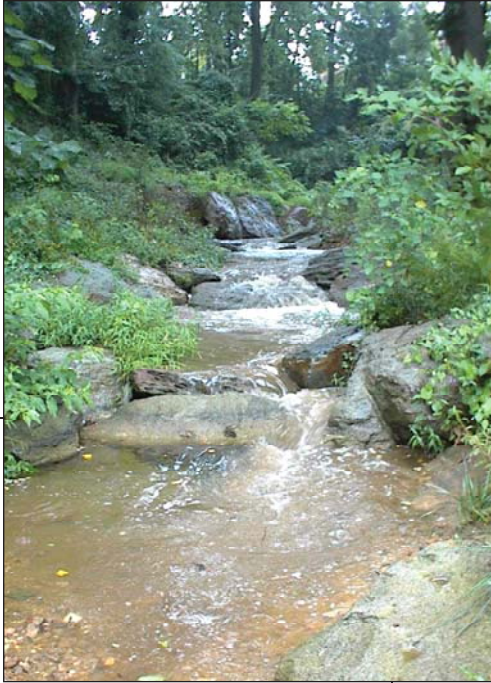




project profile : ecological restoration



Minebank Run Stream Restoration

Baltimore County, Maryland

Using fluvial geomorphologic principles in conjunction with soil bioengineering measures, Biohabitats developed, designed and oversaw construction for the restoration of Minebank Run, a tributary to the Gunpowder River in the Piedmont of Baltimore County, Maryland. Minebank Run, like many urban streams throughout the country, has experienced years of degradation due to uncontrolled stormwater runoff from upstream development. In the 1960s efforts to stabilize Minebank Run included the construction of concrete flumes and six-foot tall in-stream weir structures. Over the years, even these structures were experiencing failure and causing the accelerated erosion of the streambanks. Recognizing that the stream channel needed to be restored, Baltimore County turned to Biohabitats to implement a long-term solution.

Biohabitats developed a restoration approach based on the use of natural channel design principles, soil bioengineering measures, and aquatic habitat features to restore 1.25 miles of Minebank Run. The final design for Minebank Run included varied channel conditions to mimic valley and floodplain morphology including both step-pool and pool-riffle stream types. Successfully restoring a stable meander pattern and cross section, providing access to a relatively flat floodplain, and incorporating aquatic habitat features are hallmarks of this restoration project.

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 River



The restoration of Minebank Run ensures long-term stability to the channel while providing a wide diversity of native aquatic habitats.