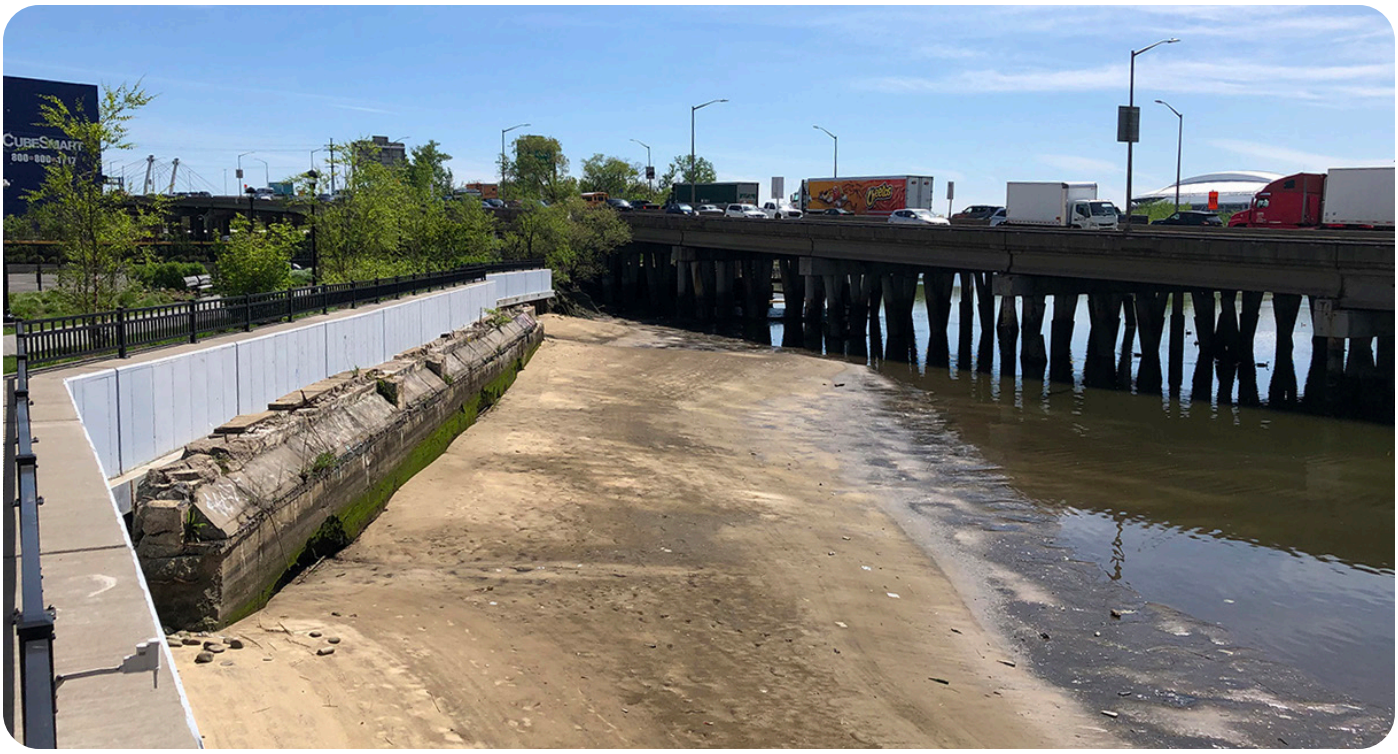
Riverkeeper/Guardians of Flushing River

Flushing Creek Green Infrastructure Retrofit

Queens, New York



A community-driven alternatives analysis yields a precedent-setting nature-based approach for retrofitting constrained waterfront sites throughout New York City.

SERVICES

Climate Adaptation & Resilience
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Over the past century, Flushing Creek had become heavily channelized, with hardened shorelines and limited access to the water. Riverkeeper and Guardians of Flushing Bay (GoFB) sought to restore ecological function and integrity to Flushing Creek while also providing a model, nature-based design for other constrained waterfront sites throughout New York City. They chose the waterfront greenway at SkyView Mall as their pilot site.

Biohabitats was contracted to conduct an assessment to identify project constraints, evaluate infrastructure, and develop design alternatives. Results from the site analysis included insights related to Flushing Creek and the site's soils, stormwater, drainage infrastructure, and local ecological benchmarks. The team developed and explored four innovative green infrastructure retrofit alternatives, examining factors such as permitting requirements, constructability, site suitability, operations and maintenance requirements, and replicability.

Based on the analysis and input from community stakeholders such as dragon boaters, professors, and social and economic development advocates, the team selected a living shoreline as the preferred alternative to progress to 30% concept design. Biohabitats produced a report summarizing the design process and highlighting critical design parameters, potential permitting requirements, rough order of magnitude costs, and maintenance considerations. The 30% design package was used to secure funding and advance to final design and permitting, led by Biohabitats. The project includes in-water habitat and shoreline enhancements, with the target of creating a design that is replicable throughout the City.