

Storm Response + Preparedness in Working Waterfront Communities



Gulf Log

A right-of-way for right whales

—Hanscom Channel will provide the platform on a proposed right-of-way slapping lanes in the Bay of Fundy between New Brunswick and Nova Scotia to a safe passage zone. Paul Doucet, a Transport Canada spokesman, said it is hoped the new lanes will be in effect by the summer of 2003. The lane change was recommended by an advisory group co-chaired by Transport Canada, with goals of minimizing the risk of whale and ship collisions, the most common killer of right whales. The agency has added the International Maritime Organization to meet shipping lanes in the bay to skirt the area where right whales congregate.

If approved, the changes would be made near Grand Manan Island, New Brunswick, where there is an outboard slapping lane. Under the proposal, lanes will be moved about three nautical miles to the east, toward the Nova Scotia coast and away from Grand Manan.

Scientists at the Whale and Seabird Research Station at Grand Manan have observed that the mammals tend to congregate on the water's surface in the middle of the lane. The scientists are also concerned about whether the whales can hear approaching ships. Laurent Marinier, the managing director of the station and a member of the advisory group that recommended the lane change, has estimated that the alteration could reduce the potential for collisions by 80 percent.

Right whales travel toward Canadian waters after ending their birthing season off Florida and Georgia. Most spend their summers feeding in the plankton-rich waters of the Bay of Fundy.

But arriving at their feeding grounds, stalked by fishing gear or vessel collisions, is a major foe. As of early May, researchers had sighted two right whales entangled in fishing gear. The first, seen in February off Florida, was a male around 21 years old, according to reports by the National Oceanic and Atmospheric Administration (NOAA). The whale was severely entangled in heavy marine line that was wrapped twice around its neck with a loose loop over the back. A second whale was seen near Cape Cod in a yearling, severely entangled with multiple body wraps including lines in the mouth. For updates on the whales' conditions, and more information contact Duane Harley of NOAA at (508) 495-2070 or visit www.oceanline.noaa.gov.

The scoop on sewage

Contending sewage pollution was the topic of a two-day workshop held in April at the Bedford Institute of Oceanography in Dartmouth, Nova Scotia. Sponsored by the Gulf of Maine Council and funded by the Nova Scotia Department of Environment and Labour, the workshop included work-

shop sessions from Massachusetts, New Brunswick, Maine, New Brunswick and Nova Scotia. The agenda included:

—Presenting the current state of coastal management in their jurisdictions.

—Andrew Gotchell, the assistant commissioner for Policy and Planning, Massachusetts Department of Environmental Protection and a keynote speaker, called the combined sewer and storm water pipes found mostly in older urban centers one of regions major pollution concerns. The systems can overflow during storms or snow melt, spewing untreated human waste, industrial waste, toxic materials and floating debris into waterways. Though the systems are "difficult and expensive" to remediate, Gotchell said, progress is slowly being made. Many of the overflow pipes have

The Gulf of Maine Expedition boat. Photo courtesy of Thomas McEneaney



On May 4 a team of five American scientists, two retired Canadian scientists and volunteers, launched their kayak from Provincetown, Massachusetts to discover the ecology and culture of the 1,000-mile-long edge of the Gulf of Maine from Cape Cod to Cape Sable Island, Nova Scotia. All community organizations along the way, the team is sharing its quality control data, water quality profiles, phytoplankton analysis, water table monitoring, and water quality test using electronic probes. Their digital journal, and other light laptop computers are provided by the human crew. The Web site for the expedition, www.gomexpedition.org, is being updated several times a week to provide the expedition's current discoveries with a real-time image from the Gulf, observations and journal entries. Dates and activities for each stop are also available on the site.

been eliminated from the 43 communities surrounding Boston, for example, due to the state-of-the-art Over Island treatment plant.

In addition, Massachusetts is also establishing total maximum daily loads (TMDLs) for pollutants, such as nitrogen, which spill into the waterways from industries, wastewater treatment plants and septic systems. The federal Clean Water Act mandates that states develop and adopt TMDLs for water affected by pollutants. And to bring on site septic systems up to code, Gotchell added, the state now mandates that homeowners have their septic systems approved by state-licensed inspectors before they can transfer the title on their home to a new owner.

In Canada, co-ordination is benefiting from a "green" infrastructure program started in 2000, to help provinces and municipalities fund site thinking water and wastewater treatment projects, said Garth Bangor, the regional director general of Environment Canada, and a keynote speaker. New Brunswick and Nova Scotia will receive more than \$1 million in funding to upgrade or build new treatment systems, with several

million more still in the process of being approved. Province of Prince Edward Island is also developing a coastal management strategy, said Gotchell.

He stressed the importance of "local" level existing contributions to fixing the sewage problem as the education campaign by groups like the Atlantic Coastal Action Program. In one instance, unfettered video footage of the sewage in coastal Lunenburg, Nova Scotia, taken by the local ACAP, raised public awareness and gave the towns the impetus to take action. "They are now building a new sewage treatment plant as a result of that footage," he said.

The workshop provided sessions in sewage treatment innovations, ecosystem health, the costs of sewage management, regulation and enforcement, funding and public education. Four case studies were presented, two showcasing

the best policy outlines a coastal management approach based on sustainable development impact and assessment to stimulate. Coastal assessment is a three scenario approach: the areas closest to the water including beaches, dunes, rock platforms, dyked lands and salt marshes, buffer areas, and areas that form a transition from coastal to inland areas. Development would be limited in the most sensitive areas, closest to the water. The policy calls for a 30 meter (99 feet) coastal buffer for salt marshes and is designed to reduce threats to personal safety by storm surges, minimize the continuation of water and wetlands from non-point material, or other contaminants, maintain flora and fauna and reduce the costs required to repair ocean damage to public property. According to figures from the department, 60 percent of New Brunswick's population lives within 30 kilometers (19 miles) of its 640 kilometers (397.5-mile) coastline. From 1980 to 1999, 8,268 new coastal lots or parcels were created with an average of 627 new coastal properties a year.

Jane Omer, an environmental planner for the department, said they are in the process of developing an interim strategy for the most sensitive areas based on the public consultations. Regulatory and non-regulatory components, legislative and a stewardship program, will be included in the longer-term strategy for the policy, she said.

Gulf of Maine Council receives award

Last month, the U.S. Environmental Protection Agency awarded the Gulf of Maine Council and in particular, seven individuals that inspired its formation with 2002 Environmental Media Awards.

The following people were cited "for their innovative and sustained commitment" in improving the management of the Gulf of Maine fishery: Bill New Brunswick (formerly with the Department of Environment and Local Government), Richard Delaney of Massachusetts (former director of Massachusetts Office of Coastal Zone Management), David Hartman of New Hampshire (director of the New Hampshire Coastal Program), Barry Jones of New Brunswick (formerly with the Department of Fisheries and Aquaculture), David Karley of Maine (with the Maine State Planning Office), Art Longard of Nova Scotia (deceased, was with the Department of Fisheries) and Peter Underwood of Nova Scotia (formerly with the Department of Environment, now deputy minister of the Department of Agriculture and Fisheries). The awards, given out since 1979, honor individuals and groups who have shown particular integrity and commitment in their efforts to preserve the regions' environment. This year's competition drew more than 90 nominators.

Protecting New Brunswick's coast

New Brunswick has proposed a new policy to address increasing coastal development pressures. The goal of policy is according to the proposal, Coastal Area Protection Policy for New Brunswick, is to protect the character of coastal areas while managing future coastal development in a sustainable manner.

Gulf Log

A right-of-way for right whales

—Hannah Chastain will give the podium on a proposal to alter shipping lanes in the Bay of Fundy between Nova Brunswick and Nova Scotia to give migrating Northern right whales a safe passage zone. Paul Doocey, a Transport Canada spokesman, said it is based on

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2000 or visit www.coastalstudies.org.

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water samples from Massachusetts, New Brunswick, Maine, New Brunswick and Nova Scotia. With science and technology

to provide the current state of coastal management in their jurisdictions. Andrew Goddard, the assistant commissioner for Policy and Planning, Massachusetts Department of Environmental Protection and a keynote speaker, called the combined areas and

management effort, as the process of developing a coastal management plan. Development Planning, industry, and environmental

best existing contributions to fixing the sewage problem are the education campaign by groups like the Atlantic Coastal Action Program. In one instance, underwater video footage of the sewage in coastal Lunenburg, Nova

Scotia policy outlines a coastal management approach based on strategic development impact and areas to avoid. Coastal areas are divided into three sensitivity zones: the areas closest to the water including beaches, dunes, rock platforms, dyked lands and salt marshes, buffer areas, and areas that form a transition from coastal to inland areas. Development would be limited in the most sensitive areas, char-

Issues

Coastal Development	13
Coastal Access & Coastal Use	14
Recreational Coastal Use	15
Tourism	16
Marine Resources	17
Lobster	17
Shellfish	18
Urchins	19
Finfish	20
Weir Fishing	21
Seaweed	22
Aquaculture	23
Marine infrastructure	24
Pollution	25
Coastal Debris	25
Land-based Resource Management	26
Industrialization	27
Invasive Species	28

Protecting new Brunswick's coast

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with the Department of Fisheries and Peter Underwood of Nova Scotia (formerly with the Department of Environment), new deputy minister of the Department of Agriculture and Fisheries. The awards, given out since 1970, honor individuals and groups who have shown particular integrity and commitment in their efforts to preserve the region's environment. This year's competition drew more than 90 applications.



MACHIAS

Extensive flooding in downtown Machias, Maine on January 10th, 2024 - Photo courtesy of The Maine Monitor



NEW HARBOR

Jack Sullivan, Island Institute

ROCKLAND

Jack Sullivan, Island Institute

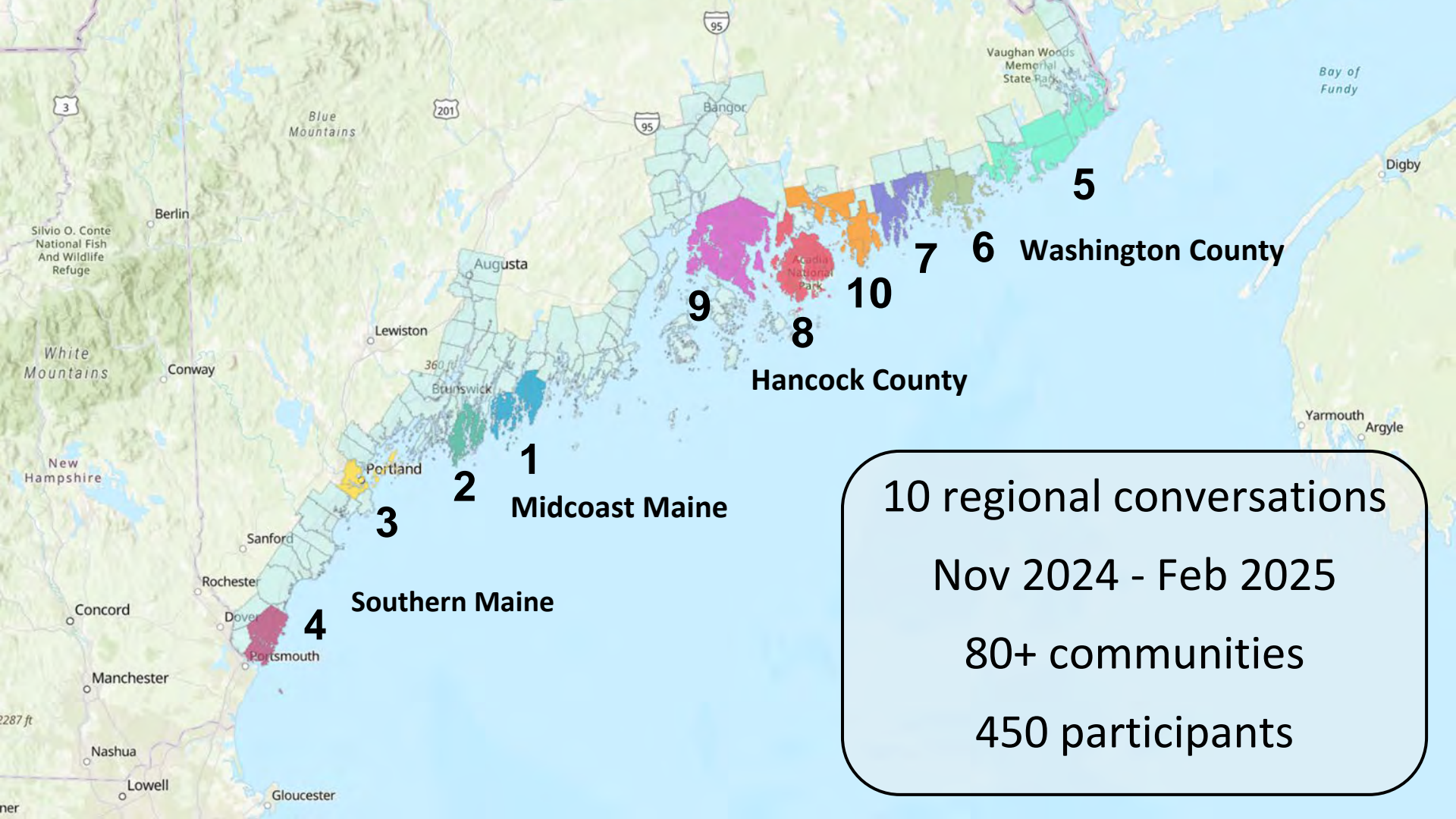


SWAN'S ISLAND, MAINE
WABI TV

Goals

- Create space for community members across diverse sectors to take stock of their working waterfronts within the context of the community's resilience since the storms.
- Share resilience and working waterfront planning work across the region: recently, underway, or planned.
- Learn about resources for public and private working waterfront resilience.
- Identify systems and networks that would be useful to have in place locally to support working waterfronts in anticipation of future storms.





1
Midcoast Maine

4
Southern Maine

Hancock County

Washington County

10 regional conversations
Nov 2024 - Feb 2025
80+ communities
450 participants

METHODS: CONVENINGS & SUMMARY NOTES

Individual Regional Convenings & Notes

1. Southport, Boothbay, Boothbay Harbor, Bristol, South Bristol
2. Phippsburg, Georgetown, Arrowsic
3. Portland, South Portland, Casco Bay Islands
4. Kittery
5. Roque Bluffs, Machias, Machiasport, Whiting, Cutler, Trescott, Eastport, Lubec
6. Jonesport, Addison, Beals
7. Milbridge, Steuben, Harrington
8. Mount Desert Island, Cranberry Isles, Trenton
9. Blue Hill, Brooklin, Brooksville, Castine, Penobscot, Sedgwick, Surry
10. Sullivan, Sorrento, Hancock, Gouldsboro, Winter Harbor

Summarize Key Takeaways:

1. Community Assets
2. Things to Improve
3. Gaps/Needs (Local)
4. Gaps/Needs (Statewide)

Aggregate by Geography:

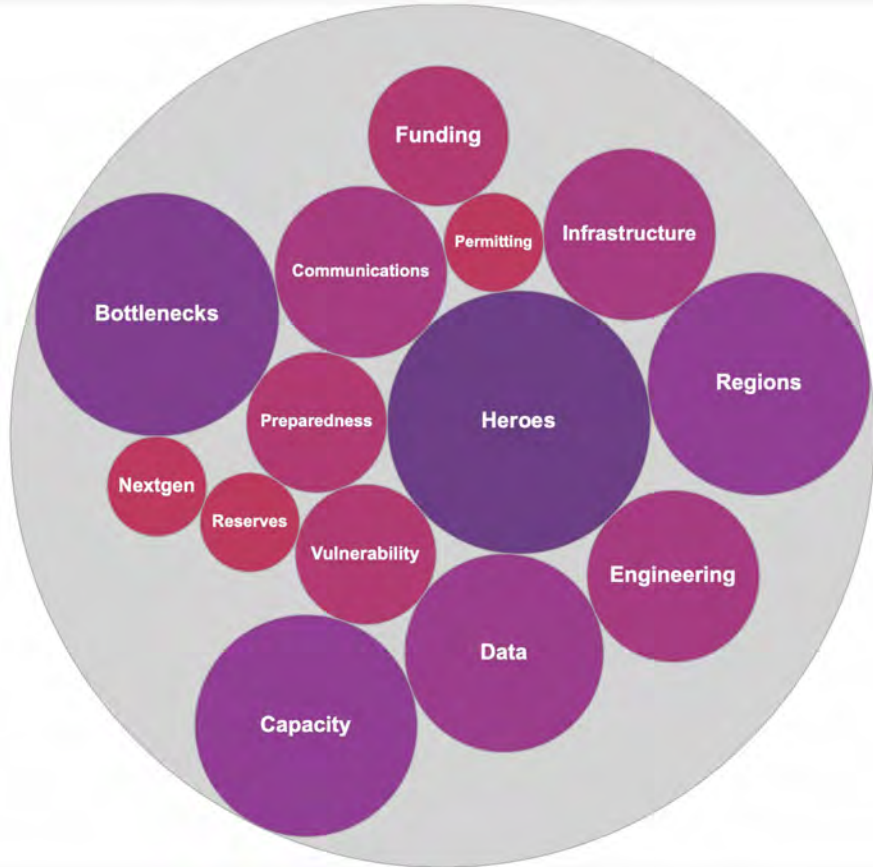
1. Southern Maine & Portland
2. Mid-coast Maine
3. Hancock County
4. Washington County

Code Emergent Themes (17 topics)

Summary Document: analysis of 17 statewide & regional themes

1. **Preparedness**
2. **Heroes**, responders, and planners
3. Community and infrastructure **vulnerability**
4. **Communications**
5. **Data** and information sharing
6. **Insurance** for working waterfronts
7. **Permitting**
8. Emergency **reserves** for projects/protection
9. Rebuilding costs and **bottlenecks**
10. **Infrastructure**
11. **Engineering** solutions
12. **Nature**-based solutions
13. **Funding** barriers
14. **Capacity** building and planning
15. Mental, physical, and spiritual **health**
16. **Regions**, geography and culture
17. The **next generation**

Hancock County



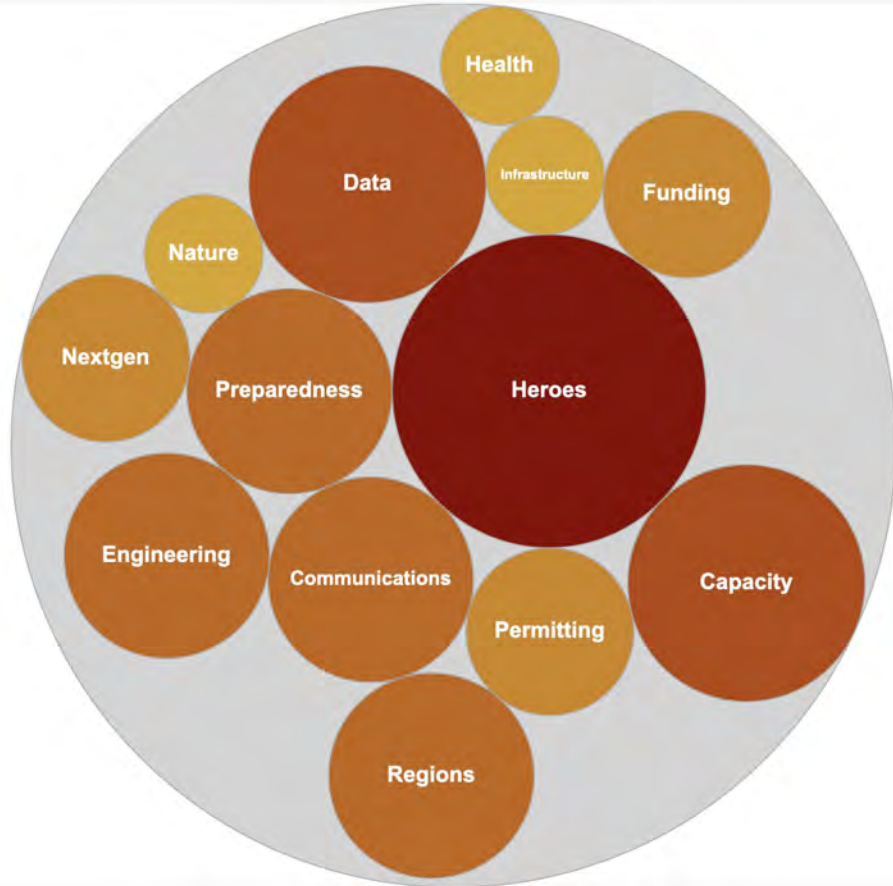
Existing relationships and collaborations are an asset.

Working regionally reduces competition, stretches resources, and reduces duplication.

“There is a need for regional inventories for culvert locations, sizes, and status and vulnerability of sewage and water systems.”

“We need a regional long-term retreat plan. What are we going to be doing in 30 years?”

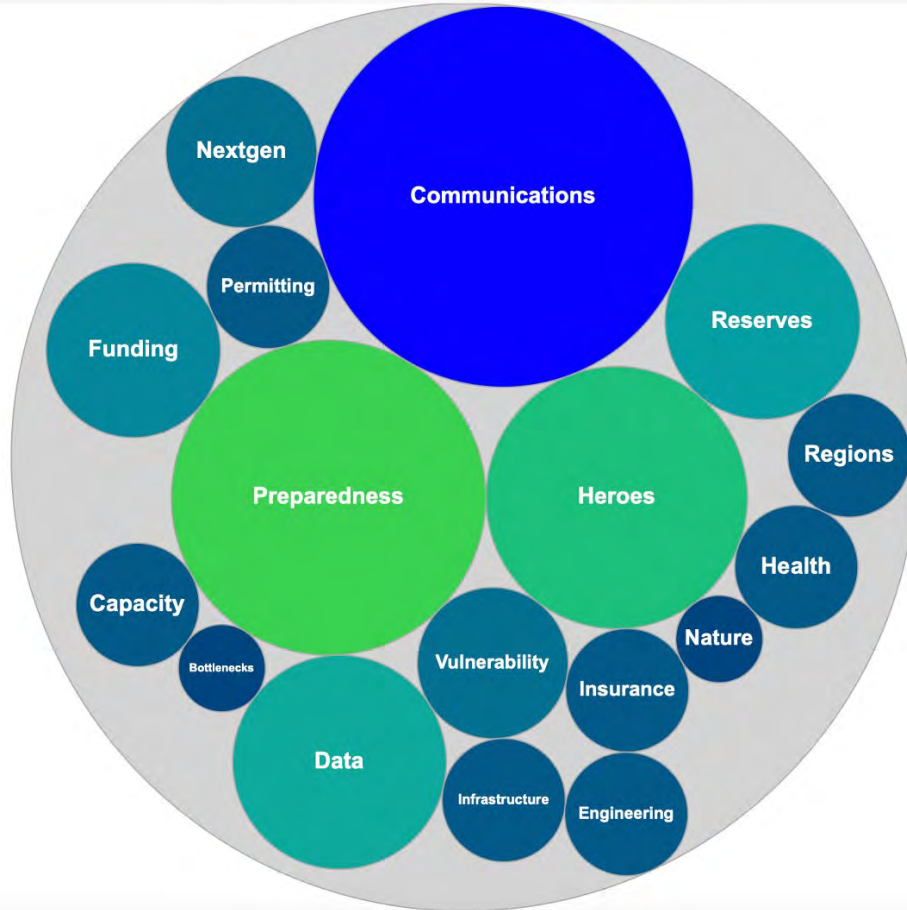
Southern Maine and Portland



“We should think about the idea of neighborhood networks and mutual aid - how can we better help one another?”

“Every number referenced for adaptation funding is missing a zero. One given project for a bridge in Kittery alone could cost \$30 million, which is half of the Governor’s entire \$60 million infrastructure and storm response initiative.”

Midcoast Maine

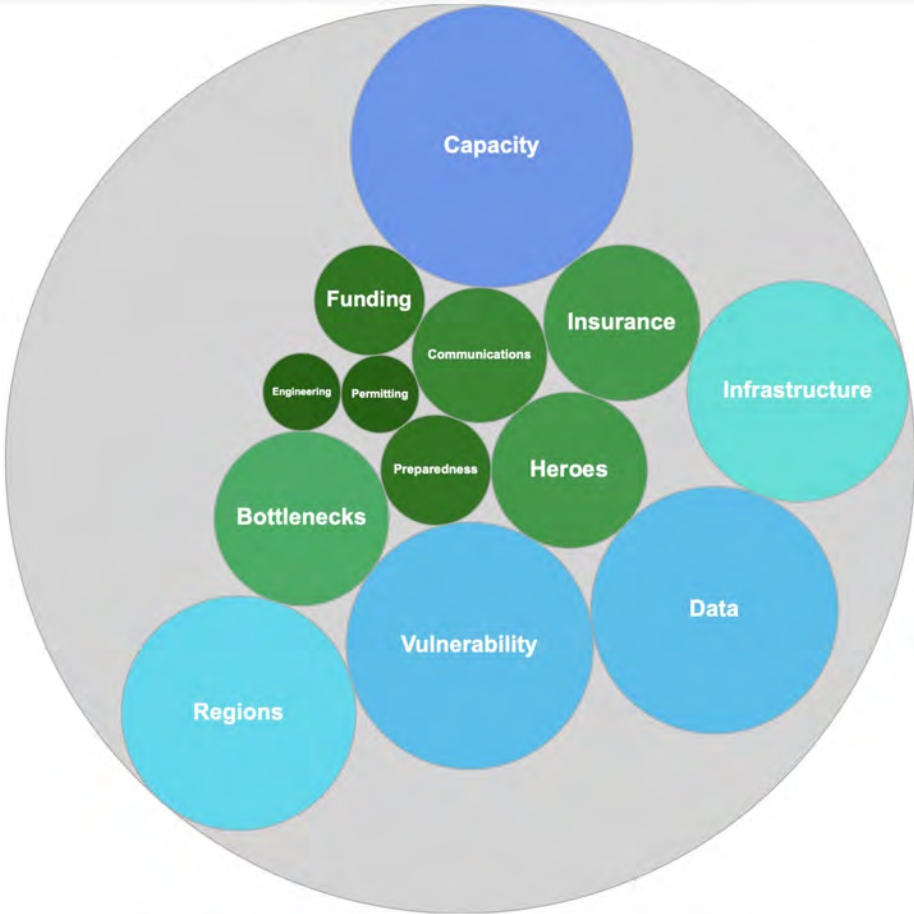


“People are ready to help but are not sure how.”

“We need to support those who do not ask for help and people who experience social isolation.”

“It would be great to support a ‘storm corps’ to engage youth in storm response.”

Washington County



Fishermen and local selectman jumped in to do repairs because people needed to get back to work.

“Washington County has lost out on emergency response (FEMA) funds because of a lack of disaster assistance submissions.”

“Washington County has one of the highest rates of outages (measured by time without power) in the entire country. Need to focus on grid reliability before funding new electricity saving tools such as heat pumps.”

Statewide Themes

- Ineffective **communication** systems
- Awareness around **disaster protocols**
- Critical coastal access and infrastructure are **vulnerable**
- Accessible **data** is crucial for risk awareness and planning
- Local **heroes** stepped up statewide
- Inaccessible **funding** stalls progress
- Insufficient **capacity** for planning, applying, implementation

Storm Response + Preparedness in Maine's Working Waterfront Communities

Summary & Key Takeaways

10 Community Conversations Reveal Local Heroes and Statewide Needs

November 2024 to February 2025



What now?

- Maintain packet of resources
- Share findings
- Working Waterfronts and *Resilient Maine* (NOAA CRRC)
- Maine Working Waterfront Coalition
- Support other efforts (e.g. Governor's Infrastructure Rebuilding and Resilience Commission, State grants, Community Resilience Partnership etc)



Thank you!

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seagrant.umaine.edu/workingwaterfrontstorms

