

12 March 2025 – Joint Standing Committee on Environment and Natural Resources

Testimony in Support of LD 226 and LD 735

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I am a research biologist with an appointment at the University of Maine. I am speaking today as a private citizen; my comments are my own and not that of the University. That said, I am strongly in support of offshore wind development. Investment in this new technology will supply the energy Maine needs to grow our economy while drastically reducing the greenhouse gas emissions generated when fossil fuels are burned for energy. Climate change can no longer be ignored.

I am also strongly opposed to sacrificing the undeveloped coastal forests of Sears Island / Wahsumkik to achieve this goal. We do not have to choose between offshore wind development and preserving Sears Island. Mack Point, paved industrial land, sits less than a mile away and can be redeveloped from an oil terminal, which met our past energy needs, into a wind port to supply energy for the future.

I give my full **support to LD 226**, which will extend the current conservation easement to cover all of Sears Island, including the western 300-acre parcel currently proposed as a site for an offshore wind port.

I also fully **support LD 735**, which gives Maine's Native peoples the right to identify and protect sacred sites on Sears Island, and which repeals LD2266 enacted one year ago this month, which gave DEP authorization to consider construction of a wind port on Sears Island that would sit directly on top of an existing coastal sand dune, in violation of both state and federal laws. Coastal sand dunes are recognized as critical habitat for nesting shorebirds, and they form the base for evolving wetlands as rising sea levels inundate lower tidal marshes. That ill-conceived legislation set a dangerous precedent. The urgent need for renewable energy does not justify following the same destructive path of environmental degradation laid down by the fossil fuel industry for the last 100 years.

Many others will be speaking today about the ecological and social value of preserving Sears Island. My comments will focus on natural carbon sequestration and the value of preserving the intact forests of Sears Island.

First some background. Carbon dioxide, the gas we exhale, is the gas released when we burn carbon for energy, whether that carbon is wood, or coal, oil or gas. Carbon dioxide along with methane and several other greenhouse gases are trapping the Sun's heat in our atmosphere and warming our planet. Reducing these greenhouse gases in our atmosphere will eventually return our climate to a more comfortable equilibrium, reduce the intensity of storms, preserve our existing shorelines. Our efforts to reduce the carbon entering the atmosphere are why we are investing in wind turbines and solar panels, investing in energy sources that do not release carbon dioxide and other greenhouse gases. This is one of the ways to reduce the carbon in our atmosphere.

Another method is natural carbon sequestration, where carbon dioxide is removed from the atmosphere and stored in plants. All green plants remove carbon from the atmosphere through photosynthesis, absorbing carbon dioxide (CO<sup>2</sup>) from the air, combining it with water and energy from the Sun and releasing the oxygen we all breathe. The carbon stays in the plants as building blocks for growth. The trunks of towering white pines were built from tiny molecules of CO<sup>2</sup> pulled from the air.

Using calculations from The Nature Conservancy's [Resilient Land Mapping Tool](#), by 2025 the 925 forested acres on Sears Island have sequestered 88,750 metric tons of carbon. That amount of carbon will offset the carbon emissions for one year from 74,000 cars. (Each average car emits 4.6 metric tons of carbon dioxide which equals 1.2 metric tons of carbon).

While two thirds of Sears Island is already in conservation, destroying the intact forests in the roughly 300 acres now discussed for an offshore wind port would ultimately release about 29,000 metric tons of carbon into our atmosphere. The equivalent of adding about 24,000 cars to Maine's roads.

To bring this full circle, enacting LD 226 and LD735 would conserve the intact forests of Sears Island and so sequester the carbon that would be released into the atmosphere if the forest was destroyed to build the wind port. In contrast, the forests on Mack Point were destroyed over a hundred years ago, building the wind port on Mack Point creates the infrastructure for offshore wind without adding carbon to our atmosphere.

Preserving the mature forests that exist today on Sears Island is an important contribution toward reaching Maine's goal to be carbon-neutral by 2045. The State of [Maine's Carbon Budget, Version 2.0](#) identifies forestland as the most significant factor removing greenhouse gases from the atmosphere through carbon sequestration.

Please vote to pass LD 226 and LD735.

#### Useful Links:

State of Maine's Carbon Budget (version 2.0). <https://crsf.umaine.edu/forest-climate-change-initiative/carbon-budget/>

The Nature Conservancy's Resilient Land Mapping Tool.

<https://www.maps.tnc.org/resilientland/#/explore>

EPA Greenhouse Gas Emissions from a Typical Passenger Vehicle.

<https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle#:~:text=typical%20passenger%20vehicle%3F,A%20typical%20passenger%20vehicle%20emits%20about%204.6%20metric%20tons%20of,8%20C887%20grams%20of%20CO2.>