

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*	Stream Channel Restoration and Protection	Provide bank protection, instream habitat and riparian buffers on streams in developed areas. <u>500 linear feet per year, with additional possible based on funding, design and permitting conditions</u>	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 implementation \$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. <u>500 linear feet per year, with additional possible based on funding, design and permitting conditions</u>	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 implementation \$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. <u>Implement and verify 100 acres per year</u>	LCCD, watershed associations, Trout Unlimited	At risk streams in Environmental Justice areas	2022-2025	Landowner cooperation/willingness 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	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 & implementation 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. <u>Assess or restore 2 sites per year</u>	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	

4.3a	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. <u>1 site per year</u>	LCCD, EPCAMR, BAMR, SRBC, Golf Course Superintendents	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 Construction 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	Conservation and management	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	
4.4a	Forestry Harvest ED and Outreach	Educating private forest landowners on the importance of proper harvesting and selecting a qualified timber harvester. <u>2 programs per year</u>	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	

