# Reusable Carry-out Bag and Environmentally Preferable Food To-go Container Model Legislation Proposal

The City of Duluth is recognized as a national leader for its support and promotion of active living and the outdoor environment. Our community has a demonstrated “love of place”. The city has made sustainability a governing principle in its comprehensive plan and has passed a variety of resolutions supporting environmental stewardship. Duluth’s location at the western-most tip of Lake Superior makes this commitment critically important because all non-biodegradable waste that enters the water from Duluth can potentially contaminate the entire length of the Great Lakes-St. Lawrence Seaway system. Single-use plastic bags and Poly Styrene Foam (PS) are significant sources of such waste. Single use paper bags also have a substantial environmental footprint. Yet, Duluth currently has no official mechanism in place for promoting better alternatives and practices other than good intention. The proposed ordinance outlined below would address this issue directly by incentivizing the promotion of reusable carryout bags and environmentally preferable food to-go containers within Duluth city limits. Its passage would enable Duluth to not only maintain – but strengthen – its commitment to sustainability and environmental stewardship, serve as a model for other cities in the U.S. and provide resonance with our "love of place".

## What problems does this look to solve?

### Litter

- Minnesotans throw away more than 500 tons of plastic bags and packaging every day. That’s more than 12 pounds every second.[1]
- The MPCA states that in Minnesota plastic bag recycling is less than 10% [2].
- It is estimated that 22 million pounds of plastic pollution enter the Great Lakes annually[3].
- Once plastic enters the environment, it never leaves – it just becomes smaller and smaller pieces of plastic called micro-particles. More than 5 trillion plastic pieces weighing over 250,000 tons contaminate our oceans.[4]
- The Great Lakes and oceans are now contaminated with tons of micro-particle pollution. This plastic pollution then acts as a reservoir for toxic chemicals.[5]
- Plastic bags are now among the top 12 items of debris most often found along global ocean coastlines.[6]
- Polystyrene foam (PS) does not biodegrade and is not easily recycled. It may break into small pieces, even minuscule pieces. But the smaller PS foam gets, the harder it is to clean up.
- Polystyrene foam (PS),is pervasive in the marine environment. Like most plastics, polystyrene is lightweight and floats. When littered, it is carried from streets and through storm drains out to the ocean.[7]

**Waste**

- Minnesotans throw away 87,000 tons of plastic bags every year.[8]
- In Duluth, most plastic bags end up in the landfill.
- Less than 5% of standard HDPE plastic bags are recycled in the US, while more than 49% of paper bags are recycled.[9]
- Styrofoam is not recycled through the WLSSD bluebox program. [10]
- Styrofoam ingestion is hazardous to marine animals.[11]

**Lifestyle Impacts**

- All bags require energy, create waste, cause greenhouse gas emissions, and produce air and water pollution.[12]
- Single-use paper bags create 64 pounds of greenhouse gas emissions and 31 pounds of water pollution per every 10,000 bags manufactured.[13]
- Single-use plastic bags create 9 pounds of solid waste, 18 pounds of greenhouse gas emissions and 2 pounds of water pollution per 10,000 uses.[14]
- Plastic bags negatively impact single sort recycling facilities. They wrap around sorting machines, requiring the sorting line to be shut down several times a day.[15]
- The building block of PS is Styrene, Styrene is classified as a possible human carcinogen by the International Agency for Research on Cancer (IARC).
- Styrene can migrate from polystyrene containers into food and beverages when heated, or in contact with fatty or acidic foods.[16]

## Proposed Solution

To encourage Duluth residents to bring reusable bags when they shop, we propose a phase-out on single-use plastic carry-out bags and an itemized charge for single-use paper bags.

To encourage the use of more sustainable food and beverage containers, Polystyrene foam food or beverage containers shall not be used to package or serve food or beverages by restaurants and/or retail food establishments within the City of Duluth.

**THIN FILM CARRY OUT BAG PHASEOUT**

Exemptions

- Reusable bags over 4 millimeters in thickness
- Produce and other food bags without handles
- Dry-cleaner, newspaper, door-hanger bags, bags for fine art paper, and plastic bags sold in packages containing multiple bags intended for use as garbage bags or to contain pet waste
- Bags used to safeguard public health and safety during the transportation of prepared take-out foods and prepared liquids intended for consumption away from the retail establishment

**PAPER BAG FEE**

- Proposed minimum charge amount: $.05 per paper bag kept by retailer
- Retail establishments cannot collect the paper bag minimum charge from anyone with a voucher or electronic benefits card issued by any federal or state food assistance program

**EXPANDED POLYSTYRENE FOOD CONTAINERS**

Exemptions

- This ordinance shall not apply to the packaging of uncooked meat, uncooked poultry, and/or uncooked fish.

**OTHER JURISDICTIONS**

Over 160 US cities have enacted single-use bag bans and/or minimum charge(s), including Minneapolis, Seattle, WA; Portland, OR; Dallas, TX; Austin, TX; Cambridge, MA; Santa Fe, NM; Boulder, CO; Washington, DC; Los Angeles, San Francisco and Oakland, CA. The whole state of Hawaii has banned plastic bags.

Over 75 cities have enacted polystyrene phase-outs including New York City ; Takoma Park, MD; Seattle, Washington; Washington DC; Miami Beach, FL; Portland, Maine; Nantucket (City & County), Massachusetts; Minneapolis, Minnesota; Portland, Oregon ; Los Angeles County and San Francisco, CA

**Duluth Area Business Examples**: The Whole Foods Coop (no plastic bags or Styrofoam), Chester Creek Café, Aldi's,Duluth Grill, Tavern on the Hill, Old Chicago, Olive Garden, Pizza Luce...

**Supporting City of Duluth Resolutions:**

Resolution 98-0480 Principles to consider environment

Resolution 01-0350 Pledge to Reduce GHG Emissions

Resolution 06-0368 Guidelines for Planning a Sustainable Community

## Timeline

Implementation to start one year after adoption

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[1] https://www.pca.state.mn.us/news/what%E2%80%99s-new-ecoexperience15-minnesota-state-fair

[2] http://www.startribune.com/state-s-pollution-fighters-hope-bagnado-whips-up-storm-of-consciousness-at-state-fair/322561431/

[3] http://www.duluthnewstribune.com/news/4184733-great-lakes-get-22-million-pounds-plastics-annually

[4] Plastic Pollution in the World's Oceans: More than 5 Trillion Plastic Pieces Weighing over 250,000 Tons Afloat at Sea, Eriksen et al, PLOS Dec 2014

[5] Chemical Pollutants Sorbed to Ingested Microbeads from Personal Care Products Accumulate in Fish Peter Wardrop, Jeff Shimeta, Dayanthi Nugegoda, Paul D. Morrison, Ana Miranda, Min Tang, and Bradley O. Clarke *Environmental Science & Technology* 2016

[6] http://www.oceanconservancy.org/our-work/international-coastal-cleanup/top-10-items-found-1.html

[7] California Coastal Commission / Miriam Gordon (2006) "Eliminating Land-based Discharges of Marine Debris in California: A Plan of Action from The Plastic Debris Project," at 2 and 15 www.plasticdebris.org

[8] http://www.startribune.com/state-s-pollution-fighters-hope-bagnado-whips-up-storm-of-consciousness-at-state-fair/322561431/

[9] "Bring Your Own Bag" Ordinance - City of Minneapolis 2016 *www.minneapolismn.gov/meetings/legislation/WCMSP-175657*

[10] http://wlssd.com/services/recycling/recycling-for-residents/

[11] Styrofoam Debris as a Source of Hazardous Additives for Marine Organisms Mi Jang, Won Joon Shim, Gi Myung Han, Manviri Rani, Young Kyoung Song, and Sang Hee Hong *Environmental Science & Technology* 2016 *50* (10), 4951-4960

[12] Franklin Associates, Ltd, *Resource and Environmental Profile Analysis of Polyethylene and Unbleached Paper Grocery Sacks*. http://plastics.americanchemistry.com/Analysis-of-Polyethylene-and-Unbleached-Paper-Grocery-Sacks

[13] Ibid

[14] Ibid

[15] Curbside Recycling: Plastics and program characteristics - MPCA https://www.pca.state.mn.us/sites/default/files/p-rrr1-04.pdf

[16] Agency for Toxic Substances & Disease Registry, U.S. Department of Health and Human Services: *ToxFAQs for Styrene*, September 2007: <http://www.atsdr.cdc.gov/tfacts53.pdf>; International Agency for Research on Cancer, "Overall Evaluations of Carcinogenicity to Humans," <http://monographs.iarc.fr/ENG/Classification/crthalllist.php>. J.L. O'Donoghue,