FINAL REPORT FOR THE QUITTAPAHILLA WATERSHED ASSOCIATION'S WATERSHED RESTORATION AND ASSISTANCE PROGRAM GRANT JUNE 30,1999

The goal of this project was to install stream bank fencing and to plant trees and shrubs in riparian buffers on cattle and dairy farms in the Quittapahilla Watershed. Along with the Quittapahilla Creek; Bachman Run, Beck Creek and Snitz Creek were the focus of these activities. These tributaries have been identified by Department of Environmental Protection as impaired waters. Agriculture is the pre-dominant land use in this area with numerous dairy farms. The streams are impacted by non-point source pollution from nutrients, and sediment from surface runoff and nutrients from groundwater pollution. We enlisted help from individual volunteers (including DEP) and local organizations for this project.

The fencing was installed by the United States Fish and Wildlife Service (USFWS). Over 25,000 feet of stream bank fencing was installed on eleven farms (three on the Quittapahilla Creek, three on Bachman Run, three on the Beck Creek and two on the Snitz Creek). USFWS studied the effects of stream bank fencing on the physical characteristics of the stream. It was anticipated that fencing cattle from direct access to the streams will improve water quality by preventing stream bank erosion and cattle dropping their discharge into the streams.

To establish a riparian buffer along the stream, at each farm, three species of trees (Black Willow, Pin Oak, and Swamp White Oak) and three species of shrubs (Cranberry Viburnum, Streamco Willow and Red Stick Dogwood) were planted. The tree plantings were accomplished with the help of many volunteers. The buffer was designed to to act as a filter of runoff and also to remove nitrate from groundwater flowing to the stream.