# **ACTION PLANS**

The French Creek Watershed Conservation Plan Steering Committee has decided that three years is an appropriate timeframe for the execution of the following actions. After three years from the release of the Plan, the Western Pennsylvania Conservancy and its partners in the French Creek Project will reevaluate conditions within the French Creek watershed and revise the Plan with guidance from the Advisory Committee. A longer timeframe for future action plans may then be implemented.

The following action plans are aimed at restoration, maintenance, and enhancement of resources within the French Creek watershed. They are designated for land, water, biological, and cultural resources as well as any miscellaneous action plans. The Plan's Steering Committee has prioritized the action plans in order of importance, with the intention that all actions will be completed or at least initiated within three years following release of the Plan. The advisory committee will provide guidance on the implementation of the recommendations.

Of major importance to the success of the French Creek Watershed Conservation Plan is support for the recommendations from watershed agencies, municipalities, businesses, industry, organizations, and residents. The Plan is intended as a planning tool and is not a regulatory document. Upon completion, the Plan must be nominated to the Pennsylvania Rivers Registry by at least one watershed municipality. Once the nomination has been accepted and the Plan is approved by PA Department of Conservation and Natural Resources, watershed groups and municipalities will be eligible for funding to implement the recommendations of the Plan.

The Plan's Steering Committee has indicated that an important first step in implementing the following actions plans is the formation of sub-watershed citizen volunteer action groups for each of the major sub-basins within the French Creek watershed. These groups should form a network of partnerships to implement recommendations from the Plan within their own sub-basins. The FCP could serve as an umbrella organization, providing assistance to these local groups. With such a network in place, watershed residents could take ownership of French Creek's resources and provide a foundation for proper management to ensure restoration, maintenance, and enhancement of the whole watershed. The partners in the FCP will be available to provide guidance, critique proposals that address recommendations, and potentially assist in technical aspects of projects.

### **Land Resource Protection**

- 1) Form a network of sub-watershed citizen volunteer action committees to help implement plan recommendations. The partners of the FCP will promote implementation of the Plan recommendations and will foster the formation of sub-basin volunteer groups.
- 2) Support county and municipal comprehensive land use planning. Existing plans should be updated to identify key areas to target infrastructure dollars. Areas should be designated as priority areas for growth with other areas set aside for conservation of open space. The French Creek Watershed Conservation Plan should be utilized by municipalities as a tool in the planning process. In this manner, municipal planning can incorporate protection for the environment and natural resources. All counties and

municipalities should incorporate farmland preservation programs to add protection to existing farms and ensure this heritage is not lost.

- 3) Conduct surveys to identify key riparian buffer areas throughout the watershed. Document where riparian buffers have been removed or degraded. Promote the restoration of riparian buffers throughout the watershed with voluntary, incentive-based programs. Focus on key areas as the highest priority.
- 4) Develop and promote a watershed-wide conservation easement program. These conservation tools can be used to insure land use practices such as agriculture, logging, mining, and recreation occur in a sustainable manner that promotes protection of natural resources.
- 5) Encourage the implementation of Best Management Practices throughout the watershed for agriculture, logging, urban areas, highways, golf courses, and development. Information about BMPs, funding, and agency resources should be made more readily available to the public to encourage implementation. Educate landowners on BMPs for lawn care. Provide incentive programs, funding, and technical assistance.

## Water Resource Protection

- The physical and biological stream conditions should be assessed throughout the watershed. This would include visual assessments of stream channels as well as riparian areas. A watershed-wide biological assessment to determine water quality should be undertaken, incorporating data from existing monitoring programs through PA Department of Environmental Protection, Environmental Alliance for Senior Involvement volunteer water quality monitors, Creek Connections, and others. In addition, a thorough water quality assessment is needed in order to form a nutrient budget for the watershed. This will provide information that will enable work in sub-watersheds to be prioritized according to impacts to the overall watershed health.
- 2) A hydrologic model and water budget should be developed for the watershed. This would be a major undertaking requiring assistance from the U. S. Geological Survey, local university experts, and private consultants. This model is necessary to assess impacts to the watershed from water withdrawals for communities, irrigation, and industry. The model would begin as a hypothetical watershed model and be customized for French Creek based on data collected.
- 3) Begin the development of and implementation of a comprehensive, systematic water quality-monitoring plan for the watershed. Development would include identification of the proper indicators to be monitored, sites, frequency, and protocols. Implementation would include identifying parties to collect samples and training for those individuals.
- 4) Counties within the watershed should be encouraged to develop stormwater management plans. Additionally, municipalities should be encouraged to develop and adopt stormwater regulations.
- 5) Research should be conducted to determine what impacts low flows and elevated water temperatures have on aquatic biota in French Creek. This information should include exacerbation from water withdrawals coincident with these conditions.
- 6) Due to the large size of the French Creek watershed, all recommendations, research, and planning should focus at the sub-basin level where applicable and efforts made to

compile this information into a complete picture of the watershed. The main stem of French Creek can be treated as a sub-basin in itself.

7) Research should be conducted to assess wetland resources in the watershed. This information would allow better monitoring and protection.

### **Biological Resource Protection**

- 1) All counties in the watershed should be inventoried under the County Natural Heritage Inventory Program. This includes special emphasis on Crawford and Venango counties. Mercer County is currently being inventoried. Erie County's 1993 inventory should be updated. If countywide inventories cannot be completed, emphasis should be placed on competing an inventory for the French Creek watershed. Information from these inventories is used as a tool to expedite planning and development while affording protection to natural resources.
- 2) Watershed-wide species of concern and natural community assessments should be conducted. These would include information on important instream and wetland habitat that is critical for many species.
- 3) Groups in the watershed should conduct a watershed-wide inventory for invasive species. This baseline information would allow for monitoring and removal plans to be developed and implemented. Known or potential invasive species in the French Creek watershed include, but are not limited to: zebra mussels, purple loosestrife, goby (*Gobionella shufeldti*), Asian clam, giant hogweed (*Heracleum mantegazzianum*), Eurasian watermilfoil, hybrid cattail, common reed, and Japanese knotweed (*Polygonum cuspidatum*). These inventories should be done in conjunction with the PA Natural Diversity Inventory program.
- 4) Select endangered, threatened, or rare species in the French Creek watershed should be monitored. These include the federally endangered clubshell and northern riffleshell mussels. Other important species should be identified for monitoring.
- 5) The aquatic communities in the French Creek watershed should be monitored as an indicator of overall watershed health. Appropriate indicator organisms and protocols should be identified and used in a monitoring program. Appropriate indicator species might include mussels, fish, benthic insects as well as plankton.

## **Cultural Resource Protection**

- 1) All existing public use lands in the French Creek watershed should be inventoried and mapped. This should include public access points for French Creek.
- 2) Impacts from all types of watershed recreation should be assessed and a watershed recreational management plan should be developed. The goal should be to increase recreational opportunities while protecting natural resources. Recreational opportunities to consider include: ATV use, Water Trail feasibility, Rail Trail feasibility, identification of appropriate stream access areas, fishing regulations customized to French Creek, and potential greenway corridor identification.
- 3) Special historic and cultural sites along the waterway and throughout the watershed should be identified, preserved, and integrated into trail, tourism, and recreational plans.

### **Other Action Plans**

- The many educational programs in and around the watershed should coordinate to expand watershed education. Other educational avenues should be explored to increase outreach to watershed residents. As an example, brochures should be developed that outline the "top 10" activities to be done for watershed protection. These brochures could be tailored to different groups of watershed stakeholders. The Plan recommends many areas for increased public education.
- 2) The partners of the FCP will meet periodically beginning in Spring 2002 to discuss successes and failures as specific recommendations and action plans are carried out. After three years, conditions in the watershed will be reevaluated and the Plan revised in a similar public process.
- 3) The partners of the FCP will convene periodic forums throughout the watershed for specific groups of watershed stakeholders to meet and discuss pertinent watershed issues. These forums can be targeted to agriculture, logging, industry, educators, outdoor enthusiasts, and scientists, to name just a few.

The partners of the FCP are available to assist groups in implementing conservation activities and recommendations provided by the plan. The French Creek Project advisory committee is a diverse group of watershed stakeholders capable of providing guidance on this implementation. Western Pennsylvania Conservancy will convene a science committee to assist the advisory committee on ecological issues in the watershed. The recommendations and action plans described above will require the collaborative efforts of watershed agencies, conservation organizations, academia, municipalities, and residents. Western Pennsylvania Conservancy hopes that more and more watershed residents will be compelled to take an active role in the conservation of French Creek.