

# Assessment and Feasibility Design Study of Waterfront Town of Castine Kickoff Meeting



November 19th, 2024

# Meeting Agenda



## Project Meeting Agenda

**Project Name:** Assessment and Feasibility Design Study of Waterfront, Castine

**Date:** December 19th, 2024

**Time:** 4:30 PM – 5:30 PM

**GEI Project Number:** 2408817

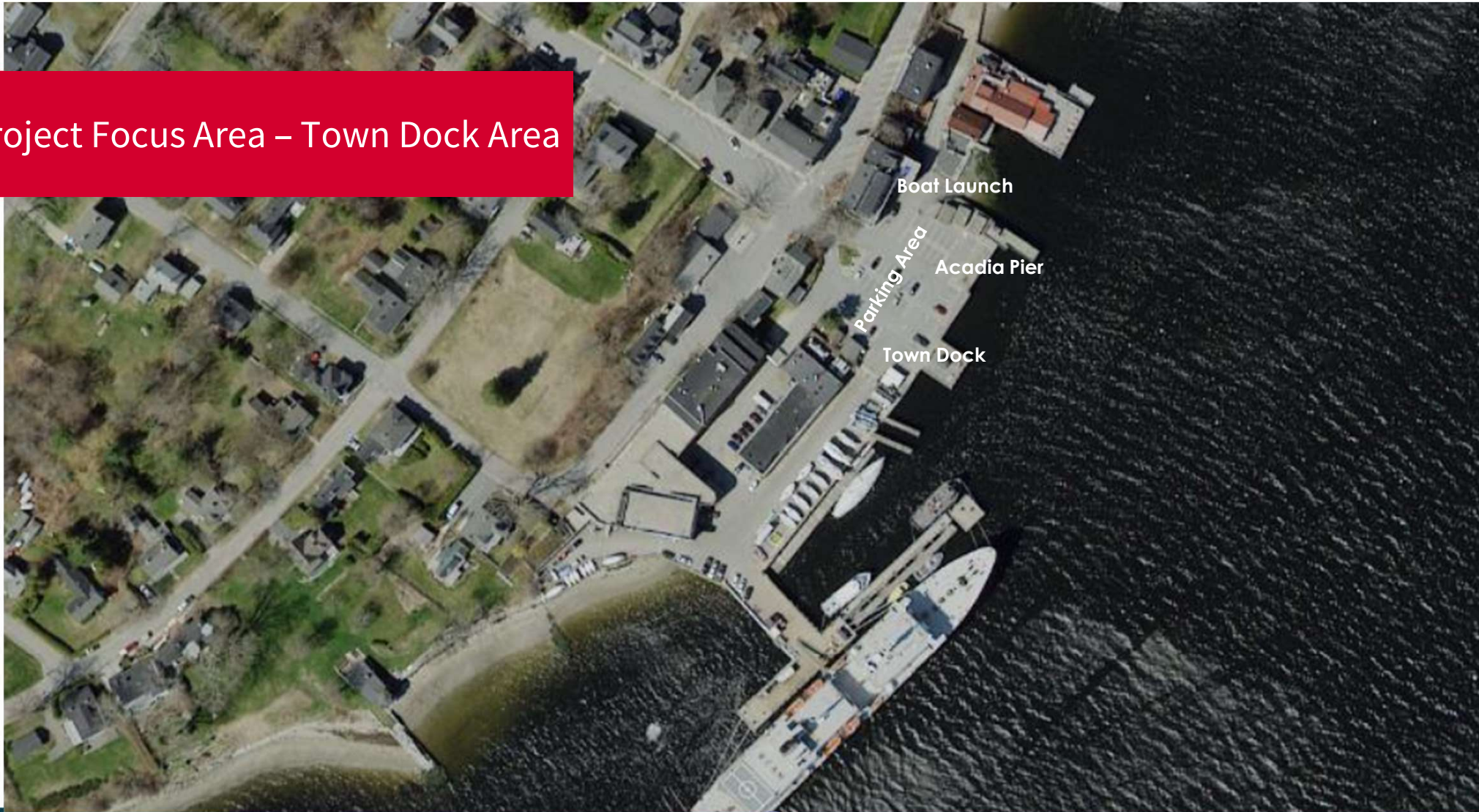
**Participants:**

<b>Project Team</b>	<b>Castine Project Team</b>
Lisa Vickers, GEI	Derik Goodine, Town Manager
Dan Bannon, GEI	Harbor Committee Members
Ilan Gasko, GEI	Selectboard Members
Noel Musson, The Musson Group	

### AGENDA

- 1. Welcome and Introductions**
  - Team roles and responsibilities
  - Primary points of contact
- 2. Discuss project goals and project area**
  - Assets of concern
- 3. Review existing and available data**
  - Data collection and base mapping
- 4. Review proposed flood scenarios for assessment**
  - Maine Climate Council
  - FEMA
- 5. Discuss a draft community engagement plan**
  - Public Workshops
  - Committee Meetings
  - Targeted Conversations
  - Town Website
- 6. Discuss overall project schedule, including:**
  - Next Deliverables
  - Community Event Schedule
  - Next Project Meeting
- 7. Next Steps**

# Project Focus Area – Town Dock Area



Boat Launch

Parking Area

Acadia Pier

Town Dock



## Project Goals

- **Assessment of Existing Conditions of Infrastructure for Castine's Town Dock Area**
- **Identify Flood Scenarios for Projected Sea Level Rise and Storm Surge**
- **Identify Assets of Concern and Mitigation Strategies**
- **Community Engagement**
- **Summarize Findings in a Final Report**



## Existing and Available Data

- **Existing Survey Data**
- **Existing GIS data**
- **Assessment Reports, Age Data, Etc. of Existing Infrastructure**
- **Adjacent Property Information**



# Vulnerability Study

GEI will look at coastal flooding due to high tide and storms for present and future conditions.

Proposed Sea Level Rise and Storm Surge Scenarios could include:

## Sea Level Rise:

- Maine Climate Council Sea Level Rise “Commit to Manage” and “Prepare to Manage” scenarios

## Storm Surge:

- FEMA storm surge stillwater elevations: “10-year storm,” “50-year storm,” and “100-year storm”
- Observed extreme water surface elevations, if available

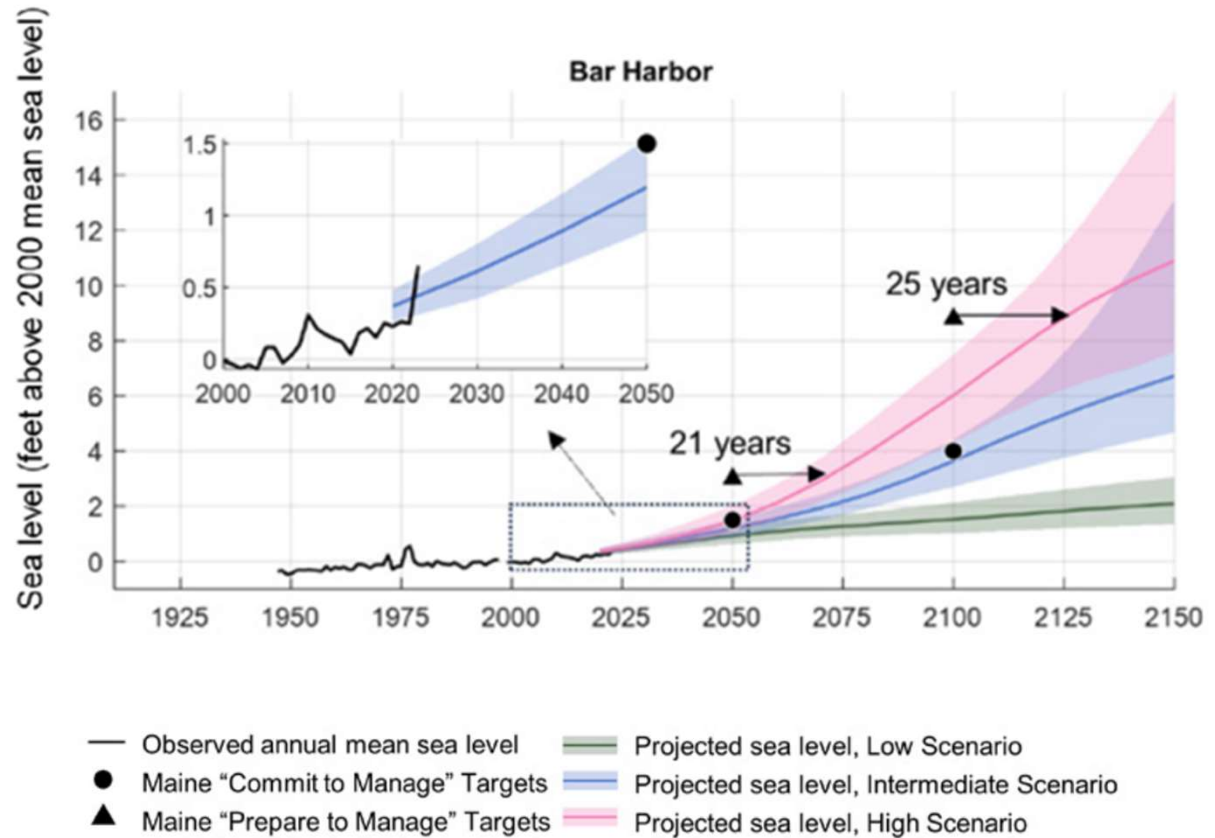
## Time Horizon:

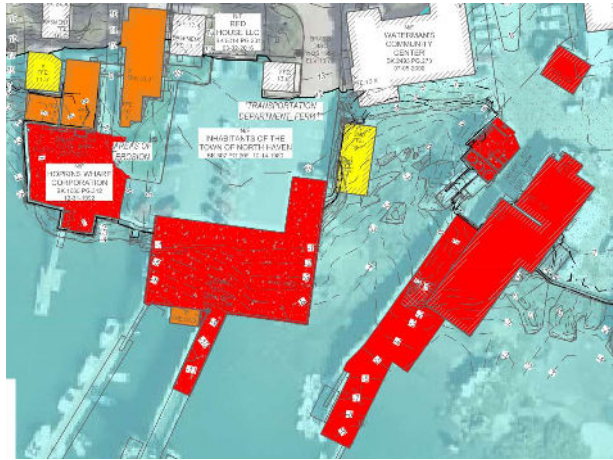
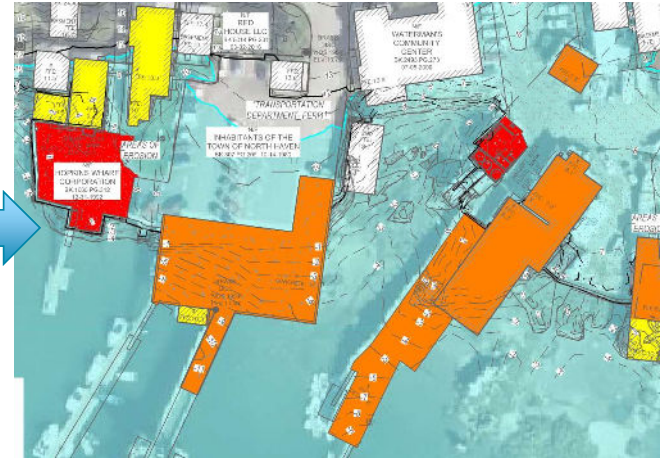
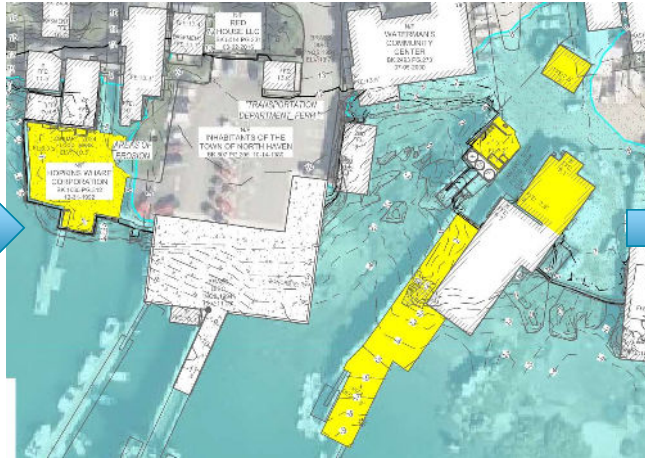
- Near-Term (Present Day)
- Medium-Term (2050, 2070)
- Long-Term (2100)



# Sea Level Rise Scenarios

Year	Bar Harbor Median (likely range)	
	Intermediate	High
2020	0.4 (0.3-0.5)	0.4 (0.3-0.5)
2030	0.6 (0.4-0.8)	0.6 (0.4-0.9)
2040	0.9 (0.7-1.2)	1.0 (0.7-1.4)
2050	1.2 (0.9-1.5)	1.5 (1.0-2.0)
2060	1.5 (1.2-2.0)	2.1 (1.5-2.8)
2070	1.9 (1.5-2.4)	2.9 (2.2-3.7)
2080	2.4 (1.9-3.0)	3.9 (2.8-4.9)
2090	3.0 (2.3-3.6)	4.9 (3.5-6.2)
2100	3.6 (2.7-4.4)	6.0 (4.3-7.5)
2110	4.4 (3.1-5.4)	7.2 (5.2-8.9)
2120	5.0 (3.5-6.7)	8.3 (5.9-10.5)
2130	5.6 (4.0-8.4)	9.3 (6.5-12.4)
2140	6.2 (4.3-10.6)	10.2 (7.0-14.6)
2150	6.7 (4.7-13.1)	10.9 (7.6-16.9)





**LEGEND**

- PROJECTED LIMITS OF FLOODING
- ASSET NOT INUNDATED
- ASSET INUNDATED < 1.5 FT
- ASSET INUNDATED 1.5 FT AND < 3.0 FT
- ASSET INUNDATED 2.0 FT AND < 3.0 FT
- ASSET INUNDATED 2.0 FT

**NOTES**

1. ALL ELEVATIONS ARE REFERENCED TO NAVD8S.

ELEVATION	MIN	MAX
BFE	17.80	17.80
RA1	12.90	46.00
MEAN	16.84	44.85
MHW	110.21	44.81
MS	45.15	1.25
M.W.	45.25	1.25
M.L.W.	9.00	5.00

\*PROJECT DATUM

- MONUMENT FOUND
- PPE OR ROD FOUND
- APPROXIMATE RIGHT-OF-WAY LINE
- APPROXIMATE PROPERTY LINE
- EASEMENT LINE
- CONTOURS - MAJOR
- CONTOURS - MINOR
- HIGHEST ANNUAL TIDE: 6.7' NAVD8S
- MEAN HIGHER HIGH WATER: 4.34' NAVD8S
- MEAN HIGH WATER: 4.03' NAVD8S
- BASE FLOOD ELEVATION: 1.7' NAVD8S
- EQUIPMENT BUILDING
- ASPHALT
- GRAVEL
- EROSION
- RIPRAP
- EXPOSED BEDROCK
- ROCKWOOL
- CONCRETE
- UTILITY POLE AND ANCHOR
- HYDRANT AND VALVE
- SANITARY SEWER STRUCTURE
- UNKNOWN STRUCTURE
- TELECOM STRUCTURE
- STORM WATER STRUCTURE
- LIGHT POLE
- SPOT ELEVATION
- TEMPORARY BENCH MARK
- FINISH FLOOR ELEVATION





## Community Engagement Plan

- **Public Workshop 1**
  - Informational presentation and data gathering from participants
- **Committee Meetings**
  - Engagement and updates to committee and public
- **Targeted Conversation**
  - Engagement with key community members and property owners
- **Town Website**
  - Information and transparency
- **Public Workshop 2**
  - Discussion of findings and next steps



# Project Schedule

PROPOSED PROJECT SCHEDULE				
Town of Castine Assessment and Feasibility Design Study of Waterfront				
GEI TASK	MONTH			
	2024 Q4	2025 Q1		
	Dec	Jan	Feb	Mar
Kick-off Meeting				
1 <sup>st</sup> Community Presentation Event*				
Waterfront Survey Assessment				
<i>Site Visit*</i>				
<i>Flood Vulnerability</i>				
<i>Adaptation Strategies, Timeline and Implementation Strategy</i>				
Final Report and Community Engagement Presentation				
Monthly Check-in Meetings				

\*To be scheduled on the same day



## Next Steps

- **Schedule Site Walk and Community Engagement Presentation**
- **Schedule Monthly Check-in Meetings**
- **Flood Vulnerability, Adaptation Strategies**
  - **Compile and review existing information**



Thank you!  
Questions?

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Consulting  
Engineers and  
Scientists

