## charlotte-mecklenburg storm water services Little Sugar Creek Stream and Floodplain Restoration

Charlotte, North Carolina



The restoration took advantage of reclaimed floodplain by designing a unique urban wetland/water quality basin with high sinuosity and low width/depth ratio.

*iohabitats* provided Charlotte-Mecklenburg Storm Water Services with turn-key services to design North Carolina's first urban wetland/water quality basin Best Management Practices (BMP) in the headwaters of Little Sugar Creek. This degraded, urban stream had been impacted by channelization and the encroachment of development upon the floodplain. The team's approach to improving water quality involved the restoration of Little Sugar Creek, and the creation of a series of floodplain riparian wetlands using a natural systems approach.

Key components of this 2,000 linear foot project included an aggressive schedule, the need for creative and innovative BMPs, and communication of the benefits of the demonstration project to the public, media, regulators and elected officials. Biohabitats met these challenges by designing an integrated system using natural channel design principles and wetland restoration techniques relying on a self- supporting hydrologic regime. Riparian and wetland revegetation included the use of soil bioengineering and native trees, shrubs and ground cover indigenous to the Piedmont province of North Carolina.

Biohabitats' responsibilities included fluvial geomorphologic assessment, development of concept alternatives, final design and construction documents for the restored stream and floodplain, permitting, and construction oversight.

## SERVICES

Inventory & Assessments Design Permitting Construction Management Public Outreach

conservation planning ecological restoration regenerative design



800.220.0919 www.biohabitats.com Physiographic Province Piedmont Bioregion Southeast Watershed Lower Catawba