

RESILIENT WOODS HOLE

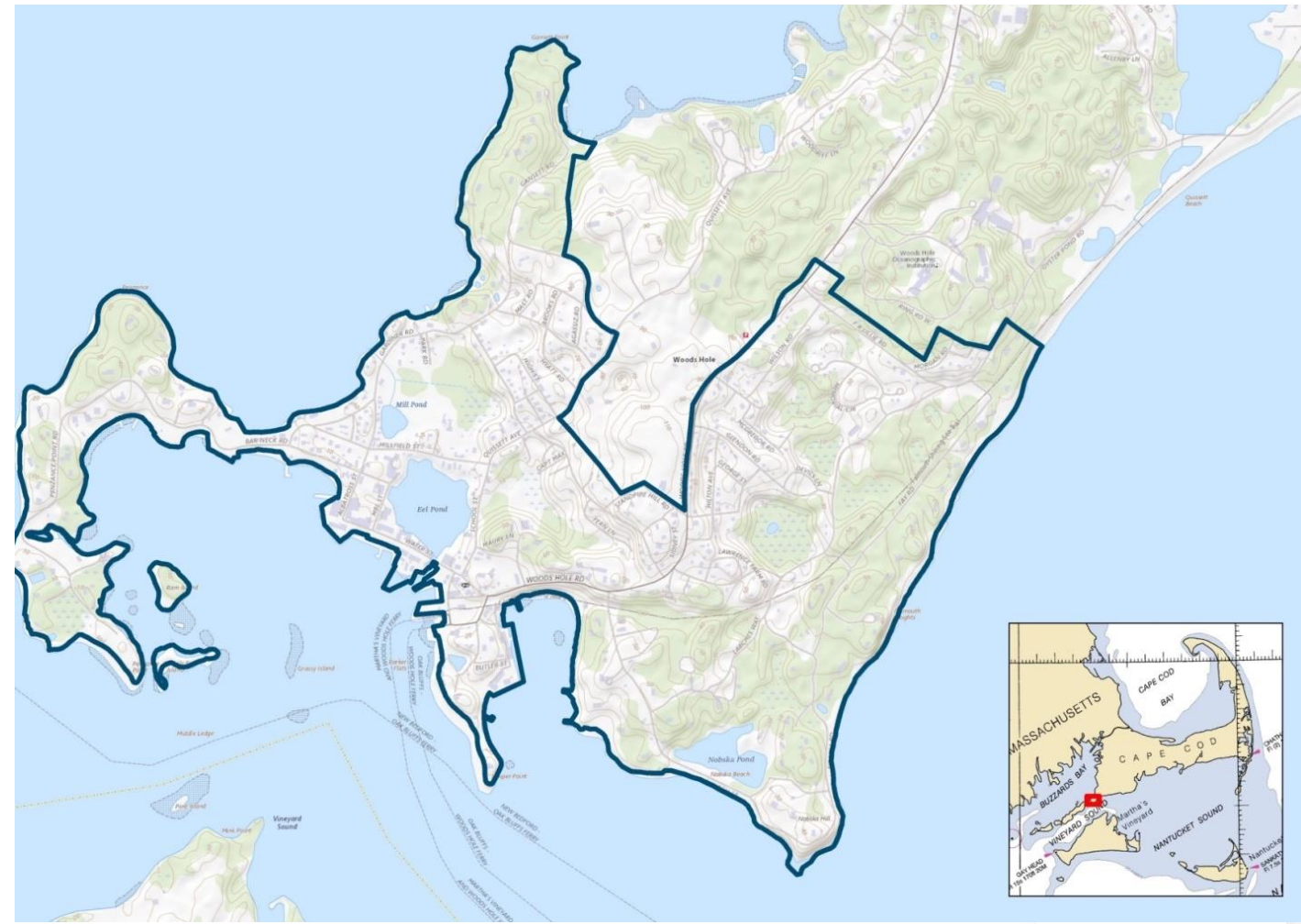
A **private-public** initiative to ensure that the vibrant and productive village of Woods Hole prospers well into the future with the advent of major climate impacts.

Led by:
Woods Hole Oceanographic Institution
Marine Biological Laboratory
NOAA Northeast Fisheries Science Center

In collaboration with:
Town of Falmouth
RWH Steering Committee

Paul Speer, PhD

Chief Operating Officer, Marine Biological Laboratory



STEERING COMMITTEE

Woods Hole Oceanographic Institution

Marine Biological Laboratory

NOAA NMFS NEFSC

US Coast Guard

Steamship Authority

US Geological Survey

Woods Hole Business Association

Woodwell Climate Research Center

Town of Falmouth – Acting Town Manager, Conservation Agent, Town Planner, Wastewater Department

Community Liaison (3)

Woods Hole Community Association

MA Office of Coastal Zone Management

Sea Education Association

Barnstable County Floodplain Manager/WHOI Sea Grant

WOODS HOLE VILLAGE INSTITUTIONS



WHOI

MBL

NMFS



At Risk: the Woods Hole Working Waterfront

At-risk: campus infrastructure

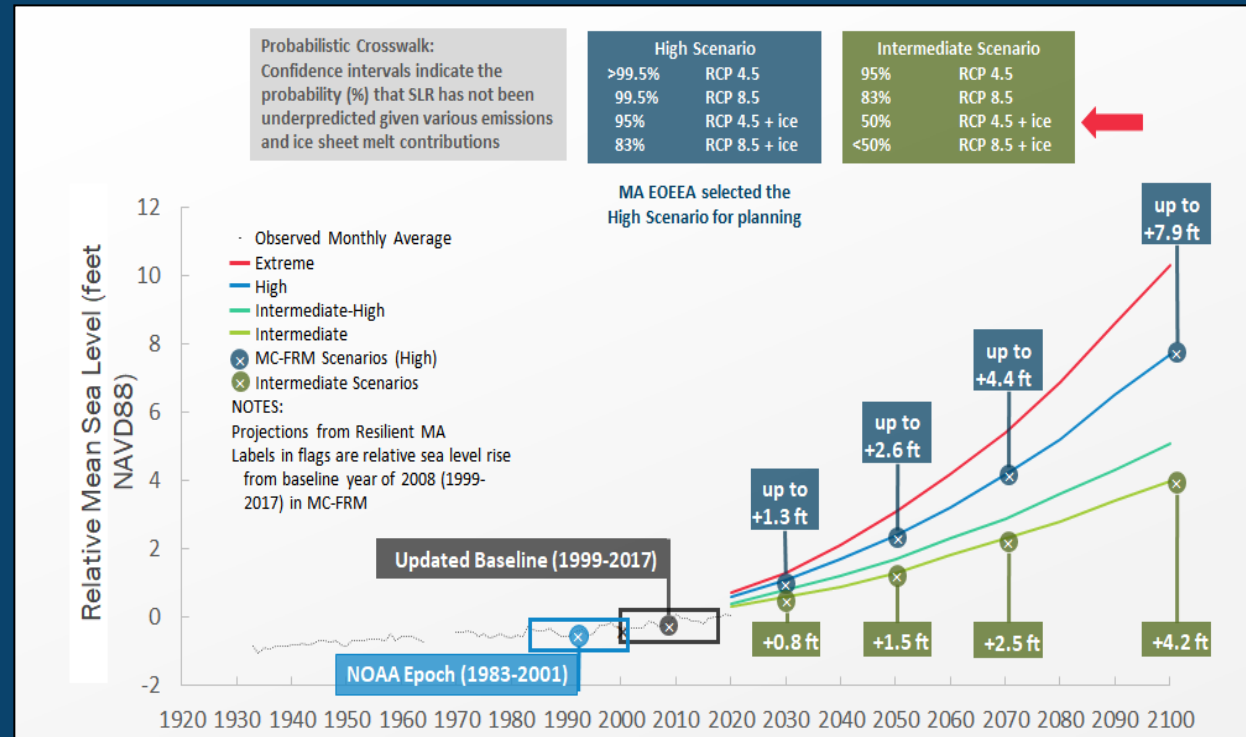
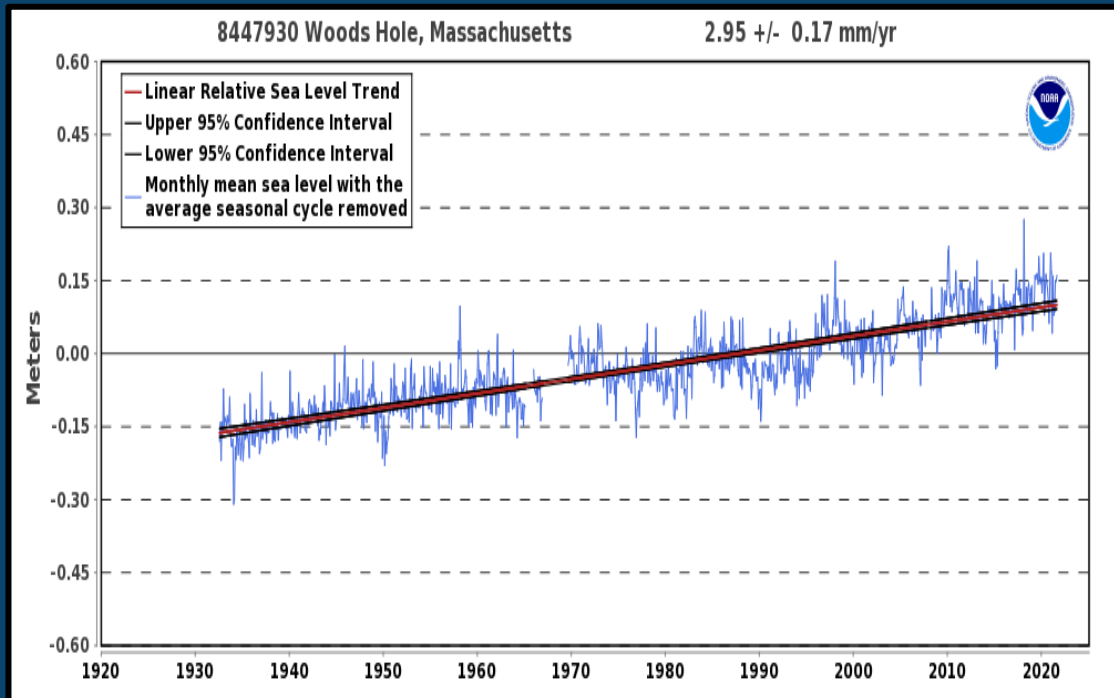


The MBL Collection Support Facility (right) and its predecessor during the 1938 hurricane

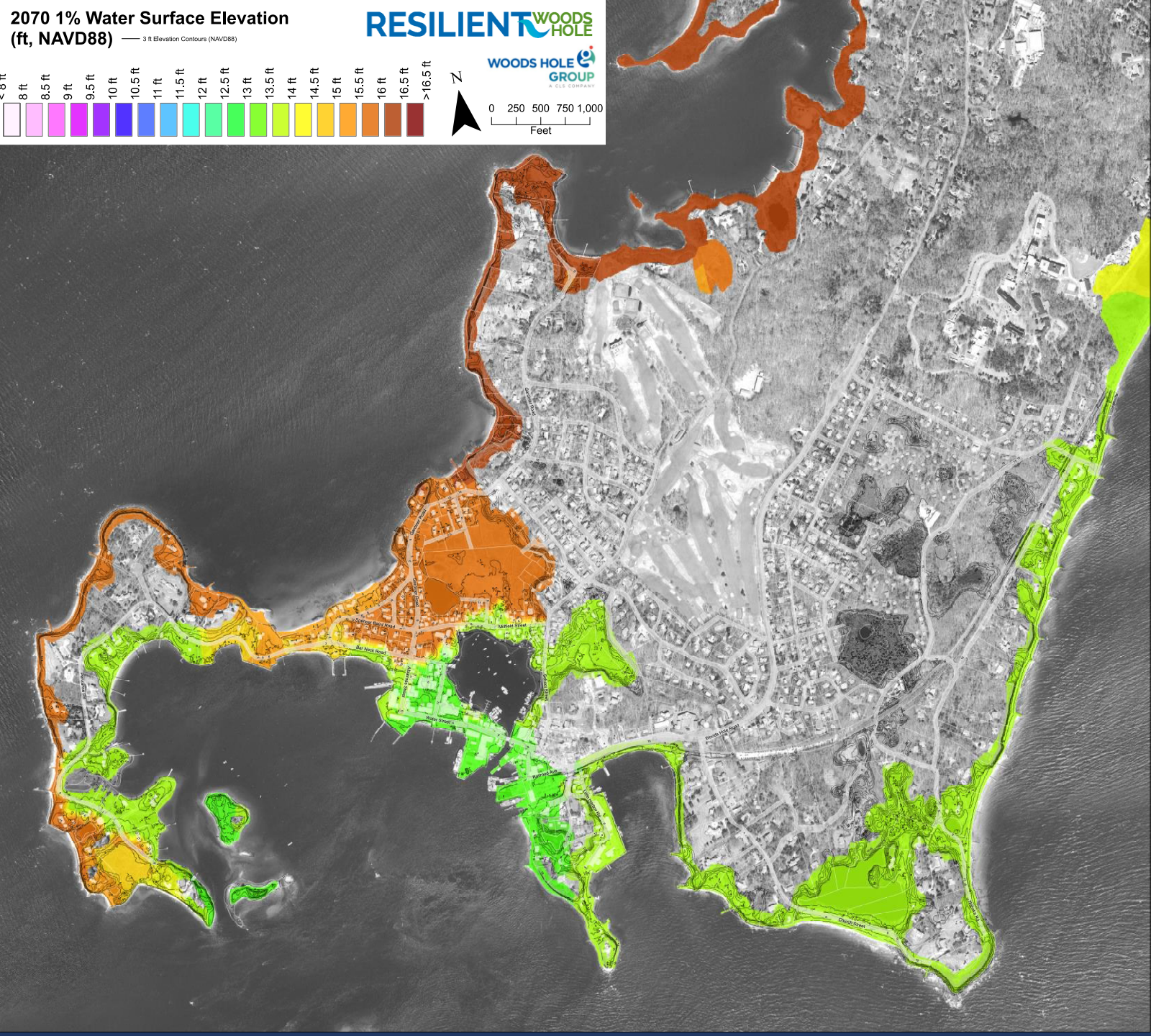
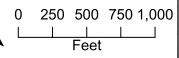
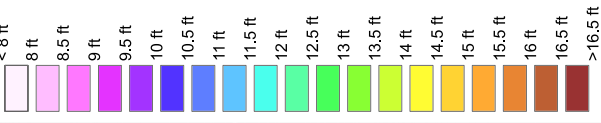
At-risk: village neighborhoods



Sea Level Rise: historic and projections



2070 1% Water Surface Elevation
(ft, NAVD88) — 3 ft Elevation Contours (NAVD88)



**GETTING BEYOND
ADMIRING THE
PROBLEM....**

ResilientWoodsHole Reports

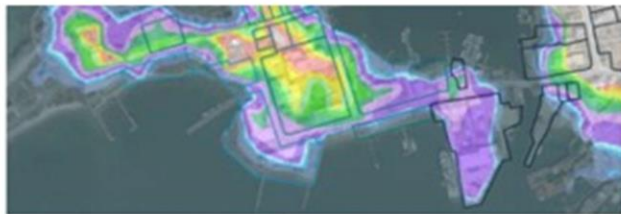
Phase 1

Phase 2

Phase 3 - Draft



Woods Hole Village Climate Change Vulnerability Assessment and Adaptation Plan



October 2020

PREPARED FOR:
Woods Hole Oceanographic Institution
Marine Biological Laboratory
NOAA Northeast Fisheries Science Center

PREPARED BY:
Woods Hole Group, Inc.
A CLS Company
107 Waterhouse Road
Bourne, MA 02532 USA



ResilientWoodsHole Phase 2 Report



January 2022

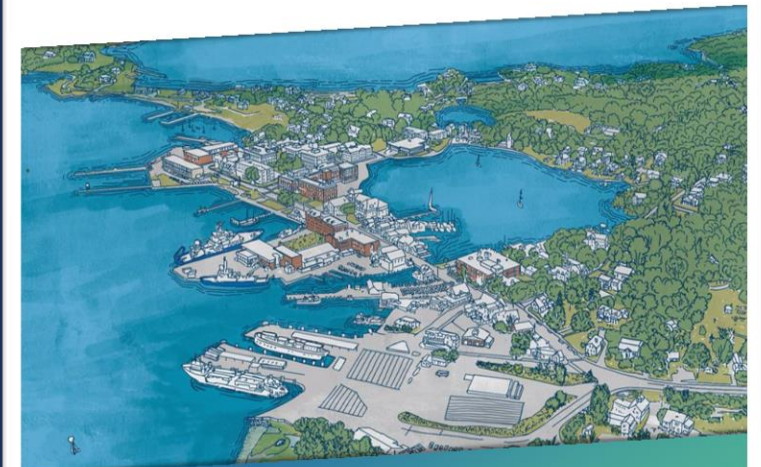
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ResilientWoodsHole Phase 3 Report

Funded by a CZM Coastal Resilience Grant

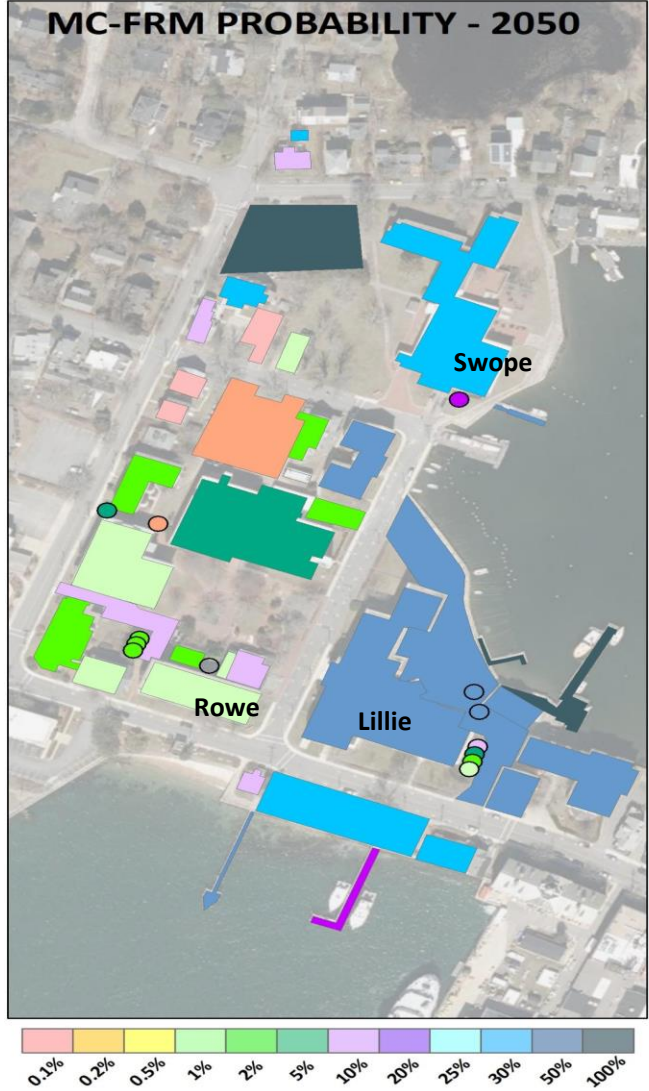


June 2022

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Phase one example: What does risk look like on the MBL campus in 2050



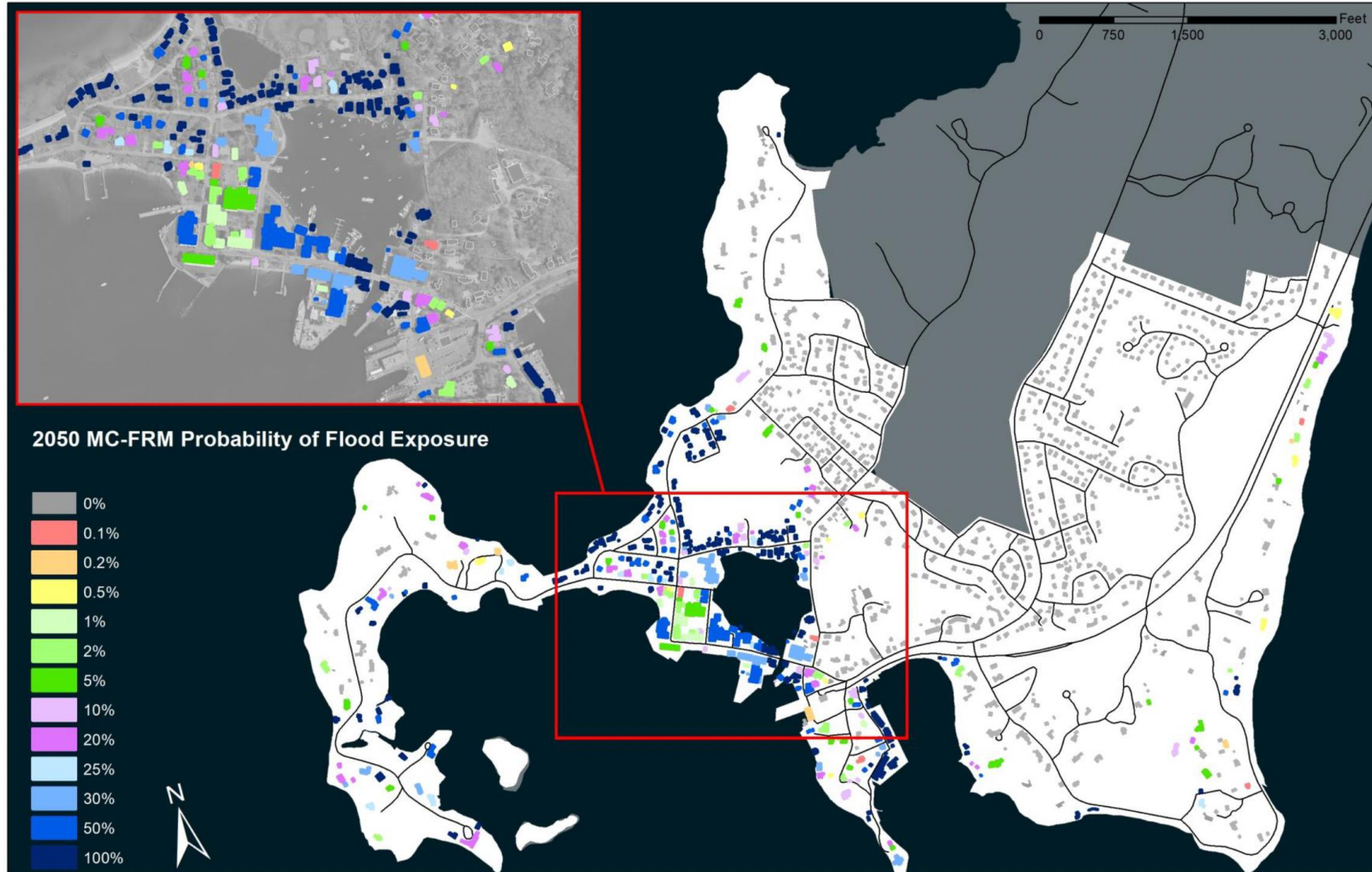
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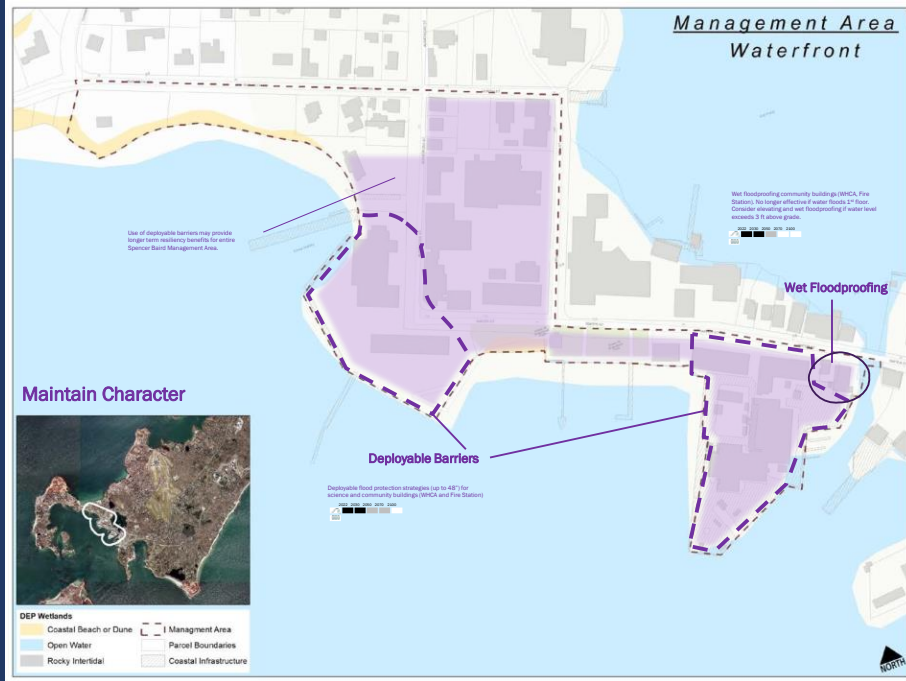


Phase 2 – Business/Residential/Lifelines CCVA



Phase 2 – Flood Pathways Analysis

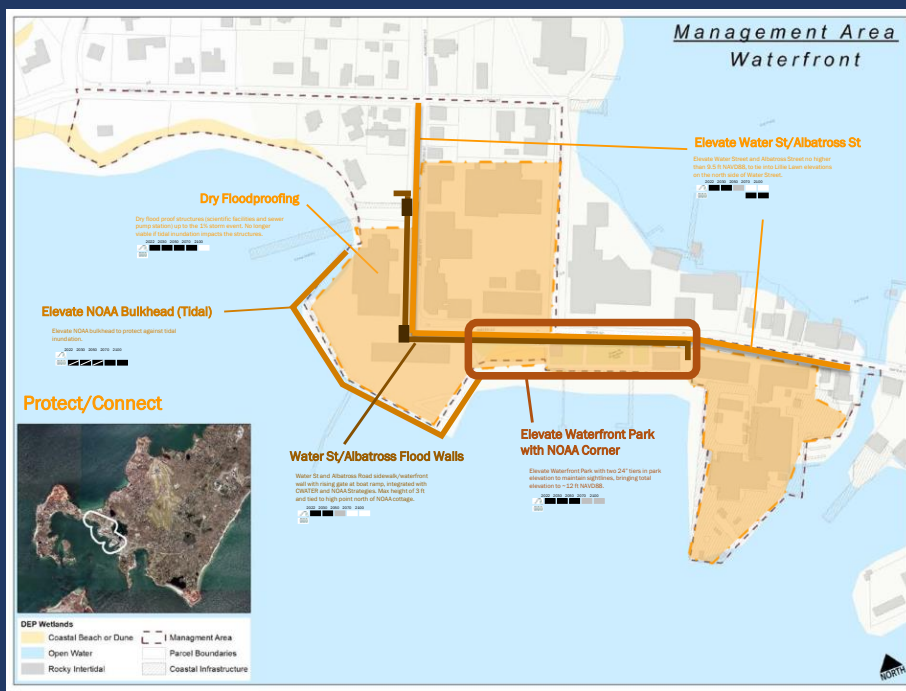
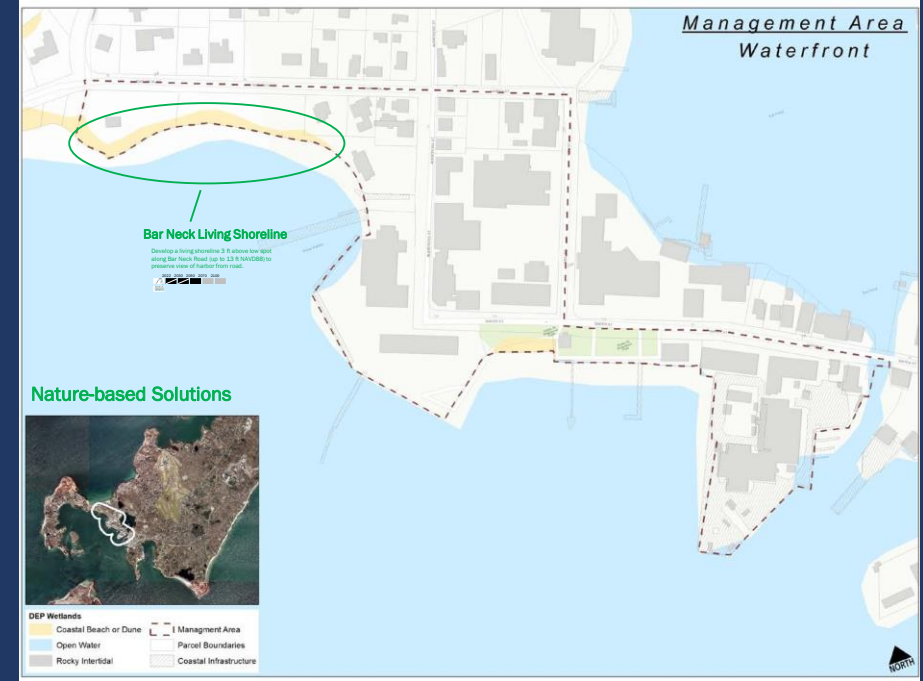




Phase 3: potential adaptations

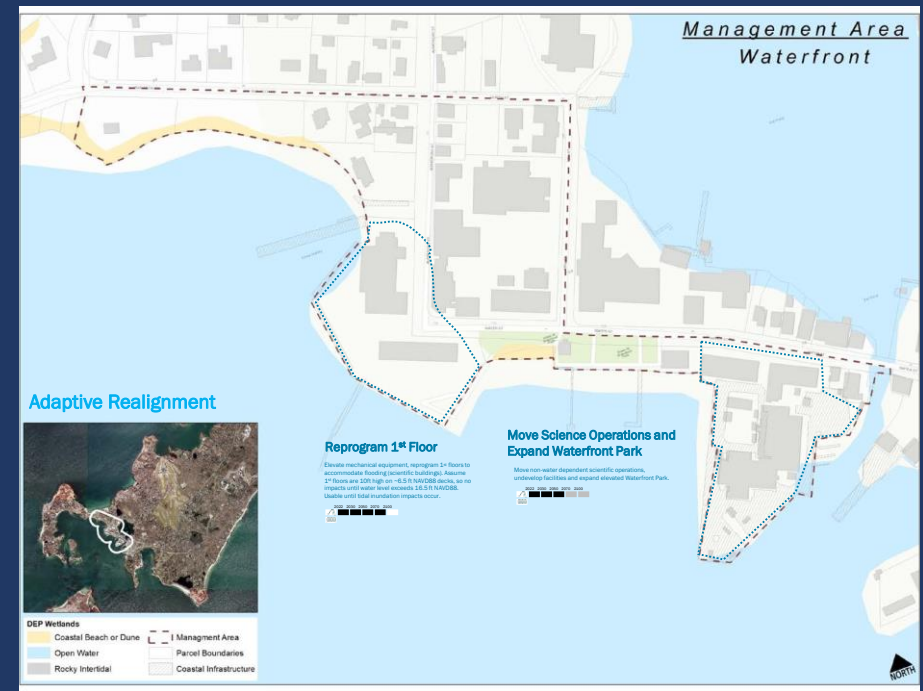
Maintain Character

Nature-based Focus



Protect/Connect

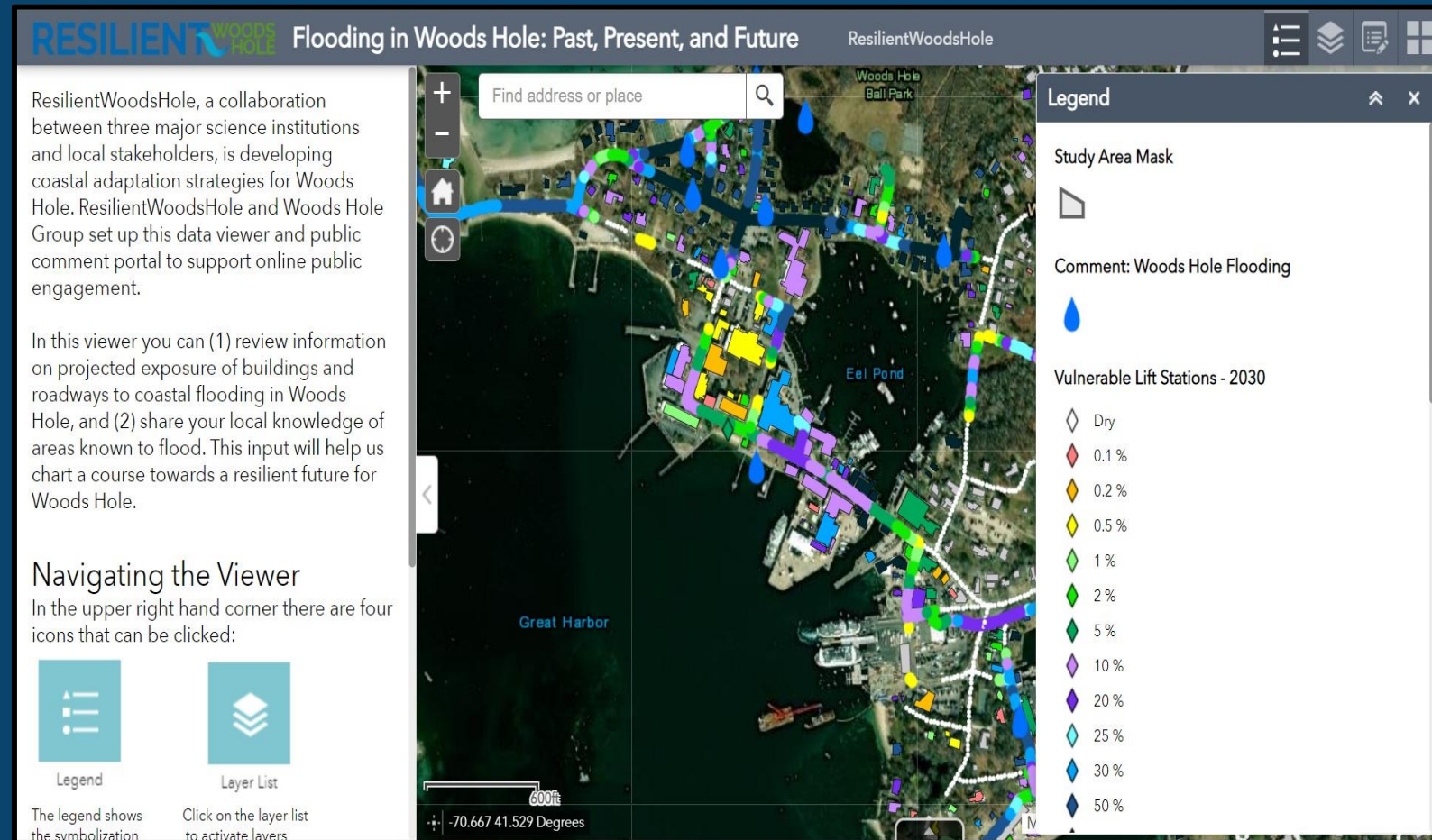
Adaptive Realignment



Community Involvement and Outreach

- *Public Symposium (Sept. '20)*
- *Presented to the Falmouth Select Board (Dec. '20)*
- *Steering Committee Mtgs (10/21, 12/21, 4/14, 4/29)*
- *Stakeholder Interviews*
- *Public Symposium 2.0 (Nov '21)*
- *Public Workshops (2/22, 5/22)*
- *Online Interactive Data Portal*
- *Focus Groups + Survey*
- *CZM Grant 2 award (Sept 22)*
- *Presented to Falmouth Select Board (Oct 22)*
- *RWH tours (summer/fall 22)*

Interactive Maps and Stakeholder Survey



What's Next ... Demonstrating Action

Provide a model for the Commonwealth and Country

Grant #2 – MA Coastal Resiliency Grant
\$499,981 with \$124,995 match, October
2022 – December 2023

Phase 4 - Demonstrating the Power of a
Private-Public Blue Economy Village
Partnership in Implementing Community
Climate Resiliency Solutions

Demonstration Projects (Short-Term)

Design and construct no-regrets scientific facility adaptation demonstrations at WHOI, MBL and NOAA (short-term)

Option 1



Custom Door + Window Flood Barrier

FRA FLOOD PANEL

BUDGETARY ESTIMATE

\$64,605.83

The Flood Risk America (FRA) Flood Panel creates a watertight seal to protect any opening against flood water and is highly resistant to heavy impact forces. Each panel is custom-engineered to meet individual installation requirements.

STORAGE SPACE



Some Storage Required

DEPLOYMENT SPEED



No Tools Needed

MORE INFO?



[LEARN MORE](#)

LEAD TIME



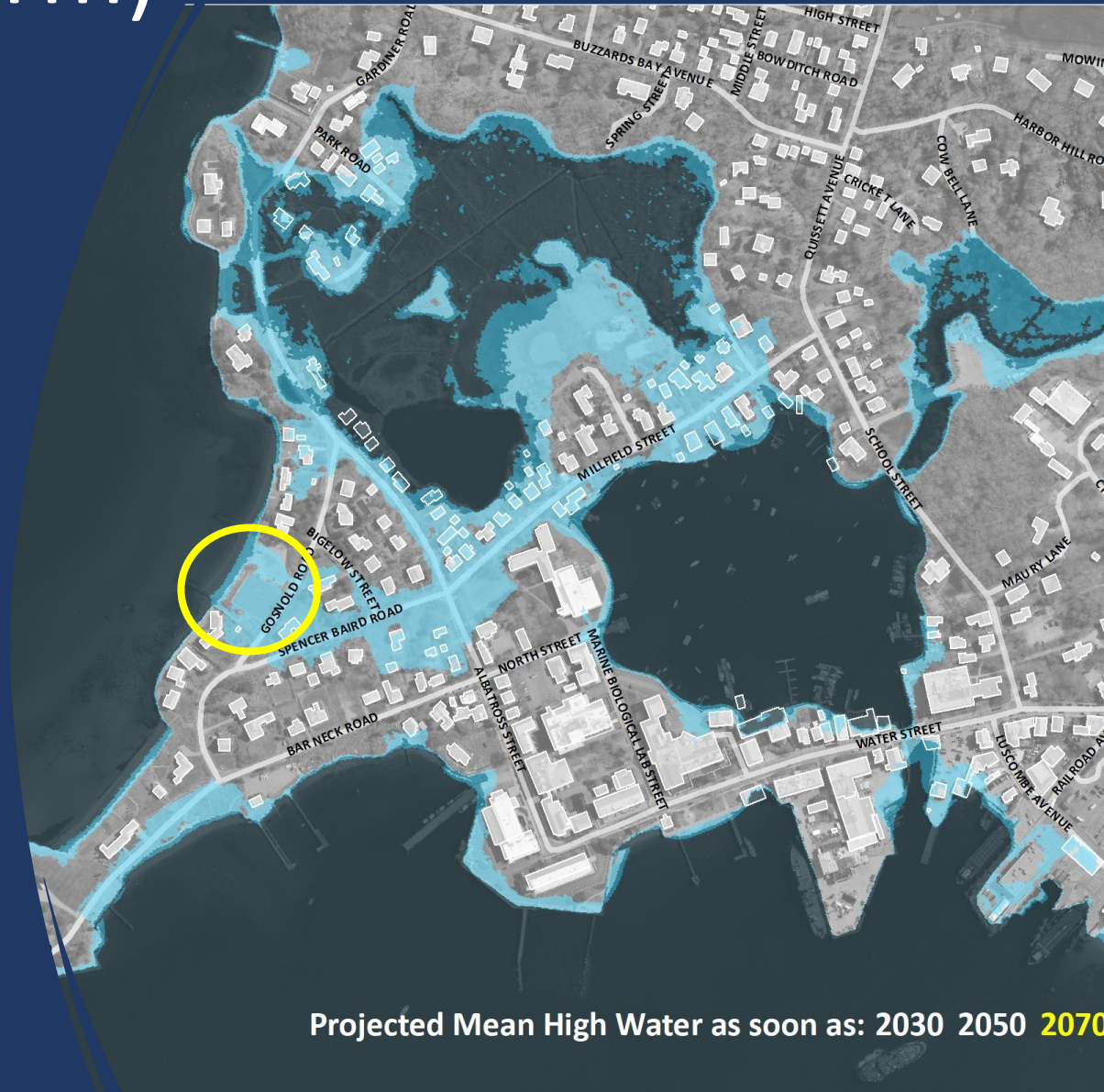
8 - 10 Weeks

UNIQUE FEATURES

- Customizable sizes
- Toolless deployment
- No permanent brackets
- <5lbs psf

Stoney Beach (Medium-Term)

Conduct a study and performance modeling on Stoney Beach to assess feasibility of cutting off a significant flood pathway through nature-based improvements



Outreach and Engagement (Long-Term)



Management Area Working Groups to provide in-depth input to localized resiliency opportunities



Utilize social technology to reach and franchise underserved and diverse residents and businesses



Develop and deliver climate and climate resiliency podcasts to educate and engage stakeholders



Produce an accessible Woods Hole Climate Walking Tour for all visitor types to physically connect with the urgent climate resilience needs and opportunities



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RESILIENT WOODS
HOLE