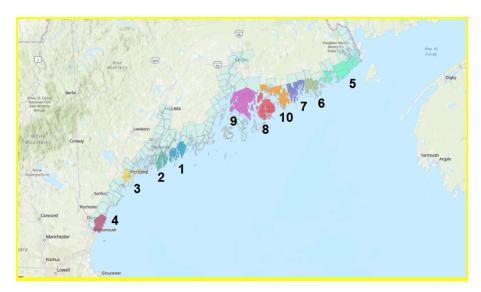
Storm Response and Preparedness in Working Waterfront Communities

A series of ten community conversations along the coast of Maine, Winter 2024-2025

Summary Notes of Regional Community Conversation #5 of 10

Roque Bluffs/Machias/Machiasport/Whiting/Cutler/Trescott/Eastport/Lubec

Washington Academy, 66 Cutler Rd, East Machias, ME 0463 December 10, 2024, 5-7 PM



The goals of this series are to:

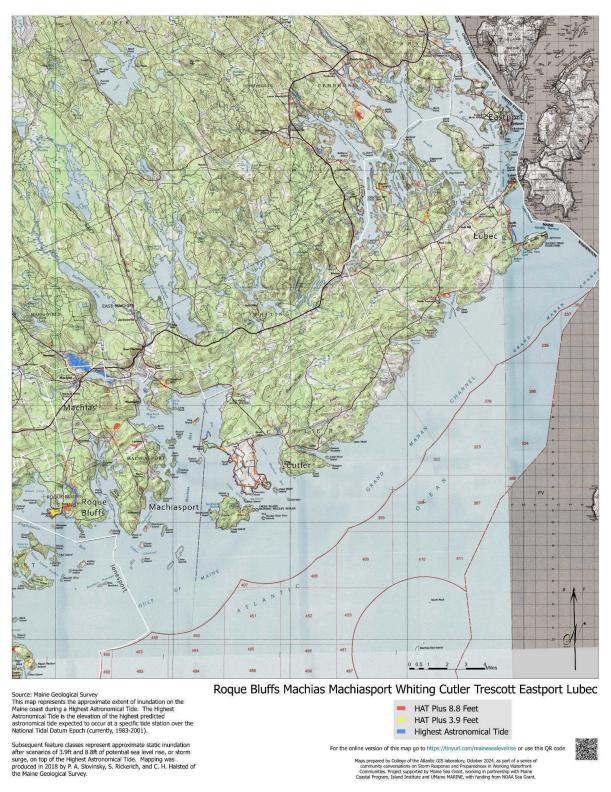
- Create space for community members across diverse sectors to take stock of their working waterfronts within the context of the community's resilience since the storms.
- Share resilience and working waterfront planning work across the region: recent, underway, or planned.
- Learn about resources for 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.

Maine Sea Grant, working in partnership with Maine Coastal Program, Island Institute and UMaine MARINE, received funding from the National Sea Grant office to plan these convenings in response to the January 2024 storms. Each convening is organized collaboratively with local leaders and contacts. We are grateful for their help!









Regional map with sea level rise projections (<u>PDF version</u>). For an online version of this map and the ability to zoom in to any region on Maine coast, go to https://tinyurl.com/mainesealevelrise. Source: Thank you to the College of the Atlantic GIS lab for data and cartography.

ABOUT THIS SERIES

During the winter 2023/24 storm season, a stream of photos filled newspapers, broadcast news, and social media depicting stark destruction of the state's waterfront infrastructure, from east to west. People throughout the state's coastal and working waterfront communities saw their businesses, bluffs, shorelines, wharves, piers, docks, and homes turned upside down by the sea. A year later, the impacts are ongoing, as people and institutions grapple with how to rebuild, rethink, and prepare for the next storms.

In the immediate aftermath, groups that support the state's working waterfront (Island Institute and Maine Coast Fishermen's Association) stepped up with rapid grants to help businesses perform emergency repairs. The state responded shortly thereafter with a \$60M storm relief package to help Maine businesses and communities recover. This funding resulted in \$25.2M awarded to 39 communities through the Infrastructure Adaptation Fund, \$21.1M granted to 68 working waterfronts through the Working Waterfront Resiliency Grant, and \$8M granted to small businesses and non-profits through the Business Recovery and Resilience Grants (with an additional \$2M available now). The Governor also created the Infrastructure Rebuilding and Resiliency Commission to analyse storm response across the state and the state's policies and practices. In November, the Commission shared their near-term recommendations in an Interim Report, and is now working towards creating a long-term rebuilding and resilience plan for the state, to be released in May 2025.

Climate impact readiness was also featured prominently in the recently updated state climate action plan, "Maine Won't Wait." This past Summer, Maine's Governor's Office of Policy Innovation and the Future (GOPIF) was awarded a \$69M climate resilience grant from the National Oceanic and Atmospheric Administration to help protect Maine's communities, environment, and working waterfronts from extreme storms, flooding, and rising sea levels.

At the county level, the emergency management community sprang into action immediately after the storms and continues to support municipalities and people through storm-related crises and pre-storm

planning. The Community Resilience Partnership (CRP) is growing rapidly throughout the state's coastal communities and receiving additional funding and capacity. Overall, the 2024 storms catapulted a fever of attention on the status of people, businesses and the coastline's ability to thrive into the future.

This series of ten regional conversations invites people who live and work in coastal communities to come together to support the economic, physical, and cultural vitality of working waterfront communities, by exploring how to integrate people's diverse expertise, depth of knowledge and lived experience to bolster regional response and preparedness. We are focusing on working waterfronts specifically in this series, but working waterfronts are part of larger communities and they play an important role in our culture, history, families, and economy. These conversations are intended to help make connections between working waterfronts, emergency management and resilience planning in the short-, mid-, and long-term.



SUMMARY OF KEY TAKEAWAYS (from this regional event)

Community Assets

- Regional storm response resources: UMaine Machias offers dorms as temporary housing and towns are turning community shelters into warming centers for power outages
- Regional intertidal access issues: Towns are working together and with local land trusts to address access issues for the clam fishery
- Downeast Sunrise Trail
- The Lubec shellfish committee is helping Machias get their committee started
- The tide gauge in Machias is helping prepare for flood events and understand impacts of storms

Things to Improve

- Planning, outreach, and regional coordination related to increased numbers of cruise ships and regional planning in general, as well as improved communication for comprehensive plans that are underway to ensure all residents and sectors are engaged.
- Commercial fishing access to the intertidal as well as other types of working waterfront infrastructure. Critical working waterfront locations also have big maintenance needs.

Gaps/Needs (local)

- Communication
 - Regional planning: towns can be affected by their neighbor's plans. Working collaboratively helps everyone
 - Sharing knowledge about available resources, like the emergency housing at UMaine Machias.
 - Need for municipal officials to fill out damage assessments promptly so the county can qualify for disaster assistance.
- Erosion: Many properties in Lubec are losing significant amounts of shoreline due to erosion. To fix the erosion issues, you need 1) Money, and 2) People to do the work. There are not enough contractors to currently fix these erosion problems in this area. Roque Bluffs has many erosion issues, too and erosion affects clam flats as well.
- The resilience needs of the Downeast Sunrise Trail need to be addressed. It cost \$500,000 to repair it after last winter.

Gaps/Needs (statewide)

- Electrical grid issues:
 - Limited 3-phase power beyond Route 1, which limits solar projects and other industries.
 - General grid resilience: before green energy can be adopted, the county needs a working electrical grid. Washington County has one of the highest rates of outages (measured by time without power) in the entire country.
- Repair and resilience costs:
 - The estimated repair cost of the road to Roque Bluffs' municipal pier is \$4 million (which is equivalent to eight years of the town's budget)
- FEMA and rebuilding requirements: Most of the time the money can only be used to build back to the former condition, but some declarations give additional funds to improve infrastructure and not just replace it as it was.
 - Be proactive and take photos of existing infrastructure before it is damaged
 - The federal damages process can be lengthy. Roque Bluffs spent \$200,000 and will likely get that money reimbursed from FEMA two years after the storm

FULL MEETING NOTES

Taking stock: Each town to share status of community climate resilience efforts, with a focus on working waterfront resilience

Sunrise County Economic Council (SCEC)

- <u>Tora Johnson (Director of the Sustainable Prosperity Initiative, SCEC):</u> SCEC provides multiple services for communities in Washington County.
 - New <u>tide gauge</u> in Machias located at the town landing. The gauge was funded by an NSF grant in partnership with GMRI.
 - There are also tide gauges in Cutler and Eastport, but this is the first one in the upper bay, which is quite different.
 - Students at Washington Academy, Machias High School, and UMaine Machias are accessing the gauge for stewardship and educational projects.
 - Recent readings from the gauge are notable the most recent king tide was six inches higher than the one measured in 2018, and nine "100 year floods" have occurred in the last 6.5 years.
 - The gauge has helped Tora and others do modeling of flooding in Machias and on the Sunrise Trail.
 - They modeled storm scenarios and the economic impacts of storms in Machias and found that flooding from the January 10, 2024 storm caused at least \$8.3 million in lost economic value to Machias businesses.
 - They can do similar work in other places.
 - SCEC hosts many <u>online planning maps</u> for Washington County communities. These
 include parcel maps showing sea level rise, flood risks, and critical infrastructure, among
 other things.
 - Tora can give tutorials to municipal staff and committees for how to use these maps.
 - SCEC does substantial work with fishing communities.
 - They gathered information about storm damage and critical infrastructure and helped connect working waterfront owners with loans and assistance.
 - SCEC is partnering with the Downeast Conservation Network to secure access to clam flats and are adding sea level rise predictions into that work. Maine Coast Heritage Trust has been an active partner in that work.
 - SCEC updated the Island Institute's "Last 20 Miles" Working Waterfront inventory for Washington County (contact Tora for access tiohnson@sunrisecounty.org)
 - Each point on the map can be clicked for information about the location; some information is not publicly shared but municipalities can access it by request.
 - There are big maintenance needs at critical sites for fishing industry, compounded by the January 2024 storms.
 - There is also a need for more access to improve safety.
 - SCEC can assist with community planning and action, including hazard mitigation planning and comprehensive planning.
 - Jen Peters, the Director of Community Development (<u>scec@sunrisecounty.org</u>) is the contact for these programs
 - A regional planning effort is the <u>Upper Machias Bay Master Plan</u>, which encompasses multiple Machias Bay towns and is being led by SCEC.

- SCEC is also working with partners to do resilience planning for the electrical grid, much
 of which was damaged last winter. Working waterfronts need a resilient electrical grid.
- SCEC is developing a <u>Coastal Climate Resilience toolkit</u>
 - Screenshots of the maps and information can be used in grant and loan applications
- SCEC works to communicate Washington County needs to state and federal agencies. They are raising awareness statewide and nationally about local needs.
 - Tora shared word clouds of top concerns locally for municipalities, businesses, and families
- <u>Jen Peters (Director of Community Development SCEC):</u> SCEC can assist municipalities and nonprofits with grant development at no cost to communities. The level of help varies with the program, and SCEC can't necessarily help write the application, but they can do nearly everything else.
 - Some FEMA grants require approved hazard mitigation plans do this now if you haven't already signed on!
 - The Northern Border Regional Commission's (NBRC) Catalyst Grant provides assistance for workforce development and economic development grants up to \$1 million.
 - The Timber for Transit Program provides funds for waterfront infrastructure. Piers and wharves are allowed since they are transportation-adjacent.
 - Contact SCEC for more info and assistance.

Eastport:

- <u>Jeanne Peacock (Eastport City Council)</u>: Eastport was hit hard during last winter's storms.
 - The city experienced significant damage to roofs, both asphalt shingled roofs and rubber membrane roofs were lost. One rubber roof blew up like a balloon during a January storm before it completely failed.
 - The city also experienced significant tree loss including extensive fallen trees in the municipal cemetery.
 - Traditionally winter storms have been from the north. Eastport was not as protected from the southern storms that occurred last winter.
 - Some fishing boats in the breakwater (municipal marina) broke loose and damaged other vessels.
 - There was damage from high tides as well as from heavy rains.
 - One whole bank on Deep Cove Road washed away, which cost \$40K to remediate.
 - The high tide lifted the pavement on Old County Road and required both the city crew and outside contractors to repair.
 - Private piers were lost such as at the Cannery Restaurant and at Look's Lobster, which did receive some federal funds for repairs.
 - A grant provided a generator to be installed at city hall as well as the installation of a public announcement system, and an ATV for remote emergency access.
 - The Governor's Office of Policy Innovation and the Future (GOPIF), ORPC (a tidal power company), the Island Institute, the City of Eastport, and Versant are planning to submit a grant for a battery array in the old Versant diesel power plant in Eastport, which will be used for an emergency electrical supply. Batteries could be powered by a combination of solar, tidal, and diesel power. We appreciate help from partners. Eastport is at the end of the electrical utility line. Previously, Versant had diesel generators to supply emergency power, but these have been decommissioned, leading to more power outages.

Roque Bluffs

- Phillip Pinto (Roque Bluffs Selectboard):
 - The municipally owned working waterfront includes a boat ramp and harbor, which is accessed by a single road that was washed away in last winter's storms. The estimated repair cost is \$4 million (which is equivalent to 8 years of the town's budget). A Maine Infrastructure Adaptation Grant provided \$75,000 to help with a necessary engineering study, but more money (~\$50,000) is needed.
 - The bluffs in Roque Bluffs also had serious erosion damage. Property owners aren't currently affected, so FEMA won't cover erosion control measures. However, erosion is a major issue for the town.
- <u>David Dowley (Roque Bluffs resident):</u> The town is pursuing grants to turn the community center into a warming center for emergencies when power is out for extended periods.

Machias

- Sarah Craighead Dedmon (Town of Machias Operations Manager):
 - The town had extensive flooding damage to the old municipal office, which forced them to move to a new location.
 - The town is part of the new Machias Bay Master Plan project, and they are looking forward to participating
 - Machiasport needs to sign onto the Washington County EMA hazard mitigation plan and she will work with the town to make that happen
- <u>Tora Johnson (Machias Resident and SCEC):</u> The Downeast Sunrise Trail is considered the working waterfront for Machias and it was destroyed last winter, which caused major disruption for businesses and the local community when it closed for six months. Those losses can't be recouped.
- <u>Jacob Van de Sande (Maine Coast Heritage Trust):</u> The resilience needs of the Downeast Sunrise Trail need to be addressed. It cost \$500,000 to repair it after last winter, and fixing the bridges could help reduce erosion. The undersized culverts need to be addressed, too.
- <u>Colleen Maker (Washington Academy science teacher):</u> Students are studying the impacts of the storms in class. Kids are asking "why don't you fix it?" and seeing everyone coming to the table to address these issues is amazing.
 - Students are working with Tora to gather data in Machias and get experience.

Machiasport

- <u>Sarah Craighead Dedmon (Town of Machias and Machiasport Operations Manager):</u> Machiasport
 is linked to Machias. Issues at the Machias wastewater treatment plant affect clam flats in
 Machiasport.
 - The town is also working on signing on to the EMA Hazard Mitigation Plan.
- <u>David Cale (Machiasport Harbor Master):</u> Machiasport has a lobster buying/distribution company, a salmon aquaculture company, and a working waterfront with many commercial boats. They had damage to the commercial municipal pier last winter, and the town received a grant to make repairs. The pier lost its ramp in the storms.
- <u>Jacob Van de Sande (Maine Coast Heritage Trust):</u> a road to a clam access point was also lost.

East Machias

• <u>Jen Peters (East Machias Planning Board and SCEC):</u> The town has decided to update their comprehensive plan to include vulnerable infrastructure including roads, overboard discharges, and other resilience needs. A lot of money is needed to address these issues.

Cutler

- Mark Smith (Cutler Planning Board): Recent storms didn't cause enormous damage in Cutler, but one private home suffered extensive water damage.
 - o The road to the Maine Coast Heritage Trust parking lot at Western Head was hammered
 - The municipal boat launch was also damaged; it will receive FEMA funds for repairs
 - The town is updating their comprehensive plan
- Jacob Van de Sande (Maine Coast Heritage Trust): Cutler has also been actively addressing clamming access issues
 - <u>Tora Johnson (SCEC)</u>: SCEC did a study of physician injuries experienced by fishermen, and clammers are experiencing significant harm by having to use less than adequate boats during inclement weather due to loss of road access, or they are walking longer distances and dragging heavy gear. The harvesters need more options for access to the intertidal.

Lubec

- Michael Scrivani (Lubec Shellfish Committee):
 - Lubec's municipal commercial pier was damaged last winter, and they received a grant to cover the costs for repairs.
 - Eastport now has an increased number of cruise ships. When do we prepare for a catastrophic ship accident in Cobscook Bay? Every community around the bay has significant clamming resources that would be decimated by such an accident.
- Amanda Lyons (Lubec intertidal harvester):
 - Having access to the intertidal is extremely important.
 - Erosion is a major issue, as is the availability of funding and people to address erosion issues
- Michael Scrivani & Jacob Van de Sande: Lubec is pursuing a new multimillion dollar safe harbor project that will be a 4-5 year buildout. It is designed to have two cranes, which will only be operational at the end of the project. The State (DOT) is managing this important construction project. Improving the working waterfront means there may need to be improvements to nearby roads. The existing infrastructure needs repairs in the meantime.

Washington County Emergency Management Agency (EMA)

- Lisa Hanscom (Washington County EMA Director):
 - This agency is your resource when you need assistance and local resources aren't enough.
 - Example: When Roque Bluffs had a flash flood in 2021 that flooded roads and stranded 270 people, the state EMA coordinated 32 DOT trucks to repair the roads, as well as getting the Coast Guard, Marine Patrol, and Maine Forest Service to assist in case there were any medical emergencies or evacuation needs. It took one call from Lisa and the Washington County EMA to get the Maine EMA (MEMA) onboard and other state resources directed to Roque Bluffs.
 - Washington County EMA sends out a survey to towns for damage assessments. This
 needs to be filled out within one week of a storm event. The survey is sent to MEMA,
 and if both the county and the state as a whole meet certain damage thresholds, the
 county can get a federal emergency declaration. The state threshold is currently \$2.7
 million in damage.
 - Washington County EMA needs information on damage to help the state meet the damage thresholds. Often, damage isn't reported in time. There was one

- incident recently where Washington County was only \$40,000 below the threshold, and Washington County EMA learned later that a communication tower was damaged and not reported, which would have gotten the county over the threshold and allowed the county to access federal disaster funding.
- Please fill out the damage assessment surveys after every storm! It can help with record-keeping. There is an app that lets you take photos with GPS embedded.
 - Your best guess of repair costs is okay. You don't need formal estimates or quotes.
- Please fill out the damage assessment surveys. They have to be done within one week of a storm. Maine has had 11 emergency declarations recently, but Washington County was only included in two of them, even when there was enough damage to qualify. Reporting is essential.
- Municipalities have to be part of the county hazard mitigation plan to be eligible for funds.
- In addition to emergency response, county EMAs can help with things like dry wells, electricity grid damage, communication towers, etc.
 - The county EMA can also help with emergency mitigation planning and can write support letters for grant applications
- If your town got FEMA money after the January storms, thank the people who completed the storm damage assessments on time.
 - Assessments filed late can be added, but it is essential to meet the deadline to qualify for funding

Discussion

- <u>Tora Johnson:</u> When is the deadline for the next round of the BRIC (Building Resilient Infrastructure and Communities) grant?
 - March 7, 2025 by 5:00 pm
- <u>Michael Scrivani:</u> [asking about the MEMA damage reporting app] when a photo is uploaded, is the metadata archived as well?
 - Yes, as long as that feature is enabled on the phone used to take the pictures
- <u>John Reisman: There</u> are three bills related to climate and storm response that will be before the Maine Legislature this spring, all sponsored by Rep. Billy Bob Faulkingham. See the legislature webpage for more information about the bills.
- Phillip Pinto: Permitting is also key to getting FEMA funding
- Robin Pinto: Can the Machias Dike be spanned with the "bridge in a backpack?" (See "resource sharing" slides linked below for information about engineering solutions presented by James Bryce, UMaine Engineering Technologies)
- <u>Phillip Pinto:</u> What is the max load for the bridge in a backpack? The two bridges on the sunrise trail need to be replaced but they are required to meet railroad specs.
 - o Jim Bryce: I'm sure we can do it.
 - Note: it was confirmed later in the week that the "bridge in a backpack" can be built to railroad specifications.
- Tora Johnson: Maine Coast Heritage Trust has been helping the town of Gouldsboro find creative ways to protect walk-in access to the intertidal using trail agreements that are enforced by the town shellfish warden. This formalizes access points that might otherwise be lost and is a lower bar for protection than the working waterfront Current Use Taxation Program, which has steep penalties for properties that are withdrawn from the program or no longer used as working waterfronts.

Looking Forward: What Systems, Networks, and Resources do participants think are needed to better prepare for future storms (or wish had been in place before the January 2024 storms)? Brainstorming community assets to meet gaps and needs

Community Assets

- Regional storm response resources: UMaine Machias offers dorms as temporary housing and towns are turning community shelters into warming centers for power outages
- Regional intertidal access issues: Towns are working together and with local landtrusts to address access issues for the clam fishery
- Students are studying the impacts of the storms in class
- Comprehensive planning and recent plan updates
 - It would be great to come together again to see what has been accomplished and to share how to work better together.
- Downeast Sunrise Trail is a critical community asset
- Working Waterfronts are a culture as well as a lifestyle, and include mudflats as well as wharves
- The Lubec shellfish committee is helping Machias get their committee started
- The tide gauge in Machias is helping prepare for flood events and understand impacts of storms

Things to Improve

- Planning, outreach, and regional coordination
 - Eastport now has an increased number of cruise ships. We need to prepare for a catastrophic ship accident in Cobscook Bay because every community around the bay has significant clamming resources that would be decimated by such an accident.
 - The Lubec comprehensive plan doesn't have representation from the fishing and clamming industries. It is important to be diligent during outreach and make sure all residents and sectors are involved in planning efforts.
 - Need for more regional planning
- Commercial fishing access
 - Access to the intertidal
 - SCEC did a study of physical injuries experienced by fishermen, and clammers are experiencing significant harm by having to use less than adequate boats during inclement weather due to loss of road access, or they are walking longer distances and dragging heavy gear. The harvesters need more options for access to the intertidal.
 - Access to other types working waterfront infrastructure
 - SCEC is inventorying access and documenting losses in access over the last 10-15 years, including after the storms
 - There are big maintenance needs at critical sites for fishing industry

Gaps/Needs (local)

- Communication
 - Comprehensive plan for outreach and ensuring all community members are involved
 - Regional planning: towns can be affected by their neighbor's plans. Working collaboratively helps everyone
 - Sharing knowledge about available resources, like the emergency housing at UMaine Machias.
 - Need for municipal officials to fill out damage assessments promptly so the county can qualify for disaster assistance.

- Erosion: Many properties in Lubec are losing significant amounts of shoreline due to erosion. To fix the erosion issues, you need 1) Money, and 2) People to do the work. There are not enough contractors to currently fix these erosion problems in this area. Roque Bluffs has many erosion issues, too, and clam flats are affected by erosion as well.
- The resilience needs of the Downeast Sunrise Trail need to be addressed. It cost \$500,000 to repair it after last winter.

Gaps/Needs (statewide)

- Electrical grid issues:
 - Roque Bluffs can't access 3-phase power and satisfactory electric utility services. The town is looking into a community solar project, but it can't be done without access to 3-phase power.
 - SCEC got an NREL grant to work on green power solutions. Before clean energy can be adopted, the county needs a working electrical grid. Washington County has one of the highest rates of outages (measured by time without power) in the entire country.
- Repair and resilience costs:
 - The estimated repair cost of the road to Roque Bluffs' municipal pier is \$4 million (which is equivalent to 8 years of the town's budget)
- FEMA and rebuilding requirements: When the President signs a disaster declaration, the money only goes towards that one disaster, and most of the time the money can only be used to build back to the former condition.
 - However, some declarations give additional funds to improve infrastructure and not just replace it as it was.
 - Be proactive and take photos of existing infrastructure before it is damaged so you can document the damage that does happen
 - The federal damages process can be lengthy. Roque Bluffs spent \$200,000 and will likely get that money reimbursed from FEMA two years after the storm

Resource Sharing

The slides presented (which include a few additional informational slides and updates added since this event) are available here: <u>Storm Response and Preparedness Slides</u>.

This resource document, <u>Resources for Storm Response and Preparedness in Working Waterfront Communities</u>, was shared during each of community convenings throughout Maine coastal and working waterfront communities from November 2024 to January 2025. This document has been updated with additional resources that were mentioned in this event and will continue to be updated with information from the full series. That document is intended to be used into the future and shared broadly.

Presenters included:

- Downeast Storm Response and Preparedness, Resources and Ongoing Projects, (Slides 12-26):
 Tora Johnson, Sunrise County Economic Council
- Washington County EMA (Slide 27): Lisa Hanscom (<u>lisa.hanscom@washingtoncomaineema.gov</u>)
 and Christine Day (<u>Christine.day@washingtoncomaineema.gov</u>)
- General Resources (Slides 29 33): Olivia Richards, Island Institute
- UMaine Engineering Technologies (Slides 34-40): Jim Bryce, Advanced Structures and Composite Center (<u>tidc@maine.edu</u>)
- Spiritual Care Services (Slides 53-54): Linda Card (<u>lindacardme@gmail.com</u>)

Closing and Next steps

- Reminder to follow the work of the <u>Infrastructure Rebuilding and Resilience Commission</u> as they finalize their work and move forward with recommendations
- Notes from each meeting will be compiled with key points and shared in a final summary document in Spring 2025
- <u>Invitation to evaluate</u> this session to provide feedback and suggestions for how to improve

Acknowledgements

- Washington Academy Host: Colleen Maker
- Local contacts who provided help with planning this convening:
 - o Tora Johnson and others at Sunrise County Economic Council
- Maps: Gordon Longsworth, College of the Atlantic GIS Lab Director
- Food: Helen's Restaurant, Flexit
- Thanks to those who have helped organize this convening locally, and to larger advisory board who have guided the design and planning of the larger series
- Project funded by the National Sea Grant Office
- Thank you to all who presented tonight! (listed in Resource Sharing section above)

Attendees information

Number of attendees: 21

Municipality	# Attendees
Roque Bluffs	4
Machias	3
Machiasport	2
East Machias	3
Cutler	1
Eastport	3
Lubec	2
Cooper	1
Other (Orono)	1

Sector/Occupation	Approximate # Attendees
Staff or volunteer on municipal committees	5
Emergency management	2
Fishing, aquaculture, and/or working waterfront property owner	1

Service provider	4
Non-profit	1
Elected official	3
Spiritual services	1
Other (Teacher, resident, reporter, etc.)	4