USACE New York District

Fort Hamilton Tree Inventory and Ecological Assessment

Brooklyn, New York



A comprehensive ecology assessment of an active military installation in New York City provides the U.S. Army with the tools to improve soil conditions, manage invasive species, increase canopy cover, and manage stormwater.

SERVICES

Conservation Planning Nature Based Solutions Water Strategies ocated in the southwest corner of Brooklyn, Fort Hamilton is an active military installation that comprises over 170 acres and has a community of active military personnel and civilians.

As a continuation of previous tree survey work to guide future installation development plans, the U.S. Army sought to conduct further natural resource studies on the site to improve ecological function. As ecological consultant to the engineering firm, First Environment, Biohabitats performed desktop and field assessments of the installation's existing ecological conditions, including canopy cover, soil health, invasive species, and stormwater.

Using information from the previously completed tree inventory, the team evaluated canopy cover and prioritized locations for new tree plantings. Biohabitats collected and analyzed soil samples and provided recommendations for soil amendments to improve tree health. Based on a site-wide assessment and inventory of invasive species, Biohabitats developed an invasive species management plan for the installation. Biohabitats analyzed the installation's drainage network and interviewed staff members to identify priority areas for stormwater management based on flooding and contribution to the City's combined sewer system. Based on this analysis, Biohabitats developed recommendations and conceptual designs for stormwater green infrastructure retrofits.