Jenny Zagariello Orrs Island, Maine Date: March 15, 2021 LD.593 An Act to An Act to Restore Eelgrass Mapping and Enhance Salt Marsh Mapping in the State Presented by Representative McCREIGHT of Harpswell.

As a resident of Harpswell I am aware of the changes happening on Maine's coastline. Two of our most valuable resources, tidal-salt marshes and eel-grass beds, are especially vulnerable ecosystems. Consistent mapping of these areas over time will provide data scientists and legislators need to understand the dynamics at work in order to monitor, conserve and/or restore these resources.

Salt marsh vegetation and eel-grass beds both contribute to our commercial economy and property values. Both are spawning grounds for many fish species by providing nutrients, food and a habitat for juveniles. Marshes in particular provide buffers and barriers to storms and rising sea level. Finally, vegetative coastal habitats are exceptionally efficient at sequestering carbon to keep it out of the atmosphere. "Coastal blue carbon" sinks like marches and eel grass beds bury carbon at a much greater rate than upland forests. (https://esajournals.onlinelibrary.wiley.com/doi/full/10.1890/110004

Tidal-salt marshes and eel-grass beds need to be protected from further degradation and loss due to a variety of factors. Nutrient loading from runoff due to development, tidal restrictions, an increase in invasive species, marsh migration and sea-level rise are all impacting the ecological balances need to keep these resources healthy and functioning.

Regularly mapping, updating maps and sharing maps will provide baseline data needed for scientists and legislators to understand what is happening to these ecosystems over time. Mapping the salt marsh vegetation and eel-grass beds at the same time is an efficient, commonsense plan because the procedures are the same. Legislation is required to prevent further degradation and loss of these critical parts of Maine's coastline. I urge you to vote in favor of LD 593.