



Testimony before the

Joint Standing Committee on Appropriations and Financial Affairs

By Rob Wood, Director of Government Relations and Climate Policy

April 26, 2021

RE: LD 49, An Act To Authorize a General Fund Bond Issue To Invest in Infrastructure To Address Sea Level Rise

Senator Breen, Representative Pierce, and members of the Joint Standing Committee on Appropriations and Financial Affairs, my name is Rob Wood and I am the Director of Government Relations and Climate Policy for The Nature Conservancy in Maine. I appreciate this opportunity to testify **in support of LD 49**, An Act To Authorize a General Fund Bond Issue To Invest in Infrastructure To Address Sea Level Rise.

The Nature Conservancy is a nonprofit conservation organization dedicated to conserving the lands and waters on which all life depends. Guided by science, we create innovative, on-the-ground solutions to our world's toughest challenges so that nature and people can thrive together. Working in more than 70 countries, we use a collaborative approach that engages local communities, governments, the private sector, and other partners. The Nature Conservancy has been leading conservation in Maine for more than 60 years and is the 12th largest landowner in the state, owning and managing roughly 275,000 acres. We also work across Maine to restore rivers and streams, partner with fishermen in the Gulf of Maine to rebuild groundfish populations, and develop innovative solutions to address our changing climate.

LD 49 would invest \$50 million to improve waterfront and coastal infrastructure in municipalities to address sea level rise, to be administered by the Department of Marine Resources.

The impact of changing climate conditions is already being felt on the ground in Maine. In Portland, sea levels rose by roughly eight inches during the 20th century, about seven inches higher than expected based on prior data. In this century, sea levels are projected to rise another one to six feet globally, with sea levels expected to rise more in the Northeastern U.S. than the global average, according to the 2018 National Climate Assessment. Maine's recently adopted four-year Climate Action Plan calls for the State to commit to managing for 1.5 feet of sea-level rise by 2050, relative to the year 2000, and for 3.9 feet of sea-level rise by the year 2100. It also

calls for consideration of preparing to manage for higher sea-level rise scenarios: 3.0 feet by 2050, and 8.8 feet by 2100.¹

While some of Maine's coast is naturally buffered against the worst effects of sea level rise because of its foundation of bedrock, approximately half of Maine's coastline is composed of tidal wetlands, coastal bluffs, and sand beaches, all threatened by rising seas and increased storm surges. Much of our built infrastructure is at risk, including businesses, roads, and working waterfronts.

Sea level rise is threatening Maine's diverse coastal habitats as well. As sea levels rise, coastal wetlands need to migrate inland. Without proper planning and investments to support marsh migration, wetlands will not have the space to retreat and reestablish. Tidal wetlands support a range of critical ecosystem functions, including filtering surface water and serving as feeding and stopover points for sea run fish and migratory birds.

Underinvestment in coastal resilience can carry a significant cost. An analysis conducted to inform the development of the Climate Action Plan found that with 1.6 feet of sea-level rise by 2050 (relative to 2000), combined with storms occurring at the same frequency and intensity as the historic baseline, Maine can expect \$17.5 billion in cumulative building damage between 2020 and 2050.² Another recent study found that sea-level rise has already cost Maine nearly \$70 million in lost home values alone between 2005 and 2017.³

Allocating \$50 million to protect against these costs is a sound investment for Maine. It is estimated that every \$1 invested in pre-disaster risk reduction results in \$6 of avoided disaster damages.⁴ Furthermore, adapting to sea-level rise will be a matter of critical public safety concern for many of our coastal communities. Roads that become inundated due to sea-level rise and increased storm surges can leave vulnerable communities cut off from emergency responders and other essential services.⁵

There are many shovel-ready projects available should the State increase investments in coastal resilience. According to the Climate Action Plan, "Maine currently has a backlog of 1,798 infrastructure-adaptation projects listed across all 16 counties at a proposed cost of \$325 million."⁶ TNC and our partners are currently developing multiple coastal resilience projects that could be enabled by additional state and federal resources.

¹ *Maine Won't Wait: A Four Year Plan for Climate Action* (December 2020), Maine Climate Council, p. 86, https://climatecouncil.maine.gov/future/sites/maine.gov.future/files/inline-files/MaineWontWait_December2020_printable_12.1.20.pdf.

² *Assessing the Impacts Climate Change May Have on the State's Economy, Revenues, and Investment Decisions: Summary Report* (November 25, 2020), State of Maine, Eastern Research Group, Inc. and Synapse Energy Economics, p. 10, https://climatecouncil.maine.gov/future/sites/maine.gov.future/files/inline-files/ERG_MCC_AssessingImpactsClimateChangeMaine_Summary_11.25.20.pdf.

³ "Rising seas swallowed \$70 million in Maine home values, study says," Lori Valigra, Bangor Daily News, January 22, 2019, <https://bangordailynews.com/2019/01/22/business/rising-seas-to-swallow-70-million-in-maine-home-values-study-says/>.

⁴ *Maine Won't Wait*, p. 91.

⁵ View The Nature Conservancy's Coastal Risk Explorer for a community-by-community risk analysis: <https://maps.coastalresilience.org/maine/>.

⁶ *Maine Won't Wait*, p. 95.

TNC offers one suggestion to strengthen LD 49: We suggest adding to the text of the bill a preference for using nature-based infrastructure to address sea-level rise wherever feasible. For example, restoring salt marshes and oyster reefs can often provide similar protection against storm surges as constructing seawalls. These “living shoreline” projects are more cost-effective than gray infrastructure, while providing substantial co-benefits for wildlife habitat and water quality.⁷

Thank you again for the opportunity to testify in support of LD 49. I am happy to answer any questions you may have.

⁷ *Assessing the Impacts Climate Change May Have on the State’s Economy, Revenues, and Investment Decisions: Summary Report*, p. 21.