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## INTRODUCTION

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### **The Buffalo Creek Watershed**

Located in southwestern Pennsylvania and the panhandle of West Virginia, the Buffalo Creek watershed is highly rural, containing a mixture of agricultural, residential, and forested land uses. Within the Pennsylvania portion, Buffalo Creek is designated a High Quality watershed by Pennsylvania Department of Environmental Protection (DEP). Though many of its habitats have been altered from natural, pristine conditions, the watershed still contains remnants of natural communities that were once abundant in Washington County, PA. The Buffalo valley was recently named the 80<sup>th</sup> Important Bird Area in Pennsylvania and, during a Natural Heritage Inventory of Washington County in 1994, Western Pennsylvania Conservancy (WPC) identified two exceptionally ranked Biodiversity Areas within the watershed's boundaries.



### **A Case for Future Planning**

Despite recognition by public and private agencies in Pennsylvania, little information about the water quality or biodiversity of the watershed existed before this plan was prepared. The only updated water quality information available was Pennsylvania DEP's 2001 Unassessed Waters investigations, from which sections of Buffalo Creek and one of its tributaries were added to DEP's 303(d) list of impaired streams due to excess nutrients and sedimentation.

An understanding of the value and location of terrestrial and aquatic resources, as well as their importance to humans, can aid in wise land-use planning. A vision for protection of the Buffalo Creek

watershed is timely, as both mining and development activities may threaten the resources of the watershed in the future. Successful planning most often involves a dialogue among residents to develop a vision for their communities. Community goals may include objectives such as conserving natural resources, preserving agricultural land, developing public services, and increasing outdoor recreational opportunities. Successful planning involves designing land controls that allow for a variety of these uses while recognizing the limitations of the natural environment and its importance to the overall well-being of a community. The development of this protection plan is an important step towards achieving these goals.

## **Evolution of *Buffalo Creek Watershed Assessment and Protection Plan***

In February 2003, the Buffalo Creek Watershed Association (BCWA), in conjunction with the Washington County Watershed Alliance, received a Pennsylvania Growing Greener Grant from the Pennsylvania Department of Environmental Protection. Western Pennsylvania Conservancy was then contracted to develop the *Buffalo Creek Watershed Assessment and Protection Plan*.

This plan is among the first of its kind to be developed through the Pennsylvania Growing Greener Program. Though similar to a restoration plan, a protection plan is intended to provide recommendations towards protection of positive attributes of an area that currently exist rather than simply restoring these attributes in an area that has been negatively impacted by activities such as mining and development. A **Watershed Protection Plan** could be defined as:

*An inventory of the health and diversity of natural resources in a watershed and accompanying recommendations to be used by public and private entities in decision-making involving the wise use of these natural resources.*

To put it simply, a protection plan is a guide to help people protect aspects of their watershed that are important to them. This plan not only takes into account water quality, but also the protection of cultural resources, natural habitats, and opportunities for continued monitoring. Because of the recognized natural assets of the Buffalo Creek watershed, it is an ideal candidate for such a project. However, the watershed's landscape, or pattern of land use, has influenced the health of natural resources in the watershed. For these reasons, the protection plan also includes elements of a restoration plan. One of the biggest impacts of land use has been increased levels of nutrients and sedimentation entering streams, resulting from a lack of agricultural best management practices and the presence of malfunctioning septic systems.

The watershed is at a crucial point at which decisions made now may significantly affect its future. Further collection of water quality data and other information will be necessary well after the completion of the plan to continue the development of restoration and management objectives. Partnerships among local groups, including those with both similar and competing interests, may be important in following through on these objectives.

This protection plan is not intended to be a mandate for municipalities about how development should occur, nor is it enforceable. However, it can be used as a guide in decision-making involving natural resources or an eco-tourist's manual to wildlife areas. It may also be a good resource for both public and private groups within the watershed searching for funding or contact information for watershed projects.

The goal of this protection plan is not to stop development, agriculture, or any other similar practice important to the local economy. In many cases, conservation goals are compatible with these objectives and can also have benefits such as reducing flooding potential, improving drinking water quality,

increasing recreational opportunities, and making a community a more attractive place to live. The benefits of a protection plan include:

- A comprehensive source of past and present natural resource and water quality data;
- A guide to important natural and historic sites;
- A source for potential restoration/protection projects and future funding sources; and
- A reference to add credibility when applying for grants/loans to conduct restoration/protection projects.

Informed recommendations for the protection of the watershed were developed from resident surveys, two public meetings, recently collected scientific data, and suggestions from experts. New data collected includes a visual assessment of accessible streams in the watershed; quarterly water quality and stream flow information; and results of macroinvertebrate, plant, fish, and other sampling. This new information was obtained through surveys conducted by WPC, local colleges and universities, and community and regional volunteers.

Because of the requirements of the funding sources for this plan, new data could not be collected for the West Virginia portion of the watershed. However, a best effort was made to include any previously collected information, whenever possible, pertaining to this area of the watershed. It was found that, in most cases, little data exists about the water quality and wildlife within the Buffalo Creek watershed in West Virginia and that more collaboration is needed between individuals and groups in Pennsylvania and West Virginia.

### **Protection Plan Timeline**

January 2003	Growing Greener Grant awarded to BCWA
February- June 2003	Background data collected
May 2003	Partner meeting held
June 2003	First public meeting held
June 2003	Field work begins
December 2004	Field work ends
March 2005	Pre-Draft plan presented to BCWA steering committee
April 2005	Draft public meeting held, plan presented to public and reviewers
May 2005	Edited plan completed and information presented at BCWA festival
June 2005	Final hard copies and CD copies given to BCWA for distribution