



Friends of Casco Bay Casco BAYKEEPER

May 7, 2021

Senator Stacy Brenner
Representative Ralph Tucker
Environment and Natural Resources Committee
ENR@legislature.maine.gov

Re: Friends of Casco Bay Testimony in Support of LD 1572: Resolve, To Analyze the Impact of Sea Level Rise

Dear Senator Brenner, Representative Tucker, and Esteemed Members of the Environment and Natural Resources Committee,

Please accept this letter as Friends of Casco Bay’s testimony in support of LD 1572: Resolve, To Analyze the Impact of Sea Level Rise. **The actions called for by this bill are critical to making our coastal communities and resources resilient to climate change.**

Friends of Casco Bay is a marine stewardship organization dedicated to improving and protecting the health of Casco Bay. We monitor water quality, and use that data to inform our advocacy and engage our communities in our efforts.

We support LD 1572 because it requires state agencies that manage and regulate coastal land use, to review the laws and rules they administer and recommend changes to this Committee, by January 1, 2022, that:

1. Incorporate consideration of 1.5 feet of relative sea level rise by 2050 and 3.9 feet of relative sea level rise by 2100; and
2. Implement “Strategy F3” in the state climate action plan.

With these changes, Maine law will have a forward-thinking lens that considers how our coast will look with sea level rise (SLR) and how it will be affected by more intense storms. With this perspective, we can be plan for change.

We must act now because our coastal communities already suffer the effects of SLR, higher tides, and more intense storms. Our Water Reporter network uses an app to photograph and document the effects of these changes. We have attached an example from a Water Reporter on Great Diamond Island. Our water quality data confirm that Casco Bay is receiving larger loads of stormwater pollution from more intense storms, including excessive nitrogen that is causing nuisance and harmful algal blooms and contributing to coastal acidification.

As Casco Baykeeper, I serve on the Coastal and Marine Working Group of the Maine Climate Council (MCC) and helped form some of the recommendations proposed by LD 1572, which are more fully detailed in Strategy F3 of the state climate action plan and Appendix A of the Community Resilience Working Group report. That strategy requires the State to update its coastal land use regulations, laws, and practices by 2024, to set a foundation f municipalities revise their

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comprehensive plans and ordinances to meet changing conditions.

There's no time for delay. The Science and Technical Subcommittee of the MCC has advised that Maine must *commit* to manage for 1.6 feet of SLR by 2050 and 3.9 feet by 2100. They further advised that we must be *prepared* to manage for 8.8 feet of SLR by 2100. These levels of SLR, coupled with the Highest Astronomical Tide,¹ have staggering consequences:

- With 1.6 feet of SLR, six of ten Maine waste water treatment facilities currently within the 100-foot floodplain will be permanently inundated.
- With 1 foot of SLR, the frequency of nuisance flooding that already impacts coastal Maine will increase 10-15 fold, from an average of 14 hours to about 142 hours per year.
- With 1.6 feet of SLR, 26 miles of coastal public roads, 6 miles of rail, and 977-1022 crossings and culverts will be inundated. With 3.9 feet of SLR, 116 miles of roads, 23 miles of rail, and 1128-1180 crossings and culverts will be flooded. (ERG Summary, p. 11).
- With 1.6 feet of SLR, 61% of undeveloped dunes and 85% of developed dunes will be inundated. With 3.9 feet of SLR, 93% of undeveloped dunes and 96% of developed dunes will be inundated. (STS Report, Table 17, p.99).
- With 1.6 feet of SLR, 43% of protective dry beach will be lost, and with 3.9 feet of SLR, 74% of dry beach will be lost. (STS Report, Table 15, p. 98).

If we do not revise our laws now, we will not have the guidance we need to properly site or modify infrastructure, protect working waterfronts, and adapt our coastal communities. Without management that considers shifts in habitat, we will lose valuable resources.

Friends of Casco Bay requests that this Committee unanimously recommend that LD 1572, A Resolve, To Analyze the Impact of Sea Level Rise, Ought To Pass. Thank you for considering our testimony.

Respectfully submitted,



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¹ As referenced by the Maine Geological Survey, 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.



Richard Frantz

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Unless it is due to a catastrophic event erosion is hard to detect on a daily basis. Over time it becomes very obvious. I post two photos to the entrance of Diamond Cove Beach on Great Diamond Island. The upper photo was taken in October 2004 and the bottom photo today, May 2021. As you can see the differences are quite dramatic; from the loss of a huge section of the road, to trees and vegetation and the increased shoreline.

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