## Salem Plastic Bag Ordinance Proposal

In Oregon, eight municipalities have banned plastic bags,<sup>1</sup> with five opting to also tack on a small fee for the purchase of paper bags at the checkout counter. With San Francisco as the first city to adopt such an ordinance in the United States, now over 200 municipalities in 18 states have also passed plastic bag/reusable bag ordinances.<sup>2</sup> As recycling facilities that service the City of Salem accept less and less plastic due to changing market forces, it is high time for Oregon's capitol city to join the sustainability party.

#### I. Model Ordinances

There are two general approaches cities have taken with regard to plastic bag ban or reusable bag ordinances:

- The Portland Plan: The first option is a simple ban on lightweight plastic bags • (also known as t-shirt bags due to logos on them).<sup>3</sup> Often these bans start with large retailers and then over time smaller retailers and restaurants not previously covered are phased in. Under this plan, most retailers will switch to highly recycled paper bags (a requirement that may be included in an ordinance), or opt to charge for a thicker plastic bag that encourages multiple uses (weight and thickness often provided for in ordinance).
- The Alternative Oregon Plan: The second option is a ban on single-use plastic bags with an additional charge or tax, also called a "pass-through fee"<sup>4</sup> which is usually five to 10 cents on single-use paper bags.<sup>5</sup> The additional charge on single use paper bags has two benefits: it incentivizes reusable bag use and also allows retailers to recover the additional costs associated with switching to paper bags. Some ordnances that add the tax have required half of the tax go to the city and half stay with the retailer (example: \$0.10 tax = \$0.05 to city, \$0.05 stays with business).

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<sup>&</sup>lt;sup>1</sup> Portland (2011), Corvallis (2013), Eugene (2013), Ashland (2014), Forest Grove (2016), Hood River (2017), McMinnville (2017), and Manzanita (2017). http://www.bagtheban.com/in-your-state.

<sup>&</sup>lt;sup>2</sup> Californian's Against Waste, www.cawrecycles.org.

<sup>&</sup>lt;sup>3</sup> See, City of Portland Code 17.103; Manzanita Ordinance 17-04.

<sup>&</sup>lt;sup>4</sup> Pass-through fee: called such because the price of higher cost paper bags is passed through the retailer and onto the consumer. This may also include a small part of the fee sent to the city as a tax for the purpose of litter abatement, etc.

<sup>&</sup>lt;sup>5</sup> See, City of Eugene Ordinance No. 20498; City of Corvallis Ordinance No. 2013-03; City of McMinnville Ordinance No. 5018; City of Hood River Ordinance No. 2030; City of Ashland Ordinance No. 3094.

## II. Why Ban Plastic Bags?

### Harms to the environment:

Millions of particles of plastic are floating in our rivers, lakes and oceans.

- On average, every square mile of ocean contains 46,000 pieces of floating plastic.<sup>6</sup>
- Single-use plastic bags are particularly susceptible to catching wind and are super buoyant, floating on the Ocean surface and slowly breaking down into microplastic particles.
- As plastic breaks down, it releases toxins into soil and water affecting agriculture, livestock and drinking water.<sup>7</sup> But not only do plastics release toxins, microplastics in water have been shown to absorb other toxins such as DDT, PCBs, and pathogens turning them into super-toxic pellets.<sup>8</sup>
- "In April 2010, a dead grey whale washed up on the beach in West Seattle . . . [with] 20 plastic bags in its stomach."<sup>9</sup>
- Sea birds are some of the most common species affected by plastic pollution in our rivers and oceans. "In the Strait of Juan de Fuca, researchers found that 12.2 percent of gulls consume plastic – half of which was thin-film, like what plastic bags are made of."<sup>10</sup>
- At least 267 species have been found suffering entanglement or ingestion of marine debris, most of which is composed of plastic; tens of thousands of whales, birds, seals and turtles die every year from contact with ocean-borne plastic bags. Some 90 percent of the birds examined in a European commission study had plastic in their stomachs.<sup>11</sup>

http://static1.squarespace.com/static/59bd5150e45a7caf6bee56f8/59bd52c67e2a5fb4e 246e297/59bd52ab7e2a5fb4e246de02/1505579691802/studies\_-Envt-WA\_Keeping-Plastic-Out-of-Puget-Sound.pdf?format=original. (Hereinafter "Puget Sound").

<sup>7</sup> Scientific American

<sup>10</sup> Puget Sound

<sup>11</sup> Scientific American

<sup>&</sup>lt;sup>6</sup> Robb Krehbiel, *Keeping Plastic out of Puget Sound: Why Washington Should Join the Global Movement to Reduce Plastic Bag Pollution*, Environment Washington Research & Policy, 2011,

<sup>&</sup>lt;sup>8</sup> Puget Sound, 9.

<sup>&</sup>lt;sup>9</sup> Robb Krehbiel, *Keeping Plastic out of Puget Sound: Why Washington Should Join the Global Movement to Reduce Plastic Bag Pollution*, Environment Washington Research & Policy, 2011,

http://static1.squarespace.com/static/59bd5150e45a7caf6bee56f8/59bd52c67e2a5fb4e 246e297/59bd52ab7e2a5fb4e246de02/1505579691802/studies\_-Envt-WA\_Keeping-Plastic-Out-of-Puget-Sound.pdf?format=original

# Harms to humans by plastic entering the food chain:

Microplastic particles are making their way into products for human consumption.<sup>12</sup>

- "Studies have found particles in 12% of freshwater fish . . . 50 particles per serving of commercially-cultured oysters, 90 particles per serving of commercially-cultured mussels," and "1, 285 particles per square foot of river sediment."<sup>13</sup>
- Researchers estimate that fish eat approximately 24,000 tons of plastic each year.<sup>14</sup>
- "According to the Washington Department of Fish and Wildlife, PCB levels in Chinook salmon from Puget Sound are 3-5 times higher than any other population on the West Coast. Herrings and Mussels in the Sound were also found to have high levels of PCB."<sup>15</sup>
- "Unhealthy additives in the plastic, including flame retardants and antimicrobials, have been associated with cancer and <u>endocrine disruption<sup>16</sup></u> in humans."

Litter reduction in city streets, storm drains, waterways, and public areas:

Cities have seen near instant payoff following implementation of bag bans.

- Ireland levied a bag tax in 2002, which has decreased plastic bag litter in the country by 95 percent.<sup>17</sup>
- Washington D.C. noticed an observable reduction in plastic pollution in local waterways, following its ban, with river cleanup efforts seeing a reduction of plastic bags by 66%.<sup>18</sup>
- San Francisco, the first U.S. municipality to pass a bag ban, one year following the ban on bags at supermarkets and pharmacies, saw a reduction of 127 million fewer bags, and cut overall bag waste reaching the landfill by 10%.<sup>19</sup>
- A San Jose, California study found that its 2011 ban has led to plastic litter reduction of "approximately 89 percent in the storm drain system, 60 percent in the creeks and rivers, and 59 percent in City streets and neighborhoods."

- <sup>17</sup> *Id.* Scientific American.
- <sup>18</sup> Puget, Alice Ferguson Fdn.
- <sup>19</sup> Id.

 <sup>&</sup>lt;sup>12</sup> Van Cauwenburghe L, Janssen, *Microplastics in bivalves cultured for human consumption.*, <u>https://www.ncbi.nlm.nih.gov/pubmed/25005888</u> (2014).
<sup>13</sup> *Microplastics in our Nation's waterways*, United States Geological Survey, https://owi.usgs.gov/vizlab/microplastics/#ref1 (last accessed February 26, 2018).

<sup>&</sup>lt;sup>14</sup> Puget Sound, 9

<sup>&</sup>lt;sup>15</sup> Id.

<sup>&</sup>lt;sup>16</sup> https://www.epa.gov/endocrine-disruption/what-endocrine-disruption.

• One year after the California statewide ban was implemented, the annual beach clean-up found plastic bags collected were down 4.3%.<sup>20</sup>

## III. Proposal

The City of Salem should adopt a plastic bag ban with a pass-through fee. This will be an ordinance similar to those recently adopted by its sister cities, Eugene, Corvallis, McMinnville, Hood River, and Ashland. These ordinances all ban the use of plastic bags in retail facilities and restaurants, while adding a pass-through fee of 5 to 10 cents per recycled paper bag. The combination of plastic bag ban and pass-through fee has been shown to be the most effective of these types of ordinances. Further, it will encourage the public to switch to less wasteful, more sustainable reusable bags, help reduce litter and plastic waste in our environment, and inspire a conservation effort on the part of all.

<sup>&</sup>lt;sup>20</sup> California Coastal Cleanup Day – Litter Data Summary 2010-2017, <u>https://static1.squarespace.com/static/54d3a62be4b068e9347ca880/t/5a0237d7652dea</u> e895d2df1c/1510094808473/California+Coastal+Cleanup+Data+2010.2016.2017.pdf