



*project profile : ecological restoration*



*The restoration of Oxon Run resulted in the protection of the bridge piers, stream channel stability and habitat improvement and stable geometry.*

## Oxon Run Stream Restoration

*Prince George's County, Maryland*

Biohabitats developed and designed a relocation and restoration plan for Oxon Run, a tributary to the Anacostia River. The need for the relocation resulted from the placement of bridge piers for the expansion of a Washington Metro Transit Authority metro line. Biohabitats' design incorporated fluvial geomorphologic principles in conjunction with engineering hydraulics and riparian enhancement.

Specific tasks included application of stream classification (Rosgen); hydrologic and hydraulic analyses; sediment transport analysis; geotechnical investigations; ecological assessments; the design of an innovative technology for creating stable channel geometry, including soil bioengineering streambank protection techniques; cost/benefit analysis, preparation of design and construction drawings; erosion and sediment control design, specifications, geometric layout, quantities sheet, and an engineers cost estimate. Specific soil bioengineering techniques included root wads, live-branch layering, live fascines, vortex rock weirs, boulder drop structures and reforestation of the riparian zone. Other responsibilities include the facilitation of regulatory permits and construction management.

### PROJECT AT A GLANCE

SERVICES	Inventory & Assessments Design Permitting Construction Procurement Construction Management Post Construction Management Public Outreach
CLIENT	Washington Metropolitan Area Transit Authority
PHYSIOGRAPHIC PROVINCE	Coastal Plain
BIOREGION	Chesapeake/Delaware Bay
WATERSHED	Potomac River