

2026 Update to
the New
Hampshire
Coastal Flood
Risk Summary

Project Managers:

Kirsten Howard and Jennifer Gilbert, New
Hampshire Department of Environmental
Services Coastal Program

Lisa Wise, Strafford Regional Planning
Commission

In partnership with:

New Hampshire Sea Grant / UNH Cooperative
Extension, Science Team



New Hampshire Coastal Flood Risk Summary

PART 1: SCIENCE | 2025 UPDATE

PREPARED FOR THE NEW HAMPSHIRE COASTAL FLOOD RISK SUMMARY STEERING COMMITTEE.
REPORT PUBLISHED BY THE UNIVERSITY OF NEW HAMPSHIRE (UNH), DURHAM, NH.



Citation: NH Coastal Flood Risk Summary Science Team. (2025). New Hampshire Coastal Flood Risk Summary – Part I: Science. Prepared for the New Hampshire Coastal Flood Risk Summary Steering Committee. Report published by the University of New Hampshire (UNH), Durham, NH. <https://dx.doi.org/10.34051/p/2025.11>

Some Key Findings



Sea level rise

New Hampshire sea level will rise approximately 1 foot between 2005 and 2050; more than it rose in the past 100 years.



Coastal storms

New Hampshire has seen fewer and more intense extratropical storms. Flooding from storms will get worse.



Groundwater rise

Sea level rise causes groundwater tables to rise much further inland, resulting in new wetlands and other impacts.



Precipitation

Precipitation is projected to increase 13-32% during the winter and spring with little change expected in the summer and fall.

TIME & TIDE




Sea
Grant
NEW HAMPSHIRE



University of
New Hampshire



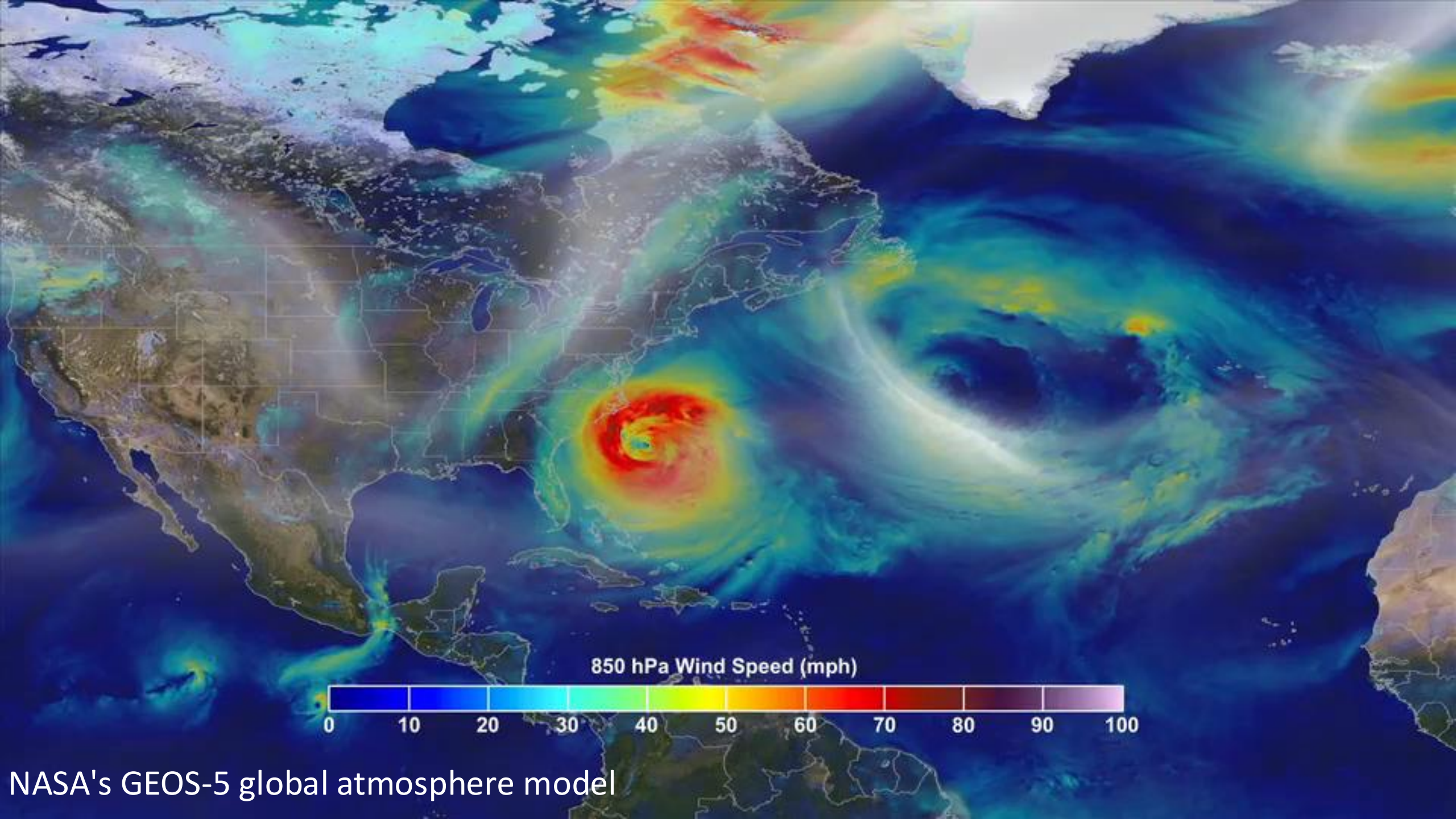


NH Coastal Flood Risk Summary - **Part II: Guidance for Using Best Available Science**



Coming Soon –
Public Input & Workshops
August/September 2026
Publication October 2026



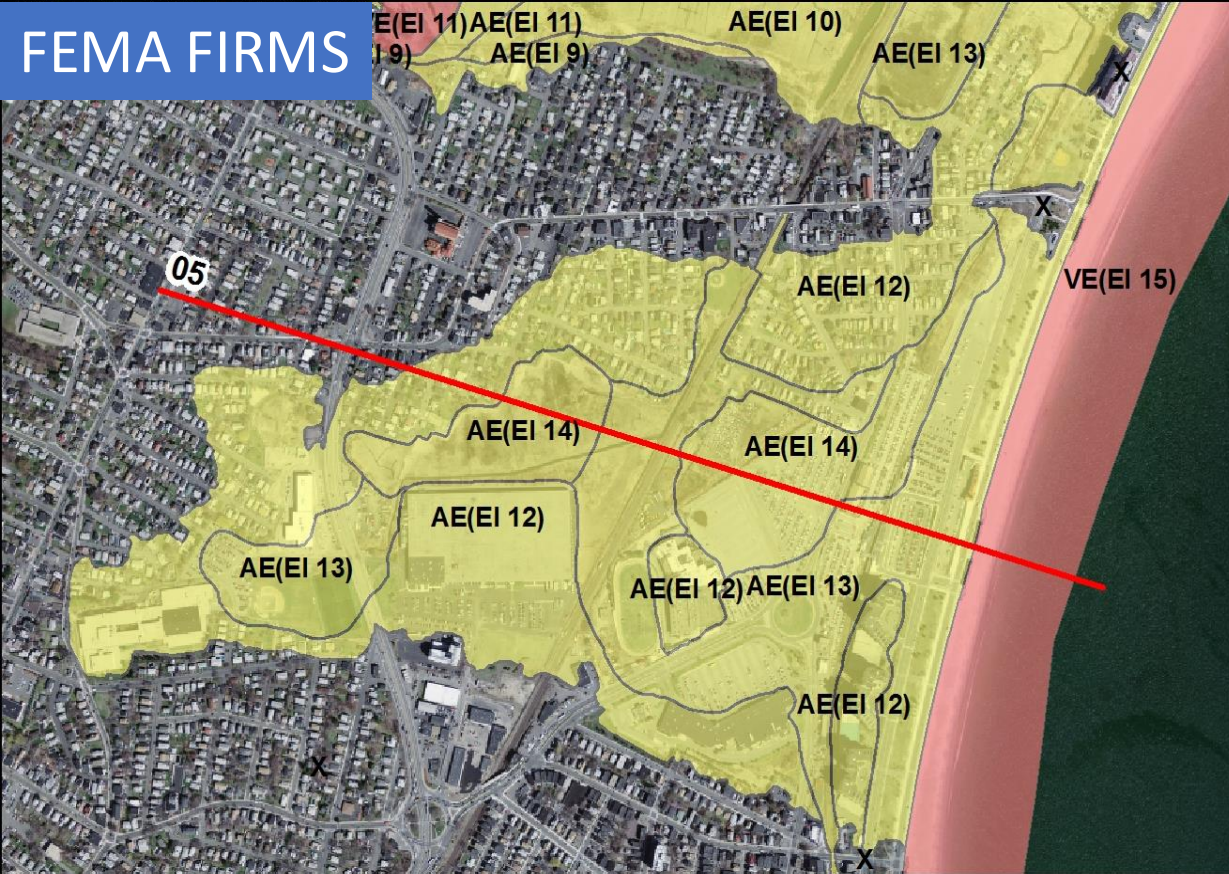


850 hPa Wind Speed (mph)

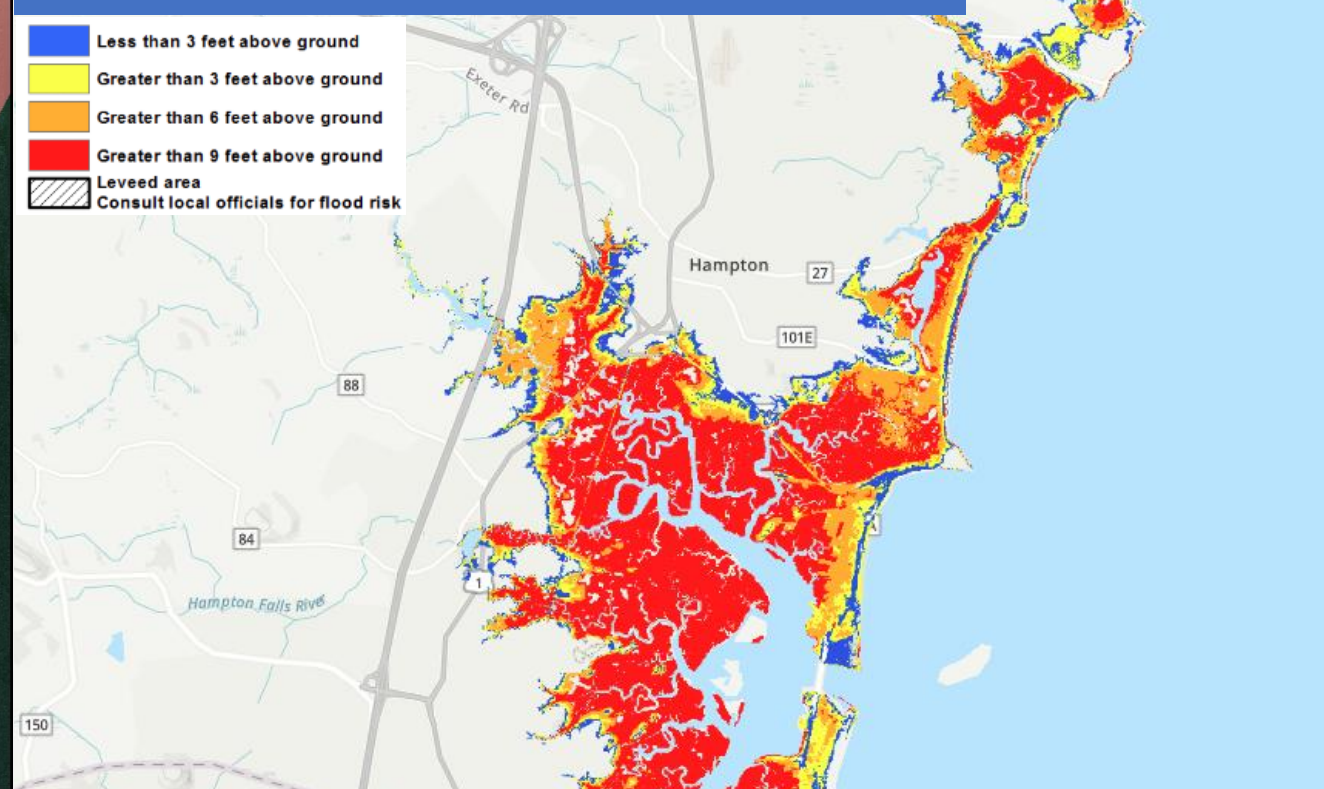


NASA's GEOS-5 global atmosphere model

FEMA FIRMS

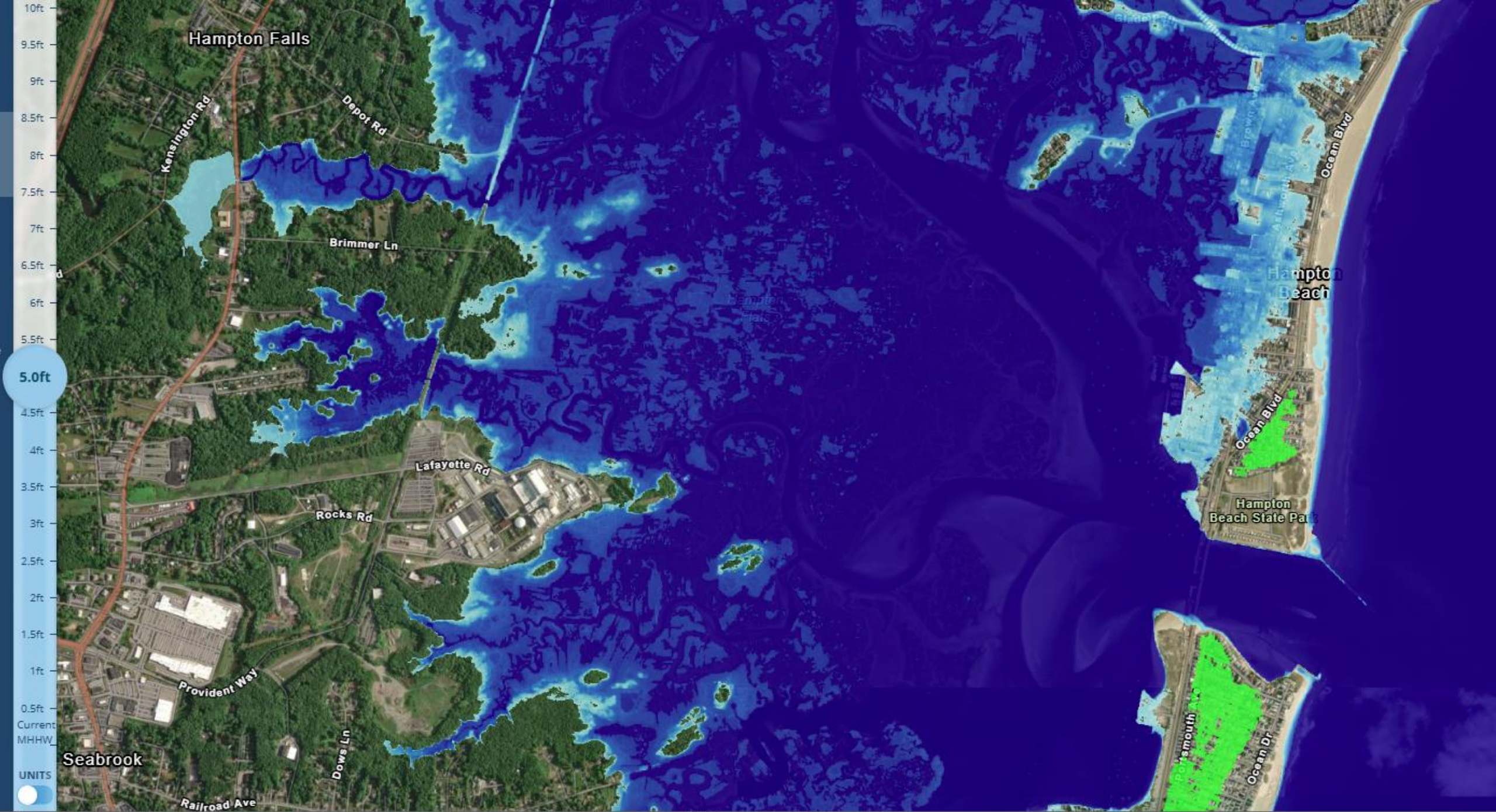


National Storm Surge Hazard Maps

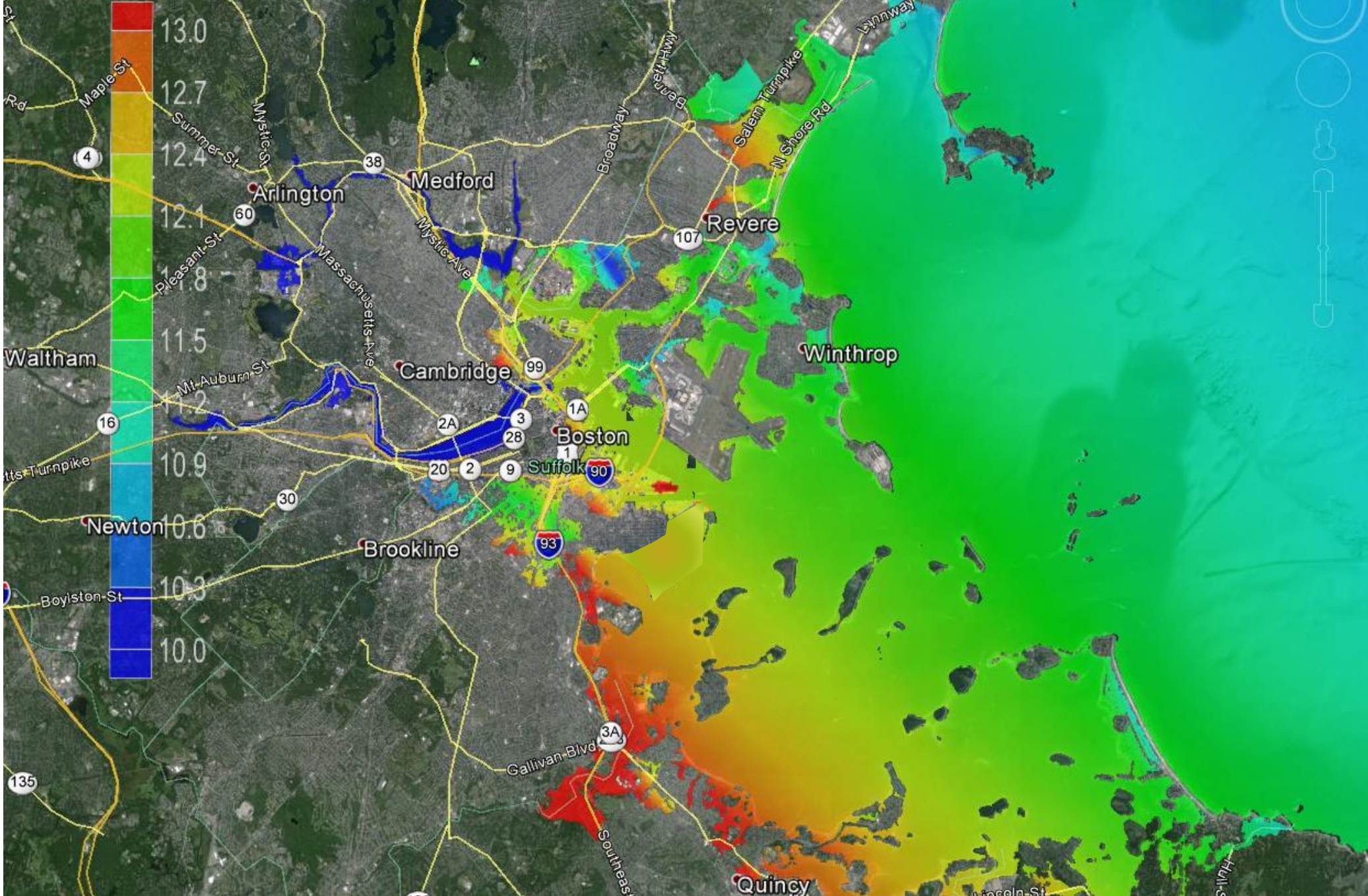


- FEMA is only backward looking
- Only considers “100-year” storm
- Region I does not use dynamic modeling
- Transect based analysis
- PRESENT CONDITIONS ONLY

- Scenarios for emergency planning
- Coarse modeling domain
- Does not include impacts of waves
- Errors are relatively large (+/- 20%)
- Just hurricanes
- PRESENT CONDITIONS ONLY

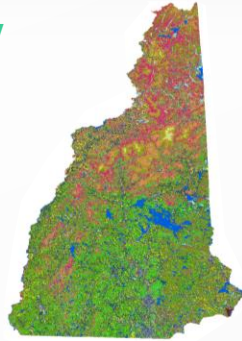


Maximum Water Level (ft-NAVD88)



Primary Model Inputs

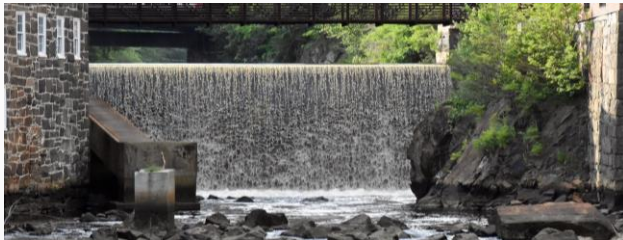
Topography and Bathymetry



Land Cover

Tides

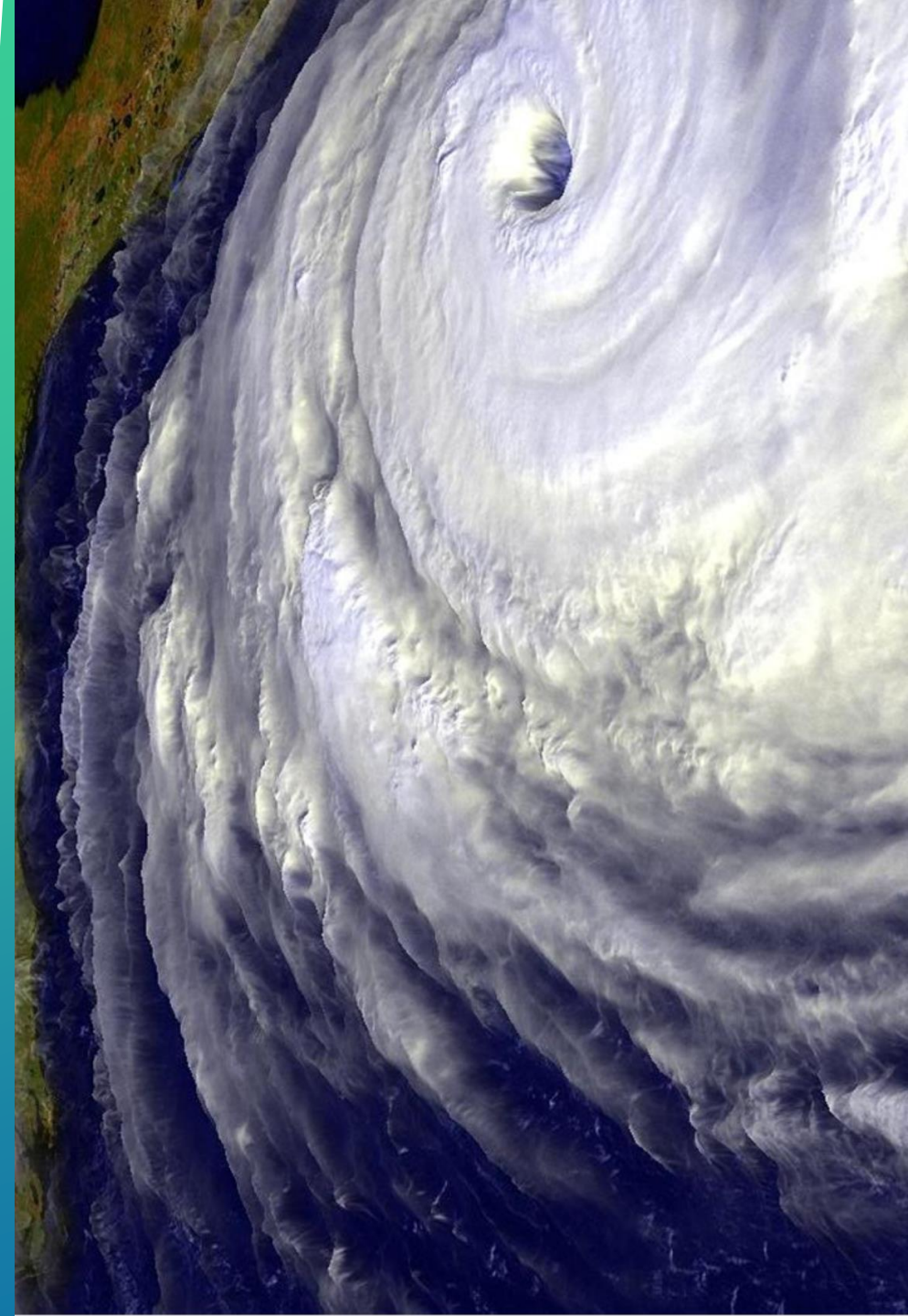
River Discharge

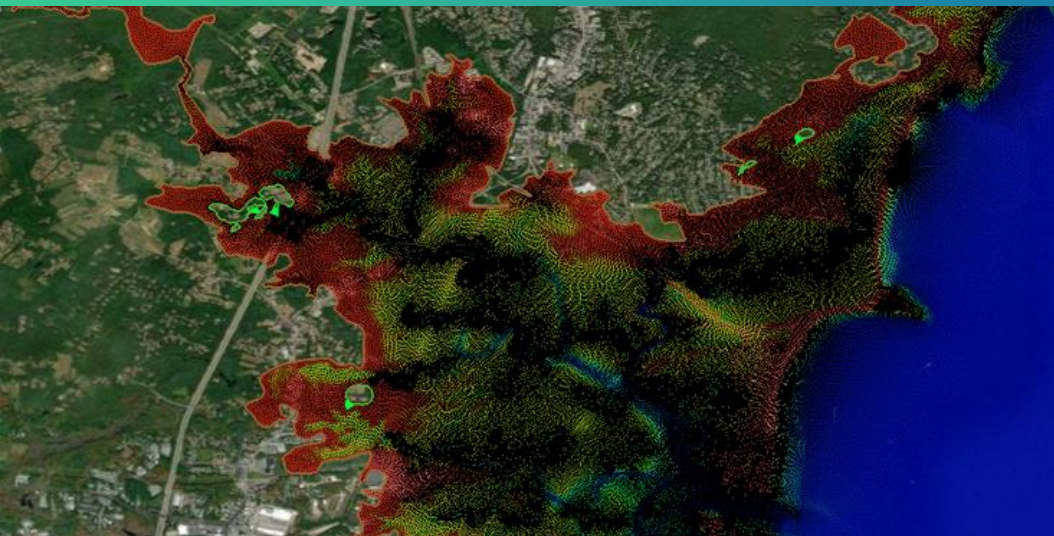
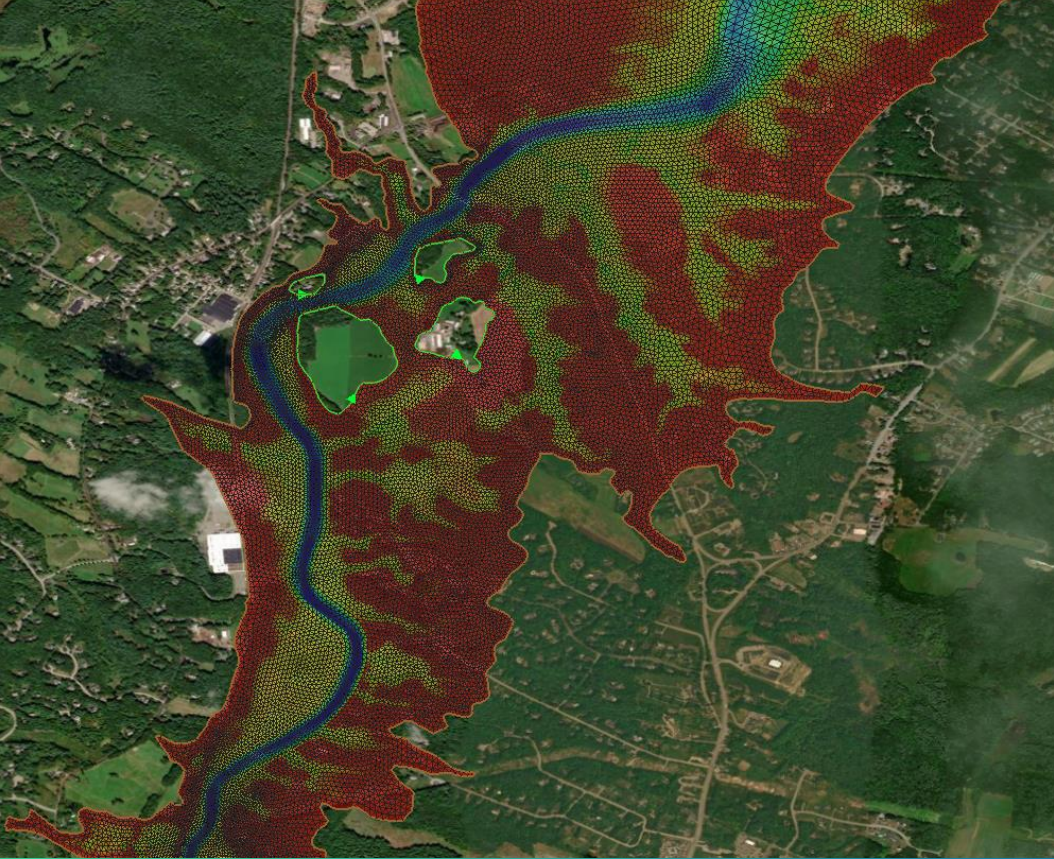


Storms – Tropical, Extra Tropical, Bombogenesis

Sea Level Rise

NH Sea Level Rise Projection	Mean Sea Level (ft, NAVD88)
0 feet (2000)	-0.24 feet NAVD88
Present Day (2015)	-0.01 feet NAVD88
0.8 feet (2040)	0.56 feet NAVD88
1.3 feet (2060)	1.06 feet NAVD88
2.4 feet (2080)	2.16 feet NAVD88
3.4 feet (2100)	3.16 feet NAVD88





1) High Resolution

- Unstructured grid allows for varying resolution
- Overland resolution of 3-7 meters (10-20 feet) in populated areas

2) Hydrodynamic, Physics-based



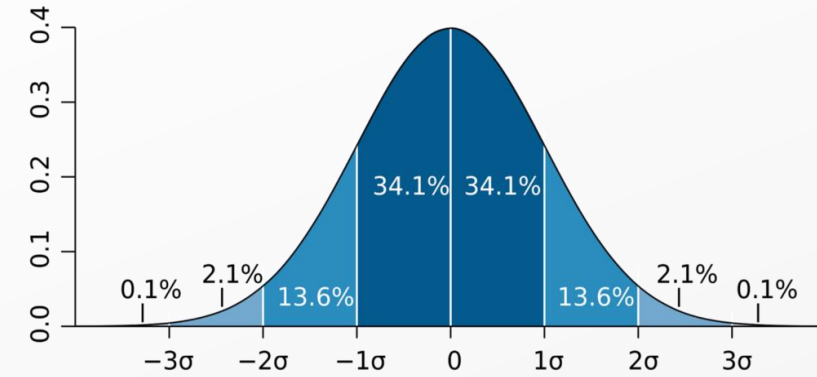
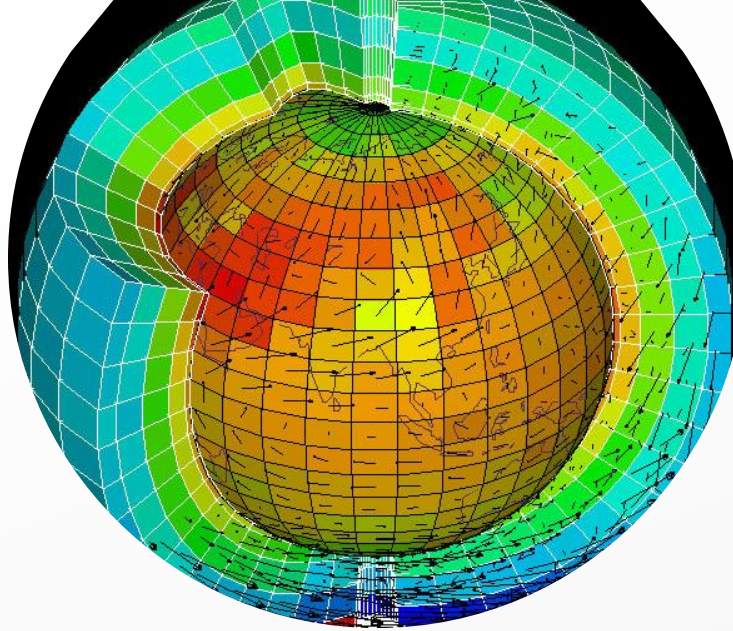
- Simulates the physical flow of water, waves, wind, surge, currents, and tides.
- Includes dynamic runup and overtopping
- Non-linear effects

3) High Priority Tidal Structure Flow

- Major Coastal Structures
- Dams
- Culverts and Bridges

4) Changing Climate

- Utilizes 4 Global Climate Models
- Increasing intensity and frequency of tropical cyclones



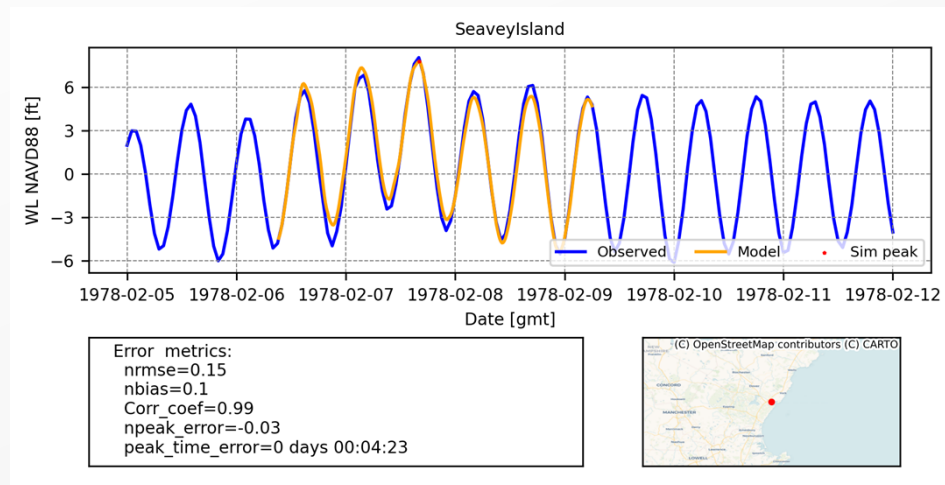
5) Calibrated and Validated

- Calibrated to historic storms
- Validated against most recent storms
- Peer reviewed methodology

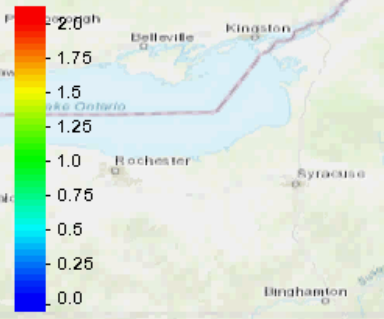


6) Probabilistic

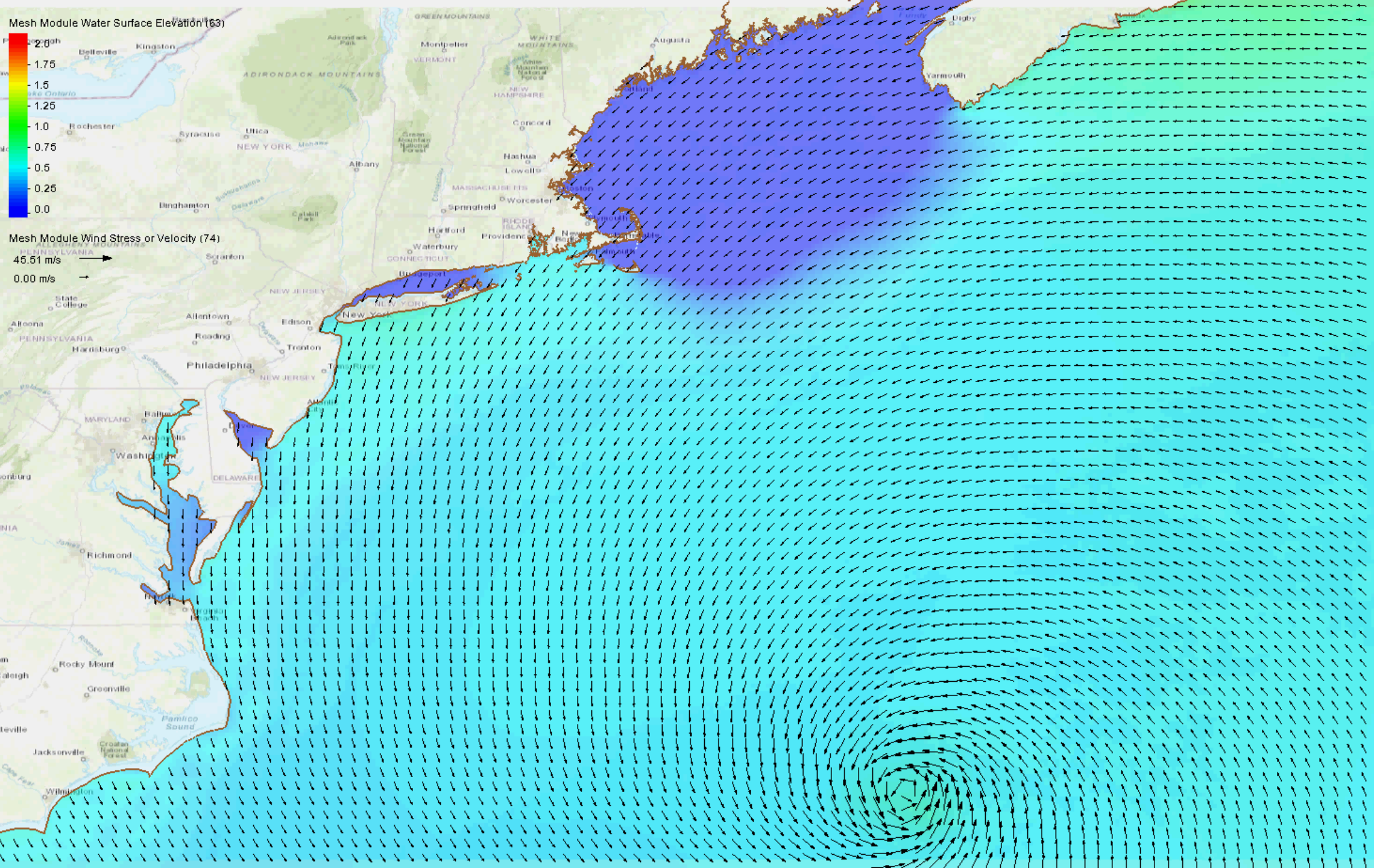
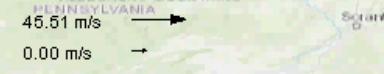
- Simulates thousands of storm events
- Monte Carlo approach
- No need to determine joint probabilities



Mesh Module Water Surface Elevation (63)



Mesh Module Wind Stress or Velocity (74)



Water Surface Elevation
(ft, NAVD88)
14-01-00:00
















Wind Speed
108.26 ft/s
0.00 ft/s
















Prescott Park, Leary Field, and Peirce Island
Present Day (2015 Epoch) Annual Coastal Flood
Exceedance Probabilities



Color	Label
	Dry
	0.02%
	0.1%
	0.2%
	0.5%
	1%
	2%
	5%
	10%
	20%
	25%
	30%
	50%
	100%














**Prescott Park, Leary Field, and Peirce Island
1.3 ft SLR Annual Coastal Flood Exceedance
Probabilities**



Color	Label
	Dry
	0.02%
	0.1%
	0.2%
	0.5%
	1%
	2%
	5%
	10%
	20%
	25%
	30%
	50%
	100%

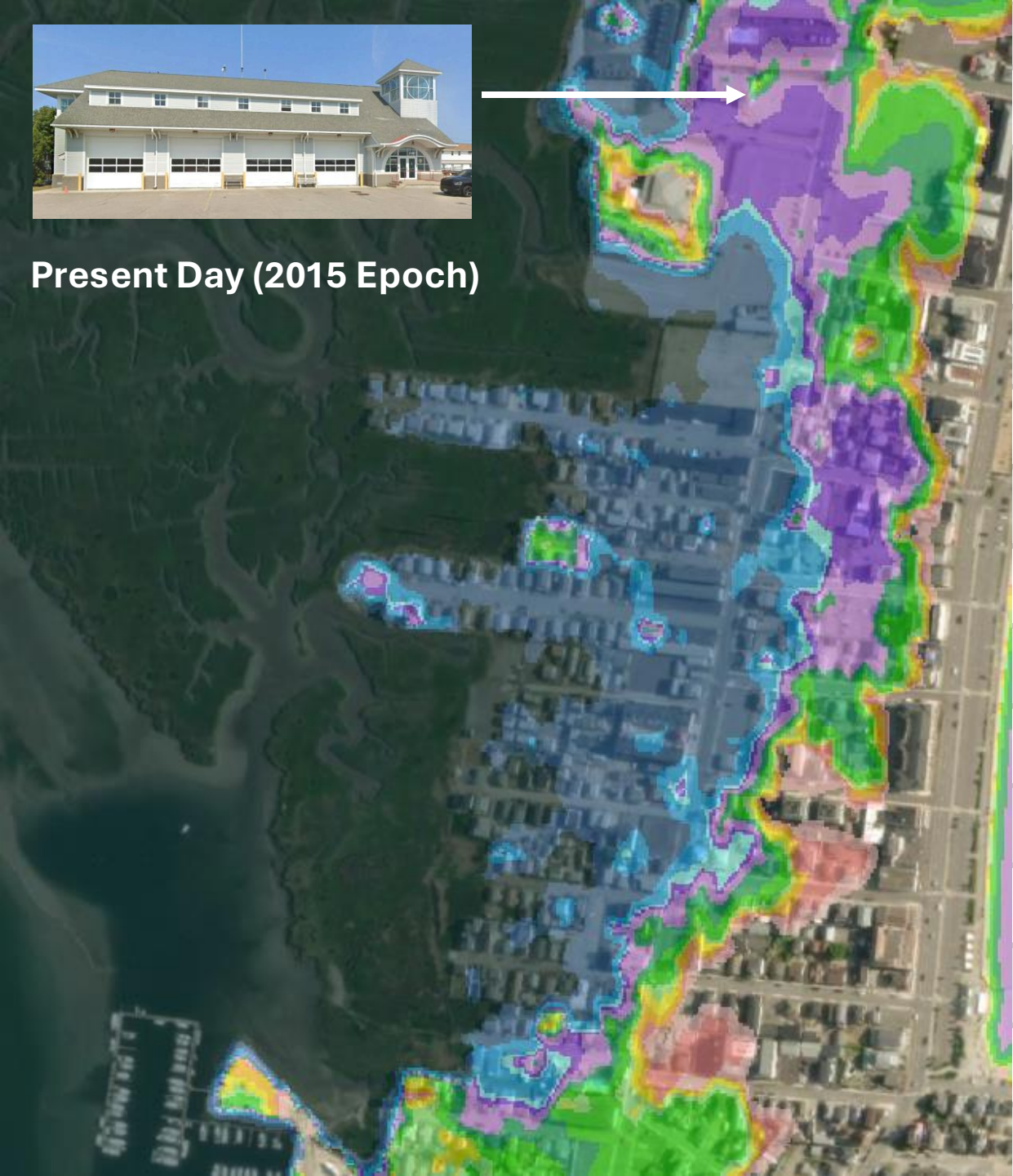
**Prescott Park, Leary Field, and Peirce Island
3.4 ft SLR Annual Coastal Flood Exceedance
Probabilities**
















Color	Label
	Dry
	0.02%
	0.1%
	0.2%
	0.5%
	1%
	2%
	5%
	10%
	20%
	25%
	30%
	50%
	100%



Present Day (2015 Epoch)




Color	Label
	Dry
	0.02%
	0.1%
	0.2%
	0.5%
	1%
	2%
	5%
	10%
	20%
	25%
	30%
	50%
	100%

Model Application and Guidance

- Guidance on how to utilize model results and data
 - Annual Exceedance Probabilities
 - Water Surface Elevations
 - Wave Heights
 - Tidal Datums

- Examples of mitigation approaches integrated into the model at various example locations

- Hampton Beach Fire Station and Neighborhood Resiliency
 - Nature-based Edge Protection
 - Individual Structure Flood Proofing
 - Road Raising
 - Fingers of Higher Ground
 - Hampton Harbor Inlet Hurricane Barrier

An aerial photograph of a coastal facility, likely a water treatment plant or research station, situated on a rocky peninsula. The facility includes a large concrete building, a paved parking lot with several cars, and various pieces of equipment. The shoreline is composed of large, light-colored rocks, and the surrounding water is a deep blue. The sky is clear and bright.

FROM MODELING TO IMPLEMENTATION: EXAMPLES FROM CAPE ANN (MA)

GLOUCESTER MARINE STATION

Infrastructure risk assessment to address priority maintenance needs:

1. Failing bulkhead
2. Broken, uneven concrete
3. Dock and crane for ocean access

Infrastructure updates enable emerging climate resilience research, teaching, and engagement:

1. Demonstrate best practices in resilient engineering, design, and construction
2. Monitor ocean & coastal habitat, species, and infrastructure responses
3. Communicate and showcase emerging approaches to coastal communities and partners across the Commonwealth

RESILIENT



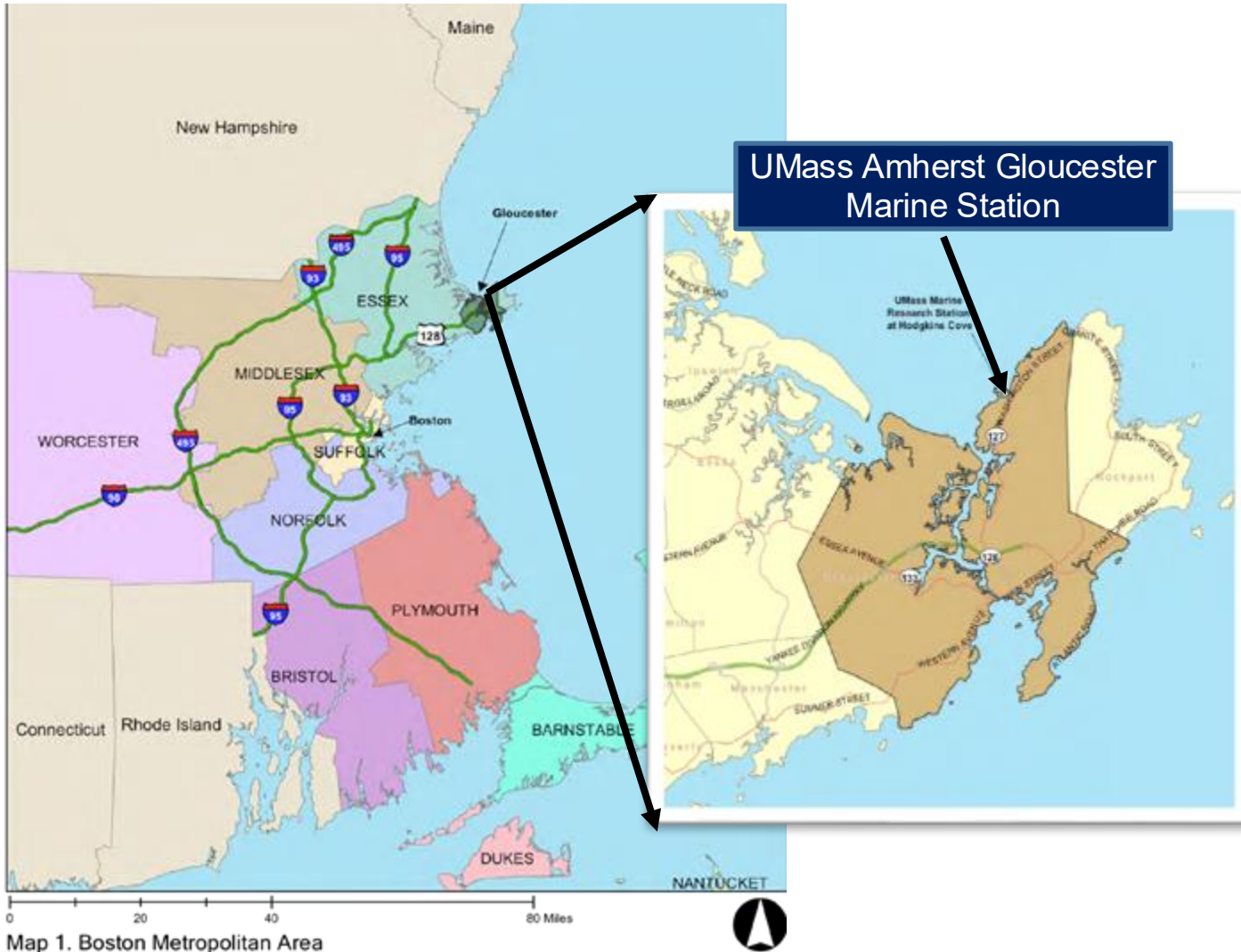
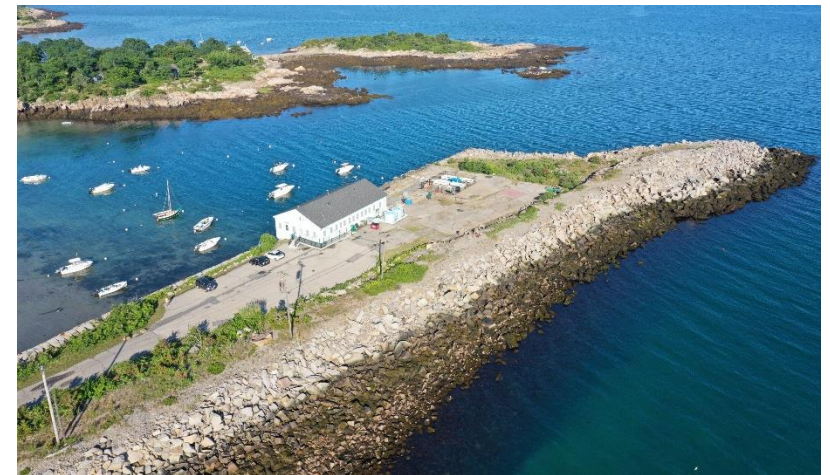
GLOUCESTER
MARINE STATION

THE SITE LOCATION

RESILIENT



GLOUCESTER MARINE STATION



UMass Amherst Gloucester Marine Station

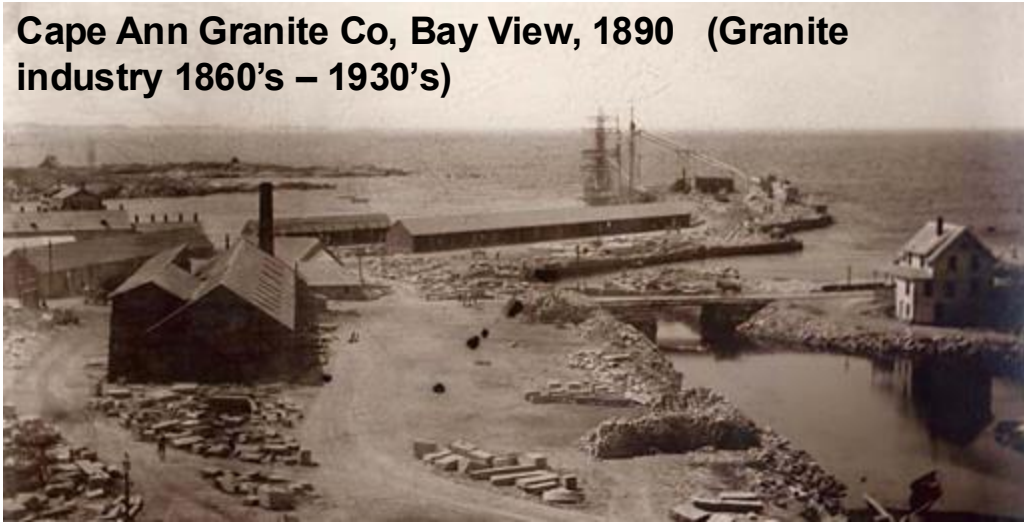
UMass Marine Research Station at Hodgkins Cove

Map 1. Boston Metropolitan Area
Gloucester Marine Research Station Future Development Feasibility Study
Produced by: The University of Massachusetts
Department of Landscape Architecture and Regional Planning

Source: Mass GIS, 2009

UNDERSTANDING THE PAST

Cape Ann Granite Co, Bay View, 1890 (Granite industry 1860's – 1930's)

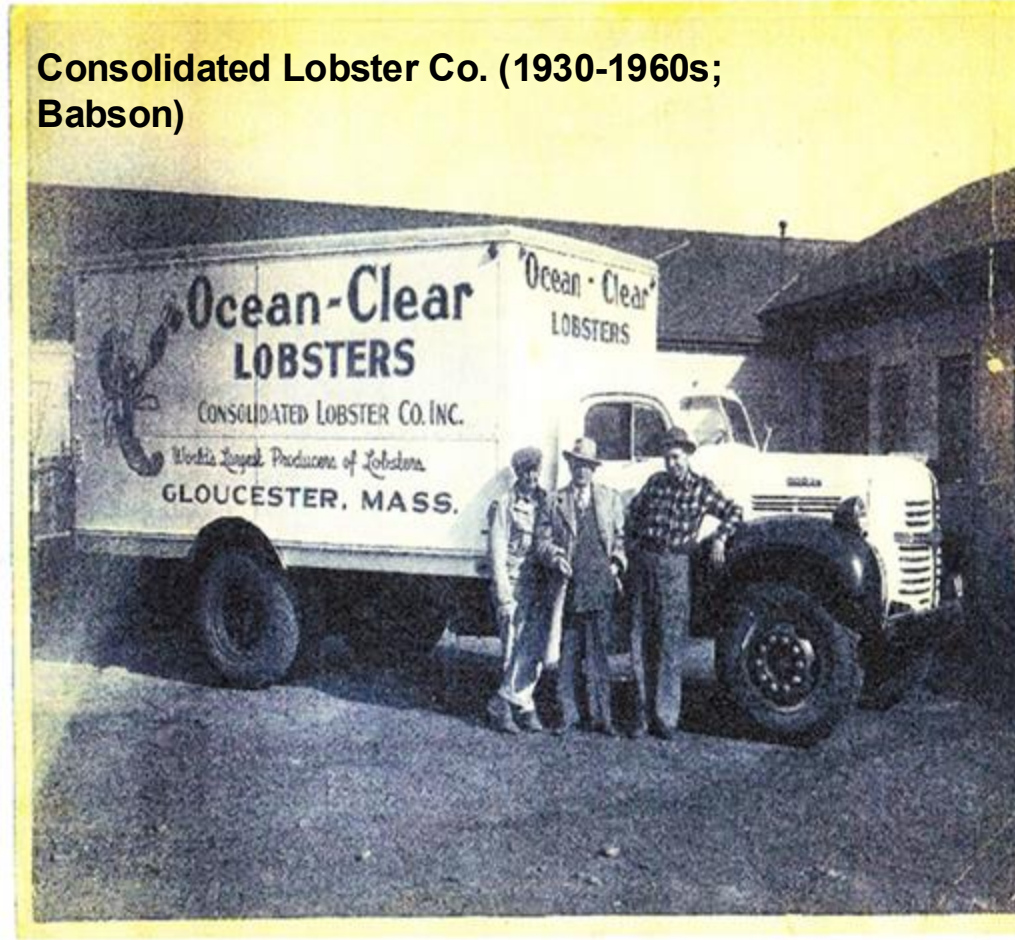


Rockport Granite Co., 1906



Rockport Granite Co. Works, Bay View, Mass.

Consolidated Lobster Co. (1930-1960s; Babson)

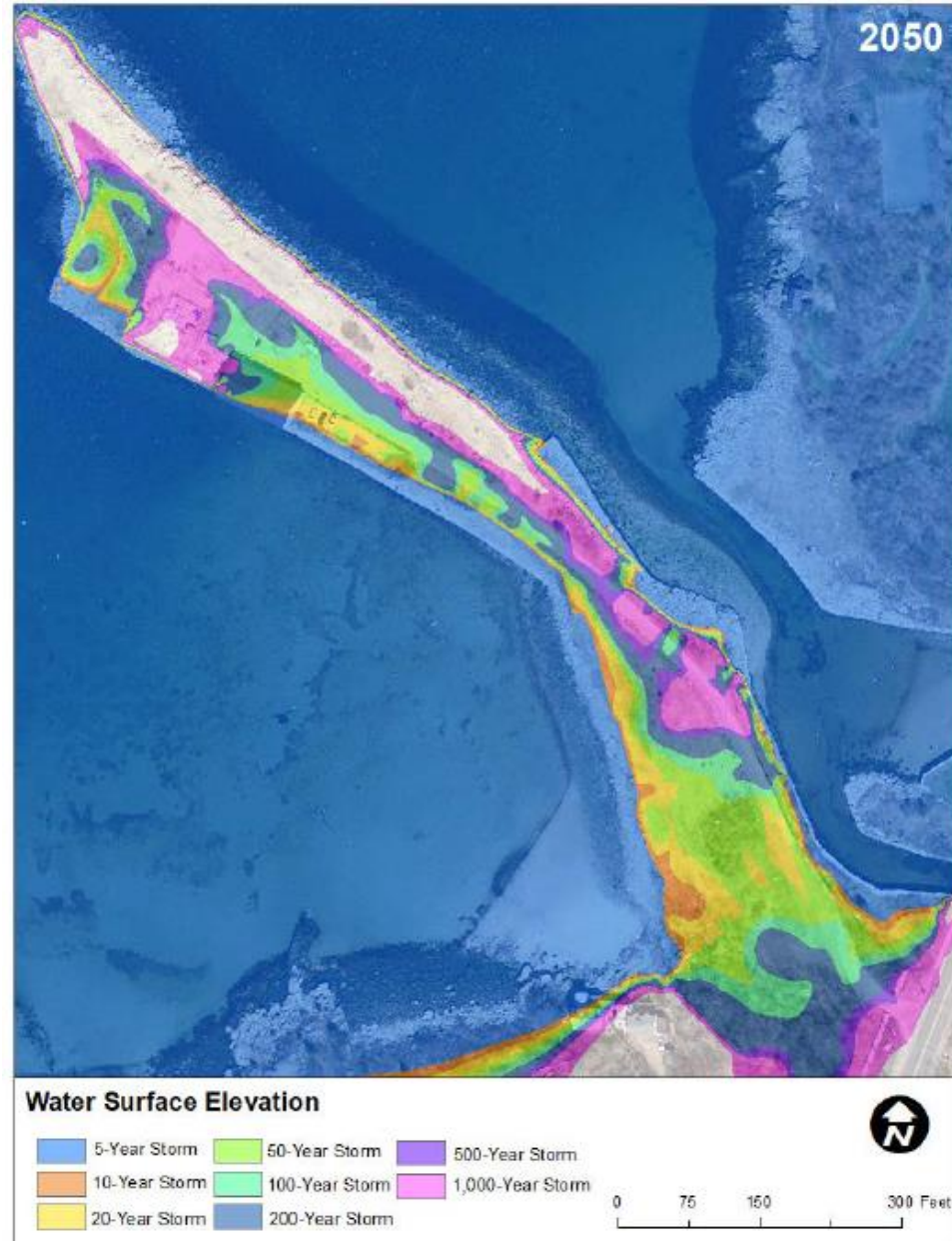


RESILIENT

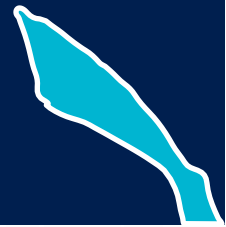


GLOUCESTER
MARINE STATION

UNDERSTANDING THE FUTURE



RESILIENT



GLOUCESTER
MARINE STATION

FUSS &
O'NEILL

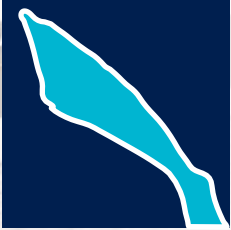
WOODS HOLE GROUP
FOR EARTH,
FROM SPACE



CONCEPT PLAN LEGEND

- | | | | |
|---|--|---|--|
| 1. OBSERVATION POINT | 8. REPURPOSED SHIPPING CONTAINERS / STORAGE | 15. PARKING - (9) SPACES | 21. PROPOSED FUTURE BUILDING SPACE |
| 2. PEDESTRIAN PUBLIC ACCESS TO OPEN SPACE | 9. ENCLOSED STORAGE AREA | 16. ENHANCED ENTRY SPACE | 22. FLEX EVENT / PVIOUS OVERFLOW PARKING |
| 3. PUBLIC FISHING ACCESS | 10. LOADING / UNLOADING LANE + FLEX SPACE | 17. TRAILER PULL-OFF AREA | 23. INFORMATIONAL KIOSK |
| 4. E-CONCRETE TIDE POOLS | 11. CRANE WORKING AREA FT. DOCK WITH LADDER ACCESS | 18. ELEVATED ROADWAY | |
| 5. DECONSTRUCTED BULKHEAD + ROCKY SHORELINE HABITAT | 12. LOWER ENERGY GREEN BULKHEAD RESEARCH AREA | 19. LIVING SHORELINE + UPLAND SURGE ATTENUATION RESEARCH AREA | |
| 6. AMPHITHEATER SPACE | 13. WATERPROOFED BUILDING | 20. PLANTED RAISED BERM | |
| 7. OUTDOOR CLASSROOM / FLEX SPACE | 14. ADA PARKING ACCESS - (2) SPACES | | |

RESILIENT



GLOUCESTER
MARINE STATION



ENCLOSED STORAGE AREA

STAIR W/RAILING

EXISTING MARINE ST.

FLEX LOADING ZONE

AMPHITHEATER SPACE

CRANE WORKING AREA

DOCK W/LADDER ACCESS

STAIR W/RAILING

INTERPRETIVE SIGNAGE

'LIVING SEAWALLS' PANELS

EXISTING SEAWALL

RESILIENT



GLOUCESTER
MARINE STATION



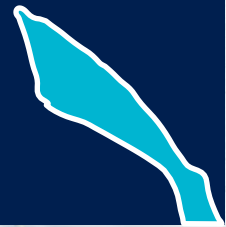
RESILIENT



GLOUCESTER
MARINE STATION



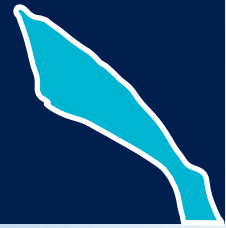
RESILIENT



GLOUCESTER
MARINE STATION



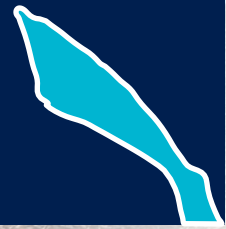
RESILIENT



GLOUCESTER
MARINE STATION



RESILIENT



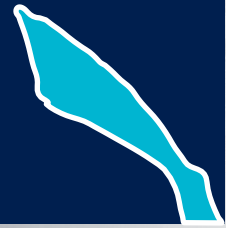
GLOUCESTER
MARINE STATION

16.5'

15'



RESILIENT

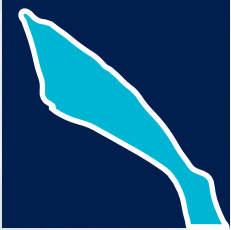


GLOUCESTER
MARINE STATION

LIGHTHOUSE BEACH



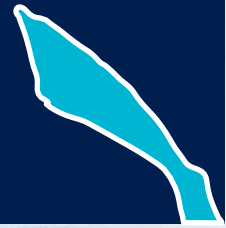
RESILIENT



GLOUCESTER
MARINE STATION



RESILIENT



GLOUCESTER
MARINE STATION



COASTAL VULNERABILITY ACTION PLAN

Plan, Adapt, Transition, and Restore

A Long-term Action Plan for Coastal Resilience
for Manchester-By-The-Sea's Inner Harbor

MANCHESTER-BY-THE-SEA

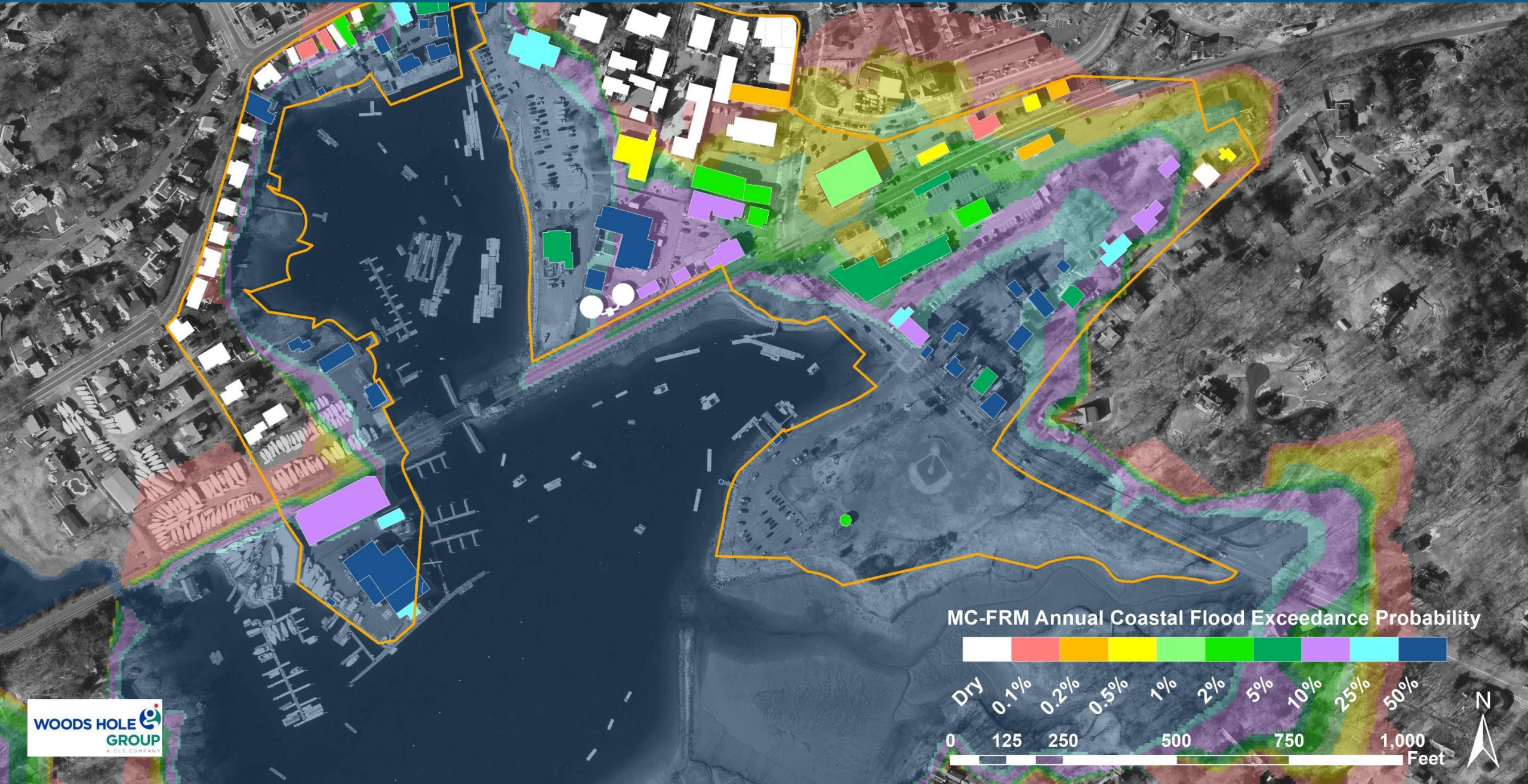
VERSION 1.0 – JUNE 2023

**FUSS &
O'NEILL**

ABOUT THE PLAN



2050 FLOOD PROBABILITY



SCENARIO 1 | PROTECT + PLAN AHEAD



Floodproof Lower Level of Fire Station

Elevate Critical Infrastructure at WWTP (e.g., generators)

Floodproof Low Elevation Entries of WWTP

Floodproof First Floor, Elevate Critical Equipment, & Rack Boats (as needed)

Elevate Critical Infrastructure at Fire and Police Stations (e.g., generators)

Flood Proof Lower Level Entries of Town Hall/Police Station

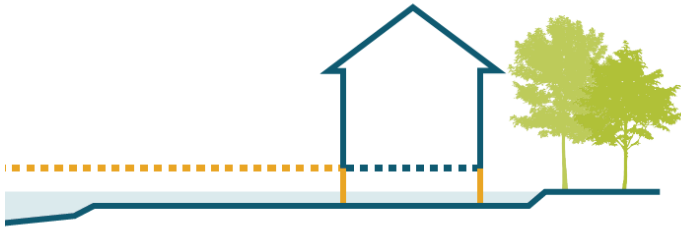
Install Check Valves on Storm Water Outfalls

Explore Adaptations to Accomodate Future Recreational Programming and Floodable Zones

Install Tide Gauge for Measuring Long-term Changes in Sea Level

FLOODPROOF BELOW CRITICAL FLOOD ELEVATIONS

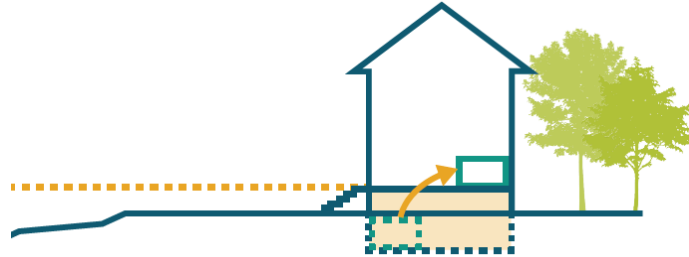
Site-scale adaptation of structures can include floodproofing of doors and windows



Floodproofed garage door
(Image credit: Flood Control International)

ELEVATE CRITICAL SYSTEMS ABOVE CRITICAL FLOOD ELEVATIONS

Site-scale adaptation of critical infrastructure can include elevating necessary backup power equipment (e.g., generators)



Lebanon, KY



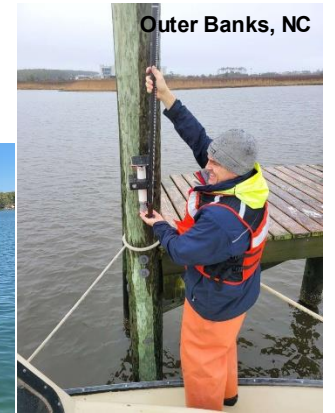
Elevation of standby generators
(Image credits: FEMA and Magna Engineers, 2013)

INSTALL LOCAL TIDE GAUGE

Long-term monitoring of sea level rise can help better cater future flood mitigation actions to the needs of the community



Quisset Harbor, MA



Outer Banks, NC

Tide gauge installations
(Image credits: Hohonu and Coastal Studies Institute)

SCENARIO 2 | ADAPT + TRANSITION + RESTORE



Buy Out & Restore Area 1

Relocate Police Station to New Location

Boat Launch To Remain

Transition to Floodable Park and Soften & Peelback Edge

Decommission WWTP and Construct New Submersible Pump Station

Relocate Fire Station to New Location & Restore Area

Buy Out & Restore Area 2

Possible Home Elevation or Buy Out & Restore Area 4

Deployable Barrier

Buy Out & Restore Area 3

Elevate Buildings

Transition to Floodable Park

LEGEND

- Roadways
- ▬▬▬ Raised Road
- ▬▬▬ Floating Boardwalk
- ▬▬▬ Possible Raised Road
- ⬅ Connection
- ▬▬▬ Raised Berm with Walkway
- ▬▬▬ Raised Berm
- ▨ Parking
- ▨ New Office Building
- ▨ Boat Racks

LANDSCAPE BERM

Elevated barriers like berms can reduce the risk of coastal flooding in low-lying areas



Norfolk, VA

Elevated berm near coastal shoreline
(Image credit: NFKVA Currents, 2022)

ROAD RAISING WITH CAPPING

Raising low-lying roads can allow access to be maintained during certain flood events and can reduce flood risk in nearby low-lying areas

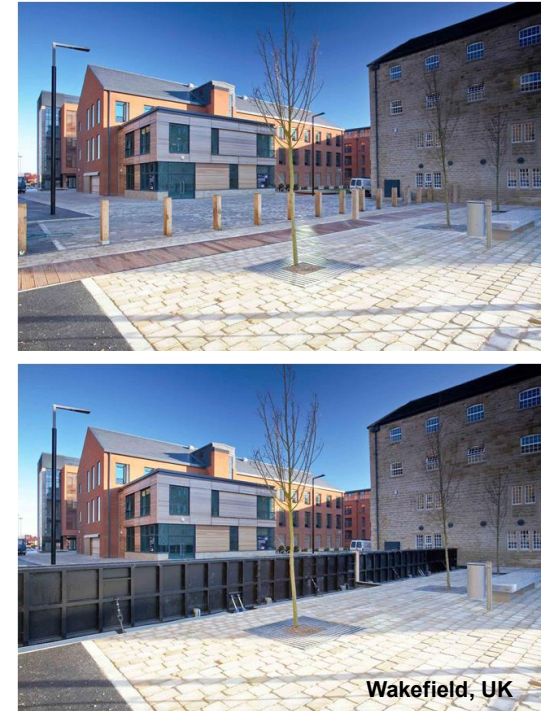


Miami, FL

Road raising project
(Image credit: CC 1.0)

DEPLOYABLE FLOOD BARRIERS

Deployable flood barriers can provide temporary flood protection when needed and then be incorporated into the streetscape when not in use – allowing the passage of cars and pedestrians



Wakefield, UK

Flip-up flood barriers that can be remotely deployed and incorporated into the street
(Image credit: Flood Control International)

PLANNING AND DESIGNING FOR A FLOODABLE PARK



**STAKEHOLDER
MEETING**



**COMMUNITY
“WALKSHOP”**



PUBLIC PIN-UP



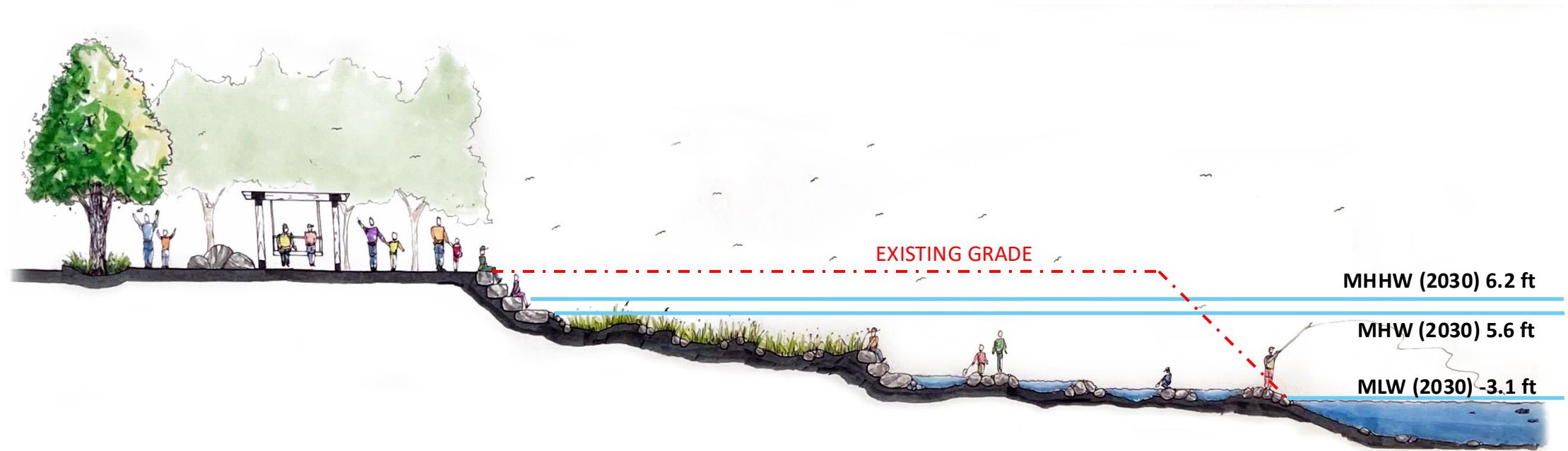
REPORT OUT

CONCEPT A

1. Reconfigured public parking
2. Parking for working waterfront
3. Bathroom/Harbormaster office
4. Elevated band stand
5. Expanded playground with new ADA surfacing
6. Flexible event lawn
7. Secondary lawn area
8. Boardwalk
9. Terraced habitat exploration area
10. Overlook seating
11. Connection to future harbor walk



PEELING BACK THE POINT



CONCEPT A (WITH TIDAL FLOODING)

1. Reconfigured public parking
2. Parking for working waterfront
3. Bathroom/Harbormaster office
4. Elevated band stand
5. Expanded playground with new ADA surfacing
6. Flexible event lawn
7. Secondary lawn area
8. Boardwalk
9. Terraced habitat exploration area
10. Overlook seating
11. Connection to future harbor walk



CONCEPT B

1. Reconfigured public parking/Parking for working waterfront
2. Bathroom/Harbormaster office
3. Elevated band stand
4. Expanded playground with new ADA surfacing
5. Flexible event lawn
6. Secondary lawn area
7. Boardwalk
8. Terraced habitat exploration area
9. Overlook seating
10. Connection to future harbor walk
11. Overlook lawn



CONCEPT B (WITH TIDAL FLOODING)

1. Reconfigured public parking/Parking for working waterfront
2. Bathroom/Harbormaster office
3. Elevated band stand
4. Expanded playground with new ADA surfacing
5. Flexible event lawn
6. Secondary lawn area
7. Boardwalk
8. Terraced habitat exploration area
9. Overlook seating
10. Connection to future harbor walk
11. Overlook lawn



CONCEPT C

1. Reconfigured public parking
2. Parking for working waterfront
3. Bathroom/Harbormaster office
4. Elevated band stand
5. Expanded tot lot playground with new ADA surfacing
6. Expanded older kids playground with new ADA surfacing
7. Flexible event lawn
8. Secondary lawn area
9. Boardwalk
10. Terraced habitat exploration area
11. Overlook seating
12. Connection to future harbor walk



2050 MHHW EXTENTS

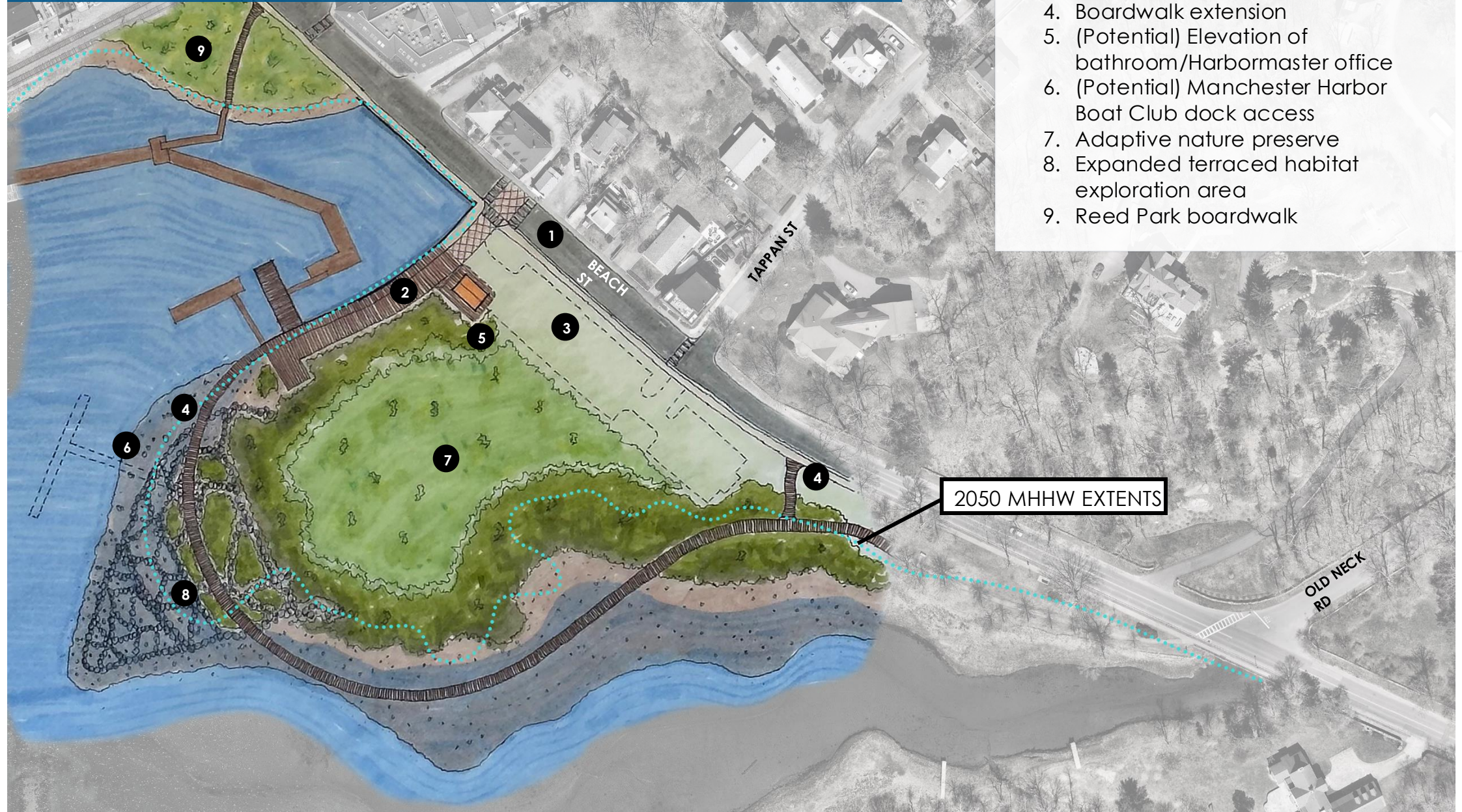
CONCEPT C (WITH TIDAL FLOODING)

1. Reconfigured public parking
2. Parking for working waterfront
3. Bathroom/Harbormaster office
4. Elevated band stand
5. Expanded tot lot playground with new ADA surfacing
6. Expanded older kids playground with new ADA surfacing
7. Flexible event lawn
8. Secondary lawn area
9. Boardwalk
10. Terraced habitat exploration area
11. Overlook seating
12. Connection to future harbor walk



CONCEPT C (2070)

1. Elevation of Beach St
2. (Potential) Elevation of pier & access road
3. (Potential) Elevation of parking
4. Boardwalk extension
5. (Potential) Elevation of bathroom/Harbormaster office
6. (Potential) Manchester Harbor Boat Club dock access
7. Adaptive nature preserve
8. Expanded terraced habitat exploration area
9. Reed Park boardwalk



CONCEPT C (2070)

1. Elevation of Beach St
2. (Potential) Elevation of pier & access road
3. (Potential) Elevation of parking
4. Boardwalk extension
5. (Potential) Elevation of bathroom/Harbormaster office
6. (Potential) Manchester Harbor Boat Club dock access
7. Adaptive nature preserve
8. Expanded terraced habitat exploration area
9. Reed Park boardwalk

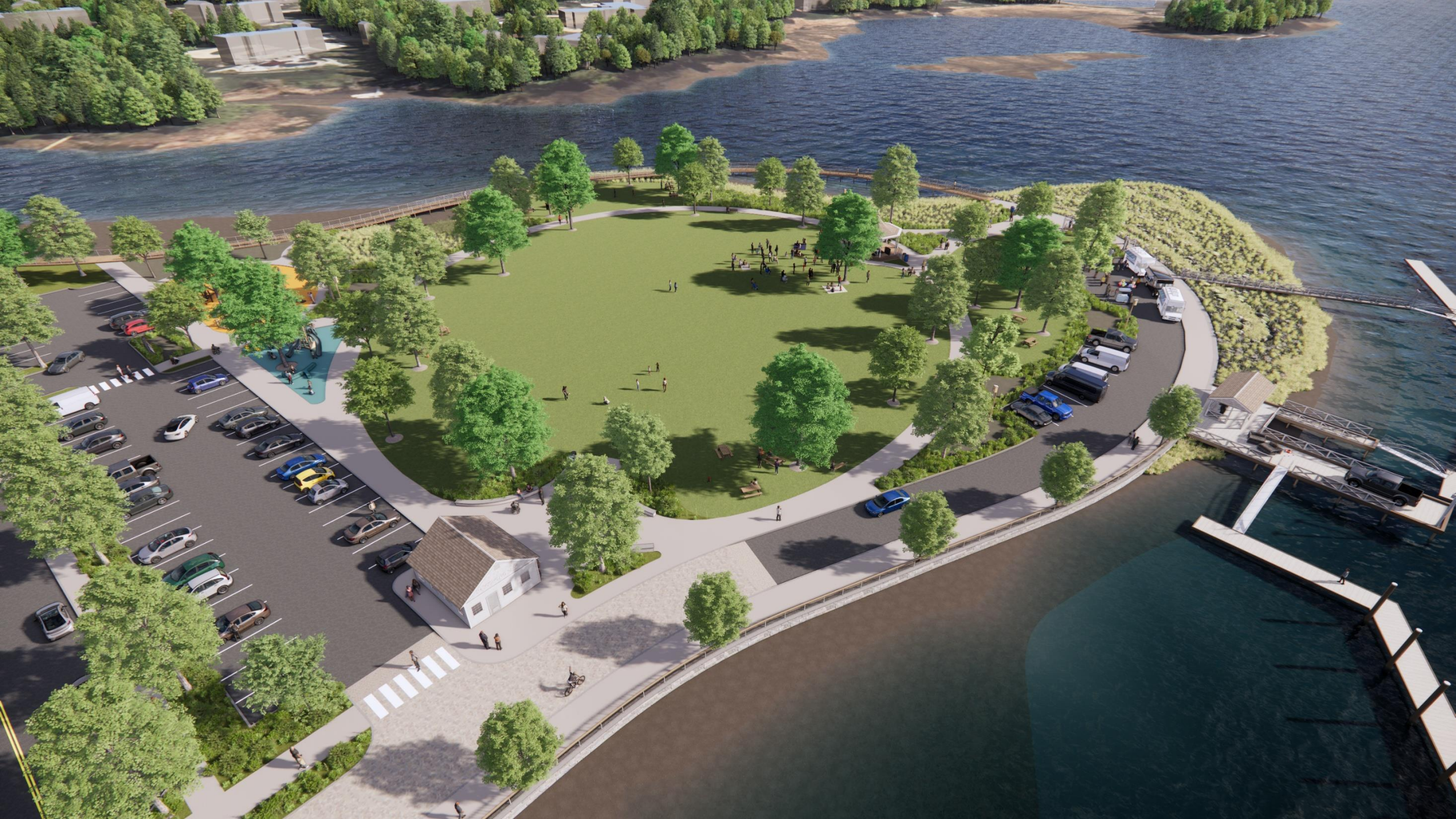


CONCEPT C

1. Reconfigured public parking
2. Parking for working waterfront
3. Bathroom/Harbormaster office
4. Elevated band stand
5. Expanded tot lot playground with new ADA surfacing
6. Expanded older kids playground with new ADA surfacing
7. Flexible event lawn
8. Secondary lawn area
9. Boardwalk
10. Terraced habitat exploration area
11. Overlook seating
12. Connection to future harbor walk







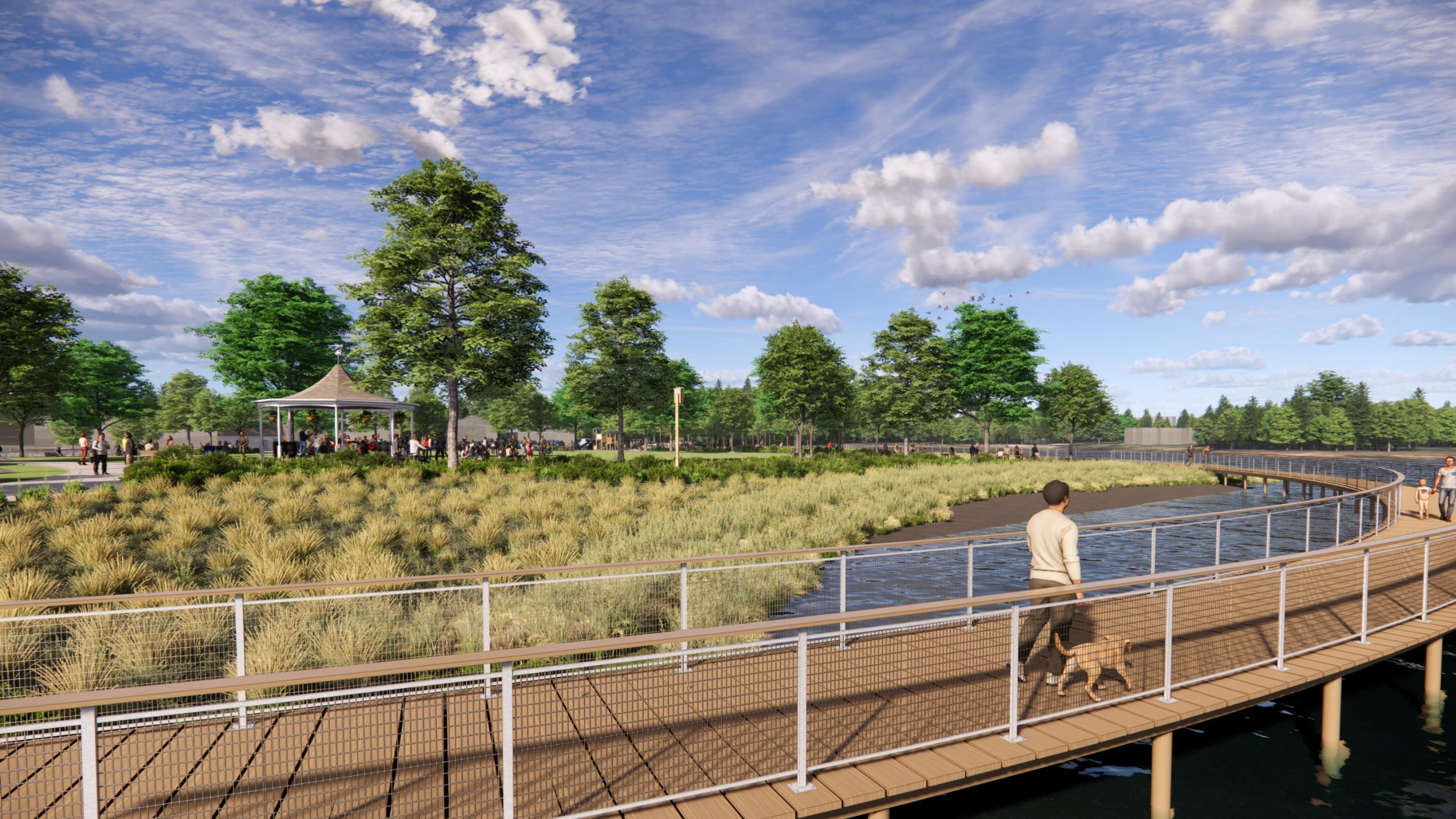


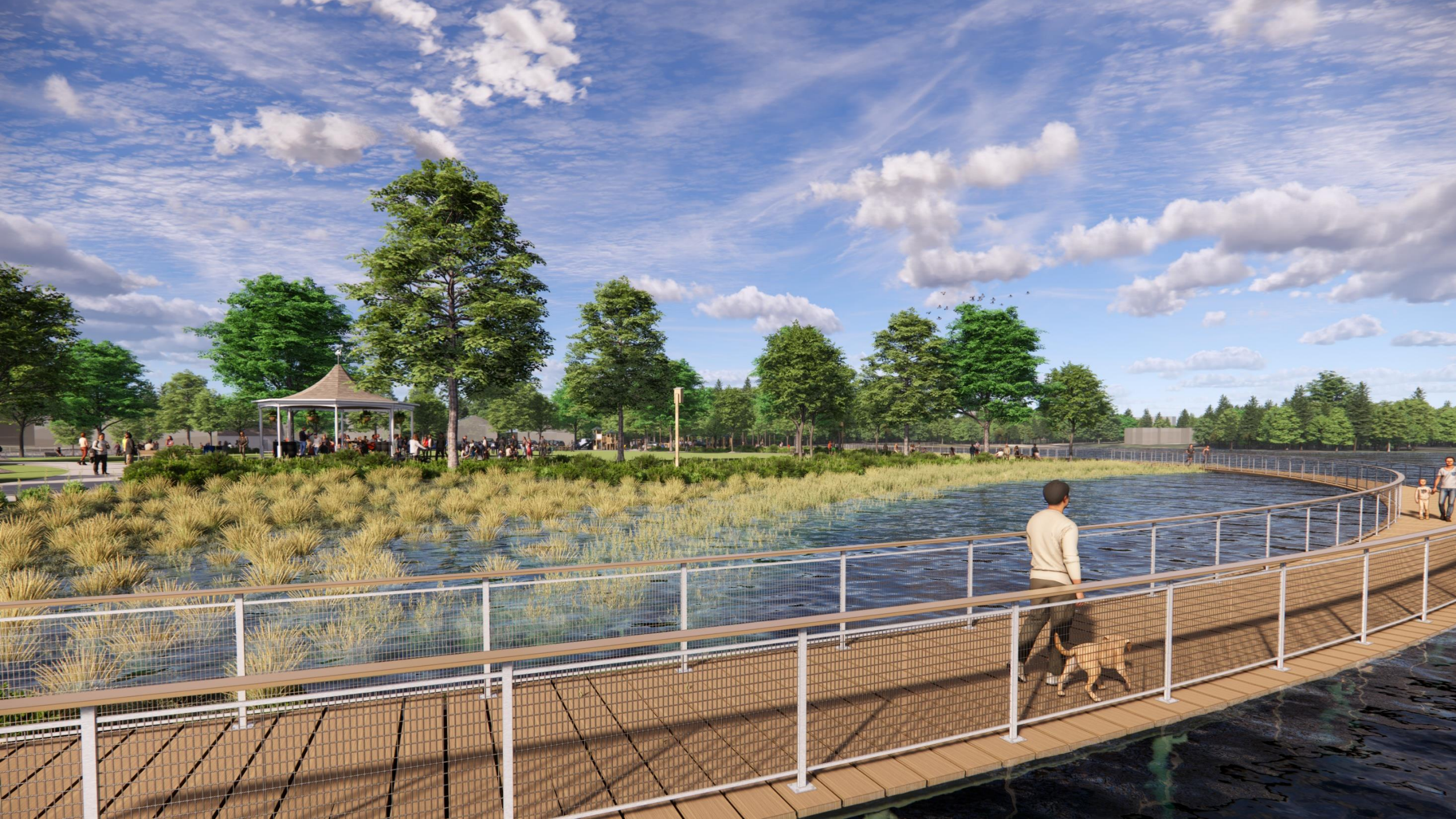






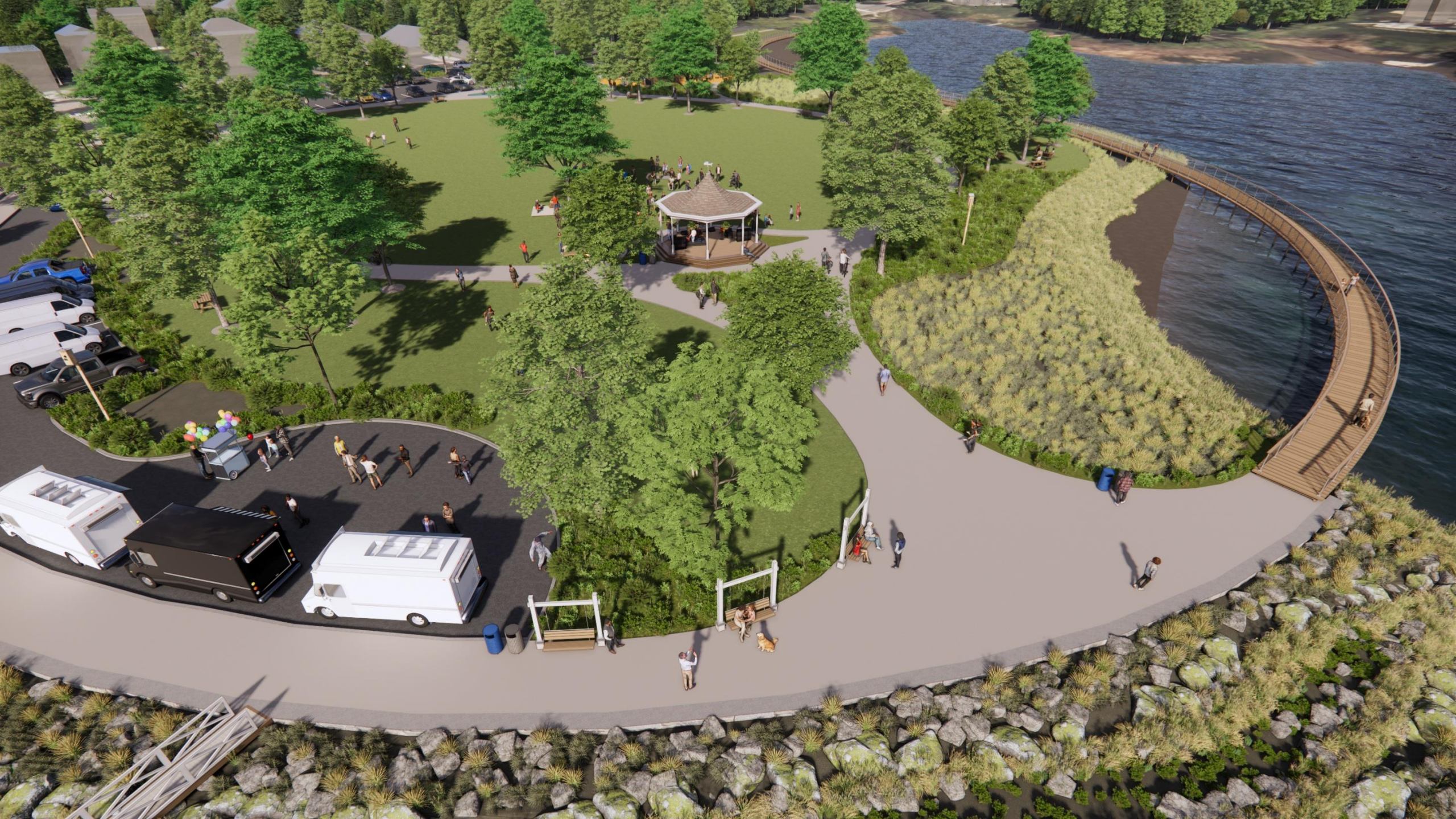


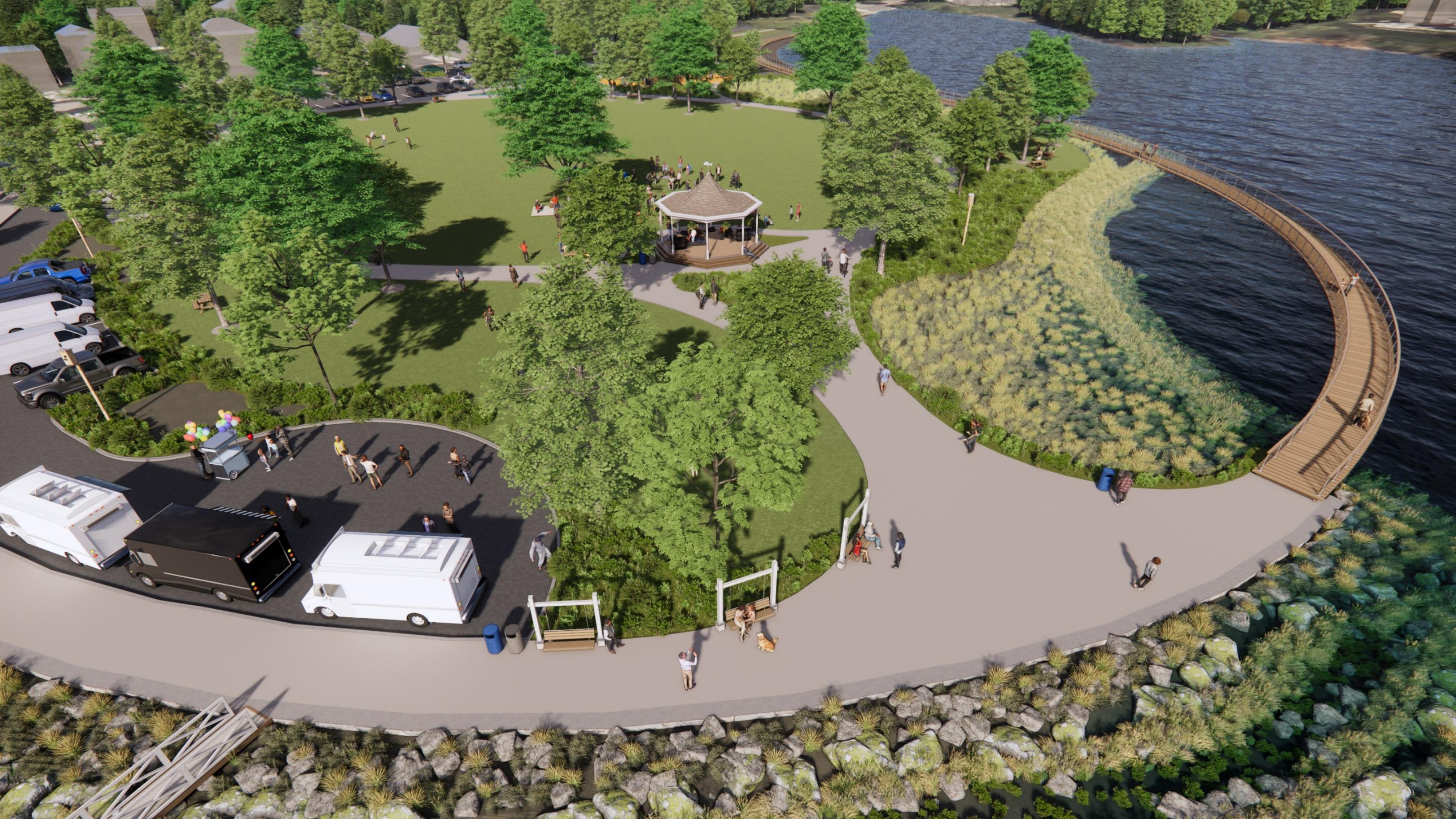












Understanding groundwater – protecting infrastructure in coastal communities

Groundwater Chapter 2025 NH Coastal Flood Risk Science - Update

NH Department of Environmental Services

City of Portsmouth

Jayne F. Knott, Ph.D., JFK Environmental Services LLC

Jennifer M. Jacobs, Ph.D., Jennifer M. Jacobs & Associates LLC

May 21, 2026

GW Rise - Three areas of community vulnerability

INUNDATION

- Pavement layers
- Underground utilities
- Septic Systems
- Basements
- Wetland transition and expansion

WATER SUPPLY

- Deep bedrock domestic wells- salinization
- Near-shore municipal wells - salinization
- Seasonal aquifer recharge - altered availability
- Drought

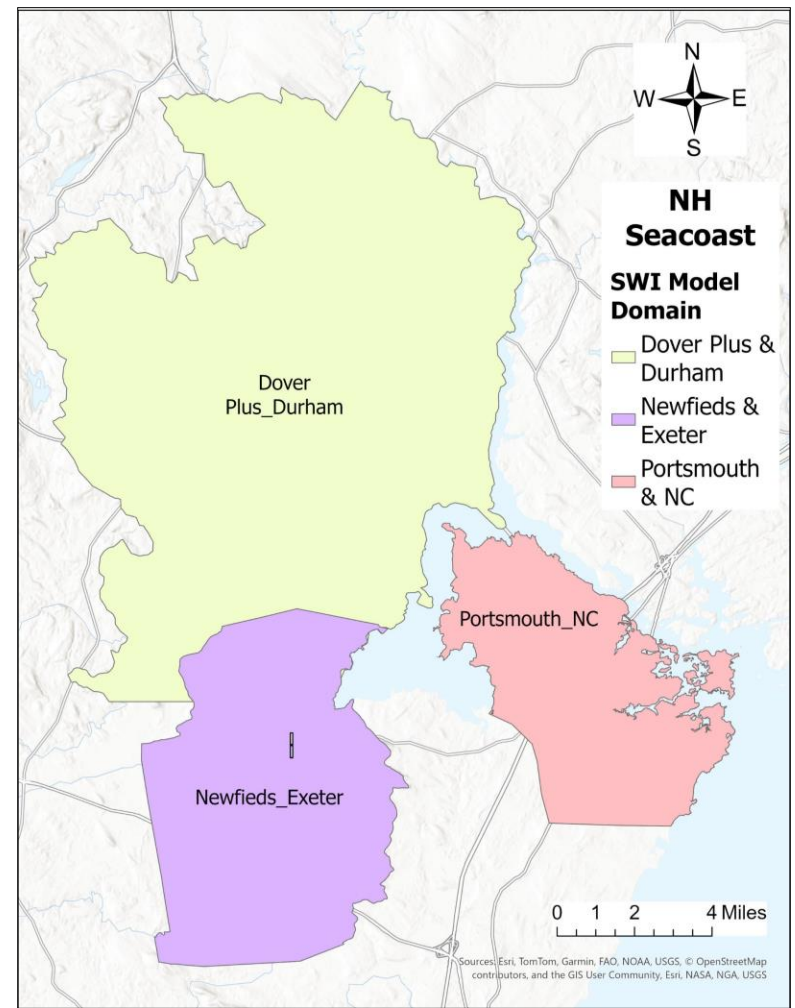
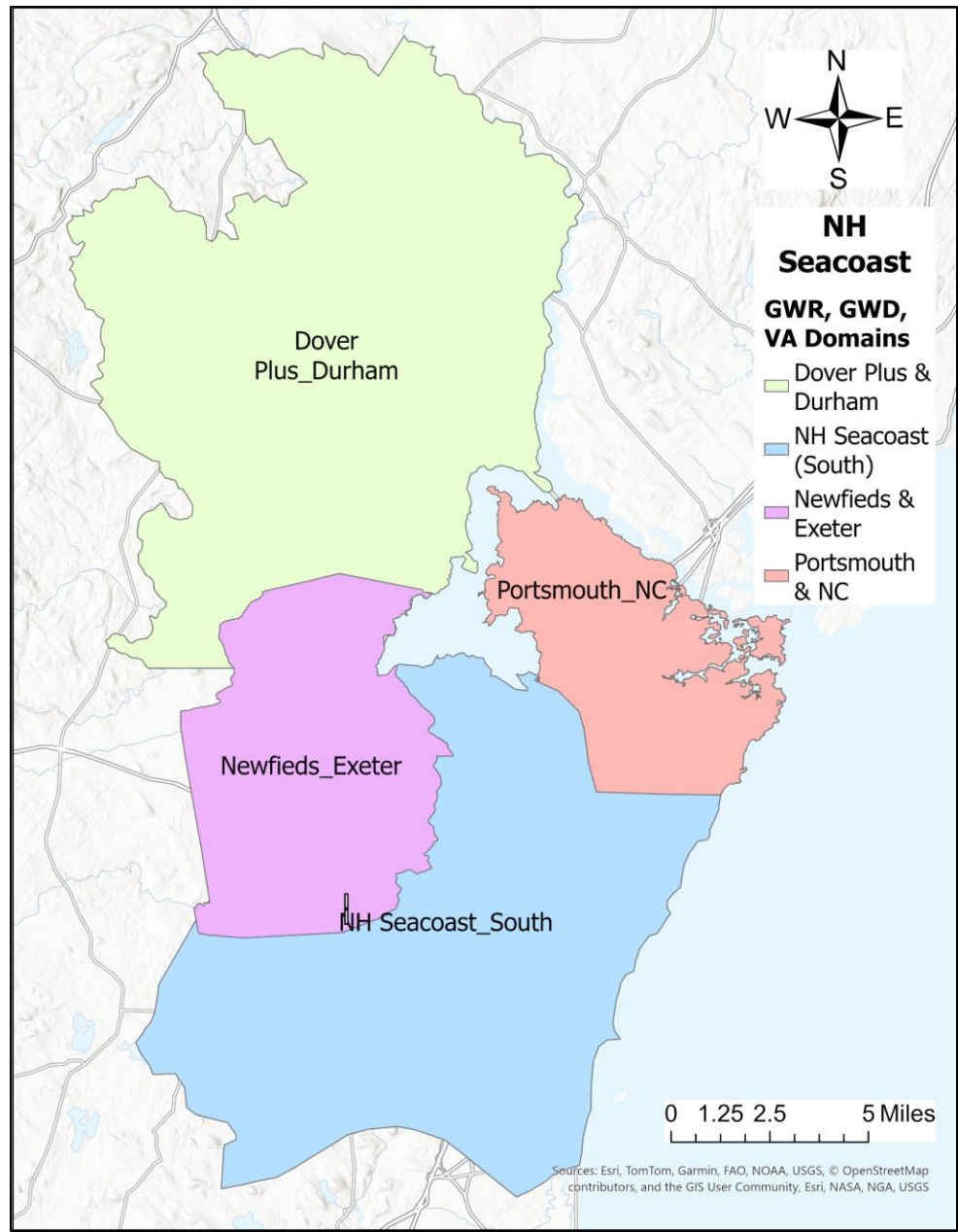
WATER QUALITY

- Reduced groundwater discharge to estuaries,
- Septic system failure
- Mobilization of legacy contaminants
- Terrain – slope instability

Groundwater Modeling Domains

GW Model Resolution

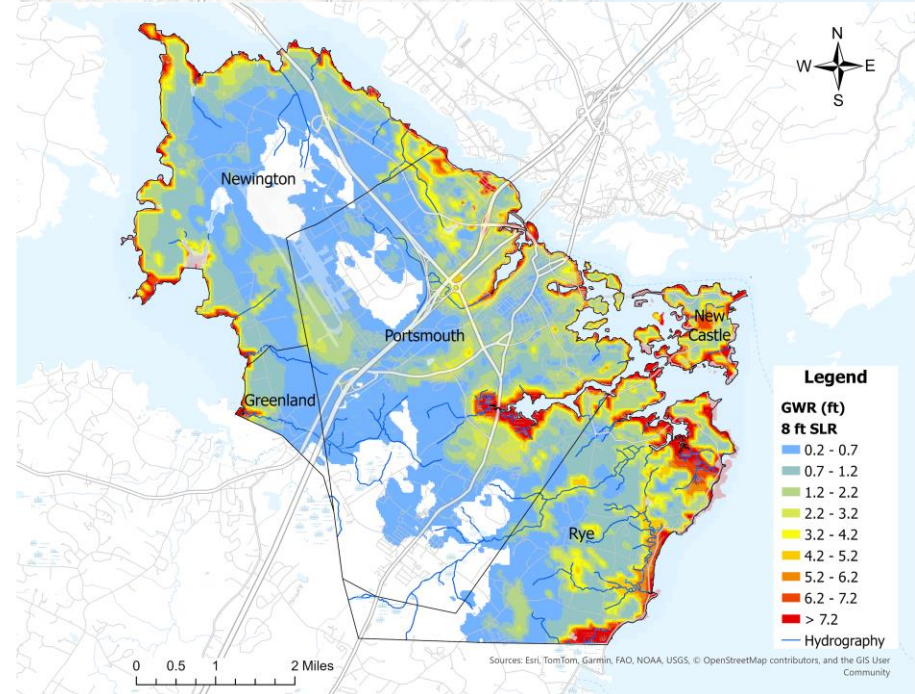
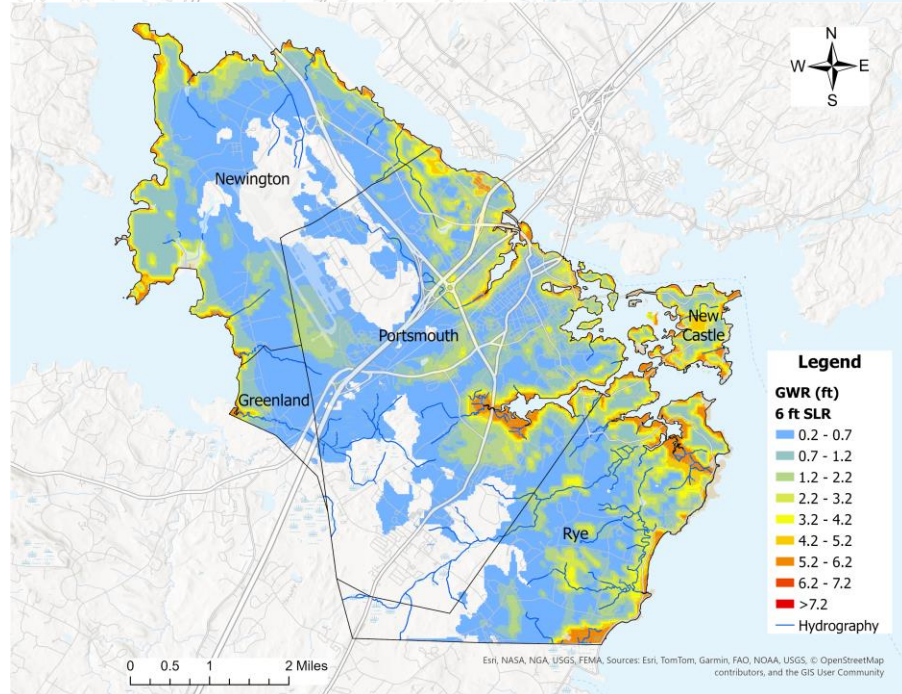
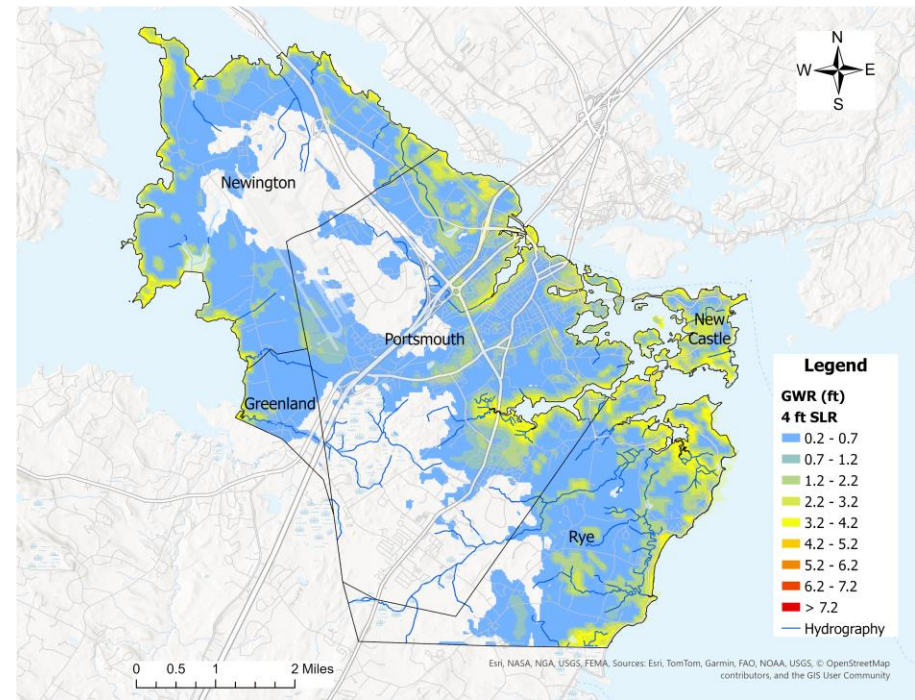
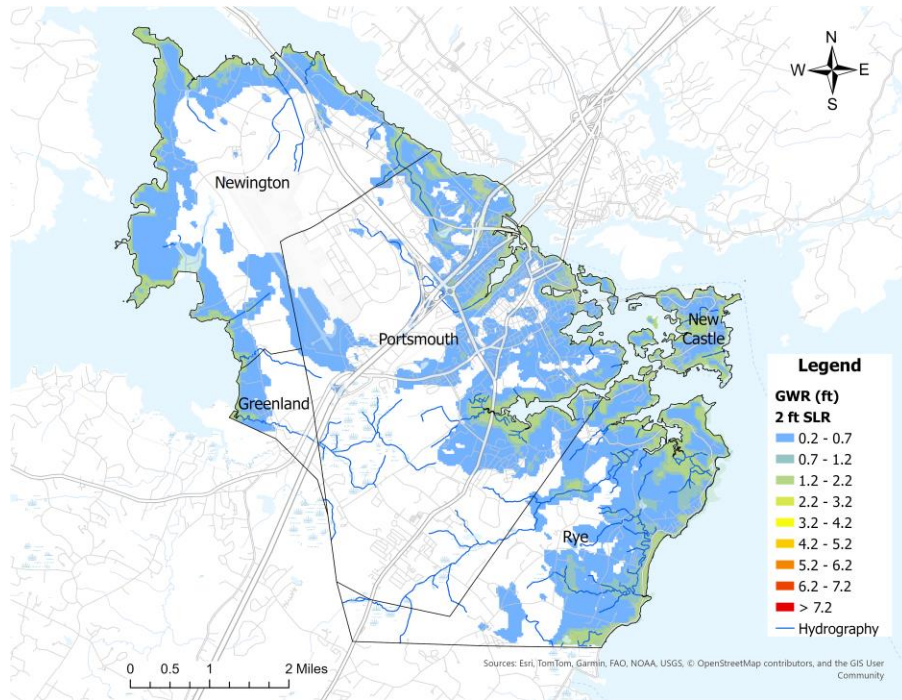
- Dover Plus – 400 ft x 400 ft
- Newfields_Exeter – 100 x 100 ft; 400 x 400 ft
- Portsmouth_NC - 100 x 100 ft; 400 x 400 ft
- NH Seacoast South – 200 x 200 ft
- Rye – 50 x 50 ft; 200 x 200 ft



Saltwater intrusion modeling –

Rollinsford, Dover, Madbury, Durham, Newmarket, Newfields, Exeter, Stratham, Newington, Portsmouth, New Castle

Projected GW Rise - Portsmouth and New Castle



Depth to Groundwater – Why do we care?

Critically Shallow (GWD: 0-5 ft)

- Road and pavements
- Basements and foundations
- Septic Systems
- Most buried utilities
- Stormwater assets
- Contaminated sites
- Critical facilities
- Wetlands

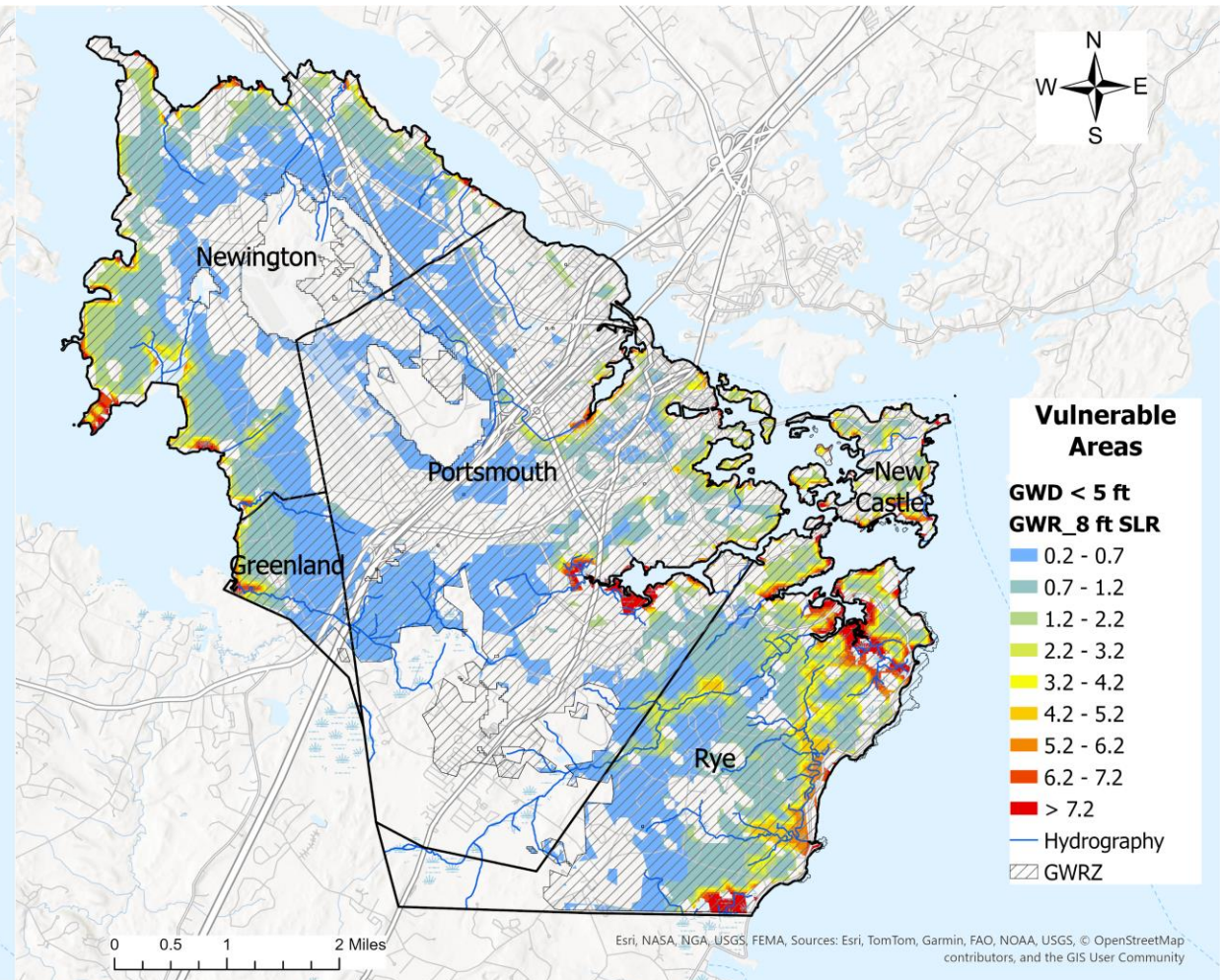
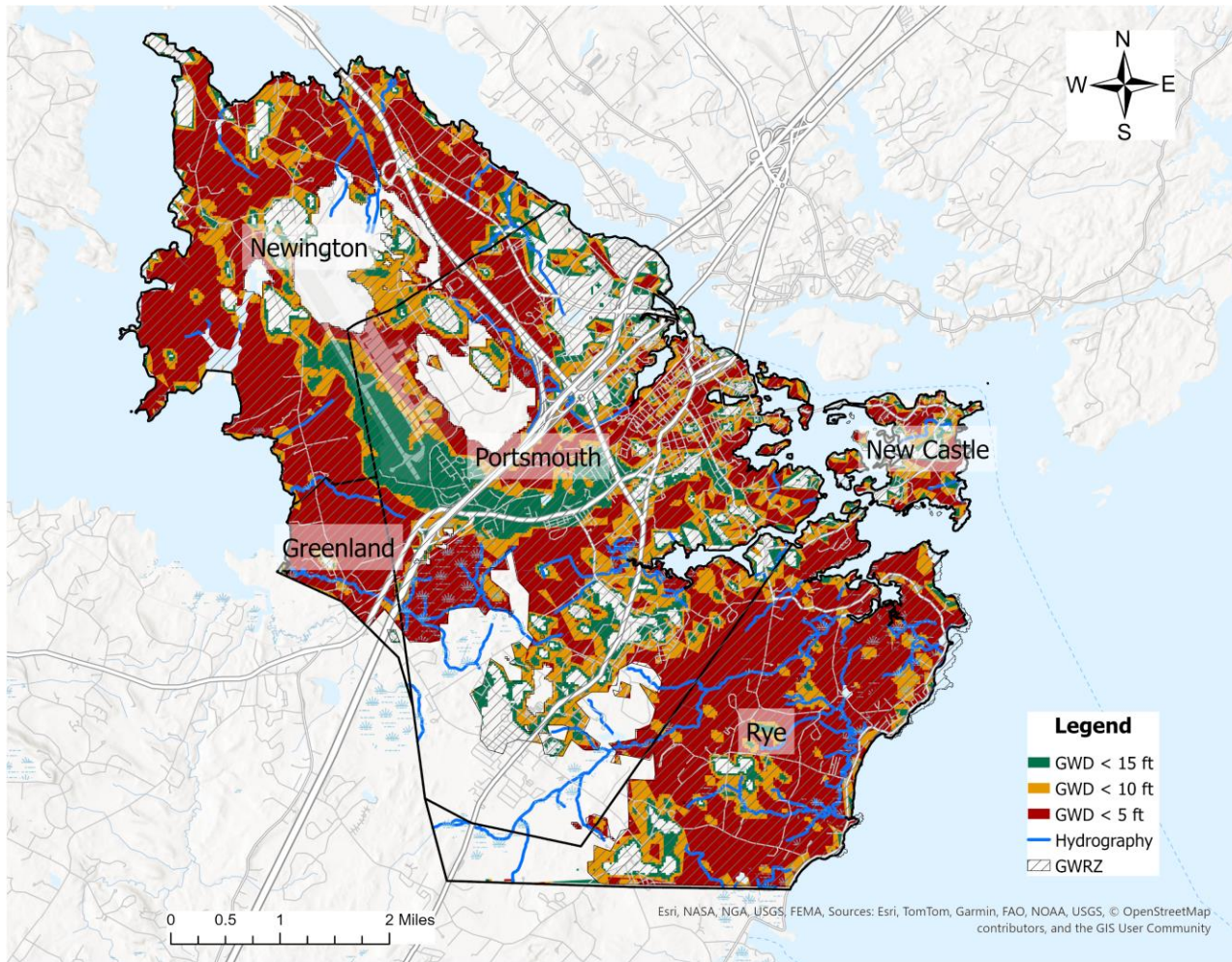
Transition Zone (GWD: 5-10 ft)

- Deeper sewers and storm drains
- Basements/foundations
- Contaminated sites

Future Risk (GWD: 10-15 ft)

- Deep trunk utilities
- Large below-grade structures
- Long-lived infrastructure

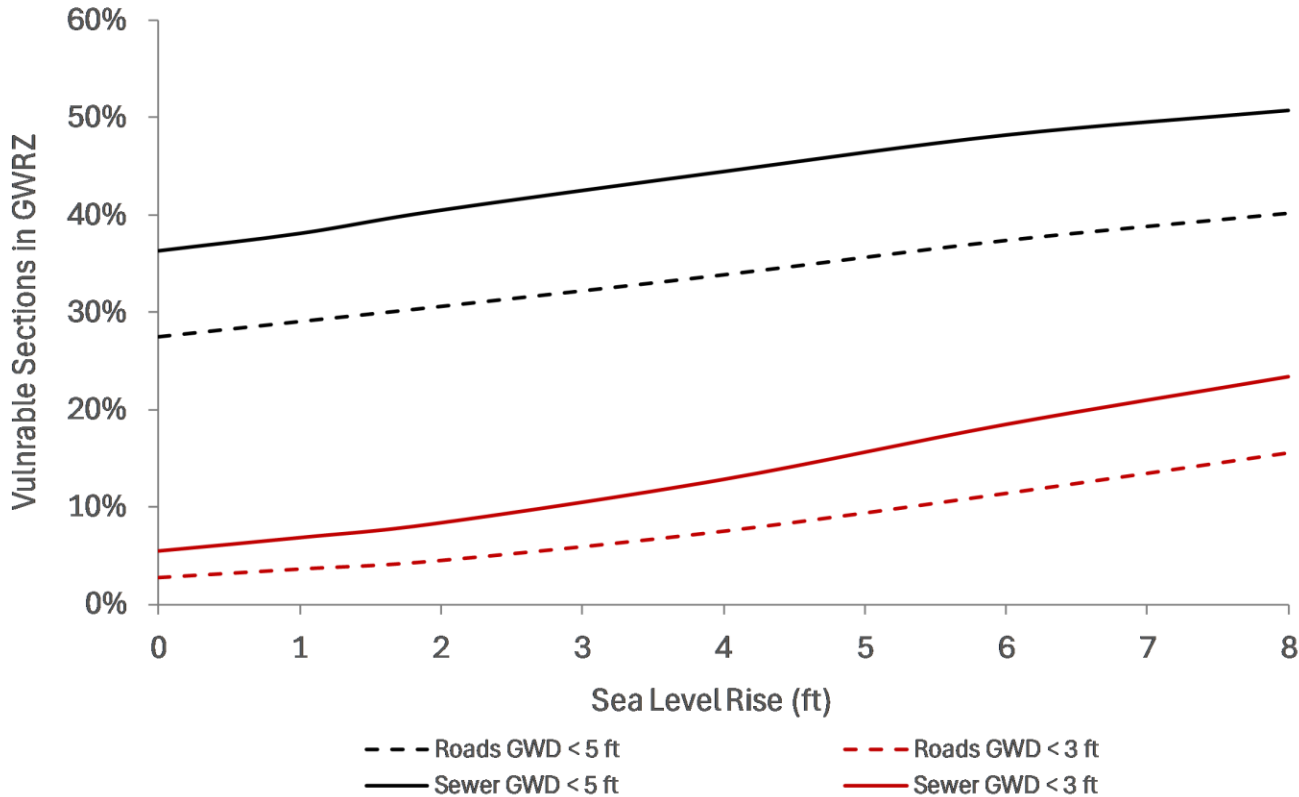
Water table depth zones and vulnerable areas – GWD < 5 ft deep



Portsmouth's Vulnerable Roads and Sewer Pipes

Vulnerable roads and sewer lines within the GWRZ where the GW Depth is less than 5 and 3 feet.

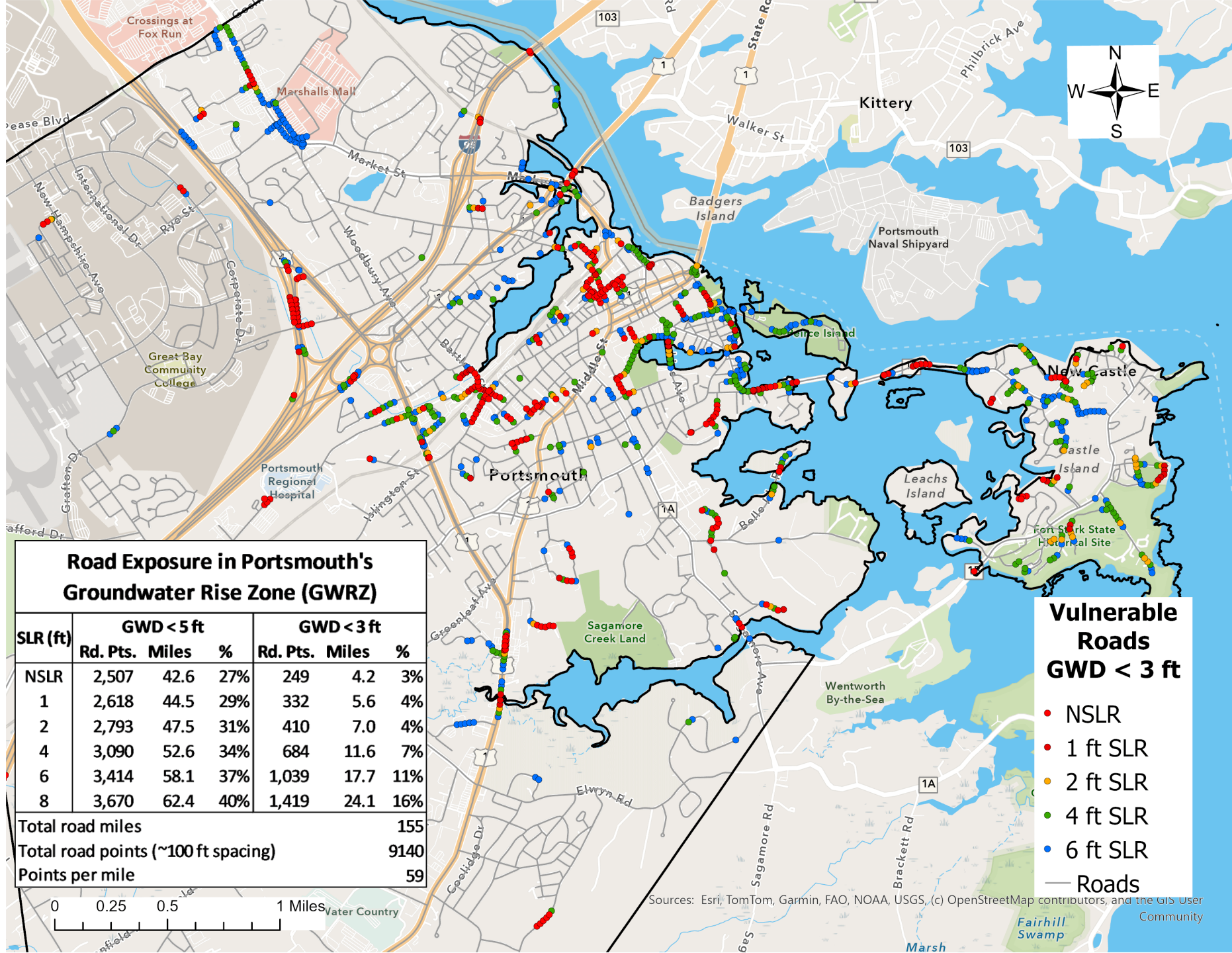
- Sewer pipes are more impacted than roads
- Pavement life reduction is expected to substantially increase with GWD < 3 feet.



Source: Rocket Plumbing <https://rocketplumbingnow.com/trenchless-sewer-repair/>

Premature pavement failure likely – $GWD < 3$ ft.

Where $GW < 5$ ft deep, the pavement's underlying supportive layers are weakened.



Road Exposure in Portsmouth's Groundwater Rise Zone (GWRZ)

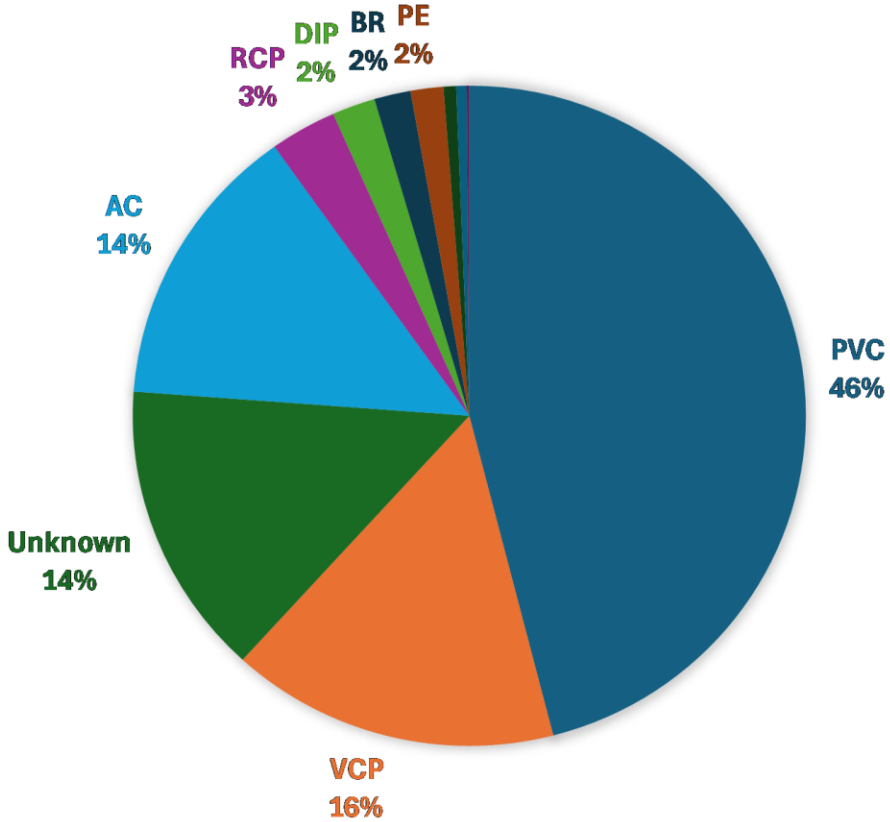
SLR (ft)	GWD < 5 ft			GWD < 3 ft			
	Rd. Pts.	Miles	%	Rd. Pts.	Miles	%	
NSLR	2,507	42.6	27%	249	4.2	3%	
1	2,618	44.5	29%	332	5.6	4%	
2	2,793	47.5	31%	410	7.0	4%	
4	3,090	52.6	34%	684	11.6	7%	
6	3,414	58.1	37%	1,039	17.7	11%	
8	3,670	62.4	40%	1,419	24.1	16%	
Total road miles						155	
Total road points (~100 ft spacing)						9140	
Points per mile						59	

**Vulnerable Roads
GWD < 3 ft**

- NSLR
- 1 ft SLR
- 2 ft SLR
- 4 ft SLR
- 6 ft SLR
- Roads

Portsmouth's Vulnerable Sewer Pipes

PIPE MATERIAL COMPOSITION - GWD < 5 FT, NSLR



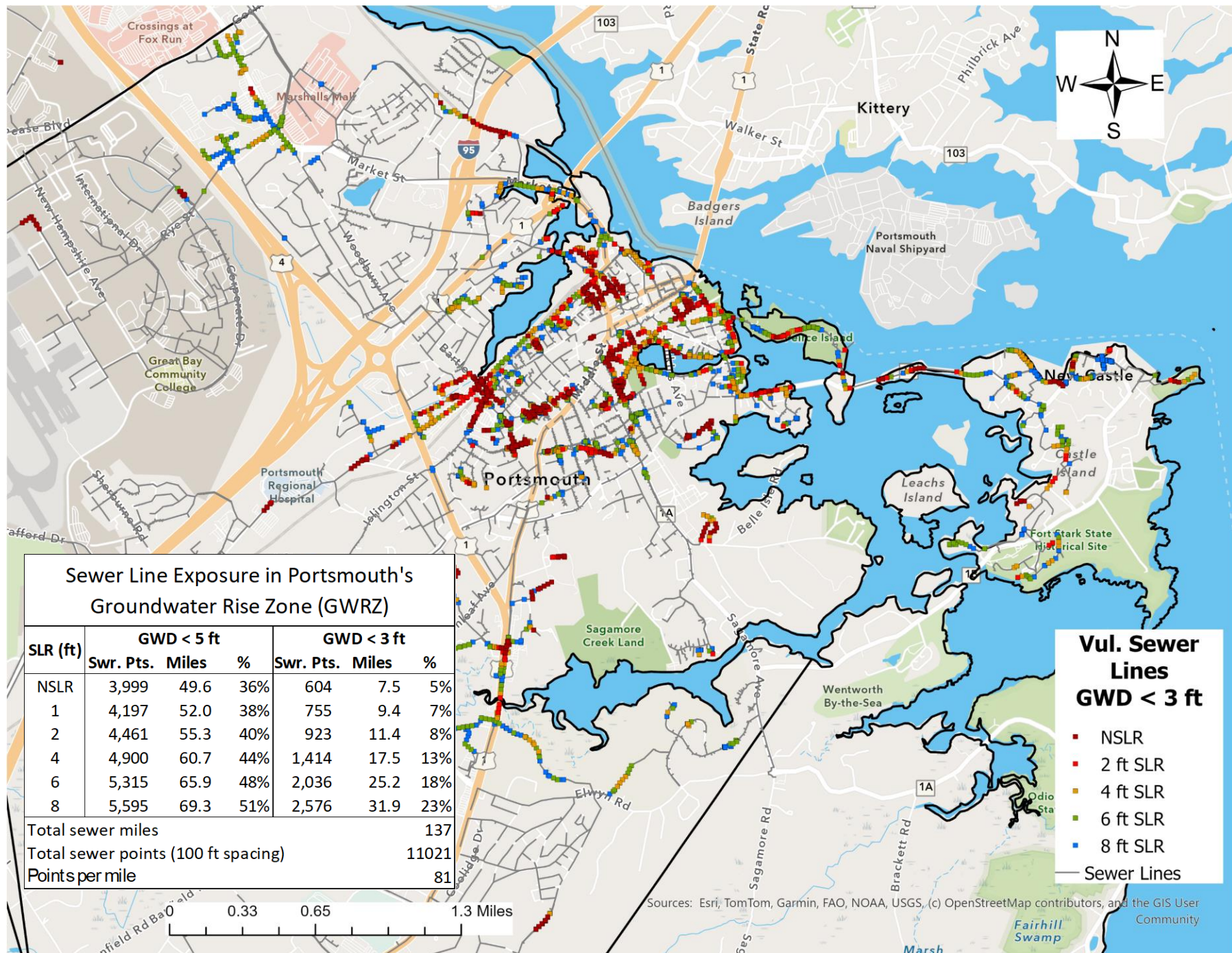
Sewer Pipe Materials Ranked by Resistance to Coastal Groundwater Damage

Ranked best to worst using weighted scores (chemical/corrosion 50%, joint/infiltration 30%, structural 20%)

Rank	Pipe Material	Corrosion resistance (1-5)	Infiltration resistance (1-5)	Structural performance (1-5)	Weighted score (0-5)
1	High-Density Polyethylene (HDPE)	5	5	4	4.8
2	PVC (SDR-35 / gravity sewer)	5	4	4	4.5
3	Vitrified Clay Pipe (VCP)	5	3	3	4
4	Ductile Iron (DIP)	2	4	5	3.2
5	Reinforced Concrete (RCP)	2	3	4	2.7
6	Cast Iron (legacy) (CIP)	1	2	4	1.9
7	Asbestos Cement (AC)	1.5	2	2	1.75
8	Brick (BR)	1	1	2	1.2



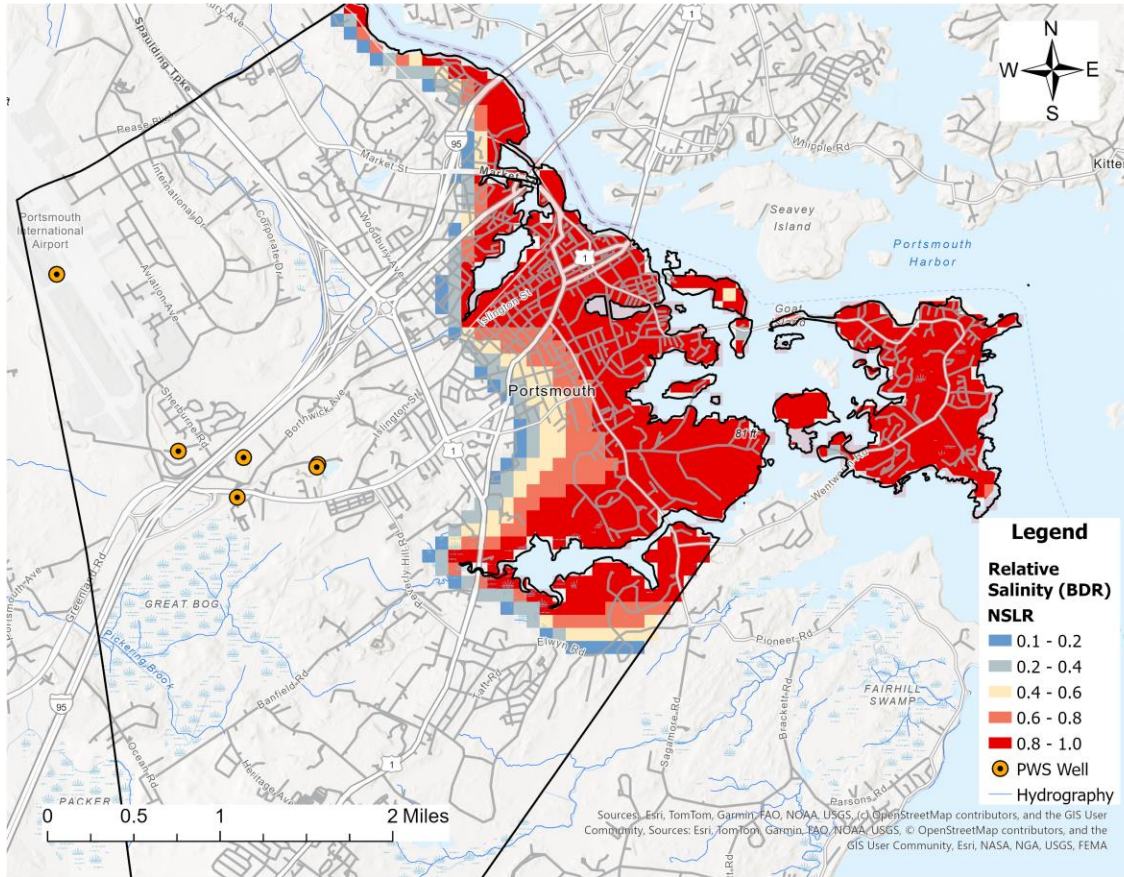
Vulnerable sewer lines - GWD < 3 ft



Saltwater Intrusion & Water Supply

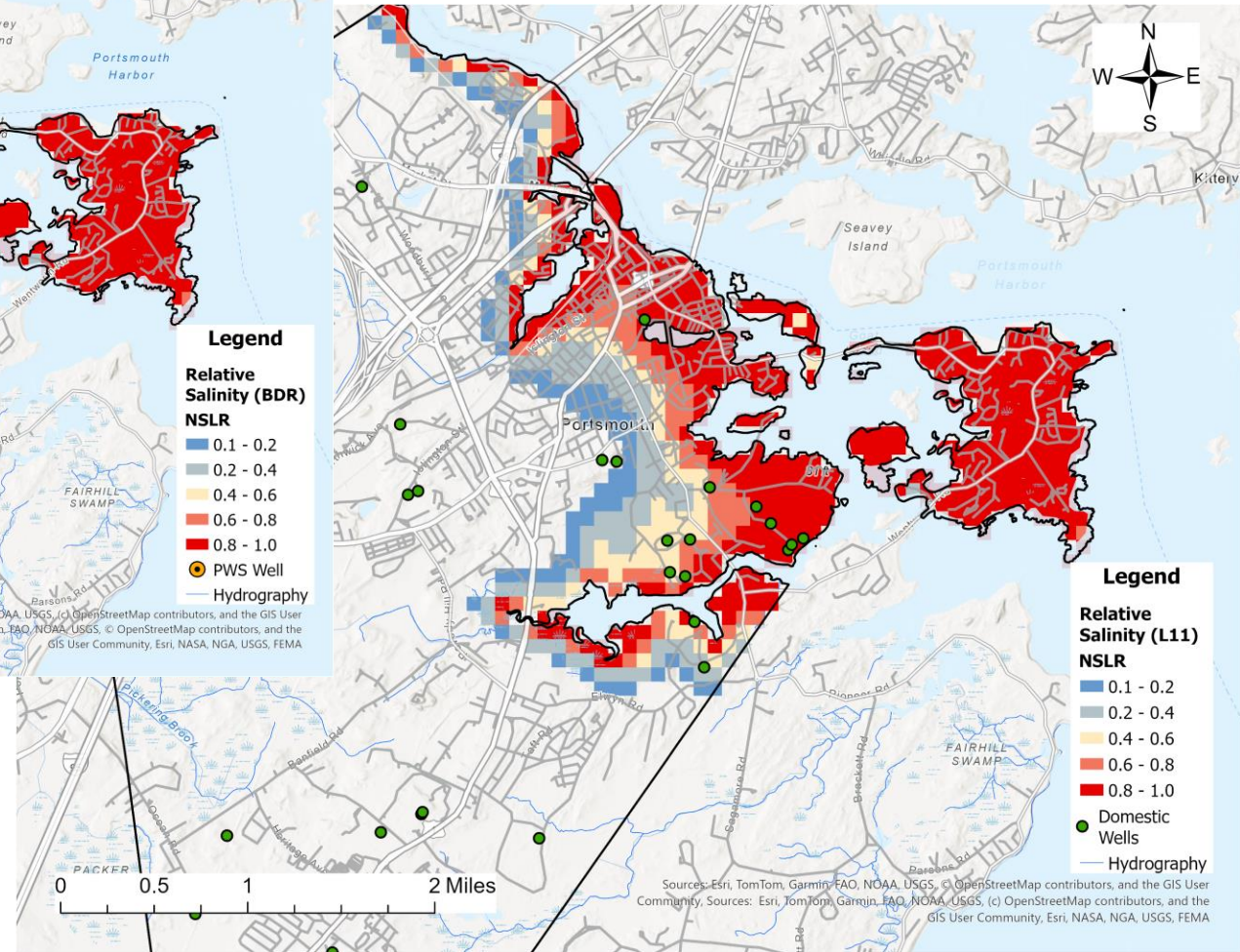
Saltwater Intrusion (SWI) in bedrock with potable water wells

Simulated SWI from the Portsmouth model.



Maximum inland extent of salinized groundwater with NSLR

Inland extent of salinized groundwater with NSLR at typical domestic well depth



Groundwater Monitoring

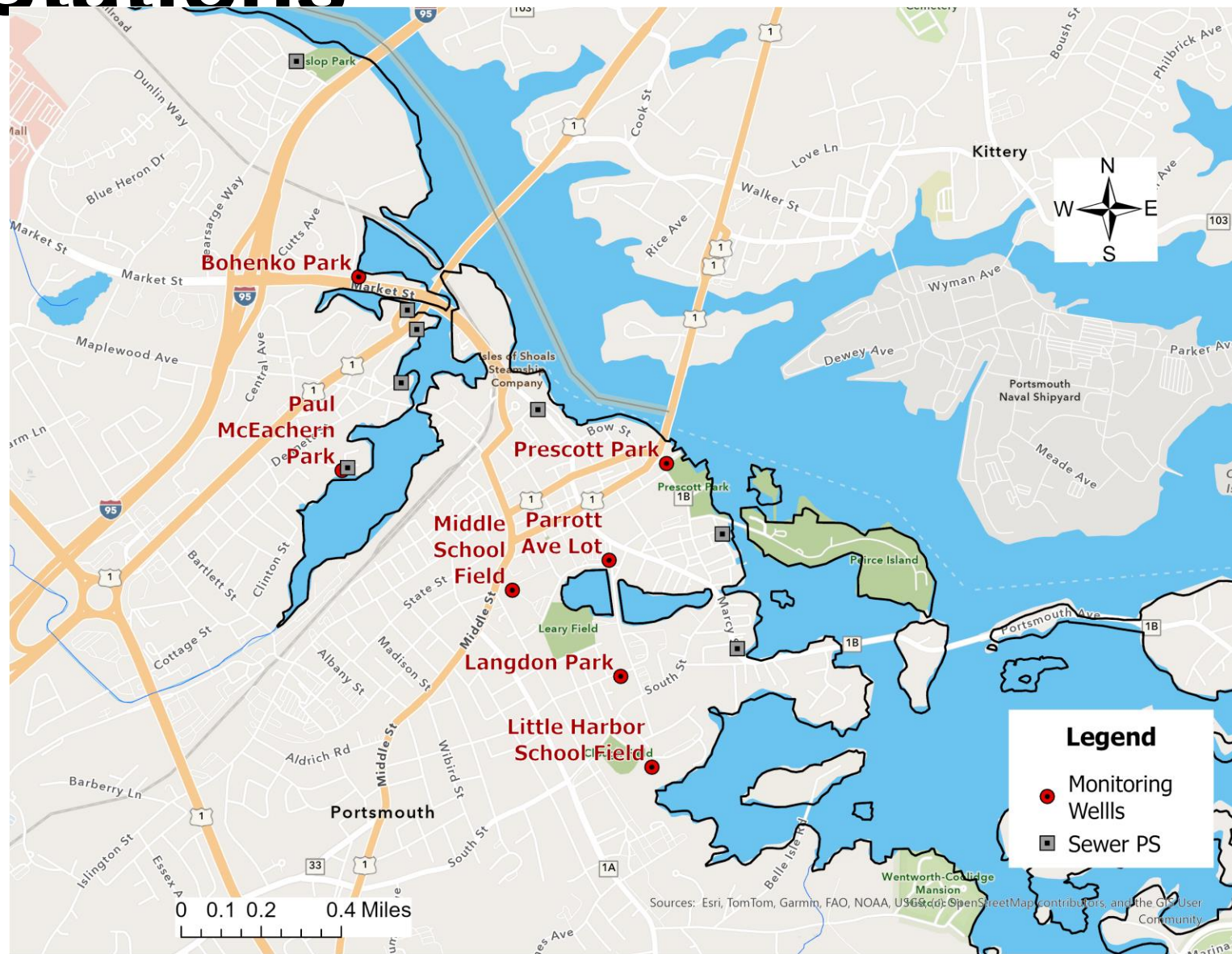
Portsmouth Monitoring Wells and Sewer Pumping Stations

GW Level, Temperature, Conductivity (LTC):

- Bohenko & Parrott Ave

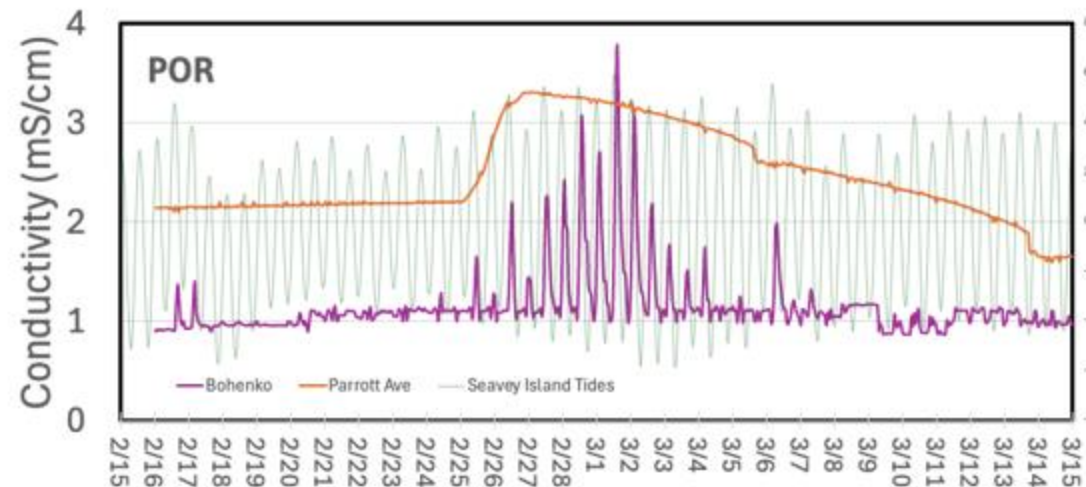
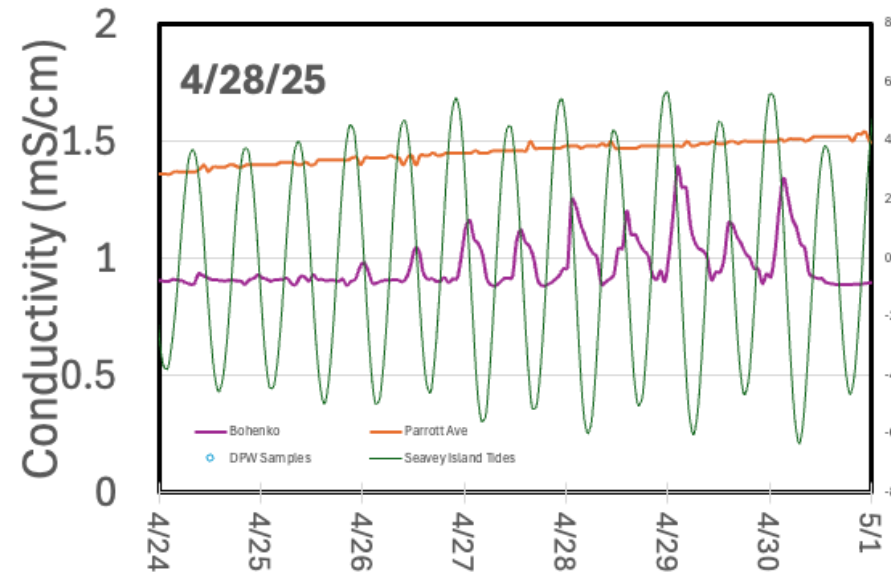
GW Level and Temperature (LT):

- McEachern
- Langdon
- Little Harbor
- Middle School
- Prescott Park



Salinity (Conductivity) - GW monitoring to determine optimal sampling times for salinity in nearby sewer pumping stations

- Use **Bohenko Park** for tidally influenced locations
 - Sample during
 - highest high tide
 - 2 hrs after Seavey Island HT
- Use **Parrott Ave.** for non-tidal locations
 - Sample during snowmelt for road salt impacts, and
 - Summer – large uncertainty



Thank you!

Contact: jfknott@hydropredictions.com
Jennifer.Jacobs@unh.edu