

Committee on Environment & Natural Resources % Legislative Information Office 100 State House Station Augusta, ME 04333

May 12, 2025

## RE: LD 1289, An Act to Prohibit Lodging Establishments from Providing Single-use Plastic Containers

Dear Sen. Tepler, Rep. Doudera, and Members of the ENR Committee:

My name is Ania Wright and I am Maine Audubon's Policy Advocate. Maine Audubon is a wildlife conservation nonprofit – we fulfill our mission to "conserve Maine wildlife and wildlife habitat" by engaging people of all ages in nature through a science-based approach to education, conservation, and advocacy. On behalf of Maine Audubon and our 30,000 members, supporters, and volunteers thank you for the opportunity to submit testimony in support of LD 1928, *An Act to Prohibit Lodging Establishments from Providing Single-use Plastic Containers*.

Maine Audubon is supportive of policies which reduce plastic use and pollution, such as LD 1928. Plastic pollution is an unchecked threat to our environment and natural resources, and especially to wildlife. Seabirds in particular have been extensively studied regarding plastic ingestion, with researchers finding plastic in the stomachs of up to 90% of seabirds.<sup>1</sup> Plastic found inside birds include bags, bottle caps, synthetic fibers from clothing, and "microplastics"—plastic that has been broken down by the sun and waves over time.

Scientists are still unearthing the far-ranging damages of accumulating microplastics in wildlife. A recently published study demonstrated how microplastics in fish changed their behavior. The study demonstrated that, compared to controls, fish treated by microplastics displayed weakened feeding ability. Microplastic-treated fish had reduced swimming speed and range of movement, demonstrating that microplastics could have negative effects on hunting behavior.<sup>2</sup> Furthermore, microplastics accumulate in the gills and intestine of fish, causing significant changes to the gallbladder and liver, which leads to impaired growth, protein creation, and lipid stores. Fish are eaten by birds, other wildlife, and humans, meaning that the known impacts of microplastic ingestion is not isolated to fish. To make matters worse, scientists estimate that by 2050, there will be more plastic in the ocean, by weight, than fish.<sup>3</sup>

<sup>&</sup>lt;sup>1</sup> Wilcox, et all (2015), Threat of plastic pollution to seabirds is global, pervasive, and increasing. <u>https://www.pnas.org/doi/full/10.1073/pnas.1502108112</u>

<sup>&</sup>lt;sup>2</sup> Wang, et al (2024), Meta-analysis of the effects of microplastic on fish: Insights into growth, survival, reproduction, oxidative stress, and gut microbiota diversity.

https://www.sciencedirect.com/science/article/abs/pii/S0043135424013927

<sup>&</sup>lt;sup>3</sup> Ellen Macarthur Foundation (2015), The New Plastics Economy

https://www.ellenmacarthurfoundation.org/the-new-plastics-economy-rethinking-the-future-of-plastics



Other studies have highlighted reduced foraging, survival, and reproduction as a result of microplastics in marine zooplankton, a foundational organism in marine ecosystems.<sup>4</sup> Researchers just this month published a study which found that seabird chicks are showing signs of brain damage similar to Alzheimer's disease, tied to the ingestion of microplastics.<sup>5</sup> Another study published recently has provided evidence that microplastics are accumulating in bird lungs, finding an average of 416 particles of microplastics in all 51 species studied.<sup>6</sup>

We urge the Committee to support LD 1928 - a step forward in progress toward confronting Maine's, our nation's, and the world's plastic problem.

Sincerely,

Ania Wright

Policy Advocate

<sup>&</sup>lt;sup>4</sup> Botterel, et all (2019), Bioavailability and effects of microplastics on marine zooplankton: A review. <u>https://www.sciencedirect.com/science/article/pii/S0269749118333190</u>

<sup>&</sup>lt;sup>5</sup> Jersey, et al (2025), Seabirds in crisis: Plastic ingestion induces proteomic signatures of multiorgan failure and neurodegeneration. <u>https://www.science.org/doi/10.1126/sciadv.ads0834</u>

<sup>&</sup>lt;sup>6</sup> Wang, et al (2025), Assessing microplastic and nanoplastic contamination in bird lungs: evidence of ecological risks and bioindicator potential. <u>https://doi.org/10.1016/j.jhazmat.2025.137274</u>