ERIE CANAL HARBOR DEVELOPMENT CORPORATION

ECHDC Riverfront Buffalo Outer Harbor Ecological Restoration Design

Buffalo, New York





from top: Example "planting island" from Biohabitats' Buffalo Riverbend Restoration project; Habitat to be restored for native species such as monarch butterfly (Danaus plexippus)

Buffalo's Outer Harbor is an approximately 500-acre strip of man-made land between Lake Erie and the City Ship Canal. Between 2008–2012, the Erie Canal Harbor Development Corporation (ECHDC) acquired approximately 160 acres on the Outer

Harbor with the intent of improving the land in accordance with the Outer Harbor's long-term plan, the Buffalo Outer Harbor Blueprint. ECHDC's focus is on developing a number of relatively low-disturbance activities that would enhance public access to and use of the Outer Harbor.

Given the brownfield nature of the site, and the need for soil capping and fencing, much of the site will be left to its natural conditions, but the design creates a series of mountain bike, pump track and skills loop/tot tracks and extends an existing Greenway Nature Trail. The design also features a Great Lawn that will provide passive recreation and an outdoor concert space.

Ecological restoration transforms an underutilized urban waterfront into a publicly accessible and enjoyable haven of beauty, biodiversity, and recreation.

Biohabitats' role was to integrate habitat restoration strategies into the design; to treat invasive species and augment poor soils and limited vegetation species with a plethora of native trees, shrubs, grasses, and forbs focused on birds and pollinators. Building on experiences with similar brownfield sites in Buffalo, Biohabitats began by developing an invasive species management strategy to target the common reed (phragmites australis). Biohabitats then integrated a series of upland habitat zones and pollinator meadows into the project to reclaim nearly five acres of habitat. Harsh soil conditions required the import of clean soil and the integration of approximately 100 "planting islands" within a series of deer enclosure fences to provide habitat and increase biodiversity and local seed sources. "Living fences" of trees and

shrubs were also designed as a way to protect certain areas from the public while providing critical habitat. Native trees, shrubs, grasses, and forbs focused on target bird and pollinator species.

Existing trees that must be cleared from the site will be salvaged and used as habitat features such as standing snags, rootwads, large woody debris, and brush piles to provide additional habitat and shelter breaks from strong offshore winds. Biohabitats' approach also leaves the door open for future restoration as additional meadow restoration is already being explored.

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