



*project profile : ecological restoration*



*The restoration of this highly degraded stream network eliminated a large source of sediment to the headwaters of the Jones Falls, a cold water fishery.*

## Wood Valley Stream Restoration

*Pikesville, Maryland*

Wood Valley stream is a headwater tributary to the Jones Falls, which supports trout in the heart of Baltimore County. The drainage area to the Wood Valley stream, at the downstream end of the project, is 125 acres of fully developed (single family, multi-family, institutional) land. Most of the development in the watershed took place during the 1960's. The change in land use from forested to urban, changed the frequency and volume of stormwater runoff entering the stream. This dramatic increase in storm flows destabilized the stream and caused severe erosion to occur in the channel. Some reaches of the channel were ten to fifteen feet deep. The sediments created by the erosion were being deposited downstream in the Jones Falls and fouling the delicate trout habitat.

Baltimore County Department of Environmental Protection and Resource Management (DEPRM) tasked Biohabitats, through an on-call stream restoration contract to develop a restoration design for Wood Valley and to assist them through construction of the project. Using natural, stable channels as references, we designed a new channel type consisting of steps, pools, and riffles that could dissipate the high energy of the new storm flows and eliminate excessive erosion. Not only is the new channel stable but it also provides valuable aquatic habitat that was lost in the old channel. By saving most of the existing vegetation we maintained canopy coverage to keep the stream shaded and maintained leaf litter that is a food source for many aquatic species from which trout feed.

### PROJECT AT A GLANCE

SERVICES	Inventory & Assessments Design Permitting Construction Procurement Construction Management Public Outreach
CLIENT	Baltimore County Department of Environmental Protection and Resource Management
PHYSIOGRAPHIC PROVINCE	Piedmont Plateau
BIOREGION	Chesapeake/Delaware Bay
WATERSHED	Jones Falls