

To: Committee on Agriculture, Conservation & Forestry

From: David von Seggern, Volunteer Leadership, Sierra Club Maine

Date: April 25, 2023

Re: **Testimony in Support of LD 1678:** *Resolve, Directing the Department of Agriculture, Conservation and Forestry to Study and Report on Soil Carbon Sequestration Incentive Programs*

Senator Ingwersen and Representative Pluecker and Members of the Joint Committee on Agriculture, Conservation, and Forestry:

My name is David von Seggern, and I am testifying on behalf of Sierra Club Maine, representing over 22,000 supporters and members statewide. Founded in 1892, Sierra Club is one of our nation's oldest and largest environmental organizations. We work diligently to amplify the power of our 3.8 million members nation-wide as we work towards combating climate change and promoting a just and sustainable economy. To that end, we urge an "ought to pass" report on LD 1678.

Soil carbon is one of the most active research branches within the field of greenhouse-gas (GHG) reductions today. Although research is still in an early stage and many uncertainties exist, there is in fact a lot known that can be the basis of action to reduce GHG emissions from lands with soils or from wetlands at this time. Maine is blessed with a high percentage of land that is not developed and not impermeable. By Maine's own Department of Agriculture, Conservation, and Forestry estimates, Maine is nearly 90% forestland or shrubland¹. Much of the remainder is highly valuable wetlands or farmlands. Maine has much to gain by examining how more carbon can be stored in these lands across the state. A 2022 report² by the same department to this Joint Committee aptly presented the current status of these lands in regard to carbon capture.

The Resolve will rightly direct the same department to study what programs might be best for increasing the carbon sequestration of Maine's soils and to research what funding may be available, federal or otherwise, to implement such programs. We strongly suggest that the language of the Resolve be slightly amended to include near-shore, carbon-rich, subaqueous soils³ that lie underneath the ocean waters. Near-shore vegetation such as eelgrass is known to be a "carbon pump" for capturing CO_2 and, through photosynthesis,

¹2022 Maine Forest Health Highlights —

https://www.maine.gov/dacf/mfs/forest_health/documents/2022-maine-forest-health-highlights120222.pdf ²An Issue Analysis of Soil Carbon Sequestration and Storage in Maine — https://legislature.maine.gov/doc/9170 ³Seagrass: The plant that removes carbon 30 times faster than a rainforest

https://www.euronews.com/green/2022/05/03/seagrass-the-plant-that-removes-carbon-30-times-faster-than-a-rain forest

efficiently storing carbon in the subaqueous soil. Areas dominated by such offshore vegetation are known to store more carbon per unit area than areas of onshore vegetation, such as in coastal marshlands.

We therefore ask that you vote to "ought to pass" for LD 1678.

Respectfully yours,

David von Seggern, Volunteer Leadership Sierra Club Maine