MIC Notes
November 3, 2017
Island Institute, 10:00-2:00
Sea Level Rise

MIC Representatives
Roger Berle, Cliff Island
Mert Howard, North Haven
Beverly Roxby, Frenchboro
Jay Corson, Chebeague Island
Eva Murray, Matinicus Island
Donna Wiegle, Swan’s Island
Kendra Chubbuck, Isle au Haut
Andy Dorr, Vinalhaven
Timmi Sellers, Peaks Island
Mott Feibusch, Monhegan (Virtual)

Legislative Representatives
Kelly Cotiaux, Office of Susan Collins
Emily Horton, Office of Chellie Pingree
Mark Kontio, Office of Bruce Poliquin
Owen Casás, Maine House Representative, District 94 (Camden, Islesboro, Rockport)
Lydia Bloom, Maine House Representative, District 3 (York)

Guests
Jamie Carter, NOAA
Pete Slovinsky, Maine Geological Survey
Ellen Grant, Gulf of Maine Research Institute
Gayle Bowness, Gulf of Maine Research Institute
Jonathan Labaree, Gulf of Maine Research Institute
Christy Davis, Symphony in the Flint Hills (Kansas)
John DeWitt, Isle au Haut
Cheryl Coviello, Collins Engineers Inc.
Margaret Qualey, Vinalhaven Sea Level Rise Committee
Marian Grogan, Vinalhaven Sea Level Rise Committee

Island Institute Staff
Karen Burns, Vice President of Community
Kate Tagai, Community Development Officer
Caroline Moore, Community Development Officer
Kim Ratner, Communications Strategist
Nick Battista, Policy Officer
Susie Arnold, Community Development Officer, Marine Science Specialist
MIC Business
Many MIC reps are dealing with the fallout from the recent storm and continued lack of power. This is our 4th and final MIC meeting of 2017. Please send topic ideas for 2018 MIC meetings to Roger, Dona, or Kate. The first meeting of the year will be in Augusta with the date TBD. The three subsequent meetings will be at the Island Institute office in Rockland and will be Friday, May 4th, Friday, August 3rd, and Friday, November 2nd 2018.

Treasurers Report
Read by Roger Berle

Motion to accept the minutes of last meeting moved and seconded. No additions or corrections.

Treasurers report is the same. We’re waiting for Diamond Island Association to pay $100. There is a positive balance of $1083 and change. Motion to accept the treasurers report moved and seconded to accept as reported. Voted approved.

Island Institute Updates
Heather Deese, Executive Vice President: We’ve had some changes in our staff structure over the last few months. We decided last winter to look at how we’re organized staff teams. We had different program areas focused around topic areas that had been added over the years. We’d been getting lots of requests from islands to work across those topic areas, and it was hard to meet those needs with our former structure. We wanted to make staff more flexible to meet community needs as they arise. At the end of August, 22 people had their roles revised, and we’re currently learning how to work with each other in new ways. Throughout this process, we’ve maintained three priorities through the reorganization.

1) To maximize the organization’s contribution to communities.
2) To set up the organization to be responsive in a rapidly changing world.
3) To maximize individual staff members’ contribution to the organization.

You may have noticed that some people introduced themselves with new titles. We are excited to have gone through this transition. We have a priority to have no negative impacts to our community work and to our funding as we go through this. Many people’s roles are 50-80% the same so that there is continuity in community relationships. We’re still trying to figure out how
to work with each other and there will be growing pains, but it seems that people are really enjoying it. Does anyone have any questions about this?

Nick Battista, Policy Officer: This is a new role for me and I’ll be spending my time supporting staff, the organization, and communities in terms of policy. We are no longer working with Newall Auger, our lobbyist in Augusta. I am in the process of transitioning into this role, so I really want to hear what kind of support is helpful for you. Rob Snyder testified on Chellie Pingree’s working waterfront bill in DC yesterday. We’re working on broadband and look to have a stronger voice in those discussions. We’re supporting the energy team in looking at how the state should use the settlement funds from the Volkswagen Settlement (21 million coming to the state) – we want a voice in how those funds are used. Island Institute has signed on to letter to congressional legislation to avoid sequestration cuts so that critical programs aren’t cut and we won’t spend all the funds on defense spending. We can share a copy of that letter if you’re interested. These are the opportunities that I suspect I’ll be sharing with you more if you’re interested.

Owen Casas: I represent Camden, Rockport, and Islesboro in the Maine House. I know that the ferry service has been looking at a new fee schedule – have you all delved into that and do you have a position?

Nick Battista: We haven’t delved into it much in the last few months, but there are members of the ferry advisory board here (Eva Murray, Donna Wiegle)

Owen Casas: I’m looking to gather some information after this meeting.

Donna Wiegle: Stay for lunch and we’ll fill you in.

Roger Berle: Will Newall’s role be replaced?

Nick Battista: That’s me. We’re still on good terms with him and he’s still available to work with islands, but you’d be paying him, rather than the Island Institute paying him as in the past. I’m happy to talk with you about how to pick a lobbyist.

Legislative Updates

Lydia Bloom: I represent the coastal part of York and host a coastal caucus of coastal legislatures. A few carry-over bills - marine debris and what we can do on a statewide basis and the coastal hazard and risk commission. I’m here to gather information on how that commission should look. The Maine Municipal Association has surveyed towns and we’re trying to gather information to make sure we have a commission that makes sense for Maine. It’s currently modeled after New Hampshire’s commission, but Maine has a much larger coastline than New Hampshire. Concerned with anything that affects coastal hazards (extreme precipitation, ocean acidification, sea level rise, etc.) and anything that will affect the marine and coastal economy. We want to assess, bring together tools, and see what the state can do to make us more resilient to future hazards. I welcome opinions on how that should be done in Maine.

Beverly Roxby: Are you working closely with Mic Devin?

Lydia Bloom: Yes

Owen Casás: Thanks for raising awareness of island and coastal communities and their concerns
Roger Berle: We’ll be in touch with Lydia and Owen regarding our Augusta meeting at the State House, right after the first of the year.

Owen Casás: Two issues I’ve observed in recent history is that Islesboro is dealing with a lot of storm and weather debris, and the ferry fee schedule is something we’ve been monitoring. It was interesting in seeing the differences between islands in cost and trying to figure out the reasoning behind that. They seem to have shown goodwill to meet with island communities and we’re hoping it’s a decent schedule we can live with.

Mark Kontio – I’m with Bruce Poliquin’s Office and represent coastal communities in the 2nd district. I’m glad to be here and am here to listen.

Kelly Cotiaux – I represent Susan Collins and am based out of Bangor. I want to reiterate Susan Collins’ position on calling attention to climate change. She’s adamant about fiscal issues – it cost $350 billion in the last years, so she asked for a GAO (government accounting office) of a forecast of costs in the years to come. The GAO would be detailed enough to break it down by state. Collins is definitely willing to talk about climate change but not everyone is. I would love a copy of the letter from Nick Battista.

Emily Horton: I work on natural resources for Chellie Pingree an am based in Portland. Keep America’s Working Waterfronts came in front of the Natural Resources Committee yesterday and we were grateful to have Rob Snyder come and testify. Clarification based upon question from Lydia Bloom: Governor LePage testified against the bill and was the only other person who came from Maine to testify.

Introduced the local farms act for the Farm Bill Reauthorization to support local and regional agriculture which includes fisheries.

Sea Level Rise

Susie Arnold: We’ve been hearing requests about communities’ concerns, so now we have a team focused on sea level rise and coastal flooding that I am coordinating. We received funding in May for 5-10 years, so this is not a short-term initiative. You should have received an invitation to our Sea Level Rise symposium in Portland on November 28. The Leadership team will be leading an ILEAD program for town leaders and interested residents on how to engage around sea level rise. Small community planning assistance grants (a few to five thousand dollars per community) are available to help communities identify vulnerabilities or start to take the next step. There’s also a Google Group (Shore Up Maine) that you can join.

Gayle Bowness: Ellen Grant and Jonathan Labaree can also speak to our work at the Gulf of Maine Research Institute (GMRI) more broadly. We’re here to speak about our outreach to communities, funded by an environmental literacy grant through NOAA.

I’m sharing with you our Sea Level Rise Program (see powerpoint) – we have engaged about 250 folks with a 90 min in-person experience that helps people to dig into the data and
determine what the questions we need to be asking are as we think about and build towards resiliency. We have developed this presentation in conjunction with Portland and South Portland, as we’re focused currently in the Greater Portland area. We are thinking about how it can be adapted to other communities. Jamie Carter, Pete Slovinsky, and Tora Johnson (GIS, UMaine, Machias) help us to stay in check in terms of replicating in other communities. The focus is on exploring hazards and thinking of the data behind the views that people see – what is the data telling us?

How are tides changing in the future and how does weather influence that? Sea level has risen 8 inches over the last 100 years and the trend has recently increased.

Posed the question for interactive discussion: What impacts of sea level rise have you already seen?

Pete Slovinsky: More frequent nuisance flooding
Owen Casás: With that extra 8 inches, when you get the storm surge you get more frequent flooding
Beverly Roxby: The supermoon high tide that covers the main road in Frenchboro
Roger Berle: Beachheads moving steadily backward
Eva Murray: Coastal erosion – people are actually losing property

Our narratives around these questions are currently focused on the greater Portland area, but we can adapt these as we move along the coast. It’s all about engaging people in the emotion behind the data.

(Showed lots of images from Portland area)
Example: photo of beach at current high tide may be a low tide in the future.
Example: flooded street – water coming up through storm drains

Why are these areas most vulnerable to flooding? (Showed past and present maps overlaid).

How much might sea levels rise?

When we talk about sea level rise, we can talk about dates and we can talk about how much, but it’s hard to put both in the same sentence. In another 100 years, so by 2100, assuming “business as usual” we can expect a minimum sea level rise of 8 inches. Oceans are warming and warmer waters take up more space, so the mid-level estimate is 1.6 feet of sea level rise. But in a scenario with maximum land-ice melt and warming waters the mid-high scenario is 3.9 feet of rise and highest scenario of sea levels rising is 6.6 feet.

Sea level is rising, but it is hard to put a time frame on it. A reminder that 2100 is not the stop date, there is more to come. This data comes from NOAA 2012. We’ve been able to make more detailed predictions since then.

Owen Casás: Do your models predict a potential land rebound due to the melting of the glaciers?
Gayle Bowness: Yes.
Lydia Bloom: This is a gentle curve, but in real life it's variable. The trend is most important.

The latest data (2017 NOAA Technical Paper 083) bumps the lowest rise scenario up to one foot and the highest scenario is an 8-foot rise by 2100. Note that this is global average sea level rise. Some places are experiencing sea level decline, because as ice melts, land rebounds and sea level actually decreases. There’s a NOAA tool to track sea level trends in different places across the world. Maine is experiencing sea level increase above average trends. For Maine, the extreme scenario is an 11-foot sea level rise by 2100.

Roger Berle: How does this/does it take in effect the increased warming of the Gulf of Maine

Jamie Carter/Pete Slovinsky: The NOAA report uses broad data, the fact that the Gulf of Maine is warming faster is indirectly captured in New England map, but not incredibly specific to Portland.

Heather Deese: We still don’t know enough about how changes in major ocean currents (Gulf Stream) may impact these predictions.

Pete Slovinsky: That has a major impact on abrupt sea level rise.

For these presentations, a big question we get is how will sea level rise impact MY community. We give folks a chance to look at different maps (interactive): bit.ly/CRISEGMRI

(Gave MIC participants 15-20 minutes to investigate the interactive sea level rise maps).

The Gulf of Maine Research Institute can give these interactive 90 minute presentations (online or offline) if you’re interested in engaging your community in these conversations.

Jamie Carter: I work for NOAA’s Office for Coastal Management and focus on Maine. I do a lot of remote-sensing and GIS work. (Showed Powerpoint Presentation).

The Office for Coastal Management focuses on four major areas: coastal zone management, coral reef conservation, digital coast, and national estuarine research reserves (which includes applied ecological research, of which Wells is one site in Maine).

The United States Ocean Economy is large – the ocean economy employs 2.9 million people, including 54,000 in Maine. (Showed image of a map from Northeast Ocean Data Portal to show that Maine is “a busy coast”)

The Bar Harbor NOAA Tide Station has seen a rise of .72 feet in the last 100 years (.51 feet increase in last 70 years). We’re projecting a low-rise scenario (just ocean expansion) of .92 feet by 2050 and an additional 3.08 feet by 2050 if you factor in ice melt contribution in addition to ocean expansion. (Showed several sea level rise projection curves.) The greatest source of uncertainty in the curves is from the melting of the Greenland ice sheet. We have been updating our models based on increased understanding of oceanographic factors, gravity
changes due to melting land based ice, and vertical land movement. Also have models for other climate-related phenomenon (precipitation trends, storm surge and strong winds).

I’m here to talk today about some visualizations and other data analytic tools that we have. Our portal is the Digital Coast, where we keep imagery, land cover data, elevation data, etc. Digital Coast includes 50+ tools for decision making, training programs, in addition to the data. (Jamie logged on to the Digital Coast Data Portal and showed us around the site) – there are tabs for data, tools, training, topics, and stories. “Topics” allow you to find all the resources associated with a topic including data, tools, and training.

Owen Casás: What are the differences between the data that we get from FEMA flood maps and the data that you have here? Insurance rates seem to be the one conversation that we have at town level.

Jamie Carter: FEMA data is backward-looking in terms of what has happened in the past. Our data is forward-looking. Now communities have a tool to think about the future rather than just what has happened. FEMA maps are an important tool – whether you’re in or out of the floodplain everyone has a stake in the game, so we need to make sure that modeling is done correctly.

Owen Casás: Following up – when municipalities get those FEMA maps in the future, is there a way to include your NOAA maps as well, and incorporate those in, so that municipalities can be more forward thinking?

Jamie Carter: It will be hard to get FEMA to be forward-looking, but we have a tool that shows how their data relates to ours and how to use them in conjunction with each other. It’s important to highlight these differences and help communities to understand those differences.

Beverly Roxby: Is this the demonstration of a feedback loop? Do you have plans to compensate for the potential diminishment of funding for NOAA?

Jamie Carter: We are showing what the models are giving us, driven by atmospheric temperatures (because heat is being absorbed by the ocean). If we’re able to decrease emissions, models could trend downward and we could see a leveling off. Our models don’t do this, because we haven’t been able to model emissions. In the 4th version of our National Climate Assessment that is currently being produced – we will continue to refine the science and the models. This was a three-year cycle for models. I can’t give you an answer on your second funding question.

Owen Casás: What is the highest that sea level could get, if everything melts? To put the 35 feet (2200 sea level rise projection) in context?

Heather Deese: It depends on how warm the atmosphere gets. Even if all the ice melts, the ocean can continue to get bigger and bigger as the water expands.

(Looked at the “Sea Level Rise Viewer” – available nationally.) We use MHHW (mean higher high water) as a starting point. You can slide the bar to see up to 6 feet of elevated water levels. You can use the “local scenarios” tab to see in-depth local scenarios with associated timeframes. It’s a way for community members to engage with Sea Level Rise that’s not just looking at a whole lot of curves.
We have a tool to help visualize nuisance flooding and high tide flooding as well. It also helps to estimate how many times per year some of those coastal flooding events occur.

Cheryl Coveillo: is this more of a planning tool, rather than for making hard engineering decisions? How much local-level wetlands and infrastructure is shown?
Jamie Carter: Correct—it is for planning but not for engineering/detailed decision-making.

Zillow has used our NOAA data and released data on the impact of future sea level rise on home and their values. FEMA is well aware of these issues—FEMA Administrator Brock Long testified earlier this year on the importance of building resilient communities. Assessing and communicating risk as well as planning for recovery are a few next steps. It’s important also to plan for ALL risks—sea level rise, coastal flood, storm surge, and other factors that lead to inundation. One of the trainings we have now is Seven Best Practices for Risk Communication Training. Showed list of resources—Island Institute will email them out.

Pete Slovinsky: I work for the Maine Geological Survey. We have created state-specific tools and data sets that we hope can help create more resiliency—I’ll talk on the four that are related to coastal flooding today. (Maine.gov/dacf/mgs/hazards/coastal/index.shtml)

LiDAR (Light Detection and Ranging Data) – lasers shot out from plane, bounce back, used to create elevation maps (DEM= digital elevation map). Without good elevation data, cannot have accurate sea level rise data. We’ve created a tool to help identify boundaries of coastal wetlands. Can go in, click on section, and learn what the highest annual tide line is. Highest annual tide (HAT) varies by year. Trying to get DEP to use the highest astronomical tide instead of the HAT, because the highest astronomical high tide is calculated as the highest over 19 years, so that the number doesn’t change every year. All tools have assumptions, limitations, and specific uses. HAT takes data from tidal stations, have to extrapolate between stations.

Sea Level Rise Mapping Tool: Use old NOAA data for sea level rise maps—has different layers that are color coded: Maine.gov/dacf/mgs/hazards/slr_ss/index.shtml

All these models are “bath tub models” meaning that they don’t take into account erosion, waves, etc. but instead look at a static rise in water level.

Coastal Wetlands Mapping Tool: Coastal wetlands go from mean tide level to highest tide—we have a tool to predict potential tidal marsh migration. It is a “bath tub model” and assumes that marshes will form and expand in areas where they currently exist. The focus is for land use conservation planning.

Hurricane Inundation Mapping Tool: Uses maximum envelopes of water (hypothetical hurricanes) to develop SLOSH model to assist communities in planning, readiness, and response. Allows communities to look at inundation depths. Use for emergency planning and preparedness. One limitation is that it can underestimate potential flooding.
I’ll conclude with some positives on how communities have already been assessing their vulnerabilities and taking steps.

- **Saco (and Damariscotta):** Changed their floodplain management ordinance to require a minimum of 3 feet above the 100-year base flood elevation. (1 foot is the minimum state standard for building). They are building resiliency for sea level rise and coastal flooding.
  - Why do it? Low hanging fruit for flood insurance premium benefits.
- **Cape Elizabeth:** Changed their shore land zoning to be the highest astronomical high tide line plus 3 vertical feet.
- **Georgetown:** Engaged in a marsh migration study. Through that process, decided they wanted to look into infrastructure. Conservation Commission incorporated results into a Climate Variability Report – led large workshops with their different departments to produce a town-wide Climate Change Adaptation Report, built at the local level and with assistance from NOAA for data (2-year process).
- **Lincoln County Sea Level Rise – County-wide mapping of coastal hazards (sea level rise and storm surge).** All developed in Google Earth so anyone can view it (doesn’t require GIS)
- **Damariscotta did an adaptation analysis for the town (got grants to do this).** Looked at structures in the floodplain and came up with adaptation options for each of those individual infrastructure vulnerabilities. Also looked at ways to protect entire downtown area so that it wouldn’t flood – seawall and raising of parking lot. Did community information session and community voted on community approach versus individual adaptations.
- **Boothbay:** One of the most at-risk items are waste water treatment plants (22 in Maine are at risk). Boothbay and Wiscasset worked with a consultant through the Coastal Community Grant Program to look at infrastructure and pumping stations to show what is at risk at different flood levels.

**Island Updates**

**Vinalhaven (Andy Dorr):** Received a Maine Coastal Program grant last year. We followed in Islesboro’s steps and completed a vulnerability study for Carver’s Harbor and our Main Street area. Design and resiliency grant for technical assistance, they brought 5 people out for a weekend workshop which included community and focus group meetings. They presented Monday night their concepts for what we could do based on our needs. Some of which we’ll probably follow up on, others not so much. Good to take the assessment and planning to the next level.

New leadership at the school with a new principal and superintendent. The bid for a new playground didn’t go well last year, now have a formal RFP out and have re-identified a lower price point.
The board is reevaluating Police services—we contract with the county and have a resident deputy but just one is not enough for the summer months. Trying to find a way to provide more coverage. The board wants us to look into our own police force so we’ll run the numbers on that. Rate proposal is going to the commission for the ferry service soon. 1.5% increase across the board has been proposed as a more equitable solution, or an in-state/out-of-state ticket structure. They will go through a public hearing process.

Lobster season hasn’t been as good as years past and folks are worried about what that will look like for this winter. There are certainly less new trucks on-island and substance abuse is a challenge. There’s a group of folks ad hoc who are trying to bring awareness and education to the island regarding substance abuse. The selectman, superintendent, and medical center are meeting to determine how we can support that group. Housing has come up again as an issue, and an ad hoc committee is looking to see how we can create more year-round housing. It’s more a question of availability than affordability on our end.

Owen Casás: The issues that you’re seeing with lobsters – is it that you can’t catch them or the price (once you figure in fuel, bait, etc) isn’t good?
Andy Door: The catch is down 25% and quantity of bait sold was up 25%, but still catching less than in past years. Perhaps some people were trying to put more bait in traps to make up for lower number of catch? We were spoiled with really record years these last years.

Peaks Island (Timmi Sellers): We’ve been negotiating with the city for a long time about more bathrooms. The Community Center – which houses the only public bathrooms available in the winter – shut down for renovations until the spring. The City of Portland finally agreed to bring modular bathroom trailers that will stay on the island a few years and are trying to get a deep water connection. So, we have one public bathroom for the winter. The city didn’t negotiate with us about what we wanted - the modular bathrooms have stairs and are not handicap accessible, etc. We’re definitely making progress in terms of working with the city, but want the city to negotiate with us first. We did get 30 parking spaces for islanders in Portland – islanders can stay overnight. This is huge for us but not a long-term solution.

We’re starting our new comprehensive plan. The last one was done in 2003. We’re trying to make sure that it will mean something to the City of Portland and to Peaks.

Major tweaks to the housing code on Peaks have been recommended as a way to provide more year-round housing, and we’re hoping that the city will pass it.

Andy Dorr: Is one of the city counselors still a Peaks resident?
Timmi Sellers: We have a Peaks resident who is a representative in Augusta, not a city counselor. The counselor for the district that we’re in has now been educated about Peaks, but when she first was elected she said “I don’t know why you (Peaks Island community) exist.” We’re starting to write a history of the Peaks Island Council to give to future city counselors to educate them.
Owen Casás: In Rockport, we’ve been accused of spending too much money in/on the harbor, but lots of our residents don’t work there. We’re spending more money on the tourists versus the people that live here year round. Do you all fall into this?

Timmi Sellers: On Peaks, we’re so inundated that the safety of our islanders is compromised, so we pay for a police cadet in the summer because it’s so crowded and dangerous. We spend a lot of our money on problems caused by the tourists because it’s so unsafe.

Donna Wiegle: We spend zero dollars on tourists on Swan’s Island.

Swan’s Island (Donna Wiegle): In August, one of the selectmen resigned over an issue with housing for our police officer. We have been operating with 2 selectmen since then and are waiting to hold a special election. Donna Wiegle has put her name in the running for selectman, whenever the special election happens. Swan’s Island hosted the Island Institute board meeting in September, and everything went well.

Inland Fisheries and Wildlife approved Swan’s Island for a special deer hunt with no take limits in January, which is outside of regular deer hunting season. This is really important for us, as we’ve had lots of Lyme on the island. A representative from Maine Medical Association has been out on the island and said it’s the most ticks he’s collected that have tested positive for Lyme. Donna has seen a lot of Lyme at the medical center, too.

Lobster catch was down this year, so there’s a lot of nervousness in the community. They’re looking at a local marijuana ordinance, modeling it after Blue Hill. Don’t know when that vote is going to be, but it’s in the pipeline. The state road has been paved – thank you Maine DOT. Our comprehensive plan is from 1994, and we’re starting to work on it. Got approval from board to apply for an Island Fellow to help with the comprehensive plan.

Owen Casás: Legislation vetoed by LePage regarding regulation of the sale of marijuana. Revised bill says that you have to opt in. Excise tax – want to get more money directly to municipalities – but typically funds go into FDIC. Issue with marijuana bill of how municipalities will get money from the excise tax and breaking the law to deposit it.

Matinicus (Eva Murry): No police, deer, or comprehensive plan. Very minimal storm damage. Brief intentional power outage so that we could clear trees. Teacher left the island a few weeks ago seriously ill. Former Matinicus teacher (Pat) is substituting. We seem to have 2 full time students. Everyone loves the library, we’re hauling trash as fast as we can, and we have ticks but not quite as many as Swan’s Island.

Frenchboro (Beverly Roxby): We lost power for about 4 days. We’re on Emera, so they go by population in terms of restoring power. Minimal tree and boat damage though. We’ve finished renovation maintenance of the town dock, they did a really good job. Had some issues with the ramp during the power outage and the generator not working properly. Ramp had to be manually brought down, which is a real issue.

We’re having a hard time finding someone to run the post office. We’re managing okay right now, but it’s day-to-day or week-to-week in terms of whether it’s officially running. School
news is always big news for us. Our teacher Jan is terrific. She’s off at the School Reform Initiative training with some Island Institute folks right now and will bring knowledge and experience back. She is retiring at the end of this year. We don’t have a search committee started yet, and Bev Roxby has reached out to Yvonne Thomas at the Island Institute. We have 5 kids coming up and it would be great to have a preschool. We need as much encouragement as possible for folks to stay. Island Institute may be able to help get the word out and attract candidates.

Noise insulation was installed into the town building. We had a Halloween party out there last week. We have no Fellow right now. Former Fellow Zain is still there and he is fishing. He’s great and is still master of ceremonies at public events and we hope he stays forever. It says a lot about the island that people want to stay – even Jan is looking to purchase a house or some land.

Isle au Haut (Kendra Chubbuck): Isle au Haut kids loved the TLC field trip to Brunswick, so I wanted to give a shout out on that. IAH was the sponsor of the Inter-Island event and I think it went well, we enjoyed having the kids around. In August, we had the annual triathlon and the proceeds went to put up a pavilion at the general store which caused some controversy. Kendra and John have completely finished their house! We’re having an informational town meeting on November 9th on housing issues. There are six students in the school, and they started a “book buddies” program at 10:15 in the library - community members come in and read to the students. They’re also doing a “Know Your Neighbor” program where students interview and draw pictures of a community member. It will culminate with a presentation at a breakfast on the Sunbeam about the people that they interview. The community has really enjoyed this so far!

Chebeague Island (Jay Corson): We are recovering from the storm – about 80% of island is back with power. On November 7th, we’ll be voting on a school bond for over one million dollars. Kids Place is having a really busy year, and they’ve had to open more days than they’ve expected. Paper streets are dead and gone at this point, we survived a few last-minute attempts to reactive some of them. Formed a tick and Lyme disease committee to study ticks on island, build a database, and host open community meetings. Cheryl is here today with me from Collins Engineering – they are doing the study on the Stone Wharf renewal and we hope to have the study completed soon. Have a second property we’ll look at for the possibility of a wharf (Sunset) so that will take several months. Other than that, not much new.

Cliff Island (Roger Berle): Chebeague, Long, and Cliff are collaborating with the Island Institute on a broadband study. We thought we’d have a copy of the report by the end of October, but we have yet to receive a copy. We hope to have something in place by the summer. Sustainable Cliff Island Project got delayed big time by city of Portland permitting issues – there’s nothing wrong with the process, but it is just different from what they’ve done in the past and very tedious. Floodplain issues are at the heart of it. The main store has been run by the owners of the building who bought the building as a gift to the community, which has apartments and a café. They are looking for operators for the store for next year, (mid-May to
We’re not really worried about that yet, but will need to find a solution because the owners are not interested in running the store again this year. We’re still out of power on the island – maybe Sunday, maybe Monday it will come back. Our power comes across from Long Island and they’re still out as well. Mark Green wanted to be here but is tending to lots of generators.

**Topics for Next Year**

*Roger Berle:* Please send ideas along to Kate, myself, Donna and we’ll work with them.

*Owen Casás:* Because I represent Islesboro, I’ve been spending a lot of time learning out there, and am hearing a lot of the same things. I can’t speak to solutions for deer and ticks. Childcare and broadband, I’ve heard a lot about that. Islesboro has a full-time childcare, which is good for families. On Islesboro, we’re reviewing tiny house ordinances as a way to try and take up less space but get affordable housing. To make islands young-person friendly, I would encourage you to look into “Tiffs”. Broadband is a local issue, you have to come up with the bond for that. It’s frustrating because even if you have the funding it can be a longer process since the poles (TWC etc) make it difficult to make that pole-ready to string fiber on. Legislature is trying to get that “pole-make-ready time” expedited.

  *Roger Berle:* We’re looking to lay fiber cable in conduits.

  *Owen Casás:* It’s easier to dig in soil and harder to dig in ledge, digging is the smarter route but more expensive.

**MIC Sea Level Rise Web Links**

**Island Institute Sea Level Rise Symposium**

*November 28th 9:30-4:00* For more information and to register use the link below: [http://mailchi.mp/9bd564338d69/join-us-portland-learn-about-preparing-maine-coast-sea-level-rise?e=[UNIQID]]

**Gulf of Maine Research Institute- Gayle Bowness**

  *C-Rise: Community Resilience Informed by Science and Experience*


  *U.S. Climate Resilience Toolkit:* [https://toolkit.climate.gov/](https://toolkit.climate.gov/)

  *GRMI Sea Level Rise Events:* [http://gmri.org/sea-level-rise](http://gmri.org/sea-level-rise)
NOAA Office for Coastal Management - Jamie Carter

Digital Coast: Data, Tools, and Trainings built for communities needing to address coastal issues.  
https://coast.noaa.gov/digitalcoast/

Digital Coast Sea Level Rise Viewer  
https://coast.noaa.gov/slr

ENOW Explorer Tool: Understand the Economic Impact of the Ocean for your Region  
https://coast.noaa.gov/enowexplorer

Northeast Ocean Data: Maps and Data about Ocean Use and Habitat  
http://www.northeastoceandata.org

Army Corps of Engineers Sea Level Change Calculator  
http://www.corpsclimate.us/ccaceslcurves.cfm

Northeast Regional Ocean Council Storm/Flood Risk Data  
http://northeastoceancouncil.org/naccs

U.S. Global Change Research Program  
Including: impacts, response options, and regional scenarios  
http://www.globalchange.gov

NOAA Climate Summary for Maine  
https://statesummaries.ncics.org/me

Zillow Assessment of SLR on Home Values  

Maine Geological Survey - Peter Slovinsky, Marine Geologist

Coastal Hazards  
Including: Highest annual tide line, Sea level rise/storm surge, Marsh migration, FEMA floodplain maps  

Maine Geological Survey: Highest Annual Tide Line  
To note: HAT is calculated by offsetting the predicted HAT from the nearest tidal station; there are errors (+−13 cm) associated with this. The HAT tool does not account for areas with tidal restrictions.  
Maine Geological Survey: Marsh Migration Maps
To note: marsh migration modeling is based on “bathtub” sea level rise, and
does not account for erosion or marsh accretion rates.
http://www.maine.gov/dacf/mnap/assistance/marsh_migration.htm

SLOSH Model: Sea, Lake and Overland Surges from Hurricanes
http://www.nhc.noaa.gov/surge/slosh.php

City of Saco, ME Floodplain Management Plan
https://ecode360.com/9676746

Lincoln County Regional Planning Commission: Sea Level Rise Coastal Hazard Study
http://lcrpc.org/sea-level-rise-scenarios