Trust for Public Land Sliver by the River Green Infrastructure Alternatives

Bridgeport, Connecticut



An analysis of green infrastructure opportunities sets the stage for integrating climate resilience, enhanced biodiversity, and water quality improvement into an urban waterfront revitalization project.

SERVICES

Ecological Restoration Conservation Planning Water Strategies Climate Adaptation Coastal Resilience s part of a multi-year plan to revitalize its waterfront, the City of Bridgeport identified "Sliver by the River," a vacant lot along the mouth of the Pequonnock River, as an "Opportunity Site" with the potential to transform the riverfront and catalyze economic growth. The Trust for Public Land (TPL) and the City of Bridgeport then began an effort to create a waterfront trail and park system, complete with kayak launches, water access, and potentially a commercial oyster harvesting operation.

As an early step toward realizing that vision, Biohabitats evaluated types of green infrastructure that could be used at the site to improve water quality, provide wildlife habitat, increase waterfront access, and enhance resilience to sea level rise and coastal flooding. This included examining the feasibility and potential benefits of techniques such as living shorelines, floating wetlands, green bulkheads, stormwater treatment wetlands, bioretention, permeable pavement, restoration of wet meadow, marsh, and riparian forest, tidal swales, and integration of nature-inspired elements into existing riprap and concrete.

Biohabitats prepared a report summarizing the green infrastructure alternatives analysis and presenting typical details of each alternative. The report, which details the alternatives and evaluates them based on ecosystem services, cost, feasibility, and site compatibility, will be used to inform the broader participatory planning and design process. Biohabitats presented the findings from the report to members of the Bridgeport Waterfront Advisory Board. Using Biohabitats' work as a model, TPL is pursuing additional green infrastructure alternatives analyses at other waterfront revitalization locations throughout Bridgeport.