

Storm Response and Preparedness in Working Waterfront Communities

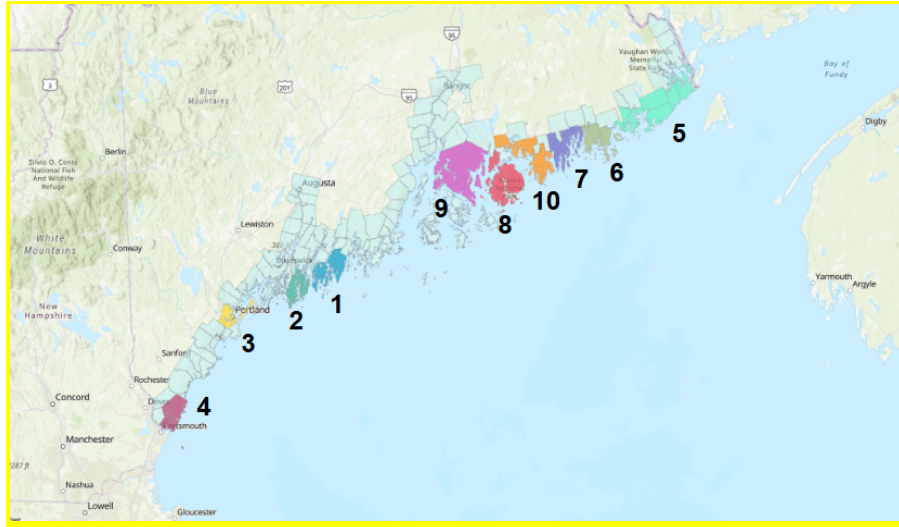
A series of 10 community conversations along the coast of Maine, winter 2024-2025

Summary Notes of Regional Community Conversation # 7 of 10

Milbridge/Steuben/Harrington

Steuben Fire Hall, 49 Smithville Road, Steuben ME 04680

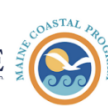
December 16, 2024, 5-7 PM

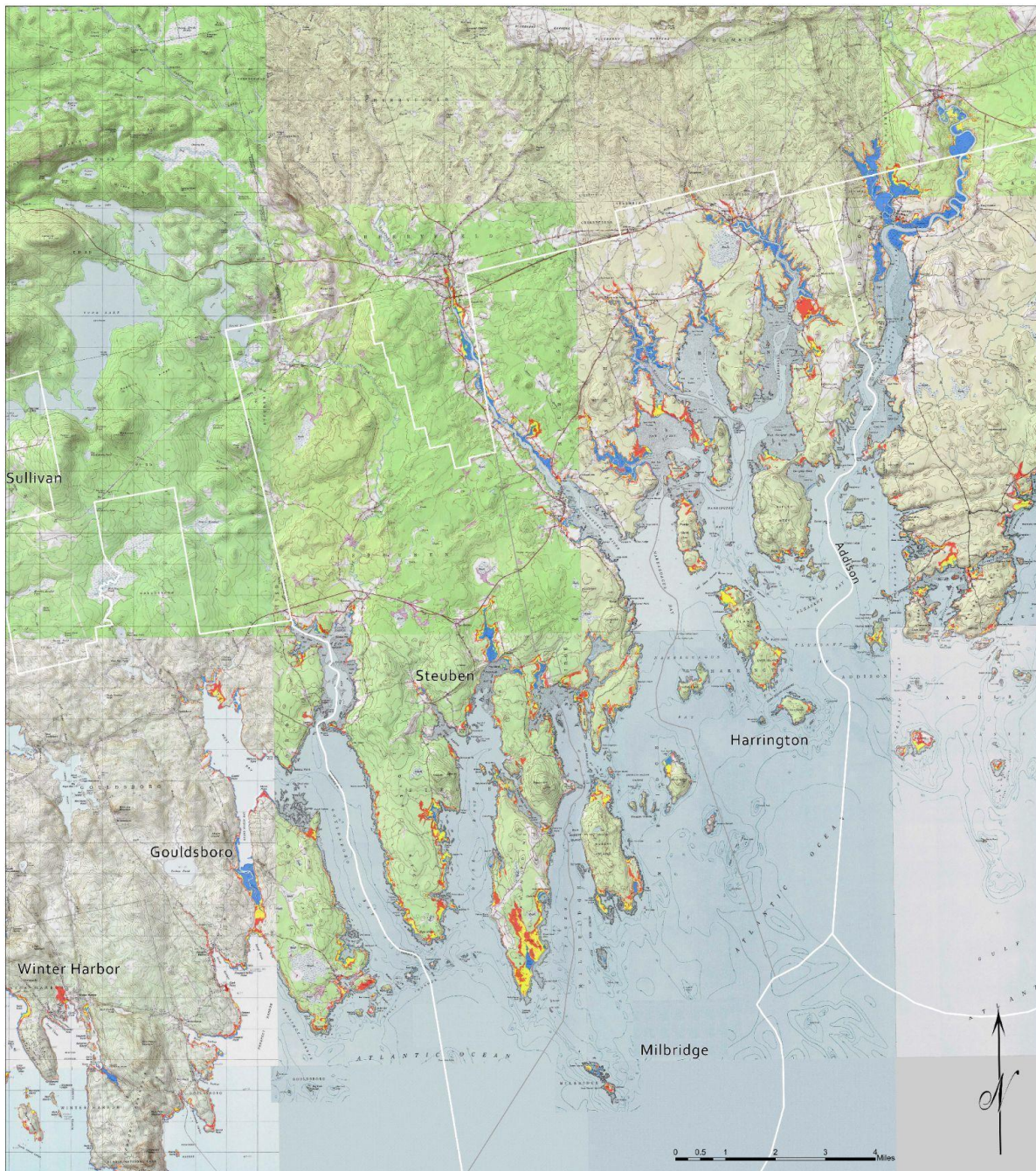


The goals of this series are to:

- 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!





Milbridge Steuben Harrington

Source: Maine Geological Survey
This map represents the approximate extent of inundation on the Maine coast during a Highest Astronomical Tide. The Highest Astronomical Tide is the elevation of the highest predicted astronomical tide expected to occur at a specific tide station over the National Tidal Datum Epoch (currently, 1983-2001).

Subsequent feature classes represent approximate static inundation after scenarios of 3.9ft and 8.8ft of potential sea level rise, or storm surge, on top of the Highest Astronomical Tide. Mapping was produced in 2018 by P. A. Slovinsky, S. Rickerich, and C. H. Halsted of the Maine Geological Survey.

■ HAT Plus 8.8 Feet
■ HAT Plus 3.9 Feet
■ Highest Astronomical Tide

For the online version of this map go to <https://tinyurl.com/mainesealevelrise> or use this QR code

Maps prepared by College of the Atlantic GIS laboratory, October 2024, as part of a series of community conversations on Storm Response and Preparedness in Working Waterfront Communities. Project supported by Maine Sea Grant, working in partnership with Maine Coastal Program, Island Institute and UMaine MARINE, with funding from NOAA Sea Grant.



Regional map with sea level rise projections ([PDF version](#)). 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

- Local leaders have supported critical working waterfront planning and resilience efforts
- Local efforts to secure clam flat access is important as they are subject to storm damage leading to loss of access
- Fishermen and local selectman jumped in to do repairs because people needed to get back to work
- Sunrise County Economic Council's working waterfront inventory (including storm damage) is a statewide model

Things to Improve

- Data collection to help assess Sea Level Rise (SLR) and flooding risk and to support planning
 - Funding and location picked out for tide gauge going into the Narraguagus River, but more data is helpful
 - SCEC can use data to create parcel maps showing sea level rise, flood risks, and critical infrastructure. They have created maps for Machias, Milbridge, and other towns, and would like to support other towns in doing so. Milbridge town manager, Lewis Pinkham, finds these maps critical for planning efforts.

Gaps/Needs (Local)

- Working waterfronts need a resilient electrical grid. The electrical grid in Washington County is not as resilient as it could be (vulnerable to outages).
- Under-reporting damages caused by storms leads to less emergency funding. WC needs support to help towns (especially those without town managers), businesses and residents report damage and loss within 1 week of event, in order to help region reach the threshold that unlocks more FEMA funds.

Gaps/Needs (Statewide)

- Burdensome processes for completing critical infrastructure projects
 - Engineering design, construction, permitting, etc. require knowledge of these systems and a lot of time (for paperwork, administration, outreach to FEMA and DEP)
- State agency capacity hinders effective program roll-out
 - For example: MaineDOT has one staff person managing the statewide Working Waterfront Resilience Project. Delays from DOT, result in delays for grant recipients to receive funding
- Private pier owners have less access to support than municipal piers
- Insurance is also a challenge. Not many businesses had flood insurance, but even then, most insurances exclude any infrastructure over the water.

FULL MEETING NOTES

Taking stock: Local organizations and towns to share status of community climate resilience efforts, with a focus on working waterfront resilience

Sunrise County Economic Council (SCEC)

- Tora Johnson (Director of the Sustainable Prosperity Initiative, SCEC):
- SCEC provides multiple services for communities in Washington County (see ‘Resource Sharing’ section below for more information on the services SCEC can provide)
 - New [tide gauge](#) in Machias located at the town landing. The gauge was funded by an NSF grant in partnership with Gulf of Maine Research Institute (GMRI).
 - 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
 - New tide gauges for Narraguagus River - Funding secured and location picked
 - Q: How was the gauge in Machias funded?
 - Tora: Through GMRI. Also important to know, there are no active river tide gauges in the Machias watershed, closest is in St. Croix; it is important to understand heavy precipitation and fluvial flow as it meets the coastal tide in Machias, and important to model hydrology flow as well
 - Q: What is the tech of the gauges?
 - Tora: Stream and tide gauging are very different. 3 common types for tides (sonar, radar, or oblique – adapted radar(?)). River gauge is often a pole, with a tube, a hydrostatic that moves up and down with flow, and communicates with a satellite or cellular network.
 - Q: Lewis Pinkham (Milbridge Town Manager) – gauge in Machias, regarding study from 2019, Lewis had 13.6’ on one of his measurements.
 - Tora: We’re understanding climate change and Sea Level Rise (SLR) is not slow, gradual, and consistent. There is some amount of rapid SLR in the past few years which have contributed to most recent storms. There is hope this rapid SLR may slow down a little bit. It is more extreme in Gulf of Maine than universally. Meaning Maine is particularly vulnerable, especially with the addition of the southerly winds.
 - Q: Lewis – in Bayview by the town marina, first storm in January was 4 feet in the parking lot of marina. The Bayview street storm surge was over the guard rails so probably a 15’ storm surge
 - Tora: I can come down and measure and model those storms to make maps for Milbridge if you’d come show me these spots. We can help show 1’ SLR on top of these storm surges
 - Shared GIS map of Machias 2024 and 2020 storm inundation
 - 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 and \$3.8M in the January 13 storm
 - SCEC can do similar work in other places
 - SCEC hosts many [online planning maps](#) 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
 - Lewis voiced that he uses these maps all the time to support his work
- 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.
 - Lewis comment – Working waterfront public access work in community includes paths for shellfish harvesting. Senator Marianne Moore is working to revise and improve “forever wild” designated paths
 - Gouldsboro has a partnership with individuals, and shellfish warden is in charge of monitoring community members accessing pathways
 - Working in a program to greatly reduce penalty for withdrawing from program, but giving a small tax incentive
 - Tora - if you unenroll you have to pay back taxes that are deferred, which can be a massive lump sum
 - Lewis – trying to reduce this amount, but also working on a waiver so you don’t get penalized
- SCEC updated the Island Institute’s “Last 20 Miles” Working Waterfront inventory for Washington County (contact Tora for access tjohnson@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 is also working with partners to do resilience planning for the electrical grid, much of which was damaged last winter. Electrification of grid is a laudable goal but not for people who will be out of power for a week. Working waterfronts need a resilient electrical grid.

Washington County Emergency Management Agency

- Tora filling in for Lisa Hanscom, Director of Washington County EMA, since she is sick
- A couple of key things to focus on:
 - There is a culture of not asking for help, and yet it can make a big difference.
 - The Washington County (WC) EMA communicates with MEMA who communicated with FEMA. WC EMA is here to help and they have many resources during these storms.
 - Anecdote from last winter - 7 inches precipitation in a couple hours in Roque Bluffs, blew out a few roads which blocked the only way out of that region. Lisa Hanscom had just started her role as WC EMA Director. During the storm, she called into MEMA and said what do I do? MEMA said what do you need? Lisa said I don’t know what to ask for I’m new...within a few hours DOT had repaired roads, marine patrol was on standby in case someone had an emergency and needed to boat to safety.
 - Timing is very important for disaster response. ONE WEEK AFTER A DISASTER TO REPORT ANY DAMAGE IN YOUR COMMUNITY, municipality will report on your behalf, even if it is private infrastructure, so that you can potentially be eligible for funding.

- \$140K of damages needs to be reported, and if state as whole has \$2M in damages, then a federal disaster is declared, and it unlocks up federal funding
 - Charles Rudelitch (SCEC) – I am shocked it is so low; it must mean that in recent storms, damages just were under reported
 - Tora – that is exactly correct! Lisa said folks just were not reporting in that first week, so they could not get that federal money. Community members can report to the town office, town office can organize those estimates (just guess! No contractor needed) and send to WC EMA and they will send to MEMA to go to FEMA.
- Q: 7 days is that business?
 - No, it is 7 calendar days. Holidays count too.
- Lewis – there are some types of damages that do not count, so you need to read the list of eligible damages to be considered.
- Tora – There is a place to send in photos to help with reporting damages.
- Charles – not all municipalities have town managers, so town clerks and selectmen need to understand that it is then up to them to do this local reporting.
- The timeline for getting reimbursed is also very important to note – you may need to find a financial option before reimbursement arrives (Jonesport taking out a bond to fund some of their repairs temporarily).
- Communications has been another issue – WC EMA and MEMA tried to go door to door to discuss resources, but community members thought they were scammers
- BRIC funding cycle opening again soon (**open NOW, see ‘Resource Sharing’ section for information**)
 - Town eligible ONLY if you are signed onto your county’s approved Hazard Mitigation Plan
 - Important to note an Hazard Mitigation Plan is different than your emergency operations plan
- More information on Hazard Mitigation Plans
 - Tanya Rucosky- Regional Coordinator for the Community Resilience Partnership in Washington, Hancock and Waldo Counties – you don’t need to come up with your own individual Hazard Mitigation Plan, it is a county plan, and you just have to fill out the paperwork that Tanya or WC EMA sends to you.
 - Tora - You only need a little meeting (Machias had 6 people discussing this plan); it is important to get your public works folks there because they know so much locally already
 - Lewis – you can even put this on the agenda meeting minutes for selectmen and then it gets discussed
 - This deadline is past due on an updated Hazard Mitigation Plan, but SCEC/WC EMA are still wrapping it up and sending it to the state/feds for review. Reach out to Lisa Hanscom with questions (lisa.hanscom@washingtoncomaineema.gov)
- Olivia – Lisa has also noted how important and helpful it is to have a record of these things to help with grant applications and disaster reporting going forward
 - Tanya – also important, FEMA is going to reimburse for what was there in disaster recovery, but BRIC grants help you make it better
 - Lewis – that is majorly helpful to understand, I have made that mistake before about bundling repairs with improvements, you need to separate the two cost

estimates. You also need before and after photos with very specific geospatial coordinates.

- Also, we thought we would get 100% back in repairs, but you do not. We received 57% and had to seek match from the state disaster funds.
- Insurance is also a challenge. Not many businesses had flood insurance, but even then, most insurances exclude any infrastructure over the water.

Community Resilience Partnership

- Abby Roche (Island Institute and CRP service provider)
 - Milbridge and Harrington are currently working with Island Institute to become enrolled in the [Community Resilience Partnership \(CRP\)](#)
 - Island Institute is going to return to do community workshops to identify community priorities around what types of resilience needs as per CRP list of actions.
 - Island Institute is going to do this in the Spring 2025 so they can help Milbridge and Harrington to apply for the \$75K grants
 - Abby really needs participants from Harrington!
 - Q: Lewis – is it possible to do a joint community workshop for Milbridge and Harrington since he works closely with both?
 - Abby – let me find that out! The state requires some reporting about individual priorities but that is a great idea.
- Tanya Rucosky- Regional Coordinator for the Community Resilience Partnership in Washington, Hancock and Waldo Counties – we talk a lot about the Community Action Grants, but it is only the tip of the iceberg. You can also get technical assistance on all types of topics (solar panels, sea walls, walkable streets, erosion control along rivers). I am available to connect you with anyone you need (engineers, contractors) and can bring in any topic experts and trainings. I can also write your BRIC grant for you, CDS grants, and so many other funding opportunities that the CRP can unlock admin support to help you get them. Contact Tanya (trucosky@sunrisecounty.org)
- Dani Robbins, Healthy Acadia - has taken leadership on engaging kids in understanding storms and being engaged in these issues. Kids have interviewed business owners.

Taking stock continued: Each town to share status of community climate resilience efforts

Milbridge

- Lewis Pinkham, Milbridge Town Manager
 - January storms – we took damage for the first time every on Bayview street
 - 95% of damaged infrastructure has been rebuilt since the storms
 - 5 local piers were damaged, rebuilt and raised 3-4 feet
 - Fishermen and selectmen did repairs without getting paid because they needed to get back to work.
 - Pier(s) are back to pre-disaster standards, but we need to revisit it with FEMA to see how to make it better and more resilient to future damages.
 - We have also been working with DEP for permits for private piers, which we have added ~4 ft of elevation to these rebuilds, and we are the pass through of about 5 of these private fishing piers that received state working waterfront funds. A lot of admin support to these private fishing folks, takes up a lot of time, even have to visit the piers and

check in on the project process. Have to do a lot of reporting and submitting to the state and FEMA.

- Lewis was a major driver in getting permits through and disbursing grant money from the state to piers (for the State Working Waterfront grant, towns were the fiscal agents, and were the entity responsible for dispersing the funds to applicants)
- Only one person at the state level managing this so it is very slow, and inconsistent. One guy has been waiting months to be reimbursed, someone else reimbursed right away
- Been with Milbridge since 2004 and have seen many storm damages and culvert repair/replacements. Making the culverts larger.
 - Working with public works department of town to maintain roads - grinding them, laying gravel, and repaving them has proved successful, haven't had to go back and redo roads since these new paving jobs we did
 - Stone granite culvert in town is flooding a lot, only elevated it 1 foot in height but wish we did higher.
- Q: Tora Johnson (SCEC) – we have been hearing permitting has been a hold up, are you having those issues?
 - Lewis – DEP told us initially “do your paperwork and get your work done”, haven't heard back yet, but Lewis used to work for DOT and USACE and background has prepared him well for these types of project development and writing. Very happy to help other towns with this process.
 - Olivia Richards (Island Institute) – how many of those projects are DEP Permit-by-Rule form or a new permit?
 - Lewis Pinkham – almost all of them a whole new permit. Acknowledged that this is a burdensome endeavor. Lewis is more than happy to support this.
- Q: Natalie Spinguel (Sea Grant) – what is the status of the 5 properties rebuilding?
 - Sawyer Wharf – 95% finished, raised 4 ft and widened it with new pilings and riprap
 - Chipman's Wharf – paperwork is in, still working on increasing it, putting finishing touches on the back burner until the Spring
 - Inland Seafood – already been reimbursed for their projects
 - Terry's Pier – decided he was at the age he doesn't want to build back, although he works at other piers
 - Milbridge Town Pier - nearly done at 95%
- Tora Johnson commenting – even some of the places we didn't expect water surge or damage when we mapped things, is now there
 - Lewis – Steuben had 5-6 piers totally damaged, Rogers Point down by the shore was washed out, that has been approved for \$919K for municipal repairs. Lewis was involved with building this pier and knows it was built well in 1980

Steuben

- 5-6 piers damaged
- Secured \$ for municipal repairs, but haven't started work yet

Harrington

- Charles Rudelitch (Executive Director, SCEC) and Lewis Pinkham (Milbridge Town Manager)
 - Damaged pier restoration has included adding concrete, rebuilding pilings, sand blasting, replacing floats, upgrading hoist systems

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

[This agenda item was folded into the conversation above, no separate notes.]

Resource Sharing

The slides presented (which include a few additional informational slides and updates added since this event) are available here: [Storm Response and Preparedness Slides](#).

This resource document, [Resources for Storm Response and Preparedness in Working Waterfront Communities](#), was shared during each of community convenings throughout Maine coastal and working waterfront communities from November 2024 to February 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:

- Sunrise County Economic Council (Slides 12-26): Tora Johnson, Sustainable Prosperity Initiative (tjohnson@sunrisecounty.org)
- County EMA (Slide 27): Washington County - Tora Johnson on behalf of Lisa Hanscom (lisa.hanscom@washingtoncomaineema.gov)
- General Resources (Slides 29 - 33): Olivia Richards, Island Institute (orichards@islandinstitute.org)
- UMaine Engineering Technologies (Slides 34-40): Jim Bryce, Advanced Structures and Composite Center (tidc@maine.edu)
- Current Use Tax Program (Slides 41-48): Contact Jessica Gribbon Joyce, Tidal Bay Consulting (jessica@tidalbayconsulting.com, (207) 200-8795)
- StrengthenME (Slides 49 - 52): Dani Robbins, Healthy Acadia (dani.robbs@healthyacadia.org)
- Spiritual Care Services (Slides 53 - 54): Pamela Brouker (pbrouker@gmail.com)

NEW and Highlighted Resources

- SCEC can assist with community planning and action, including hazard mitigation planning and comprehensive planning. **Contact SCEC for more info and assistance (emails below).**
 - 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.
 - Jen Peters, the Director of Community Development (scec@sunrisecounty.org) and Tanya Rucosky, Community Resilience Partnership Coordinator (trucosky@sunrisecounty.org)
- SCEC provides microloans to the following groups
 - Commercial fishing folks (\$10K upward limit)
 - Local food/small scale farmers (\$20K upward limit)
 - Contact Susan Hatton, Loan Program Manager (207-255-0983, shatton@sunrisecounty.org)
- SCEC is developing a [Coastal Climate Resilience toolkit](#)
 - 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.

[FEMA Building Resilient Infrastructure and Communities \(BRIC\) Program](#)

- **Applications** - **OPEN NOW**, application period January 6 - April 18, 2025
- **Use** - Hazard mitigation activities, including capacity and capability activities and hazard mitigation projects. BRIC can help fund building code activities, promoting partnerships, project scoping, hazard mitigation plans, management costs, mitigation planning & planning related activities.
- **Eligibility** - State, local, tribal, and territorial governments who have a FEMA-approved Local Hazard Mitigation Plan
- **Contact** - State Hazard Mitigation Officer (hmagrants@maine.gov)

[FEMA Flood Mitigation Assistance \(FMA\)](#)

- **Applications** - **OPEN NOW**, application period January 6 - April 18, 2025
- **Use** - Projects that reduce or eliminate the risk of repetitive flood damage to buildings insured by the [National Flood Insurance Program](#)
- **Eligibility** - State, local, tribal, and territorial governments who have a FEMA-approved Local Hazard Mitigation Plan
- **Contact** - State Hazard Mitigation Officer (hmagrants@maine.gov)

Closing and Next steps

- Reminder to follow the work of the [Infrastructure Rebuilding and Resilience Commission](#) 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
- [Invitation to evaluate](#) this session to provide feedback and suggestions for how to improve

Acknowledgements

- Hosts: Steuben Fire Department
- Local contacts who provided help with planning the convenings:
 - Lewis Pinkham, Milbridge Town Manager
 - Tora Johnson and others at Sunrise County Economic Council
 - Abby Roche, Island Institute
- Maps: Gordon Longworth, College of the Atlantic GIS Lab Director
- Food: Governor's Restaurant and Bakery (Ellsworth) and Flexit Cafe (Ellsworth)
- Thank you to all who presented tonight! (listed in 'Resource Sharing' section above)
- 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

Attendees information

Number of attendees: 15

Municipality	Approximate # Attendees
Milbridge	2
Steuben	0
Harrington	2
Neighboring Communities (Whiting, Gouldsboro, Addison, Machias)	4
Other	8

Sector/Occupation	Approximate # Attendees
Staff or volunteer on municipal committees	0
Emergency management, social services, public safety	1
Fishing, aquaculture, and/or working waterfront property owner	0
Service provider	7
Spiritual services	1
Elected official or staff	2

Non profit	2
Other	2