
USACE New York District

Rockaway-Jamaica Bay Vegetation and Habitat Survey

New York



*Ecological assessment guides
nature-based solutions to
enhance coastal resiliency for
vulnerable communities.*

SERVICES

Climate Adaptation & Resilience
Ecological Restoration
Nature Based Solutions

After New York City's Rockaway Inlet and Jamaica Bay suffered the devastating impacts of Superstorm Sandy in 2012, the U.S. Army Corp of Engineers New York District (USACE NYD) and the New York State Department of Environmental Conservation (NYSDEC) conducted a study to assess coastal storm risk and management strategies. The study determined that nature-based solutions were the answer to high frequency flooding risks that threatened coastal communities within Long Island and Queens. To develop these solutions using the best knowledge and data available, USACE NYD turned to First Environment and Biohabitats.

As the team's ecological consultants, Biohabitats coordinated and executed several baseline data collection and mapping efforts to guide the design of wetland and marsh restoration at Brant Point and Dubos Point Wildlife Sanctuaries. This included site topographic and bathymetric survey, tidal marsh biobenchmarking, vegetation inventory, habitat mapping, and wetland delineation. The information gathered informed the design of berm structures and native planting plans that were used to create high-quality maritime forest and wetland habitat along an ecologically functional living shoreline, all of which will stabilize and protect an area that is vulnerable to storms and the effects of climate change.

The adaptive ecology strategies and nature-based solutions developed by the project team were cost-effective, proven approaches to enhancing resiliency, managing erosion, and reducing the risk of frequent flooding for years to come.