Ecological Services - Stony Creek Marsh Island Ecosystem Restoration Project

Brooklyn, New York



The restoration of 62 acres of complex marsh island habitat enhances the resilience and biodiversity of Jamaica Bay and its heavily urban watershed.

SERVICES Climate Adaptation & Resilience Ecological Restoration Nature Based Solutions **N** ew York's 26-square-mile Jamaica Bay is a complex network of ecosystems that provide numerous services to the region, including economic and recreational resources and critical wildlife habitat. Among these ecosystems are marsh islands, which help buffer and protect shoreline communities, filter pollutants, and enhance regional biodiversity and habitat. Over the last century, however, 85% of Jamaica Bay's marsh islands have been lost as a result of filling, shoreline hardening, contamination, salt marsh die back, and other factors associated with human development.

As the ecological consultant on a team led by First Environment, Biohabitats helped the U.S. Army Corps of Engineers (USACE) restore 62 acres if Stony Creek Marsh Island, which is located within the Gateway National Recreation Area. Specifically, Biohabitats delineated wetlands, mapped vegetation for possible transplant, and identified biological benchmarks to help determine optimal elevation ranges for tidal wetland plant establishment. The project will involve the use of dredged material and Biohabitats' findings will support the planned restoration of 26 acres of low marsh, 22.5 acres of high marsh, 3.5 acres of scrub/ shrub, 1.4 acres of tidal channels, and 8.7 acres of shallow marine habitat.