

REBUILD
BY
DESIGN

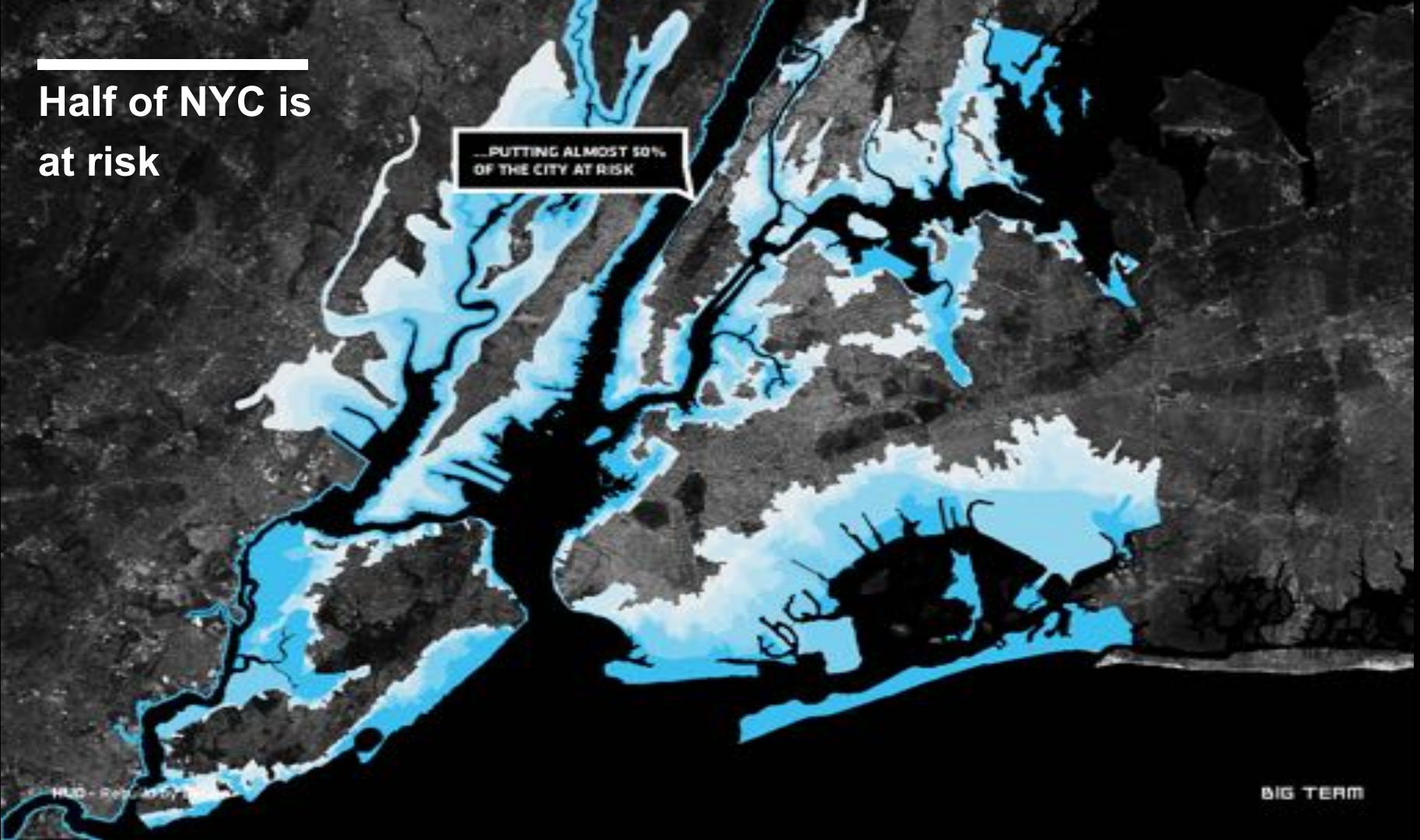




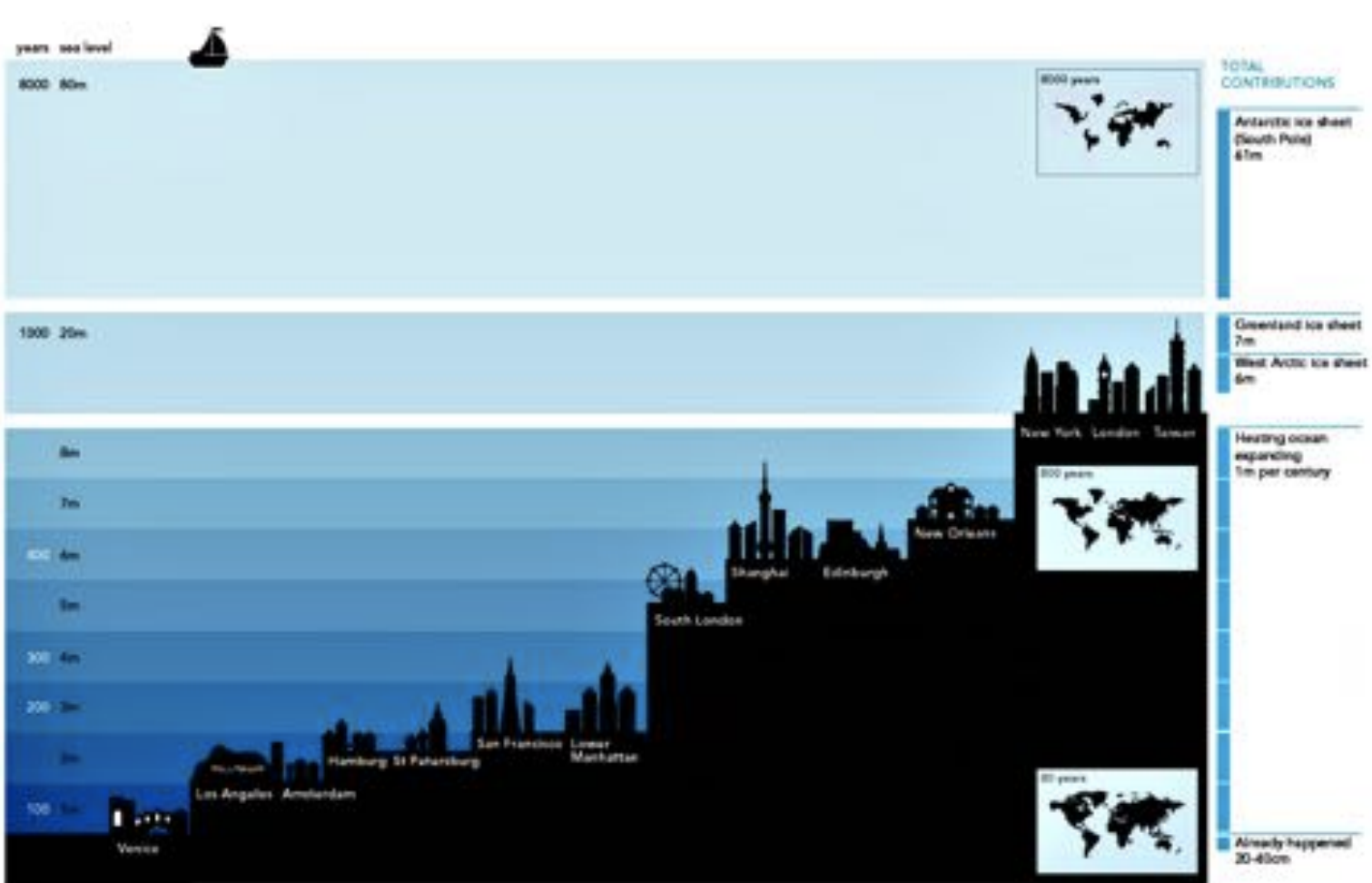
**WAKE UP
CALL**

Half of NYC is
at risk

...PUTTING ALMOST 50%
OF THE CITY AT RISK



NYC isn't the only one



David McCandless // v1.0 // Jan 2010
 Illustrations: Laura Sullivan & Joe Swainson

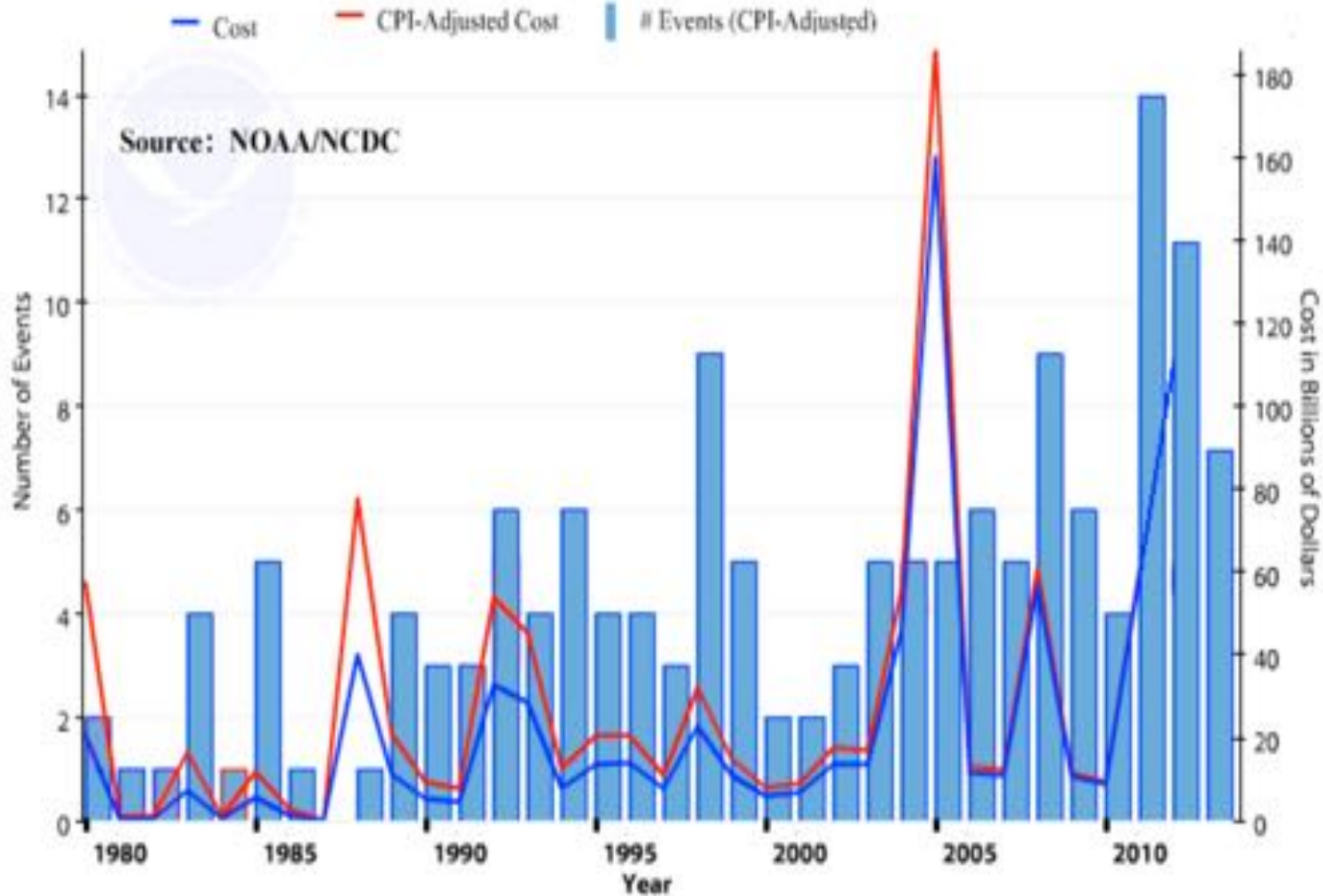
Note:
 Heights above sea level
 vary across cities.
 Lowest points used.

source: IPCC, NASA,
 NewScientist.com,
 Potsdam Institute,
 Sea Level Explorer

IPCC Predictions

We can't afford to keep doing things the same way

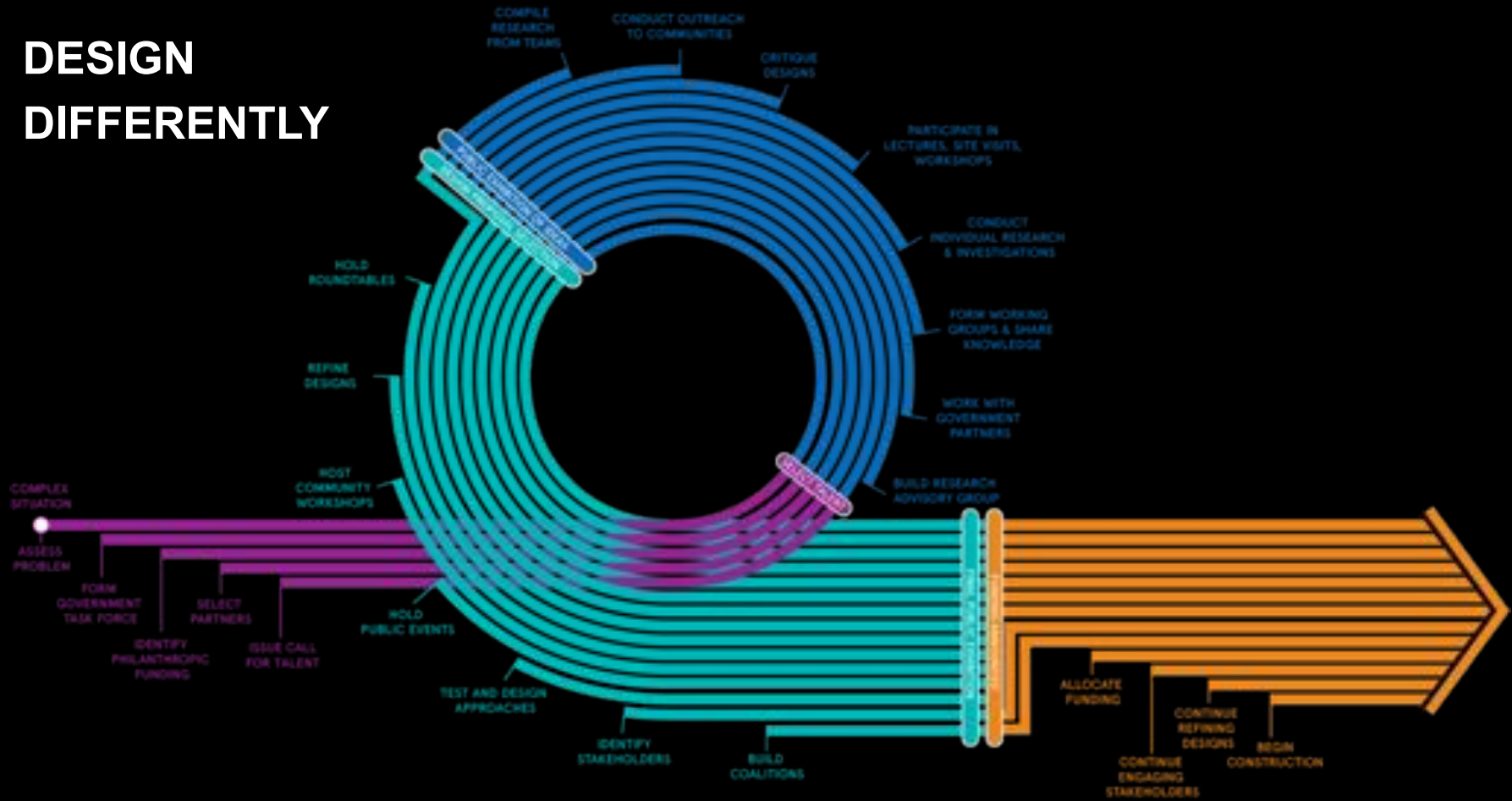
Billion-Dollar U.S. Weather Disasters, 1980 - 2013



REBUILD BY DESIGN WAS DIFFERENT



DESIGN DIFFERENTLY



RESEARCH DIFFERENTLY

Jamaica Bay



Jersey Shore



Lower East Side, Hoboken, and Jersey City



Bridgeport, Milford, and Fairfield



Long Island



Red Hook and Lower Manhattan



Staten Island



ENGAGE DIFFERENTLY

5

Philanthropic
Funders

4

Partner
NGOs

141

Neighborhoods

19

Universities

535

Community
Stakeholder Orgs

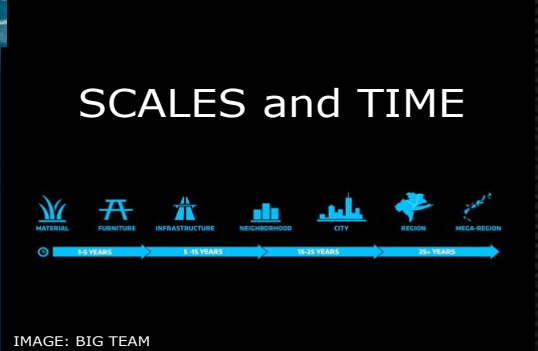
181

Government
Agencies

ENGAGE DIFFERENTLY



COLLABORATE DIFFERENTLY



BOLD IDEAS, INCREMENTAL IMPLEMENTATION

\$930M (HUD)
~\$400M (OTHER)



-  Connecticut
-  New Jersey
-  New York

- 10**
BIG Team
The BIG is
Warfield, NY
- 9**
HRSA Advisors, Inc.
with Cooper, Robertson
& Partners
Commercial Corridor
Resilience Project
Ashbury Park, NJ, Rockaway, NY,
Red Hook, NY
- 8**
Inferboro Team
Living with the Bay:
A Comprehensive Regional
Resilience Plan for
Nassau County's South Shore
Nassau County, NY
- 7**
MIT CAU + ZUS +
URBANISTEN
New Woodlands: Productive
City + Regional Park
Woodlands, NJ
- 6**
OMA
Revisit, Define, Share, Discharge:
A Comprehensive Strategy
for Hoboken
Hoboken, NJ
- 5**
PerrinDesign/OLIN
Hunt Point Urban
Bays, NY
- 4**
Sasaki/Rutgers/Jrnp
Resilience + The Beach
Union Beach, Ashbury Park,
Toms River, NJ
- 3**
SCAPE/Landscape
Architecture
Living Breakwaters
Station Island, NY
- 2**
WB unbridged
with Yale ARCADES
Resilient Bridgeport
Bridgeport, CT
- 1**
WXY/West 8
Blue Dunes - The Future of
Coastal Protection
Atlantic Coastline

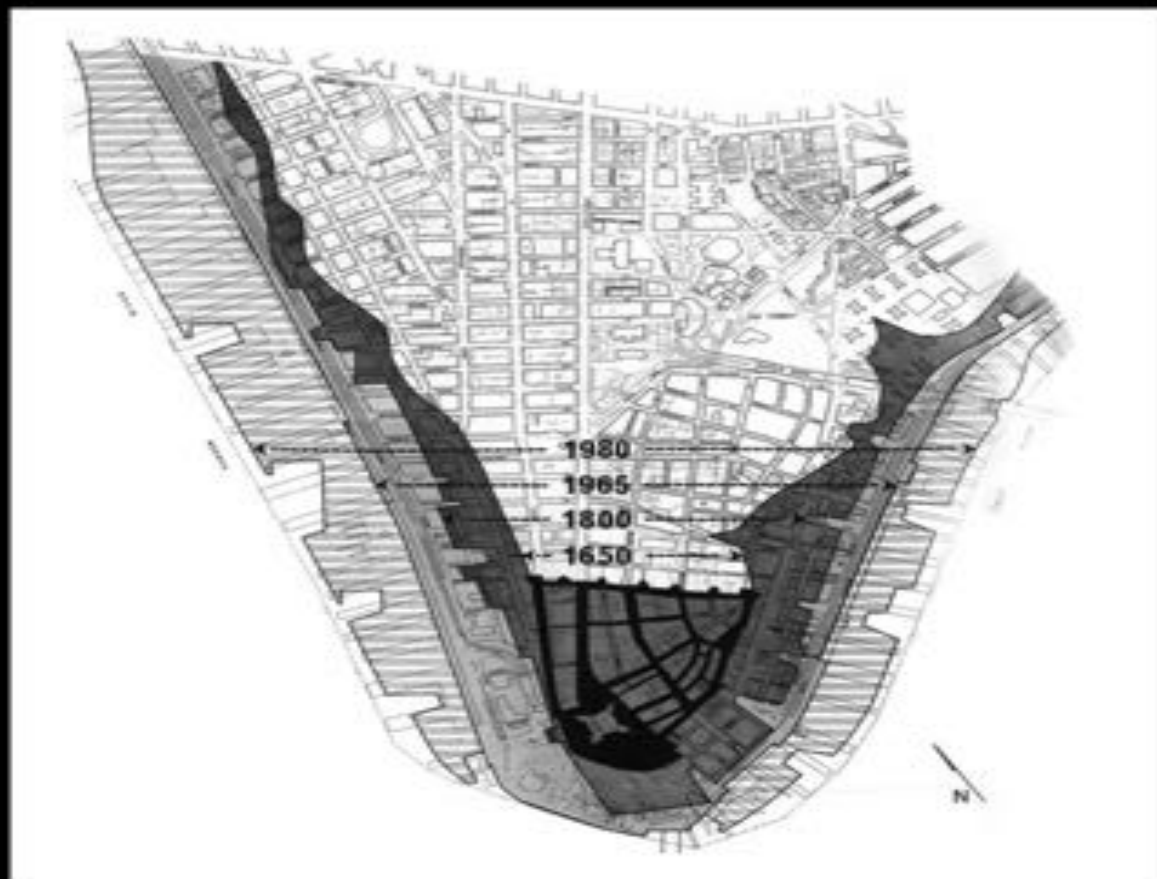
THE BIG “U”: Manhattan, NYC

Goal: Protect a 10 mile flood zone around the low-lying areas of Manhattan.

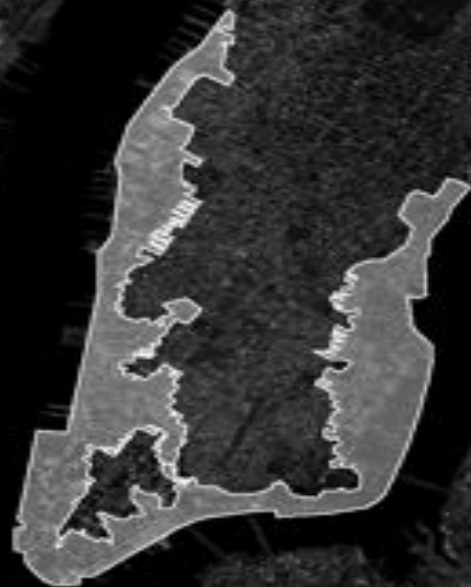
Addresses multiple issues:

- Flooding from storm surge
- Protection of low income housing
- Improvement of recreational space
- Safe access to waterfront
- Improved transit options
- Biodiversity





FEMA FLOOD ZONE



HUD - Rebuild by Design

BIG TEAM



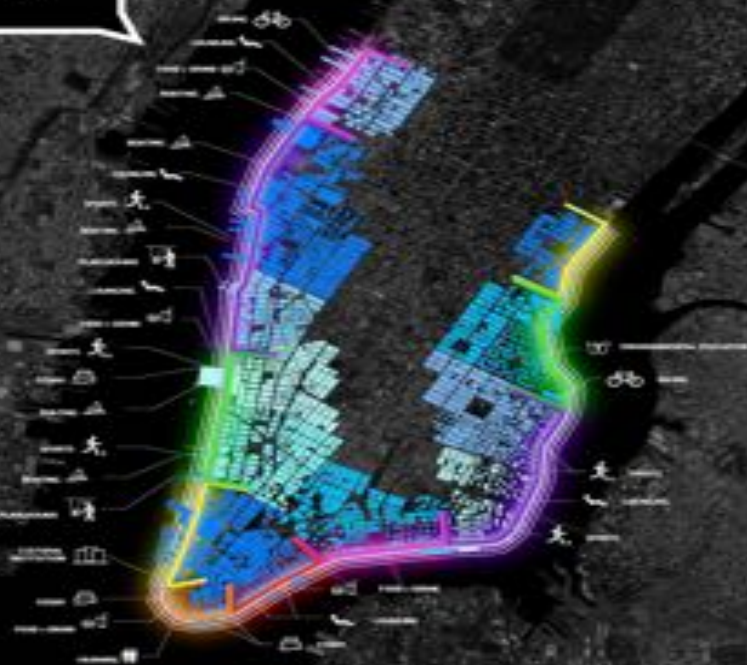
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RESILIENCY INFRASTRUCTURE

PEOPLE!

A TAILORED APPROACH TO
TRADITIONAL INFRASTRUCTURE:
DIVERSITY!



THE BIG U - EAST SIDE COASTAL RESILIENCE (ESCR)

HUD/
NDRC

\$335,000,000



SOCIAL INFRASTRUCTURE

Integrating flood protection with improved access and open spaces throughout East River Park and Stuyvesant Cove.



#BNEIPIC



LONG-TERM PERSPECTIVE

THE BRIDGING BERM...



BIG TEAM

LONG-TERM PERSPECTIVE

DECK EXTENSION OVER THE FDR!





TWO BRIDGES - UNDER FDR
EXISTING CONDITION



FLIP-DOWN DEPLOYABLE ART

A NEW BAND OF PUBLIC SPACE ALONG THE WATERFRONT!



THE STORM

PANELS DEPLOYED IN PLACE PRIOR TO EVENT



FULTON FISH MARKET

EXISTING CONDITIONS



SOUTH STREET PAVILIONS
FLEXIBLE PROGRAMMING ON FLOODSIDE!



STORM

GATES CLOSED, FURNITURE REMOVED

THE BIG U - LOWER MANHATTAN COASTAL RESILIENCY (LMCR)

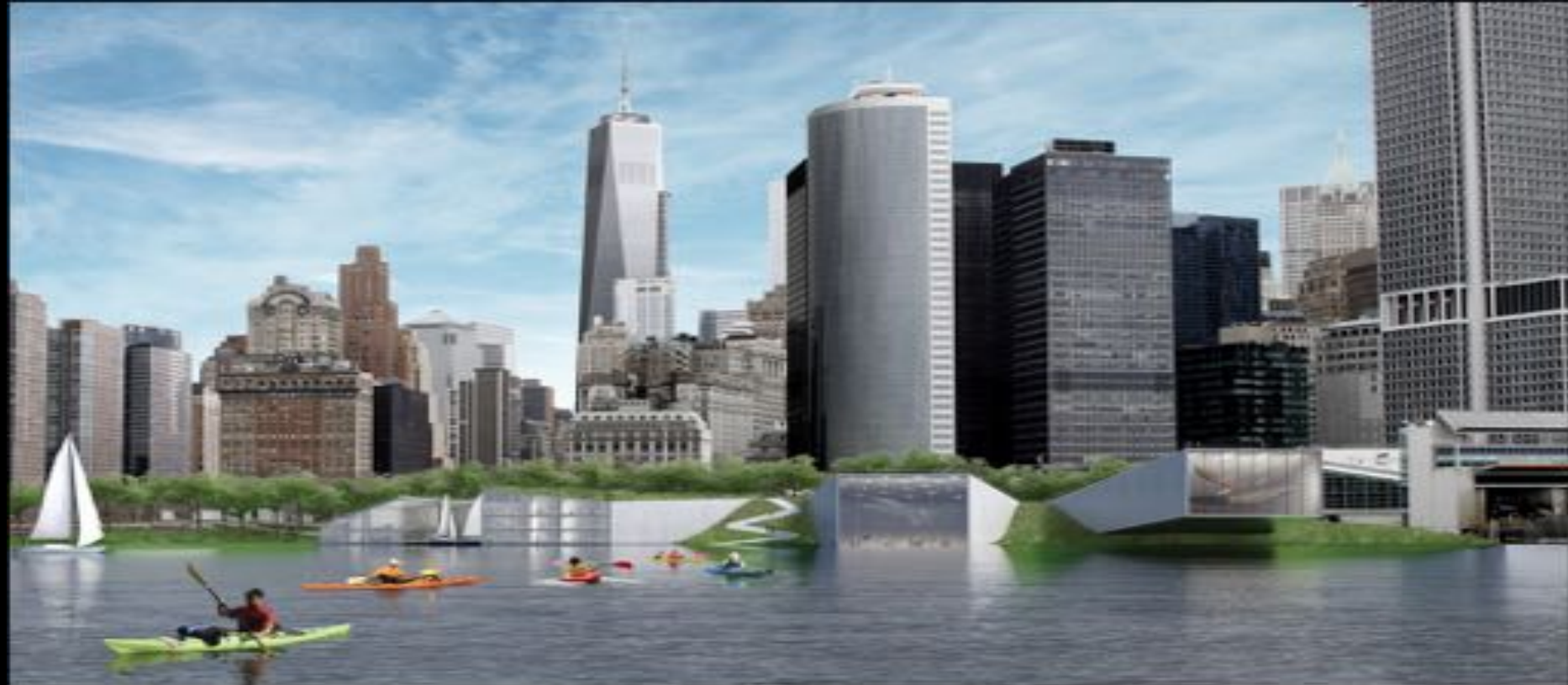
NYC

\$107,000,000

HUD/
NDRC

\$176,000,000





HARBOR BERM!

HARBOR MIDDLE SCHOOL AND REVERSE AQUARIUM

