

Islands Conference
Mike Barrett, WHOI
June 2025

RESILIENT WOODS
HOLE

What is *ResilientWoodsHole*?



- **MISSION:**

ResilientWoodsHole is 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.

- **GOAL:**

Lead the way in developing and applying strategies for increasing coastal resiliency in Woods Hole and serve as model for other like-initiatives.

Who is *ResilientWoodsHole*?



STEERING COMMITTEE

Town of Falmouth: Town Manager, Conservation Agent, Town Planner, Wastewater Superintendent

USCG Woods Hole

Steamship Authority

USGS

Woods Hole Business Association

Neighborhood Representatives (3)

Woods Hole Community Association

Woodwell Climate Research Center

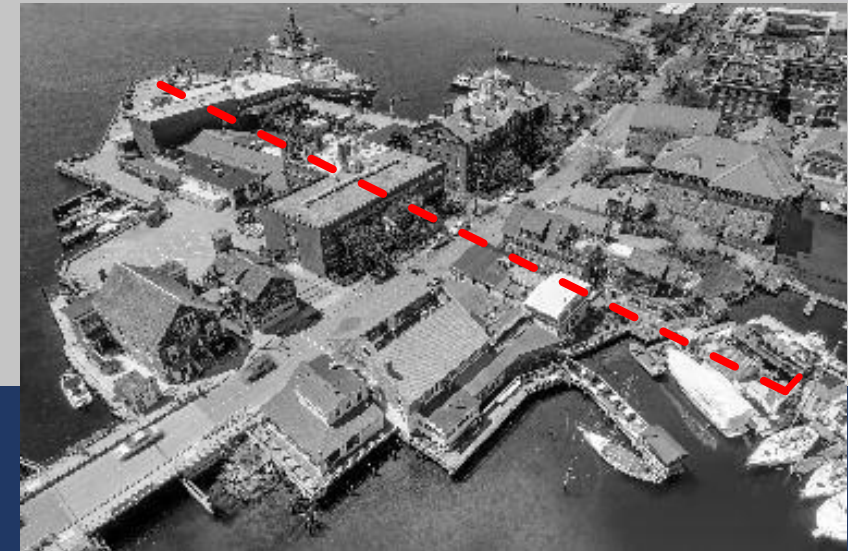
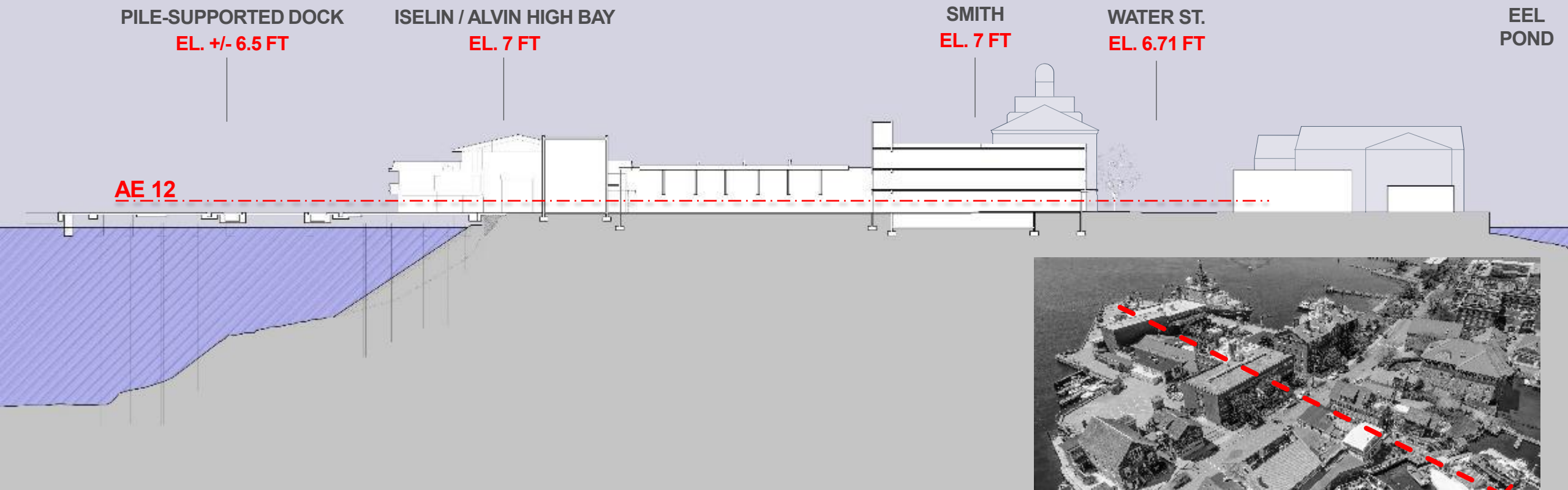
Barnstable County Floodplain

Sea Education Association

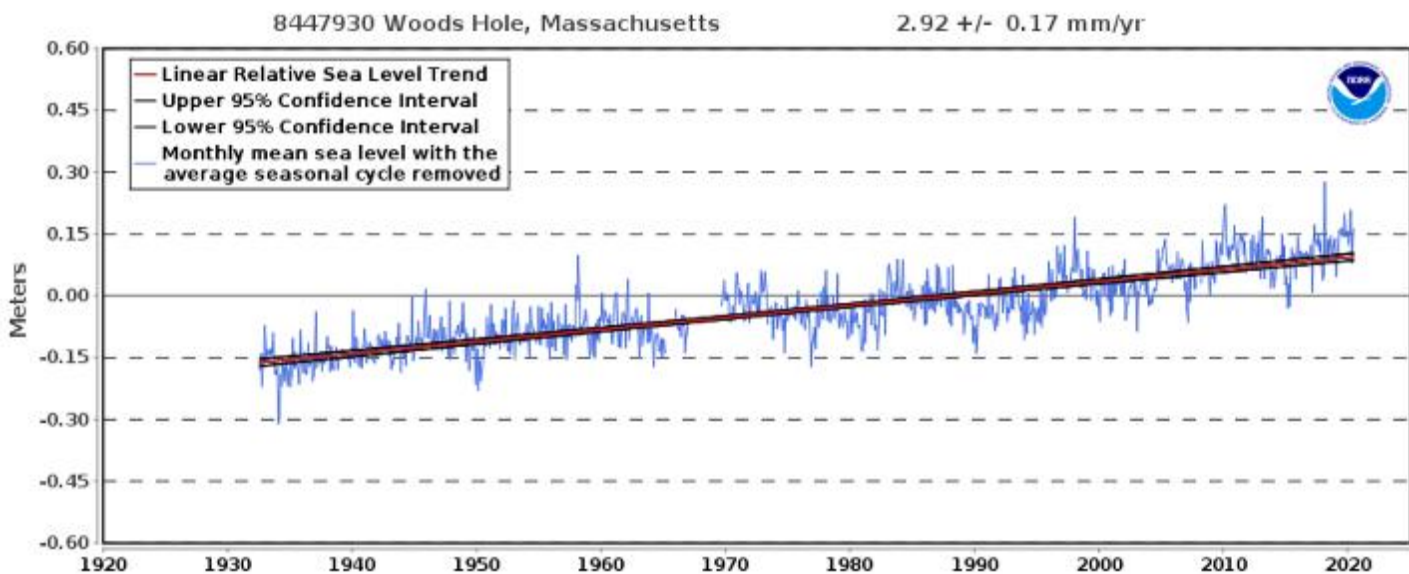
ResilientWoodsHole Timeline



Water Street Neighborhood | Looking West

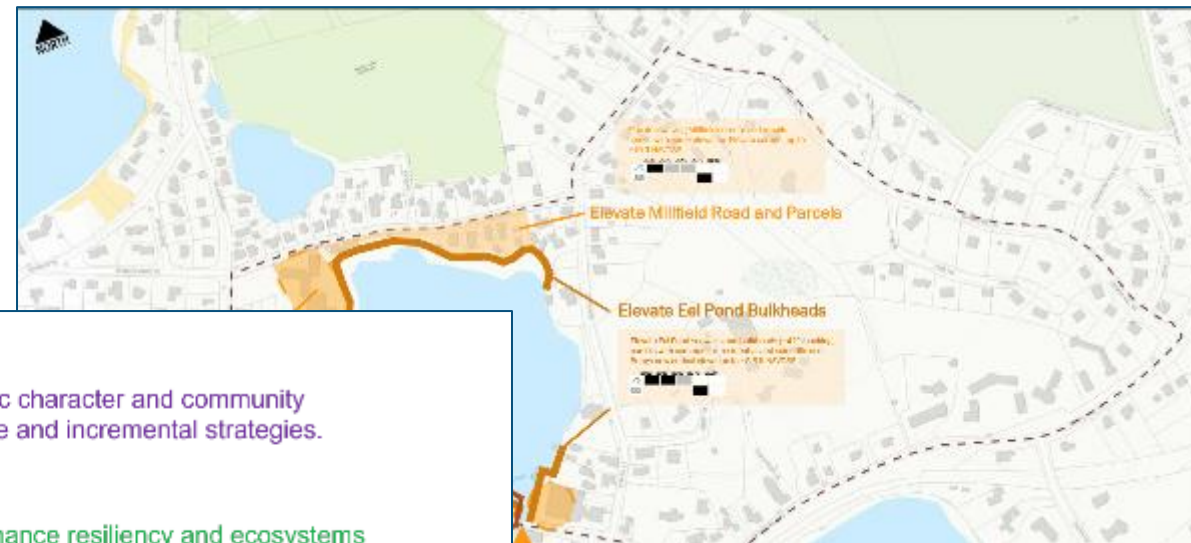
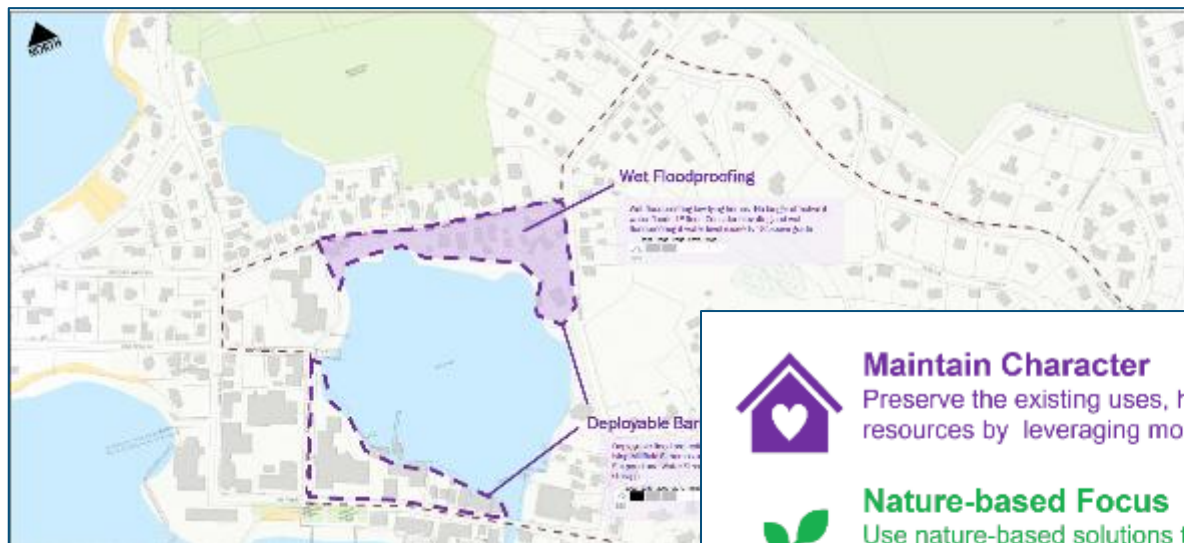


Sea Level Rise in Woods Hole



Mapping Flood Pathways





Maintain Character

Preserve the existing uses, historic character and community resources by leveraging moderate and incremental strategies.



Nature-based Focus

Use nature-based solutions to enhance resiliency and ecosystems services by extending the effectiveness and potential longevity of coastal green infrastructure and open space.



Protect/Connect

Emphasize protection and maintenance of existing infrastructure and ensure vital connectivity by using hard and/or hybrid solutions to reduce exposure of important features and preserve critical accessways.

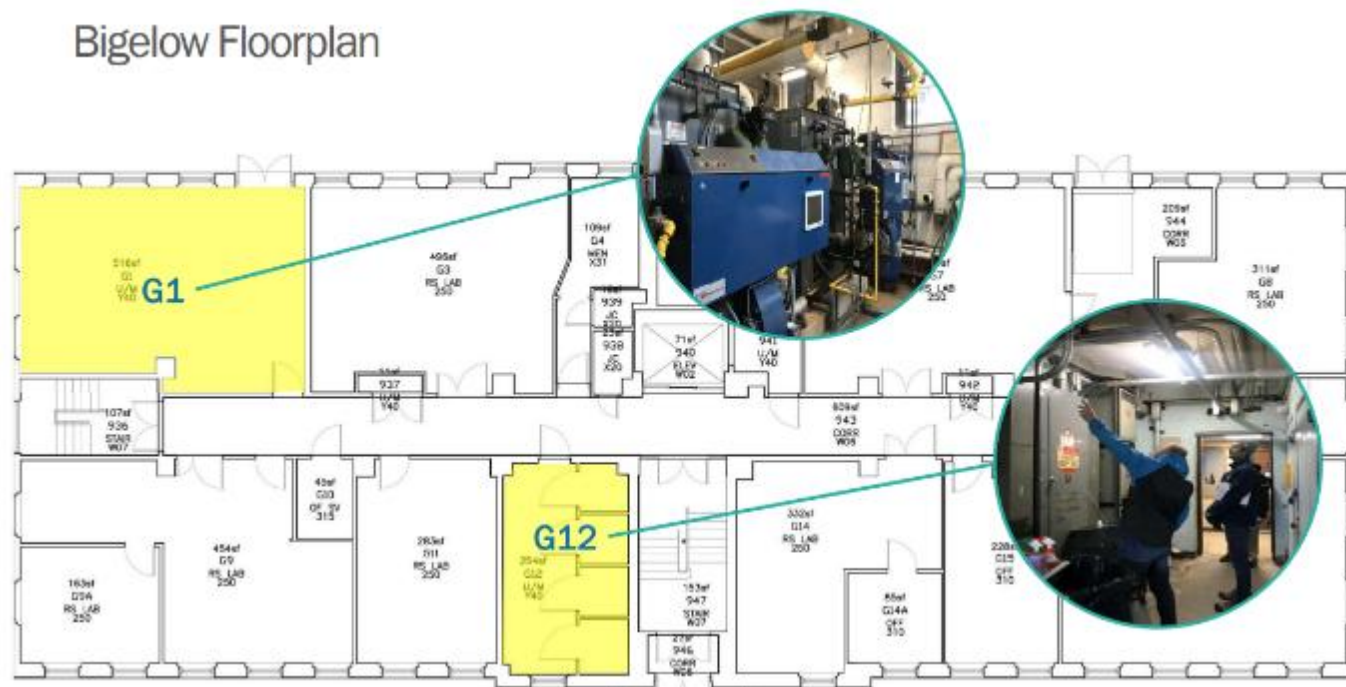


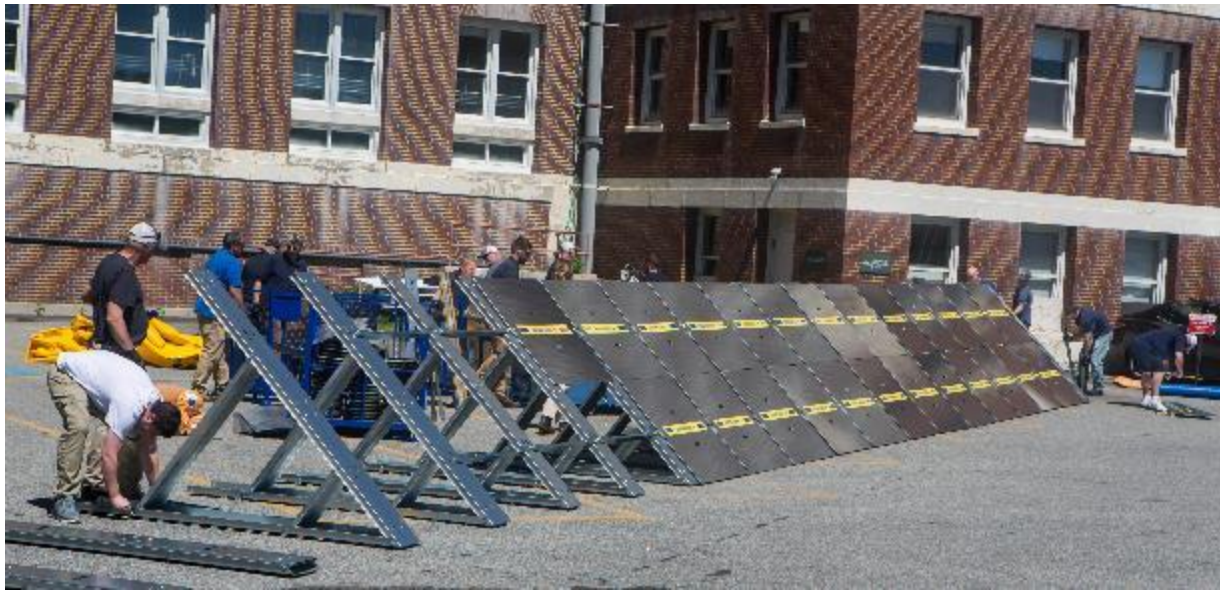
Living With Water

Reimagine Woods Hole through the lens of living with water by developing a multi-phased plan to accommodate water with lateral or vertical relocation where existing uses and configurations cannot reasonably continue.

Phase 4

Floodproofing Demonstration Projects at Bigelow and Lillie Lab





Town of Falmouth Workshop

Goal: Start to develop a draft of a conceptual infrastructure climate resilience plan for Woods Hole Village through engagement and buy-in from the town of Falmouth.

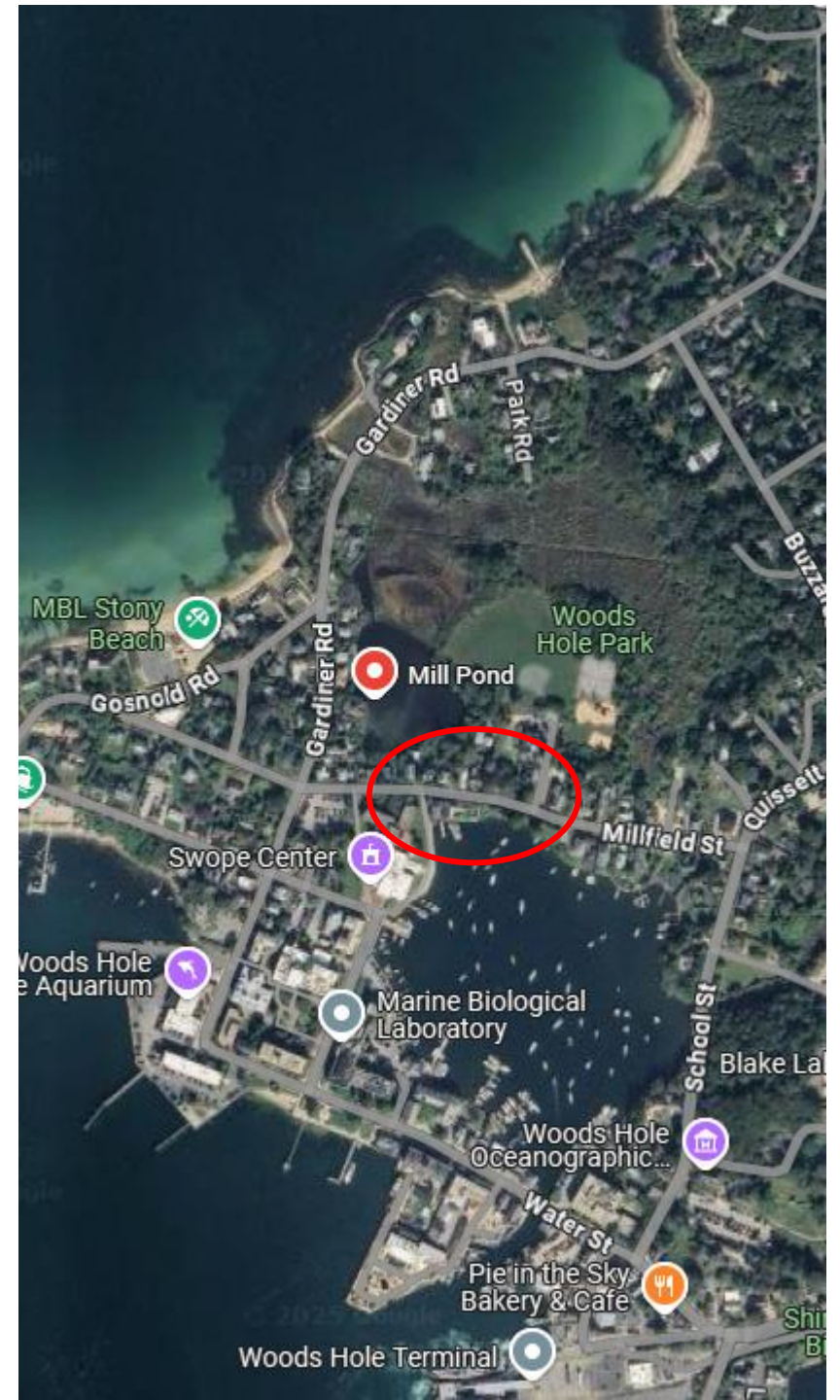
Objectives:

- **Objective 1:** Outline the climate impacts from sea level rise and coastal storm flooding in Woods Hole, review adaptation solutions, and RWH's recent work.
- **Objective 2:** Define goals and vision to encourage town buy-in for the conceptual infrastructure plan and climate resilient action in Woods Hole.
- **Objective 3:** Prioritize strategies for climate resilient action in areas of concern in Woods Hole in the near-term, medium-term, and long-term and identify implementation steps to carry out priority actions.
- **Objective 4:** Collaboratively develop a plan for action strategies that will inform the draft conceptual infrastructure master plan.

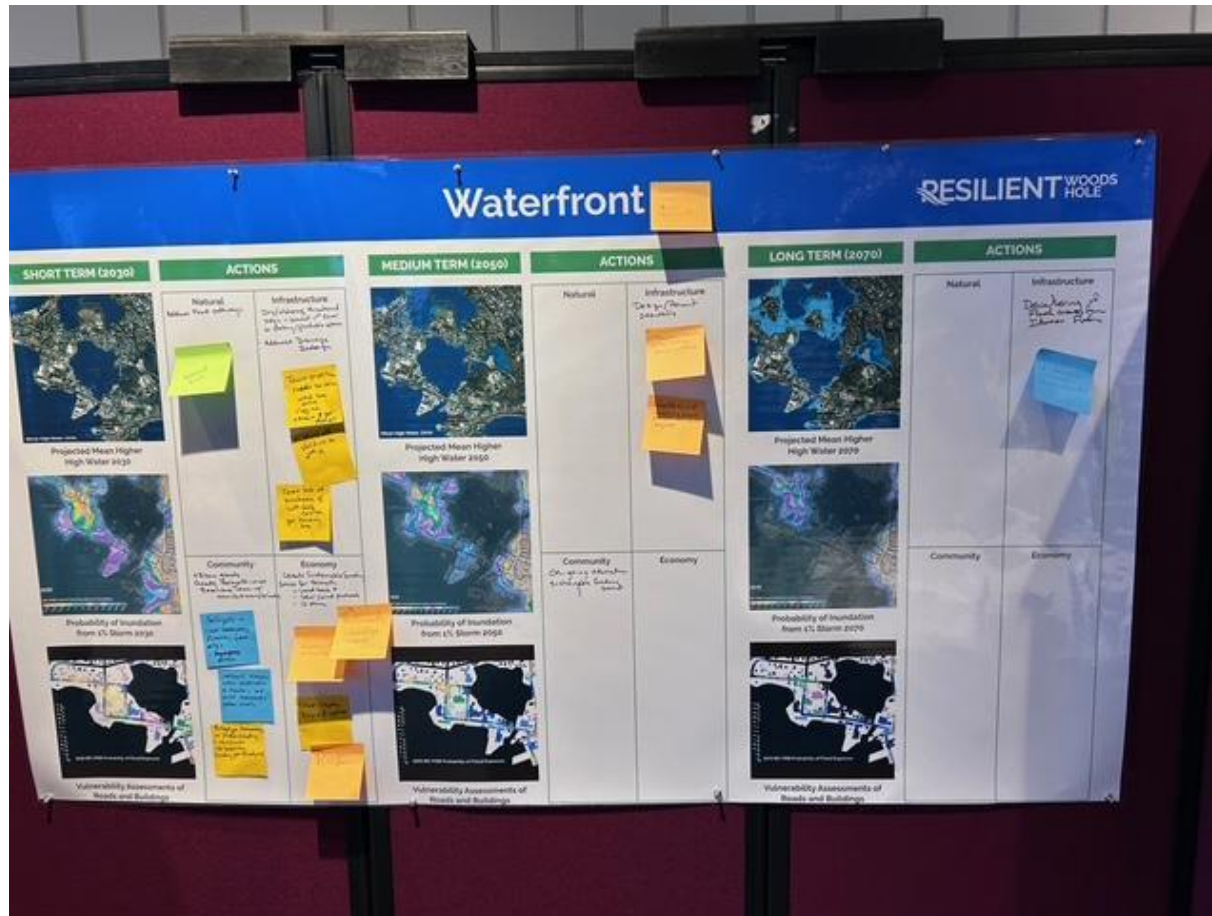
Attendees: RWH Steering Committee Members, Town of Falmouth staff, department leads, Board Members, Town Manager, Assistant Town Manager

Mill Pond/Eel Pond Actions

1. Conduct a feasibility Study for the Mill Pond/Eel Pond area to identify vulnerability, possible solutions, costs, and other details.
2. Reduce flood vulnerability through culvert replacements between Mill Pond and Eel Pond
3. Reduce flood vulnerability through addition of drainage to Gardner Rd seawall



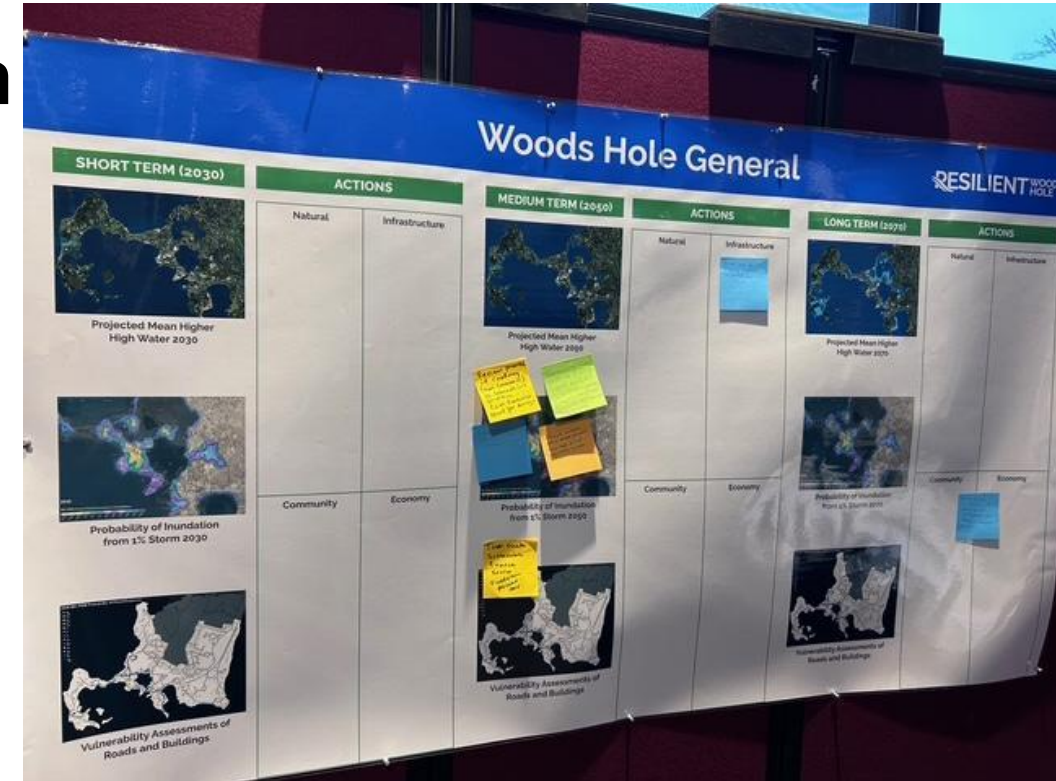
Water St. Actions



1. Flood proof sewer pump stations and develop emergency plans for sewer infrastructure.
2. Prioritizing roads to raise to address flood risk
3. Engage the local business community in resilience planning and action

General Woods Hole Actions

1. Develop an integrated emergency management plan for pre-planning and post-recovery.
2. Improve community communication and preparedness for climate impacts.
3. Establish a consistent funding source for resilience projects.



Summary and Report

1. Resilient sewer infrastructure
2. Feasibility study to replace culverts in the Mill Pond/Eel Pond area
3. Development of a comprehensive emergency management plan.

**Workshop
Report will be
out soon!**

<https://resilientwoodshole.org/reports/>

Complex change

- How do we get there?

Formula for Complex Change

- Vision
- + Skills
- + Incentive
- + Resources
- + Action Plan

CHANGE



Thank you...

On behalf of
ResilientWoodsHole

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www.resilientwoodshole.org
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