

Rising Currents

MoMA re-imagines flood zone infrastructure.





0

1

2

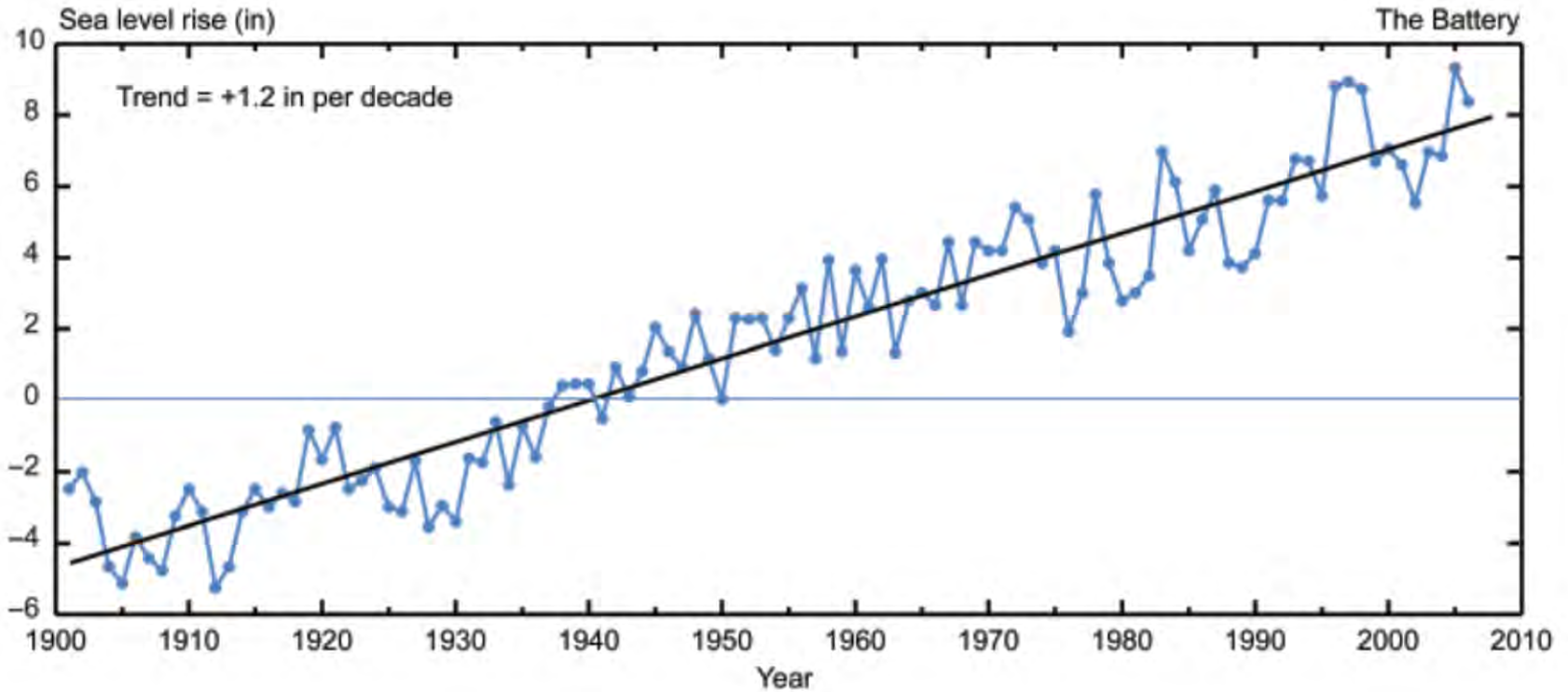
4

3



Project Genesis

Recorded Sea Level Rise in New York Harbor



Source: New York City Climate Report Information 2009

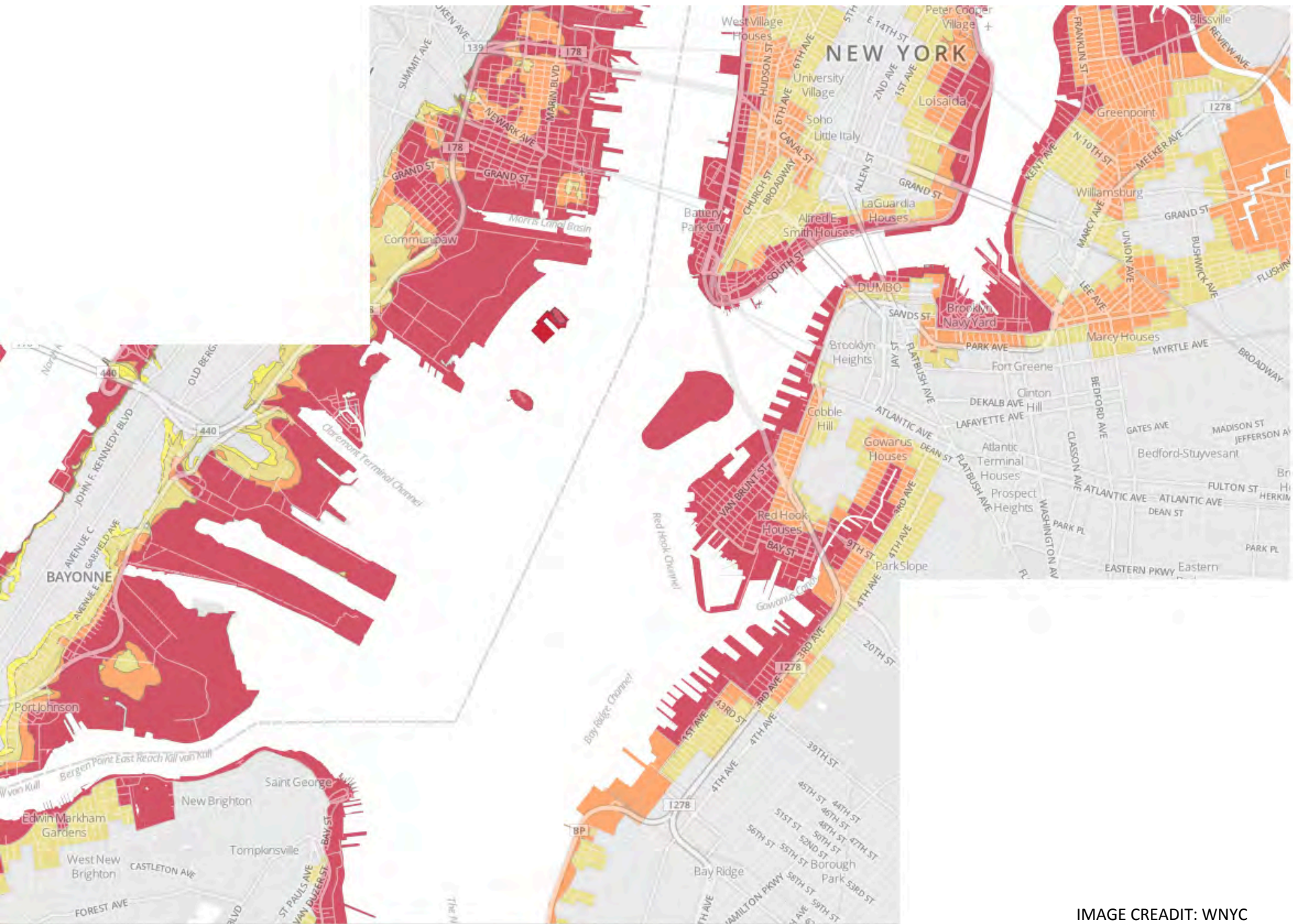
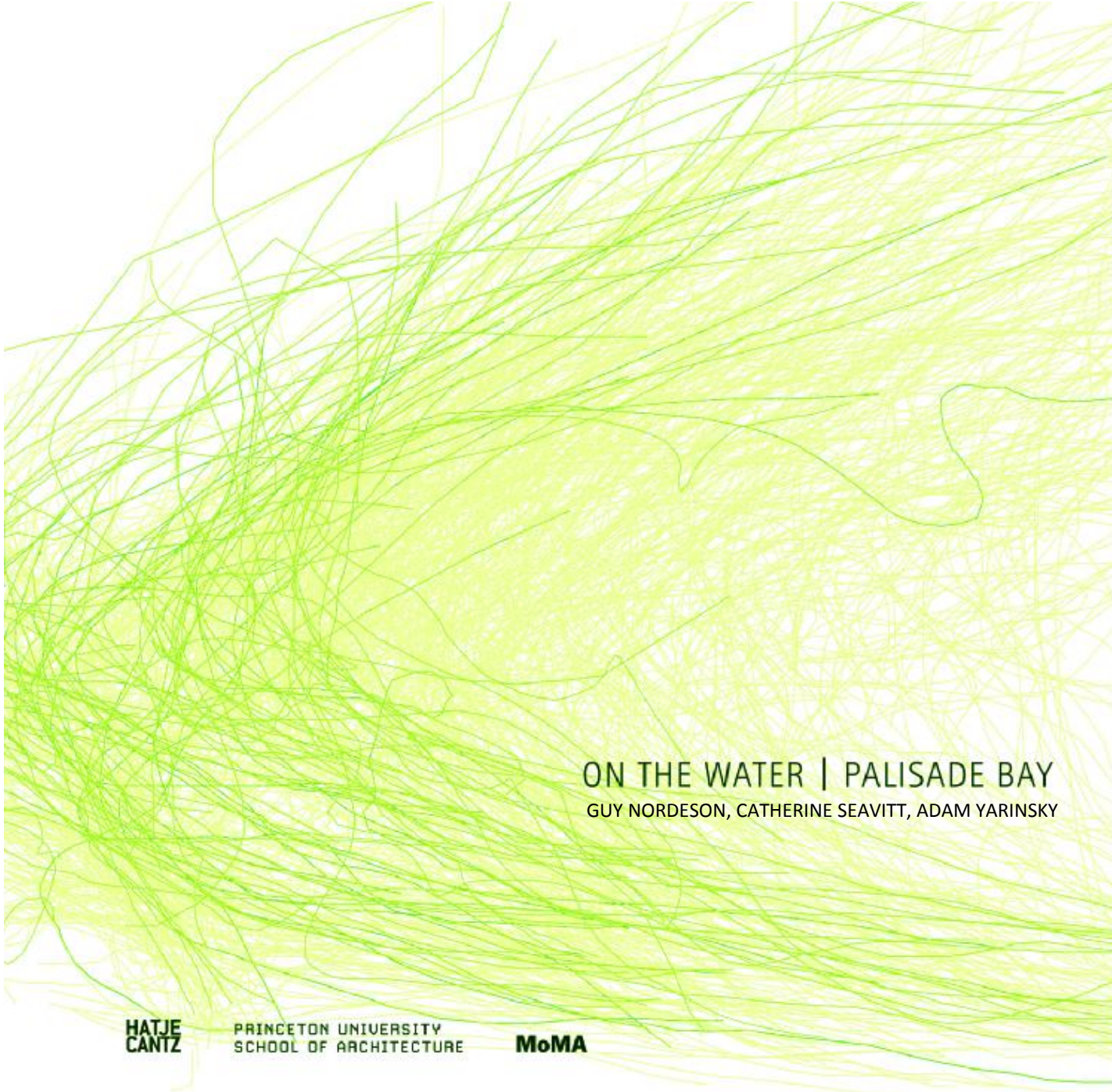


IMAGE CREDIT: WNYC



ON THE WATER | PALISADE BAY

GUY NORDESON, CATHERINE SEAVITT, ADAM YARINSKY

**HATJE
CANTZ**

PRINCETON UNIVERSITY
SCHOOL OF ARCHITECTURE

MoMA

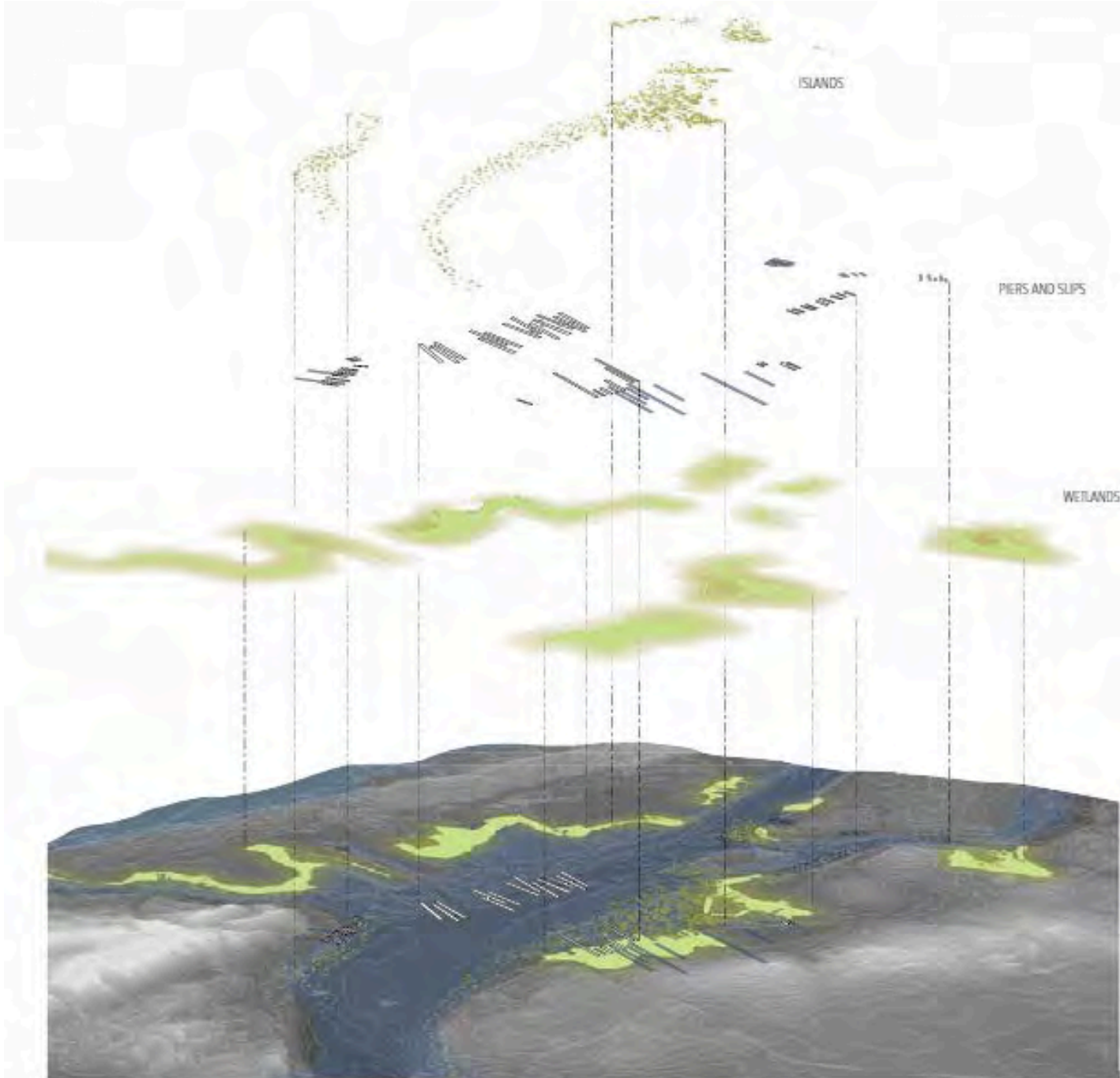


IMAGE CREDIT: GUY NORDESON, CATHERINE SEAVITT, ADAM YARINSKY

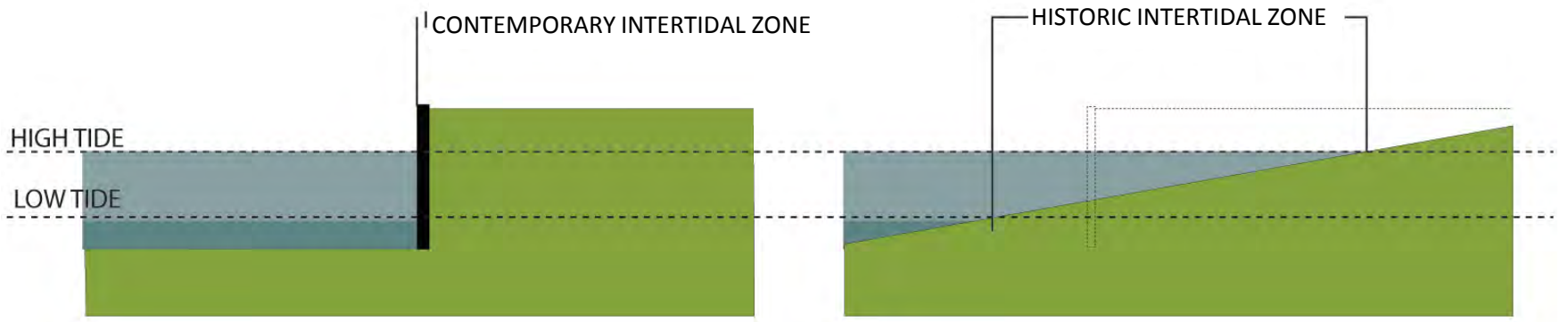


NYC HISTORIC
ECOSYSTEMS



NYC MODERN
ECOSYSTEMS





INTER TIDAL ZONE ERASURE

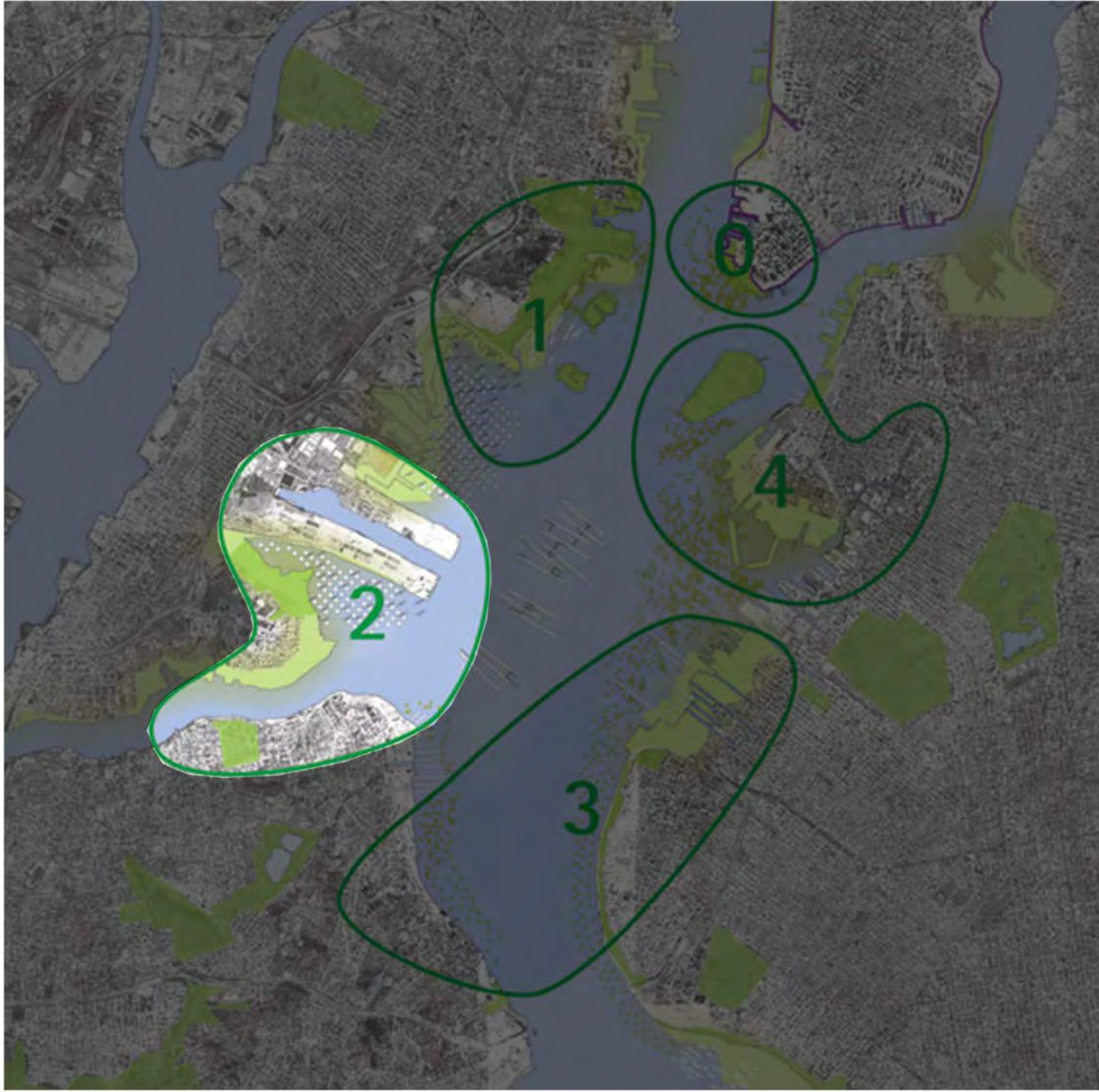


SOFT INFRASTRUCTURE

Zone 2: Working Waterline









SHIPPING

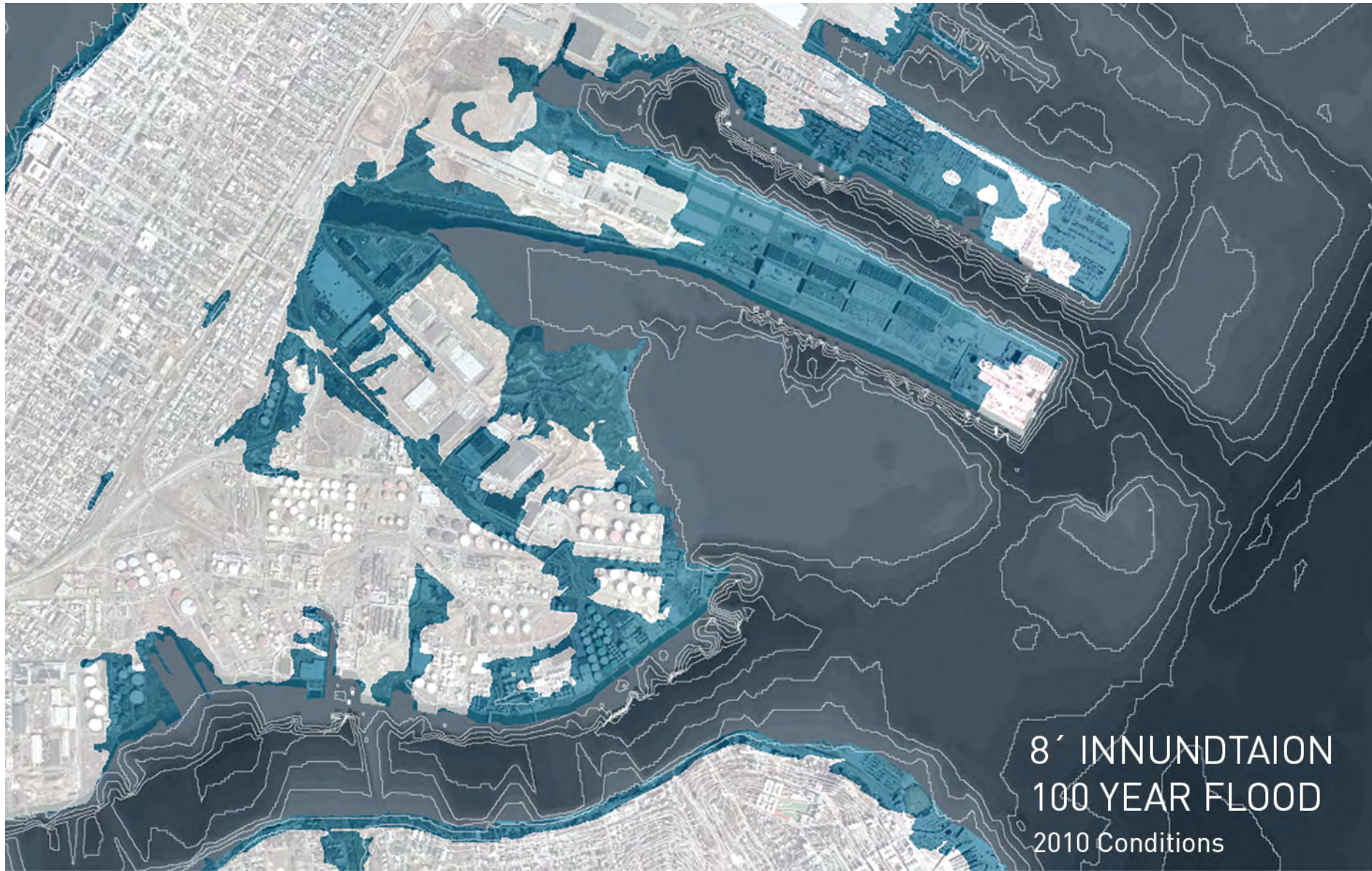
**PETROLEUM
REFINERY**

**STATEN ISLAND
RESIDENTIAL**

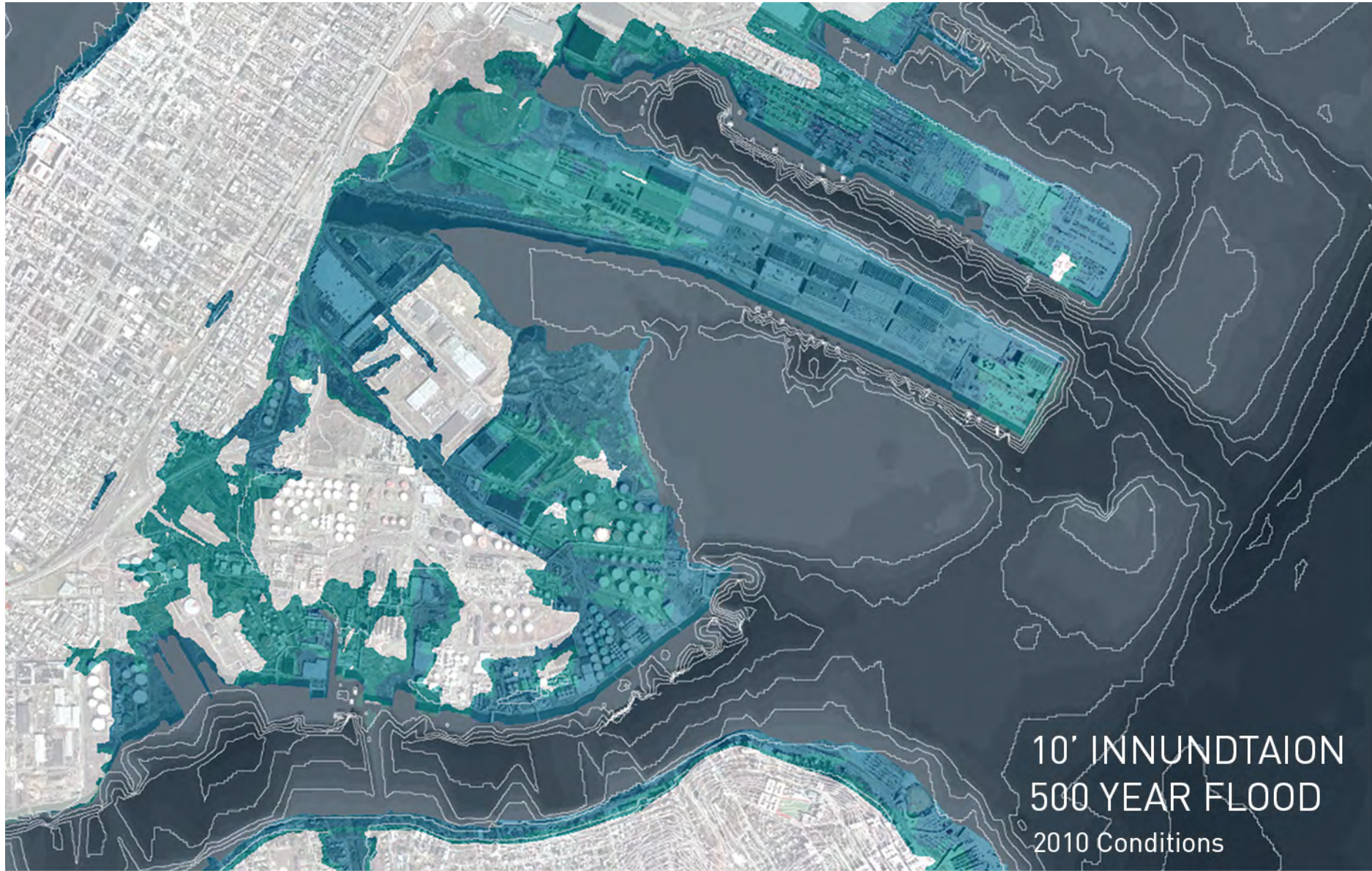


0' INNUNDTAION
2010 CONDITIONS

EXISTING WATER LEVELS

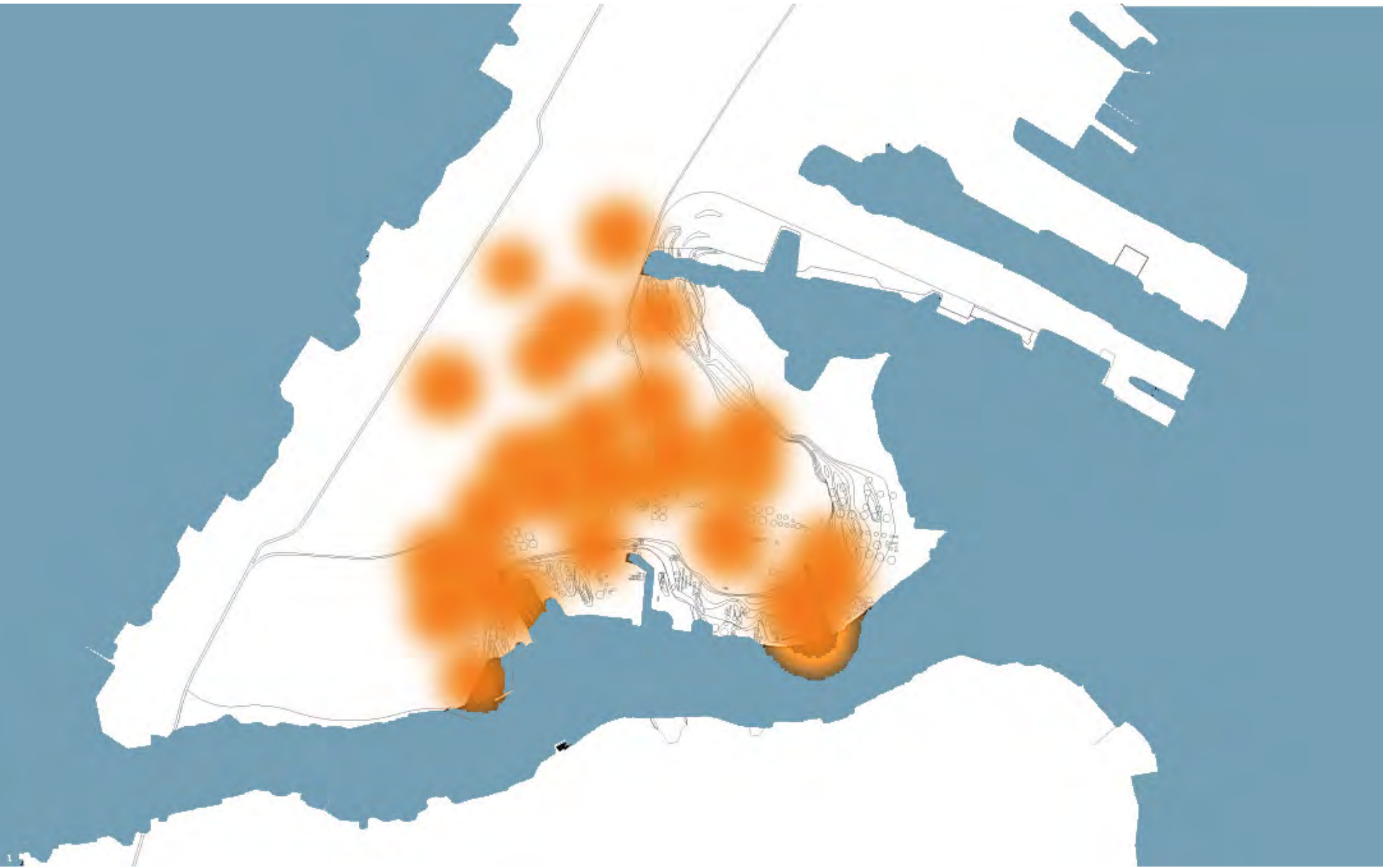


100 YEAR FLOOD PROJECTION



500 YEAR FLOOD PROJECTION

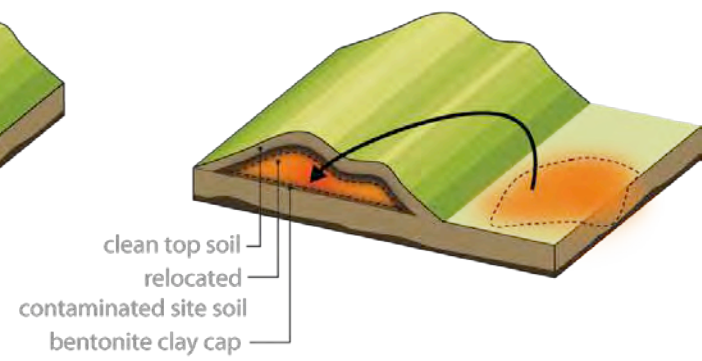
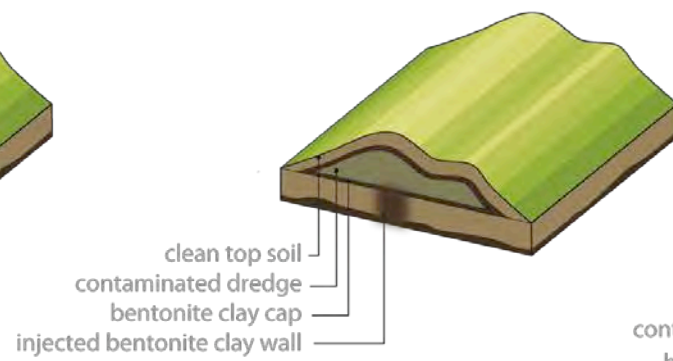
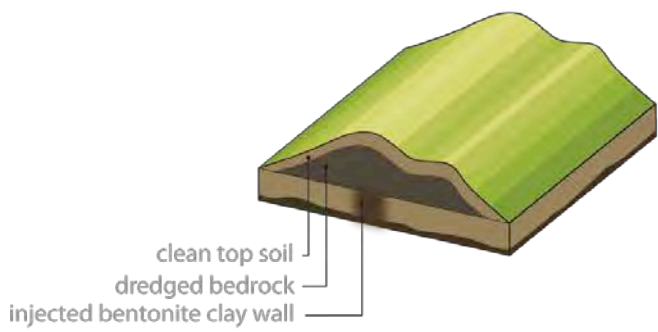




CONTAMINATED LAND



CAP AND CONTAIN



CAP AND CONTAIN



TRANSFORMING EXISTING INFRASTRUCTURE: TAKN FARM TO ALGAE FARM



ALGAE IS USED TO CLEAN RESIDUAL PETROLIUM FROM TANKS



RECYCLED TANKERS CAPTURE CSO AT OUTLETS

CSO STORED IN CLEAN TANKS, USED AS ALGAE FOOD



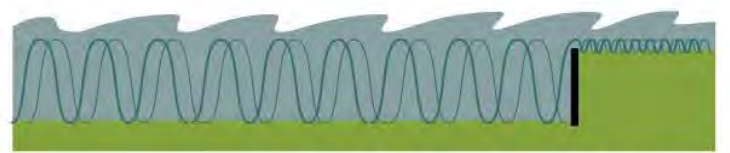
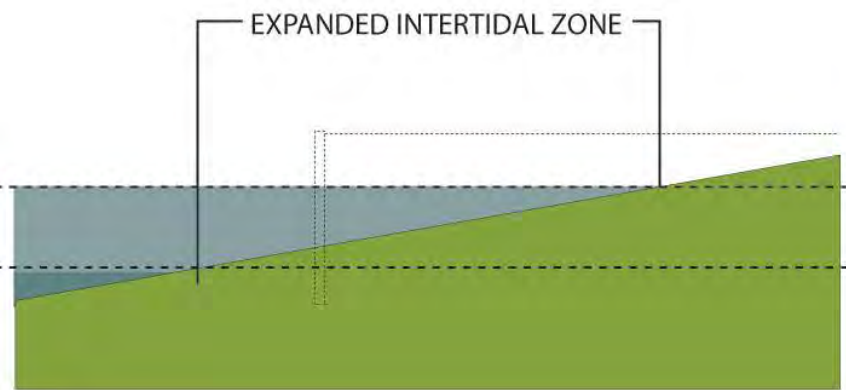
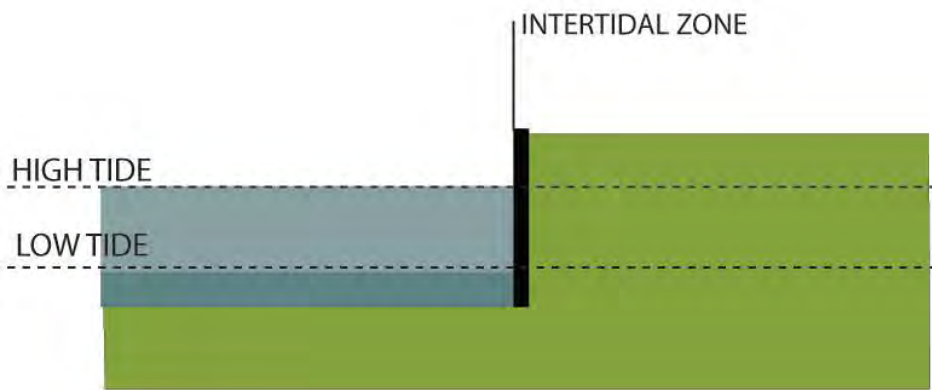
TANKS BECOME GREENHOUSES FILLED WITH PHOTOBIOREACTORS

AT ALL PHASES, THE MATERIALS ARE BIODEGRADABLE AND NON-TOXIC.



NONTOXIC, BIODEGRADABLE, RENEWABLE, CARBON NEUTRAL FUEL SOLD REGIONALLY

TRANSFORMING EXISTING INFRASTRUCTURE: BIOFUEL + CSO RECYCLING



HARD EDGES DEFLECT WAVE ENERGY

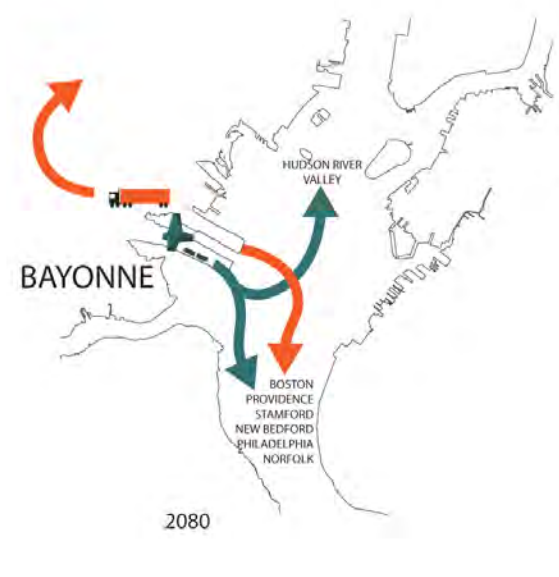
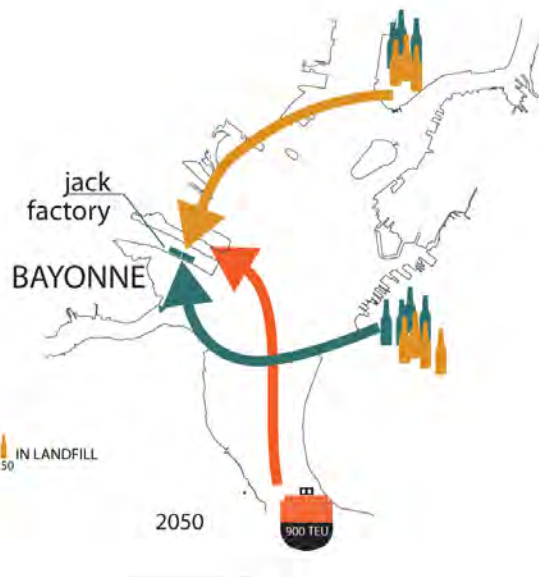
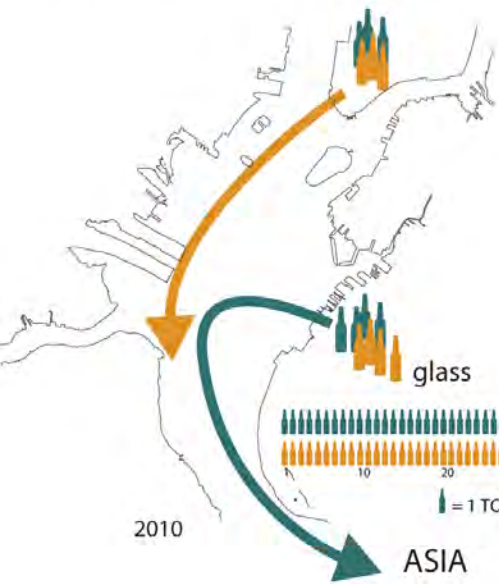


REEFS DISPERSE WAVE ENERGY

STORM SURGE MITIGATION



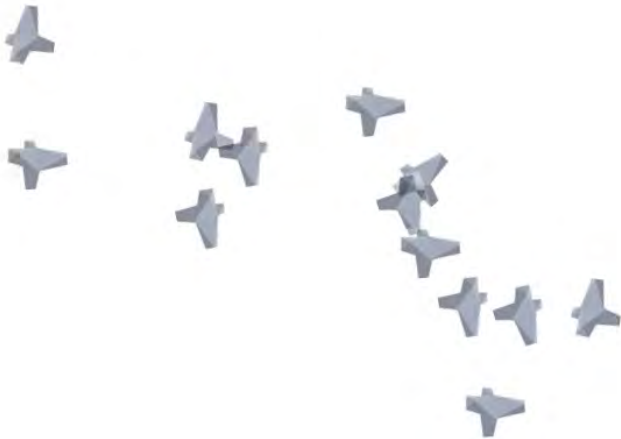
STORM SURGE MITIGATION



INCREASE REGIONAL PRODUCTION + SHIPPING



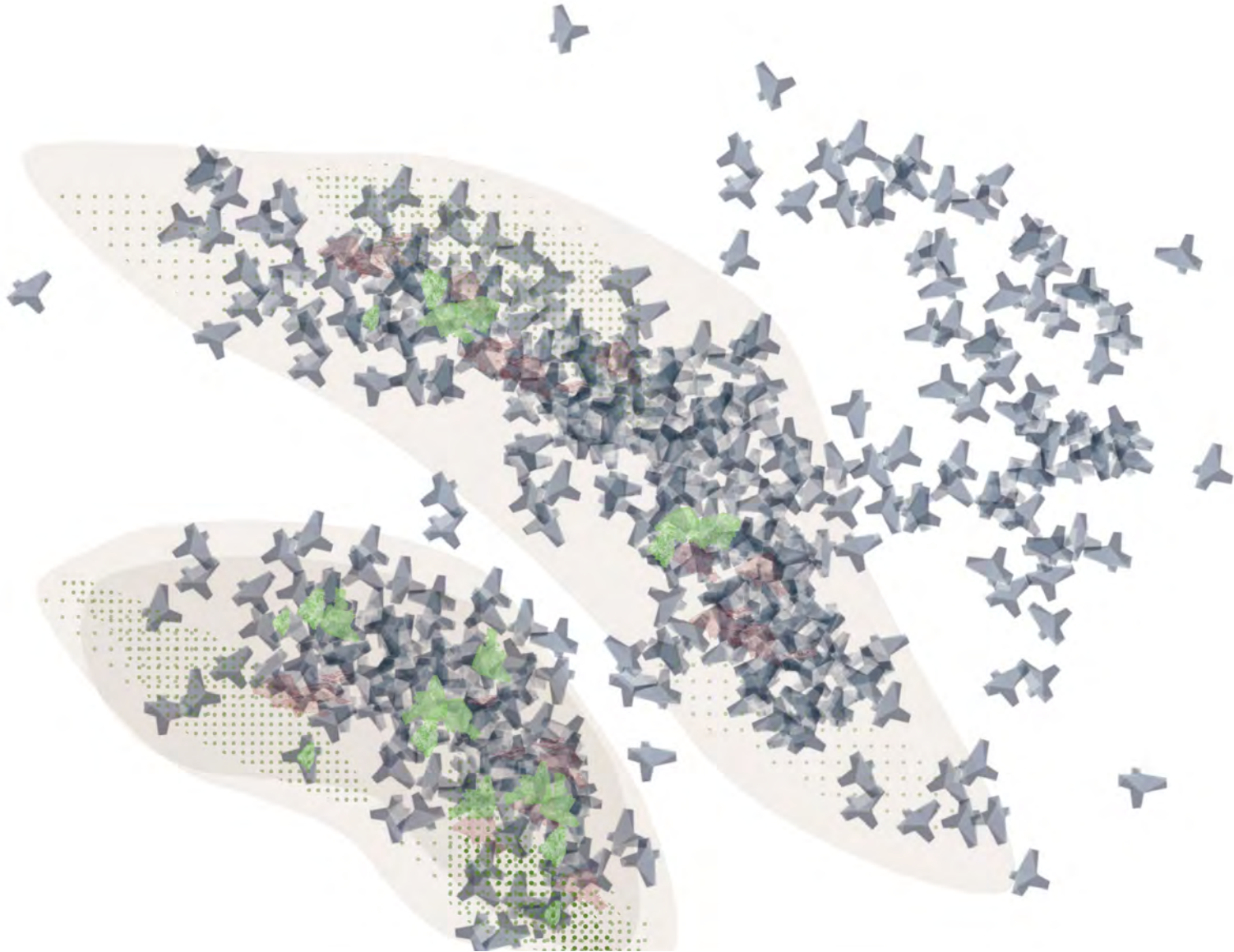


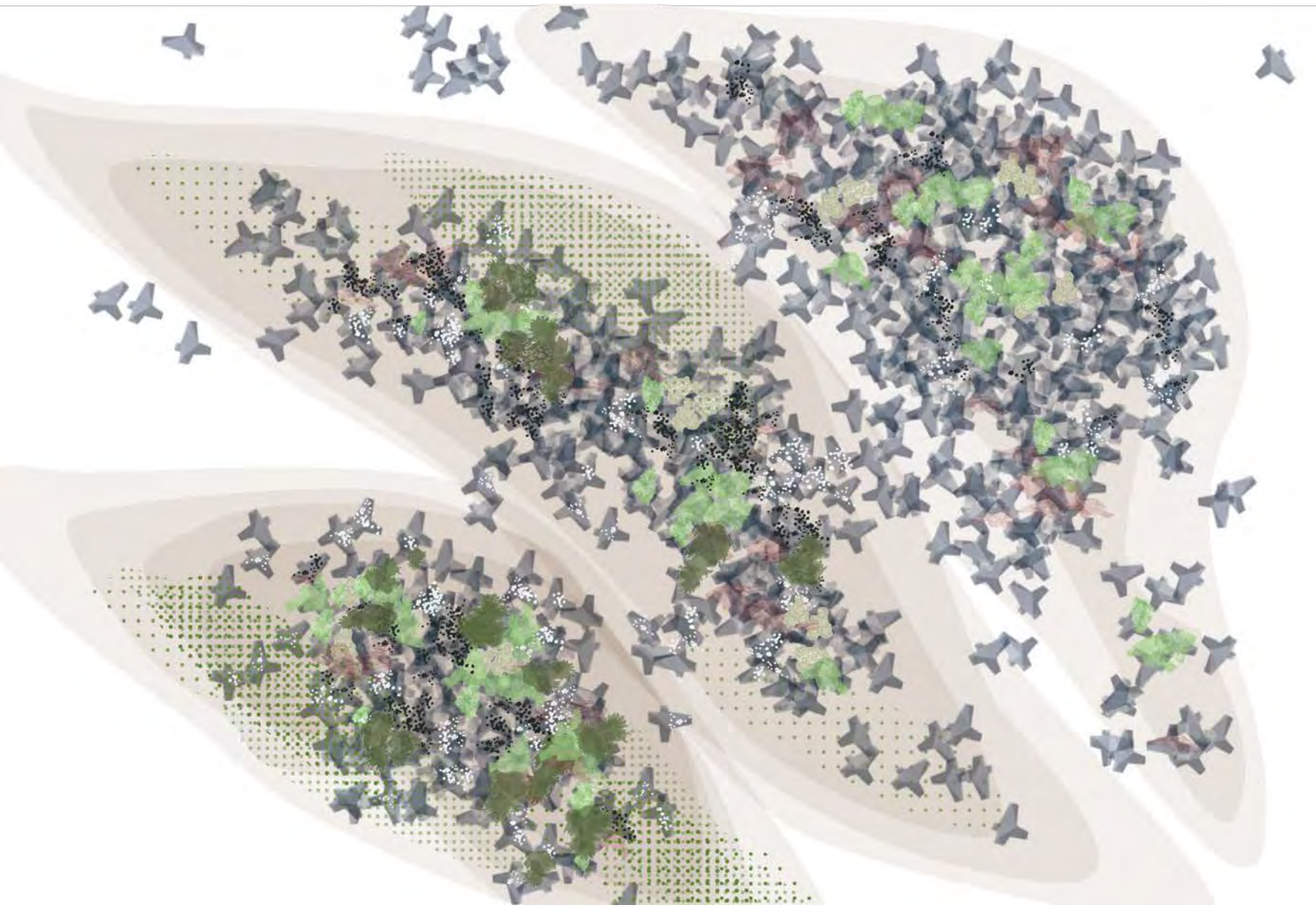


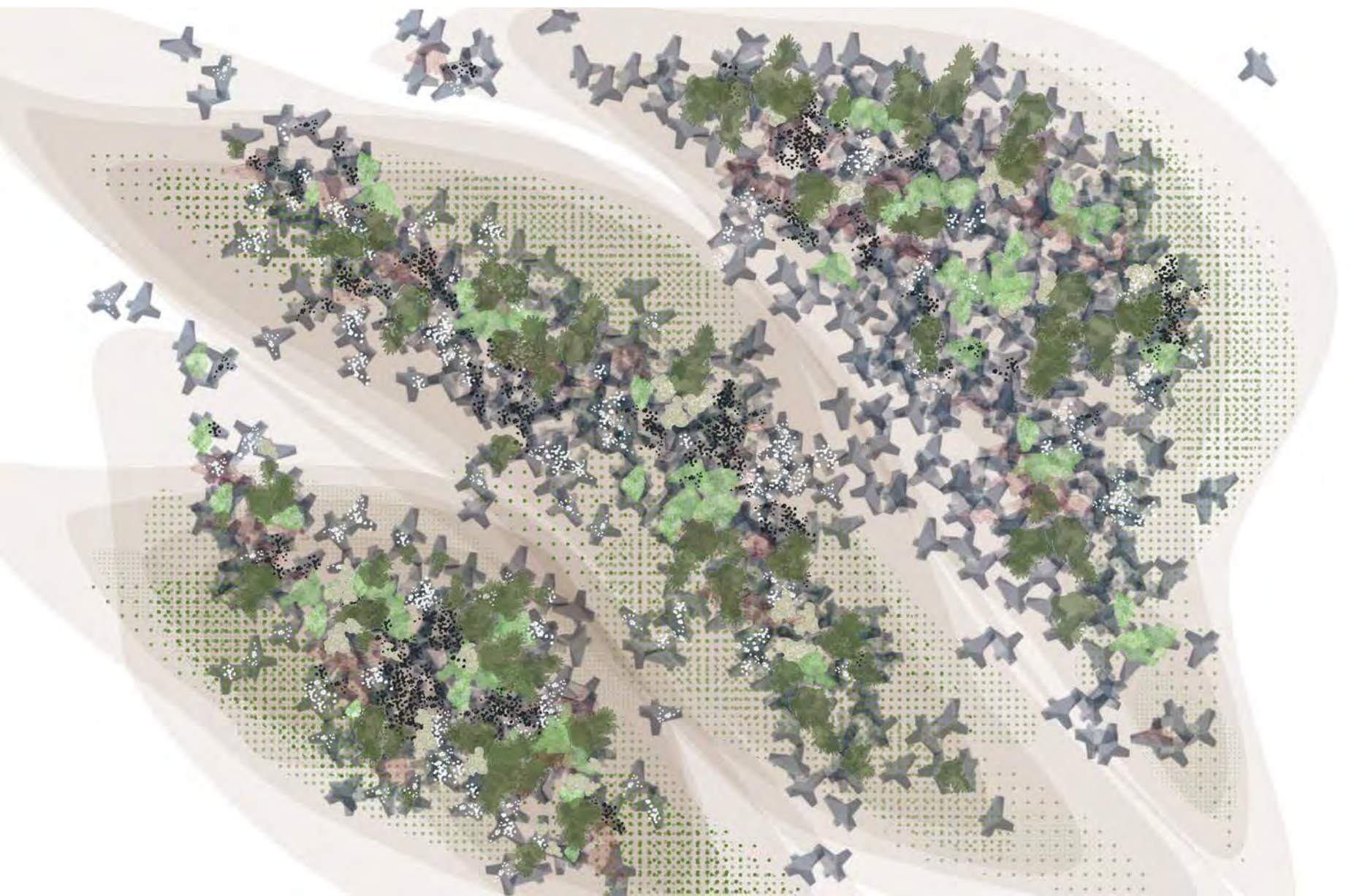


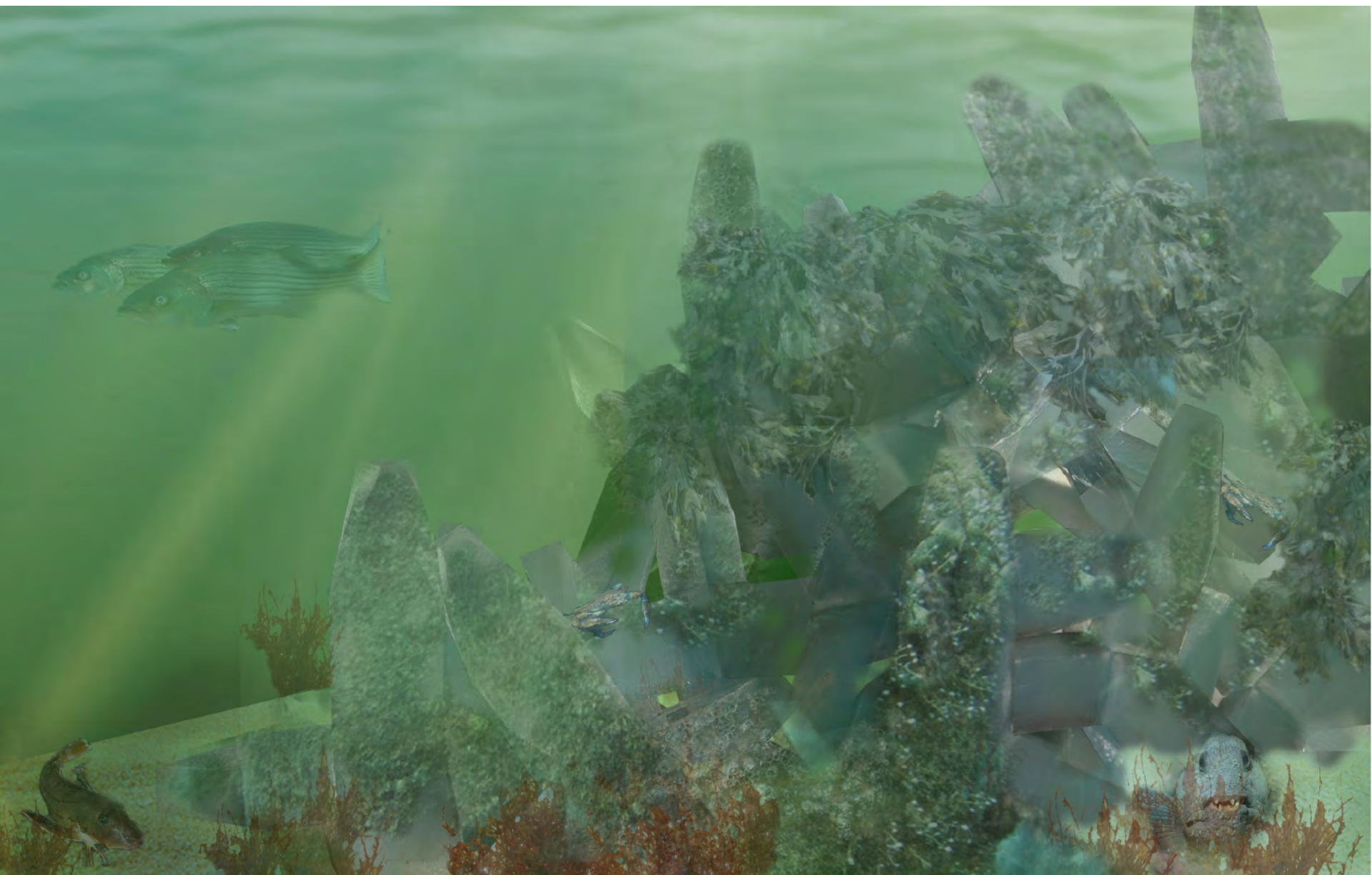












GLASS REEF

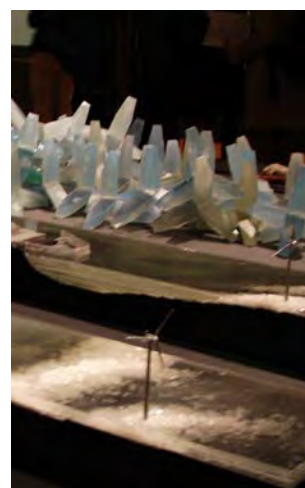
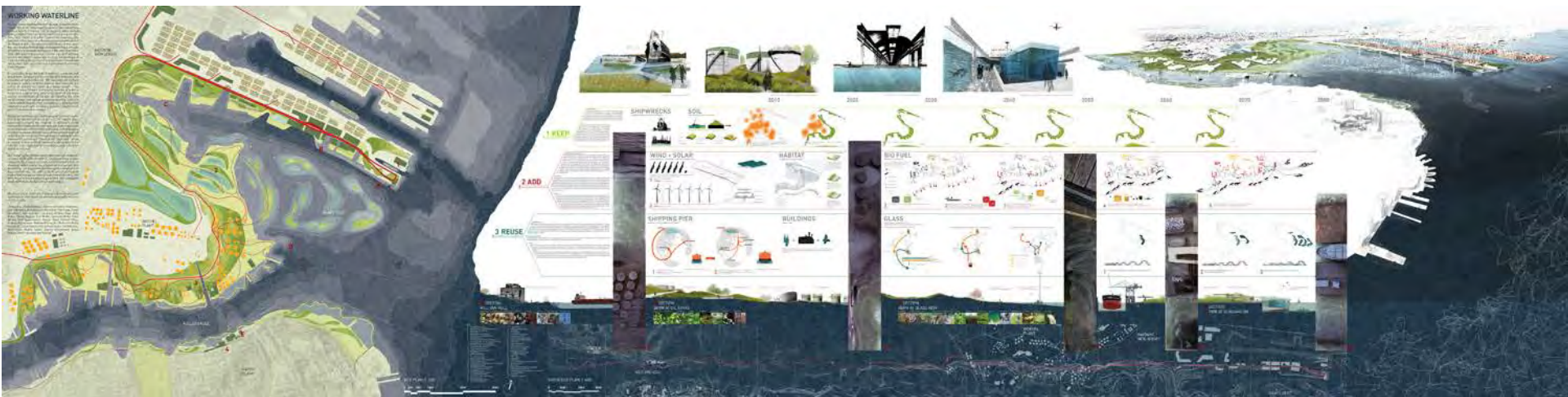
Process



OPEN HOUSE 1, December 2009



OPEN HOUSE 2, January 2010

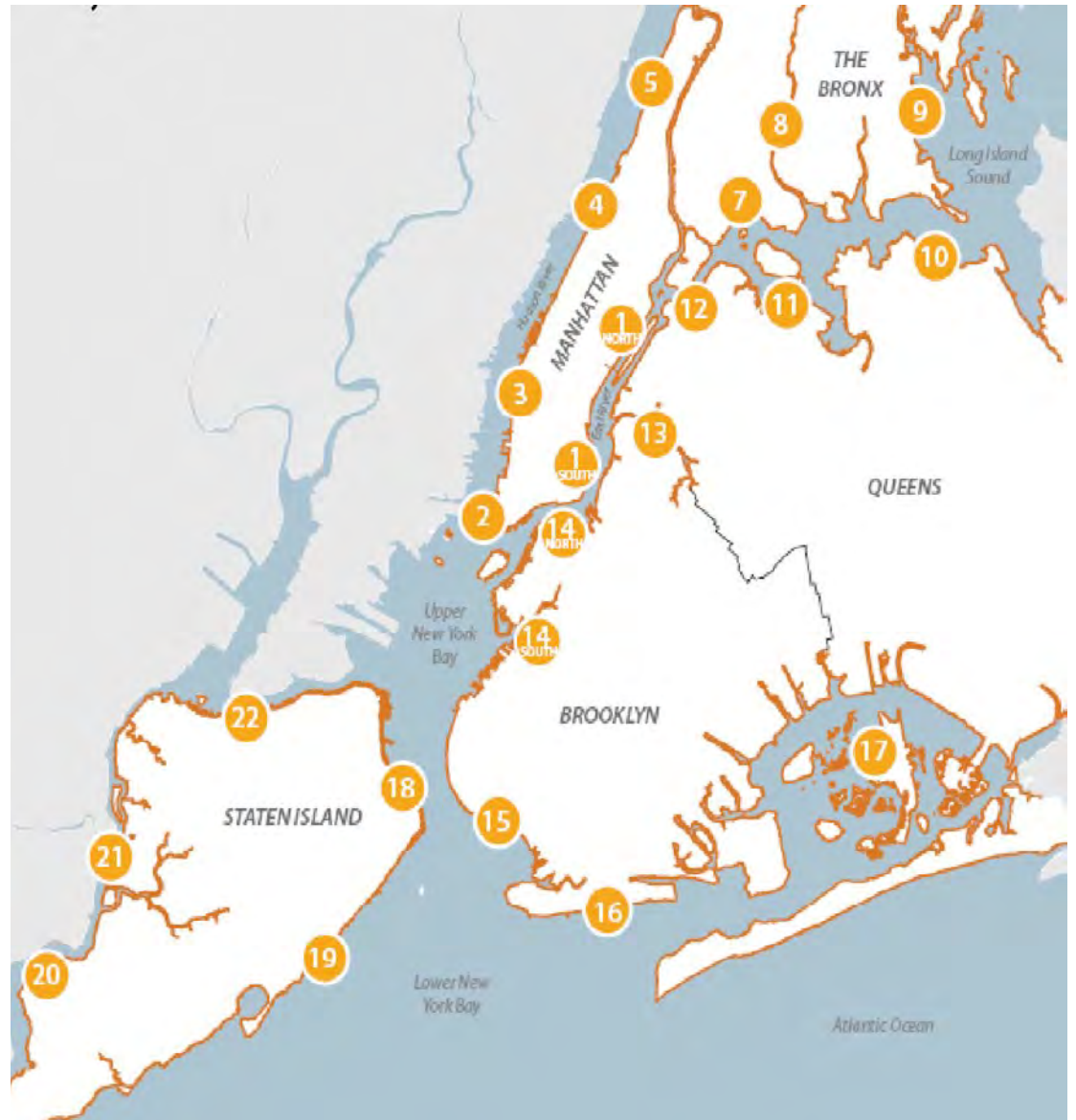


So What?



Figure 1: New York City Hurricane Evacuation Zones from the Coastal Storm Plan

- Zone A: Encompasses all areas that will be inundated with storm surge in a Category 1 hurricane and all areas abutting the Atlantic coast, regardless of inundation. Faces the highest risk of life-threatening tidal inundation. The immediate beach areas in this zone are also vulnerable to destructive surf and coastal erosion.
- Zone B: Encompasses all Category 2 inundation areas. These areas are at risk from damaging inland storm surge, but not from destructive surf.
- Zone C: Encompasses all Category 3 and 4 inundation areas. These areas, though farthest from the pounding coastal surf, are still at risk.



COMMUNITY OUTREACH



Partners:

Hudson River Foundation
NY/NJ Baykeepers
U.S. Army Corps of Engineers
Port Authority of NY/NJ
The Urban Assembly
New York Harbor School
New York Harbor Foundation
Governors Island Trust
Hudson River Park Trust

INCREASED PUBLIC SUPPORT FOR ECOLOGICAL RESTORATIONS PROJECTS

RISING CURRENTS

PROJECTS FOR NEW YORK'S WATERFRONT

[Blog](#) [Project Description](#) [Index of Posts](#) [Events](#) [Respond to the Exhibition](#) [Credits](#)

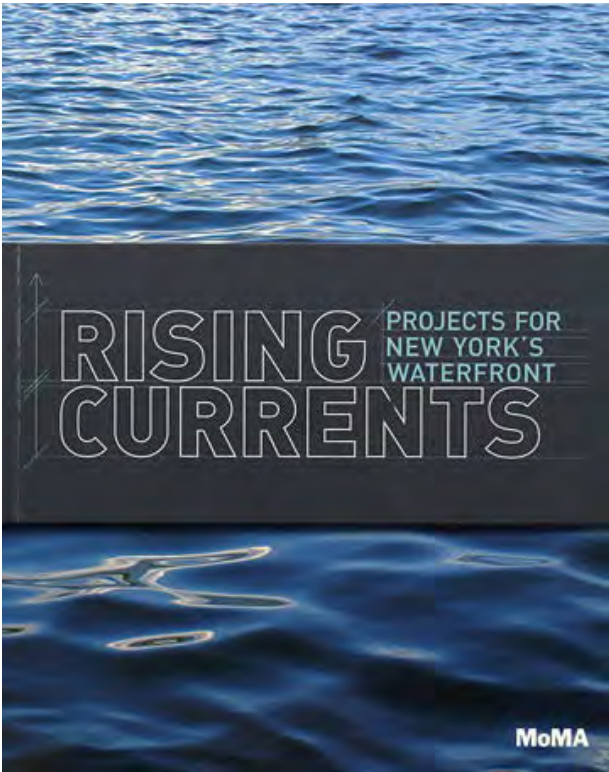
NOVEMBER 1, 2010 | [RISING CURRENTS](#)

Rising Currents: Looking Back and Next Steps

Posted by [Barry Bergdoll](#), The Philip Johnson Chief Curator of Architecture and Design

The *Rising Currents* exhibition at MoMA closed on October 11, and as we have worked on the de-installation of the show in the intervening weeks, I have had a chance to reflect on the exhibition and the project as a whole. As I've noted here previously, the workshop and exhibition were precedent-setting in many ways—for myself as a curator, for MoMA as an institution, and, in some ways, for the New York architecture and landscape design community.

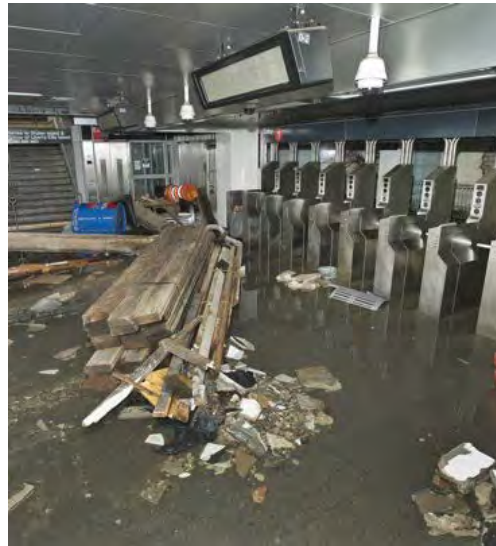
[Read more](#) | [6 Comments](#)



FORUM FOR DISCUSSION

and then





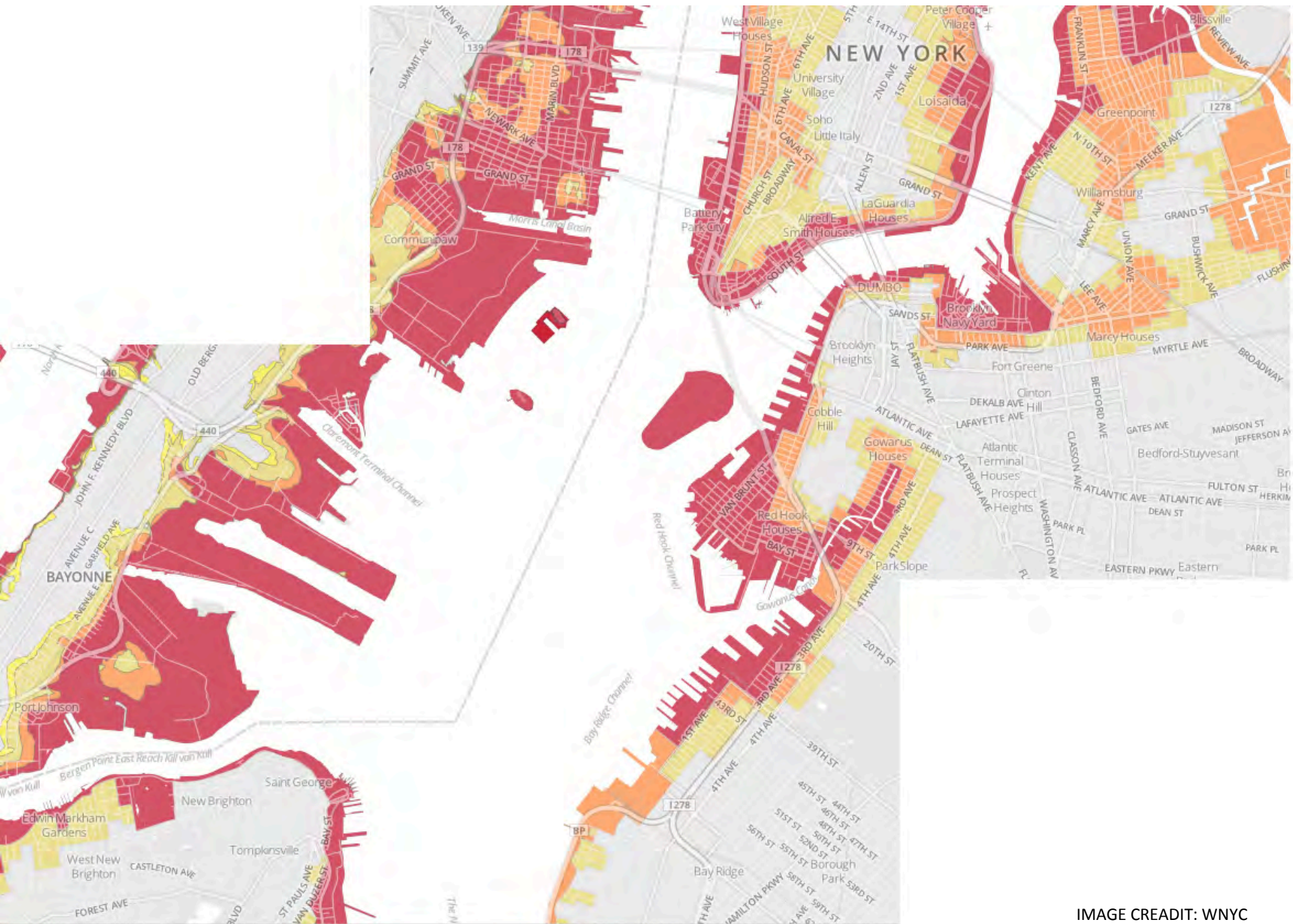


IMAGE CREDIT: WNYC

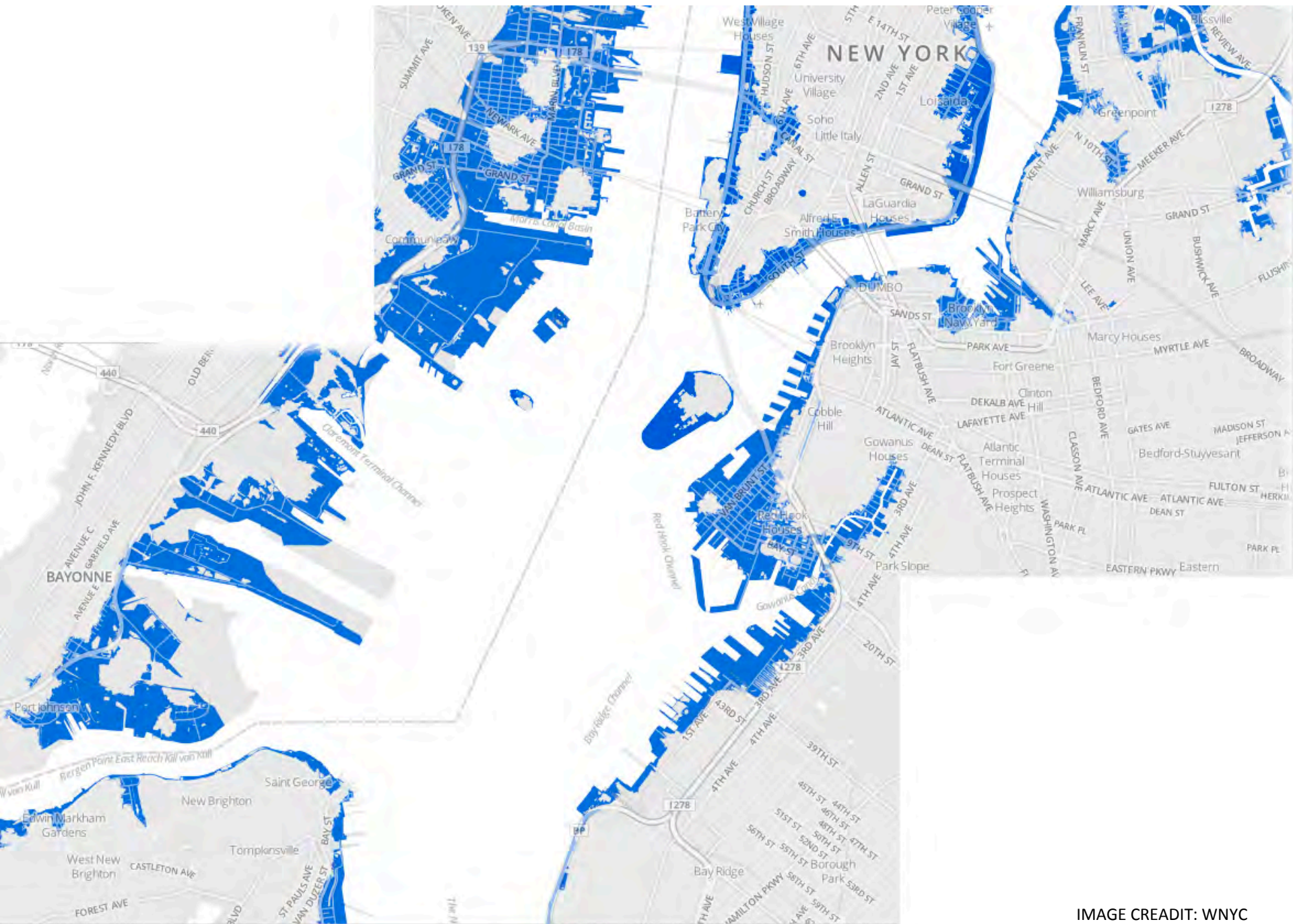


IMAGE CREDIT: WNYC



ARCHITECTURAL CRAZINESS

8 Ideas to Combat Floods and Rising Sea Levels in NYC

Tuesday, October 30, 2012, by Jessica Dailey

NYR

BLOG

Roving thoughts and provocations from our writers

E-MAIL SHARE PRINT COMMENTS

Design from Disasters

Martin Filler

THE NEW YORKER

JANUARY 15, 2013

SAVE NEW YORK BY MAKING IT "SOFT"

POSTED BY THOMAS DE MONCHAUX

the Atlantic
CITIES
PLACE MATTERS

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Flashback: MoMA's Ideas to Combat Rising Seas in New York Harbor

JENNA M. MCKNIGHT | OCT 29, 2012 | COMMENTS

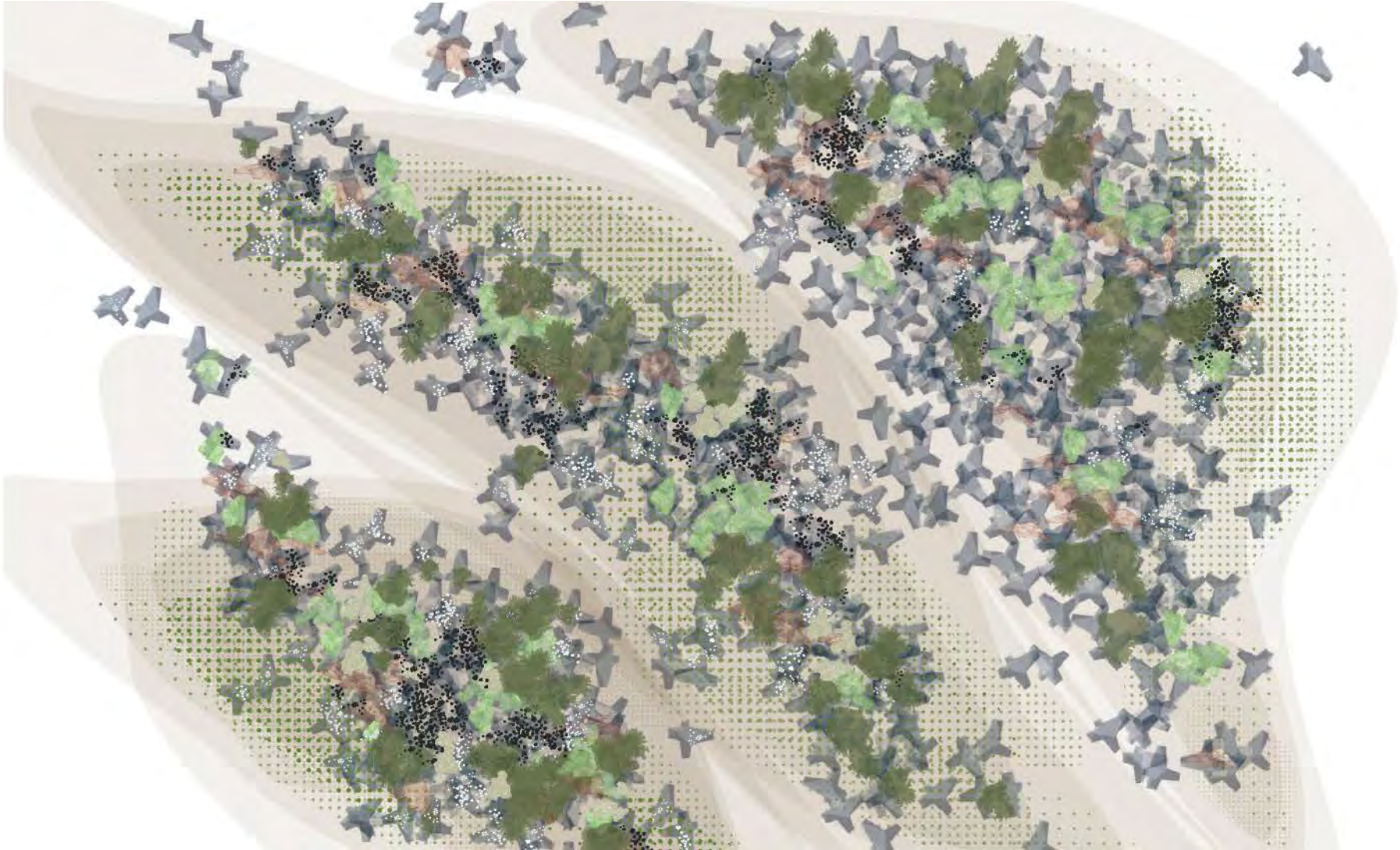
ARCHITECTURAL RECORD

NEWS:

In Sandy's Wake, Revisiting MoMA's Prescient "Rising Currents" Exhibition

By Wendy Moonan and Aileen Cho

November 2, 2012



http://www.moma.org/explore/inside_out/category/rising-currents
-OR- google MoMA Rising Currents