p>GIS Analysis shows 110.39 acres of agricultural land use within 35ft of stream.</p>	<p>Conservation District, NRCS, WPC, NC Conservancy, DCNR, Alliance for Chesapeake Bay</p>	<p>Bay Portion of Clearfield County</p>	<p>2021-2025+</p> <p>Farmer and landowner participation is challenging. Need for education</p> <p>Long term maintenance is not achievable without funding</p> <p>Need more flexibility in qualifying criteria for installing buffers. Buffer size should be proportional of runoff potential and stream size/watershed area.</p> <p>NC Conservancy and WPC NFWF funding</p>	<p>Data gathering through Bay Tech visits</p> <p>CD Technical Assistance</p> <p>NRCS Technical Assistance</p> <p>TU TAG</p> <p>WPC Tech assistance</p> <p>Headwaters-Financial Administration and Project Management</p>	<p>Technician funded through CBP and NM/MMP agreements</p> <p>NRCS Technical Assistance</p> <p>Data gathering through Bay Tech visits</p> <p>Watershed Specialist</p> <p>Watershed organizations</p> <p>WPC and TU tech</p>	<p>REAP, EQIP, DCNR Buffer Grants, CREP, Growing Greener, NFWF</p>	<p>DEP, SCC, NRCS, FSA, DCNR, WPC, PACD, Alliance for Chesapeake, NC Conservancy</p>	<p>Design and BMP outreach</p>	<p>DEP, DCNR C2P2, NFWF</p>	<p>Forested Riparian Buffers (\$1,157,000)</p> <p>Forested Riparian Buffers with exclusion fence (\$1,804,000)</p> <p>Grass Riparian Buffers (\$256,257)</p> <p>Grass Riparian buffers with exclusion fencing (\$1,013,30030)</p> <p>Off stream water system development</p>	<p>State, Federal, and Non-profit grants</p>

		and 385 acres within 100ft of stream. Total non-forested acres 1070 within 35ft of stream.				allows for flexible buffer sizing Utilize prime prospect list for buffer sites - DCNR		assistance, TU TAG DCNR Technical Assistance NC Conservancy Headwaters RC&D					(\$15,573) / farm Long Term Maintenance Funding	
3.8	Implement more barnyard runoff control/loafing lot management/ag stormwater management	Continue to identify, report, and implement barnyard runoff controls and loafing lot management Report/construct barnyard runoff control BMPs (3 acres) Construct an additional loafing lot management BMPs (3 acres)	Conservation District, NRCS	Bay Portion of Clearfield County	2021-2025+	Farmer participation, long term agreements are needed to enforce use of BMP	Data gathering through Bay Tech visits CD Technical Assistance NRCS Technical and Engineering Assistance PACD Engineering Assistance TU TAG WPC Tech assistance Headwaters-Financial Administration and Project Management	Technician funded through CBP and NM/MMP agreements NRCS Technical Assistance TU TAG WPC Headwaters RC&D	REAP, EQIP, and state grants	DEP, SCC, NRCS	Additional Engineering Assistance	Private, PACD, State	Barnyard Runoff Control (\$248,070) Loafing lot management (\$3,659,040)	State, Federal, and Non-profit grants
3.9	Animal waste management BMP implementation for livestock	Continue to identify, report, and implement manure storage BMPs Construct additional Manure Storage Facility for dairy and beef operations (1900 AEU's)	Conservation District, NRCS	Bay Portion of Clearfield County	2021-2025+	Farmer participation, long term agreements are needed to enforce use of BMP	Data gathering through Bay Tech visits CD Technical Assistance	Technician funded through CBP and NM/MMP agreements NRCS Technical	REAP, EQIP, and state grants	DEP, SCC, NRCS	Additional Engineering assistance	Private, PACD, State	Dairy and Beef Manure storage (\$1,707,530) Imported Poultry Manure Storage	State, Federal, and Non-profit grants

		Construct Manure Storage structures for imported poultry manure (450 Poultry AEU's) Construct manure storage/composting facilities for small horse operations (3000 Horse AEU's)					NRCS Technical and Engineering Assistance PACD Engineering Assistance TU TAG WPC Tech assistance Headwaters-Financial Administration and Project Management	and Engineering Assistance PACD Engineering Assistance WPC Headwaters RC&D					(\$404,415) Horse Composting facility/manure storage (\$295,470)	
3.10	Accelerated implementation of grassed waterways on critical runoff areas in priority watersheds.	Implement 600 acres of grassed waterways on modeled erosive channels in agricultural lands reduced accelerated erosion.	Conservation District, NRCS	Bay Portion of Clearfield County	2021-2025+	Farmer participation and long term maintenance	Data gathering through Bay Tech visits CD Technical Assistance NRCS Technical and Engineering Assistance PACD Engineering Assistance Headwaters-Financial Administration and Project Management	Technician funded through CBP and NM/MMP agreements NRCS Technical and Engineering Assistance PACD Engineering Assistance Headwaters RC&D	REAP, EQIP, and state grants	DEP, SCC, NRCS	Additional GIS Capabilities with updated LiDAR information	State	\$3,000,000	State, Federal, and Non-profit grants
3.11	Agricultural Land Retirement	Utilize the CREP and EQIP program to convert non-productive agricultural land use to meadow, forest, or pollinator habitats and utilizing conservation easements (800 acres currently enrolled, 25-50	Conservation District, FSA, NRCS	Bay Portion of Clearfield County	2021-2025+	Farmer participation is limited, long term noxious weed management is a problem.	CD Technical Assistance NRCS Technical Assistance WPC Land Conservation	Technician funded through CBP and NM/MMP agreements	CREP, EQIP. PACD Education Grants	FSA, NRCS, PACD	None	None	None	None

		acres new enrolment annually)						NRCS Technical and Engineering Assistance						
	Urban													
3.12	Install of “infiltration practices” (infiltration basins, infiltration trenches)	Identify problematic urban watersheds runoff drainages. Install BMPs on private and public lots, government lands through new construction and potential retrofits -225 acres treated	Conservation District, Municipalities, Watershed Organizations, Wildlife Conservation Organizations Homeowners/Landowners, Engineering Firms	Bay Portion of Clearfield County	2021 - 2025+	Infiltration trenches are non-invasive, versatile, and effective. Infiltration basins can be made into wetlands/aquatic habitat. long term maintenance CDBG eligibility might not apply in project areas	Permitting guidance and tech assistance	Conservation District 102 staff Engineering Firms	CDBG Community Development Block Grants	County	Engineering/design	Landscapers, Consultants	\$560,000 (BMP Installation)	County, Municipalities, Private Funding
3.13	Install permeable pavement	Municipal code adoption of permeable pavements. Cost effective, longer life span, solves urban SW issues. Implement through new construction and potential retrofits -150 acres	CD, Municipalities, Landscapers, Watershed Organizations Homeowners/Landowners/Landscapers, Engineering Firms	Bay Portion of Clearfield County	2021 - 2025+	Cost-effective for homeowners. Different types of PP allow for urban uses on driveways, roads, sidewalks, parking lots, etc. long-term maintenance Possibility of installations in local parks and walkways CDBG eligibility might not apply in project areas	Permitting guidance and tech assistance	Conservation District 102 staff Engineering Firms	CDBG Community Development Block Grants	County	Engineering/design	Landscapers, Consultants	\$6,000,000 (BMP Installation)	County, Municipalities, Private Funding
3.14	Treat impervious developed land use with bio retention and rain gardens	Include in municipal code and/or promote landscaping aesthetic in problem areas, specifically those with nutrient loading problems. Promote installation on public lands/parks. Implement through new construction and potential retrofits	CD, municipalities, watershed organizations, Homeowners/Landowners/Landscapers, Engineering Firms	Bay Portion of Clearfield County	2021 - 2025+	Homeowner participation, BMP sizing can be issue, long term maintenance CDBG eligibility might not apply in project areas	Permitting guidance and tech assistance	Conservation District 102 staff Engineering Firms	CDBG Community Development Block Grants	County	Engineering/design	Landscapers, Consultants	\$2,100,000 (BMP Installation)	County, Municipalities, Private Funding

		- 375 acres												
3.15	Treat developed land use with wet ponds and wetlands	Identify areas on floodplains capable of wetland processes. Wetlands intercept urban runoff before reaching waterways. Implement through new construction and potential retrofits - 150 acres treated	CD, municipalities, watershed organizations, USFWS, Homeowners/Landowners, Engineering Firms	Bay Portion of Clearfield County	2021 - 2025+	Include in municipal code and/or promote landscaping aesthetic. BMP size and landowner participation limiting factors, long term maintenance CDBG eligibility might not apply in project areas	Permitting guidance and tech assistance	Conservation District 102 staff, USFWS Engineering Firms	CDBG Community Development Block Grants	County	Engineering/design	State, Consultants, NRCS/PAC D Engineering	\$420,000 (BMP Installation)	County, Municipalities, Private Funding
3.16	Convert urban turf grass to Conservation Landscape/Turf to Meadow Conversion	Identify unused turf, turf unnecessarily cut/treated lawns, pre-regulation turf, and implement CLP on them. - 225 acres	CD, municipalities, watershed organizations, Homeowners/Landowners/Landscapers DCNR, WPC, PennDOT	Bay Portion of Clearfield County	Begin outreach in 2021 with potential future implementation 2025+	Landowner participation, and available land for BMP, long term maintenance Weed ordinances will prohibit adoption Work with schools, churches, and universities to convert turf areas Work with PennDOT to preserve conservation areas/landscaping in rights-of-way Work with Clearfield Borough to install native plantings in public parks and walkways CDBG eligibility might not apply in project areas	Tech assistance, and education	Conservation District, County Planning, Municipalities DCNR, WPC, Penn State Extension	CDBG Community Development Block Grants DCNR Lawn Conversion Program	County, DCNR	Design	DCNR	\$1,125,000 (BMP Installation)	County, Municipalities, DCNR, Private Funding
3.17	Install urban riparian buffers on private and public lands	Install riparian buffers in urban opportunity areas	Conservation District, County Planning,	Bay Portion of Clearfield County	Begin outreach in 2021	Landowner and Homeowner participation/buy in.	Tech assistance, education, design	Conservation District, DCNR, WPC,	Keystone 10 Million	DCNR	None	N/A	\$560,000	DCNR, DEP, EPA

		<p>identified through GIS analysis (100 acre goal)</p> <p>GIS Analysis shows approximately 104 acres within 35ft of stream that are not forested.</p>	DCNR, Municipalities, WPC, Watershed Organizations		<p>with potential future implementation 2025+</p> <p>Long term maintenance</p> <p>Problems with neighbor cooperation</p> <p>Work with Clearfield Borough to install native plantings and tree plantings in public parks and walkways</p> <p>Concern with buffer "look"</p> <p>CDBG eligibility might not apply in project areas</p>		<p>Alliance for Chesapeake Bay, Tree Pennsylvania, Penn State Extension, NC Conservancy</p>	<p>Trees Partnership, DCNR TreeVitalize, Tree Pennsylvania</p>						
3.18	Increase Urban Tree Canopy	<p>Implement free tree giveaway for urban residents approximately 900 trees (3 acres Urban Tree Canopy)</p> <p>Utilize District tree sale to collect planting locations and data about land use, and report locations.</p> <p>Work with future American Water programs to plant trees when customers switch to paperless billing</p>	Conservation District, County Planning, American Water	Bay Portion of Clearfield County in SPARROW Urban Restoration Watershed	2022 – 2025+	<p>Small lot size restrictions in urban land uses, municipal ordinances, homeowner participation, EPA/DEP acceptance of approach and data long term maintenance</p> <p>Recommendations: Create school educational project/activity where each participant plants a tree at their home with a GPS coordinate on turf land use. Could coincide with Earth Day/Arbor Day events</p>	Tech assistance, education	Conservation District, DCNR, WPC, Alliance for Chesapeake Bay, Tree Pennsylvania, Penn State Extension	District Education Funding to help initiate program	Conservation District, DCNR, American Water	GIS technology to map tree locations and cross reference land use under canopy	State	\$3,600	County and State funding

						Work with Clearfield Borough to install tree plantings in public parks and walkways and over impervious surfaces CDBG eligibility might not apply in project areas								
3.19	Curwensville Lake Tree Planting	Planting shade trees over turf land use (1 acre) Conversion of turf land use to conservation landscaping (1+acres) Permeable pavement installations (1.5 acres) Shoreline Erosion Control Projects (500 ft+)	Curwensville Lake Authority, Friends of Curwensville Lake, Boy Scouts, Army Corps,	Curwensville Lake Recreation Area	2021-2025+	Limited Financial Resources, Army Corp permission	CLRA Long term maintenance Boy Scouts troop will be used to install shade trees	CLRA	CLRA Funds, DCNR funding	CLRA, DCNR	Engineering/design	Engineers/Landscapers	Permeable Pavement (\$400,000) Conservation landscaping (\$5,000) Shoreline Protection (\$?) Tree canopy installation (\$2,000)	State and Federal Funding
3.20	Increase Urban Forest Planting	Identify large contiguous landowners to accommodate sizing requirements for BMP and establish new urban forest plantings (170 acre goal)	Conservation District, County Planning, Municipalities, DCNR, WPC	Bay Portion of Clearfield County in SPARROW Urban Restoration Watershed	Begin outreach in 2021 with potential future implementation 2025+	Landowner participation, minimum size requirements for BMP, and available land for BMP, long term maintenance No funding source available	Technical assistance	Conservation District, County Planning, Municipalities, DCNR, WPC	None	None	Design	Landscapers/Foresters	\$850,000	State and Federal Funding
3.21	Runoff Reduction Performance Standard and Storm Water Treatment Performance Standard Implementation	Rian Barrels capture/reuse 50 acres of roof runoff treated	Municipalities. Conservation District	Bay Portion of Clearfield County in SPARROW Urban	2025+	Landowner / Municipal buy in and long term maintenance	Tech assistance	Conservation District	CDBG Community Development	County, Municipalities	Engineering/Design	State and Federal Funding	\$5000/20 rain barrel kits	County State and Federal Funding

				Restoration Watershed		CDBG eligibility might not apply in project areas			Block Grants					
3.22	Impervious surface reduction projects	Identify unused/flood prone impervious area and convert back to natural land use or park. (10 acre goal)	County, Municipalities, DCNR	Bay Portion of Clearfield County in SPARROW Urban Restoration Watershed	Begin outreach in 2021 with potential future implementation 2025+	Landowner participation Maintenance CDBG eligibility might not apply in project areas	Technical assistance	Conservation District, County Planning, Municipalities, DCNR, WPC	CDBG Community Development Block Grants	County, Municipalities	Engineering/Design	Engineers/Landscapers	\$600,000 (BMP Implementation)	County State and Federal Funding
3.23*	Implement Urban Nutrient Management	Provide education to landowners and industries about nutrient management requirements for turf grass (3000 acres of turf education) - Reported through event signup	Conservation District, Penn State Extension Municipalities	Bay Portion of Clearfield County in SPARROW Urban Restoration Watershed	2022 – 2025+	Landowner participation, State fertilizer legislation needed	Education	Penn State Extension	None	None	Tech assistance	State and Federal Funding	N/A	State and Federal Funding
3.24	Impervious Disconnection	Disconnect roof water from sewer and/or stormwater systems and direct to amended soils or vegetated flow paths. Increase reporting of current efforts. (100 acres)	Municipalities Landowners/ Homeowners Municipal Authorities	Bay Portion of Clearfield County in SPARROW Urban Restoration Watershed	2021 – 2025+	Disconnections are sometimes directed into storm sewers or nearby streams. More disconnections increase likelihood of damage to adjacent properties	Technical Assistance	Municipal Authorities	None	None	Design technical assistance for retention and infiltration	Certified Landscapers, Engineers	\$21,780,000 2,722 – 1,600 sqft roofs \$25/sqft	State and Federal Funding
3.25	Septic and Wastewater Improvement and Developments	Areas of County without developed sewer systems are contributing nutrients to local waterways. Identifying and addressing malfunctioning on lot septic systems in small communities will lead to nutrient reduction and water quality improvement. Needs quantified by county planning, engineers, and DEP	Municipalities, Landowners, DEP	Bay Portion of Clearfield County Start in Rockton, West Decatur, Chestnut Grove, Allport, Frenchville	2021 – 2025+	Public opposition Financial Requirements Limited State Funds for Act 537 Reimbursement Program for municipal costs 50% Outdated 537 plans don't represent current conditions Education is needed about private septic maintenance	Education	Penn State Extension	None	N/A	Consulting – Engineering Analysis needs to be completed by partners and agencies to quantify the scale and need of county.	Private Firms, County planning, DEP	\$20,000-\$100,000 for plan development + \$2,000,000/system	Penn Vest RUS- USDA CDBG

	Landscape BMPs													
3.26*	Wetland Installation and restoration	Identify interested landowners/municipal areas/schools/businesses within areas of the restorable wetlands layer and install/restore wetlands 50 acre goal	Conservation District, USFWS Partners Program	Bay Portion of Clearfield County in areas with restorable wetlands	2025+	Landowner participation, permitting, site access and feasibility, funding	Permitting and Technical Assistance NRCS Technical and Engineering Assistance CD GIS mapping and planning	Conservation District, USFWS Partners Program NRCS	NRCS Funding USFWS Funding CREP	NRCS, USFWS. FSA	Engineering Wetland mitigation opportunity mapping and planning is needed.	Private, State, or NRCS	\$3,247/acre	State and Federal Funding
3.27*	Stream Restorations	Identify critical areas of streambank erosion and install BMPs to reduce and control erosion. Urban Stream Restoration – 26,700ft Non-Urban Stream Restoration- 10,200ft	Conservation District, County, PAFBC, WPC, TU, Watershed organizations, NC Conservancy, USFWS Partners Program	Bay Portion of Clearfield County	2021 - 2025+	Landowner participation, permitting, site access and feasibility, funding Need for visual assessments	Permitting and Technical Assistance NRCS/ PACD Engineering assistance Permitting Assistance and Site Design, Construction Oversight Visual habitat assessments Headwaters-Financial Administration and Project Management	Conservation District WPC and TU tech assistance, Fish and Boat, NC Conservancy, USFWS Partners Program, PACD Headwaters RC&D	State and Non-profit grant funding NFWF Growing Greener	Fish and Boat, WPC, TU, NC Conservancy	Engineering Visual habitat assessments to determine needs	State WPC	\$30-100/ft Estimated	State and Federal Funding
3.28	Floodplain Restoration	Increase stream connectivity to floodplains to reduce flooding impacts and improve riparian habitat (Implement Wetland Restoration, Riparian Buffers, Stream Restoration. Woody Debris Additions) Feet or acres of floodplain restored) unknown at this point	Conservation District, WPC, TU, American Rivers, Municipalities, NC Conservancy, PFBC	Bay Portion of Clearfield County	2025+	Ideological issues, landscape/infrastructure limitations, landowner participation, Land use limitations, available tree canopy for wood additions, not good in urban environments Zoning issues	Permitting and Technical Assistance Headwaters-Financial Administration and Project Management	Conservation District, WPC, TU, American Rivers, NC Conservancy, PFBC Headwaters RC&D	State and Non-profit grant funding	TU	Engineering/ planning/design GIS work Priority mapping and listing needs to be completed and quantified to assess scale	State, Conservation district, Trout Unlimited, American Rivers	Unknown – Site specific	State and Federal Funding

											and feasibility of implementation			
3.29	Continue dirt and gravel road program	Continue to implement DRLVR Program to reduce and control erosion on dirt and low volume roads DGLVR Erosion Control - Outlets 56,000ft of road treated DGLVR Erosion Control -DSA + Raising Road Bed 1,000ft of road treated DGLVR Erosion Control -DSA + Outlets 10,000ft of road treated	Conservation District, DCNR, PGC, PFBC	Bay Portion of Clearfield County	2021 – 2025+	Lack of township involvement, implementing BMPs in urban environments is difficult. Low Volume funds are limiting implementation of practices	Technical assistance and grant administration	Conservation District, Center for Dirt and Gravel Road Studies	Conservation District (\$500,000 annually) DCNR (\$180,000)	SCC	Designated Engineering assistance, improved GIS resources	State	Additional money to accelerate practice implementation	State
3.30	Increase capacity of Dirt and Gravel Road Projects with additional funding	Using external funding to support increased installation of BMPs on DGLVR projects (Increase implementation of stream restoration, riparian buffers, stormwater control, etc..)	Conservation District, Municipalities, WPC, TU, PFBC	Bay Portion of Clearfield County	2021 – 2025+	Ability of municipalities to manage larger project sizes, landowner participation	Technical assistance and grant administration	Conservation District, TU, WPC	DGLVR Funds		Engineering		Additional grant funds needed for off road BMP installations	
3.31*	Waterway Obstruction Removal	The removal of dams and impoundments, and replacement failing/ undersize culverts to restore streams channels, reconnect floodplains, improve flood retention, improve aquatic organism passage, and improve recreation (Implementation of stream restoration, riparian buffers, wetland restoration)	American Rivers, Conservation District, TU, WPC, SRBC American Water, PAFBC, DEP, PennDOT, FEMA, PEMA, USFWS Partners Program	Bay Portion of Clearfield County	2025+	Ideological barriers of dam removal, Financial requirements.	Permitting and Technical Assistance Project identification – WPC Headwaters RC&D Headwaters-Financial Administration and Project Management	American Rivers Conservation District, WPC, TU, DGLVR Program	CHP - NAACC	WPC	Identification, planning, design, Engineering, permitting	Engineering	Planning funds for identifying projects Design and permitting funds Construction funds Monitoring funds \$50,000/culvert	State, Federal, and Non-profit funding

3.32*	Farmland Conservation	Conserve Farmland in Clearfield County through implementation of Conservation Easements (900 acres)	Conservation District, Farmland Preservation, County Planning, WPC	Bay Portion of Clearfield County	2021 – 2025+	Current Clearfield Farmland Preservation Program is not funded in a way that makes easement purchases possible. Farmer cost requirement is too high. Lack of established Ag Security Areas in county also limits participation. Need to develop preservation priority areas in County	Soil Conservation, GIS work, application processing	Conservation district planning support. WPC technical assistance	\$80,000/year in Farmland Preservation allocation. (160 acres by 2025) \$3,000/year technical assistance	State	Additional Staff to administer preservation program in County Planning	County/ State	\$1,480,000 additional funds needed to purchase (740 additional acres)	County/ State/ Non-profit
3.33*	Forest Conservation	Conserve Forest Land in Clearfield County through implementation of Conservation Easements (6800 acres)	Conservation District, Farmland Preservation, County Planning, WPC	Bay Portion of Clearfield County	2021 – 2025+	Landowner participation and lack of dedicated stable funding for conservation easement. Ideological problems also a barrier to adoption. Need to develop preservation priority areas in County	Soil Conservation, GIS work, application processing	Conservation district planning support. WPC technical assistance	Same as above	State	Same as above	Same as above	\$6,800,000 (\$1000/Acre)	Same as above
3.34*	Wetland Conservation	Conserve Wetlands in Clearfield County through implementation of Conservation Easements (340 acres)	NRCS (WRP) WPC Farmland Preservation (if wetlands are present on farm)	Bay Portion of Clearfield County	2021 – 2025+	Landowner participation and lack of dedicated stable funding for conservation easement. Ideological area also a barrier to adoption. Need to develop preservation priority areas in County	Soil Conservation, GIS work, application processing	NRCS WPC Conservation District	Same as above assuming wetlands are on property	State	Same as above assuming wetlands are on property	Same as above	\$340,000 (assuming \$1000/acre)	Same as above

3.35*	Recreational Access Developments	Installation of stabilized access points to waterways that improve recreational access and stabilize bank erosion. 1 per year	WPC, Conservation District, NC Conservancy	Bay Portion of Clearfield County	2021 – 2025+	Landowner participation. Need for long term easement to ensure public access Long term maintenance Headwaters RC&D	WPC Tech assistance Headwaters RC&D	WPC, NC Conservancy	Boating Facilities Grant Program Canoe Access Development Fund	PAFB WPC	None	N/A	Continued grant support (\$8,000/site) minimum additional funds	State, Federal, and Non-profit
	AMD Treatment /AML Reclamation/Sediment Reduction													
3.36*	AML Reclamation	Reclamation of abandoned mine land through regrading, forestry, and revegetation	DEP/BAMR, SRBC, WPC, Conservation District, DCNR, PGC	Bay Portion of Clearfield County	2021 – 2025+	Financial limitations because of project size. Landowner participation is mixed. Native species establishment is a priority for water quality and wildlife habitats. Long term maintenance is an issue	Design, permitting, oversight	DEP/BAMR, SRBC, WPC, Conservation District, DCNR, PGC	DEP/BAMR are actively working on AML reclamation throughout the county	Unknown	Design, engineering, permitting (if we are doing a project on our own)	Consultant DEP Conservation District	24,000 acres of AML lands in need of reclamation/reforestation (\$240,000,000)	PEC, GG, 319, OSM, Foundation for PA Watersheds
3.37*	Implement Upper West Branch Susquehanna Rivers Conservation Plan Implement Upper West Branch Susquehanna QHUP	Restoration of the Upper West Branch Susquehanna River watershed	Clearfield CD, Cambria CD, Watershed Associations, TU, SRBC, DEP/BAMR, WPC	Upper West Branch Susquehanna River watershed	2025+	Older plan so cost estimates and priorities may need updated, landowner participation, funding availability, ongoing maintenance	Grant writing, project oversight	Clearfield and Cambria CD Watershed Specialists, SRBC, DEP/BAMR	DEP has money to maintain Lancashire Treatment Plant Otherwise: no other money in hand	Unknown	Engineering, design, permitting, ongoing maintenance	Consultant DEP Conservation District Project partners	\$10,300,000+ capital	GG, DEP/BAMR, DCNR, CHP, Foundation for PA Watersheds, NFWF
3.38*	Implement PFBC Susquehanna River Management Plan	Restore, enhance, and protect the aquatic resources of the Upper West Branch Susquehanna River watershed	PFBC, Clearfield CD, Cambria CD, Watershed Associations,	Upper West Branch Susquehanna River watershed	2025+	Funding, manpower, need accurate cost estimates	PFBC biologists	PFBC	None	None	Partner cooperation to pursue grants	All project partners	Unknown	Unknown

			TU, SRBC, DEP, WPC			Recommendations: follow PFBC lead								
3.39*	Implement Chest Creek Assessment and Restoration Plan	Restoration of Chest Creek watershed	Clearfield CD, Cambria CD, Chest Creek Watershed Alliance, TU, SRBC, DEP, WPC, NC Conservancy	Chest Creek watershed	2025+	Funding, landowner participation, ongoing maintenance	Grant writing, project oversight	Clearfield and Cambria CD Watershed Specialists, SRBC, DEP/BAMR	None	None	Engineering, design, permitting, ongoing maintenance	Consultant DEP Conservation District Project partners	\$784,368+	GG, DCNR, CHP, NFWF, Foundation for PA Watersheds
3.40*	Implement Spring Run and Snyder Run Coldwater Conservation Plan	Restoration of Spring and Snyder Run watersheds	Clearfield CD, Chest Creek Watershed Alliance, NC Conservancy, WPC	Spring and Snyder Run watersheds	2025+	Funding, landowner participation	Grant writing, project oversight	Clearfield CD Watershed Specialist	None	None	Engineering, design, permitting, ongoing maintenance	Consultant Conservation District	\$400,000+	GG, CHP, Foundation for PA Watersheds
3.41*	Implement Rogues Harbor Run Coldwater Conservation Plan	Enhancement and protection of Rogues Harbor Run watershed	Clearfield CD, Cambria CD, Chest Creek Watershed Alliance, NC Conservancy, WPC	Rogues Harbor Run watershed	2025+	Funding, landowner participation	Grant writing, project oversight	Clearfield & Cambria CD Watershed Specialists	None	None	Engineering assistance Education/outreach	Consultant	\$200,000+	GG, CHP, Foundation for PA Watersheds, NFWF
3.42*	Implement Kratzer Run Assessment and Coldwater Conservation Plan	Restoration of Kratzer Run watershed	Clearfield CD, SRBC, WPC, DEP/BAMR, Anderson Creek Watershed Association, NC Conservancy	Kratzer Run watershed	2025+	Funding, landowner participation, ongoing maintenance Clarify nutrient impairment from On-Site Treatment Systems (Septic Systems and similar decentralized systems) – is this listing still valid?	Grant writing, project oversight	Clearfield CD Watershed Specialist, SRBC Mine Drainage Coordinator	<ul style="list-style-type: none"> • Bilger 4.0 Construction Grant - \$300,000 • Wildwood Design Grant - \$47,312 • Russell Whitaker Land Rec – 	319 Nonpoint Source Grant Program	Engineering, design, permitting, ongoing maintenance, insight into impairment listing	Consultant DEP Conservation District	\$2,000,000+	GG, 319, CHP, PEC, OSM, Foundation for PA Watersheds, NFWF
3.43*	Implement Anderson Creek WIP (including Little Anderson Creek	Restoration of the Anderson Creek watershed (primarily the Little Anderson Creek subwatershed)	Clearfield CD, SRBC, WPC, DEP/BAMR, Anderson	Anderson Creek watershed	2025+	Funding, landowner participation, ongoing maintenance	Grant writing, project oversight	Clearfield CD Watershed Specialist,	None	None	Engineering, design, permitting, ongoing	Consultant DEP/BAMR	\$11,000,000+	319, GG, PEC, OSM, Pilot Funding,

	WIP Update of 2020/2021)		Creek Watershed Association, NC Conservancy					SRBC Mine Drainage Coordinator , BAMR engineers			maintenance , BAMR AML reclamation design	Conservation District		AMD Set Aside Program, Foundation for PA Watersheds
3.44*	Implement Hartshorn Run WIP	Restoration of the Hartshorn Run watershed	Clearfield CD, DEP	Hartshorn Run watershed	2025+	Funding, landowner participation, ongoing maintenance	Grant writing, project oversight	Clearfield CD Watershed Specialist	None	None	Engineering, design, permitting, ongoing maintenance	Consultant DEP Conservation District	\$600,000+	319, GG, OSM
3.45*	Implement Montgomery Creek WIP (including 2021 update)	Restoration of the Montgomery Creek watershed	Clearfield CD, DEP, Montgomery Creek Watershed Association, Clearfield Municipal Authority	Montgomery Creek watershed	2025+	Funding, landowner participation, ongoing maintenance	Grant writing, project oversight	Clearfield CD Watershed Specialist	MON71 enhancement funding - \$25,000	319 Nonpoint Source Grant Program	Engineering, design, permitting, ongoing maintenance	Consultant DEP Conservation District	\$1,000,000+	319, GG, OSM, Sky Haven Treatment Trust
3.46*	Implement Lick Run Coldwater Conservation Plan	Restoration of Lick Run watershed	Clearfield CD, AMCTU, DCNR, PFBC	Lick Run watershed	2025+	Funding, annual cost for alkaline addition, ongoing maintenance	Grant writing, project oversight	Clearfield CD Watershed Specialist	None	None	Engineering, design, permitting, ongoing maintenance	Consultant DCNR Conservation District	\$1,100,000+	GG, CHP, DCNR, Foundation for PA Watersheds , NFWF, EBTJV
3.47*	Implement Trout Run Watershed Acid Deposition Assessment and Restoration Plan	Restoration of the Trout Run watershed	Clearfield CD, AMCTU, Goshen Township Sportsmen, DCNR	Trout Run watershed (trib to West Branch)	2025+	Funding, annual cost for alkaline addition, ongoing maintenance	Grant writing, project oversight	Clearfield CD Watershed Specialist, DNCR maintenance	None	None	Engineering, design, permitting, ongoing maintenance	Consultant DCNR Conservation District	\$1,100,000+	GG, CHP, DCNR, Foundation for PA Watersheds , NFWF, EBTJV
3.48*	Implement Potts Run Coldwater Conservation Plan Implement Potts Run AMD Restoration Plan Implement Qualified Hydrologic Unit Plan for the Potts Run Watershed	Restoration of the Potts Run watershed	TU, Clearfield CD, DEP/BAMR, NC Conservancy	Potts Run watershed	2025+	Funding, landowner participation, ongoing maintenance	Grant writing, project oversight Ongoing operation of Potts Run Treatment System	TU Technical staff, Clearfield CD Watershed Specialist, BAMR engineers	None	None	Engineering, design, permitting, ongoing maintenance	Consultant DEP Conservation District TU	\$2,444,387+	GG, CHP, PEC, OSM, Pilot Funding, AMD Set Aside Program, Foundation for PA Watersheds

3.49*	<p>Implement the Morgan Run Watershed Mine Drainage Assessment and Restoration Plan</p> <p>Implement Morgan Run 319 WIP (under development 2021)</p> <p>Implement Qualified Hydrologic Unit Plan for Morgan Run watershed</p>	Restoration of the Morgan Run watershed	Clearfield CD, DEP, PGC, TU	Morgan Run watershed	2025+	Funding, landowner participation, ongoing maintenance	Grant writing, project oversight	Clearfield CD Watershed Specialist	<ul style="list-style-type: none"> MR7 Construction funding - \$1,067,493 MRSGL Collection funding - \$151,142 WIP Development Funding - \$29,579 Flushing Unit Replacement funding - \$21,417 	GG 319 Nonpoint Source Grant Program	Engineering, design, permitting, ongoing maintenance	Consultant Conservation District DEP	\$1,729,941	GG, 319, OSM, Pilot Funding, AMD Set Aside Program, Foundation for PA Watersheds
3.50*	Implement the Muddy Run Watershed AMD Restoration Plan	Restoration of the Muddy Run watershed	Clearfield CD, Clearfield Creek Watershed Association, SRBC, DEP/BAMR	Muddy Run watershed	2025+	Funding, landowner participation, ongoing maintenance	Grant writing, project oversight	Clearfield CD Watershed Specialist, SRBC Mine Drainage Coordinator, BAMR engineers	None	None	Engineering, design, permitting, ongoing maintenance	Consultant DEP	\$17,530,000	GG
3.51*	Implement projects identified as priorities in the Clearfield Creek Assessment	Restoration of Clearfield Creek watershed	Clearfield Creek Watershed Association, Clearfield and Cambria CDs, SRBC, DEP/BAMR	Clearfield Creek watershed	2025+	Funding, landowner participation, ongoing maintenance	Grant writing, project oversight	Clearfield & Cambria CD Watershed Specialists, SRBC Mine Drainage Coordinator, Clearfield Creek Watershed Association,	None in Clfd Co - Current grants for Clearfield Creek are in Cambria Co	GG, 319 NPS Grant Program	Engineering, design, permitting, ongoing maintenance	Consultant DEP	Extremely high cost – exact figure unknown at this point.	GG, 319, OSM, Pilot Funding, AMD Set Aside Program, Foundation for PA Watersheds

								BAMR engineers						
3.52*	Implement recommendations of Acid Mine Drainage Assessment of Valley Forks Run study	Restoration of Valley Forks Run watershed	Clearfield CD, Clearfield Creek Watershed Association, SRBC, DEP/BAMR	Valley Forks Run watershed	2025+	Funding, landowner participation, ongoing maintenance	Grant writing, project oversight	Clearfield CD Watershed Specialist, BAMR engineers	None	None	Engineering, design, permitting, ongoing maintenance	Consultant DEP	\$958,584	GG
3.53*	Implement Hubler Run WIP	Restoration of Hubler Run watershed	Clearfield CD, DEP, Emigh Run Lakeside Watershed Association	Hubler Run watershed	2025	Funding, landowner participation, ongoing maintenance	Grant writing, project oversight	Clearfield CD Watershed Specialist	None	None	Ongoing O&M oversight, Engineering assistance	Consultant DEP	\$200,000+ capital for Hubler 4	319
3.54*	Implement Moravian Run Restoration Plan	Restoration of Moravian Run watershed	Clearfield CD, DEP, PGC	Moravian Run watershed	2025+	Funding, landowner participation, ongoing maintenance	Grant writing, project oversight	Clearfield CD Watershed Specialist	None	V	Engineering, design, permitting, ongoing maintenance	Consultant Conservation District DEP	\$1,320,000+	GG, Foundation for PA Watersheds
3.55*	Implement Deer Creek Watershed Implementation Plan	Restoration of Deer Creek watershed	Clearfield CD, Deer Creek Watershed Association	Deer Creek watershed	2025+	Funding, landowner participation, ongoing maintenance	Grant writing, project oversight	Clearfield CD Watershed Specialist	Deer Creek Construction - \$883,174	319 NPS Grant Program	Engineering, design, permitting, ongoing maintenance	Consultant Conservation District DEP	\$4,025,000	319, GG, Foundation for PA Watersheds
3.56*	Implement recommendations from Potter Run AMD Watershed Assessment	Restoration of Potter Run watershed	Clearfield CD, Watershed Associations, DEP/BAMR, SRBC	Potter Run watershed	2025+	Funding, landowner participation, ongoing maintenance	Grant writing, project oversight	Clearfield CD Watershed Specialist, SRBC Mine Drainage Coordinator, BAMR engineers	None	None	Engineering, design, permitting, ongoing maintenance	Consultant Conservation District DEP	Exact cost unknown at this point.	GG
3.57*	Implement recommendations from Rupley Run AMD Watershed Assessment	Restoration of Rupley Run watershed	Clearfield CD, Watershed Associations, DEP/BAMR, SRBC	Rupley Run watershed	2025+	Funding, landowner participation, ongoing maintenance	Grant writing, project oversight	Clearfield CD Watershed Specialist, SRBC Mine Drainage Coordinator, BAMR engineers	None	None	Engineering, design, permitting, ongoing maintenance	Consultant Conservation District DEP	Exact cost unknown at this point.	GG
3.58*	Implement Emigh Run Watershed Mine	Restoration of Emigh Run watershed	Clearfield CD, Emigh Run	Emigh Run watershed	2025+	Funding, landowner participation,	Grant writing, project oversight	Clearfield CD	None	None	Engineering, design,	Consultant	\$2,660,650	GG

	Drainage Assessment and Restoration Plan		Lakeside Watershed Association,			ongoing maintenance		Watershed Specialist			permitting, ongoing maintenance	Conservation District DEP		
3.59*	Implement Shimel Run Mine Drainage Assessment and Restoration Plan	Restoration of the Shimel Run watershed	Moshannon Creek Watershed Association, Clearfield and Centre CDs, SRBC, DEP/BAMR	Shimel Run watershed	2025+	Funding, landowner participation, ongoing maintenance	Grant writing, project oversight	Clearfield CD Watershed Specialist, SRBC Mine Drainage Coordinator, BAMR engineers	None	None	Engineering, design, permitting, ongoing maintenance	Consultant Conservation District DEP	\$340,000	GG
3.60*	Implement Moshannon Creek Headwaters Mine Drainage Assessment and Restoration Plan Implement Moshannon Creek Phase II Mine Drainage Assessment and Restoration Plan Implement Moshannon Creek Headwaters Coldwater Conservation Plan Implement recommendations from Moshannon Creek Reassessment Coldwater Conservation Plan (under development 2021)	Restoration of Moshannon Creek watershed	Moshannon Creek Watershed Association, Clearfield CD, Centre CD, SRBC, DEP/BAMR, PGC, NC Conservancy, WPC	Moshannon Creek watershed	2025+	Funding, landowner participation, ongoing maintenance Few landowners willing to install AMD treatment systems	Grant writing, project oversight	Clearfield and Centre CD Watershed Specialists, SRBC Mine Drainage Coordinator	CHP Reassessment - \$6800 CHP Reassessment Match - \$36,264 RLB2 Construction - \$249,500	CHP SRBC SMCRA Grant Program	Engineering, design, permitting, ongoing maintenance	Consultant Conservation District DEP	\$25,000,000+	GG, CHP, Foundation for PA Watersheds, NFWF
3.61*	Implement Sinnemahoning Creek Watershed Conservation Plan Implement Bennett Branch Sinnemahoning Creek QHUP	Restoration of the Sinnemahoning Creek watershed	Clearfield CD, Elk CD, Cameron CD, Potter CD, McKean CD, DEP, BAMR, SRBC, WPC, Watershed Associations, TU, NC Conservancy.	Sinnemahoning Creek watershed	2025+	Funding, landowner participation, ongoing maintenance,	Grant writing, project oversight	Clearfield, Elk, Cameron, and Potter CD Watershed Specialists, SRBC Mine Drainage Coordinator, BAMR engineers	None	None	Engineering, design, permitting, ongoing maintenance	Consultant Conservation Districts DEP	Unknown, not specified in plan but sounds extensive	GG, DCNR, AMD Set Aside Program, NFWF, CHP, Sinnemahoning Stakeholder Grant Program, Foundation

			Headwaters RC&D											for PA Watersheds
3.62	Implement outstanding TU Technical Assistance Recommendations	Follow through with implementation of recommendations contained in outstanding TU Technical Assistance Reports generated through the TAG programs	Clearfield CD, Watershed Associations, TU, SRBC, DEP/BAMR, WPC	Countywide	2025+	TAG reports can cover AMD, habitat, biological and water quality monitoring, etc recommendations. The technical work has typically already been completed; they just need follow up implementation of recommendations provided.	Technical assistance Grant writing and project oversight	TU Conservation District	None	None	Engineering, design, permitting, ongoing maintenance	Consultant Conservation Districts	Exact cost unknown at this point.	CHP, GG, 319, NFWF
3.63	Acid Deposition Remediation	Restore watersheds impaired by acid deposition	Clearfield CCD, DCNR, St. Francis, PFBC, TU	Countywide	2025+	Funding, landowner participation, ongoing maintenance. Site access can be difficult	Technical assistance Grant writing and project oversight	TU Conservation District	None	None	Engineering, design, permitting, ongoing maintenance	Consultant Conservation Districts	Exact cost unknown at this point.	GG, DCNR, NFWF, CHP, Sinnemahoning Stakeholder Grant Program, Foundation for PA Watersheds

Priority Initiative #4: Research, Education & Training

4.1	Local studies of agricultural BMPs to assess impacts to profitability	Complete more local research to define economic variables for the implementation of BMPs on Conservation District farm and partnering farms Utilize CIG Funding to demonstrate and investigate the feasibility of new BMP technologies	Conservation District, County Farms, Penn State.	Bay Portion of Clearfield County	2022 – 2025+	Time constraints and Funding availability	Tech assistance Research	Conservation District Penn State	None	N/A	University assistance with study trials and data analysis to assign economic values	Penn State other universities	Unknown	CIG, SARE
4.2	4R Practice Education	Hold on farm 4R Education Events to build local knowledge of 4R practices and benefits - 1 event per year)	Conservation District	Bay Portion of Clearfield County	2021 – 2025+	Farmer led trainings and field demonstrations	Tech, education, and admin support	Conservation District, 4 R Alliance, Local Farms	None	N/A	4R Knowledge and Expertise	4R Alliance	\$5,000/ Event	CIG, 4R Alliance, SARE, PACD, DEP

4.3	On Farm BMP showcase field days	Hold on farm BMP Field days to build local knowledge of BMP practices and benefits - 1 event per year	Conservation District	Bay Portion of Clearfield County	2021 – 2025+	Farmer led trainings and field demonstrations	Tech, education, and admin support	Conservation District, 4R Alliance, Local Farms, PA No-till alliance, Soil Health Coalition	None	N/A	Technical Knowledge – Experts in Topic	NRCS, PACD, Contractors, Farmers, PA No-till, PA 4R, Penn State, WPC, NCC, TU and more	\$5,000/ Event	CIG. 4R Alliance, SARE, PACD, DEP
4.4	On Farm Soil Health field days	Hold on farm Soil Health Field days to build local knowledge of BMP practices and benefits - 1 event per year	Conservation District, Penn State Extension	Bay Portion of Clearfield County	2021 – 2025+	Farmer led trainings and field demonstrations	Tech, education, and admin support	Conservation District, 4R Alliance, Local Farms, PA No-till Alliance, NRCS, Penn State	None	N/A	Technical Knowledge – Experts in Topic	NRCS, PACD, Contractors, Farmers, PA No-till, PA 4R, Penn State, WPC, NCC, TU and more	\$5,000/ Event	CIG. 4R Alliance, SARE, PACD, DEP
4.5	Farmer to farmer training and outreach events that increase success of no-till and cover crops	Hold on farmer-to-farmer training days to build local knowledge of success and failures of no-till and cover crop adoption - 1 event per year	Conservation District	Bay Portion of Clearfield County	2021 – 2025+	The approach will lead to increased adoption in the late adopter farms	Tech, education, and admin support	Conservation District, 4R Alliance, Local Farms, PA No-till Alliance, NRCS, Penn State	None	N/A	Technical Knowledge – Experts in Topic	Local Farmers	\$5,000/ Event	CIG. 4R Alliance, SARE, PACD, DEP
4.6	Grazing Education	Hold education events to increase the knowledge of rotational grazing benefits that will increase the adoption of grazing management - 1 event per year	Conservation District Headwaters RC&D	Bay Portion of Clearfield County	2021 – 2025+	Farmer led trainings and field demonstrations	Tech, education, and admin support	Conservation District, Headwaters RC&D, Project Grass, NRCS	None	N/A	Technical Knowledge – Experts in Topic	NRCS, PACD, Contractors, Farmers, PA No-till, PA 4R, Penn State, WPC, NCC, TU and more	\$5,000/ Event	CIG, SARE, PACD, DEP
4.7	Increase the usage of nutrient monitoring technologies on farms	Increase the adoption of monitoring technologies to monitor crop nitrogen needs through the education events and technical assistance	Conservation District	Bay Portion of Clearfield County	2021 – 2025+	Targeted education about nutrient monitoring technologies will increase the adoption and help farmers make economical and	Tech, education, and admin support	Conservation District, 4R Alliance, Local Farms, PA No-till Alliance, NRCS, Penn State	None	N/A	Technical Knowledge – Experts in Topic	NRCS, PACD, Contractors, Farmers, PA No-till, PA 4R, Penn State, WPC, NCC,	\$5,000/ Event	CIG. 4R Alliance, SARE, PACD, DEP

		Provide example service to farms and record adoption of practice - 1 event per year				environmental decisions about in-season nitrogen management						TU and more		
4.8	Legislative field days and education	Education of Legislators about conservation will increase support of programs and funding to enhance water quality improvements - 1 event per year	Conservation District, PACD, DEP	Countywide	2021 – 2025+	Project visit to demonstrate the effectiveness and need of installed BMPs	District Knowledge	Conservation District	None	N/A	None	N/A	\$5,000 / Event	State
4.9	Riparian Buffer Education	Hold education events to increase the knowledge of riparian buffer benefits that will increase the adoption of buffers on private lands - 1 event per year	Conservation District, PACD, DEP, Penn State, WPC, Municipalities	Countywide	2021 – 2025+	Project visit to demonstrate the effectiveness and need of installed BMPs. There is a critical need for education in Clearfield Borough about riparian areas and their impact on flood events	District Education Municipal Education	Conservation District and Clearfield Borough	None	N/A	Technical Knowledge – Experts in Topic	DCNR, PACD, NRCS, Penn State, WPC, TU	\$5,000 / Event	State
4.10	Land Conservation and Preservation Education	Hold educational events for municipalities and property owners to improve understanding and acceptance of conservation easements - 1 event per year	Conservation District and WPC, Penn State Extension NC Conservancy	Bay Portion of Clearfield County	2022 – 2025+	The improved education about how conservation easements affect local recreation, land value, and taxes will lead to the increased adoption and acceptance of easements in the County	Education	WPC, Conservation District, 33 NC Conservancy	None	N/A	None	N/A	\$5,000 / Event	State
4.11	Climate Change Education	Hold education events about how climate change is impacting natural resources and economies. And how adopting - 1 event per year	Conservation District, Headwaters RC&D	Bay Portion of Clearfield County	2022 – 2025+	Education of climate issues and local impacts will spur adoption of climate resilient BMPs that improve water quality	Education	Conservation District, Headwaters RC&D, WPC, PA Wilds	None	N/A	Technical Knowledge – Experts in Topic	Climate in Rural Systems Partnership	\$5,000 / Event	State
4.12	Update economic benefits of AMD treatment	Knowing the economic benefit of AMD and AML reclamation is beneficial in showing the need for reclamation and the	Conservation District, TU, WCPAMR, EPCAMR,	Countywide and beyond	2022 – 2025+	Knowing the economic return from AMD/AML reclamation is	Project oversight	Conservation District, Headwaters RC&D,	None	N/A	Study and data analysis to assign	Consultant	Unknown	State or federal

		<p>economic return realized in the local economy.</p> <p>Develop education resource with information on economic return of AMD investment</p>				needed to demonstrate the benefits of reclamation. We understand the environmental benefits but funders, companies, private citizens, and legislators are more responsive to economic return from a project.		WPCAMR, EPCAMR			economic values			
4.13	Public education events about urban stormwater practices	<p>Hold education events for public on the importance of home stormwater practices to encourage adoption on private properties</p> <p>- 1 event per year</p>	Conservation District, Commissioners municipalities, municipal authorities, Penn State Extension	Bay Portion of Clearfield County	2022 – 2025+	Holding regular meetings to build relationships with community and increase adoption and implementation of key urban BMPs.	Tech, education, and admin support	Landscapers , Conservation District, Master Gardeners	None	N/A	Technical Knowledge – Experts in Topic	Penn State, Engineers	\$5,000 / Event	State
4.14	Urban Nutrient Management Education	<p>Conduct education of commercial landscape industry/golf course owners/homeowners regarding nutrient management</p> <p>- 1 event per year</p>	Conservation District, Penn State Extension	Bay Portion of Clearfield County	2022 – 2025+	Education events about urban nutrient management will reduce the amount of nutrients applies to turf in urban environments	Tech, education, and admin support	Landscapers , Conservation District, Master Gardeners	None	N/A	Technical Knowledge – Experts in Topic	Penn State, Engineers, Landscapers	\$5,000 / Event	State
4.15	Education about stormwater issues and benefits of stormwater remediation	<p>Hold education events to increase awareness and accelerate future implementation</p> <p>- 1 event per year</p>	Conservation District, Penn State Extension	Bay Portion of Clearfield County	2021 – 2025+	Providing education to landowners, local governments and municipal officials will increase the awareness and adoption of stormwater remediating BMPs	Penn State resources, PACD resources	Penn State, PACD	None	N/A	Technical Knowledge – Experts in Topic	Penn State, Engineers, Landscapers, PACD	\$5,000 / Event	State
4.16	Developer and Engineer Education Events	<p>Hold education events for engineers and developers on the CAP goals and key stormwater BMPs to encourage incorporation into their projects</p> <p>- 1 event per year</p>	Conservation District, Engineers, Developers, Landscapers, Architects, Commissioners municipalities,	Bay Portion of Clearfield County	2021 – 2025+	Holding regular meetings to build relationships with private development entities will increase adoption and implementation of	Tech, education, and admin support	Conservation District Penn State	None	N/A	Technical Knowledge – Experts in Topic	Penn State, Engineers, Landscapers, PACD	\$5,000 / Event	State

			municipal authorities			key urban BMPs. Annual meeting will also provide updates for CAP reporting and progress								
4.17	Promote Carbon Credit Program participation to increase no-till and cover crops	Increase the adoption and sustained implementation of no-till and cover crops by increasing farm participation in carbon credit programs - 1 event per year	Conservation District	Bay Portion of Clearfield County	2021 – 2025+	Education and technical outreach about current Carbon Markets and Companies participating in Carbon Crediting will lead to the adoption and long term sustainability of no-till and cover crops within the County.	Tech, education, and admin support	Conservation District Penn State, Private Sector Companies	None	N/A	Technical Knowledge – Experts in Topic	Private carbon companies, farmers, Penn State	\$5,000 / Event	State

Phase 3 Watershed Implementation Plan (WIP) Planning and Progress 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 through 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).