DELAWARE DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENTAL CONTROL

Pike Creek at Three Little Bakers Golf Course Stream Restoration

New Castle County, Delaware





Pike Creek, which is part of the White Clay Creek Wild and Scenic River system, is a public drinking water source and one of the few trout put-and-take stocked streams in Delaware. Pike Creek, which

provides habitat in an area of high growth and development, is part of the Delaware Estuary Program. The Delaware Department of Natural Resources and Environmental Control (DNREC) contracted Biohabitats to restore a 4,500 linear foot section of Pike Creek which flows through the Three Little Bakers Golf Course. The goal of the project was to stabilize the stream channel using natural channel design and reintroduce riparian vegetation to the floodplain.

Abating stream channel erosion would reduce or eliminate excess sediment in the stream Restoration of Pike Creek resulted in a stable stream system with enhanced trout habitat and improved water quality. It also transformed high maintenance turf areas into naturally functioning wooded buffers that enhanced golf course aesthetics.

and improve water and habitat quality. The project also included the design, construction and planting of riparian wetland and upland vegetation to further protect banks, improve and maintain water quality and provide riparian habitat.

Biohabitats collected background data on the stream and its watershed, performed a comprehensive morphological survey of the project reach and an identified reference reach, assessed sediment transport and in-stream aquatic habitat, and modeled watershed hydrology and stream hydraulics. After creating a series of alternative concepts, participating in stakeholder meetings, and facilitating regulatory agency participation, Biohabitats prepared final design and construction

drawings, specifications and bid documents and provided construction oversight.

Biohabitats worked closely with construction contractors to make field adjustments and save DNREC money. DNREC was able to restore an additional 1,000 linear feet of stream with the savings. The team also worked directly with the golf pro and maintenance supervisor to tailor the vegetation to facilitate the golf experience.

SERVICES

Inventory & Assessments Design Permitting Construction Procurement Construction Management Construction Oversight Public Outreach

conservation planning ecological restoration regenerative design



800.220.0919 www.biohabitats.com Physiographic Province Piedmont Bioregion Chesapeake/Delaware Bays Watershed Brandywine-Christina