DATE: Jan. 25, 2022
TO: Committee on Education & Cultural Affairs
FROM: Hannah Carter, Dean of University of Maine Cooperative Extension
RE: **LD 1902, *An Act To Establish a Pilot Program To Encourage Climate Education In Maine Schools***

Senator Rafferty, Representative Brennan and distinguished members of the Joint Standing Committee on Education and Cultural Affairs: As the Dean of University of Maine Cooperative Extension and also a member of the Natural and Working Lands Working Group of the Maine Climate Council, I write on behalf of the University of Maine System (UMS) to inform the Committee's consideration of LD 1902, *An Act To Establish a Pilot Program To Encourage Climate Education In Maine Schools.*

Consistent with our unique capacity as the state's public research university and a land, sea and space grant institution, UMaine faculty, staff and students travel the world and the state to contribute to understanding of climate change and to help develop climate solutions for Maine's communities, companies and citizens.

Cooperative Extension is a key component of this important work, bringing our interdisciplinary education, research and service to every Maine county to help everyone from homeowners to agriculture producers meet the challenges and opportunities brought by a changing climate from managing pests to pasture management.

Today, I am most excited to write to you about the hands-on, research-based STEAM (science, technology, engineering, arts and math) education our 4-H Youth Development programs deliver to Maine students. Through our four environmental learning centers (in Knox, Oxford, Waldo and Washington counties), UMaine's Orono campus, local clubs and community centers, in schools across the state and increasingly online, Maine 4-H directly engages nearly 20,000 youth each year in experiential education increasingly connected to climate science.

As part of the Telstar Freshman Academy, a partnership between UMaine's 4-H Center in Bryant Pond and MSAD #44, we merge focused climate science with the innovation engineering process, supported by the UMaine Foster Center for Innovation. Through this curriculum, students develop engineering solutions to climate change issues, build prototype models, and pitch their ideas to a panel of professional engineers and stakeholders.

We directly support Maine educators with free professional development and toolkits, including to advance data/science literacy and understanding of the natural world around us through applied learning about climate change here in our state and especially the Gulf of Maine. Next month we'll lead vacation week workshops that bring Maine students into marshlands where they will consider shifting species due to climate change, and this summer, our UMaine 4-H Center at Greenland Point (Princeton) will partner with colleagues in UMaine's Native American Studies Program to host the Wabanaki Youth in Science (WaYS) Earth Camp. The University's WaYS program integrates Western science and technology with traditional Wabanaki culture and knowledge, with a strong focus on climate issues as they relate to wildlife, water quality and more.

Through all this interdisciplinary climate education, we're not only connecting Maine youth to our natural world and empowering them to be its informed stewards, we're helping them develop

creative and critical thinking skills, solve real-world problems, be physically active, and build self-esteem and self-reliance. I can think of no better way to learn.

With our expertise, experience and statewide resources and relationships, UMaine Cooperative Extension and our 4-H Youth Development programs are well-positioned if LD 1902 moves forward to partner with Maine schools and other organizations to develop high-quality, high-impact climate science education programs that foster more equitable student achievement and environmental outcomes.

Thank you for your continued commitment to University of Maine Cooperative Extension and to Maine's public universities. Please let me know if I can provide any additional information.