



project profile : ecological restoration



Spring Branch's holistic restoration approach has many benefits over conventional streambank stabilization including, restoration of natural hydrologic and ecological cycles, enhancement of riparian and in-stream aquatic habitat, improved aesthetics, long-term sustainability, and significant cost savings over most structural solutions.

Spring Branch Stream Restoration

Baltimore County, Maryland

Baltimore County has embarked on one of the most ambitious stream restoration programs in the Eastern U.S. One of the highlights of their program is the restoration of Spring Branch, once a natural trout stream nestled within a suburban neighborhood in the Baltimore metropolitan region. Erosion and rushing stormwater carved a gorge 30 feet across and up to 15 feet deep in Spring Branch. One long-time resident once explained that 20 years ago a person could 'hop' across this channel.

Recognizing the need to protect water quality and aquatic biodiversity, Baltimore County retained Biohabitats to assess approximately 2-1/2 miles of Spring Branch and develop a plan to restore stable stream channel geometry, enhance water quality and re-establish aquatic habitat to support coldwater fisheries.

Biohabitats' approach to this project included a comprehensive, holistic approach that included a wetland basin to attenuate stormwater runoff and improve water quality; natural channel design to restore a stable meander pattern, cross section and profile; plunge pools below storm drain pipe outfalls and catch basins to attenuate stormwater runoff; in-stream habitat features including step-pools, pools and riffles, woody debris and vegetation overhangs; riparian buffer enhancement and invasive species management.

Spring Branch, one of the first natural channel design projects in Baltimore County, has proven to be one of their more successful projects.

PROJECT AT A GLANCE

SERVICES

Inventory and Assessments
Design
Permitting
Construction Procurement
Construction Management
Post Construction Monitoring
Public Outreach

CLIENT

Baltimore County Department of Environmental Protection and Resource Management

PHYSIOGRAPHIC PROVINCE

Piedmont

BIOREGION

Chesapeake/Delaware Bay

WATERSHED

Gunpowder