TRENDMAKER DEVELOPMENT COMPANY

Flewellen Creek Stream Restoration

Fort Bend County, Texas





from top: Restored stream with inset of initial conditions; Restored riparian meadow with trail

Award-winning project restored a degraded rural stream and transformed it into the centerpiece of a 3,200-acre community.

Biohabitats designed the restoration of approximately 15,000 linear feet of Flewellen Creek. Years of ditching, grazing, and loss of riparian vegetation resulted in severe erosion and the rural stream channel's loss of connection to its floodplain.

Biohabitats, along with SWA Group and Brown & Gay Engineers, helped restore the degraded stream corridor and establish it as the centerpiece of a 3,200-acre, mixed-use community development. More than 25 miles of trails follow 400 acres of open space corridors that meander along the restored Flewellen Creek.

After performing a fluvial geomorphic assessment, Biohabitats developed a concept plan that reconfigured the planform, profile, and cross section to a stable form under the existing hydrologic regime. The design realigned the stream as a low gradient, meandering system, and created floodplain wetlands and native riparian zones. Biohabitats then helped prepare final design drawings and provided construction oversight. The project received a Merit Award from the Texas Chapter of the American Society of Landscape Architects and a Silver Award in Engineering Excellence from the Texas Chapter of the American Council of Engineering Companies.

SERVICES

Inventory & Assessments Design Construction Management

conservation planning
ecological restoration
regenerative design



800.220.0919 www.biohabitats.com

