

Rapid Fire

Design Projects and Programs Taking Action

Moderated By: **David Cash**

*Dean, John W. McCormack Graduate School
of Policy and Global Studies
Sustainable Solution Lab, University of
Massachusetts Boston*

The Case for Passive Survivability

Alex Wilson

President, Resilient Design Institute
Founder, Building Green, Inc.

Resilient design at Spaulding – flood protection



Spaulding Rehabilitation Hospital, Charlestown - Photo: Perkins + Will



Photo: Alex Wilson

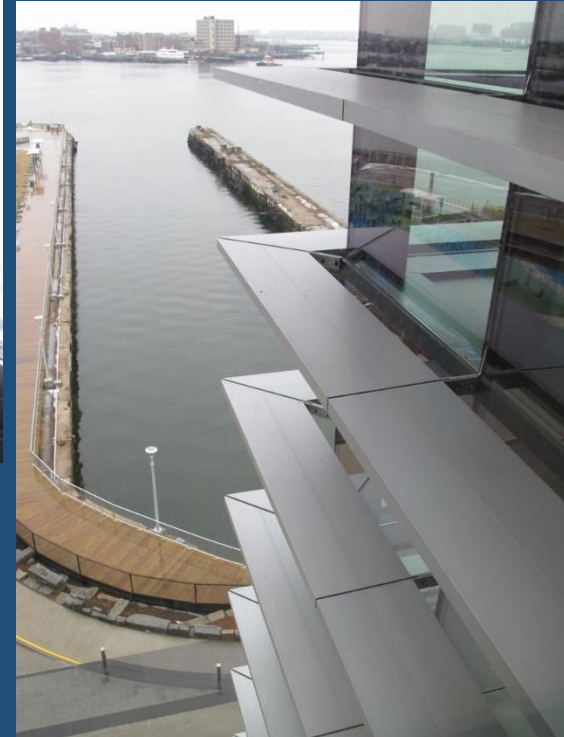
Resilient design at Spaulding – passive survivability



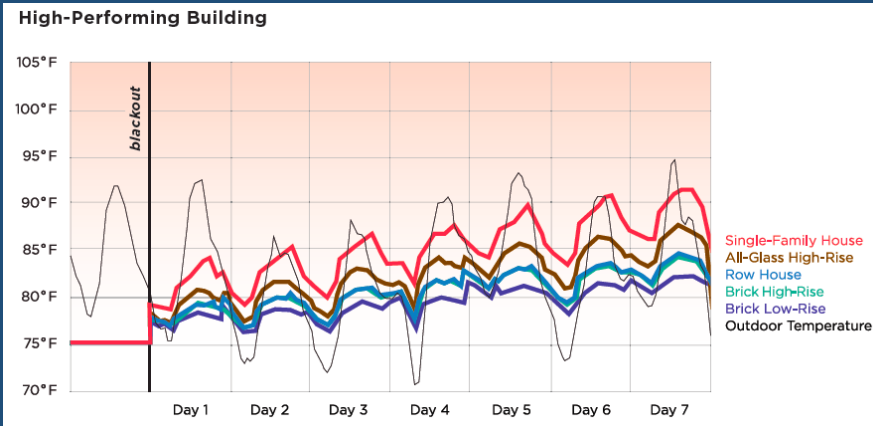
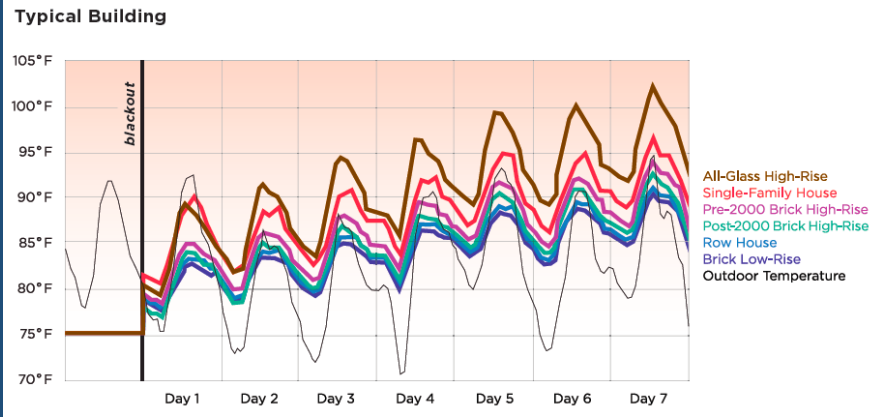
Operable windows at Spaulding Rehab - Photo: Perkins+Will



*Operable window
(above) and exterior
shading (right)
Photos: Alex Wilson*



Take-away points – The case for passive survivability



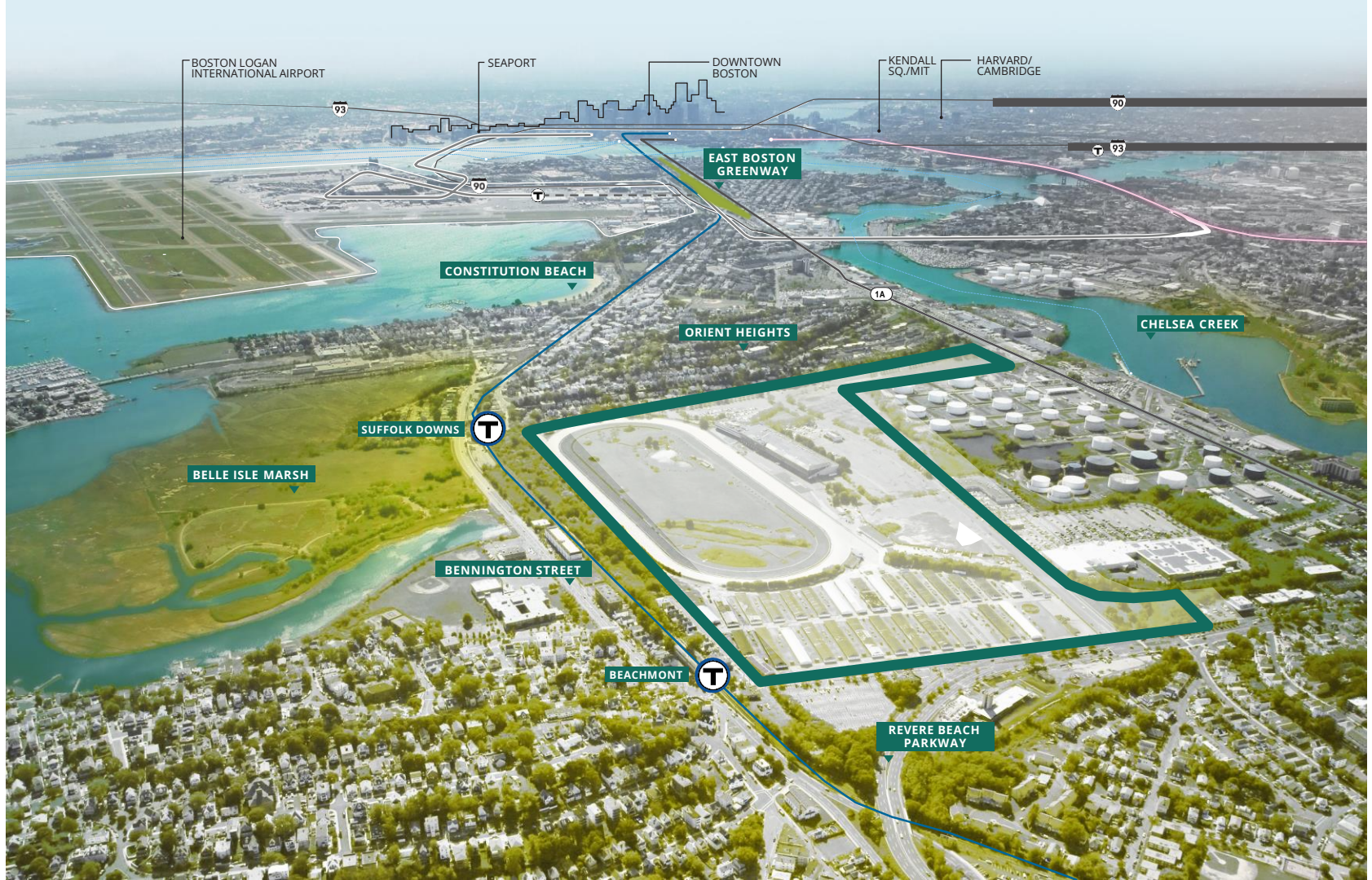
- With a changing climate we face increasing vulnerabilities, including extended loss of power
- We know how to design buildings that will maintain habitable temperatures in the event of lost power: passive survivability
- Achieving passive survivability in buildings requires high levels of energy efficiency and passive design—reducing energy use and carbon emissions
- Such buildings can be close to carbon-neutral—adaptation *and* mitigation
- Life-safety can be a greater motivator than “doing the right thing,” with potential to appeal across the political divide

Atelier Ten, from report
“Baby It’s Cold Inside,”
Urban Green Council

Suffolk Downs Redevelopment

Thomas N. O'Brien

*Founding Partner, Managing Director
The HYM Investment Group, LLC*



BOSTON LOGAN INTERNATIONAL AIRPORT

SEAPORT

DOWNTOWN BOSTON

KENDALL SQ./MIT

HARVARD/CAMBRIDGE

EAST BOSTON GREENWAY

CONSTITUTION BEACH

BELLE ISLE MARSH

SUFFOLK DOWNS

BENNINGTON STREET

BEACHMONT

REVERE BEACH PARKWAY

ORIENT HEIGHTS

CHELSEA CREEK

1A

Unique on Site Water and Wetland Features



MASTER PLAN



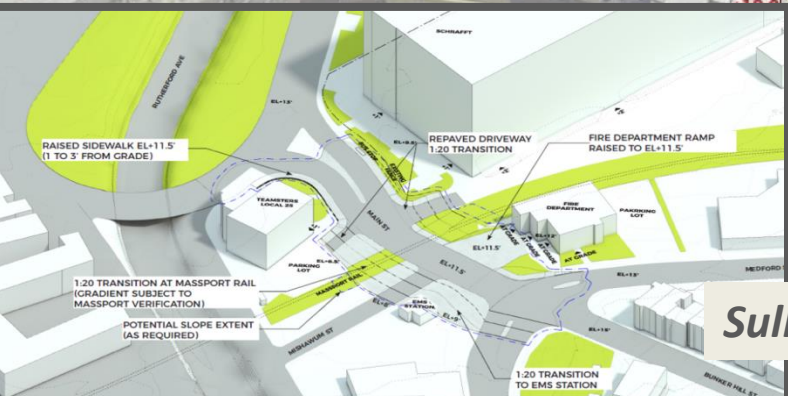
CRB: From Planning to Action

Mia Mansfield

*Climate Ready Boston Program Manager
City of Boston Office of Environment,
Energy, and Open Space*

1. ACT THROUGH CURRENT PLANS

- PROGRAM ELEMENTS:**
- MULTI-USE FIELD
 - SOFTBALL
 - SOCCER 300'X180'
 - BASEBALL
 - LITTLE LEAGUE FIELD
 - BOCCIE
 - PLAYGROUND
 - MULTI-SPORT HALF COURT
 - CIVIC / PASSIVE SPACE
 - ENHANCED ENTRY POINTS AT COMMERCIAL STREET
 - SERVICE / STORAGE AREA
 - WATER ACCESS

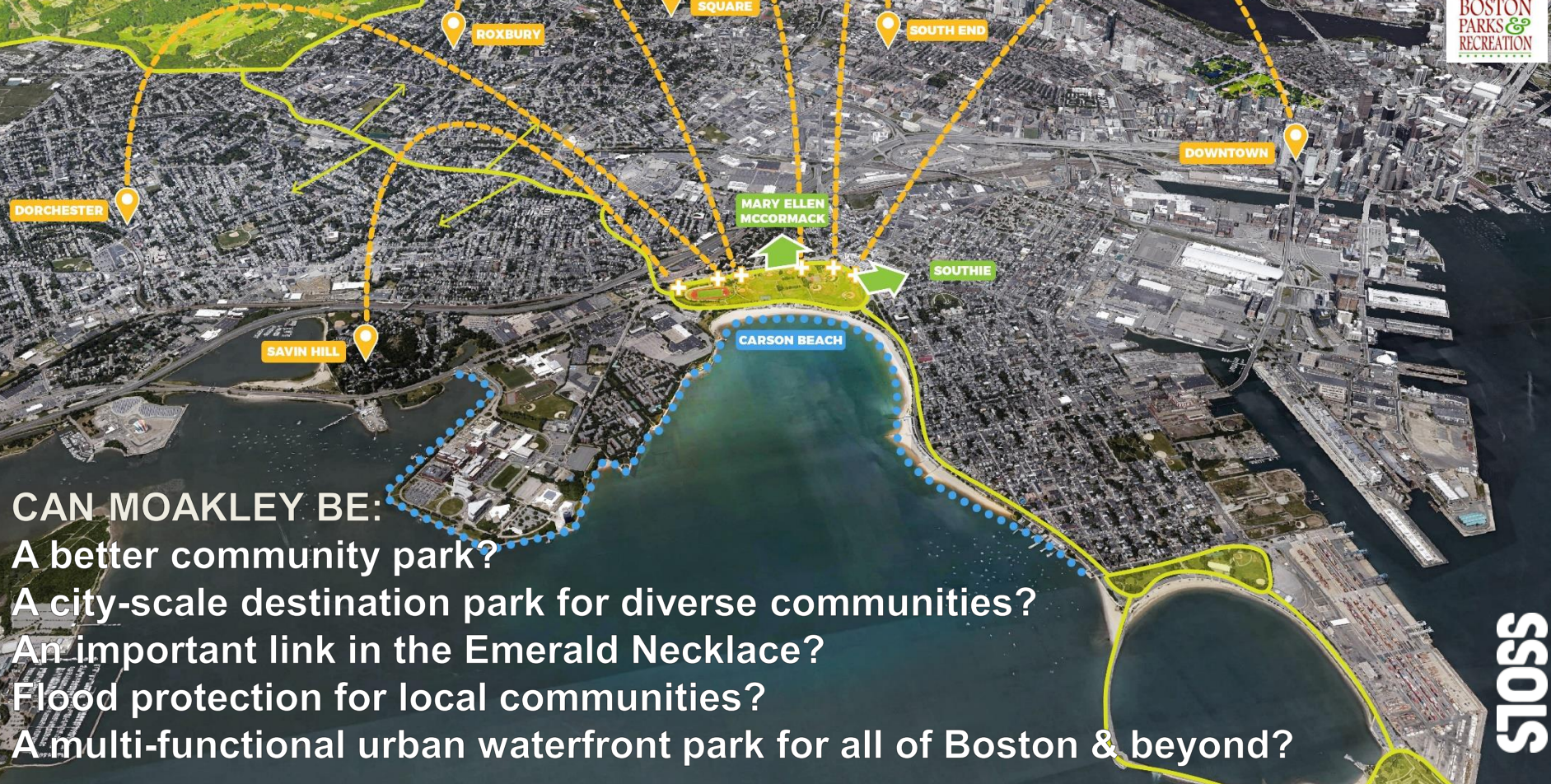


Langone/ Puopolo Park, North End

Sullivan Square Redesign

FRANKLIN PARK

2. CONNECT THE VISION

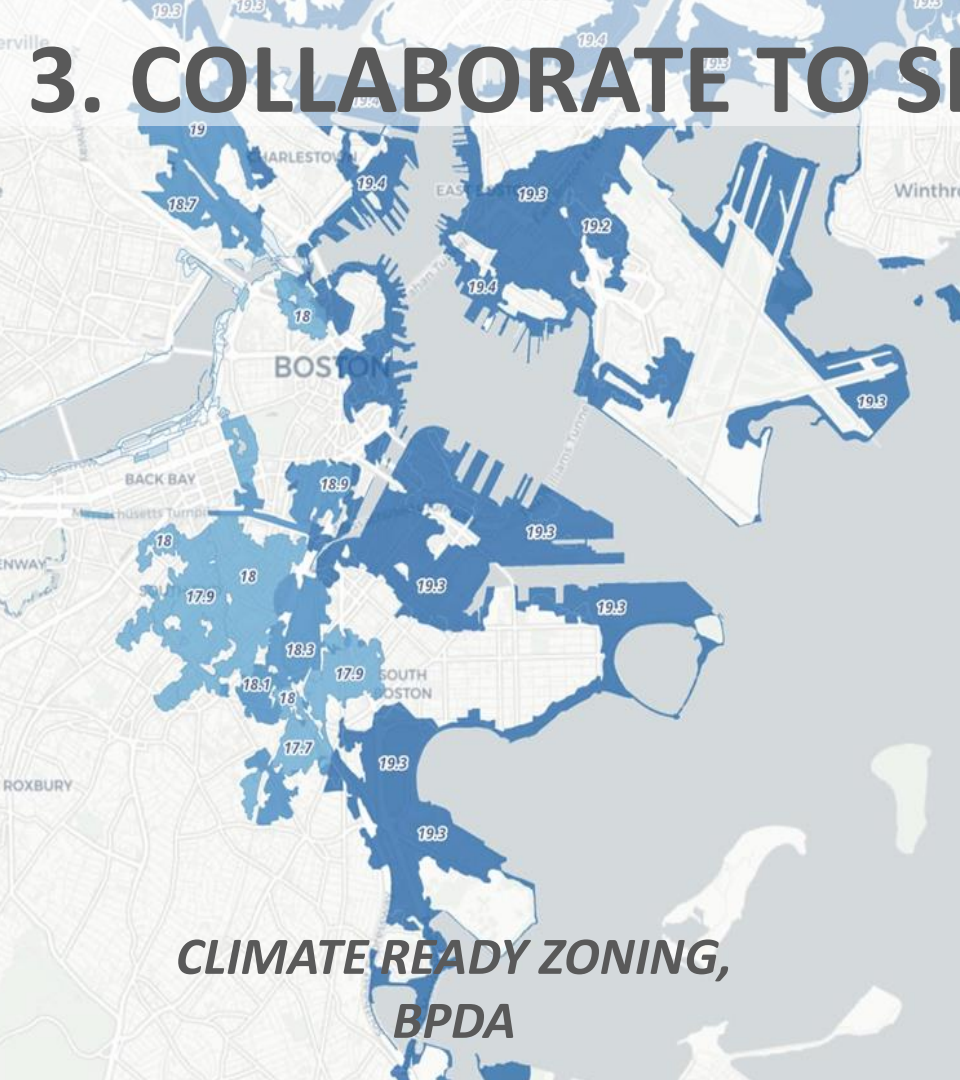


CAN MOAKLEY BE:

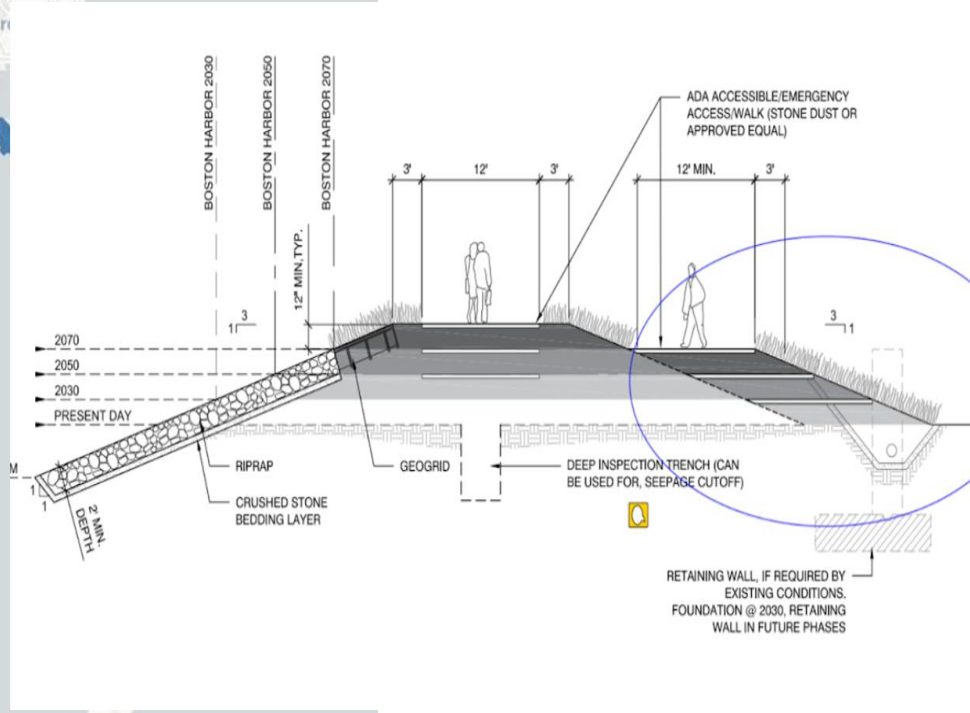
- A better community park?
- A city-scale destination park for diverse communities?
- An important link in the Emerald Necklace?
- Flood protection for local communities?
- A multi-functional urban waterfront park for all of Boston & beyond?

SSOLS

3. COLLABORATE TO SET STANDARDS



**CLIMATE READY ZONING,
BPDA**



**RESILIENT INFRASTRUCTURE,
PUBLIC WORKS**

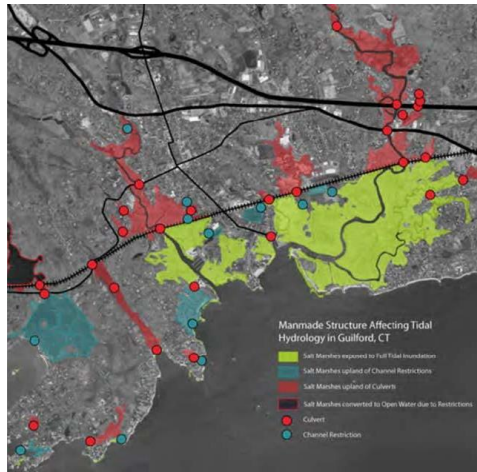
Coastal Adaptation: Working at Unconventional Scales

Alexander Felson

Associate Professor, Yale School of Architecture; Director and Principal Investigator, Yale F&ES + YSOA



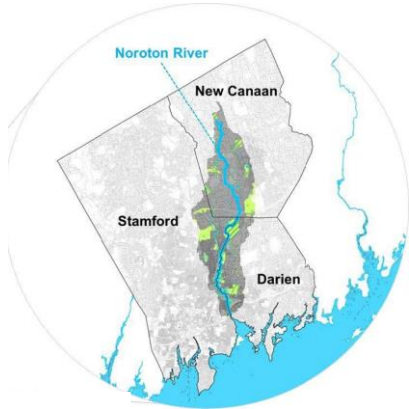
Bridgeport, CT



Guilford, CT



Connecticut HUD NDR



Noroton, CT



North Haven, CT



Portland, Oregon



How can we adapt urbanised flood prone areas most effectively, with the least disruption to people and the greatest benefit to economic, social and ecological resilience?

Resilient Landscapes Using Designed Experiments

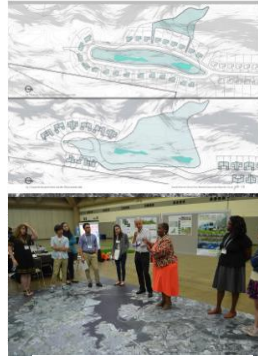
Ecological Research
Designed Experiments

Climate and Coastal
Adaptation

Green Infrastructure
through Landscape
Architecture

Site design,
Environmental Planning
& Constructed Nature

Social Ecological
Research and
Community



Earth Stewardship Initiative



MillionTreesNYC Reforestation Plan NY-CAP



Bridgeport Bioretention Gardens



American River Parkway



Thermo-Greenwall

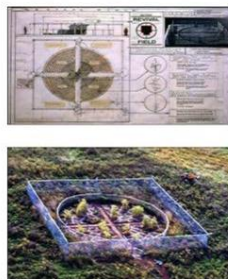


TNC Coastal Adaptation

Knowledge gaps

Pillars of knowledge

PRECEDENTS



REVIVAL FIELD, MEL CHIN
1991



OLENTANGY RIVER WETLAND
RESEARCH PARK



JENA PROJECT,
SWITZERLAND



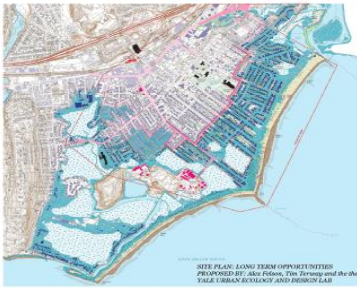
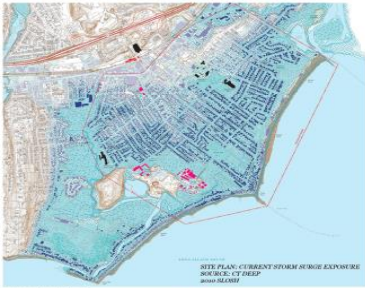
HUBBARD BROOK



CEDAR CREEK

We are making choices on incomplete information and at scales that may not be relevant to people or to ecological functions.

*How can researchers more effectively gather, analyze, and translate ecological and social ecological analysis into valuable information for designers?
 *Don't just rely on the best available science; what science do we need to know? How well do we have to understand a system before we are comfortable shaping it?



FAIRFIELD	
PROPOSED BY: Alex Felson, Tim Teruya and the other YALE URBAN ECOLOGY AND DESIGN LAB	
Water	Water
Wetland	Wetland
...	...

