

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			Review Checklist Comments	
							Technical	Source	Financial	Source	Technical	Suggested Source		Financial
Priority Initiative 4: Watershed Health														
4.1	AMD Treatment for Nutrient Reductions	Detailed evaluation of nutrient loads in AMD discharges and development of treatment plans. <u>Evaluate 3 sites per year</u>	EPCAMR, BAMR, LCD, Landowners	AMD treatment sites: Mehoopany Creek, Bowman Creek, Fishing Creek, Susquehanna River, Lackawanna River, Delaware River Basin, Nescopeck Creek, and Catawissa Creek Watersheds	2023-2025	High Cost, Landowner participation, complex treatment systems	Existing AMD treatment technologies	Various Organizations & Agencies	Funding for existing treatment reductions	DEP, 319 Grants	Chemical analysis of discharges and specific treatment designs, measured flow data	EPCAMR, universities, BAMR	Funding for research, design, & construction	State & federal grants, private endowments \$250,000 per year
4.2	Stream Restoration	Provide bank protection, instream habitat and riparian buffers on streams in degraded sections of streams in rural and developed areas.	LCD, municipalities, Trout Unlimited, watershed associations	County impaired streams Mehoopany Creek, Bowman Creek, Fishing Creek, Susquehanna River, Lackawanna	2022-2025	High cost/lack of matching funds, Lack of available land for stream restoration, landowner participation	Standard stream design guidance	LCD Watershed Specialist, PAF&BC, TU, PADEP, State, Rosgen	Existing grant programs (e.g. Growing Greener), Public lands in urban areas (parks, trails, etc.)	Local, county, state agencies	Project coordination, Design/permitting services	LCD Watershed Specialist, Consultants, Trout Unlimited	Dedicated and sustainable funding source for district staff position & funding for design, permitting, and implementati	Local grants, DEP Growing Greener Program, DEP Stream Improvement Program DCED Watershed Restoration and Protection

		<u>400 linear feet per year</u>		River, Delaware River Basin, Nescopeck Creek, and Catawissa Creek Watersheds								on of projects	Program (WRPP), DCED Flood Mitigation Program (FMP) \$2,500 per in stream structure \$1,000 per/ft of mudsill \$500,000 per year	
4.3	Riparian Buffer Development	Protect and plant trees along critical stream sections. <u>Implement and verify 200 acres per year</u>	LCD, watershed associations, Trout Unlimited	County impaired streams Mehoopany Creek, Bowman Creek, Fishing Creek, Susquehanna River, Lackawanna River, Delaware River Basin, Nescopeck Creek, and Catawissa Creek Watersheds	2022-2025	Landowner cooperation/williness 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/outreach materials	LCD Watershed Specialist,	Existing Grant Programs	CBF K-10, DCNR PADEP CBO	Additional outreach to landowners and volunteers & coordination/design of buffer projects	LCD Watershed Specialist & additional outreach staff member	Dedicated and sustainable funding source for district staff positions & implementation of buffer projects	State (DEP, PDA, Growing Greener, CBP block grant), endowments, DCED Watershed Restoration and Protection Program (WRPP), DCED Flood Mitigation Program (FMP) \$250,000 per year
4.4	Farmland and Forestry Preservation	Quantify existing preserved open space to ensure	LCD, County Planning & Zoning Department,	County farm and forestlands	2021-2025	Having enough staffing resources to compile, verify, report data, and coordinate	Existing land trust and Farmland Preservation	DCNR, LCD, North Branch Land Trust,	Existing grant programs	DCNR C2P2, Farmland	Additional outreach to landowners and	LCD Ag. Pres. Program Coord. & Additional	Dedicated and sustainable funding	Farmland Preservation Program, USDA ACEP,

		proper pollutant reduction credits and Preserve additional farmland and natural lands. <u>Add 500 acres per year</u>	North Branch Land Trust			additional preservation efforts and Funding to purchase conservation easements	Program resources	Foresters, PA Dept. of Ag.		Pres. Program	coordination of data collection effort and future land preservation projects	outreach staff member and land trust staff members	source for staff positions & additional Funding to purchase additional conservation easements	private land donations, DCNR, PGC \$350,000 per year	
4.5	AML Reclamation Planning and AMD Restoration	Restoring AML impacted areas, enhancing existing and future AML reclamation projects to include additional conservation benefits (e.g., use of AMD sludge and biosolids for soil improvement, planting warm season grasses and use of Forest Reclamation Approach for improved SW mgmt. & wildlife habitat, etc.), and treating AMD discharges to restore water quality.	DEP BAMR, EPCAMR, Trout Unlimited, private landowners	Mining-impacted areas of the County Mehoopany Creek, Bowman Creek, Fishing Creek, Susquehanna River, Lackawanna River, Delaware River Basin, Nescopeck Creek, and Catawissa Creek Watersheds	2024+	High Cost, Landowner participation, complex treatment systems	Existing AMD treatment technologies and AML land reclamation standards	Various Organizations & Agencies	Funding for reclamation and restoration	DEP, 319 Grants, BAMR funds	Project coordination, Design/permitting services	LCD Watershed Specialist, EPCAMR Staff, BAMR Staff, TU Staff, Consultant	Funding for staff positions and to design, permit, implement projects	DCED Abandoned Mine Drainage Abatement and Treatment Program (AMDATP) DEP Growing Greener Program, Act 13 grant funds, 319 Funds \$250,000 per year	

		<u>Evaluate 3 projects per year</u>													
4.6*	Reporting and Verification of Existing BMPs	Collect data on and verify status (including operation & maintenance needs) of existing, recently completed, and in-progress BMPs <u>50 watershed projects per year</u>	LCD, partnering organizations, local governments, and state agencies (DEP, DCNR, PGC, & PFBC)	County	2021-2025	Having enough staffing resources to compile, verify, and report data	BMPs and plans that were funded through agencies and grants are already known	LCD, DEP	N/A	N/A	Dedicated staff or contracted staff to compile existing data and do outreach (e.g., partner survey, records research) and data entry	LCD outreach staff member, Luzerne County CAP Coordinator	Dedicated and sustainable funding to this position	State funds \$80,000 per year for staffing	
4.7	Wetland Enhancement & River Shoreline Improvement	Improve and expand wetland habitat and beneficial aquatic plant habitat for improved water quality <u>Complete 25 acres per year</u>	LCD, landowners, partnering organizations, and state agencies (DCNR, PGC, & PFBC)	County – key environmentally important areas	2021-2025	Landowner Participation, funding sources for implementation, permitting hurdles	Design assistance	LCD, Wildlife organizations (e.g. DU), U.S. F&WS	Current enhancement and improvement funding	NFWF	Design assistance, landowner outreach, and project design/permitting	LCD Watershed Specialist & additional outreach staff member	Dedicated and sustainable funding source for district staff positions & implementation of projects	Local, State, Federal, and private funding \$150,000 per year	

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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).