

# WHAT

## WHAT'S THE PROBLEM WITH PLASTIC AND STYROFOAM?

### 1. Plastic particles, straws and Styrofoam are killing our wildlife.

- Great plastic garbage islands the size of Mexico have been found floating in the Pacific. That is only the tip of the iceberg since 70% of waste sinks to the bottom. <sup>1</sup>
- Plastic bags, straws and Styrofoam don't ever decompose but rather break down into tiny pieces the size of a grain of rice that float in the ocean and surface waters. <sup>2</sup>
- 18 billion pounds of plastic entering the ocean kill 1 million animals every year. <sup>3</sup>
- Sea turtles and albatross are in danger of extinction from eating plastic. <sup>4</sup>
- At current rates of pollution, there will be more plastic than fish in the ocean by 2050. <sup>5</sup>
- Plastic particles are found even in Minnesota's remote lakes. <sup>6</sup>
- Fish are preferentially eating plastic and Styrofoam particles, causing them to feel full, starving to death. The toxins contaminate the whole food chain, even us! <sup>7</sup>

### 2. Plastics and Styrofoam are harming our climate and environment.

- Plastics, made from petroleum, give off greenhouse gases, methane and ethylene. <sup>8</sup>
- Switching from plastic to reusable bags would reduce greenhouse gases by 50%. <sup>9</sup>
- Styrofoam production releases 57 chemical byproducts that harm our environment. <sup>10</sup>
- Styrofoam manufacturing uses hydrofluorocarbons, which harm the ozone layer. <sup>11</sup>

### 3. Plastic and Styrofoam give off chemicals that cause serious health problems.

- PVC (Polyvinyl Chloride), Phthalates, BPA and PFOS get into the food we eat from plastic products like plastic containers, wraps, personal care products, toys that children put in their mouths etc. Plastic we ingest and breathe in causes endocrine disruption, cancer, impaired immunity, and gender neutrality, neurological, reproductive and respiratory damage, obesity, high blood pressure, and high cholesterol to name a few. <sup>12</sup>
- Plastic bag production releases dangerous toxins such as dioxins, phthalates, vinyl chloride, ethylene dichloride, lead, cadmium that are found in our blood and tissue. <sup>13</sup>
- A recent study found that people ingest an average of 5 grams of plastic a week, the equivalent of a credit card. <sup>14</sup> One [research review](#) in 2019 calculated that the average American eats, drinks, and breathes in more than 74,000 microplastic particles a year.
- The largest source of plastic ingestion is bottled drinking water. <sup>15</sup>
- The chemicals dioxin and styrene in Styrofoam take-out containers and cups are toxins that leach into our food, harming human health and reproductive systems. <sup>16</sup>

## **OPPORTUNITY FOR MANKATO**

Mankato as a green step city has the opportunity to be a leader in Minnesota to phase out the use of plastic bags, straws and Styrofoam by passing an ordinance.

## **PLACES THAT BANNED/PUT A FEE ON PLASTIC BAGS, STRAWS AND STYROFOAM:**

- **PLASTIC BAGS AND STRAW BANS**

BAG BANS - States of Hawaii, California, Connecticut, Delaware, New York, Vermont, Maryland, Maine, Oregon, Samoa, Guam, —Northern Mariana Islands, US Virgin Island, Puerto Rico.

Parts of states that have banned plastic straws – Oregon, Montana, Nevada, Arizona, South Carolina, Virginia

Part of states that have banned bags and straws -Washington, Utah, Colorado, California, New York, New Jersey, Washington D.C., Florida

Over 200 Counties and Cities

69 Countries

The European Union, India, China, Thailand, Canada, Antigua, Barbuda, Colombia, Romania, Senegal, South Korea, Tunisia Albania, Georgia, Samoa, Bangladesh, and 34 African countries have banned Single Use Plastics.

Corporations like Kroger, Savers, McDonalds, Starbucks, Aldi's (charges 8 cents a bag), and HyVee (gives credit for bringing your own bag)

- **STYROFOAM BAN**

Maine; Maryland; New York City; Vermont, Colorado, Washington, D.C.; Seattle; San Francisco and many more municipalities ban food services, stores and manufacturers from offering single-service Styrofoam foam articles or polystyrene loose fill packaging.

- Corporations and Institutions like Alaska Airlines, Bon Appetit food service company, Marriot in Britain, Chicago Art Institute, The Getty Museum, Vassar College, St. Louis Washington University, the University of Portland, Vancouver, Scotland, Taiwan, Britain Seattle, Edmonds

## FOOTNOTES

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<https://www.theguardian.com/environment/2017/sep/06/plastic-fibres-found-tap-water-around-world-study-reveals>
16. <https://saferchemicals.org/2014/05/26/styrene-and-styrofoam-101-2/>