SIERRA CLUB
NEW JERSEY CHAPTER

RE-THINKING SINGLE-USE PLASTICS

Carry Out Bags, Straws and Foam Food Containers

Accumulated global plastic waste is massive and has created health and environmental dilemmas worldwide. While inexpensive to produce, plastics are proving costly.

Carry-out plastic bags given at point-of-purchase, straws and polystyrene foam food containers are a hugely popular group within the larger category of (SU) Single-use plastics, which also includes balloons, microbeads, packaging, bottles, cigarette butts and bottle/container caps.

Since plastic came into wide use in the 1950s,
over 6.3 billion metric tons of global plastic waste has accumulated in landfills and in oceans.
Only 9% has been recycled.

8.3 billion metric tons of plastic has ever been produced.

6.3 billion metric tons of that has become plastic waste.

only 9% of that waste **has been recycled.**

The rest, **79%** is **accumulating in landfills or as "litter."**

Much of it ends up in the oceans.

Here's a video about how much plastic trash is littering the Earth.
Or read these FAQs on Plastics.

More Single-Use Plastic Facts:

Damage from plastic debris has been well-documented for water habitats.

> "All known species of sea turtles, about half of all species of marine mammals, and one-fifth of all species of sea birds were affected by entanglement or ingestion of marine debris."
>
> – Secretariat of the Convention on Biological Diversity and the Scientific and Technical Advisory Panel–GEF, 2012, p.9

Read more: Impacts of Marine Debris on Biodiversity: Current Status and Potential Solutions (Secretariat of the Convention on Biological Diversity, Montreal), CBD Technical Series No. 67.

Manufacturing of plastic from oil adds to CO2 in the atmosphere.

> "More than 1.6 billion gallons of oil are used each year for plastic bags alone."
>
> – BC Food Systems Network

Research suggests **single-use plastics are entering food webs, carrying toxins associated with plastic production.**

> "Plastic bags in the ocean resemble jellyfish and are often ingested by turtles and dolphins who mistake them for food. There is emerging evidence that the toxic chemicals added during the manufacturing process transfer from the ingested plastic into the animals' tissues, eventually entering the food chain for humans as well."
>
> – Single Use Plastics: A Road Map for Sustainability, UN Report 2018, p.13

> "Microplastics, found in finfish and shellfish tissues are most probably entering aquatic and human food webs."
>
> – NY NJ Harbor Estuary Plastic Collection Report, NY NJ BayKeeper, 2/2016, p.5

There are too many plastic bags "trashing" our landscapes

> Aerodynamic single-use plastic bags "can readily become litter even when they are disposed of properly. According to a study of litter composition on America's roadways, plastics in general make up 19.3 percent of counted items."
>
> - Brendle Group, Triple Bottom Line Evaluation: Plastic Bag Policy Options, City of Fort Collins, Oct 2012, p. 9

Damage from plastic waste is costly

> "Each year, more than **8 million tons of plastic ends up in the oceans**, wreaking havoc on marine wildlife, fisheries and tourism, and costing at least $8 billion in damage to marine ecosystems."

– UN REPORT: Legal Limits on Single-Use Plastics and Microplastics: A Global Review of National Laws and Regulations, p.6

Recycling single-use plastics is costly

> "California State Government spends roughly **$428 million annually to control litter before it reaches state waters**. Between 8 and 25 percent of that cost is attributable to plastic bag waste. **Managing the 24 billion bags that end up in landfills costs $25 million per year**."

– Clean Water Action Plastics Toolkit

Single-use plastics often increase Solid Waste Management costs for municipalities.

> Plastic bags create issues for operators of landfills and recycling facilities which then increase solid waste management costs for the community.
>
> Larimer County Landfill (CO) spent over $21,000 2011 and 2012 in site clean-up. About half of the cost is attributed to plastic bags.
>
> "Eco-Cycle, an organization supporting recycling efforts in the City of Boulder, estimated the total cost of plastic bag contamination to Boulder's [municipal recycling facility] to be between $200,000 and $524,000 per year."

-Brendle Group, Triple Bottom Line Evaluation: Plastic Bag Policy Options, City of Fort Collins, Oct 2012, p.12

Single-use plastics have an actual cost that's much greater than the cost of purchase

> "Though Styrofoam is relatively inexpensive to produce, the social costs of its production involve the use of hazardous chemicals, fossil fuels, and the emission of greenhouse gases. The lightweight yet durable nature of Styrofoam that makes it good for single-use consumer products also yields it not readily recyclable and leads to its accumulation in landfills and as litter in waterways and highways."

-The Real Cost of Styrofoam: Presented to St. Louis Earth Day, 2016

Single use plastics are now prevalent everywhere, worldwide everywhere.

"The entire category of Single Use Plastics is estimated at 30% of global plastic production."
– UN REPORT Legal Limits on Single-Use Plastics and Microplastics: A Global Review of National Laws and Regulations p.6

"The average American family takes home an average of 1,500 plastic bags annually."
– Center for Biological Diversity – Plastic Bag Facts

"Three million tons of polystyrene are produced in the United States each year, predominantly used to make packaging materials and food service items such as foam cups, cartons, and other containers."
-The Real Cost of Styrofoam: Presented to St. Louis Earth Day, 2016

"It is estimated half a million plastic straws are used worldwide daily."
L.A. Times Editorial, 2016

Best practices for single-use legislation:

Total ban on carry-out single-use plastic bags

While many believe simply charging for plastic bags would be effective, studies have shown **fee-based systems are not as effective as bans** and may not have an effect at all on consumer behavior.
- Brendle Group, Triple Bottom Line Evaluation: Plastic Bag Policy Options, City of Fort Collins, Oct 2012, p. 9

Hybrid ban: a total ban on single-use plastic bags + a fee on allowable bags

All studies show that after a ban/fee hybrid system was implemented, many more customers brought reusable bags. In addition, the number of people who asked for no bag increased dramatically.
– SurfRider Rise Above Plastics "Why Bag Bans Work: A Summary of Plastic Bag Law Effectiveness"

A Maryland County's Nickel Tax for Plastic Bags is Paying Off, But Not as Planned, The Washington Post, 7/4/2016

For more information contact
chair@sierraclub.newjersey.org
zerowaste@sierraclub.newjersey.org