

Chapter 9. Management Recommendations

Management recommendations are projects that have been identified through the development of the Youghiogheny River Conservation Plan Part 1: Headwaters to Dunbar Creek. When implemented, these projects will improve conditions in the Youghiogheny River watershed. Some recommendations are designed to improve water quality, while others might improve wildlife habitat or the general quality of life for area residents.

These recommended projects were identified through various forms of community outreach and collaboration. They are broken down by the various subsections or resources within the chapters of this report. Management Recommendations will be listed as basin wide, meaning they can be implemented in any of the management units. Then they will be followed by any management unit specific recommendations. Completing these recommended projects will improve conditions and the quality of life within the watershed.

In the matrix below, suggested project partners and potential funding sources are included alongside recommended projects. The listed funding sources and potential partners are not exclusive – others may participate in completing the recommended project. Further, the suggested partners and funders may choose not to participate in the recommended projects. Table 9-1 identifies the acronyms or abbreviations for organization used in the management recommendations matrix.



Volunteers installing a handicapped parking space at one of the trailheads for the Indian Creek Valley Trail.

TABLE 9-1. MANAGEMENT RECOMMENDATION ACRONYMS

Acronym	Definition
ADA	American Disability Act
DOH	Department of Health
FACT	Fayette Area Coordinated Transit
FPW	Foundation for PA Watersheds
ICVWA	Indian Creek Valley Water Authority
IDEXX	Water Testing Company
IJJA	Infrastructure Investment and Jobs Act
LHMG	Laurel Highlands Mini-Grants
LWA	Loyalhanna Watershed Association
MAWC	Municipal Authority of Westmoreland County
MDE	Maryland Department of Environment
MDNR	Maryland Department of Natural Resources
MWA	Mountain Watershed Association
NFWF	National Fish and Wildlife Foundation
OSM	Office of Surface Mining
PA-DCNR	Pennsylvania Department of Conservation and Natural Resources
PA-DEP	Pennsylvania Department of Environmental Protection
PENNVEST	Pennsylvania Infrastructure Investment Authority
PFBC	Pennsylvania Fish and Boat Commission
PGC	Pennsylvania Game Commission
PHMC	Pennsylvania Historic Museum Commission
SLHPMP	Southern Laurel Highlands Plant Management Partnership
STROUD	Stroud Center for Water Research
WPC	Western PA Conservancy
WTA	Westmoreland Transit Authority
WVDEP	West Virginia Department of Environmental Protection
WVDNR	West Virginia Department of Natural Resources

YOUGHIOGHENY RIVER WATERSHED

PROJECT AREA CHARACTERISTICS

Recommendation	Potential Partners	Potential Funding	Priority
Communication			
Improve cellular service through installation of towers and other devices.	Legislators, Cellular Companies, Visitors Bureaus, Chambers of Commerce	Private Sources, Legislators, Economic Development Departments, Appalachian Region Commission	
Expand access to high-speed internet, especially in low-income, rural, and environmental justice communities.	Legislators, Cellular Companies, Visitors Bureaus, Chambers of Commerce	Private Sources, Legislators, Economic Development Departments, Appalachian Region Commission	

Transportation

Increase public transportation opportunities, especially in low-income, rural, and environmental justice communities.	Area agencies on aging, Redevelopment Authorities, Senior Services, Legislators	Private Sources, Legislators	
Enhance techniques for improving and maintaining local roadways.	Municipal Units, State Highway Departments	State Highway Departments, State and Federal Legislators	
Increase funding to municipal units for improving and maintaining local roadways.	Municipal Units, State Highway Departments	State Highway Departments, State and Federal Legislators	
Maintain and improve dirt and gravel roadways to minimize erosion.	Center for Dirt & Gravel Roads, Municipal Units, State Highway Departments	Private Sources, Legislators, State Environmental Agencies, State Highway Departments	

PROJECT AREA CHARACTERISTICS

Recommendation	Potential Partners	Potential Funding	Priority
Sewage			
Conduct source tracking to identify stream impacts caused by bacteria and fecal coliform,	Municipal Units, Businesses, Conservation Organizations, State Agencies	Private Foundations, Private Sources, Economic Development Departments	
Work with landowners to upgrade malfunctioning septic systems, or potentially establish municipal systems when viable.	Municipal Units, Conservation Organizations, State Agencies, Landowners	Private Foundations, Private Sources, Economic Development Departments	
Update Act 537 or similar plans to determine if municipal sewage treatment systems would be more effective and cost-effective in areas lacking public sewage treatment.	Municipal Units, Businesses, Conservation Organizations, State Agencies	Private Foundations, Private Sources, Economic Development Departments	

Drinking Water

Identify and test popular springs where people obtain drinking water to determine if it is safe for consumption and for educational purposes.	Certified Labs, Watershed Organizations, Cooperative Extensions	Private Foundations, Private Sources, State Agencies, Health Department	
Upgrade old water lines to be compliant with new parameters, such as lead.	Water Authorities, State Agencies	Private Foundations, Private Sources, State Agencies	
Expand public water supplies into communities where aquifers have been impacted by mining or other industrial pollution.	Water Authorities, State Agencies	Private Foundations, Private Sources, State Agencies	
Establish ordinances restricting land uses in source water protection areas.	Municipal Units, Water Authorities	Private Sources	

PROJECT AREA CHARACTERISTICS

Recommendation	Potential Partners	Potential Funding	Priority
Drinking Water (con't)			
Establish a drop-off location where people can have their private water systems tested for drinking water parameters.	Certified Labs, Cooperative Extensions	State Agencies, Private Foundations, Private Sources, DOH	
Emergency Responders			
Install fire hydrants when expanding or installing new water lines.	Fire Departments, Water Authorities, Municipal Units, State Agencies	Private Foundations, Private Sources, State Agencies	
Increase funding to local fire departments to purchase needed equipment.	Fire Departments, Municipal Units, State Agencies	Private Foundations, Private Sources, State Agencies	
Establish a fund to help offset equipment and training for volunteer firemen.	Fire Departments, Municipal Units, State Agencies	Private Foundations, Private Sources, State Agencies	
Develop community incentives to encourage individuals to become volunteer firefighters and help breach gender barriers.	Fire Departments, Municipal Units, State Agencies	Private Foundations, Private Sources, State Agencies	
Develop a river access map for emergency providers.	First Responders, Municipal Units, State Agencies, Landowners	Private Foundations, Private Sources, State Agencies	

LAND RESOURCES

Recommendation	Potential Partners	Potential Funding	Priority
Illegal Dumping/Recycling			
Identify, document, and clean up dumpsites including orphan dumps.	Municipal Units, PA CleanWays	Private Foundations, Private Sources	
Offer municipal unit cleanup days for hard to dispose items.	Municipal Units, Community Members, PA CleanWays	Private Foundations, Private Sources, State Funds	
Establish additional recycling centers or recycling drop-off locations.	Municipal Units, Community Members, PA CleanWays	Private Foundations, Private Sources, State Funds	
Offer an annual hazardous waste pick up for items that municipal cleanup days cannot accept.	Municipal Units, Community Members, PA CleanWays	Private Foundations, Private Sources, State Funds, Fees	
Mining			
Petition additional lands be designated as Unsuitable for Mining.	Conservation Organizations, State Agencies	Private Foundations, Private Sources	
Pursue conservation easements or fee-simple land purchases to restrict future mining or other industrial activities that would harm watersheds or communities.	Conservation Organizations, Land Trusts	Private Foundations, Private Sources, State Agencies	
Advocate against new mining operations in sensitive watersheds.	Conservation Organizations	Private Foundations, Private Sources	
Riparian Corridor Preservation			
Conduct a riparian corridor survey and recommend specific riparian corridors for preservation and restoration activities.	Conservation Districts, Conservation Organizations, State and Federal Agencies	Private Foundations, Private Sources, State and Federal Agencies	

LAND RESOURCES

Recommendation	Potential Partners	Potential Funding	Priority
Riparian Corridor Preservation (con't)			
Protect riparian corridors by establishing a minimum 50' buffer on both sides of the stream using native species.	Conservation Districts, Conservation Organizations, State and Federal Agencies	Private Foundations, Private Sources, State and Federal Agencies	
Conduct educational outreach programs about benefits of riparian corridors and the impacts that mowing has to the streambank.	Conservation Districts, Conservation Organizations, State and Federal Agencies	Private Foundations, Private Sources, State and Federal Agencies	
Install streambank fencing and provide alternative water supplies to keep livestock out of area streams.	Conservation Districts, Conservation Organizations, State and Federal Agencies	Private Foundations, Private Sources, State and Federal Agencies	
Logging Impacts			
Implement best management practices to minimize erosion and sedimentation impacts.	Conservation Districts, Cooperative Extensions, State Agencies	Private Foundations, Private Sources	
Host workshops for loggers to educate them about impacts of erosion and sedimentation and best management practices that can minimize these impacts	Conservation Districts, Cooperative Extensions, State Agencies, Loggers	Private Foundations, Private Sources	
Land Protection			
Implement better system to track properties owned by land trusts and non-profit organizations that should be considered conserved lands.	Conservation Organizations, Land Trusts, Watershed Organizations	Private Foundations, Private Sources	
Increase acreage of lands protected through implementation of conservation easements.	Conservation Organizations, Land Trusts, Watershed Organizations	Private Foundations, Private Sources	

WATER RESOURCES

Recommendation	Potential Partners	Potential Funding	Priority
Abandoned Mine Drainage			
Monitor existing mine drainage treatment systems at least quarterly to ensure systems are functioning properly and document improvements to local streams.	State Agencies, Watershed Organizations	Private Foundations, Private Sources, Legislature	
Continue exploring new technologies to treat discharges where treatment options have yet to be discovered. Including methods to remove aluminum.	State Agencies, Watershed Organizations, Consultants	Private Foundations, Private Sources, Legislature	
Provide additional funding for operation and maintenance of treatment systems.	State Agencies, Office of Surface Mining	Private Foundations, Private Sources, Legislature	
Continue exploring new technologies to treat discharges where treatment options have yet to be discovered. Including methods to remove aluminum.	State Agencies, Watershed Organizations, Consultants	Private Foundations, Private Sources, Legislature, State Agencies	
Provide additional funding for operation and maintenance of treatment systems.	Office of Surface Mining, Western PA Coalition for Abandoned Mine Drainage, State Agencies	Private Foundations, Private Sources, Legislature, State Agencies, Office of Surface Mining	
Enhance or establish emergency response funds to assist with treatment system malfunctions or issues.	Office of Surface Mining, Western PA Coalition for Abandoned Mine Drainage, State Agencies, Fayette County Conservation District	Private Foundations, Private Sources, Legislature, State Agencies, Office of Surface Mining	
Conduct an assessment of mine drainage discharges and develop a comprehensive restoration plan.	State Agencies, Watershed Organizations, Consultants	Private Foundations, Private Sources, State Agencies	
Evaluate older treatment systems for efficiency and performance. Determine if maintenance or redesign is needed.	Office of Surface Mining, Western PA Coalition for Abandoned Mine Drainage, State Agencies, Watershed Organizations, Consultants	Private Foundations, Private Sources, Legislature, State Agencies, Office of Surface Mining	

WATER RESOURCES

Recommendation	Potential Partners	Potential Funding	Priority
Abandoned Mine Drainage (con't)			
Develop treatment systems for mine drainage discharges that are currently untreated.	Office of Surface Mining, Western PA Coalition for Abandoned Mine Drainage, State Agencies, Watershed Organizations, Consultants	Private Foundations, Private Sources, Legislature, State Agencies, Office of Surface Mining	
Streambank Stabilization			
Conduct erosion and sedimentation surveys, identifying areas impacted and best management practices.	Conservation Organizations, Watershed Organizations, Trout Unlimited, State Agencies, Consultants, Stroud	Private Foundations, Private Sources, State Agencies	
Install best management practices identified to minimize erosion and sedimentation.	Conservation Organizations, Watershed Organizations, Trout Unlimited, State Agencies, Consultants, Stroud	Private Foundations, Private Sources, State Agencies	
Flooding			
Conduct wetland delineations to identify and document existing wetlands and develop a management plan to minimize flooding.	Consultants, Watershed and Conservation Organizations, State Agencies, Stroud	Private Foundations, Private Sources, State Agencies	
Conduct a flood assessment of streams and implement best management practices arising from the assessment.	Consultants, Watershed and Conservation Organizations, State Agencies, Stroud	Private Foundations, Private Sources, State Agencies	

WATER RESOURCES

Recommendation	Potential Partners	Potential Funding	Priority
Impaired Streams			
Set up a monitoring program to monitor streams listed as impaired.	State Agencies, Watershed Organizations	Private Foundations, Private Sources, State Agencies	
Address impairments through the use of best management practices aimed at removing listed waterbodies.	State Agencies, Watershed Organizations	Private Foundations, Private Sources, State Agencies	
Water Quality Monitoring			
Conduct a watershed assessment.	State Agencies, Watershed Organizations	Private Foundations, Private Sources, State Agencies	
Establish bacteria monitoring program throughout the entire Youghiogheny River watershed to monitor safe swimming conditions.	Watershed Organizations, State Agencies	Private Sources, Foundations, State Agencies	
Establish bacteria monitoring program throughout the entire Youghiogheny River watershed to monitor NPDES permits to ensure they are meeting their permit requirements.	Watershed Organizations, State Agencies	Private Sources, Foundations, States	
Conduct fish surveys on unassessed streams using the Pennsylvania Fish and Boat Commission protocol or other state protocols in Maryland and West Virginia	Watershed & Conservation Organizations, Trout Unlimited, State Agencies	Private Foundations, Private Sources, State Agencies, National Fish and Wildlife Foundation, Laurel Highland Mini Grants	

WATER RESOURCES

Recommendation	Potential Partners	Potential Funding	Priority
Water Quality Studies			
Establish a Water Budget for the entire Youghiogheny River watershed.	Watershed & Conservation Organizations, Consultants, State Agencies	Private Foundations, Private Sources, State Agencies	
Develop lake management plans for each lake in the watershed for water quality and invasive species living along and in the lake.	Watershed & Conservation Organizations, Consultants, State Agencies	Private Foundations, Private Sources, State Agencies	
Conduct a study to determine how much water is being diverted out of the Youghiogheny River Basin and determine impacts that causes.	Watershed & Conservation Organizations, Consultants, State Agencies	Private Foundations, Private Sources, State Agencies	

Stream Classification

Petition to name unnamed streams, especially those with additional tributaries flowing into them.	State Agencies, Watershed Organizations	State Agencies, Legislature	
Upgrade stream classification systems, especially in Pennsylvania, to incorporate neighboring stream systems into the designation.	State Agencies, Watershed Organizations	Private Foundations, Private Sources, State Agencies, Legislature	

BIOLOGICAL RESOURCES

Recommendation	Potential Partners	Potential Funding	Priority
Invasive Species			
Conduct invasive plant surveys to document the presence of invasive species and to identify best management practices to remove them.	Conservation & Watershed Organizations, State Agencies, Cooperative Extensions	Private Foundations, Private Sources, State and Federal Agencies, National Fish and Wildlife Foundation	

BIOLOGICAL RESOURCES

Recommendation	Potential Partners	Potential Funding	Priority
Invasive Species (con't)			
Conduct invasive plant surveys to document the presence of invasive species and to identify best management practices to remove them.	Conservation & Watershed Organizations, State Agencies, Cooperative Extensions	Private Foundations, Private Sources, State and Federal Agencies, National Fish and Wildlife Foundation	
Conduct educational videos on how to identify and properly remove invasive species.	Conservation & Watershed Organizations, State Agencies, Cooperative Extensions	Private Foundations, Private Sources, State and Federal Agencies, National Fish and Wildlife Foundation	
Conduct workshops about how to identify and properly remove invasive species.	Conservation & Watershed Organizations, State Agencies, Cooperative Extensions	Private Foundations, Private Sources, State and Federal Agencies, National Fish and Wildlife Foundation	
Implement best management practices through the development of any assessments or remediation plans.	Conservation & Watershed Organizations, State Agencies, Cooperative Extensions	Private Foundations, Private Sources, State and Federal Agencies, National Fish and Wildlife Foundation	
Develop educational materials about invasive species and their associated impacts.	Conservation & Watershed Organizations, State Agencies, Cooperative Extensions	Private Foundations, Private Sources, State and Federal Agencies, National Fish and Wildlife Foundation	
Host events to remove invasive species.	Conservation & Watershed Organizations, State Agencies, Cooperative Extensions	Private Foundations, Private Sources, State and Federal Agencies, National Fish and Wildlife Foundation	
Conduct preventative measures like treatments to protect native species from invasives similar to what is used for the woolly adelgid.	Cooperative Extensions, Conservation Districts, Conservation Organizations, State Agencies, SLHPMP	Private Foundations, Private Sources, State and Federal Agencies, National Fish and Wildlife Foundation	

BIOLOGICAL RESOURCES

Recommendation	Potential Partners	Potential Funding	Priority
Biological Surveys			
Conduct surveys to update or verify the presence of species of concern and conduct the means necessary in order to protect these species and their habitats.	Consulting Firms, State Agencies, Watershed & Conservation Organizations, National Fish and Wildlife Foundation	Private Foundations, Private Sources, State Agencies, National Fish and Wildlife Foundation	
Conduct macroinvertebrate surveys to document and monitor stream conditions.	Consulting Firms, State Agencies, Watershed & Conservation Organizations, National Fish and Wildlife Foundation	Private Foundations, Private Sources, State Agencies, National Fish and Wildlife Foundation	
Conduct additional freshwater mussel surveys to document populations and explore reintroduction if conditions are suitable.	Consulting Firms, State Agencies, Watershed & Conservation Organizations, National Fish and Wildlife Foundation	Private Foundations, Private Sources, State Agencies, National Fish and Wildlife Foundation	
Expand hellbender surveys to document populations.	Consulting Firms, State Agencies, Watershed & Conservation Organizations, National Fish and Wildlife Foundation	Private Foundations, Private Sources, State Agencies, National Fish and Wildlife Foundation	
Conduct bird surveys in critical habitats.	Conservation organizations, Audubon, National Fish and Wildlife Foundations, Universities, Bird Clubs	Universities, Private Foundations, Private Sources, National Fish and Wildlife Foundations	

BIOLOGICAL RESOURCES

Recommendation	Potential Partners	Potential Funding	Priority
Habitat Preservation			
Establish pollinator gardens at various open spaces, such as community parks and mine drainage treatment systems.	Cooperative Extensions, Master Stewardship Program, Master Gardner Program, Watershed Organizations	Private Foundations, Private Sources, US Fish and Wildlife Service, Wildlife & Sportfish Restoration Program	
Coordinate planning of new roads, pipelines, powerlines, windmills, etc. to avoid large forests blocks, or use existing corridors.	Permit reviewers, Municipal Units, State Agencies	Private Foundations, Private Sources, National Fish and Wildlife Foundation	
Identify the most suitable sites for species of greatest conservation need and implement best management practices to maintain or enhance their habitats.	Watershed Organizations, Land Trusts, Trout Unlimited, State Agencies	Private Foundations, Private Sources, National Fish and Wildlife Foundation	
Identify and conserve priority forested wetlands.	Watershed Organizations, Land Trusts, Trout Unlimited, State Agencies	Private Foundations, Private Sources, National Fish and Wildlife Foundation	
Encourage utility companies to develop and implement an avian protection plan to minimize avian mortality risks.	Watershed Organizations, Land Trusts, Trout Unlimited, State Agencies	Private Foundations, Private Sources, National Fish and Wildlife Foundation	
Work with willing dam-owners to remove dams, provide fishways if dam removal is not possible.	Watershed Organizations, Land Trusts, Trout Unlimited, State Agencies	Private Foundations, Private Sources, National Fish and Wildlife Foundation	
Survey culverts to document fish passage capability and recommend best management practices to allow fish passage.	Watershed Organizations, Land Trusts, Trout Unlimited, State Agencies	Private Foundations, Private Sources, National Fish and Wildlife Foundation	
Protect river scour communities.	Watershed & Conservation Organizations, Land Trusts, Trout Unlimited, State Agencies	Private Foundations, Private Sources	

CULTURAL RESOURCES

Recommendation	Potential Partners	Potential Funding	Priority
Historical			
Increase awareness of the local history through the development of brochures, signage, lectures highlighting the regions history	Historical Societies, Universities, State Preservation Office	Private Foundations, Private Sources, Universities, State Preservation Office	
Identify and preserve local historical sites and work with landowners to place them on the National Register of Historical Sites	Historical Societies, Municipal Units, Historical Site Landowners, State Preservation Office	Private Foundations, Private Sources	
Conduct thorough research or provide support for a master student to conduct a thesis study to research and document the earliest inhabitants of the watershed.	Historical Societies, State Preservation Offices, Universities	Universities, Private Foundations, Private Sources	
Conduct historical recordings of the local residents talking about the local history.	Historical Societies, Community Members	Private Foundations, Private Sources	
Establish a self-guided historical roadmap of historical sites.	Historical Societies, Community Members	Private Foundations, Private Sources	
Trails			
Increase signage along roadways to direct visitors to access points and trailheads.	State Highway Departments, Landowners, Trail Managers	Private Foundations, Private Sources, State Agencies	
Add interpretive signage along trails to highlight historical or ecological significant features like hemlocks.	Historical Societies, Conservation Organizations, Trail Managers	Private Foundations, Private Sources, State Agencies	
Environmental Education			
Work with local school districts to set up annual programs for Conservation Organizations to come into the classrooms with students to teach about local watersheds.	Conservation & Watershed Organizations, Schools, Three River Quest	Private Foundations, Private Sources, State Agencies	

CULTURAL RESOURCES

Recommendation	Potential Partners	Potential Funding	Priority
Environmental Education (con't)			
Establish Trout in the Classroom programs at local school districts.	Conservation & Watershed Organizations, Schools, Three River Quest, Trout Unlimited	Private Foundations, Private Sources, State Agencies, Trout Unlimited	
Conduct environmental educational programs geared towards reaching school aged students.	State Parks, State Forests, Conservation & Watershed Organizations, Schools, Three River Quest	Private Foundations, Private Sources, State Agencies,	
Conduct environmental educational programs geared towards reaching adult populations.	State Parks, State Forests, Conservation & Watershed Organizations, Schools, Three River Quest	Private Foundations, Private Sources, State Agencies,	
Host guided walks about local history.	Trail Managers, Historical Societies	Private Foundations, Private Sources	
Conduct environmental education programs geared towards reaching families.	State Parks, State Forests, Conservation & Watershed Organizations, Schools, Three River Quest	Private Foundations, Private Sources, State Agencies,	

YOUGHIOGHENY HEADWATERS

Recommendation	Potential Partners	Potential Funding	Priority
Biological Resources			
Conduct County Heritage Inventories in Maryland and West Virginia similar to those conducted in Pennsylvania to document species of concern.	MDNR, WVDNR, Heritage Programs	Private Foundations, Private Sources, State Agencies	
Establish Important Mammals Area program in Maryland and West Virginia similar to the program in Pennsylvania modeled after the Important Birds Area program.	MDNR, WVDNR, PGC, NFWF, Heritage Programs	NFWF, Private Foundations, Private Sources	

DEEP CREEK

Recommendation	Potential Partners	Potential Funding	Priority
Biological Resources			
Conduct County Heritage Inventories in Maryland and West Virginia similar to those conducted in Pennsylvania to document species of concern.	MDNR, WVDNR, Heritage Programs	NFWF, Private Foundations, Private Sources	
Establish Important Mammals Area program in Maryland and West Virginia similar to the program in Pennsylvania modeled after the Important Birds Area program.	MDNR, WVDNR, PGC, NFWF, Heritage Programs	NFWF, Private Foundations, Private Sources	
Water Resources			
Establish a Water Budget for Deep Creek Lake Watershed.	MDE, MDNR, Environmental Organizations, Consultants	Private Foundations, Private Sources, State Agencies	
Establish a bacteria monitoring program in the Deep Creek watershed	MDE, MDNR, Environmental Organizations	Private Foundations, Private Sources, State Agencies	
Conduct biological monitoring to compare historic data to determine if water quality is improving	MDE, MDNR, Environmental Organizations	Private Foundations, Private Sources, State Agencies	

UPPER YOUGHIOGHENY

Recommendation	Potential Partners	Potential Funding	Priority
Biological Resources			
Conduct County Heritage Inventories in Maryland and West Virginia similar to those conducted in Pennsylvania to document species of concern.	MDNR, WVDNR, Heritage Programs	NFWF, Private Foundations, Private Sources	
Establish Important Mammals Area program in Maryland and West Virginia similar to the program in Pennsylvania modeled after the Important Birds Area program.	MDNR, WVDNR, PGC, NFWF, Heritage Programs	NFWF, Private Foundations, Private Sources	
Water Resources			
Conduct an assessment of impaired streams including an intensive chemical water quality monitoring to document impairment sources and develop a remediation plan.	MDE, MDNR, WVDEP, WVDNR, Environmental Organizations	Private Foundations, Private Sources, State Agencies	
Establish a bacteria monitoring program in the Deep Creek watershed	MDE, MDNR, WVDEP, WVDNR, IDEXX, Environmental Organizations	Private Foundations, Private Sources, State Agencies	

CASSELMAN RIVER

Recommendation	Potential Partners	Potential Funding	Priority
Biological Resources			
Conduct County Heritage Inventories in Maryland and West Virginia similar to those conducted in Pennsylvania to document species of concern.	MDNR, WVDNR, Heritage Programs	NFWF, Private Foundations, Private Sources	
Establish Important Mammals Area program in Maryland and West Virginia similar to the program in Pennsylvania modeled after the Important Birds Area program.	MDNR, WVDNR, PGC, NFWF, Heritage Programs	NFWF, Private Foundations, Private Sources	
Water Quality			
Conduct biological monitoring in the Pennsylvania portion of the Casselman River Watershed.	PFBC, MWA, WPC, PA-DEP, WVDEP, MDE, MDNR, WVDNR, PA-DCNR	PA-DEP, NFWF, WVDEP, MDE, Private Foundations, Private Sources	
Conduct a TMDL or other study to address the impacts that sedimentation has on the Casselman River Watershed.	Somerset Conservation District, MWA, WPC, PA-DEP, MDNR, MDE, WVDEP	State Agencies, Private Foundations, Private Sources, FPW	
Establish bacteria monitoring program for swimming holes in the Casselman River, expanding on Mountain Watershed Association's program	MWA, MDE, MDNR, PA-DEP, WVDNR,	PA-DEP, MDE, Private Foundations, Private Sources, FPW	

LAUREL HILL CREEK

Recommendation	Potential Partners	Potential Funding	Priority
Water Resources			
Maintain Water Quality Monitoring Program.	PA-DCNR, MWA, PA-DEP	Private Foundations, Private Sources, PA-DEP, PA-DCNR	

MIDDLE YOUGHIOGHENY

Recommendation	Potential Partners	Potential Funding	Priority
Water Resources			
Re-establish water quality monitoring program.	MWA, WPC, PA-DEP, PA-DCNR	Private Foundations, Private Sources, PA-DEP, PA-DCNR, LHMG	
Conduct biological monitoring.	MWA, WPC, DEP, DCNR	Private Foundations, Private Sources, DEP, DCNR, LHMG	
Cultural Resources			
Enhance access to recreational areas in the Dunbar Creek watershed for uses other than ATVs.	PGC, PFBC, Conservation Organizations	Private Foundations, Private Sources, LHMG	

INDIAN CREEK

Recommendation	Potential Partners	Potential Funding	Priority
Project Area			
Identify and establish a park-n-ride in Melcroft, Indian Head, Normalville, Mill Run, or nearby area.	FACT, WTA, Legislature, Municipalities	Legislature, Private Sources	
Update ACT 537 plan and determine if installing a municipal sewage treatment system in Saltlick and/or Springfield Township are feasible.	Municipalities, PA-DEP, Consultants, ICVWA	Private Foundations, Private Sources, PENNVEST	
Pressure Donegal Township to address the lack of public sewage in the lower Route 31 corridor.	PA-DEP, Municipalities, Conservation organizations, ICVWA	Private Foundations, Private Sources, PENNVEST	
Establish public sewage in community areas of the watershed, such as Donegal, Jones Mills, Champion, Melcroft, Indian Head, Normalville, and Mill Run.	ICVWA, Municipalities, Consultants	Private Foundations, Private Sources, PENNVEST	
Expand public water to residents on the following roads: Mason, Stewart, Turkeyfoot, Mt. Olive, County Line, Rogers Mill-Buck Run, Jim Mountain, Fairview, Fowl Hill, Mt. Zion, Melcroft/Albright, Pine Hill, Charnety, Harris Road, and Pine Slopes.	ICVWA, Municipalities	Private Foundations, Private Sources, PENNVEST, PA-DCED, PA-DEP	
Install at least 50-60 new fire hydrants throughout the Indian Creek watershed.	Volunteer Fire Departments, Municipalities, ICVWA	Private Foundations, Private Sources, PA-DCNR, PA-DCED	

INDIAN CREEK

Recommendation	Potential Partners	Potential Funding	Priority
Land Resources			
Research properties for sale in the watershed and purchase properties that still have mineral rights attached to the deed.	Conservation Organizations, Land Trusts, MWA, WPC	Private Foundations, Private Sources, PA-DCNR	
Water Resources			
Develop and install informational signage at mine drainage treatment systems.	MWA, PA-DEP	Private Foundations, Private Sources, PA-DEP, IJJA	
Determine the source of the Sagamore Rogue Discharge and develop a treatment plan for the discharge.	MWA, PA-DEP, Consultants	Private Foundations, Private Sources, PA-DEP, IJJA	
Work with Bureau of Abandoned Mine Reclamation to install the next phase of treatment at the Marsolino Treatment system.	MWA, PA-DEP, Consultants	Private Foundations, Private Sources, PA-DEP, IJJA	
Reapply lime within the Poplar Run watershed to maintain improvements made through the land-liming project.	MWA, PA-DEP, Consultants	Private Foundations, Private Sources, PA-DEP, OSM	
Conduct a study to identify and minimize impacts of runoff from the turnpike in the headwaters of the Indian Creek watershed.	MWA, PA-DEP, Consultants, PENNDOT, Turnpike Commission	Private Foundations, Private Sources, PA-DEP	

INDIAN CREEK

Recommendation	Potential Partners	Potential Funding	Priority
Biological Resources			
Conduct a survey in the Indian Creek Gorge and other potential habitat sites to document and update the potential expansion of the River Otter.	MWA, PFBC, PGC, WPC, PA-DCNR, Universities	Private Foundations, Private Sources, PA-DCNR	
Conduct a survey to document and update the potential expansion of the fisher.	MWA, PFBC, PGC, WPC, PA-DCNR, Universities	Private Foundations, Private Sources, PA-DCNR	
Conduct a survey to document and update the presence of hellbenders.	MWA, PFBC, PGC, WPC, PA-DCNR, Universities	Private Foundations, Private Sources, PA-DCNR	
Conduct a survey to document and update the presence of freshwater mussels.	MWA, PFBC, PGC, WPC, PA-DCNR, Universities	Private Foundations, Private Sources, PA-DCNR	
Cultural Resources			
Explore the possibilities of placing the Steyer Bridge on the National Register of Historic Places.	MAWC, PHMC	Private Foundations, Private Sources	
Upgrade Mill Run Athletic Fields to become ADA compliant.	Springfield Township, Community Organizations	Private Foundations, Private Sources, PA-DCNR	
Host annual Indian Creek Watershed Festival geared towards providing recreational opportunities as well as environmental outreach programs.	MWA, Community Organizations	Private Foundations, Private Sources, PFBC, Community Members and Businesses	