## Habitat Enhancement and Water Quality Improvements along the Gowanus Canal, Brooklyn, NY

Conceptualized by: The Gaia Institute

Ecological features can be incorporated in the development of urban infrastructure projects that both greatly improve water quality and biodiversity in urban landscapes.

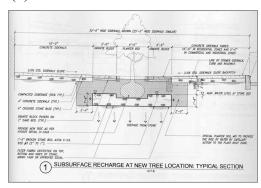
An integrated housing plan development is being put together along the Gowanus Canal, where 600 linear feet of canal shoreline can be ecologically restored to both create biologically diverse habitat and act as a natural filter to clean the water.

Macro algae, benthic invertebrates, tunicates, barnacles, marsh plants, and ribbed mussels all have the ability to flourish in this location.

A tidal creek could also be constructed/restored on-site, lined with salt tolerant plant species and ribbed mussels, to provide further filtration capacity and greatly increased habitat value. A kayak launch here could also provide access to the Canal for residents in the community

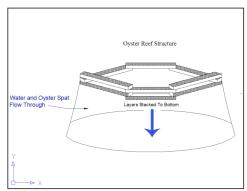


- (1) Stormwater runoff moves from vegetated roadway corridor into tidal creek filter
- (2) Restored tidal creek
- (3) Shoreline habitat enhancement



Streetscape stormwater infiltration surrounding the site, overflows drain to tidal creek.

Oyster reef structure made from recycled glass products or textured concrete increase the surface area and ecological value of the canal edge. Barnacles, oysters and other attached organisms can grow and develop on an enhanced bulkhead, which can also be used to create pocket wetland habitat along sheet piling.



Foam glass (green) installed on sheet piling for habitat enhancement.

