

SECTION 7

7. ACTION PLAN

This section presents the actions that are being recommended to address issues, concerns, and opportunities identified through the planning process. Action items were identified based upon the problems, their respective potential, and the interest expressed by the community.

The overall goals for river conservation plans, as defined by the DCNR, are to restore, maintain, and enhance the land, water, biological, and cultural resources of the watershed.

Based upon the public input obtained through the planning process, the primary objectives for the Action Plan for the Buffalo Creek Watershed can be organized according to the following major themes:

1. Retain and improve the rural landscape and small-town sense of community that typifies the watershed and attracts people to the area.
2. Conserve, restore, and protect the biological communities present in the watershed, with particular emphasis on stream ecosystems, the regionally significant forest associations, and reducing potential impact from exotic invasive species introductions.
3. Enhance the regionally significant outdoor recreational resources in the watershed in order to provide for increased quality of life for residents, to provide increased economic opportunities through tourism, and to encourage all to develop a sense of stewardship.
4. Create a sense of community stewardship. Encourage and enable residents and local governments to take active and proactive roles in issues pertaining to natural resources, landscape, aesthetics, biodiversity, and other resources that affect their quality of life.

Within these themes, various action items have been developed to meet the goals to restore, maintain, and enhance, as appropriate. For each action item, potential partners in implementing the recommendation are suggested, potential sources of funding are identified, and a priority level is recommended.

The implementation of these themes must be consistent with landowner preferences and private property rights. Approximately 99 percent of the watershed is in private ownership. Therefore, many initiatives in the watershed will depend on private landowners for success. Initiatives need to be consistent with private property rights and landowner preferences, and landowners must be part of any planning process.

It is also the responsibility of governments to take an active and proactive role to achieve many of the goals in the plan. It is essential for government, both local and state, to assume leadership where needed and appropriate.

Potential partners were identified through the public coordination process, review of organizations present in the watershed with interests consistent with the action plan item, and based upon regulatory provisions or requirements for municipal participation. These partnerships are merely suggestions and do not represent a commitment by any party to participate. In fact, it is quite possible that many items may be implemented by individuals and groups not identified in this plan document. It is the intent of this plan to serve as an invitation

for all to become involved, and to assume active roles in implementing recommendations of individual interest.

Priorities were established recognizing that there are limited financial and human resources available, that some items of necessity must respond to timetables driven by outside forces, and that some items depend on the successful completion of others. The priorities identified range from critical (those requiring immediate action) to low (those that can be implemented when/if resources are available). The qualifiers used to identify priority are as follows:

- Critical - Requires immediate action.
- High - Actions that should be initiated within the three years following issuance of the plan.
- Moderate - Actions that should be initiated within six years following issuance of the plan.
- Low - Actions that should be initiated if/when resources are available.

The regulatory and financial requirements and opportunities, as well as participants available to implement plan components, can be expected to change over time. These changing conditions may modify priorities.

Action Plan items are identified in Tables 7-1 and 7-2 and are discussed below. The tables present the action plan organized by resources category (Table 7-1) and by partnership opportunities (Table 7-2).

7.1 OVERALL WATERSHED ISSUES

Watershed Coalition. As noted in Section 6, many stakeholders expressed frustration at a perceived lack of information and coordination among municipalities, organizations, and interested individuals in the watershed. While there are numerous initiatives and opportunities being pursued by these various interests, there is no centralized source of information, coordination or advocacy for the watershed as a whole. The great need for a Buffalo Creek Watershed Coalition to serve as a central coordinating entity became quickly apparent during preparation of the action plan.

As defined by the Pennsylvania Organization for Watersheds and Rivers, a watershed association is simply a group of citizens who are concerned with local water resource issues. Typically, these groups serve as advocates for the protection, restoration and enjoyment of water resources, and conduct programs that foster stewardship, communication, leadership, and action.

Formation of an active, functioning watershed coalition is viewed as one of the critical priorities for the implementation of this watershed conservation plan. This coalition is urgently needed to lead or coordinate many of the items included in this action plan. ASWP has taken initial steps towards creating a watershed coalition, which will operate under its auspices, including several informational and training seminars held in August and September of 2007. These seminars were aimed at promoting the watershed, recruiting

coalition members and providing training to these individuals. ASWP has also acquired resources needed to hire two full-time employees that will work in the watershed over the next three years. Continued support and coordination will fall under the auspices of ASWP, which will ensure that the needed resources are in place for the continued growth and function of the watershed coalition.

In addition to the overall coordination and implementation of various action plan items, several specific projects have been identified for the watershed coalition. These include:

- Develop a **watershed website**. This website would invite participation in the coalition, serve as information clearinghouse for watershed resources and events, provide a focus on conservation issues, and also function as an information portal for outdoor recreation information.
- Organize an annual **river sojourn** to raise awareness about local watershed issues.
- Produce a **DVD presentation** for distribution to municipalities, schools, organizations, and landowners presenting the watershed as a special place, promoting stewardship, and serving as an invitation to get involved. It is recommended that at least two versions of the DVD be developed for school use. These should include one for grades K-6 and another for grades 7-12. These should be standards-based so that schools can obtain maximum benefit from their use.
- Organize and coordinate an annual **Buffalo Creek Watershed Festival** celebrating the lifestyle, history, biodiversity, and recreation opportunities of the watershed. The festival would serve dual purposes as a means of encouraging and promoting stewardship among residents and of inviting visitors to experience the watershed. It would provide an opportunity for all organizations active in the watershed to meet the public and promote their activities. It is envisioned that the festival would include recreational, educational, and entertainment components. Additional activities, such as a farmers market, fishing derby, or other events could be used to involve local businesses.
- Prepare an annual **State of the Watershed Report** to summarize progress on the Plan's goals related to protection, restoring and stewardship. This yearly scorecard could be made available on the watershed website.
- Oversee the **review of the Buffalo Creek Watershed Plan** on a regular basis. The utility and reach of the plan is highly dependent upon how well the plan serves the current and changing needs of the watershed. Incorporating new and recently completed projects, updating funding sources and programs, and immediately addressing new conservation issues that arise will allow the plan to serve as a living document. Therefore, this plan should exist as a continuously edited draft, as opposed to a report relevant to a single snapshot in time. Annual, or biannual, edits are encouraged, and should be completed at the discretion of the watershed coalition.
- Initiate a program to provide roadside signage identifying major streams within the watershed to increase public awareness of water resources.

7.2 LAND RESOURCES

During the public involvement process, residents indicated that the current rural and small town atmosphere is a very highly valued quality of the watershed. In fact, the rural character was often identified as a primary reason why people choose to live where they do. Rural character is most threatened by sprawl and the introduction of incompatible land uses, which are direct threats to quality of life enjoyed by residents. At the same time, residents enjoy and value highly their individual prerogatives to determine the best use for their property.

Planning is needed in order for municipalities to successfully retain the rural and small town atmosphere that the residents value. In the absence of planning, uncontrolled growth leads to sprawl and incompatible uses. In recognition of the importance of planning, Governor Rendell reinitiated the Pennsylvania State Planning Board as an advisory board to the Governor's Office in 2004. In its' *2006 Report*, the Board advised that "*Effective planning, coordinated investment and implementation by the state, county and local governments, municipal authorities and school districts are essential to achieve a vibrant economy, well-planned infrastructure, a well-educated and competent workforce, a healthy and attractive environment, and a superior quality of life in every region of the Commonwealth.*"

The Pennsylvania Municipalities Planning Code (MPC) requires counties, and enables other municipalities, to prepare and adopt comprehensive plans for the sound development of communities. To date, municipalities have often been disinclined to prepare comprehensive plans for a number of reasons. However planning, and the zoning regulations that are used to implement plans, are the most effective tools available to ensure that the needs and desires of the community, at its most local level, are considered in future development. For this reason, municipalities should prepare **comprehensive plans** and enact **zoning ordinances** to ensure that the needs and desires of their citizens are attained. It is recommended that municipalities without plans take action to prepare plans, and that communities with outdated plans update their plans. Plans should be reviewed at least once every 10 years. Pennsylvania Act 148 of 1973 gives municipalities the ability to establish **environmental advisory councils (EACs)**, which may be advisory entities in the planning and land use decision-making processes. Municipalities are encouraged to form councils of informed citizens to assist in the identification and assessment of environmental issues of importance to the local community. The Pennsylvania Environmental Council has an Environmental Advisory Council Network that can provide information to municipalities that are interested in forming EACs.

Local planning support, including expert planning advice, and technical and financial assistance are available to municipalities and counties through a variety of outlets. Professional staff at many county planning agencies can be available to provide guidance. In addition, the Governor's Center for Local Government Services (<http://www.newpa.com/>) is the principal state entity responsible for land use assistance and monitoring in Pennsylvania. Its regional offices can provide technical and financial assistance, and hold planning courses. The current publications relating to planning and land use regulations available from the Center includes a Planning Series (#3 in the series outlines the entire process of preparing a comprehensive plan and plan components). MPC provides procedural requirements for adopting the comprehensive plan (which involves public notices and hearings). One goal of the center is to enhance existing planning curriculum by offering courses to local government officials. The Center partners with the Pennsylvania State Association of Township Supervisors (PSATS) for courses that focus on best management practices (BMPs) and conservation, and with the Pennsylvania State Association of Boroughs (PSAB) for courses directed at alternatives to sprawl. The

Pennsylvania Planning Association (PPA) and the Pennsylvania State University Cooperative Extension co-sponsor basic community planning programs through the Pennsylvania Municipal Planning Education Institute. The PDCED regional office can also be contacted for information on planning and planning assistance (financial or technical).

A significant component of the Governor's Center for Local Government Services' Growing Smarter Action Plan is the Land Use Planning and Technical Assistance Program (LUPTAP). While LUPTAP generally provides matching grants for municipalities preparing to develop and strengthen community planning and land use management practices, priority consideration for funding is given to multi-municipal approaches to planning.

The Governor's Center for Local Government Services (<http://www.newpa.com/>) offers grant assistance that can be used for updating or preparing zoning ordinances and comprehensive plans. Municipalities are permitted and encouraged to use up to \$1,000 of funding received towards educational programs on planning issues for local officials.

In addition, the incorporation of **smart growth principles** in providing for future development can ease the accommodation of new growth while maintaining the overall rural quality of the area. Smart growth has been defined as growth that balances economic, social, and environmental interests to make fair, efficient use of public resources and bring services and amenities closer to people. Smart growth principles include encouraging compact development, protecting open space and farmlands, encouraging partnerships, and reliance on incentives rather than prohibitions to accomplish goals. Counties, municipalities, and local citizens are encouraged to educate themselves on smart growth principles and utilize these in future land use decisions in their communities.

The MPC, as well as many other organizations and resources, exist that offer guidance on smart growth principles, such as 10,000 Friends of Pennsylvania (<http://www.10000friends.org/>), Smart Growth PA (<http://www.smartgrowthpa.org/>), and the Smart Growth Network (<http://www.smartgrowth.org/default.asp>). The United States Soil Conservation Service can provide information and technical advice to protect against erosion, sedimentation and stormwater problems which could impact the watershed. The Pennsylvania Department of Environmental Protection published a handbook series on environmental planning and should be consulted when applying land use controls to sensitive environmental resources. The MPC requires nine elements be included in plans, including a watershed inventory, a consistency analysis with other regional plans in place (i.e. Buffalo Creek Watershed Conservation Plan), and natural feature preservation ordinances. The United States Environmental Protection Agency website offers the Watershed Academy Web (<http://www.epa.gov/watertrain/>), which provides an introduction to watershed planning including building local partnerships, developing a watershed management plan and recommendations for implementing and evaluating the plan. The online training presents modules in analysis and planning and management practices. The Conservation Technology Information Center online learning center offers a program called "Know Your Watershed" (http://www.conservationinformation.org/?action=learningcenter_kyw). This resource offers guides in Building Local Partnerships, Getting to Know Your Watershed, Leading and Communicating, and Managing Conflict.

The Pennsylvania **Greenways Program** was launched in August 2001 with the completion of a statewide greenways action plan designed to provide a coordinated and strategic approach to creating connections through the establishment of greenways. DCNR has been designated by the Governor as the lead agency for implementation of the greenway plan.

The greenways action plan (*Pennsylvania Greenways, An Action Plan for Creating Connections*), sets the direction for a program to establish a statewide network of greenways, with a greenway in every local community by 2020.

As defined by DCNR, “A greenway is a corridor of open space. Greenways vary greatly in scale, from narrow ribbons of green that run through urban, suburban, and rural areas to wider corridors that incorporate diverse natural, cultural and scenic features. They can incorporate both public and private property, and can be land- or water-based. They may follow old railways, canals, or ridge tops, or they may follow stream corridors, shorelines, or wetlands, and include water trails for non-motorized craft. Some greenways are recreational corridors or scenic byways that may accommodate motorized and non-motorized vehicles. Others function almost exclusively for environmental protection and are not designed for human passage. Greenways differ in their location and function, but overall, a greenway will protect natural, cultural, and scenic resources, provide recreational benefits, enhance natural beauty and quality of life in neighborhoods and communities, and stimulate economic development opportunities.” Among other greenway activities, DCNR promotes the development of “greenway plans” by county and local governments as an integral part of their comprehensive planning and implementation efforts. DCNR administers grants to fund the preparation of greenway plans and implementation of plan recommendations. Greenways are recommended as a key feature in the preservation of open space within the watershed, and should be developed for all watershed municipalities. Butler County is presently the only county in western Pennsylvania without a greenway plan. Buffalo and Clinton Townships are currently preparing a Joint Greenway Plan. A primary goal of any greenway development in the watershed should be the preservation and restoration of ecological functions and values. If designed and developed properly, greenways can serve as a valuable means of conserving aquatic and riparian systems. Greenway plans developed for adjoining counties can serve as an important resource in developing plans in Butler County in lieu of a county-wide plan. Armstrong County is currently preparing a recreation plan, as is Buffalo Township.

Substantial damage from Hurricane Ivan was incurred in some areas due to development in floodplains and from slope failure due to inappropriate land use or clearing activities. Therefore, it is also recommended that municipalities either develop regulations or amend existing regulations, if necessary, to ensure that **sensitive areas** such as floodplains and steep slopes, are not subject to inappropriate uses.

Forest resources were identified by many residents, as well as biological diversity data, as one of the outstanding attributes of the watershed. The size and diversity of forest communities present rises to the level of a regional and state-significant resource. Almost all forests in the watershed are privately owned. These areas have by and large benefited by the enlightened and dedicated stewardship of landowners, many of whom have owned properties for generations. In order to strengthen and increase stewardship, landowners can be encouraged and supported in a number of ways. It is recommended that as a first step the watershed coalition develop a **Forest Planning Program** to promote forest conservation and sustainable use in the watershed. This program would provide educational materials, programs, and resources to landowners and municipalities. Another key element of this effort would be to develop an inventory of forest lands in the watershed. This inventory would include the size, type and ownership of forest tracts; the identification of large forest tracts, key connector corridors, and other areas of particular conservation concern; and identify forest management issues pertaining to these areas that may be of use to landowners. Landowners can be encouraged to participate in the **Pennsylvania Forest Stewardship Program**, the **Forest Legacy Program**, the **American Tree Farm System**, and to prepare **conservation plans** for

their properties with NRCS assistance. In addition, loggers working in the watershed can be encouraged to become certified under the **Sustainable Forestry Initiative of Pennsylvania** and landowners can be encouraged to engage the services of certified professionals. Public and agency landowners, such as the Pennsylvania Game Commission and municipal parks, should be encouraged to consider forest conservation in planning and management activities, and should be recognized for their contributions. Particularly vulnerable large forest tracts or other sensitive forest communities can be provided with additional protection, with the landowner's consent, through comprehensive planning and through conservation easements, and/or acquisition by conservation organizations or government. It is recommended that the Forest Planning Program consider the establishment of a number of core old-growth forest preserves, constituting perhaps 15 to 20 percent of forestland within the watershed. These areas would be primarily valued for their ecological and biodiversity functions and would therefore be protected from timbering. While not currently old growth, these areas would be managed to become old growth in the future. These preserves can in some cases utilize existing preserves, such as Todd Sactuary and the Minter Limestone Spring Preserve. In other cases, they can be developed through conservation easements or aquisition by local or state agencies.

Agriculture is a dominant land use in the watershed (34 percent) and is a critical component of the rural landscape. As noted in Section 2, in Butler County the total number of farms decreased by 55 percent and agricultural area decreased by 59 percent between 1959 and 2001. The trend is even worse in Armstrong County, where the total number of farms decreased by 57 percent and agricultural area decreased by 73 percent. In response, the state has initiated several programs to facilitate agricultural lands conservation, including **Agricultural Security Areas (ASAs)**, **agricultural easements**, and the **Clean and Green Program**. Farmers should be encouraged to participate in these programs, and provided with technical assistance as needed to enroll in relevant programs. In addition, other organizations can step in to provide assistance to farmers through purchase of **privately-funded conservation easements**. These arrangements can serve to benefit the farmer and benefit the public at large through retention of the agricultural and rural aspects of the watershed. For example, ASWP has successfully used this tool to help ensure the agricultural future of a Century Farm and provide for the long-term preservation of the rural nature of the Bells Run watershed.

A wide variety of other programs are available to help farmers improve their bottom line while enhancing environmental conditions. For example, farmers should be encouraged to prepare **conservation plans** for their properties with NRCS assistance. Substantial progress has been made in implementing **agricultural BMPs**. However, there are still a number of farms that could profit from BMPs with the advice and assistance of the conservation districts. Non-productive areas and sensitive areas not suited to agriculture can be enrolled in the **Conservation Reserve Program**. The counties and municipalities can help support agriculture in their communities by celebrating the heritage of **Century Farms**, promoting **agrotourism**, and by establishing local **farmers markets** to provide a ready outlet for local growers and a forum for residents and visitors to learn about agriculture. Butler County presently has several programs in place to promote agrotourism (Butler Agritour Product Alliance) and agricultural products (the Butler Brand). There are currently few participants in these programs in the watershed. Local farmers and related businesses should be encouraged to participate. **Community Supported Agriculture (CSA)** farms also presented a new and exciting mean of promoting and maintaining local agriculture. The watershed is likely capable of supporting several of these member-oriented produce operations.

Several opportunities are recommended to address trash and litter problems in the watershed. Foremost of these is the supporting efforts of the **local chapter of PA Cleanways** within the watershed. This non-profit organization helps people take action against illegal dumping and littering in their communities. Through local chapters, programs are implemented revolving around cleanups, adoptions and education. Inventories of illegal dump sites and plans for cleanup are also provided through these chapters. It is recommended that the local chapter undertake an inventory of major illegal dumping locations in the watershed to prioritize areas for cleanup and enforcement actions. This effort has been initiated in Butler County but is needed for Armstrong County as well. The sponsorship of an **annual cleanup day** would serve to leverage volunteer labor as well as provide an opportunity to educate the public about illegal dumping issues. The local organization might consider developing long-term subwatershed stewardship efforts with businesses and other organizations. These approaches have been very successful in other areas. Household hazardous wastes appear to be substantial components of the illegal dumping problem. There are currently few or no local legal collection opportunities. Therefore, it is recommended that the local chapter, in partnership with municipalities and other organizations, should work to organize and sponsor local collection events for household hazardous wastes.

Increasing development is leading to light pollution as a result of excessive or poorly designed outdoor lighting. This reduces the rural character of the landscape, as these sources are often visible for many miles at night. In order to address this problem, it is recommended that **planning and design requirements for outdoor lighting** be incorporated into county and/or municipal regulations pertaining to new development.

7.3 WATER RESOURCES

Based upon the limited information available, water resources are currently perceived to be in good condition. Water resource issues expressed during the public involvement process generally focused on potential threats from future development, including direct impacts to water quality as well as increased flooding from stormwater and inappropriate development in floodplains. Hurricane Ivan recently illustrated the potential for these problems in many areas.

Lack of long-term water quality data constrains any attempt to accurately assess current conditions as well as trends and problem areas. Data are needed to provide a comprehensive status of water quality issues and threats. Then appropriate measures can be developed to address these issues. The available subjective biological data suggest that overall stream ecosystem health is not as good as the limited water quality data may suggest. In fact, serious problems may exist. Therefore, a key first step in the addressing of water resource issues is to develop and implement a **long-term monitoring program** for the watershed. Volunteer monitoring programs such as “river keepers”, the Alliance for Aquatic Resource Monitoring (ALARM), or other efforts have been very successfully implemented in many watersheds in Pennsylvania. Ideally, this effort would be organized by major subwatersheds. The watershed coalition should coordinate this effort, involving other groups and schools to the extent possible to assist in mobilizing volunteers and adopting subwatersheds. The goal of this effort would be to provide the most effective and efficient use of available resources. The watershed coalition would be responsible for developing monitoring protocols and providing equipment, ensuring that appropriate quality assurance and quality control (QA/QC) components are employed, and making the results easily accessible to public via a website and periodic publications. Data should be reported to the county conservation districts and PaDEP on a regular basis. Signage or other appropriate recognition should be provided to acknowledge the efforts of individual and group volunteers.

The Armstrong County portion of the watershed has a recent and comprehensive water quality assessment. This document, prepared by the conservation district, provides an excellent tool for organizations and individuals to identify actions needed to restore and enhance water quality. It is recommended that a similar **Butler County Water Quality Assessment** be prepared for the corresponding portion of the watershed in that county.

Eighty-three stream segments are listed as requiring total maximum daily loads (TMDLs). Predominant causes of degradation are siltation, nutrients, and metals. The primary sources listed for siltation and nutrients is agriculture, with abandoned mine drainage the source of metals contamination. PaDEP should continue to **develop TMDLs** for these stream segments. Patterson Creek is currently the only Buffalo Creek subwatershed in PaDEP's Southwest Region with a TMDL in progress.

A number of resources and actions are available to control sediment and nutrient loads introduced by agriculture and other sources. It is recommended that the county conservation districts continue to encourage and assist farmers in developing **nutrient management plans** and implementing **agricultural BMPs**. **Riparian buffers** need to be created and maintained in agricultural areas, as well as all other urban land uses. All streams in the watershed should be candidates for buffer protection utilizing an appropriate method such as that defined in the Chesapeake Bay Riparian Handbook (USDA 1997). Appropriate riparian buffer protection should be incorporated in county and municipal subdivision ordinances. Greenway protection can also provide protection for riparian vegetation. Riparian buffer protection and greenway planning should be coordinated to achieve maximum effect. In agricultural areas, **riparian fencing and livestock crossings** are very effective in stabilizing and restoring riparian corridors. The county conservation districts should continue to encourage and assist farmers in implementing these controls. In addition, other groups such as the watershed coalition or the Western Pennsylvania Conservancy's Riparian Restoration Initiative can be encouraged to participate in providing farmers with assistance in implementing these measures. Unauthorized all terrain vehicle (ATV) use in some areas creates increased erosion and stream impacts and is of concern to landowners. Fencing and restoration of riparian corridors can help alleviate these problems as well. It is recommended that Trout Unlimited continue its efforts to **stabilize and restore streambanks** to minimize erosion. It is also recommended that the county conservation districts and Trout Unlimited continue to work to control erosion, sedimentation, and dust from dirt and gravel roads under the Pennsylvania **Dirt and Gravel Road Program**. The watershed coalition, or members thereof, may also consider becoming involved in this program as well.

Acid mine drainage (AMD) discharges can be controlled by passive treatment systems such as wetland systems. There are three major discharges documented in the Armstrong County portion of the watershed. These include one on Marrowbone Run and two that drain to the impounded portion of Buffalo Creek at Laneville (Freeport). The **Marrowbone Run discharge** is located in an area that is suitable for construction of a passive treatment wetland system. It is recommended that the watershed coalition and the county conservation district, in cooperation with the landowner, work to obtain funding to design and construct a treatment system for this discharge. The two **other lower Buffalo Creek discharges** are problematic, as each emerges on the steep slope and drains directly downhill to the creek. Suitable areas for passive treatment facilities are not available. Therefore, other technologies such as limestone drains, channels or diversion wells may be necessary. It is recommended that the watershed coalition and the county conservation district, in cooperation with the landowner, work to obtain funding to investigate the severity of the impacts of these discharges and identify treatment options. If a favorable cost/benefit is established, then efforts to implement treatment options

should be implemented. Efforts to identify other discharges that could be considered for treatment should be among the objectives of the watershed's **long-term monitoring program** and the **Butler County Water Quality Assessment** discussed previously.

The primary water quality issue raised during the public coordination process was sewage and sewage treatment. Municipal treatment systems are typically considered wherever problems arise and are often dictated by existing regulations. However, these facilities are often very ill-suited to rural environments such as the majority of the Buffalo Creek watershed. Great economic hardship can be imposed on rural communities and residents by the expense of installing and maintaining these facilities. In addition, the installation of public infrastructure such as sewage often creates a stimulus to development by permitting high density uses to occur in areas that were previously limited by provisions of building regulations. Finally, the construction of sewer lines and treatment plants typically occur along streams. These have already had substantial adverse impacts on natural communities in the stream valleys in the southern portions of the watershed, particularly the regionally significant large forest tracts that occur in the valleys of Buffalo Creek and its tributaries. Fortunately, impacts were minimized where possible through the inspired dual use of the Butler-Freeport Trail right-of-way as the sewer main location. This will not be possible in much of the remainder of the watershed. The strong potential exists for sewage facilities to create far greater adverse land use, economic, and ecological impacts than the incremental improvement in water quality obtained by their construction. This is particularly true in the Buffalo Creek watershed, where water use is generally unimpaired due to sewage impacts.

Where municipal facilities are warranted, these should be limited to towns rather than extended township areas, and **municipal facilities must be designed to minimize impacts to ecological resources including riparian, wetland and large forest tract habitats**. It is vital that these areas be identified during the project development phase, and the PaDEP and other permitting and review agencies require an environmental assessment of impacts to these areas prior to authorization for construction. The Socioeconomic impacts of facility construction and operation must also be required. Disproportionate impacts to low income rural populations are not acceptable.

Alternative treatment options should be considered wherever feasible. PaDEP regulations and procedures need to be modified to allow for alternative options, such as increased use of low-cost community-based rather than municipal systems, and increased focus on providing for functioning on-lot septic systems. Malfunctioning septic systems are a concern in the watershed. Municipalities can take a proactive role in addressing these problems to avoid the need for more intensive treatment solutions. It is recommended that municipalities implement a **septic system inspection program** if not already in place and enforce existing regulations concerning malfunctioning septic systems. In order to make this effort benefit both water quality and landowners, municipalities need to provide resources to homeowners concerning repair of malfunctioning systems. First efforts should focus on helping homeowners correct problems rather than in assessing fines or other punitive actions. This might include providing technical information and resources, as well as working with PaDEP to establish a cost-share program to assist with repairs. This program could potentially be much more cost-effective for the commonwealth than construction of municipal systems.

Many of the **municipal 537 sewage management plans** are out of date. Municipalities should be proactive in updating their plans to reflect changing development patterns and to consider alternative treatment systems in rural areas. The Armstrong County Sewage Enforcement Agency, The Butler County Sewage Association and the Allegheny County Health

Department Water Pollution Control Section are responsible for Act 537 enforcement within their respective counties.

Stormwater issues are a concern to watershed residents. Impacts from recent development have created noticeable problems in some areas. Because stormwater discharge affects downstream properties irrespective of municipal boundaries, planning for stormwater management is most effective when conducted on a watershed basis. Therefore, it is recommended that watershed municipalities work together to prepare an **Act 167 Stormwater Management Plan** for the entire watershed. Municipalities also need to **adopt and enforce stormwater ordinances** that are compatible with Phase I and II NPDES regulations for pre- and post-construction discharges, if they have not already done so. Finally, **stormwater remediation** efforts should be considered where there are current stormwater discharge problems. For example, the potential to retrofit existing commercial, industrial, and school facilities to control discharge could be evaluated.

Hurricane Ivan served to highlight problems created by development in floodplain, both in the watershed and throughout western Pennsylvania. To minimize future flood damage, **municipal floodplain ordinances** should be in place to discourage incompatible development. In addition, municipalities should **update floodplain mapping** where appropriate to reflect changing conditions and development. The current flood maps for many municipalities in the watershed are 20 or more years old.

7.4 BIOLOGICAL RESOURCES

Action plan items pertaining to biological resources largely focus on the maintenance and enhancement of the existing, regionally significant ecological communities. Foremost among these are the extensive forest communities associated with the Buffalo Creek valley and its major tributaries.

A critical and immediate need is to halt the spread of Japanese Knotweed along the main stem of Buffalo Creek. This invasive species has caused significant damage to the forest and riparian ecosystem between the S.R. 28 Bridge and the Allegheny River, and it is rapidly spreading to areas just below the Iron Bridge road crossing. Road repairs by township crews in Buffalo Township have resulted in soils containing knotweed rhizomes being transported to other portions of the township, resulting in rapid dispersal. Substantial stands are also located in the upper Pine Run subwatershed. Throughout this area, it has virtually eliminated all other understory plant communities and is prohibiting the regeneration of canopy tree species. Spread of this species up the watershed could have potentially devastating consequences to land, water, biological, and recreational resources. Eradication of established populations is extremely expensive and labor-intensive. Therefore, containment is the primary immediate objective. A partnership needs to be formed to develop and implement a containment plan to prevent upstream spread. This partnership would potentially include the watershed coalition, Buffalo and South Buffalo Townships, the Ben Franklin Technology Center (BFTC), and landowners. Implementation of the plan would likely involve providing educational materials to landowners, trail users, and municipalities concerning containment and eradication; providing financial and material assistance to landowners to eradicate new stands; and the implementation of additional local regulations to ensure that fill material used in all municipalities in the watershed does not result in additional introductions of knotweed or other invasive or noxious species.

An important step in the future stewardship of biological resources is the completion of the **Armstrong County Natural Heritage Inventory**. Proactive efforts are warranted to help conserve the biological diversity areas and conservation areas identified in both the Butler and Armstrong County inventories. It is recommended that this be accomplished through the development of a **land steward program** in which volunteers, under the auspices of the watershed coalition or another interested group, would work with landowners and municipalities to help conserve important resources in these areas. This program would develop materials to educate landowners and municipalities about stewardship of these resources, and if needed and desired, could work with landowners to obtain conservation easements or other formal protective measures. Finally, counties and municipalities should be aware of **Natural Heritage Inventory data for local planning and decision making**. The inclusion of Natural Heritage Inventory data in local planning processes would ensure that resources receive appropriate consideration.

Todd Nature Reserve was identified as a biodiversity area in the Butler County Natural Heritage Inventory. ASWP has been implementing measures to enhance protection of this important forested area for much of the past decade. These efforts have included land purchases and obtaining of conservation easements. ASWP should continue these efforts to enhance protection throughout the Watson's Run and Bell's Run watersheds. In addition, it is recommended that ASWP pursue listing of the Todd Nature Reserve property on the National Register of Natural Landmarks and the National Register of Historic Places to further enhance long-term protection. ASWP should continue to use Todd as an environmental education resource for local school districts.

Continuing efforts to enhance conservation of the **Buffalo Creek Valley Important Bird Area** are recommended. In addition to efforts associated with Todd Nature Reserve, it is recommended that a conservation plan be developed for the forest communities within the IBA. This effort could incorporate the **Forest Planning Program** recommended under land resources to promote forest conservation and sustainable use in the watershed. In order to be successful, an IBA conservation plan will require the enthusiastic cooperation and support of landowners in functioning as stewards of this regional resource. Education and outreach efforts are vital to obtain this support. In addition to working directly with landowners, providing educational materials through the schools would serve to reach the broadest possible constituency in the watershed. It is recommended that ASWP continue its lead role in this effort, with assistance from other interested organizations. The Pennsylvania Game Commission should be encouraged to manage forests on its properties within the watershed to conserve IBA resources and to provide educational information on the IBA and forest conservation at those locations. As an outgrowth of educational efforts, it is recommended that ASWP develop a **Buffalo Creek Birding Trail**, as discussed later under recreational resources.

The upper Buffalo Creek watershed is the southeastern limit of the range of the Eastern Massasauga Rattlesnake. This species is listed as threatened in Pennsylvania. Its current status in the watershed is tenuous due to habitat changes, and a **Massasauga Rattlesnake Habitat Program** is needed to ensure its survival here. An inventory of occupied rattlesnake habitat should be conducted periodically to identify current distributions and habitat status. Following this effort, a conservation and restoration plan should be developed to ensure the long-term survival of this species at known locations in the watershed. Appropriate efforts might include restoration of wet meadow and upland habitats, periodic land management, provision of signage or other informative materials, and where needed and desired, utilization of conservation easements or other landowner incentives to ensure long-term habitat availability. This effort will require the willing and enthusiastic participation of landowners; therefore, a key

priority is to develop educational materials that can be distributed at the time of initial contacts with landowners and other interested persons. This educational effort should be expanded to include the community at large within the range of the rattlesnake to encourage stewardship. Providing educational materials through the schools would serve to reach the broadest possible audience.

A second species of concern, the federally-endangered Indiana Bat, is a permanent resident in the watershed. The overall distribution and habitat requirements of the Indiana Bat are poorly understood, and the watershed is one of the few documented occurrences of this species in Pennsylvania. Therefore, efforts to further **Indiana Bat conservation** in the watershed could be particularly useful. Foremost among these is to develop and distribute educational materials for landowners identifying appropriate conservation measures. This species is particularly susceptible to disturbance of trees containing maternity colonies during the summer, disturbance of hibernacula in winter, and disturbance of staging areas near hibernacula in the fall. Therefore, foremost among the needed efforts is to develop and distribute educational materials for landowners identifying appropriate conservation measures. These should be developed and distributed with the assistance of regulatory agencies (USFWS and PGC) and can initially be targeted to landowners in the vicinity of hibernacula and maternity colony sites. Providing educational materials through the schools would serve to reach a broader audience at a later time. If needed and welcomed by the landowners, more formal protective measures such as the establishment of conservation easements around hibernacula would also provide long-term conservation for the species. It is suggested that the watershed coalition, the conservation districts, ACC, or other interested organization could serve to initiate and coordinate this effort. A program to install bat roosting boxes in appropriate areas throughout the watershed could also be of value. The formation of a **Rare Species Stewardship Program** is recommended as a means of encouraging stewardship of species of concern in the watershed. This effort would involve volunteers working with landowners, other organizations, and federal, state and local agencies to facilitate education and conservation efforts. This could include providing assistance in locating and monitoring efforts and providing or facilitating expertise for the stewardship of species and habitats. It is recommended that the watershed coalition initiate this effort. Local schools could be enlisted to assist in this effort where appropriate.

In order to address an impending serious threat to the watershed's forest communities, a **Hemlock Woolly Adelgid Control Program** is needed in the near future. This insect is capable of eliminating the Eastern Hemlock from the ecosystem within the span of a few years. This could have a devastating impact on the extensive hemlock-white pine-northern hardwood forest ecosystem that is such a characteristic component of the landscape. Proactive planning to control infestations could have a substantial effect in preventing widespread defoliation and death of hemlocks. It is envisioned that this program would include a monitoring program to quickly identify outbreaks and an educational and technical assistance component to assist landowners in initiating effective control measures. It is particularly important that this program be targeted to those areas included in the land steward program. Therefore, this program could potentially be a joint effort of the land steward program, the watershed coalition, and the conservation districts.

Populations of the White-tailed Deer are presently too high in many areas. This is having a substantial impact on the composition of the vegetation community, forest regeneration, associated animal populations such as ground and shrub nesting birds, private property and agriculture, as well as public safety due to collisions with vehicles. The watershed coalition and/or other interested groups should support efforts to **reduce deer populations**.

This can be accomplished by promoting increased hunting access on public and private lands, and by providing educational materials. Through education, the public and municipalities can be encouraged to support PGC efforts to control deer populations. This might include providing information on sustainable deer population levels, impacts from excessively high populations, and ongoing management and regulatory efforts. Furthermore, education directed toward landowners and sportsman will enable them to understand PGC efforts and how the current regulations may benefit their quality of life and sporting pastimes.

Buffalo Creek Cave is a unique geologic feature in the watershed, and in Armstrong County in general. This resource has been conserved through the stewardship of the landowner. It is recommended that the watershed coalition offer technical assistance to the landowner, if requested, to help ensure the long-term conservation of the cave, which is located in an area of high recreational use and active mining.

The extensive farmlands in the Worthington vicinity provide habitat for several uncommon **grassland bird species**. It is recommended that ASWP or the watershed coalition, in concert with IBA conservation activities and with the assistance of the conservation district, work to educate landowners of this unique resource. This effort could include encouraging farmers to avoid hay harvest until July where feasible. The application of financial incentives under CREP or other programs to provide for delayed harvest also merits exploration where species of concern are involved.

7.5 CULTURAL RESOURCES

During the public involvement process, considerable desire was expressed for additional and expanded outdoor recreational opportunities in the watershed. Public facilities are generally lacking in most areas of the watershed. Activities that are enjoyed by thousands, such as fishing, rely on the generosity of landowners to allow public access to their properties. Additional support can be offered to landowners to help maintain this access, and to increase access opportunities throughout the watershed. It became apparent during the public involvement process that a number of groups are working very hard to provide recreational activities. Further cooperation and coordination among groups would likely lead to increased success in mobilizing volunteer efforts and in obtaining funding. Organizations in the watershed are **encouraged to explore partnership opportunities** to both ease their individual burdens and increase recreational resources for all.

In addition, the watershed holds great opportunity as a regional “day use” recreational area. The high quality and often unique resources found here are within an hour’s drive of most of the Pittsburgh metropolitan area. This is much closer than the highly popular Laurel Highlands or the Allegheny Forestlands regions, while offering many of the same types of recreational opportunities. This resource is presently untapped, but with thoughtful planning and promotion, could provide needed economic boost to the watershed’s small towns and opportunities for entrepreneurial businesses serving day and weekend users. With increased economic value come broader stewardship opportunities.

An overall coordinated effort is needed to market the resources of the watershed as a day trip destination in the region. This should include the incorporation of watershed destinations in county and regional tourism and promotions. The watershed should be presented as a complete rural destination in advertising and websites. Increased use by both residents and non-residents will create the opportunity for businesses to provide support services, such as restaurants, sporting goods and bait stores, bicycle and canoe rentals, and

bed and breakfast accommodations. It is recommended that these opportunities be aggressively pursued by creating a **tourism business incubator** partnership to identify, encourage and support the development of these services.

Community parks are highly desired by residents. Few are available at present; these are not adequate to meet the needs of current, let alone growing populations. Development of community parks is the responsibility of the counties and municipalities. Typically, the initial step in developing park facilities is the preparation of a **community recreation plan**. These can be prepared for a single municipality or can be joint efforts. Those municipalities lacking plans should prepare one. Funding for planning is widely available. Municipal recreation facilities developed in accordance with plans should provide for passive outdoor recreation facilities such as trails, and ideally will provide interconnections between facilities. A birding trail, or greenway trail, are options that fit this need. Joint planning is a desirable option in that municipalities can not only share costs and effort, but also plan for more diverse facilities providing for a wider array of opportunities. Buffalo and Clinton Townships, which are presently facing substantial population growth, are currently working on a **Buffalo-Clinton Greenways Plan**, and Buffalo Township is preparing a **mini recreation plan**. These efforts should be completed and implemented.

Buffalo Creek is one of the principal recreation resources in the watershed. Upper portions of the watershed have extensive access available on private lands. However, these areas are seeing increasing use and appear to be nearing their capacity during the peak fishing season. Extensive unutilized areas are located downstream, including a regionally significant Smallmouth Bass fishery. Stream access is desperately needed between Boggsville and Freeport. Through about half of this area, the creek is paralleled by the Butler-Freeport Trail. Additional access is also desirable in the upper portions of the watershed on the main stem and its major tributaries. It is recommended that the watershed coalition take the lead in working with landowners to develop **Buffalo Creek access opportunities** for fishing and boating. The PFBC should initiate trout stocking and Smallmouth Bass fishery management, as appropriate, as access becomes available. Little Buffalo Creek is also a potentially significant bass and trout fishery that has no access at present. This stream is paralleled by the Butler-Freeport Trail for its entire length. It is recommended that the watershed coalition also take the lead in working with landowners to develop **Little Buffalo Creek access opportunities** for fishing. Anecdotal evidence suggests that the Smallmouth Bass Fishery in the lower Buffalo Creek watershed may have experienced decline in the past few decades. Research into this population is warranted. Catch and release regulations or other management options may be appropriate in this area. Access points should focus on bike-in or hike-in access to moderate pressure on the naturally reproducing population.

In addition, canoeing opportunities are limited by the lack of launch facilities and access points. It is recommended that the watershed coalition take the lead in working with landowners to develop **Buffalo Creek additional access opportunities** for canoe launching. The canoeing opportunities and associated day-touring businesses can be promoted by developing a **Buffalo Creek Water Trail**. It is recommended that the watershed coalition work with PFBC to formally incorporate appropriate sections of Buffalo Creek into the Pennsylvania Water Trails System. Appropriate mapping, signage, and access points should be developed as needed.

There is currently no readily accessible and comprehensive information concerning fishing and boating opportunities in the watershed. It is recommended that a guidebook be developed and placed on the watershed coalition website providing information on access,

routes, stream conditions, fishery resources, etc. to encourage stewardship and direct public use to appropriate areas.

Some fishing and boating access sites would benefit greatly by the addition of **access site user amenities** for comfort and health/safety issues. It is recommended that the watershed coalition and other interested groups work with landowners to provide off-road parking and restroom facilities at heavily used locations. Restroom facilities are most needed during the first month of trout season. The deployment of portable restroom facilities with landowner permission would alleviate a number of problems. Additionally, a formal **litter control program** that is implemented during the first month of trout season would be highly beneficial to landowners. This effort would include the temporary deployment of trash cans and regular garbage collection in heavily used areas to minimizing litter on private property.

The single youth and handicapped accessible fishing site in the watershed is heavily used. More facilities of this type are needed. It is recommended that the watershed coalition and other interested groups work with landowners to develop additional **youth and handicapped fishing access**. The PFBC should implement special regulations to ensure appropriate use of these areas.

The **Butler-Freeport Trail** is an outstanding regional recreation resource. The **missing portion of the trail should be completed** to form the complete route between Butler and Freeport. It is also recommended that the Butler-Freeport Trail Council (BFTC) pursue efforts to connect the trail to other components of the regional trail system, such as the Baker Trail and Rachel Carson Trail. Connections to other local recreational areas and trails should also be considered in development of municipal greenway and recreation plans. The BFTC and municipalities should consider providing permanent restroom facilities at key locations. The trail route features numerous sites relating to all of the various historical themes associated with the watershed, as well as outstanding natural communities. The development of signage and/or guidebook to **interpret historical and natural features along the trail** would enhance visitor experiences and provide a valuable educational opportunity. It is suggested that a partnership of interested organizations, perhaps including the BFTC, local historical societies, the watershed coalition, and Freeport Renaissance Association might participate in this project.

ASWP should continue to **develop trails and visitor facilities at Todd Sanctuary** in Buffalo Township. It is also recommended that the **Armstrong County Conservancy (ACC) consider developing trails on its property** in the watershed.

The watershed contains a wealth of historic resources and themes. Several of these have been preserved and interpreted by local historical societies. There is little readily-accessible information available on what historic resources are present, let alone how they can be preserved or enhanced. Preservation and interpretation of historic resources could be a component of existing and future park developments, tourism efforts, and local redevelopment and revitalization efforts. There is in general no consistent or comprehensive consideration of historic resources and historic preservation in the watershed. Local planning should take historic preservation into account and information on the resources available for historic preservation made more accessible to interested individuals, organizations, and businesses. It is recommended that each municipality establish a **municipal historic preservation commission** to advise elected officials on this issue. In addition, municipalities should develop **local preservation plans** pursuant to PA Act 68 of 2000, including the development of historic resource overlay districts for municipal zoning ordinances.

A number of historically and architecturally important structures exist in the small town centers throughout the watershed. Many of these are unused or underused and provide great opportunity for **adaptive reuse**. Restoration and reuse of historic town centers is an important smart growth concept, with the additional benefit of helping to retain the important small town atmosphere. It is recommended that counties or municipalities conduct inventories of structures suitable for reuse, and working with partner organizations (such as the Steel Industry Heritage Corporation) make this information available to the business community.

The historic **Beatty Mill Bridge** provides an opportunity for historic preservation, interpretation, and recreation access at one site, as well as providing a model for preservation and reuse. This national-register eligible bridge built in 1875 is a wrought iron bowstring truss bridge that is the last remaining metal span over Buffalo Creek. The bridge is scheduled for replacement. It is recommended that the existing bridge be preserved on-site, with interpretive signage, an adjacent parking space, and formal stream access provided.

A number of actions are recommended to promote and increase tourism within the watershed.

Many of the watershed's rural back roads provide ideal biking locations, however information for bicyclists is presently unavailable. It is recommended that the county tourism agencies, in cooperation with businesses and other organizations, develop and designate scenic and historical **bicycle tour routes** utilizing both trails and roads. Necessary brochures, maps, signage and interpretive information should also be provided. **Auto tour routes** should also be similarly developed. One such tour currently exists, however it has not been made available to the public and needs to be formalized. These can be tied to specific themes such as historical sites, agrotourism, or scenic drives. These bicycle and auto routes should be appropriately advertised in local and regional publications and on county tourism websites.

The opportunity exists to invite birders to the area through creation of a **Buffalo Creek Birding Trail**, similar to the Susquehanna River Birding and Wildlife Trail developed by Pennsylvania Audubon. This trail would provide regional exposure for the IBA, the watershed, and its developing tourism support services. It is recommended that ASWP take the lead role in developing this trail, including identifying routes and access points, developing a guide, and creating a website.

Portions of Buffalo Creek and Little Buffalo Creek should be considered for designation under the **Pennsylvania Scenic Rivers System** as wild, scenic or recreational status. Such status would confer additional levels of protection and recognize the significance of these resources at the state level. Such an effort will require considerable public input and cannot be successful without the enthusiastic support of landowners and municipalities. It is recommended that the watershed coalition, in cooperation with the county planning agencies, examine local interest in such a designation after sufficient recreation and access facilities are in place to warrant consideration.

**Table 7-1
BUFFALO CREEK WATERSHED ACTION PLAN
(ORGANIZED BY RESOURCE CATEGORY)**

Action Item	Description	Potential Partners¹	Funding Options¹	Priority Level
General				
Watershed Coalition	Provide assistance to ASWP in continuing to develop the Coalition, raise awareness and recruit members to coordinate activities and efforts.	Conservation Districts, TU, BFTC, Sportsmen's clubs, Historical societies, Armstrong County Conservancy	DCNR-BRC, DEP	Critical
Watershed Website	Establish watershed website to serve as information clearinghouse and tourism promotion tool.	Watershed coalition	Watershed association	High
State of Watershed Report	Prepare on annual scored to summarize progress and needs.	Watershed coalition	DCNR-BRC, DEP	High
Watershed Festival	Initiate an annual festival celebrating the watershed. Include recreational, educational, and entertainment components. Serve as an annual opportunity for all organizations to meet the public.	Watershed coalition, TU, historical societies, BFTC, ACC, FRA	Watershed coalition, DCED	High
River Sojourn	Organize an annual spring river sojourn on Buffalo Creek to raise interest in watershed issues.	Watershed coalition	DCNR-BRC	Moderate
Watershed DVD	Prepare DVD presentation for distribution to municipalities, schools, organizations, and landowners presenting the watershed as a special place and discussing the RCP recommendations.	Watershed coalition	DCNR-BRC, DCED, foundations	Moderate
Stream Signage	Initiate a program to provide roadside signage of major streams.	Watershed coalition	DCNR-BRC, PennDOT	Moderate
Land Resources				
Zoning	Develop and implement zoning where is not currently in place, and work to improve and update existing zoning through application of smart growth principles (see below).	Municipalities, citizens	DCED	High

Table 7-1 (Continued)

Action Item	Description	Potential Partners	Funding Options	Priority Level
Land Resources (Continued)				
Comprehensive Plans	Develop individual or joint comprehensive plans where not currently in place. Encourage the development of joint plans to reflect effects over large landscape areas.	Municipalities, county planning departments, citizens	DCED, Governors Center for Local Government Services	High
Smart Growth	Utilize smart growth principles in new development. Encourage shift from traditional development to open-space oriented or village-centered patterns.	Municipalities, county planning departments, citizens	DCED, PHFA	High
Greenways	Develop individual or joint greenway plans.	Municipalities, county planning departments	DCNR-BRC, DCNR-BF	High
Forest Planning	Develop a program to promote forest conservation and sustainable use in the watershed and provide education programs and resources to landowners and municipalities.	Watershed coalition, conservation districts, DCNR-BF, DCNR-BRC, PFA, NWOA, professional foresters	DCNR-BRC, DCNR-BF	High
Forest Conservation	Provide for protection of large forest tracts through landowner education, participation in forest stewardship program, forest legacy program, comprehensive planning, and conservation easements.	Watershed coalition, conservation districts, DCNR-BF, DCNR-BRC, USFS, PGC	DCNR-BF, DCNR-BRC	High
Forest Stewardship Program	Encourage landowner to participate in the PA Forest Stewardship Program and/or American Tree Farm System.	Watershed coalition, conservation districts, DCNR-BF, PFA, landowners	DCNR-BF, DCNR-BRC	High
Agriculture Security Areas	Promote enrollment in existing areas and creation of additional areas.	Conservation districts, NRCS, FSA, municipalities	BFP	High
Agricultural Conservation Easements	Promote enrollment in state or private programs.	Conservation districts, FSA, watershed coalition, municipalities	BFP, Private sources	High
Environmental Advisory Committees	Establish environmental advisory committees (as authorized under Pennsylvania Municipalities Planning Code) to advise local elected officials on environmental matters.	Municipalities, PEC	DCED, municipalities	Moderate

Table 7-1 (Continued)

Action Item	Description	Potential Partners	Funding Options	Priority Level
Land Resources (Continued)				
Protect Critical Areas	Develop regulations or amend existing regulations to ensure that sensitive areas including floodplains and steep slopes are not subject to inappropriate uses.	Municipalities, county planning departments, conservation districts	DCNR-BRC, DCNR-BF	Moderate
Local Agriculture Promotion	Promote local agriculture through advertising, cooperative efforts, agro-tourism, and farmers markets. Encourage participation in Butler Brand and Butler Agritour Product Alliance.	Conservation Districts, FSA, farmers, municipalities, Butler Agritour Product Alliance, county tourism agencies	PFB	Moderate
Conservation Reserve Enhancement Program	Promote enrollment in CREP programs.	Conservation districts, NRCS, FSA	PaDEP	Moderate
Agricultural BMPs	Install BMPs where needed.	Conservation districts	PaDEP	Moderate
Clean and Green Program	Promote enrollment of farmland and forest in the Clean and Green Program.	County Assessors, conservation districts		Moderate
Conservation Plans	Encourage farmers and large landowners to prepare conservation plans for their properties under the NRCS assistance program.	Conservation districts, NRCS	NRCS	Moderate
Light Pollution Control	Incorporate planning and design requirements for outdoor lighting within county and/or municipal regulations.	County planning departments, municipalities	DCED, county and municipal funds	Moderate
Century Farms	Promote enrollment and community recognition	Conservation districts, FSA, municipalities	BFP	Low
Waste Cleanup	Reactivate Armstrong County 6, chapter of PA Cleanways. Inventory illegal dump sites and plan for cleanup.	Watershed coalition, conservation districts, PA Cleanways	Watershed Organization	Low
Watershed Cleanup Day	Local chapter of PA Cleanways should initiate an annual cleanup day. Consider subwatershed stewardship efforts with businesses and organizations.	Watershed coalition, conservation districts, PA Cleanways	Watershed Organization	Low
Household Hazardous Waste	Sponsor local collection of household hazardous wastes.	Watershed coalition, conservation districts, PA Cleanways, municipalities	PaDEP, PA Cleanways, municipalities	Low

Table 7-1 (Continued)

Action Item	Description	Potential Partners	Funding Options	Priority Level
Water Resources				
Butler County Watershed Assessment	Prepare a watershed assessment for the portion of the watershed in Butler County.	Conservation district	PaDEP	High
Riparian Buffers	Collaboration with WPC Riparian Restoration Initiative	Watershed coalition, WPC, TU, PaDEP Stream Releaf	DCNR-BRC, NRCS, PaDEP	High
Monitoring Program	Develop and implement a long-term monitoring program in the watershed. Should have subwatershed components and include QA/QC components. Make results easily accessible to public via website.	Watershed coalition, conservation districts, school districts, scout groups, WPC Watershed Assistance Center, EASI	PaDEP, watershed organization, foundations	High
Municipal Sewage Treatment Facilities	Where municipal facilities are warranted, design facilities to minimize impacts to riparian, wetland and large forest tract habitats. Consider alternative treatment options where feasible.	Municipalities, PaDEP	PaDEP	High
Septic Systems	Implement a septic system inspection program and enforce regulations concerning malfunctioning septic systems. Provide resources to homeowners concerning repair of malfunctioning systems. Establish cost-share program to assist with repairs.	Counties, Municipalities, PaDEP,	PaDEP, municipalities	Moderate
Stormwater Plan	Prepare an Act 167 Plan for the entire watershed. Butler Co. is in the process. Armstrong Co. has not started.	Municipalities	PaDEP	Moderate
Stormwater Ordinances	Adopt and enforce stormwater ordinances. Ordinances should be compatible with Phase I and II NPDES regulations for pre- and post-construction discharges.	Municipalities	PaDEP	Moderate
Stormwater Remediation	Work to alleviate current stormwater discharge problems. Evaluate potential to retrofit existing commercial, industrial, and school facilities.	Municipalities, conservation districts	PaDEP, private developers	Moderate

Table 7-1 (Continued)

Action Item	Description	Potential Partners	Funding Options	Priority Level
Water Resources (Continued)				
Small Scale Sewage Treatment Systems	Explore development of small community-based treatment systems where appropriate as opposed to large-scale municipal systems.	Municipalities	PaDEP	Moderate
Act 537 Plans	Update plans to incorporate changing development patterns and to consider alternative treatment systems in rural areas.	Municipalities, PaDEP	PaDEP	Moderate
Dirt and Gravel Roads	Continue to work to control erosion, sedimentation, and dust from dirt and gravel roads under the PA Dirt and Gravel Road Program.	Conservation districts, TU	PA State Conservation Commission	Moderate
Stream Corridor Fencing	Provide fencing and livestock crossings to stabilize and restore riparian corridors.	Watershed coalition, conservation districts, Riparian Restoration Initiative, PGC, Ducks Unlimited	NRCS, Riparian Restoration Initiative, PGC, Ducks Unlimited	Moderate
Streambank Stabilization and Restoration	Continue to implement natural stream restoration techniques to control bank erosion.	TU, conservation districts, PGC, Ducks Unlimited	DCNR-BRC, NRCS, PaDEP, PGC, Ducks Unlimited	Moderate
TMDLs	Develop and implement TMDLs on impaired streams.	PaDEP	PaDEP	Moderate
Nutrient Management Plans	Encourage and assist farmers in developing nutrient management plans.	Conservation districts, FSA, farmers	NRCS	Moderate
AMD Remediation	Conduct monitoring to assess real impact of AMD in watershed. Identify, rank, and obtain funding to design and implement AMD remediation efforts. Work to remediate obvious discharges where feasible.	Conservation districts, watershed coalition,	DCNR-BRC, PaDEP	Moderate
Floodplain Mapping	Update floodplain mapping where appropriate to reflect changing conditions and development.	Municipalities	PaDEP, FEMA	Low
Floodplain Regulation	Create municipal floodplain ordinances to discourage incompatible development.	Municipalities	FEMA, DCED	Low

Table 7-1 (Continued)

Action Item	Description	Potential Partners	Funding Options	Priority Level
Biological Resources				
Japanese Knotweed Control	Develop and implement plan to prevent upstream spread of knotweed. Provide educational materials and assistance to landowners and municipalities to prevent additional introductions.	Watershed coalition, conservation districts, BFTC	DCNR-BRC, DCNR-BF, foundations	Critical
Armstrong County Natural Heritage Inventory	Complete the Natural Heritage Inventory and make accessible to the public.	Armstrong County Planning Department, WPC	DCNR-BRC, DCNR-BF	High
Diversity Area Stewardship Program	Develop a land steward program for BDAs. Volunteers responsible for landowner education and monitoring. Work with landowners to help preserve biodiversity and conservation areas.	Watershed coalition, WPC, ACC	Watershed organization	High
Natural Heritage Inventory Planning	Incorporate Natural Heritage Inventory data in municipal planning.	County planning, municipalities, WPC, diversity area stewardship program	Municipalities	High
Massasauga Habitat Program	Inventory massasauga rattlesnake habitat, develop and implement conservation and restoration plans.	Watershed coalition, WPC, PFBC, USFWS, ASWP, ACC, conservation districts, landowners	DCNR-BRC, PFBC, foundations	High
Hemlock Woolly Adelgid	Monitor for outbreaks, work with landowners to immediately initiate control measures.	Watershed coalition, conservation districts, landowners	DCNR-BRC, DCNR-BF, foundations	High
Deer Population	Support efforts to reduce deer populations. Promote increased hunting access on public and private land. Provide educational materials to landowners and municipalities.	Watershed coalition, PGC	PGC, private	High

Table 7-1 (Continued)

Action Item	Description	Potential Partners	Funding Options	Priority Level
Biological Resources (Continued)				
Buffalo Creek IBA	Develop management plan for IBA and provide education to municipalities and landowners. Develop educational materials for school use.	ASWP, watershed coalition	ASWP, DCNR BRC, DCNR-BF, foundations	Moderate
Todd Nature Reserve	Continue to work with adjacent landowners to conserve forest core and buffer areas within watershed. Obtain listing on National Register of Natural Landmarks and National Register of Historic Places to enhance long-term protection. Develop a long-term management plan. Continue to use Todd as environmental education resource for local schools.	ASWP	Foundations, ECOZ	Moderate
Indiana Bat Conservation	Work with regulatory agencies and landowners to provide protection to hibernacula and maternity colony sites. Develop educational materials for landowners identifying appropriate conservation measures.	Watershed coalition, ACC, PGC, USFWS, DCNR-BF, conservation districts, landowners.	DCNR-BRC, DCNR-BF, PGC	Moderate
Rare Species Stewardship Program	Develop a program to foster stewardship of rare species. Volunteers work with landowners to provide education, monitoring, and stewardship expertise.	Watershed coalition, schools	Watershed coalition	Low
Buffalo Creek Cave	Work with landowner to ensure conservation of unique resource.	Watershed coalition, landowner, NSS	Watershed organization	Low
Grassland Bird Nesting	Encourage farmers to avoid hay harvest until July where feasible. Explore financial incentives under CREP, etc. where species of concern are involved.	ASWP, Watershed coalition, conservation districts, FSA	NRCS, Watershed coalition	Low
Cultural Resources				
Community Parks/ Recreation Planning	Prepare recreation plans for those municipalities lacking plans. Develop municipal recreation facilities in accordance with plans. Provide for passive outdoor recreation facilities such as trails and provide interconnections between facilities.	Municipalities, DCNR-BRC, recreation organizations	DCNR-BRC, municipalities, foundations, private	High

Table 7-1 (Continued)

Action Item	Description	Potential Partners	Funding Options	Priority Level
Cultural Resources (Continued)				
Buffalo Creek Access	Identify potential access opportunities. Work with landowners to develop public access sites for fishing and boating access. Initiate trout stocking and smallmouth bass fishery management as appropriate.	Watershed coalition, landowners, DCNR-BRC, TU, ACC, PFBC	DCNR-BRC, PFBC, foundations	High
Little Buffalo Creek Access	Identify potential access opportunities. Work with landowners to develop public access sites for fishing. Initiate trout stocking and smallmouth bass fishery management as appropriate.	Watershed coalition, landowners, DCNR-BRC, TU, PFBC	DCNR-BRC, PFBC, foundations	High
Butler-Freeport Trail	Complete construction of trail between Butler and Freeport. Provide permanent restroom facilities at key locations. Provide connections to nearby recreation facilities.	BFTC, municipalities	DCNR-BRC, foundations, private	High
Greenways and Recreation Plans	Complete development of plans in progress. Implement recommendations. Develop others in remaining municipalities.	Municipalities, DCNR-BRC, recreation organizations	DCNR-BRC, municipalities, foundations, private	High
Youth/Handicapped Fishing Areas	Work with landowners to develop additional youth and handicapped fishing access. Implement special regulations to ensure appropriate use.	Watershed coalition, landowners, DCNR-BRC, TU, PFBC, ACC	DCNR-BRC, PFBC, TU, foundations	Moderate
Buffalo Creek Access Site Amenities	Work with landowners to develop parking and restroom facilities at heavily used locations.	Watershed coalition, landowners, DCNR-BRC, TU, PFBC	DCNR-BRC, PFBC, foundations, private	Moderate
Buffalo Creek Litter Control Program	Work with landowners to provide trash cans and garbage collection during first month of trout season in heavily used areas.	Watershed coalition, landowners, TU	DCNR-BRC, PFBC, foundations, private	Moderate
Buffalo Creek Water Trail	Work with PFBC to incorporate appropriate sections of Buffalo Creek into the PA Water Trails System. Develop mapping, signage, and access points as appropriate.	Watershed coalition, PFBC	PFBC, DCNR-BRC, PaDEP	Moderate

Table 7-1 (Continued)

Action Item	Description	Potential Partners	Funding Options	Priority Level
Cultural Resources (Continued)				
Bicycle Tour Routes	Develop scenic and historical bicycle tour routes utilizing both trails and roads and prepare brochures with maps and interpretive information.	County tourism agencies, businesses, watershed coalition, historical societies, FRA	PHMC, DCNR-BRC, foundations, private	Moderate
Auto Tour Routes	Develop scenic and historical auto tour routes and prepare brochures with maps and interpretive information.	County tourism agencies, businesses, watershed coalition, historical societies, FRA	PHMC, DCNR-BRC, foundations, private	Moderate
Minteer Preserve Trails	Develop trails and public access facilities on conservancy property.	Armstrong County Conservancy	DCNR-BRC	Moderate
Todd Nature Reserve Trails	Continue to develop trails and visitor facilities	ASWP	ECOZ, DCNR-BRC, Foundations	Moderate
Butler-Freeport Trail Historical Interpretation	Develop signage and/or guidebook to interpret historical and natural features along Butler-Freeport Trail.	BFTC, historical societies, watershed coalition, FRA	PHMC, DCNR-BRC, foundations, private	Moderate
Beatty Mill Bridge	Preserve the Beatty Mill Bridge for use as historic site and pedestrian access.	Watershed coalition, PennDOT, historical societies	PennDOT, FHWA, PHMC, DCNR-BRC, foundations, private	Moderate
Tourism Promotion	Aggressively promote the watershed as a day trip destination. Incorporate watershed destinations in tourism planning. Include in advertising and websites.	County tourism agencies, Steel Industry Heritage Corporation	PDCED	Moderate
Historic Structure Reuse	Encourage adaptive reuse of historic structures.	County planning departments, municipalities, Steel Industry Heritage Corporation	PDCED, PHMC	Moderate
Tourism Business Incubator	Create partnerships to identify, encourage and support the development of support services needed for increased tourism.	County tourism agencies, Steel Industry Heritage Corporation, municipalities	PDCED	Moderate
Historic Preservation Commissions	Establish municipal historic preservation commissions to advise elected officials.	Municipalities, historical societies	PHMC, DCED, municipalities	Moderate

Table 7-1 (Continued)

Action Item	Description	Potential Partners	Funding Options	Priority Level
Cultural Resources (Continued)				
Historic Preservation Plans	Develop local preservation plans pursuant to PA Act 68 of 2000. Develop historic resource overlay districts for municipal zoning ordinances.	Municipalities, historical societies	PHMC, DCED, municipalities	Moderate
Buffalo Creek Birding Trail	Develop a Buffalo Creek Birding Trail to highlight regional importance of the Buffalo Creek IBA. Coordinate access points, develop guidebook, and create website.	ASWP, PA Audubon	DCNR-BRC, PA Audubon, USFWS, PennDOT	Low
State Scenic Rivers System	Consider designation in the PA Scenic Rivers System if there is sufficient public and municipal interest.	Watershed coalition, county planning agencies	DCNR-BRC	Low

¹ See Table 7-2 for key to abbreviations.

Table 7-2
BUFFALO CREEK WATERSHED ACTION PLAN
(ORGANIZED ALPHABETICALLY BY POTENTIAL PARTNER)

Armstrong County Conservancy (ACC)	Natural Resource Conservation Service (NRCS)
Audubon Society of Western Pennsylvania (ASWP)	National Woodland Owners Association (NWOA)
Butler-Freeport Trail council (BFTC)	Pennsylvania Audubon
Businesses	Pennsylvania Cleanways
Butler Agritour Product Alliance	Pennsylvania Department of Environmental Protection (PA DEP)
Citizens	Pennsylvania Department of Transportation (PennDOT)
Conservation Districts	Pennsylvania Forestry Association (PFA)
County Assessor	Pennsylvania Fish and Boat Commission (PFBC)
County Planning Agencies	Pennsylvania Game Commission (PGC)
County Tourism Agency	Professional Foresters
Pennsylvania Department of Community and Economic Development (DCED)	Recreation Organizations
Pennsylvania Department of Conservation and Natural Resources, Bureau of Recreation and Conservation (DCNR-BRC)	Riparian Restoration Initiative
Pennsylvania Department of Conservation and Natural Resources, Bureau of Forestry (DCNR-BF)	School Districts and Scout Groups
Diversity Area Stewardship Program	Sportmen's Clubs
Ecologically Concerned of Zelienople (ECOZ)	Steel Industry Heritage Organization
Farmers	Trout Unlimited (TU)
Freeport Renaissance Association	United States Forest Service (USFS)
Farm Service Agency (FSA)	United States Fish and Wildlife Service (USFWS)
Historical Societies	Watershed Coalition
Landowners	Western Pennsylvania Conservancy (WPC)
Municipalities	

ARMSTRONG COUNTY CONSERVANCY

Action Item	Description	Funding Options	Priority Level
Buffalo Creek Access	Identify potential access opportunities. Work with landowners to develop public access sites for fishing and boating access. Initiate trout stocking and smallmouth bass fishery management as appropriate.	DCNR-BRC, PFBC, foundations	High
Buffalo Creek IBA	Assist ASWP in developing management plan for IBA and provide education to municipalities and landowners. Develop educational materials for school use.	ASWP, DCNR-BRC, foundations	Moderate
Diversity Area Stewardship Program	Develop a land steward program for BDAs. Volunteers responsible for landowner education and monitoring. Work with landowners to help preserve biodiversity and conservation areas. Continue to obtain land and easements to protect habitats where appropriate.	Watershed coalition	High
Indiana Bat Conservation	Work with regulatory agencies and landowners to provide protection to hibernacula and maternity colony sites. Develop educational materials for landowners identifying appropriate conservation measures.	DCNR-BRC, DCNR-BF, PGC	Moderate
Massasauga Habitat Program	Inventory massasauga rattlesnake habitat, develop and implement conservation and restoration plans.	DCNR-BRC, PFBC, foundations	High
Minteer Preserve Trails	Develop trails and public access facilities on conservancy property.	DCNR-BRC	Moderate

ARMSTRONG COUNTY CONSERVANCY (Continued)

Action Item	Description	Funding Options	Priority Level
Watershed Coalition	Assist ASWP in its effort to develop a Watershed coalition.	DCNR-BRC	Critical
Watershed Festival	Initiate an annual festival celebrating the watershed. Include recreational, educational, and entertainment components. Serve as an annual opportunity for all organizations to meet the public.	Watershed coalition, DCED	High
Youth/Handicapped Fishing Areas	Work with landowners to develop additional youth and handicapped fishing access. Implement special regulations to ensure appropriate use.	DCNR-BRC, PFBC, TU, foundations	Moderate

AUDUBON SOCIETY OF WESTERN PENNSYLVANIA

Action Item	Description	Funding Options	Priority Level
Buffalo Creek Birding Trail	Develop a Buffalo Creek Birding Trail to highlight regional importance of the Buffalo Creek IBA. Coordinate access points, develop guidebook, and create website.	DCNR-BRC, PA Audubon, USFWS, PennDOT	Low
Buffalo Creek IBA	Develop management plan for IBA and provide education to municipalities and landowners. Develop educational materials for school use.	ASWP, DCNR-BRC, foundations	Moderate
Massasauga Habitat Program	Inventory massasauga rattlesnake habitat, develop and implement conservation and restoration plans.	DCNR-BRC, PFBC, foundations	High
Todd Nature Reserve	Continue to work with adjacent landowners to conserve forest core and buffer areas within watershed. Obtain listing on National Register of Natural Landmarks and National Register of Historic Places to enhance long-term protection. Develop long-term management plan. Continue to use Todd as an environmental education resource for local schools. Continue to develop trails and visitor facilities.	Foundations, ECOZ	Moderate
Watershed Coalition	Continue development of a Buffalo Creek Watershed Coalition to coordinate activities and efforts.	DCNR-BRC	Critical

BUTLER FREEPORT TRAIL COUNCIL

Action Item	Description	Funding Options	Priority Level
Japanese Knotweed Control	Develop and implement plan to prevent upstream spread of knotweed. Provide educational materials and assistance to landowners and municipalities to prevent additional introductions.	DCNR-BRC, DCNR-BF, foundations	Critical
Watershed Coalition	Assist ASWP in its effort to develop a Watershed coalition.	DCNR-BRC	Critical
Watershed Festival	Initiate an annual festival celebrating the watershed. Include recreational, educational, and entertainment components. Serve as an annual opportunity for all organizations to meet the public.	Watershed coalition, DCED	High

BUSINESSES

Action Item	Description	Funding Options	Priority Level
Auto Tour Routes	Develop scenic and historical auto tour routes and prepare brochures with maps and interpretive information.	PHMC, DCNR-BRC, foundations, private	Moderate
Bicycle Tour Routes	Develop scenic and historical bicycle tour routes utilizing both trails and roads and prepare brochures with maps and interpretive information.	PHMC, DCNR-BRC, foundations, private	Moderate

BUTLER AGRITOUR PRODUCT ALLIANCE

Action Item	Description	Funding Options	Priority Level
Local Agriculture Promotion	Promote local agriculture through advertising, cooperative efforts, agrotourism, and farmers markets. Encourage participation in Butler Brand and Butler Agritour Product Alliance.	PFB	Moderate

CITIZENS

Action Item	Description	Funding Options	Priority Level
Comprehensive Plans	Develop individual or joint comprehensive plans where not currently in place. Encourage the development of joint plans to reflect effects over large landscape areas.	DCED	High
Smart Growth	Utilize smart growth principles in new development. Encourage shift from traditional development to open-space oriented or village-centered patterns.	DCED, PHFA	High
Zoning	Develop and implement zoning where is not currently in place.	DCED	High

CONSERVATION DISTRICTS

Action Item	Description	Funding Options	Priority Level
Agricultural BMPs	Install BMPs where needed.	PaDEP	Moderate
Agricultural Conservation Easements	Promote enrollment in state or private programs.	BFP, Private sources	High
Agriculture Security Areas	Promote enrollment in existing areas and creation of additional areas.	BFP	High
AMD Remediation	Identify, rank, and obtain funding to design and implement AMD remediation efforts.	DCNR, PaDEP	Moderate
Butler County Watershed Assessment	Prepare a watershed assessment for the portion of the watershed in Butler County.	PaDEP	High
Century Farms	Promote enrollment and community recognition	BFP	Low
Clean and Green Program	Promote enrollment of farmland and forest in the Clean and Green Program.		Moderate
Conservation Plans	Encourage farmers and large landowners to prepare conservation plans for their properties under the NRCS assistance program.	NRCS	Moderate
Conservation Reserve Enhancement Program	Promote enrollment in CREP programs.	PaDEP	Moderate

CONSERVATION DISTRICTS (Continued)

Action Item	Description	Funding Options	Priority Level
Dirt and Gravel Roads	Continue to work to control erosion, sedimentation, and dust from dirt and gravel roads under the PA Dirt and Gravel Road Program.	PA State Conservation Commission	Moderate
Forest Conservation	Provide for protection of large forest tracts through landowner education, participation in forest stewardship program, forest legacy program, comprehensive planning, and conservation easements.	DCNR-BF, DCNR-BRC	High
Forest Planning	Develop a program to promote forest conservation and sustainable use in the watershed and provide education programs and resources to landowners and municipalities.	DCNR-BF, DCNR-BRC	High
Forest Stewardship Program	Encourage landowner to participate in the PA Forest Stewardship Program and/or American Tree Farm System.	DCNR-BF, DCNR-BRC	High
Grassland Bird Nesting	Encourage farmers to avoid hay harvest until July where feasible. Explore financial incentives under CREP, etc. where species of concern are involved.	NRCS, Watershed coalition	Low
Hemlock Woolly Adelgid	Monitor for outbreaks, work with landowners to immediately initiate control measures.	DCNR-BF, DCNR-BRC foundations	High
Household Hazardous Waste	Sponsor local collection of household hazardous wastes.	PaDEP, PA Cleanways, municipalities	Low
Indiana Bat Conservation	Work with regulatory agencies and landowners to provide protection to hibernacula and maternity colony sites. Develop educational materials for landowners identifying appropriate conservation measures.	DCNR-BF, DCNR-BRC, PGC	Moderate
Japanese Knotweed Control	Develop and implement plan to prevent upstream spread of knotweed. Provide educational materials and assistance to landowners and municipalities to prevent additional introductions.	DCNR-BF, DCNR-BRC, foundations	Critical
Local Agriculture Promotion	Promote local agriculture through advertising, cooperative efforts, agrotourism, and farmers markets. Encourage participation in Butler Brand and Butler Agritour Product Alliance.	PFB	Moderate
Massasauga Habitat Program	Inventory massasauga rattlesnake habitat, develop and implement conservation and restoration plans.	DCNR-BRC, PFBC, foundations	High
Monitoring Program	Develop and implement a long-term monitoring program in the watershed. Should have subwatershed components and include QA/QC components. Make results easily accessible to public via website.	PaDEP, watershed organization, foundations	High
Nutrient Management Plans	Encourage and assist farmers in developing nutrient management plans.	NRCS	Moderate

CONSERVATION DISTRICTS (Continued)

Action Item	Description	Funding Options	Priority Level
Protect Critical Areas	Develop regulations or amend existing regulations to ensure that sensitive areas including floodplains, steep slopes, wetlands, and large forests are not subject to inappropriate uses.	DCNR-BRC, DCNR-BF	Moderate
Stormwater Remediation	Work to alleviate current stormwater discharge problems. Evaluate potential to retrofit existing commercial, industrial, and school facilities.	PaDEP, private developers	Moderate
Stream Corridor Fencing	Provide fencing and livestock crossings to stabilize and restore riparian corridors.	NRCS, Riparian Restoration Initiative, PGC, Ducks Unlimited	Moderate
Streambank Stabilization and Restoration	Continue to implement natural stream restoration techniques to control bank erosion.	DCNR-BRC, NRCS, PaDEP Stream Releaf	Moderate
Waste Cleanup	Establish local chapter of PA Cleanways. Inventory illegal dump sites and plan for cleanup.	Watershed Organization	Low
Watershed Coalition	Assist ASWP in its effort to develop a Watershed coalition.	DCNR-BRC	Critical
Watershed Cleanup Day	Local chapter of PA Cleanways should initiate an annual cleanup day. Consider subwatershed stewardship efforts with businesses and organizations.	Watershed Organization	Low

COUNTY ASSESSORS

Action Item	Description	Funding Options	Priority Level
Clean and Green Program	Promote enrollment of farmland and forest in the Clean and Green Program.		Moderate

COUNTY PLANNING AGENCIES

Action Item	Description	Funding Options	Priority Level
Armstrong County Natural Heritage Inventory	Complete the Natural Heritage Inventory and make accessible to the public.	DCNR-BRC, DCNR-BF	High
Comprehensive Plans	Develop individual or joint comprehensive plans where not currently in place. Encourage the development of joint plans to reflect effects over large landscape areas.	DCED	High
Greenways	Develop individual or joint greenway plans.	DCNR-BRC, DCNR-BF	High
Historic Structure Reuse	Encourage adaptive reuse of historic structures.	PDCEd, PHMC	Moderate
Natural Heritage Inventory Planning	Incorporate Natural Heritage Inventory data into municipal planning.	Municipalities	High
Protect Critical Areas	Develop regulations or amend existing regulations to ensure that sensitive areas including floodplains, steep slopes, wetlands, and large forests are not subject to inappropriate uses.	DCNR-BRC, DCNR-BF	Moderate

COUNTY PLANNING AGENCIES (Continued)

Action Item	Description	Funding Options	Priority Level
Smart Growth	Utilize smart growth principles in new development. Encourage shift from traditional development to open-space oriented or village-centered patterns.	DCED, PHFA	High
State Scenic Rivers System	Consider designation in the PA Scenic Rivers System if there is sufficient public and municipal interest.	DCNR-BRC,	Low

COUNTY TOURISM AGENCY

Action Item	Description	Funding Options	Priority Level
Auto Tour Routes	Develop scenic and historical auto tour routes and prepare brochures with maps and interpretive information.	PHMC, DCNR-BRC, foundations, private	Moderate
Bicycle Tour Routes	Develop scenic and historical bicycle tour routes utilizing both trails and roads and prepare brochures with maps and interpretive information.	PHMC, DCNR-BRC, foundations, private	Moderate
Local Agriculture Promotion	Promote local agriculture through advertising, cooperative efforts, agrotourism, and farmers markets. Encourage participation in Butler Brand and Butler Agritour Product Alliance.	PFB	Moderate
Tourism Business Incubator	Create partnerships to identify, encourage and support the development of support services needed for increased tourism.	PDCED	Moderate
Tourism Promotion	Aggressively promote the watershed as a day trip destination. Incorporate watershed destinations in tourism planning. Include in advertising and websites.	PDCED	Moderate

DCNR

Action Item	Description	Funding Options	Priority Level
Buffalo Creek Access	Identify potential access opportunities. Work with landowners to develop public access sites for fishing and boating access. Initiate trout stocking and smallmouth bass fishery management as appropriate.	DCNR-BRC, PFBC, foundations	High
Buffalo Creek Access Site Amenities	Work with landowners to develop parking and restroom facilities at heavily used locations.	DCNR-BRC, PFBC, foundations, private	Moderate
Buffalo-Clinton Greenways and Recreation Plans	Complete development of plans. Implement recommendations.	DCNR-BRC, municipalities, foundations, private	High
Community Parks	Prepare recreation plans for those municipalities lacking plans. Develop municipal recreation facilities in accordance with plans. Provide for passive outdoor recreation facilities such as trails and provide interconnections between facilities.	DCNR-BRC, municipalities, foundations, private	High
Forest Conservation	Provide for protection of large forest tracts through landowner education, participation in forest stewardship program, forest legacy program, comprehensive planning, and conservation easements.	DCNR-BRC, DCNR-BF	High

DCNR (Continued)

Action Item	Description	Funding Options	Priority Level
Todd Nature Reserve	Continue to work with adjacent landowners to conserve forest core and buffer areas within watershed. Obtain listing on National Register of Natural Landmarks and National Register of Historic Places to enhance long-term protection.	Foundations, ECOZ	Moderate
Little Buffalo Creek Access	Identify potential access opportunities. Work with landowners to develop public access sites for fishing. Initiate trout stocking and smallmouth bass fishery management as appropriate.	DCNR-BRC, PFBC, foundations	High
Youth/Handicapped Fishing Areas	Work with landowners to develop additional youth and handicapped fishing access. Implement special regulations to ensure appropriate use.	DCNR-BRC, PFBC, TU, foundations	Moderate
Natural Heritage Inventory Planning	Consider Natural Heritage Inventory data in municipal planning.	Municipalities	High

ECOLOGICALLY CONCERNED OF ZELIENOPLE (ECOZ)

Action Item	Description	Funding Options	Priority Level
Todd Nature Reserve	Continue to work with adjacent landowners to conserve forest core and buffer areas within watershed. Obtain listing on National Register of Natural Landmarks and National Register of Historic Places. Develop a long-term management plan. Continue to use Todd as an environmental education resource for local schools. Continue to develop trails and visitor facilities.	Foundations, ECOZ	Moderate

FARMERS

Action Item	Description	Funding Options	Priority Level
Local Agriculture Promotion	Promote local agriculture through advertising, cooperative efforts, agrotourism, and farmers markets. Encourage participation in Butler Brand and Butler Agritour Product Alliance.	PFB	Moderate
Nutrient Management Plans	Encourage and assist farmers in developing nutrient management plans.	NRCS	Moderate

FREEMPORT RENAISSANCE ASSOCIATION

Action Item	Description	Funding Options	Priority Level
Auto Tour Routes	Develop scenic and historical auto tour routes and prepare brochures with maps and interpretive information.	PHMC, DCNR-BRC, foundations, private	Moderate
Bicycle Tour Routes	Develop scenic and historical bicycle tour routes utilizing both trails and roads and prepare brochures with maps and interpretive information.	PHMC, DCNR-BRC, foundations, private	Moderate
Butler-Freeport Trail Historical Interpretation	Develop signage and/or guidebook to interpret historical and natural features along Butler-Freeport Trail.	PHMC, DCNR-BRC, foundations, private	Moderate

FREEPORT RENAISSANCE ASSOCIATION (Continued)

Action Item	Description	Funding Options	Priority Level
Watershed Festival	Initiate an annual festival celebrating the watershed. Include recreational, educational, and entertainment components. Serve as an annual opportunity for all organizations to meet the public.	Watershed coalition, DCED	High

FARM SERVICE AGENCY

Action Item	Description	Funding Options	Priority Level
Agricultural Conservation Easements	Promote enrollment in state or private programs.	BFP, Private sources	Moderate
Century Farms	Promote enrollment and community recognition	BFP	Low
Conservation Reserve Enhancement Program	Promote enrollment in CREP programs.	PaDEP	Moderate
Grassland Bird Nesting	Encourage farmers to avoid hay harvest until July where feasible. Explore financial incentives under CREP, etc. where species of concern are involved.	NRCS, Watershed coalition	Low
Local Agriculture Promotion	Promote local agriculture through advertising, cooperative efforts, agrotourism, and farmers markets. Encourage participation in Butler Brand and Butler Agritour Product Alliance.	PFB	Moderate
Nutrient Management Plans	Encourage and assist farmers in developing nutrient management plans.	NRCS	Moderate

HISTORICAL SOCIETIES

Action Item	Description	Funding Options	Priority Level
Auto Tour Routes	Develop scenic and historical auto tour routes and prepare brochures with maps and interpretive information.	PHMC, DCNR-BRC, foundations, private	Moderate
Beatty Mill Bridge	Preserve the Beatty Mill Bridge for use as historic site and pedestrian access.	PennDOT, FHWA, PHMC, DCNR-BRC, foundations, private	Moderate
Bicycle Tour Routes	Develop scenic and historical bicycle tour routes utilizing both trails and roads and prepare brochures with maps and interpretive information.	PHMC, DCNR-BRC, foundations, private	Moderate
Butler-Freeport Trail Historical Interpretation	Develop signage and/or guidebook to interpret historical and natural features along Butler-Freeport Trail.	PHMC, DCNR-BRC, foundations, private	Moderate
Historic Preservation Commissions	Establish municipal historic preservation commissions to advise elected officials.	PHMC, DCED, municipalities	Moderate
Historic Preservation Plans	Develop local preservation plans pursuant to PA Act 68 of 2000. Develop historic resource overlay districts for municipal zoning ordinances.	PHMC, DCED, municipalities	Moderate
Watershed Coalition	Assist ASWP in its effort to develop a Watershed coalition.	DCNR-BRC	Critical

HISTORICAL SOCIETIES (Continued)

Action Item	Description	Funding Options	Priority Level
Watershed Festival	Initiate an annual festival celebrating the watershed. Include recreational, educational, and entertainment components. Serve as an annual opportunity for all organizations to meet the public.	Watershed coalition, DCED	High

LANDOWNERS

Action Item	Description	Funding Options	Priority Level
Buffalo Creek Access	Identify potential access opportunities. Work with landowners to develop public access sites for fishing and boating access. Initiate trout stocking and smallmouth bass fishery management as appropriate.	DCNR-BRC, PFBC, foundations	High
Buffalo Creek Access Site Amenities	Work with landowners to develop parking and restroom facilities at heavily used locations.	DCNR-BRC, PFBC, foundations, private	Moderate
Buffalo Creek Cave	Work with landowner to ensure conservation of unique resource.	Watershed organization	Low
Buffalo Creek Litter Control Program	Work with landowners to provide trash cans and garbage collection during first month of trout season in heavily used areas.	DCNR-BRC, PFBC, foundations, private	Moderate
Forest Stewardship Program	Encourage landowner to participate in the PA Forest Stewardship Program and/or American Tree Farm System.	DCNR-BRC, DCNR-BF	High
Hemlock Woolly Adelgid	Monitor for outbreaks, work with landowners to immediately initiate control measures.	DCNR-BRC, DCNR-BF, foundations	High
Indiana Bat Conservation	Work with regulatory agencies and landowners to provide protection to hibernacula and maternity colony sites. Develop educational materials for landowners identifying appropriate conservation measures.	DCNR-BRC, DCNR-BF, PGC	Moderate
Little Buffalo Creek Access	Identify potential access opportunities. Work with landowners to develop public access sites for fishing. Initiate trout stocking and smallmouth bass fishery management as appropriate.	DCNR-BRC, PFBC, foundations	High
Massasauga Habitat Program	Inventory massasauga rattlesnake habitat, develop and implement conservation and restoration plans.	DCNR-BRC, PFBC, foundations	High
Youth/ Handicapped Fishing Areas	Work with landowners to develop additional youth and handicapped fishing access. Implement special regulations to ensure appropriate use.	DCNR-BRC, PFBC, TU, foundations	Moderate

MUNICIPALITIES

Action Item	Description	Funding Options	Priority Level
Act 537 Plans	Update plans to incorporate changing development patterns and to consider alternative treatment systems in rural areas.	PaDEP	Moderate
Agricultural Conservation Easements	Promote enrollment in state or private programs.	BFP, Private sources	Moderate

MUNICIPALITIES (Continued)

Action Item	Description	Funding Options	Priority Level
Agriculture Security Areas	Promote enrollment in existing areas and creation of additional areas.	BFP	Moderate
Buffalo-Clinton Greenways and Recreation Plans	Complete development of plans. Implement recommendations.	DCNR-BRC, municipalities, foundations, private	High
Butler-Freeport Trail	Complete construction of trail between Butler and Freeport. Provide permanent restroom facilities at key locations. Provide connections to nearby recreation facilities.	DCNR-BRC, foundations, private	High
Century Farms	Promote enrollment and community recognition.	BFP	Low
Community Parks	Prepare recreation plans for those municipalities lacking plans. Develop municipal recreation facilities in accordance with plans. Provide for passive outdoor recreation facilities such as trails and provide interconnections between facilities.	DCNR-BRC, municipalities, foundations, private	High
Comprehensive Plans	Develop individual or joint comprehensive plans where not currently in place. Encourage the development of joint plans to reflect effects over large landscape areas.	DCED, Governor's Center for Local Government Services	High
Environmental Advisory Committees	Establish environmental advisory committees (as authorized under Pennsylvania Municipalities Planning Code) to advise local elected officials on environmental matters.	DCED, municipalities	Moderate
Floodplain Mapping	Update floodplain mapping where appropriate to reflect changing conditions and development.	PaDEP, FEMA	Low
Floodplain Regulation	Create municipal floodplain ordinances to discourage incompatible development.	FEMA, DCED	Low
Greenways	Develop individual or joint greenway plans.	DCNR-BRC, DCNR-BF	High
Historic Preservation Commissions	Establish municipal historic preservation commissions to advise elected officials.	PHMC, DCED, municipalities	Moderate
Historic Preservation Plans	Develop local preservation plans pursuant to PA Act 68 of 2000. Develop historic resource overlay districts for municipal zoning ordinances.	PHMC, DCED, municipalities	Moderate
Household Hazardous Waste	Sponsor local collection of household hazardous wastes.	PaDEP, PA Cleanways, municipalities	Low
Light Pollution Control	Incorporate planning and design requirements for outdoor lighting within county and/or municipal regulations.	DCED, county and municipal funds	Moderate
Local Agriculture Promotion	Promote local agriculture through advertising, cooperative efforts, agrotourism, and farmers markets. Encourage participation in Butler Brand and Butler Agritour Product Alliance.	PFB	Moderate
Municipal Sewage Treatment Facilities	Where municipal facilities are warranted, design facilities to minimize impacts to riparian, wetland and large forest tract habitats. Consider alternative treatment options where feasible.	PaDEP	High

MUNICIPALITIES (Continued)

Action Item	Description	Funding Options	Priority Level
Natural Heritage Inventory Planning	Incorporate Natural Heritage Inventory data into municipal planning.	Municipalities	High
Protect Critical Areas	Develop regulations or amend existing regulations to ensure that sensitive areas including floodplains, steep slopes, wetlands, and large forests are not subject to inappropriate uses.	DCNR-BRC, DCNR-BF	Moderate
Septic Systems	Implement a septic system inspection program and enforce regulations concerning malfunctioning septic systems. Provide resources to homeowners concerning repair of malfunctioning systems. Establish cost-share program to assist with repairs.	PaDEP, municipalities	Moderate
Small Scale Sewage Treatment Systems	Explore development of small community-based treatment systems where appropriate as opposed to large-scale municipal systems.	PaDEP	Moderate
Smart Growth	Utilize smart growth principles in new development. Encourage shift from traditional development to open-space oriented or village-centered patterns.	DCED, PHFA	High
Stormwater Plan	Prepare an Act 167 Plan for the entire watershed.	PaDEP	Moderate
Stormwater Ordinances	Adopt and enforce stormwater ordinances. Ordinances should be compatible with Phase I and II NPDES regulations for pre- and post-construction discharges.	PaDEP	Moderate
Stormwater Remediation	Work to alleviate current stormwater discharge problems. Evaluate potential to retrofit existing commercial, industrial, and school facilities.	PaDEP, private developers	Moderate
Tourism Business Incubator	Create partnerships to identify, encourage and support the development of support services needed for increased tourism.	PDCED	Moderate
Zoning	Develop and implement zoning where is not currently in place.	DCED	High

NATURAL RESOURCE CONSERVATION SERVICE

Action Item	Description	Funding Options	Priority Level
Agriculture Security Areas	Promote enrollment in existing areas and creation of additional areas.	BFP	High
Conservation Plans	Encourage farmers and large landowners to prepare conservation plans for their properties under the NRCS assistance program.	NRCS	Moderate
Conservation Reserve Enhancement Program	Promote enrollment in CREP programs.	PaDEP	Moderate

NATIONAL WOODLAND OWNERS ASSOCIATION

Action Item	Description	Funding Options	Priority Level
Forest Planning	Develop a program to promote forest conservation and sustainable use in the watershed and provide education programs and resources to landowners and municipalities.	DCNR-BRC, DCNR-BF	High

PA AUDUBON

Action Item	Description	Funding Options	Priority Level
Buffalo Creek Birding Trail	Develop a Buffalo Creek Birding Trail to highlight regional importance of the Buffalo Creek IBA. Coordinate access points, develop guidebook, and create website.	DCNR-BRC, PA Audubon, USFWS, PennDOT	Low

PA CLEANWAYS

Action Item	Description	Funding Options	Priority Level
Household Hazardous Waste	Sponsor local collection of household hazardous wastes.	PaDEP, PA Cleanways, municipalities	Low
Waste Cleanup	Establish local chapter of PA Cleanways. Inventory illegal dump sites and plan for cleanup.	Watershed Organization	Low
Watershed Cleanup Day	Local chapter of PA Cleanways should initiate an annual cleanup day. Consider subwatershed stewardship efforts with businesses and organizations.	Watershed Organization	Low

PENNSYLVANIA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES - BUREAU OF RECREATION AND CONSERVATION

Action Item	Description	Funding Options	Priority Level
Forest Planning	Develop a program to promote forest conservation and sustainable use in the watershed and provide education programs and resources to landowners and municipalities.	DCNR-BRC, DCNR-BF	High
Forest Conservation	Provide for protection of large forest tracts through landowner education, participation in forest stewardship program, forest legacy program, comprehensive planning, and conservation easements.	DCNR-BRC, DCNR-BF	High
Forest Stewardship Program	Encourage landowners to participate in the PA Forest Stewardship Program and/or American Tree Farm System.	DCNR-BRC, DCNR-BF	High
Community Park/Recreation Planning	Prepare recreation plans for those municipalities lacking plans. Develop municipal recreation facilities in accordance with plans. Provide for passive outdoor recreation facilities such as trails and provide interconnections between facilities.	DCNR-BRC, municipalities, foundations, private	High

**PENNSYLVANIA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES -
BUREAU OF RECREATION AND CONSERVATION (Continued)**

Action Item	Description	Funding Options	Priority Level
Buffalo Creek Access	Identify potential access opportunities. Work with landowners to develop public access sites for fishing and boating access. Initiate trout stocking and smallmouth bass fishery management as appropriate.	DCNR-BRC, PFBC, foundations	High
Little Buffalo Creek Access	Identify potential access opportunities. Work with landowners to develop public access sites for fishing. Initiate trout stocking and smallmouth bass fishery management as appropriate.	DCNR-BRC, PFBC, foundations	High
Greenways and Recreation Plans	Complete development of plans in progress. Implement recommendations. Develop others in remaining municipalities.	DCNR-BRC, municipalities, foundations, private	High
Youth/Handicapped Fishing Access	Work with landowners to develop additional youth and handicapped fishing access. Implement special regulations to ensure appropriate use.	DCNR-BRC, PFBC, TU, foundations	Moderate
Buffalo Creek Access Site Amenities	Work with landowners to develop parking and restroom facilities at heavily used locations.	DCNR-BRC, PFBC, foundations, private	Moderate

**PENNSYLVANIA DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES -
BUREAU OF FORESTRY**

Action Item	Description	Funding Options	Priority Level
Forest Planning	Develop a program to promote forest conservation and sustainable use in the watershed and provide education programs and resources to landowners and municipalities.	DCNR-BRC, DCNR-BF	High
Forest Conservation	Provide for protection of large forest tracts through landowner education, participate in forest stewardship program, forest legacy program, comprehensive planning, and conservation easements.	DCNR-BRD, DCNR-BF	High
Forest Stewardship Program	Encourage landowners to participate in the PA Forest Stewardship Program and/or American Tree Farm System.	DCNR-BRC, DCNR-BF	High
Indiana Bat Conservation	Work with regulatory agencies and landowners to provide protection to hibernacula and maternity colony sites. Develop educational materials for landowners identifying appropriate conservation measures.	DCNR-BRC, DCNR-BF, PGC	Moderate

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Action Item	Description	Funding Options	Priority Level
Act 537 Plans	Update plans to incorporate changing development patterns and to consider alternative treatment systems in rural areas.	PaDEP	Moderate

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (Continued)

Action Item	Description	Funding Options	Priority Level
Municipal Sewage Treatment Facilities	Where municipal facilities are warranted, design facilities to minimize impacts to riparian, wetland and large forest tract habitats. Consider alternative treatment options where feasible.	PaDEP	High
Septic Systems	Implement a septic system inspection program and enforce regulations concerning malfunctioning septic systems. Provide resources to homeowners concerning repair of malfunctioning systems. Establish cost-share program to assist with repairs.	PaDEP, municipalities	Moderate
TMDLs	Develop and implement TMDLs on impaired streams.	PaDEP	Moderate

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION

Action Item	Description	Funding Options	Priority Level
Beatty Mill Bridge	Preserve the Beatty Mill Bridge for use as historic site and pedestrian access.	PennDOT, FHWA, PHMC, DCNR-BRC, foundations, private	Moderate

PENNSYLVANIA FORESTRY ASSOCIATION

Action Item	Description	Funding Options	Priority Level
Forest Planning	Develop a program to promote forest conservation and sustainable use in the watershed and provide education programs and resources to landowners and municipalities.	DCNR-BRC, DCNR-BF	High
Forest Stewardship Program	Encourage landowner to participate in the PA Forest Stewardship Program and/or American Tree Farm System.	DCNR-BRC, DCNR-BF	High

PENNSYLVANIA FISH AND BOAT COMMISSION

Action Item	Description	Funding Options	Priority Level
Buffalo Creek Access	Identify potential access opportunities. Work with landowners to develop public access sites for fishing and boating access. Initiate trout stocking and smallmouth bass fishery management as appropriate.	DCNR-BRC, PFBC, foundations	High
Buffalo Creek Access Site Amenities	Work with landowners to develop parking and restroom facilities at heavily used locations.	DCNR-BRC, PFBC, foundations, private	Moderate
Buffalo Creek Water Trail	Work with PFBC to incorporate appropriate sections of Buffalo Creek into the PA Water Trails System. Develop mapping, signage, access points as appropriate	PFBC, DCNR-BRC, PaDEP	Moderate
Little Buffalo Creek Access	Identify potential access opportunities. Work with landowners to develop public access sites for fishing. Initiate trout stocking and smallmouth bass fishery management as appropriate.	DCNR-BRC, PFBC, foundations	High

PENNSYLVANIA FISH AND BOAT COMMISSION (Continued)

Action Item	Description	Funding Options	Priority Level
Massasauga Habitat Program	Inventory massasauga rattlesnake habitat, develop and implement conservation and restoration plans.	DCNR-BRC, PFBC, foundations	High
Youth/ Handicapped Fishing Areas	Work with landowners to develop additional youth and handicapped fishing access. Implement special regulations to ensure appropriate use.	DCNR-BRC, PFBC, TU, foundations	Moderate

PENNSYLVANIA GAME COMMISSION

Action Item	Description	Funding Options	Priority Level
Deer Population	Support efforts to reduce deer populations. Promote increased hunting access on public and private land. Provide educational materials to landowners and municipalities.	PGC, private	High
Forest Conservation	Provide for protection of large forest tracts through landowner education, participation in forest stewardship program, forest legacy program, comprehensive planning, and conservation easements.	DCNR-BRC, DCNR-BF	High
Indiana Bat Conservation	Work with regulatory agencies and landowners to provide protection to hibernacula and maternity colony sites. Develop educational materials for landowners identifying appropriate conservation measures.	DCNR-BRC, DCNR-BF, PGC	Moderate

PROFESSIONAL FORESTERS

Action Item	Description	Funding Options	Priority Level
Forest Planning	Develop a program to promote forest conservation and sustainable use in the watershed and provide education programs and resources to landowners and municipalities.	DCNR-BRC, DCNR-BF	High

RECREATION ORGANIZATIONS

Action Item	Description	Funding Options	Priority Level
Community Parks	Prepare recreation plans for those municipalities lacking plans. Develop municipal recreation facilities in accordance with plans. Provide for passive outdoor recreation facilities such as trails and provide interconnections between facilities.	DCNR-BRC, municipalities, foundations, private	High

RIPARIAN RESTORATION INITIATIVE

Action Item	Description	Funding Options	Priority Level
Stream Corridor Fencing	Provide fencing and livestock crossings to stabilize and restore riparian corridors.	NRCS, Riparian Restoration Initiative, PGC, Ducks Unlimited	Moderate

SCHOOL DISTRICTS AND SCOUT GROUPS

Action Item	Description	Funding Options	Priority Level
Monitoring Program	Develop and implement a long-term monitoring program in the watershed. Should have subwatershed components and include QA/QC components. Make results easily accessible to public via website.	PaDEP, watershed organization, foundations	High

SPORTSMEN CLUBS

Action Item	Description	Funding Options	Priority Level
Watershed Coalition	Assist ASWP in its effort to develop a Watershed coalition.	DCNR-BRC	Critical

STEEL INDUSTRY HERITAGE ORGANIZATION

Action Item	Description	Funding Options	Priority Level
Historic Structure Reuse	Encourage adaptive reuse of historic structures.	PDCED, PHMC	Moderate
Tourism Business Incubator	Create partnerships to identify, encourage and support the development of support services needed for increased tourism.	PDCED	Moderate
Tourism Promotion	Aggressively promote the watershed as a day trip destination. Incorporate watershed destinations in tourism planning. Include in advertising and websites.	PDCED	Moderate

TROUT UNLIMITED

Action Item	Description	Funding Options	Priority Level
Buffalo Creek Access	Identify potential access opportunities. Work with landowners to develop public access sites for fishing and boating access. Initiate trout stocking and smallmouth bass fishery management as appropriate.	DCNR-BRC, PFBC, foundations	High
Buffalo Creek Access Site Amenities	Work with landowners to develop parking and restroom facilities at heavily used locations.	DCNR-BRC, PFBC, foundations, private	Moderate
Buffalo Creek Litter Control Program	Work with landowners to provide trash cans and garbage collection during first month of trout season in heavily used areas.	DCNR-BRC, PFBC, foundations, private	Moderate
Dirt and Gravel Roads	Continue to work to control erosion, sedimentation, and dust from dirt and gravel roads under the PA Dirt and Gravel Road Program.	PA State Conservation Commission	Moderate
Little Buffalo Creek Access	Identify potential access opportunities. Work with landowners to develop public access sites for fishing. Initiate trout stocking and smallmouth bass fishery management as appropriate.	DCNR-BRC, PFBC, foundations	High
Streambank Stabilization and Restoration	Continue to implement natural stream restoration techniques to control bank erosion.	DCNR, -BRC NRCS, PaDEP	Moderate
Watershed coalition	Assist ASWP in its effort to develop a Watershed coalition.	DCNR-BRC	Critical

TROUT UNLIMITED (Continued)

Action Item	Description	Funding Options	Priority Level
Watershed Festival	Initiate an annual festival celebrating the watershed. Include recreational, educational, and entertainment components. Serve as an annual opportunity for all organizations to meet the public.	Watershed coalition, DCED	Moderate
Youth/Handicapped Fishing Areas	Work with landowners to develop additional youth and handicapped fishing access. Implement special regulations to ensure appropriate use.	DCNR-BRC, PFBC, TU, foundations	Moderate

US FOREST SERVICE

Action Item	Description	Funding Options	Priority Level
Forest Conservation	Provide for protection of large forest tracts through landowner education, participation in forest stewardship program, forest legacy program, comprehensive planning, and conservation easements.	DCNR-BRC, DCNR-BF	High
Indiana Bat Conservation	Work with regulatory agencies and landowners to provide protection to hibernacula and maternity colony sites. Develop educational materials for landowners identifying appropriate conservation measures.	DCNR-BRC, DCNR-BF, PGC	Moderate

US FISH AND WILDLIFE SERVICE

Action Item	Description	Funding Options	Priority Level
Massasauga Habitat Program	Inventory massasauga rattlesnake habitat, develop and implement conservation and restoration plans.	DCNR-BRC, PFBC, foundations	High

WATERSHED COALITION

Action Item	Description	Funding Options	Priority Level
AMD Remediation	Identify, rank, and obtain funding to design and implement AMD remediation efforts.	DCNR-BRC, PaDEP	Moderate
Auto Tour Routes	Develop scenic and historical auto tour routes and prepare brochures with maps and interpretive information.	PHMC, DCNR-BRC, foundations, private	Moderate
Beatty Mill Bridge	Preserve the Beatty Mill Bridge for use as historic site and pedestrian access.	PennDOT, FHWA, PHMC, DCNR-BRC, foundations, private	Moderate
Buffalo Creek Access	Identify potential access opportunities. Work with landowners to develop public access sites for fishing and boating access. Initiate trout stocking and smallmouth bass fishery management as appropriate.	DCNR-BRC, PFBC, foundations	High
Buffalo Creek Access Site Amenities	Work with landowners to develop parking and restroom facilities at heavily used locations.	DCNR-BRC, PFBC, foundations, private	Moderate
Buffalo Creek Cave	Work with landowner to ensure conservation of unique resource.	Watershed organization	Low

WATERSHED COALITION (Continued)

Action Item	Description	Funding Options	Priority Level
Buffalo Creek IBA	Develop management plan for IBA and provide education to municipalities and landowners. Develop educational materials for school use.	ASWP, DCNR-BRC, foundations	Moderate
Buffalo Creek Litter Control Program	Work with landowners to provide trash cans and garbage collection during first month of trout season in heavily used areas.	DCNR-BRC, PFBC, foundations, private	Moderate
Buffalo Creek Water Trail	Work with PFBC to incorporate appropriate sections of Buffalo Creek into the PA Water Trails System. Develop mapping, signage, and access points as appropriate.	PFBC, DCNR-BRC, PaDEP	Moderate
Butler-Freeport Trail Historical Interpretation	Develop signage and/or guidebook to interpret historical and natural features along Butler-Freeport Trail.	PHMC, DCNR-BRC, foundations, private	Moderate
Deer Population	Support efforts to reduce deer populations. Promote increased hunting access on public and private land. Provide educational materials to landowners and municipalities.	PGC, private	High
Diversity Area Stewardship Program	Develop a land steward program for BDAs. Volunteers responsible for landowner education and monitoring. Work with landowners to help preserve biodiversity and conservation areas.	Watershed organization	High
Forest Conservation	Provide for protection of large forest tracts through landowner education, participation in forest stewardship program, forest legacy program, comprehensive planning, and conservation easements.	DCNR-BRC, DCNR-BF	High
Forest Planning	Develop a program to promote forest conservation and sustainable use in the watershed and provide education programs and resources to landowners and municipalities.	DCNR-BRC, DCNR-BF	High
Forest Stewardship Program	Encourage landowner to participate in the PA Forest Stewardship Program and/or American Tree Farm System.	DCNR-BRC, DCNR-BF	High
Grassland Bird Nesting	Encourage farmers to avoid hay harvest until July where feasible. Explore financial incentives under CREP, etc. where species of concern are involved.	NRCS, Watershed coalition	Low
Hemlock Woolly Adelgid	Monitor for outbreaks, work with landowners to immediately initiate control measures.	DCNR-BRC, DCNR-BF foundations	High
Household Hazardous Waste	Sponsor local collection of household hazardous wastes.	PaDEP, PA Cleanways, municipalities	Low
Indiana Bat Conservation	Work with regulatory agencies and landowners to provide protection to hibernacula and maternity colony sites. Develop educational materials for landowners identifying appropriate conservation measures.	DCNR-BRC, DCNR-BF, PGC	Moderate
Japanese Knotweed Control	Develop and implement plan to prevent upstream spread of knotweed. Provide educational materials and assistance to landowners and municipalities to prevent additional introductions.	DCNR-BRC, DCNR-BF, foundations	Critical

WATERSHED COALITION (Continued)

Action Item	Description	Funding Options	Priority Level
Little Buffalo Creek Access	Identify potential access opportunities. Work with landowners to develop public access sites for fishing. Initiate trout stocking and smallmouth bass fishery management as appropriate.	DCNR-BRC, PFBC	High
Massasauga Habitat Program	Inventory massasauga rattlesnake habitat, develop and implement conservation and restoration plans.	DCNR-BRC, PFBC, foundations	High
Monitoring Program	Develop and implement a long-term monitoring program in the watershed. Should have subwatershed components and include QA/QC components. Make results easily accessible to public via website.	PaDEP, watershed organization, foundations	High
River Sojourn	Organize an annual spring river sojourn on Buffalo Creek to raise interest in watershed issues.	DCNR-BRC	Moderate
State of Watershed Report	Prepare an annual scorecard to summarize progress and needs.	Watershed coalition	High
State Scenic Rivers System	Consider designation in the PA Scenic Rivers System if there is sufficient public and municipal interest.	DCNR-BRC	Low
Stream Corridor Fencing	Provide fencing and livestock crossings to stabilize and restore riparian corridors.	NRCS, Riparian Restoration Initiative, PGC, Ducks Unlimited	Moderate
Stream Signage	Initiate a program to provide roadside signage of major streams.	DCNR-BRC, PennDOT	Moderate
Waste Cleanup	Work with local chapter of PA Cleanways. Inventory illegal dump sites and plan for cleanup.	Watershed Organization	Low
Watershed Cleanup Day	Local chapter of PA Cleanways should initiate an annual cleanup day. Consider subwatershed stewardship efforts with businesses and organizations.	Watershed Organization	Low
Watershed DVD	Prepare DVD presentation for distribution to municipalities, schools, organizations, and landowners presenting the watershed as a special place and discussing the RCP recommendations.	DCNR-BRC, DCED, foundations	Moderate
Watershed Festival	Initiate an annual festival celebrating the watershed. Include recreational, educational, and entertainment components. Serve as an annual opportunity for all organizations to meet the public.	Watershed coalition, DCED	High
Watershed Website	Establish watershed website to serve as information clearinghouse and tourism promotion tool.	Watershed coalition	High
Youth/ Handicapped Fishing Areas	Work with landowners to develop additional youth and handicapped fishing access. Implement special regulations to ensure appropriate use.	DCNR-BRC, PFBC, TU, foundations	Moderate

WESTERN PENNSYLVANIA CONSERVANCY

Action Item	Description	Funding Options	Priority Level
Armstrong County Natural Heritage Inventory	Complete the Natural Heritage Inventory and make accessible to the public.	DCNR-BRC, DCNR-BF	High
Butler County Natural Heritage Inventory Update	Complete an update of the original (1991) inventory. Presently underway and likely to be completed in 2009.	DCNR-BRC, DCNR-BF, Butler County	High
Diversity Area Stewardship Program	Develop a land steward program for BDAs. Volunteers responsible for landowner education and monitoring. Work with landowners to help preserve biodiversity and conservation areas.	Watershed organization	High
Massasauga Habitat Program	Inventory massasauga rattlesnake habitat, develop and implement conservation and restoration plans.	DCNR-BRC, PFBC, foundations	High
Natural Heritage Inventory Planning	Incorporate Natural Heritage Inventory data into municipal planning.	Municipalities	High