

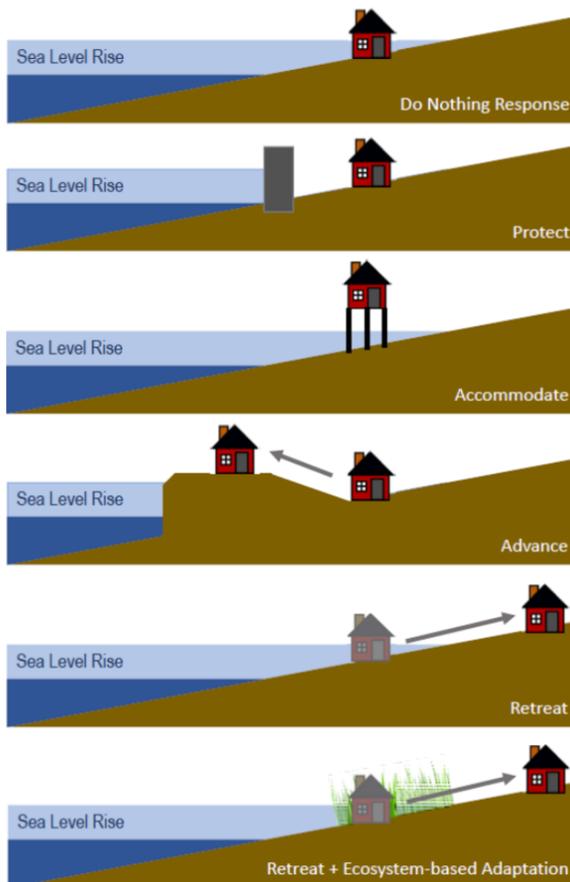
# Should we mitigate sea level rise at the light station?

NEWS FLASH: We had quite an interesting conclusion to 2022 with respect to rising sea levels on Islesboro. As predicted by the Maine Geological Survey simulation software, flooding occurred at the base of the lighthouse, along Ferry Road and at the Narrows. The road at the Narrows was closed to traffic for 2 hours.

December 23, 2022 storm surge and astronomical high tide. The red circles are sites of predicted flooding from a Maine Geological Survey simulation.



Observations are the beginning of the story of our awareness of sea level rise. The next chapter is figuring out how to protect our community from sea level rise or how to mitigate at-risk sea level rise sites.



The Lighthouse Committee members have made many observations of sea level rise at the light station. We've also obtained definite surveyor waypoints, including determination of high astronomical tide level, which are essential to understanding the threat level of sea level rise. The committee now needs expert help to determine mitigation steps.

Several mitigation ideas have been proposed by the Natural Resources Defense Council, as you can see in the accompanying drawings. The article (referenced below) is worth reading. It is short and scary, as scary as us looking at our light station at astronomical high tides with storm surges. One of the conclusions of the report is to *act decisively and to act now*.

Which of the six adaptation strategies is best for Islesboro? For the past 170 plus years, we have embraced the “do nothing approach.” The “advance”, “retreat” and “retreat plus ecosystem-based” adaptations are

limited by the land area at Grindle Point, which will become Grindle Island as the sea level rises 9 feet by 2100.

This leaves us with the “protect” or “accommodate” options. The “protect” option has been a stop-gap measure employed along the coast with ever increasing sea level rise; a seawall will have only temporary success, with vertical extensions to the wall needed as the waters rise.

This leaves us with the “accommodate” option which means raising the lighthouse. Going up saves us from having to move the lighthouse to an unknown location if one even exists, and maintains the Light station’s one word or two welcoming iconic image. The financial cost to raise the lighthouse will be expensive and must be agreed upon as worthwhile by the community. Do we *act decisively now* or wait for more flooding events in 2023?

<https://www.nrdc.org/experts/rob-moore/ipcc-sea-level-rise-adaptation-essential-not-optimal>

*Submitted by the Lighthouse Committee*