

Choking on Plastic: Changing Laws to Reduce Harm to Aquatic Animals

In 2019, a whale beached itself in the Philippines, vomiting blood. It died within hours. NPR reported the autopsy found “nothing but nonstop plastic” in the whale’s stomach—88 pounds in total. The marine biologist who performed the autopsy told NPR the whale’s stomach was “as hard as a baseball.” He concluded the whale had been suffering for months or years from the plastic it was unknowingly ingesting.¹ Similarly, in 2018, a dead whale washed ashore in Indonesia with 13.2 pounds of plastic in its stomach. National Geographic reported the plastic included “115 drinking cups, 25 plastic bags, plastic bottles, two flip-flops and a bag containing more than 1,000 pieces of string.”²

Whales are not the only aquatic animal at risk of harm from plastic pollution. The New York Times has reported “hundreds of animal species are in danger when plastics end up in bodies of water, but whales tend to attract more interest because of the large quantities they can hold in their bodies.”³

Laws in the United States have failed to address the problem.⁴ There is no federal law addressing the issue. Some places have instituted single-use plastic bag regulations. Oregon and Portland, examples for this article, have done so.

¹ Dalia Mortada, *Stomach of Dead Whale Contained ‘Nothing but Nonstop Plastic*, NPR (Mar. 18, 2019), <https://www.npr.org/2019/03/18/704471596/stomach-of-dead-whale-contained-nothing-but-plastic>.

² Laura Parker, *Sperm Whale Found Dead with 13 Pounds of Plastic in its Stomach*, Nat’l Geographic (Nov. 21, 2018), <https://www.nationalgeographic.com/environment/2018/11/dead-sperm-whale-filled-with-plastic-trash-indonesia/>.

³ Daniel Victor, *Dead Whale Found With 88 Pounds of Plastic Inside Body in the Philippines*, N.Y. Times (Mar. 18, 2019), <https://www.nytimes.com/2019/03/18/world/asia/whale-plastics-philippines.html>.

⁴ This article will not focus on international law, or other countries’ laws.

This paper examines how the expanding problem of plastic use and pollution impacts aquatic animals. First, it explains how plastics end up in waterways and oceans, how they decompose, and how that pollution impacts aquatic animals. Second, it analyzes laws in Oregon regarding plastic pollution. Finally, it provides frameworks for municipal or state level legislation to reduce plastic pollution's impact on aquatic animals.⁵ It analyzes the possibilities of success for such legislation, and potential opposing arguments.

The Plastic Lifecycle

Plastic was invented in the nineteenth century as a sustainable alternative to ivory, but commercial production and widespread adoption started in the mid-twentieth century.⁶ It has assisted positively in areas such as the advancement of modern medicine and creating lighter aircraft and automobiles that emit less pollution.⁷ But its low cost and ease of production spurred development of disposable, single-use plastics. By 2017, humans had produced 9.2 billion tons of plastic. Six billion, nine-hundred million tons had become waste. And only 600 million tons were recycled—6.3 billion tons were not. Forty-percent of the plastic produced yearly is disposable.⁸

⁵ This paper will not cover all forms of plastic pollution and its impacts on aquatic animals. Nor will it cover all possible legal solutions. The scope of plastic use and pollution is too broad for this paper to cover. For examples of all the different ways in which plastic is used and causes harm, *see generally Plastic or Planet*, Nat'l Geographic, <https://www.nationalgeographic.com/environment/planetorplastic/> (last visited June 26, 2020) (showcasing articles on how different, common products contribute to plastic pollution).

⁶ Laura Parker, *We Made Plastic. We Depend on it. Now we're Drowning in it*, Nat'l Geographic (Apr. 8, 2019), <https://www.nationalgeographic.co.uk/2018/05/we-made-plastic-we-depend-it-now-were-drowning-it>.

⁷ *Id.*

⁸ *Id.*

It is unknown how much of the 6.3 billion tons of unrecycled plastic ends up in the oceans, the “Earth’s last sink.”⁹ Much of this comes from land and rivers, which convey the plastic pollution to the oceans.¹⁰ One estimate suggests 5.3 million to 14 million tons of plastic from coastal regions end up in oceans. The researcher analogized that 8.8 million tons of plastic would amount to “five plastic grocery bags stuffed with plastic trash...sitting on every foot of coastline around the world.”¹¹ Much of the plastic remains in coastal waters, but ocean currents can transport it globally.¹²

A large amount of the plastic pollution comes from single-use plastic products that are mismanaged in the waste management process.¹³ Half of that plastic comes from Asian countries.¹⁴ They lack proper waste management systems and are overwhelmed by developed nations exporting their plastic to them.¹⁵

It is also unknown how long plastic takes to biodegrade. National Geographic reported “estimates range from 450 years to never.”¹⁶ While it is in solid form, aquatic animals can ingest

⁹ *Id.*

¹⁰ Laura Parker, *Plastic Pollution Facts and Information*, Nat’l Geographic (June 7, 2019), <https://www.nationalgeographic.com/environment/habitats/plastic-pollution/>.

¹¹ Laura Parker, *We Made Plastic. We Depend on it. Now we’re Drowning in it*, *supra* note 6; *Sea of Problems: Impacts of Plastic Pollution on Oceans and Wildlife: Oversight Hearing before the H. Subcomm. on Water, Oceans, and Wildlife of the Comm. on Nat. Res.*, 116th Cong. 24 (2020) (statement of Jenna R. Jambeck, Ph.D., Professor of Environmental Engineering, University of Georgia; National Geographic Fellow).

¹² Laura Parker, *Plastic Pollution Facts and Information*, *supra* note 10.

¹³ *Sea of Problems: Impacts of Plastic Pollution on Oceans and Wildlife: Oversight Hearing before the H. Subcomm. on Water, Oceans, and Wildlife of the Comm. on Nat. Res.*, 116th Cong. 25 (2020) (statement of Jenna R. Jambeck, Ph.D., Professor of Environmental Engineering, University of Georgia; National Geographic Fellow).

¹⁴ Laura Parker, *We Made Plastic. We Depend on it. Now we’re Drowning in it*, *supra* note 6.

¹⁵ *Sea of Problems: Impacts of Plastic Pollution on Oceans and Wildlife: Oversight Hearing before the H. Subcomm. on Water, Oceans, and Wildlife of the Comm. on Nat. Res.*, 116th Cong. 25 (2020) (statement of Jenna R. Jambeck, Ph.D., Professor of Environmental Engineering, University of Georgia; National Geographic Fellow).

¹⁶ Laura Parker, *We Made Plastic. We Depend on it. Now we’re Drowning in it*, *supra* note 6.

the plastic, leading to a false sensation of fullness. This eventually can starve the animals to death.¹⁷ Or it can pierce an animal's intestine and cause death.¹⁸ Animals can also become entangled in the plastic, such as the familiar image of turtles becoming ensnared in plastic six-pack rings.¹⁹ Over 700 species have eaten or become entangled in plastic.²⁰

Plastic eventually degrades into microplastics—plastic particles smaller than 0.2 inches.²¹ Experiments have shown microplastics “damage aquatic creatures” by interfering with their digestion and hunger.²² If the animal is a newborn, consuming the plastic can cause the animal to die within its first day.²³

Microplastics eventually degrade into nanoplastics—microscopic plastic under one-tenthousandth of a millimeter. These plastics can move from the digestive organs into the aquatic animals' tissue. There is little data on their impact.²⁴ In a statement to Congress, a professor of environmental engineering at the University of Georgia explained plastic in the environment does not biodegrade, “it simply fragments into smaller and smaller pieces, and with an unknown fate, I would say, of the smallest particles that we can't even measure yet.”²⁵

¹⁷ Natasha Daly, *For Animals, Plastic Is Turning the Ocean Into a Minefield*, Nat'l Geographic (June 2018), <https://www.nationalgeographic.com/magazine/2018/06/plastic-planet-animals-wildlife-impact-waste-pollution/>.

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ *Id.*

²¹ Elizabeth Royte, *We Know Plastic Is Harming Marine Life. What About Us?*, Nat'l Geographic (Jun. 2018), <https://www.nationalgeographic.com/magazine/2018/06/plastic-planet-health-pollution-waste-microplastics/>.

²² *Id.*

²³ Laura Parker, *Baby fish have started eating plastic. We haven't yet seen the consequences*, Nat'l Geographic (May 2019), <https://www.nationalgeographic.com/magazine/2019/05/microplastics-impact-on-fish-shown-in-pictures/>.

²⁴ Laura Parker, *We Made Plastic. We Depend on it. Now we're Drowning in it*, *supra* note 6.

²⁵ *Sea of Problems: Impacts of Plastic Pollution on Oceans and Wildlife: Oversight Hearing before the H. Subcomm. on Water, Oceans, and Wildlife of the Comm. on Nat. Res.*, 116th Cong.

Additionally, plastics can convey toxic chemicals to aquatic animals and their habitats. Plastics can contain toxic additives. Also, toxins can accumulate on plastics as they travel across waterways and oceans.²⁶ These plastics can have even greater impacts on aquatic animals than plastics without the additional toxins on them. For example, one researcher found that microplastics treated with certain chemicals can have greater impacts on aquatic animals than untreated microplastics.²⁷

Current Oregon Legislation

Federal action on plastic pollution and regulation is ideal, but unlikely before at least 2021. Therefore, the best course of action is to look at states and municipalities to push consumer and corporate behavior away from single-use plastics that harm aquatic animals. This article will focus on Oregon and Portland, which have adopted legislation and ordinances regarding this problem.

Oregon passed a law regulating and restricting single-use checkout bags in December, 2019. The Oregon Department of Environmental Quality described it as “a positive first step

17 (2020) (statement of Jenna R. Jambeck, Ph.D., Professor of Environmental Engineering, University of Georgia; National Geographic Fellow).

²⁶ *Id.* at 23 (“Plastics in the ocean are associated with chemicals. This includes organic compounds like flame retardants, pesticides, and polychlorinated biphenyls (PCBs) that accumulate on the plastic from surrounding water. It also includes the additive ingredients of the plastic that can leach into the surrounding environment.”).

²⁷ Elizabeth Royte, *We Know Plastic Is Harming Marine Life. What About Us?*, *supra* note 21. The article explained a University of Toronto ecology professor discovered in her experiments that fish which “ingested the [plastic treated with soaked ground-up polyethylene, which is used to make some types of plastic bags] suffered more liver damage than those that had consumed virgin plastic. (Fish with compromised livers are less able to metabolize drugs, pesticides, and other pollutants.) Another experiment demonstrated that oysters exposed to tiny pieces of polystyrene—the stuff of take-out food containers—produce fewer eggs and less motile sperm.” *See also Sea of Problems: Impacts of Plastic Pollution on Oceans and Wildlife: Oversight Hearing before the H. Subcomm. on Water, Oceans, and Wildlife of the Comm. on Nat. Res.*, 116th Cong. 24 (2020) (statement of Jenna R. Jambeck, Ph.D., Professor of Environmental Engineering, University of Georgia; National Geographic Fellow).

towards addressing the large amount of plastic debris in the oceans, which threatens Oregon’s marine wildlife.”²⁸ The statute defines “Single-use checkout bag” as “a bag made of paper, plastic or any other material that is provided by a retail establishment to a customer at the time of checkout, and that is not a recycled paper checkout bag, a reusable fabric checkout bag or a reusable plastic checkout bag.”²⁹ Retail stores and restaurants are prohibited from providing customers with single-use plastic checkout bags. Restaurants can provide recycled paper bags for free, or reusable plastic bags for five cents a bag. Retail stores can provide recycled paper bags or reusable plastic bags for five cents a bag.³⁰

But the scope of the law is limited. It excludes bags “provided by a retail establishment to a customer at a time other than the time of checkout.”³¹ This includes bags that “(i) [p]ackage bulk items such as fruit, vegetables, nuts, grains, greeting cards or small hardware items, including nails, bolts or screws; (ii) [c]ontain or wrap frozen food, meat, fish, flowers, a potted plant or another item for the purpose of addressing dampness or sanitation; (iii) [c]ontain unwrapped prepared food or a bakery good; or (iv) [c]ontain a prescription drug.”³² Newspaper bags, door hanger bags, garment bags, laundry bags, dry cleaning bags, and bags “sold in a package containing multiple bags for uses such as food storage, garbage containment or pet waste collection” (i.e., garbage bags and Ziploc bags) are also excluded.³³

Oregon has also regulated single-use plastic straws. The statute, passed contemporaneously with the single-use plastic bag law, prohibits a “food and beverage provider

²⁸ *Bag FAQ*, Oregon Dept. of Env'tl. Quality, <https://www.oregon.gov/deq/mm/production/Pages/Bags.aspx> (last accessed June 26, 2020).

²⁹ Or. Rev. Stat. Ann. § 459A.755(8)(a) (2020).

³⁰ Or. Rev. Stat. Ann. § 459A.757 (2020); *Bag FAQ*, *supra* note 28.

³¹ Or. Rev. Stat. Ann. § 459A.755(8)(b)(A) (2020).

³² Or. Rev. Stat. Ann. §§ 459A.755(8)(b)(A)(i)-(iv) (2020).

³³ Or. Rev. Stat. Ann. §§ 459A.755(8)(b)(B)-(C) (2020).

or convenience store...[from providing] a single-use plastic straw to a consumer.”³⁴ The statute defines “single-use plastic straw” as “a tube made primarily from plastic that is derived from petroleum or a biologically based polymer, such as corn or another plant source, and that is intended: (i) To transfer liquid from a container to a consumer's mouth; (ii) For a single use; and (iii) For disposal after the single use.”³⁵ It does not include a straw “made from materials other than plastic, including but not limited to paper, pasta, sugar cane, wood or bamboo; and...[a] plastic straw that is attached to or packaged with a beverage container before the beverage container is offered for retail sale.”³⁶

But the statute has many loopholes. The food and beverage provider or convenience store can provide a single-use plastic straw if “the consumer specifically requests” one.³⁷ Additionally, a food and beverage provider or convenience store may offer a single-use plastic straw to a consumer if the consumer is picking up the prepared food or beverage from a drive-through window.³⁸ And convenience stores may sell “single-use plastic straws in bulk or unconnected with a sale or provision of food or a beverage,” or make “single-use plastic straws available to consumers in an unattended location only if the convenience store does not have space in which to store the single-use plastic straws in a location where employees of the convenience store provide service to consumers.”³⁹

³⁴ Or. Rev. Stat. Ann. § 616.892(2)(a) (2020).

³⁵ Or. Rev. Stat. Ann. § 616.892(1)(e)(A) (2020).

³⁶ Or. Rev. Stat. Ann. § 616.892(1)(e)(B) (2020).

³⁷ Or. Rev. Stat. Ann. § 616.892(2)(a) (2020).

³⁸ Or. Rev. Stat. Ann. § 616.892(2)(b) (2020).

³⁹ Or. Rev. Stat. Ann. § 616.892(2)(c) (2020).

The city of Portland first regulated single-use plastics in 2011.⁴⁰ Portland has gone a step further than the state legislature by regulating the use of Single-Use Plastic Serviceware. The city ordinance defines this as “single-use plastic straws, stirrers, Utensils and Condiment Packaging. This includes compostable and biodegradable plastic (petroleum or biologically based polymer) serviceware, but does not include serviceware that are made from non-plastic materials, such as paper, sugar cane, bamboo, etc.”⁴¹ It requires that “Retail Food and Beverage Establishments and Cafeterias, where beverages may be consumed at Dine-in areas, shall provide Plastic Serviceware only after Customer request.”⁴² Additionally, “Retail Food and Beverage Establishments and Cafeterias, where Customers order Fast Food, take-out or delivery, shall provide Plastic Serviceware to Customers only after asking if the Customer needs Plastic Serviceware and the Customer responds affirmatively. For Electronic Ordering, the Retail Food and Beverage Establishments are responsible for coordinating with any outside ordering service to prompt the Customer to select Plastic Serviceware.”⁴³

Even though this is not a ban on the use of serviceware, the Portland ordinance carves out broad exemptions to the rule. “Cafeterias and Retail Food and Beverage Establishments designed for counter service may allow Customers to access a self-service station for plastic Utensils.”⁴⁴ Plastic serviceware is exempted if it “is attached to or packaged by the manufacturer with a beverage container before the beverage container is offered for retail sale. For example,

⁴⁰ Cole Rosengren, *Oregon Governor Signs Law Banning Plastic Bags, Straws*, WasteDive (July 8, 2019), <https://www.wastedive.com/news/oregon-governor-signs-laws-banning-plastic-bags-straws/558262/>.

⁴¹ Portland, Or., Public Improvements § 17.103.300(H) (2020).

⁴² Portland, Or., Public Improvements §17.103.310(A) (2020).

⁴³ Portland, Or., Public Improvements § 17.103.310(B) (2020).

⁴⁴ Portland, Or., Public Improvements § 17.103.310(C)(1) (2020).

juice boxes.”⁴⁵ Products including ingredients “packaged with single-use Plastic Serviceware [are exempted]. For example, a separate plastic container of dressing included within a larger salad container.”⁴⁶ Finally, “free or reduced-price meals...provided as part of a social service to vulnerable populations” are exempted.⁴⁷

Proposed Amendments

The Oregon and Portland laws are a starting point for reducing single-use plastic waste from entering the waterways and oceans. But they are insufficient to make meaningful reductions. Too many products contain single-use plastic that are improperly disposed of and become ocean refuse. This section explores possible ways to strengthen these laws and the impact the amendments might have.

1) The Portland Ordinance

Oregon’s state law is overly specific. It focuses solely on checkout bags and plastic straws. These are major sources of plastic pollution, but there are many additional sources. As National Geographic found, a large amount of plastic pollution in the Philippines comes from single-use condiment containers.⁴⁸ Similarly, the Portland ordinance is not a major impediment to the continued use of single-use plastic serviceware.

Plastic serviceware, as defined by the city ordinance, should be subject to far greater regulation and restriction. First, most of these items are unnecessary conveniences in modern American disposable culture.⁴⁹ Packing one’s own flatware would not be a great burden—many

⁴⁵ Portland, Or., Public Improvements § 17.103.310(C)(2) (2020).

⁴⁶ Portland, Or., Public Improvements § 17.103.310(C)(3) (2020).

⁴⁷ Portland, Or., Public Improvements § 17.103.310(C)(4) (2020).

⁴⁸ Laura Parker, *We made Plastic. We depend on it. We’re drowning in it.*, *supra* note 6.

⁴⁹ *Id.*

individuals already bring reusable water bottles. Second, the ordinance specifically carves “serviceware that are made from non-plastic materials, such as paper, sugar cane, bamboo, etc.” from the definition of “Plastic Serviceware.”⁵⁰ So if the covered businesses decide to continue providing disposable serviceware, they will have non-plastic options to choose from.

Portland should amend its ordinance to ban “all Retail Food and Beverage Establishments and Cafeterias” from providing plastic serviceware.⁵¹ Additionally, any provision of serviceware made from non-plastic materials should cost five cents.

Understandably, this will create problems for companies trying to source these alternative materials. Companies already are having supply-chain difficulties providing this serviceware. This might be even more extreme for condiment packaging, which the ordinance defines as “plastic packaging used to deliver single-serving condiments to customers. This includes but is not limited to single-serving plastic packaging for ketchup, mustard, relish, mayonnaise, hot sauce, coffee creamer, salad dressing, jelly and jam and soy sauce.”⁵² It is harder to envision consumers carrying soy sauce and jelly in their cars for trips to drive-throughs.

Therefore, the amendment should also include phase-in periods as companies develop and build supply chains for new packaging. Many retailers have already started providing straws, stirrers, and utensils from non-plastic alternatives.⁵³ Therefore, a two-year phase-in period for the amendment might be reasonable. The technology already exists and supply chains are already being created and enhanced. Furthermore, consumers can easily bring reusable versions of these items with them. A two-year period instead of a one-year period allows the

⁵⁰ Portland, Or., Public Improvements § 17.103.300(H) (2020).

⁵¹ Portland, Or., Public Improvements § 17.103.310(A) (2020).

⁵² Portland, Or., Public Improvements § 17.103.300(A) (2020).

⁵³ Bonnie McCarthy, *After straw ban, California builds a non-plastic future*, L.A. Times (Apr. 9, 2019), <https://www.latimes.com/home/la-hm-california-straw-ban-update-20190409-story.html>.

covered businesses more time to navigate the COVID-19 pandemic. Sharp revenue declines have caused many businesses to struggle or close.⁵⁴ Although it is important to reduce the plastic waste as quickly as possible, doing so in a way that is too disruptive to residents and businesses might backfire.

Condiment packaging should be given a longer phase-in period as the technology is developed.⁵⁵ The products do not yet exist, but sometimes government should play a technology-forcing role. The plastic producers and consumers do not have to internalize the externalities of their plastic pollution—the aquatic animals do. The packaging producers, sellers, and consumers have no incentive to change. The government must step in here to fix this economic distortion. Otherwise, these production and consumption choices will not change until a disruptive event occurs that severely impacts those producing, selling, or consuming these disposable products.

A five-year phase-in period might make more sense here. Similarly, a five-year phase-in period might make sense when removing the items currently listed as “exemptions” in section 17.103.310(C). A draft amendment incorporating these changes is attached as Appendix A.

2) The Oregon Statutes

As shown above, there are many areas within the plastic bag regulation that are unrestricted. Although it will reduce the single-use plastic consumed, it is only an initial step. These proposed amendments improve upon the initial law.

⁵⁴ Heather Long, *Small business used to define America's economy. The pandemic could change that forever*, Washington Post (May 12, 2020), <https://www.washingtonpost.com/business/2020/05/12/small-business-used-define-americas-economy-pandemic-could-end-that-forever/>.

⁵⁵ Laura Parker, *We made Plastic. We depend on it. We're drowning in it.*, *supra* note 6.

First, the single-use checkout bag definition should phase out the exceptions listed in the definitions section.⁵⁶ However, that would leave a currently impracticable situation. It might not work to provide some products in reusable plastic bags or paper bags. Certain products might not fit or stay properly in paper bags. And it might cause businesses to start relying heavily on paper bags and plastic bags deemed “reusable” by the statute—which would not be a solution. Therefore, the definition of single use bag should specifically exclude bags certified as biodegradable in marine, soil, and freshwater, or commercially compostable. These alternatives would be more expensive than traditional single-use plastic. Businesses could either internalize those costs, pass them onto consumers as fees, or find ways to reduce usage of those materials to avoid the costs. The amendment would hopefully modify behavior in a positive way. There is a possibility for unforeseen negative consequences, but it is hard to plan for an unknown unknown.

Additionally, many of the currently exempted products do not have commonly used alternatives. For example, single-use dry cleaning bags are still ubiquitous. Therefore, it is important the affected businesses have time to learn about any new requirements or prohibitions and make appropriate arrangements. The law will fail without large-scale community buy-in. The proposed amendments suggest a two-and-one-half year phase-in period. It still requires businesses to push for alternatives and to reorient themselves away from disposable plastic. However, it provides businesses time to deal with the coronavirus pandemic until a vaccine is developed or the population approaches herd immunity.⁵⁷ So the burden of rethinking many aspects of their business might seem slightly less onerous. A draft amendment incorporating these changes is attached as Appendix B.

⁵⁶ See Or. Rev. Stat. Ann. § 459A.755(8)(b) (2020).

⁵⁷ Jane E. Brody, *The Race to Develop a Covid Vaccine*, N.Y. Times (June 22, 2020), <https://www.nytimes.com/2020/06/22/well/live/covid-vaccine.html?searchResultPosition=1>.

Second, the plastic straw law is only a small first step in cutting-back on a notorious ocean plastic pollution source. As mentioned earlier, there are many loopholes. The customer can specifically ask for a straw and drive-through restaurants may offer them unprompted. Additionally, self-serve locations can leave the single-use plastic straws out unattended. Stores can also continue to sell them in-bulk to consumers.

Because there are so many situations in which a business may provide these straws, it comes down to businesses choosing to understand and follow the original law. Common sense suggests many businesses will decide to ignore the original law because it is easier to continue business-as-usual.

Therefore, it is a sensible next-step to remove all the loopholes from the law. The law's definition from "single-use plastic straw" already exempts straws "made from materials other than plastic, including but not limited to paper, pasta, sugar cane, wood or bamboo."⁵⁸ These are widely available alternatives.⁵⁹ Additionally, businesses such as Starbucks have developed cups that do not require straws.⁶⁰ The amendment would push businesses in Oregon to adopt the best-available technology for single-use non-plastic straws.

The amendment to the law would also increase the penalties for businesses that ignore the new restrictions. It would raise the daily fine for violations from \$25 to \$50 and would raise the yearly cap on fines from \$300 to \$18,250. If it is routinely enforced, it should help prevent

⁵⁸ Or. Rev. Stat. Ann. § 616.892(1)(e)(B) (2020).

⁵⁹ Amie Tsang, *McDonald's to Switch to Paper Straws in Britain as Country Turns Against Plastic*, N.Y. Times (June 15, 2018), <https://www.nytimes.com/2018/06/15/business/mcdonalds-plastic-straws-britain.html?searchResultPosition=2> (explaining the United Kingdom and McDonalds were working on switching to non-plastic straws).

⁶⁰ Bonnie Rochman, *Straws are out, lids are in: Starbucks announces environmental milestone*, Starbucks Stories (July 9, 2018), <https://stories.starbucks.com/stories/2018/starbucks-announces-environmental-milestone/>.

businesses that ignore the law from saving money by not purchasing more-expensive single-use non-plastic straws.⁶¹

Finally, the law would go into effect on January 1, 2021. This is a shorter time than some of the other proposed amendments because many big businesses (such as McDonalds and Starbucks) already have developed supply chains for alternatives to single-use plastic straws. Therefore, many other businesses in the area should not have a hard time finding suppliers for new straws. It is a technology that already exists and is being mass produced—the law will just force businesses and consumers to adopt the new straws. A draft amendment incorporating these changes is attached as Appendix C.

Potential Opposition

Any proposal to regulate environmental harm in the United States draws criticism—this will be no exception. This section will raise foreseeable arguments from businesses, consumer groups, and anti-government groups.

Anti-government groups are generally against environmental regulations. This was previewed by Congressional Representative Tom McClintock in his October 2019 statement at the Oversight Hearing before the Subcommittee on Water, Oceans, and Wildlife. He wrote “American consumers are heroes—not villains—in the fight against plastics pollution of our oceans. We should be celebrating them and not punishing them! Yet, that is just what Draconian

⁶¹ One estimate suggests a paper straw costs \$0.025 while a plastic straw costs \$0.005. This penalty increase estimates a business uses 2,500 straws a day, which would cost \$50 more in paper straws. Kellie Ell, *Paper straws cost ‘maybe 10 times’ more than plastic straws, says paper straw distributor*, CNBC (July 9, 2018), <https://www.cnbc.com/2018/07/09/paper-straws-are-better-for-the-environment-but-they-will-cost-you.html>.

[sic] restrictions on plastic use would do.”⁶² He wrote it would cost valuable jobs in his home state. And he stated that plastics were an improvement upon older technologies, such as toothpaste that “came in collapsible metal tubes.”⁶³ It would be environmentally wasteful to return to that older packaging. Yet, he claimed that it has been historical practice to use disposable packaging that does not biodegrade, but the world has been fine even with that waste.⁶⁴

There are four arguments to respond to in his statement. First, any attempt to change consumer behavior casts them as villains. Representative McClintock is technically correct—many American municipalities have better waste management than developing nations.⁶⁵ But that misses the point. Americans export a large portion of their plastic pollution to developing Asian nations.⁶⁶ Some of the plastic polluting their coastal waters and endangering aquatic species is from the United States. Additionally, the United States must lead by example. It is harder to push other countries to implement plastic-reduction solutions when American consumers do not have to change. Also, it will be easier and cheaper for other countries to adopt the new policies and methods if American laws and regulations spur technology and change.

⁶² *Sea of Problems: Impacts of Plastic Pollution on Oceans and Wildlife: Oversight Hearing before the H. Subcomm. on Water, Oceans, and Wildlife of the Comm. on Nat. Res.*, 116th Cong. 6 (2020) (statement of Rep. Tom McClintock).

⁶³ *Id.*

⁶⁴ *Id.* (writing “the most common single-use packaging of the ancient world—once we had progressed from animal skins and gourds—was the amphora, usually a ceramic. A massive hill called Mt. Testaccio in Rome is composed of discarded amphorae, which have not degraded in nearly 2,000 years. Yet the world isn’t the worse for it—and the Romans were infinitely better off for it.”).

⁶⁵ Laura Parker, *We Made Plastic. We Depend on it. Now we’re Drowning in it*, *supra* note 6.

⁶⁶ Erin McCormick et al., *Where does your plastic go? Global investigation reveals America’s dirty secret*, *The Guardian* (June 17, 2019), <https://www.theguardian.com/us-news/2019/jun/17/recycled-plastic-america-global-crisis>.

Second, the representative warned restricting plastic that is damaging the world's oceans and aquatic animals would cost Americans jobs. He did not provide a specific reason why this would occur. Nor did he explain why those same companies could not transition to making alternative materials that fit the new regulations and laws. Governments should not protect businesses that refuse to change and adapt. That would improperly skew the economy toward inefficient companies incapable of developing new technologies and competing in the global economy. If the representative was actually concerned about job loss, he might have suggested funding to attract companies developing new technologies into his district. That way, his constituents might have an easier time transitioning to more competitive companies.

Third, the representative alleged removing single-use plastics from the economy would force companies and consumers to return to more-wasteful alternatives that the plastic replaced. This argument misses the point—the new laws would be technology forcing and behavior modifying. It would not be pushing consumers to return to antiquated and unsafe methods. Instead, it requires businesses and consumers to examine where disposable items are necessary, and if so, how to replace plastic with more planet-friendly alternatives.

Finally, Representative McClintock wrote that humans have traditionally used non-biodegradable containers. That did not end the world in Roman times, so why should we change our behavior now. Just because humans have always done an activity or created a form of waste, does not mean it created no harm. Also, there are billions more humans now than there were in antiquity who live longer and use more items, so any harm created has been multiplied billions of times. And doing something for a long time does not mean it should be safe from examination and evaluation.

Business groups might argue this will hurt their bottom line. They are already hurting because of the pandemic, so any additional stressor could cause even more businesses to close. However, businesses do not have to bear any of the costs related to the bans. They can simply pass the cost of the single-use items onto consumers by charging for straws, utensils, laundry bags, or other items. Or they can avoid offering some items completely if they find they are unnecessary to their business. For example, dry cleaners do not have to put customers' clothes in plastic. Finally, the amendments that will have the greatest impacts and require more new technologies have a longer phase-in period. This will allow businesses time to focus on overcoming the pandemic, and complying with the new laws.

Some consumer groups might oppose the broader plastic bans. One argument is that certain differently abled individuals require straws to drink.⁶⁷ But the plastic straw amendment would not prohibit businesses from providing non-plastic straws and people could bring reusable straws with them. An additional argument might include non-plastic alternatives cost more. However, consumers can save money by using reusable options for many items, such as utensils and bags.

Passing the Amending Legislation

The raucous political climate has trickled from federal government to state and local governments. Oregon is no exception. Passing *any* new legislation on a statewide basis will be tricky, and might not occur until 2021. However, amendments to the Portland city ordinance might occur more easily.

⁶⁷ James Rainey, *How business groups are fighting a wave of anti-plastic straw laws*, NBC News (Mar. 1, 2019), <https://www.nbcnews.com/news/us-news/how-business-groups-are-fighting-wave-anti-plastic-straw-laws-n977196>.

Oregon's legislature is unique in comparison to many other state legislatures because two-thirds of legislators must be present to have a quorum.⁶⁸ On its face, this does not sound problematic. But politicians nationwide have resorted to procedural maneuvering to stymie legislation they oppose. Democrats hold supermajorities in both the Oregon state senate and legislature. However, the Republicans hold enough seats in the state senate to deny Democratic lawmakers a quorum. Republican lawmakers have used this rule three times just in the past year.⁶⁹ Changing the quorum rule to a simple majority might be on the ballot in November 2020, but a state legislative initiative of this type will be a slow battle until then.

It could be easier and faster to pass amendments to the Portland ordinance. The city council is only comprised of the mayor and four commissioners,⁷⁰ so it might be easier to persuade a smaller group of individuals to act. Additionally, Portland already had a statute regulating plastic bags before the state intervened, suggesting the city is interested in plastic regulation and reduction.

Conclusion

Plastic is a huge, global problem. The oceans are full of it and aquatic animals are suffering and dying. People are beginning to impose restrictions on plastic usage, but many of the current bans are insufficient. The single-use plastic regulations in Oregon are first steps, but need broader scopes. There are currently too many loopholes to make enough of a difference on single-use plastic pollution. The amendments proposed in this article are a next step in moving

⁶⁸ Andrews Selsky, *Oregon Democrats seek to change quorum rules, end walkouts*, KGW8 (Jan. 30, 2020), <https://www.kgw.com/article/news/politics/oregon-democrats-seek-to-change-quorum-rules-end-walkouts/283-02606f01-accb-4022-a1c5-fa2d8274d99c>.

⁶⁹ *Walkouts in Oregon politics used to be rare, but not anymore*, KGW8 (Feb. 24, 2020), <https://www.kgw.com/article/news/politics/walkouts-in-oregon-politics-are-rare-but-not-unprecedented/283-6b7210ae-beee-4e04-9a20-e687884b560a>.

⁷⁰ City Government, City of Portland, <https://www.portland.gov/government>.

the economy away from disposable plastic. They will not solve the problem, but will help change people's behavior, create awareness, and reduce some of the plastic created and sent into the oceans.

Appendix A—Single-Use Plastic Serviceware

17.103.300 Definitions for Restrictions on Single-Use Plastic Serviceware.

- A. “Condiment Packaging” means plastic packaging used to deliver single-serving condiments to customers. This includes but is not limited to single-serving plastic packaging for ketchup, mustard, relish, mayonnaise, hot sauce, coffee creamer, salad dressing, jelly and jam and soy sauce.
- B. “Counter Service” is when food with ordered by the customer at a counter and is either picked up at the counter by the customer or delivered to the table by restaurant staff.
- C. “Customer” means every person who purchases food or beverage that is intended to be consumed using single-use Plastic Serviceware.
- D. “Dine-in” means food and beverage that are intended to be consumed inside the place of business where the food and beverage were purchased, including without limitation cafeterias and food halls.
- E. “Electronic Orders” are food purchases conducted by smart phone, email or the website of a Retail Food and Beverage Establishment. This includes electronic ordering services that are independent of the retail food and beverage establishment.
- F. “Fast Food” is food that can be prepared quickly and easily and is sold in Retail Food and Beverage Establishments as a quick meal or to be taken out for consumption. Fast food includes drive through, take-out and delivery orders and applies to orders transacted in person, by phone or electronically.
- G. “Cafeterias” are dine-in areas within corporations, government, education and medical institutions. Cafeterias include ones managed by the institution or contracted food services.
- H. “Plastic Serviceware” means single-use plastic straws, stirrers, Utensils and Condiment Packaging. This includes compostable and biodegradable plastic (petroleum or biologically based polymer) serviceware, but does not include serviceware that are made from non-plastic materials, such as paper, sugar cane, bamboo, etc.
- I. “Non-Plastic Serviceware” means single-use straws, stirrers, Utensils and Condiment Packaging that are made from non-plastic materials such as paper, sugar cane, bamboo, etc.
- J. “Retail Food and Beverage Establishments” means any retail business that provides single-use Plastic Serviceware as a component of the product delivery. This includes but is not limited to full service and limited service (or fast food) restaurants, food carts, bars, coffee and tea shops, grocery stores, convenience stores, hotels, motels, caterers and food service contractors.
- K. “Utensils” are single-use plastic utensils intended for consumption of food which include but are not limited to spoons, forks, knives, sporks and chopsticks.

17.103.310 Restrictions on Single-Use Plastic Serviceware.

- A. As of ~~October~~July 1, ~~2019~~2021, all Retail Food and Beverage Establishments and Cafeterias, ~~where beverages may be consumed at Dine-in areas~~, shall not provide Plastic

Serviceware ~~only after Customer request, except for Condiment Packaging, until as specified in Section B.~~

~~B.~~ B. As of ~~October~~ July 1, 2019~~2025~~, all Retail Food and Beverage Establishments and Cafeterias, ~~where Customers order Fast Food, take-out or delivery,~~ shall not provide ~~Plastic Serviceware to Customers only after asking if the Customer needs Plastic Serviceware and the Customer responds affirmatively. For Electronic Ordering,~~ the Condiment Packaging.

~~B.C.~~ B.C. As of July 1, 2021, all Retail Food and Beverage Establishments ~~are responsible for coordinating with any outside ordering service to prompt the Customer to select and~~ Cafeterias may provide Non-Plastic Serviceware at a cost of five cents per item.

~~C.D.~~ C.D. Exemptions. The following situations are considered exempt from the restriction on single-use Plastic Serviceware until July 1, 2025:

~~1. Cafeterias and Retail Food and Beverage Establishments designed for counter service may allow Customers to access a self-service station for plastic Utensils.~~

~~2.1.~~ 2.1. When the Plastic Serviceware is attached to or packaged by the manufacturer with a beverage container before the beverage container is offered for retail sale. For example, juice boxes.

~~3.2.~~ 3.2. When the product includes an ingredient packaged with single-use Plastic Serviceware. For example, a separate plastic container of dressing included within a larger salad container.

~~4.3.~~ 4.3. When free or reduced-price meals are provided as part of a social service to vulnerable populations, including without limitation, free or reduced-price meals provided by school systems, homeless shelters and programs that deliver meals to the elderly.

Appendix B—Plastic Bags

459A.755. Definitions

- (1) “Garment bag” means a large bag that incorporates a hanger on which garments may be hung to prevent wrinkling during travel or storage.
- (2) “Local provision” means a charter provision, ordinance, resolution or other provision adopted by a city, county or other local government, as defined in ORS 174.116.
- (3) “Recycled paper checkout bag” means a paper bag that contains at least 40 percent post-consumer recycled fiber.
- (4) “Restaurant” means an establishment where the primary business is the preparation of food or drink:
 - (a) For consumption by the public;
 - (b) In a form or quantity that is consumable then and there, whether or not it is consumed within the confines of the place where prepared; or
 - (c) In consumable form for consumption outside the place where prepared.
- (5) “Retail establishment” means a store that sells or offers for sale goods at retail and that is not a restaurant.
- (6) “Reusable fabric checkout bag” means a bag with handles that is specifically designed and manufactured for multiple reuse and is made of cloth or other machine-washable fabric.
- (7) “Reusable plastic checkout bag” means a bag with handles that is specifically designed and manufactured for multiple reuse and is made of durable plastic that is at least four mils thick.
- (8)
 - (a) “Single-use ~~checkout~~ bag” means a bag made of paper, plastic or any other material that is provided by a retail establishment to a customer ~~at the time of checkout~~, and that is not a recycled paper checkout bag, a reusable fabric checkout bag, ~~or~~ a reusable plastic checkout bag, or a bag certified using to ISO, TUV, or ASTM standards as biodegradable in marine, soil, and freshwater, or commercially compostable. A biodegradable bag must have a red circle with a three-inch diameter or be entirely red and state it is biodegradable. A commercially compostable bag must have a green circle with a three-inch diameter or be entirely green and state it is commercially compostable. Until January 1, 2023 this shall only apply to bags provided at the time of checkout.
 - (b) The definition for “Single-use ~~checkout~~ bag” does not include the following until January 1, 2023 mean:
 - (A) A bag that is provided by a retail establishment to a customer at a time other than the time of checkout, including but not limited to bags provided to:
 - (i) Package bulk items such as fruit, vegetables, nuts, grains, greeting cards or small hardware items, including nails, bolts or screws;
 - (ii) Contain or wrap frozen food, meat, fish, flowers, a potted plant or another item for the purpose of addressing dampness or sanitation;
 - (iii) Contain unwrapped prepared food or a bakery good; or

- (iv) Contain a prescription drug;
- (B) A newspaper bag, door hanger bag, garment bag, laundry bag or dry cleaning bag; or
- (C) A bag sold in a package containing multiple bags for uses such as food storage, garbage containment or pet waste collection.

459A.757. Retail establishments; reusable checkout bags

- (1) Except as provided in subsection (2) of this section, a retail establishment may not provide:
 - (a) Single-use ~~checkout~~ bags to customers.
 - (b) Recycled paper ~~checkout~~ bags, reusable fabric ~~checkout~~ bags or reusable plastic ~~checkout~~ bags to customers unless the retail establishment charges not less than five cents for each recycled paper checkout bag, reusable fabric checkout bag or reusable plastic checkout bag.
- (2) A retail establishment may provide:
 - (a) Reusable fabric checkout bags at no cost to customers as a promotion on 12 or fewer days in a calendar year.
 - (b) Recycled paper checkout bags or reusable plastic checkout bags at no cost to customers who:
 - (A) Use a voucher issued under the Women, Infants and Children Program established under ORS 413.500.
 - (B) Use an electronic benefits transfer card issued by the Department of Human Services.
- (3) Except as provided in subsection (4) of this section, a restaurant may not provide:
 - (a) Single-use checkout bags to customers.
 - (b) Reusable plastic checkout bags to customers unless the restaurant charges not less than ~~five-twenty-five~~ cents for each reusable plastic checkout bag.
- (4) A restaurant may provide:
 - (a) Recycled paper checkout bags at no cost to customers.
 - (b) Reusable plastic checkout bags at no cost to customers who use an electronic benefits transfer card issued by the Department of Human Services.

459A.759. Provisions

To prohibit or limit the use of recycled paper checkout bags, reusable fabric checkout bags, reusable plastic checkout bags or single-use checkout bags by a restaurant or retail establishment, a city, county or other local government, as defined in ORS 174.116:

- (1) May adopt a local provision that establishes definitions, requirements and restrictions that are identical to the definitions, requirements and restrictions established by ORS 459A.755 and 459A.757.

- (2) May amend a local provision that was in effect before January 1, 2020, so the local provision establishes definitions, requirements and restrictions that are identical to the definitions, requirements and restrictions established by ORS 459A.755 and 459A.757.
- (3) May adopt, amend or enforce a local provision to impose a penalty other than the penalty established by ORS 459.993, A restaurant or retail establishment may be charged with a violation under either the local provision or ORS 459.993, but not both.
- (4) May not adopt or enforce a local provision that establishes definitions, requirements or restrictions that are not identical to the definitions, requirements and restrictions established by ORS 459A.755 and 459A.757.
- (5) Notwithstanding subsection (4) of this section, may adopt, amend or enforce a local provision to require a restaurant or retail establishment to charge a fee of more than five cents under provisions otherwise identical to ORS 459A.757 (1)(b) and (3)(b).

Appendix C—Plastic Straws

O.R.S. § 616.892. Definitions; single-use plastic straws prohibited; exceptions

(1) As used in this section:

- (a) “Consumer” means an individual who orders a beverage of any description from a food and beverage provider in this state.
- (b) “Convenience store” means a business that, for compensation, offers or provides a range of commodities that includes food and beverages.
- (c) “Enforcement officer” means an authorized representative of the State Department of Agriculture who conducts inspections under ORS 616.286 or an authorized representative of the Director of the Oregon Health Authority or of a local government who conducts inspections under ORS 624.010 to 624.121 or 624.310 to 624.430.
- (d)
 - (A) “Food and beverage provider” means a business that, for compensation, offers or serves food or beverages to a consumer.
 - (B) “Food and beverage provider” does not include a health care facility, as defined in ORS 442.015, or a residential care facility, as defined in ORS 443.400, that provides single-use plastic straws to patients or residents.
- (e)
 - (A) “Single-use plastic straw” means a tube made primarily from plastic that is derived from petroleum or a biologically based polymer, such as corn or another plant source, and that is intended:
 - (i) To transfer liquid from a container to a consumer's mouth;
 - (ii) For a single use; and
 - (iii) For disposal after the single use.
 - (B) “Single-use plastic straw” does not include:
 - (i) A straw made from materials other than plastic, including but not limited to paper, pasta, sugar cane, wood or bamboo; and
 - (ii) A plastic straw that is attached to or packaged with a beverage container before the beverage container is offered for retail sale.

(2)

- (a) A food and beverage provider or convenience store may not provide a single-use plastic straw to a consumer ~~unless the consumer specifically requests the single-use plastic straw.~~
- ~~(b) Notwithstanding the prohibition in paragraph (a) of this subsection, a consumer may request, and a food and beverage provider or a convenience store may offer to the consumer, a single-use plastic straw in an area of the food service provider's or convenience store's premises in which the consumer may receive a delivery of prepared food or a beverage while seated in or on a vehicle.~~

- ~~(c) The prohibition in paragraph (a) of this subsection does not apply to a convenience store that:~~
- ~~(A) Sells or offers single-use plastic straws for sale in bulk or unconnected with a sale or provision of food or a beverage; or~~
 - ~~(B) Makes single-use plastic straws available to consumers in an unattended location, provided that the convenience store may leave the single-use plastic straws in an unattended location only if the convenience store does not have space in which to store the single-use plastic straws in a location where employees of the convenience store provide service to consumers.~~
- (3) An enforcement officer may enforce subsection (2) of this section in the course of conducting an inspection. A food and beverage provider or a convenience store that violates subsection (2) of this section is subject to a notice for a first and second violation and, for subsequent violations, to a fine of not more than ~~\$25~~50 for each day in which the food and beverage provider or convenience store remains in violation of subsection (2) of this section. The enforcement officer may not impose total fines of more than ~~\$300~~18250 during a calendar year for a food and beverage provider's or a convenience store's violation of subsection (2) of this section.
- ~~(3)~~(4) Changes to this section will come into effect on January 1, 2021.