

Buena Vista Watershed Project

Sponsors:
City of Buena Vista
Natural Bridge Soil and Water Conservation District

October 2005



*Hillside view overlooking the
City of Buena Vista*



*Cobble removal through
residential area after flood*



Debris and flooding



Overland flow and street flooding

Location: The watershed is located in the City of Buena Vista and Rockbridge County, Virginia and covers 11,850 acres.

Problem: Flooding from four streams that flow through Buena Vista causes overland flow and ponding problems. Flooding problems consist of economic damages to streets, bridges, gas lines, water lines, homes, businesses and industries. Studies indicate that a 100-year storm without project protection would flood 245 residences, 70 commercial properties, and many streets, roads, and utilities resulting in \$9.5 million in urban damages.

Purpose: To provide flood protection from interior stream drainage.

Benefits: The project will provide a level of protection that will allow Buena Vista to prosper economically after being flooded for most of its history. It will significantly decrease future flooding and related damages. The City will see a reduction in total average annual flood damages by \$684,000/year. The project has a positive benefit/cost ratio with an estimated benefit of \$1.52 for every dollar spent.

Summary: The watershed project plan provides an overall approach to address the long-standing flooding problems in Buena Vista. Environmental impacts expected are minimal.

Watershed Project Components:

- Construct seven debris basins
- Replace/enlarge/remove seven culverts and/or bridges
- Construct 500 feet of concrete floodwall
- Upgrade 220 feet of earthen berm
- Improve 5,538 feet of stream channel
- Realign and improve 120 feet of stream channels
- Replace two railroad bridges on Indian Gap Run with five box culverts.

Costs: The estimated cost of the completed project is \$8.6 million. USDA Natural Resources Conservation Service is funding 91 percent of the total project costs. The City of Buena Vista and the Natural Bridge Soil and Water Conservation District are funding the remaining 9 percent.