
City of Columbia

Eightmile Branch Stream Restoration

Columbia, South Carolina



Stability and riparian habitat enhancements are envisioned for a degraded urban stream.

SERVICES

Ecological Restoration
Climate Change
Urban Ecology

As part of a contract to provide the City of Columbia with services related to stormwater infrastructure projects, and as a subconsultant to Thomas & Hutton, Biohabitats developed a restoration strategy for an unnamed tributary to Eightmile Branch. The tributary, which flows through a densely developed residential community, has become severely eroded and incised, and continues to pose a flooding threat to several adjacent residential properties. Complicating matters is the presence of aging drainage infrastructure in the stream system.

Biohabitats began the project by assessing the hydrologic, geomorphic, and hydraulic conditions of the degraded tributary, consisting of an approximate 1,500 lf reach. This included conducting preliminary hydrologic and hydraulic modeling, stream geomorphic surveys, and riparian habitat assessments to evaluate opportunities and constraints.

With a focus on stream bed and bank stabilization and riparian corridor enhancement, Biohabitats developed a conceptual approach to restore stability and ecological function to the incised channel. The concept uses regrading and revegetated banks to reduce erosion, enhance the riparian corridor, and add beauty and habitat to the residential setting where the channel resides.