

**Ordinance means
no more of these:**

**These bags would still be in use—
but now recyclable if clean and dry**



We use too many plastic bags

Annual use is estimated at:

- US: 2009, **100 billion** bags a year & growing
- Worldwide: **1 trillion** bags a year

Momentary convenience, permanent damage

- used for an average **of 12 minutes**,
- not recycled (**only 1-5% recycled** each year)
- last 'forever' (life expectancy of 500-1,000 years)

<https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/plastics-material-specific-data>

Plastic bags contribute to green house gas emission

- Plastic bags are created from natural gas and petroleum products.
- More than **1.6 billion gallons** of oil a year are used for US plastic bags *alone*.

The bags are **not free**

- US retailers spend \$4 billion on plastic bags a year--passed on to the **consumer**
- **Taxpayers** money pays for: contamination of waste stream; costs of collection, recycling, and/or disposal; removing from streets, parks, ditches, electrical lines and storm drains; clogging recycling machines; processing in landfills
- Cost to San Francisco per year = \$8.49 million (equal to **17 cents per bag**)

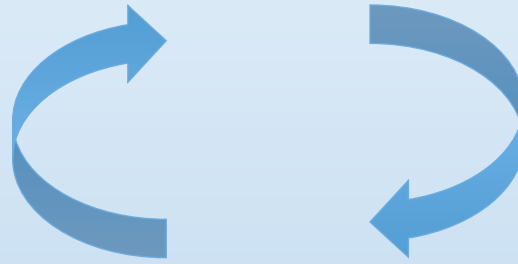


Plastic is destroying our oceans

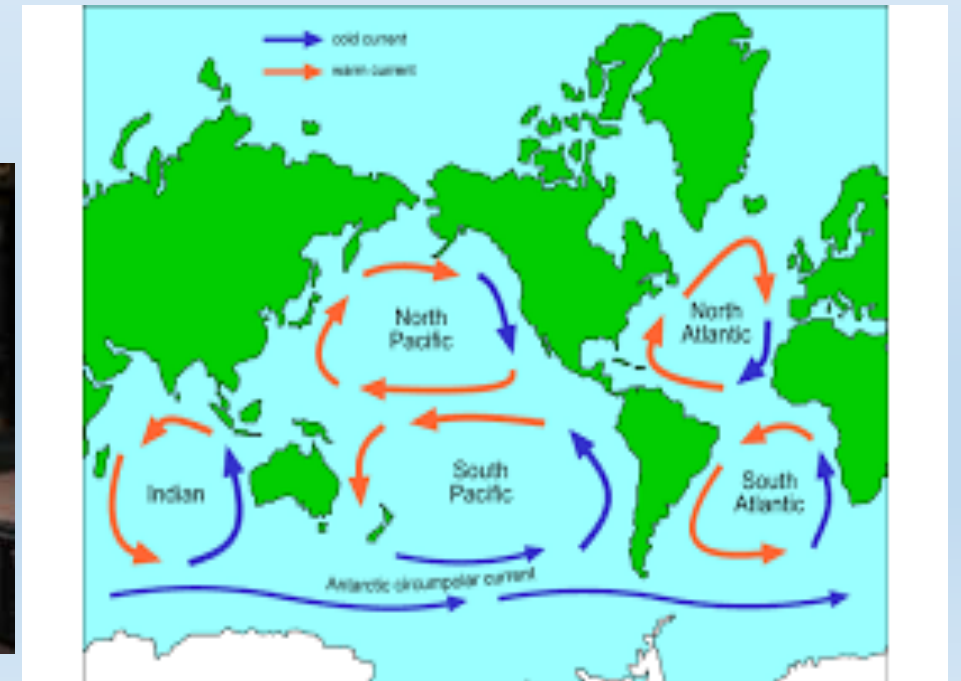
Approximately **8 million metric tons** of plastic enter the world's oceans each year

By 2050, the oceans will contain more plastic than fish

Ocean clean up also destroys animals and ecosystems that live on the ocean surface



<https://www.epa.gov/trash-free-waters/movement-aquatic-trash>



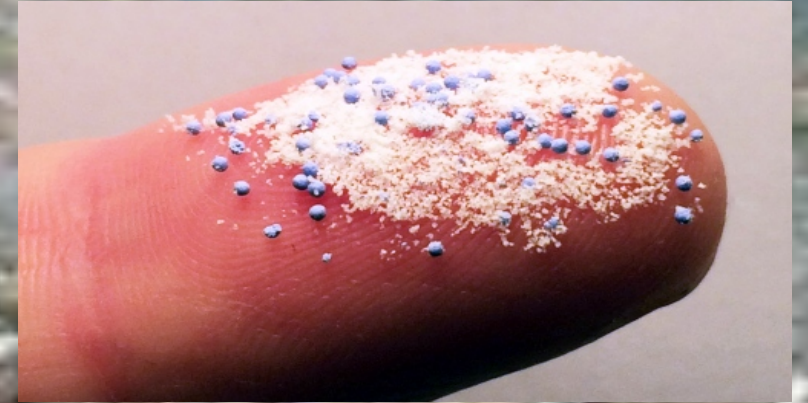
Plastic Bags Kill



What goes in the water goes in you

- Plastic bags do not biodegrade. Instead they break down into tiny pieces called “microplastics.”
- **Microplastics** enter waterways and flow into the ocean, where they enter the aquatic food chain and **bioaccumulate**.
- Microplastics are in **Lake Champlain**

- A 2015 study (US and Indonesia) found that about **25%** of **fish** sold in supermarkets contain plastic debris and man made fibers.
- A 2013 study found plastic in **36.5%** of fish from the English Channel
- A 2014 Ghent University of Belgium study found that European shellfish consumers can ingest **11,000 pieces of microplastic** per year



A recent study found that **94%** of municipal **tap water** sampled in the US contains plastic fibers.

And...

90% of commercial **bottled water** contains microplastic fibers

Where Have Plastic Bags Been Banned?

30 Countries

Denmark
France
Ireland (90% reduction)
Italy
Netherlands
UK
Greenland
Morocco
China
India
Bangladesh
Benin
Cameroon
Eritrea
Fr. Guyana
Mexico
Argentina
Bolivia
Brazil
Chile

2 States

California

San Jose California (60% reduction)

Hawaii

??Cities

Austin, TX
Boston, MA
Boulder, CO
Brownsville, TX
Chicago, IL
Portland, ME
Seattle, WA
Washington, DC
Milwaukie, OR
Providence, RI
Salem, OR
Bedford, NY
Larchmont, NY
Mamaroneck, NY
East Hampton, NY
New Paltz, NY
Newcastle, NY
Patchogue, NY
South Hampton, NY
Rye, NY
Hastings On Hudson, NY

Mount Pleasant, SC
Jackson Hole, WY
SW Harbor, ME
Waterville, ME
Camden, ME
Belmar, NJ
Jersey City, NJ
Gainesville, FL
Anchorage, AK
Charleston, SC
James Island, SC
Westport, CT
East Hampton, NY

Ulster County, NY
Suffolk County, NY
Montreal, QC
NYC, NY (preempted by New York State)

Adams,
Amherst,
Andover,
Aquinnah,
Arlington,
Ashland,
Athol,
Barnstable,
Bedford,
Belmont,
Beverly,
Boston,
Bourne,
Bridgewater,
Brookline,
Cambridge,
Chatham,
Chilmark,
Cohasset,
Concord,
Dalton,
Danvers,
Dartmouth,
Dennis,
Duxbury,
Edgartown,
Falmouth,
Framingham,
Gloucester,
Grafton,
Great Barrington,
Hamilton
Harwich

87 in Massachusetts

Haverhill,
Hopkinton,
Ipswich,
Lee,
Lenox,
Lexington,
Lincoln,
Longmeadow,
Lowell,
Manchester-by-the-Sea,
Mansfield,
Marblehead,
Marshfield,
Mashpee,
Melrose,
Milton,
Nantucket,
Natick,
Newburyport,
Newton,
Northampton,
Oak Bluffs,
Pembroke,
Plymouth,
Provincetown,
Reading,
Rockport,
Salem,

Sandwich,
Shrewsbury,
Somerville,
South Hadley,
Stockbridge,
Sudbury,
Swampscott,
Tewksbury,
Tisbury,
Topsfield,
Truro,
Tyngsborough,
Wakefield,
Watertown,
Wayland,
Wellesley,
Wellfleet,
West Tisbury,
Westborough,
Westford,
Weston,
Williamstown,
Wilmington,
Winchester,
Yarmouth

Brattleboro—bag ban passed and going smoothly

Wilmington VT—recently passed

Manchester- endorsed by the Selectboard but waiting for a state-wide law

Montpelier VT—approved, needs state approval

Burlington VT—on the 2019 ballot

Middlebury—on the 2019 ballot

Bristol—campaign coalition formed

Colchester—collecting petition signatures

Vergennes—just beginning

Williston—Just beginning

Hartford—researching

Is Vermont next? No, not unless towns go first.

Effect in Middlebury**

With a population of 8,598, a bag ban would:

- Reduce trash and toxins in our environment by about **4.6 million bags per year**
- Eliminate about **120 metric tons per year of greenhouse gases**
- **Save** retailers over **\$182,000 a year** on buying plastic bags

MassGreen.org calculator