Action #	Description	Green - action Performance Target(s)	has been complet Responsible Party(ies) and Partnerships	Geographic Location	Expecte d Timeline	Potential Implementation	action has encountered minor obstacles Red - action has not been Resources Available				en taken or has	Review Checklist Comments			
						5	Technical	Source	Financial	Source	Technical	Suggested Source	Financial	Suggested Source	
Priori 4.1*	Stream Channel Restoration and Protection	4: Watershed Provide bank protection, instream habitat and riparian buffers on streams in developed areas. 500 linear feet per year, with additional possible based on funding, design and permitting	Health LCCD, municipalities, Trout Unlimited, Watershed associations	Urban/ developed	2022-2025	Lack of available land for stream restoration, landowner participation	Standard stream design guidance,	PAF&BC, Trout Unlimited, PADEP, NC State, Rosgen	Public lands in urban areas (parks, trails, etc.)	Local, county, state governments	Design services for restoration, construction, permitting	Consultants, Trout Unlimited	Design and construction funding for restoration and protection project implementati on \$800,000 per year	Local grants, growing greener DCED Watershed Restoration and Protection Program (WRPP) DCED Flood Mitigation Program (FMP)	
4.2*	Stream Bank Stabilization	Protecting stream banks and securing for stabilization. 500 linear feet per year, with additional possible based on funding, design and permitting conditions	LCCD, watershed associations, Trout Unlimited	At risk streams in Environmental Justice areas	2022-2025	Landowner cooperation, volunteers for planting and installation	Standard guidance, education/ outreach materials	Conservation Districts, USDA, DCNR	Plantings and materials	PADEP CBO, K-10	Coordinators, outreach for volunteer support Materials and design	Staff at Conservation Districts Consultants and contractors	Funding for coordinator positions, materials, design, and implementati on \$800,000 per year	CBO, endowments DCED Watershed Restoration and Protection Program (WRPP) DCED Flood Mitigation Program (FMP)	

4.2a	Riparian Buffer Development	Protect and plant trees along critical stream sections. Implement and verify 100 acres per year	LCCD, watershed associations, Trout Unlimited	At risk streams in Environmental Justice areas	2022-2025	Landowner cooperation/willi ngness to enter into long-term agreements (DCNR program), volunteers for planting, limited availability of certain tree species	Development of planting specs, coordinating projects with landowners, Standard guidance, education/outre ach materials	Conservation Districts, USDA, DCNR, NRCS	Plantings and materials, Existing Grant Programs	PADEP CBO, K-10, DCNR	Coordinators, outreach for volunteer support, example planting plans	LCCD Watershed Specialist & additional outreach staff member	Dedicated and sustainable funding source for district staff positions & implementati on of buffer projects \$250,000 per year	CBO, endowments , State (DEP, PDA, Growing Greener, CBP block grant) DCED Watershed Restoration and Protection Program (WRPP) DCED Flood Mitigation Program (FMP)
4.3	AML Reclamation Planning and AMD Restoration	Restoring AML impacted areas and treating AMD discharges to restore water quality. Operation and maintenance on existing reclamation and restoration sites. Assess or restore 2 sites per year	EPCAMR, LRCA, BAMR	AML and AMD areas within Lackawanna County	2024+	High costs associated with planning and restoration	Technical assistance, Support, documentation and case study's	EPCAMR, BAMR, NRCS	AMD restoration funds	Act 13 funds, Growing Greener, BAMR, 319 Funds, various mine reclamation programs, State and federal funding	Planning and restoration labor, permitting	Private consultant and contractor	Costs associated with restoration and reclamation planning \$1,000,000 per year	Federal funding, state funds DCED Abandoned Mine Drainage Abatement and Treatment Program (AMDATP) Growing Greener, Act 13, 319 Funds

4.3 a	Mine Pool Water Treatment for Irrigation	Treating mine pool water to remove heavy metals to be used for irrigation on golf courses and other Turf grass areas. This will increase irrigation and reduce nutrient application on these areas. 1 site per year	LCCD, EPCAMR, BAMR, SRBC, Golf Course Superintenden ts	Pine Hills Golf Course, other Golf Courses and Entities using mine pool water for irrigation	2023+	Existing regulation on water withdraws, high cost treatment facilities	Technical guidance for treatment design and permitting	EPCAMR, BAMR	Funding to complete Design Permitting and Constructi on of project	Act 13 funds, Growing Greener, BAMR, 319 Funds, various mine reclamation programs, State and federal funding	Support to alter existing water withdraw permits and complete permitting and design	Private Consultants, SRBC	Costs associated with the project, include design, permitting and construction \$750,000 per project	Federal funding, state funds DCED Abandoned Mine Drainage Abatement and Treatment Program (AMDATP) Growing Greener, Act 13, 319 Funds
4.4	Forest Land Conservation and Management	Preserve Quality Forest Land Surrounding Quality Resources through conservation easements, deed restrictions, land conservancies.	LCCD, NRCS, DCNR, Landowners, PGC	Forest lands near quality resources	2022-2025	Funding for conserved lands and landowner participation	Conservation efforts, existing land conservancy programs	DCNR, NRCS, PSU Extension, Foresters	Conservati on and manageme nt	Private funds, existing grant programs	Addition outreach and support	DCNR, NRCS, LCCD	Cost associated with conservation , planning, and management \$150,000 per year	State Grants DCNR Riparian Forest Buffer Grants
4.4 a	Forestry Harvest ED and Outreach	Educating private forest landowners on the importance of proper harvesting and selecting a qualified timber harvester. 2 programs per year	DCNR, NRCS, LCCD	Private forest landowners	2023	Participation from landowners and interest and technical assistance	Educational materials	DCNR, PSU Extension	N/A	N/A	Outreach events, education programs, county specific harvest information	LCCD, DCNR, NRCS	Costs associated with in person events, county specific materials, and outreach. Dedicated Funding for	State grants, Growing Greener Education Grant, State and Federal Funding

			part time staff to coordinate
			program. ½ FTE,
			\$40,000 per year.

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 though outreach, assistance or funding, and who will be responsible for delivering the identified programs or practices.

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

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

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

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

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