DISTRICT OF COLUMBIA DEPARTMENT OF THE ENVIRONMENT Rock Creek-Bingham Run Regenerative Stormwater Conveyance Design-Build Washington, DC





top: After restoration bottom: Initial conditions

Rock Creek Park, a favorite spot among Washington, DC bikers, hikers, birders, runners and skaters, is a natural oasis amidst a highly urbanized landscape. Administered by the U.S. National Park Service, this popular park contains many degraded streams. Biohabitats is currently helping the District Department of the Environment (DDOE) restore Reconnecting a degraded urban stream to its floodplain restores ecological function, value and stability in the middle of a popular city park.

one of them, Bingham Run, an ephemeral tributary to Rock Creek.

A regenerative stormwater conveyance (RSC) approach is being applied to this designbuild restoration of 800 linear feet of incised stream channel. This involves raising the channel bed and reconnecting the stream with its floodplain and riparian wetlands to optimize the conversion of stormwater to groundwater and reduce its erosive energies. The aim of this project is to demonstrate this technology as an alternative to traditional approaches to stream and outfall erosion, such as piping, rip rap and hard structures. The RSC

approach will improve water quality by stopping head-ward migration of the channel incision. It will also improve local hydrology by tempering the influence of stormwater runoff on the stream, converting "peaky" surface discharge into shallow seepage, reducing existing forested stream bank erosion and tree loss, and improving the quality and quantity of water delivered to downstream reaches.

SERVICES

Inventory & Assessments Design Design-Build Permitting Construction Management Project Management

conservation planning ecological restoration regenerative design



800.220.0919 www.biohabitats.com Physiographic Province Piedmont Bioregion Chesapeake/Delaware Bays

> Watershed Rock Creek