# , projection

The existing grid of New York City is projected out onto the water through the establishment of the modular pier system. This projection serves as a physical extension of the grid as well as a visual extension of the city's identity into its 6th borough, the water.

Green Transit Hubs attract individuals out to, and beyond, the water's edge through the use of varying degrees of transportation. These include electric passenger ferries, water taxis, bike shares, electric car shares, electric shuttle buses, and bicycle monorail.

The interactive pier system integrated into each Blue Network Transit Hub and Clean Tech Expo location encourage participants to interact with one another while partaking in the activities and exhibits that each site has to offer.

The new pier system provides additional habitat for existing ecosystems, allowing for the future projection of wildlife and vegetation. This new habitat also serves as additional green space for the city, further attracting residents and visitors out beyond the water's edge.



### Projection - of Self, Collective, City & Habitat

By projection and overlap of these elements, our design weaves together the Sixth Borough and the Clean Tech Expo. The concept allows for unobstructed projections of transportation, varying levels of education, participation, and recreation, and creates solutions to New York City's (& other coastal cities) projected problems.

This projection is represented in a modular system of piers & docks that extend from the city's grid.

The modular system creates hubs throughout the Blue Network, with differing levels of application. Primary: multi-modal transportation outlets for the Blue Network and Clean Tech destinations; Secondary: Blue Network transportation; Tertiary: site reflective (i.e. ecological piers near industrial sites, recreational piers near parks).

At specific sites, the pier & dock systems range from floating structures for temporary use, to permanent infrastructure for high-use areas. The concept projects people past the city's edge, and carries the Self, Collective, City, & Habitat onto, and into, the water.

## Blue Network & Clean Tech Master Plan

Not only does each Blue Network Hub serve as a stop for electric passenger ferries and water taxis, but each location is also connected through a rapid transit lane for electric shuttle buses and electric cars. Each Hub is equipped with several charging stations for electric cars, as well as bike shares, bike garages and access to the bicyle monorails



Queens

### Manhattan

Blue Network Hub

Primary Ferry Route

Bicycle Monorail

Secondary Ferry Route

Parks, Habitat, Wetland

Site Reflective Piers

### Brooklyn

### Clean Tech Focus Area: Govenors Island - Academia

As an educational focal point for the Clean Tech Expo, Governors Island displays an example of how the modular pier system can be applied as an extension of the existing grid of the city. Existing roadways imply an outward projection, from both Brooklyn and Manhattan, that intersect at Governors Island. The resulting grid on the water's edge sets the framework for a series of piers that, together, create recreational and educational spaces that can be used, both during and after the Clean Tech Expo, to strengthen New York's continuing commitment to sustainabilit

# Staten Island



Manhattan







### SHWEEB/CLEAN TECH TRANSIT TERMINAL -

A primary transportation hub that serves as a destination for the Blue Network and the Clean Tech Expo. The terminal allows for ferry traffic specific to Clean Tech to stop at the end of the pier, while a pedal powered bicycle monorail departs and arrives on the above platform, connecting to other transportation hubs along the East River. Tidal turbines are placed in close vicinity to the ferry drop-off to capture not only East River currents but also additional currents spurred by the ferry.



TIDAL TURBINE CAPTURES FERRY CURRENT

THE POOL — The new pier system at Governors Island creates pockets of water resulting in naturally filtered swimming pools that foster education and recreation. Used as a model for filtering the water, the pools are surrounded by marine habitat skirts that cleanse surface and sub-surface water. Other enclosed pools on the pier have platforms underneath the water which allow for a more intricate filtration of the water as it enters the pool.



THE COVE — Dredged material from The East River is used to develop a vegetated mound that



WETLAND OBSERVATION AMPHITHEATER - Placed between a gridded portion of the modular pier system, a floating wetland is encased on three sides by glass, allowing an unobstructed view of the wetland's physical composition and function. A staircase descends into the amphitheater, passing the glass wall that dep icts where the floating wetland will rise and fall, according to the tide.









