February 11th, 2025

RE: SUPPORT for Senate Bill 526

Dear Chair Sollman and Committee Members,

On behalf of our organizations and our supporters throughout Oregon, we would like to express our strong support of SB 526, which would significantly reduce the amount of microfiber pollution entering our ocean and freshwater ecosystems, our lands, our air, and our communities by requiring microfiber filters on washing machines sold in Oregon.

Microfibers are one of the most abundant and ubiquitous types of microplastic found in nature, including in Oregon's lands, waterways, and coastal environments. A 2021 study of 30 rivers in Oregon by Environment Oregon found microfibers in 100% of tested sites.¹

Microfiber pollution poses serious risks to the environment, wildlife and human health. Microplastics impact the marine food chain and its associated industries,^{2,3,4} as well as decrease crop productivity,⁵ costing Oregon's economy valuable resources. Furthermore, humans are known to consume microfibers and a recent report suggests microplastics and the chemicals associated with them can cause pulmonary and cardiac disease, and even cancer, doing unknown harm to Oregonians and burdening the health care system. Once in the environment, microfibers are nearly impossible to clean up, which is why upstream interventions are critical in preventing these particles from entering the environment in the first place. The cost of inaction is dangerously high.

A major source of microfibers in the environment is the shedding of clothing and other textiles, including from regular washing of those materials—a single load of laundry can release up to 18 million microfibers. Almost 70% of the materials used to make textiles are synthetic, resulting in plastic being shed into the environment in the form of microfibers. Between 1950 and 2016, 5.6 million metric tons of synthetic microfibers were emitted from washing clothes globally,⁶ which is equivalent to 28.2 billion t-shirts entering the environment.

Interventions are needed to address microfiber pollution across the full lifecycle of textiles. In addition to exploring upstream textile redesign and infrastructure solutions to reduce the generation of microfibers, we need near-term solutions to effectively capture microfibers before they enter the environment.

Fortunately, washing machine filter technology has already proven to be an effective solution. These filters are affordable and have demonstrated their efficacy to capture up to 90% of

¹ Meiffren-Swango, C., Environment Oregon. "Microplastics in Oregon: A survey of waterways." (2021).

² Cole, M. et al. 2019. *Environmental Science & Technology*.

³ Jacob, H. et al. 2020. *Environmental Science & Technology*.

⁴ Rochman, C. et al. 2015. <u>Scientific Reports</u>.

⁵ Zang, H. et al. 2020. <u>Soil Biology and Biochemistry</u>.

⁶ Gavigan J., et al. (2020). <u>PLoS ONE</u>.

microfibers in laboratory and field trials. There are no significant technical or financial barriers to applying these filters to new washing machines, in fact, microfiber filtration technology is already built into washing machines sold outside the U.S. from major brands like Panasonic, Hitachi, Sharp, and Toshiba. A recent estimate by an economic consulting firm found the potential cost increase for including microfiber filters to be \$14 - \$20 per machine, which is less than \$2 per year over the lifetime of a machine. Over time and with economies of scale, the cost of these filtration systems is likely to decrease as the technology becomes more widespread and manufacturing costs decrease. We must also address the cost of inaction. It is exponentially less expensive to stop these microfibers from entering the environment in the first place.

By requiring microfiber filtration systems in all new washing machines sold in Oregon by January 1, 2030, this bill would not only protect our environment but also support businesses by driving the development and adoption of new technologies.

Senate Bill 526 is a critical step towards protecting human and environmental health from the threat of microplastic pollution. By including readily available, cost-effective microfiber filtration systems in washing machines, Oregon can lead the way in addressing this urgent environmental issue and set an example for other states and countries to follow. With effective filtration solutions available, we cannot afford to wait to address the threats of microfiber pollution. We respectfully urge an AYE vote when this bill is heard in your committee.

Sincerely,

Anja Brandon, Ph.D. Director, Plastics Policy Ocean Conservancy

Lisa Arkin Executive Director Beyond Toxics

Jackie Nuñez Founder The Last Plastic Straw

Krystle Moody Wood Founder & Principal Materevolve, LLC

Kerry Carlin Morgan Director of Education and Volunteer Engagement Oregon Coast Aquarium

Miriam Gordon Reuse Director Story of Stuff Charlie Plybon Oregon Senior Policy Manager Surfrider Foundation

Dianna Cohen CEO & Co-Founder Plastic Pollution Coalition

Celeste Meiffren-Swango State Director Environment Oregon

Tom Egleston Legislative Chair Association of Oregon Recyclers

Alison Waliszewski Director of Regional Policy & Program Development The 5 Gyres Institute