ANNE ARUNDEL COUNTY DEPARTMENT OF PUBLIC WORKS

## Crofton Tributary Stream Restoration

Anne Arundel County, Maryland



top: Post construction with inset of initial conditions; above & right: Restored ecology along the stream



The regenerative stream channel system approach cost effectively transforms a degraded stream into a naturally functioning system that improves its own stability, water quality, and in-stream and riparian habitats.

n 2001, Biohabitats evaluated a 3,500-foot long degraded tributary network in Crofton, Maryland and developed three detailed stream restoration concepts. Severe bank erosion and channel incision into loose Coastal Plain deposits threaten adjacent infrastructure in the residential community. Moreover, channel incision resulted in a drawdown of the groundwater table, which changed the plant community, and degraded water quality, and aquatic habitat.

In 2007, Biohabitats was awarded a contract to develop a stream restoration design for the tributary. The goal was to restore watershed processes, including recharging the groundwater table to regenerate spring seeps. Biohabitats' design reconnected the channel to its floodplain. This approach eliminates high and eroding banks, improves water quality and creates conditions favorable for native Anne Arundel County coastal plain biota while naturally controlling invasive species. The restoration design package included cost estimates, construction details, specifications and implementation guidance (e.g. sequence of operations, operation & maintenance). The reconstructed portion of the channel now functions naturally.

## SERVICES

Inventory & Assessments Design Permitting Construction Procurement Construction Services

conservation planning ecological restoration regenerative design



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