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Senator Lee Beyer
Chair, Senate Committee on Energy and Environment

Dear Senator Beyer and Committee Members,

Thank you for the opportunity to submit this testimony in regard to proposed Senate Bill 541.

I serve as director of the Oregon Climate Change Research Institute (OCCRI), which is hosted by the College of Earth, Ocean, and Atmospheric Sciences at Oregon State University. OCCRI was created in 2007 under House Bill 3543. OCCRI seeks to achieve a climate-prepared state and region by building a climate knowledge network, cultivating climate-informed communities, and advancing understanding of regional climate, its effects, and adaptation.

Senate Bill 541 would include carbon sequestered by Oregon's lands and waters in calculations of the state's progress toward meeting goals for reduction of greenhouse gas emissions. Oregon is fortunate to have many natural options for offsetting emissions. For example, research results published in peer-reviewed scientific journals suggest that forests in the Pacific Northwest, especially old-growth forests, have considerable potential to mitigate emissions of carbon dioxide. To illustrate, an article in *Ecological Applications* in March, 2020, by Buotte and others indicated that conservation of resilient forests with medium to high potential for carbon sequestration could offset about eight years of regional emissions from fossil fuels. As another example, an April, 2020, publication in *PLoS ONE* by Graves and others reported that reforestation of riparian areas in Oregon also could make a meaningful contribution to mitigation of emissions. Other benefits conferred by these actions include preserving economic, recreational, and aesthetic opportunities.

Nevertheless, mitigation and reduction of emissions are distinct, and I respectfully encourage the legislature to continue to recognize the difference. By way of analogy, an athletic person may remain lean and fit despite consuming high quantities of added sugars. However, many of us would encourage both the physical activity and a reduction in sugar consumption.

Please let me know if you would like additional information. Thank you again.

Sincerely,

Erica Fleishman

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