ERIE COUNTY DEPARTMENT OF ENVIRONMENT AND PLANNING (DEP)

Aquatic Restoration and Invasive Species Management at 61 Smith Street

Erie County, New York





from top: Initial conditions; Cut down Japanese knotweed (Fallopia japonica) stand prior to treatment

rie County, NY ✓ launched an effort to improve habitat quality along a stretch of the Buffalo River that was designated a Great Lakes Area of Concern. After contaminated sediment was removed from the river bottom, Biohabitats, working with Wendel, is helping the County to restore a section of degraded shoreline along the river. After designing an 800 linear foot reach along Red Jacket Park, the team then designed an additional 1,100 linear feet of shoreline located upstream.

Restoring shallow-water habitat, removing invasives, and planting native plants will restore aquatic and riparian habitat, reconnect people to the Buffalo River, and provide a model for future restoration designs on the Buffalo River.

Biohabitats led the effort to design a "living shoreline" that would not only restore habitat and function, but would foster ongoing regeneration of the natural systems and processes that comprise a healthy, stable shoreline. The design aimed to improve fish and wildlife habitat by creating a mosaic of escape and forage habitat, and restoring valuable shallow-water areas and their rich vegetation community. Biohabitats began by completing an ecological assessment of the 15-acre site, which included an invasive species inventory.

Biohabitats' design includes a series of rock weirs along the shoreline to encourage the deposition of sediment and

replace critical shallow-water habitat that was lost during the dredging of contaminated sediment. Submerged aquatic vegetation and emergent vegetation will be planted to provide additional habitat. In riparian areas, invasive species are to be treated, and a "living" fence consisting of a complex of willows and sumac is planned, along the park edge, to limit encroachment from adjacent invasive species while providing habitat and a native seed source.

SERVICES

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conservation planning
ecological restoration
regenerative design



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