

Dear Committee on Agriculture and Environment and Committee on Commerce, Consumer Protection and Health;

The mission of Pacific Whale Foundation (PWF) is to protect the ocean through science and advocacy and to inspire environmental stewardship. We support and greatly appreciate your efforts to help reduce single-use plastics in the State of Hawaii. We write to provide our **support** for Bill SB522 with the report title of "Plastic Food Packaging; Plastic Bags; Single-Use Beverage Containers; Prohibition; Plastic Source Reduction Working Group; Appropriation" aimed at reducing single-use plastic items in the state of Hawaii, but with a few suggested amendments.

As a scientific organization, many of PWF's studies have shown plastic pollution to be an ever growing problem in Hawaii. A recent baseline study published by Currie *et al.* (2018) found 90% of nearshore macro debris in Maui Nui to be plastics. Another study conducted by PWF surveyed three shoreline beaches around the island of Maui in part to determine the most prevalent type of debris on the island (Blickley *et al.* 2016). This study concluded that of the debris collected at each of the three sites; 70% of it was plastic. As part of our citizen science efforts, our Coastal Marine Debris Monitoring Program has been collecting coastal marine debris data from volunteers since 2013 (CMDMP, 2019). Of the ~25,000 pieces of debris collected to date, 84% were plastics. These local studies have shown plastic debris to be a major problem that is extremely prevalent not only around the world, but here in Hawaii as well.

Eight million metric tons of plastic enter our oceans each year, and plastic production does not seem to be slowing down (Jambeck *et al.*, 2015). Plastics do not biodegrade; instead, they go through a process called photodegrading, meaning they will break up into smaller and smaller pieces, but never truly are gone from the environment. Further, only 9% of recyclable products are actually being recycled (EPA, 2018). In an effort to solve this plastic pollution issue, compostable 'bio-plastics' were created. Bioplastics are typically made out of polylactic acid (PLA) which is sugars from corn starch, cassava, or sugarcane. While bioplastics will break down very efficiently and emit less greenhouse gases if disposed of properly, this would have to be done in an industrial compost facility, which we do not have on all of the Main Hawaiian Islands. When bioplastics are not put into an industrial compost facility and end up in a landfill, they release methane, a greenhouse gas that is 23 times more potent than carbon dioxide (Posen *et al.*, 2017). We believe this should be taken under consideration when talking about non-plastic, compostable alternatives and when defining the word plastic.

500 million plastic straws are used every day in America and straws have become one of the top ten marine debris items found during beach clean ups both in our own country and worldwide (Ocean Conservancy, 2018). In the summer of 2018, there was a wave of environmental campaigns asking for cities and states to ban all plastic straws from businesses, restaurants, theme parks, and even airplanes. But in the hopes of putting a dent into our plastic pollution problem, the needs of disabled persons have been overlooked. The

American Disability Alliance (ADA) has expressed that people with certain motor function or muscular disabilities require plastic drinking straws. Often times, non-plastic alternatives do not function in the same way as plastic straws, which some people require to drink. We believe this is something the state of Hawaii should also take into account for in this proposed bill, by adding in an exemption for people with disabilities, and/or requiring restaurants to keep a stock of plastic straws for people who require them for medical reasons.

Plastic debris is becoming a looming and increasing threat in today's world, with over 220 million tons of plastic produced each year (GESAMP. (2009). Pacific Whale Foundation asks all of its members and supporters to help keep our single-use plastics to a minimum here in the state of Hawaii by supporting this proposed bill.

We believe the proposal to reduce a variety of single-use plastic items state-wide should be passed with careful consideration to all parties involved. Passing this proposal will benefit our oceans and wildlife, while taking a large step in the direction of reducing our plastic pollution crisis.

Sincerely,

Jenny Roberts

Conservation Coordinator for Pacific Whale Foundation

Jens Currie

Chief Scientist for Pacific Whale Foundation

Stephanie Stack

Chief Biologist for Pacific Whale Foundation

Literature Cited:

Blickley, L.C., Currie, J.J., Kaufman, G.D. 2012. Trends and drivers of debris accumulation on Maui shorelines: Implications for local mitigation strategies. *Marine Pollution Bulletin* 105: 292–298.

Currie, J.J., Stack, S.H., Brignac, K.C., & Lynch, J.M. 2018. Nearshore sea surface macro marine debris in Maui County, Hawaii: Distribution, drivers, and polymer composition. *Marine Pollution Bulletin* 138: 70-83.

Coastal Marine Debris Monitoring Program, 2019.
<https://www.pacificwhale.org/conservation/marine-debris/>

Environmental Protection Agency (EPA). 2018. Advancing Sustainable Materials Management: 2015 Fact Sheet. Report on Assessing Trends in Material Generation, Recycling, Composting, Combustion with Energy Recovery and Landfilling in the United States. 22 p.

Group of Experts on the Scientific Aspects of Marine Environmental Protection (GESAMP). (2009). *Pollution in the Open Oceans: A Review of Assessments and Related Studies*. International Maritime Organization. 64 p.

Jambeck, J.R., Geyer, R., Wilcox, C., Siegler, T.R., Perryman, M., Andrady, A., Ramani, N., Law, K.L. (2015). Plastic waste inputs from land into the ocean. *Science* 768-771.

Ocean Conservancy, 2018. International Coastal Clean Up Report 2018. *Ocean Conservancy* 1-28.

Posen, I. D., Jaramillo, P., Landis, A. E., & Griffin, W. M. 2017. Greenhouse gas mitigation for US plastics production: energy first, feedstocks later. *Environmental Research Letters*, 12(3). 12 p.