

# WATERFRONT CAMPUS PLAN

Baltimore, Maryland

Urban Design and Planning



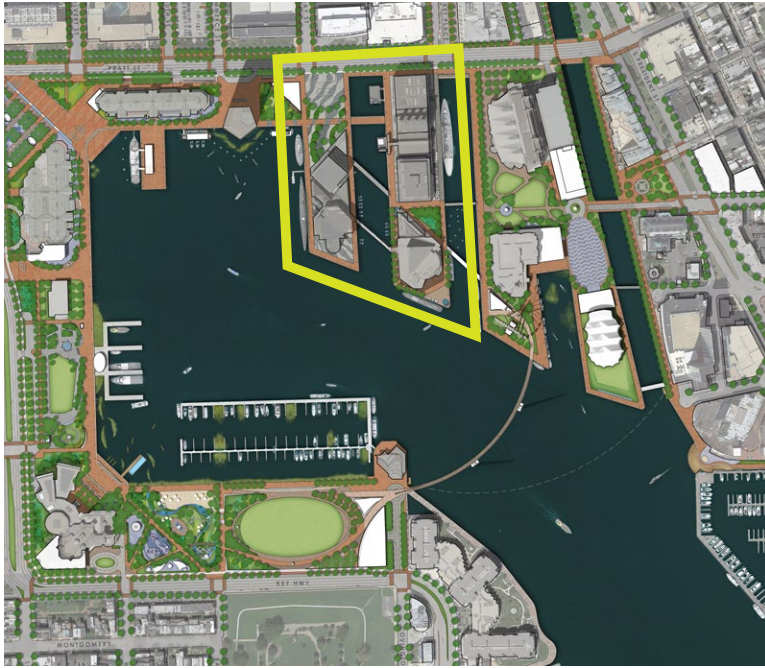
## Synopsis

Much of the history of urban waterfronts is a story of economic enterprise and human alteration—often at the expense of a broader aquatic community. Baltimore's Inner Harbor and the Chesapeake Bay are no exception. In pre-Columbian times, the Bay was a species-rich environment used by indigenous populations as a source of food and other natural resources. Acres of tidal salt marsh fringed the Bay, and throughout the lower Bay, abundant oyster reefs thrived at significant depths.

Attracted by the abundance, Europeans settled the area. The new built environment of towns and cities altered habitats, replacing forest and salt marsh with hardscapes, buildings, and seawalls to facilitate commercial shipping and industry.

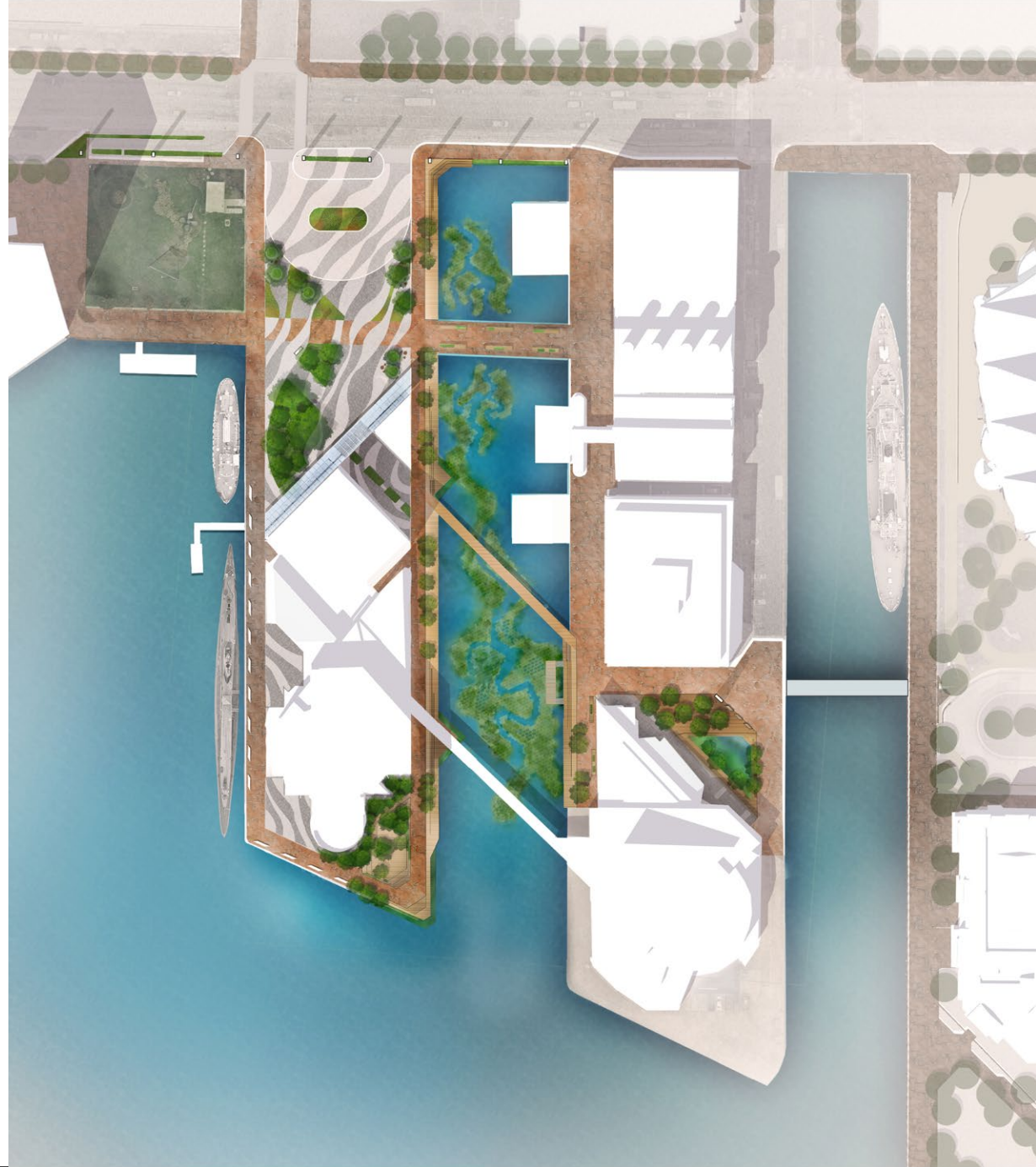
Perched on historic shipping piers on Baltimore's Inner Harbor, the National Aquarium is positioned to extend its mission into the waterfront just outside its doors joining with Baltimore to green the waterfront.

The Waterfront Campus Plan advances the Aquarium's mission by unifying the campus as a welcoming civic space where visitors are immersed in the natural systems and habitats of the Chesapeake Bay. An interdisciplinary team of landscape architects, planners, and architects model how urban waterfronts can improve water quality and build community by creating a thriving, green waterfront, while advancing the economic and urban success of the Inner Harbor and Downtown with renewed civic infrastructure.



*Above:* The Waterfront Campus Plan sits within the Baltimore Inner Harbor Master Plan (completed by the same firm).

*Right:* The Waterfront Campus Plan expands on principles of the Inner Harbor Plan by advancing water quality and renewing civic infrastructure.



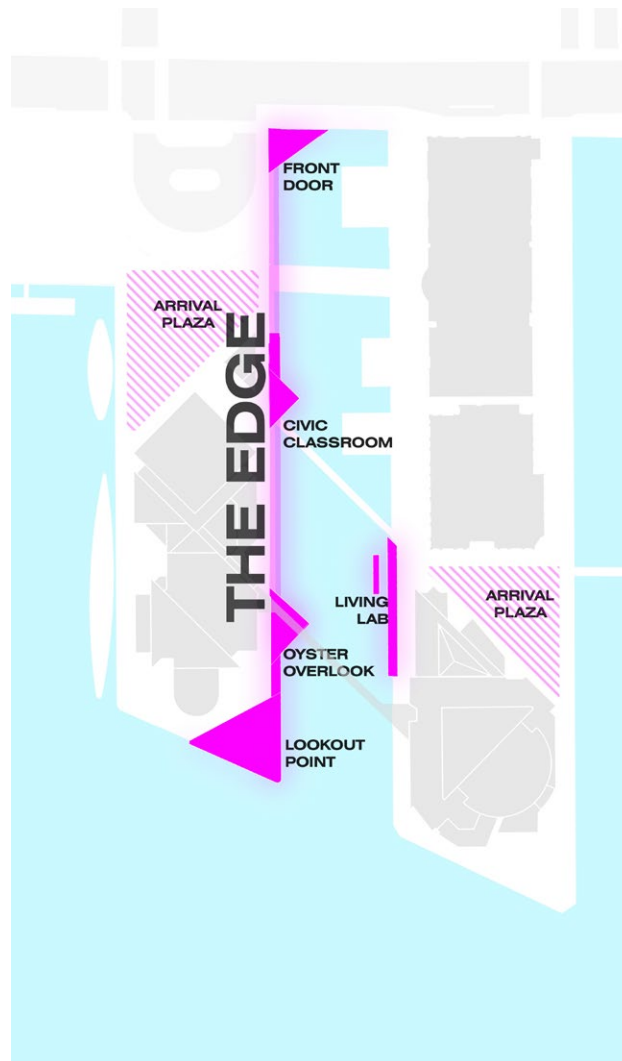
## Project Context

National Aquarium Waterfront Campus Plan

The project goals are to welcome and engage people, inspire conservation action, restore ecosystems and be a living lab, and foster community engagement.



Plan highlights habitats located within the Chesapeake Bay Watershed.



The edge unifies the campus with a consistent design approach, drawing people to the water.



Floating wetlands are reminiscent of the natural forms found in the salt marshes.

## Concept

National Aquarium Waterfront Campus Plan

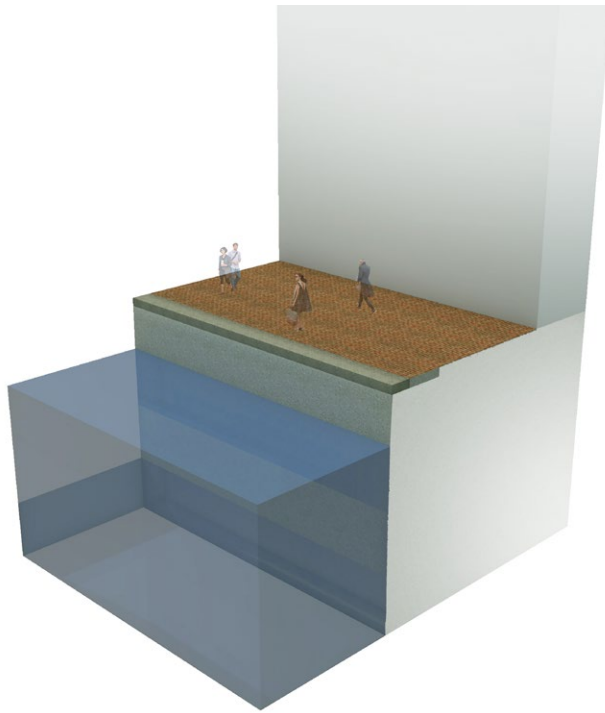
The plan provides opportunities to bring people to the water through outdoor classrooms, overlooks, and a living lab.



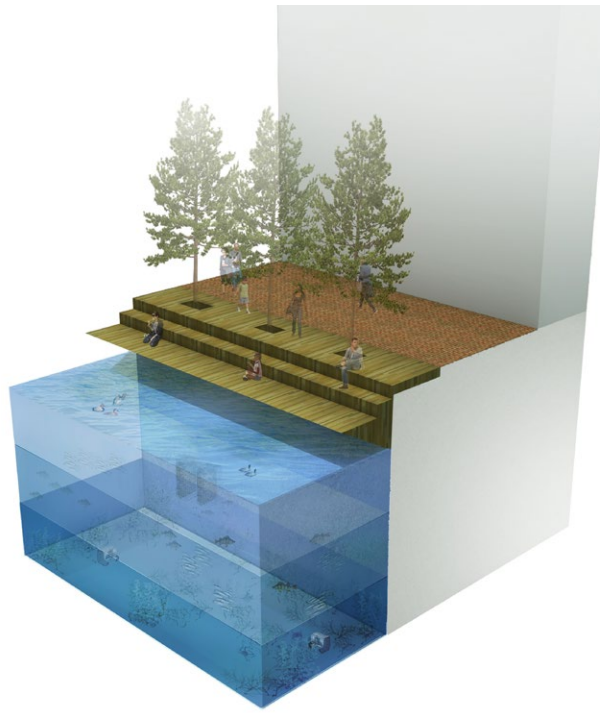
## Meandering Forms

National Aquarium Waterfront Campus Plan

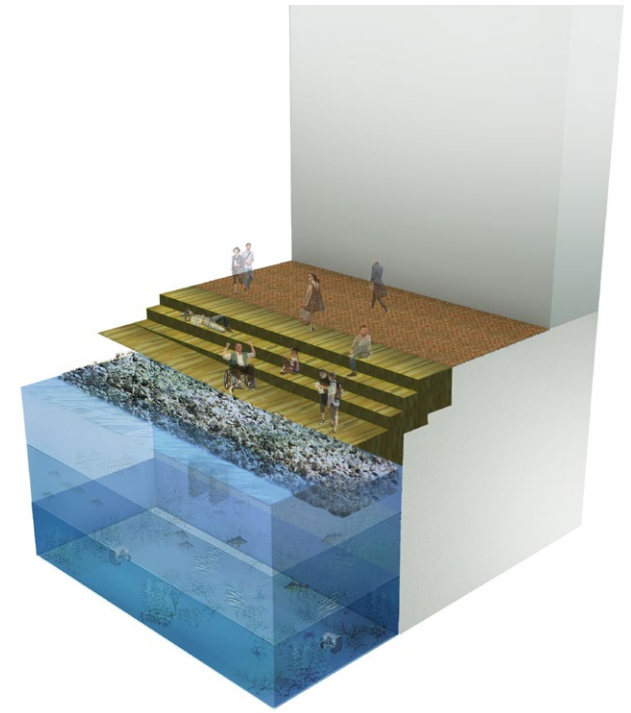
Inspired by the meandering forms of the Chesapeake's tidal salt marshes, a network of floating wetlands return native wetland plants to the Inner Harbor and utilize their restorative power to clean the water and invite wildlife back.



Current condition: an engineered bulkhead



Proposed waterfront edge brings people and habitats down to the water

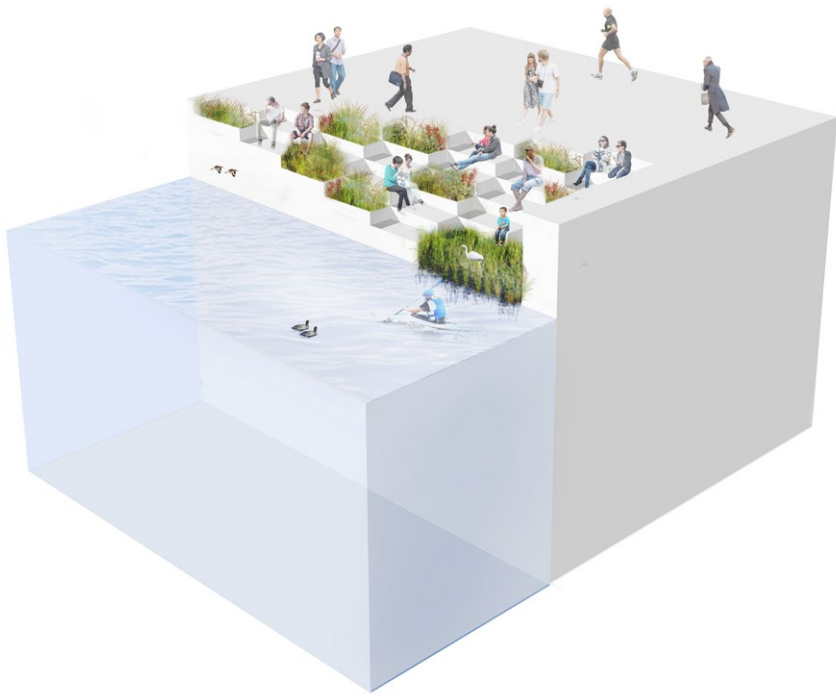


Proposed waterfront edge with cantilevered oyster reefs

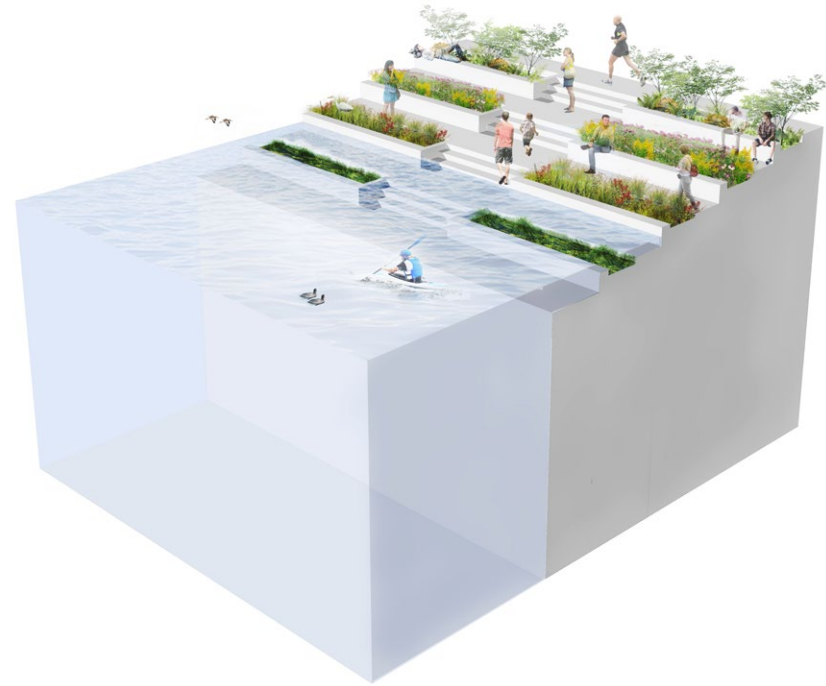
## Connections to Water

National Aquarium Waterfront Campus Plan

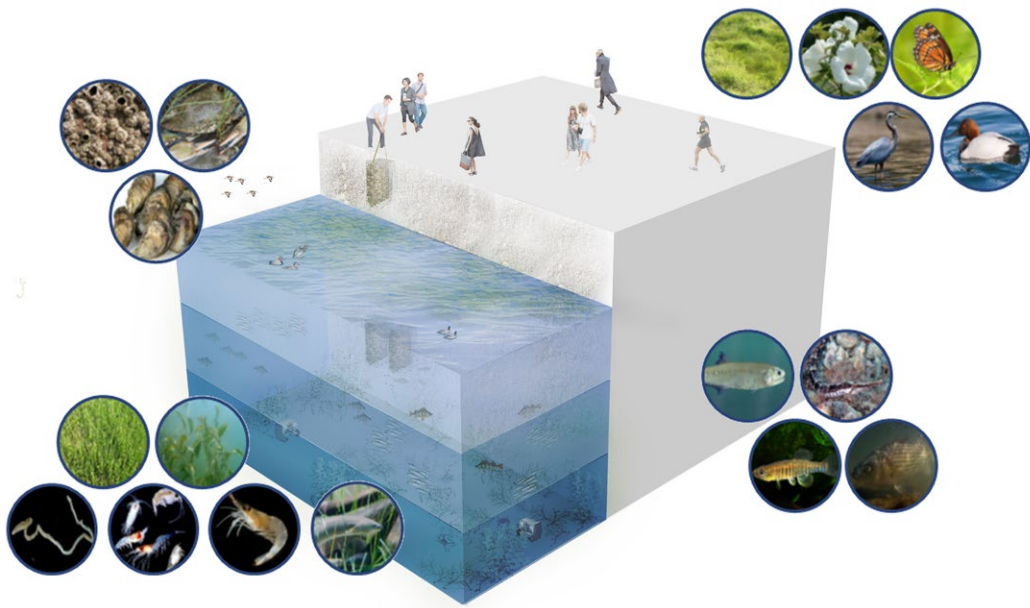
The design merges aquatic and terrestrial aquatic communities along a common edge by softening existing engineered bulkhead barriers. Proposals include stepping down to the water and creating places for both people and ecosystems, including an oyster reef providing habitat for oysters to naturally filter the water.



Terraced edge study at low tide



Alternative terraced edge study at high tide



Bringing wildlife and habitat back to the campus is a desired outcome of the plan.

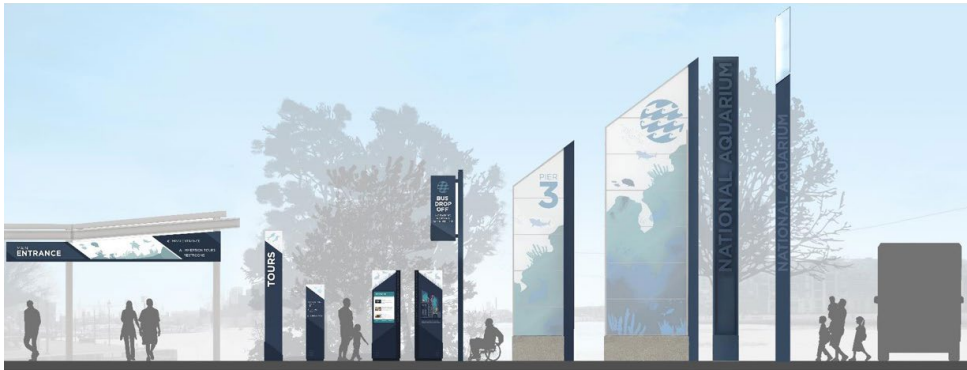


The experience along the water's edge changes with the tidal sequence. High and low tide experiences are illustrated above.

## Expanded Ecosystems

National Aquarium Waterfront Campus Plan

By creating a thriving, green waterfront that inspires hope for a healthier Chesapeake Bay, the National Aquarium is modeling best practices for fostering community and stewardship in all watersheds. Proposals highlight the water's movement into spaces with the change of tides.



Family of campus signage types



The Pier 4 Dolphin Pool re-envisioned as a new threshold into campus



Aquatic-themed signage pylons identify the campus and engage visitors.

## Destination and Identity

National Aquarium Waterfront Campus Plan

A comprehensive approach to wayfinding and identity on the Aquarium's campus will enhance the visitor experience and aid with navigation through a complex urban setting.





*Top:* Existing conditions

*Bottom:* Pier 3 tip brings people and habitat down to the water's edge.

*Top:* Existing conditions

*Bottom:* Edge encourages the overlook of floating wetlands and expanded ecosystems.

## Immersive Experiences

National Aquarium Waterfront Campus Plan

A series of immersive experiences are proposed across campus. Multi-sensory installations engage visitors on campus, connecting them with authentic Chesapeake Bay watershed habitats.



## Waterfront Campus

National Aquarium Waterfront Campus Plan

Floating wetlands, perched amphitheaters, terraced bulkheads, and a variety of multi-sensory experiences invite guest to connect with the harbor in ways that foster a memorable civic experience.