

Tompkins County Environmental Management Council

Tompkins County Plastic Bag Ban Proposal

Presented by: EMC's Waste Reduction Committee

Prepared for EMC 10/18/2018





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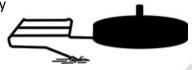




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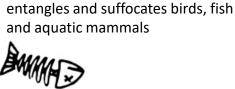
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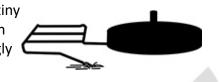


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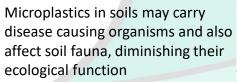




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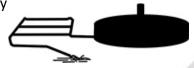




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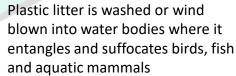
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Microplastics in soils may carry disease causing organisms and also affect soil fauna, diminishing their ecological function



Microplastics are presently found in food that contains or was processed in water. They have also been detected not only in fish and seafood but in salt, sugar and beer.



Ingestion by organisms results in bioaccumulation thus entering the food chain



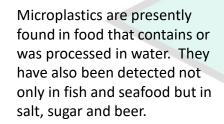
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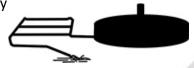
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Every human in the developed world has traces of plastics in their blood!



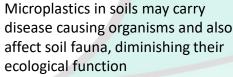
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https://www.sciencedaily.com/releases/2018/02/180205125728.htm

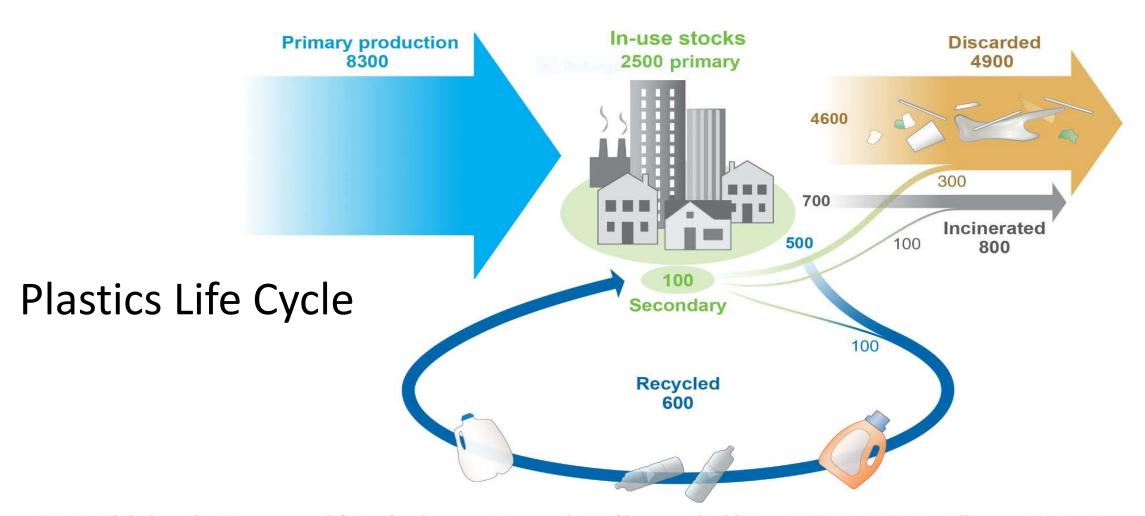


Fig. 2. Global production, use, and fate of polymer resins, synthetic fibers, and additives (1950 to 2015; in million metric tons).

Plastic Pollution = Microplastics = Toxic

- Plastic does not decompose, it degrades into microplastics
- ➤ A single plastic bottle can break up into 10,000 pieces of microplastic
- All plastics ever made are still in existence
- Microplastics absorb toxins in the environment becoming
 1 million times more toxic than the water around it
- Microplastics are difficult to filter out in water treatment plants and create contaminated sludge with disposal issues
- Microplastics are found increasingly in drinking water and the food chain
- Pose threats to many types of life, including humans



Testing for microplastics in bottled water



93%

of bottled water tested showed signs of microplastic contamination



10.4

particles per litre bigger than 100 microns (about the width of a human hair)



314

particles per litre smaller than 100 microns which are probably plastic

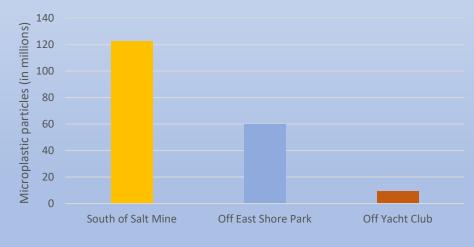
Source: Orb Media/State University of New York Fredonia



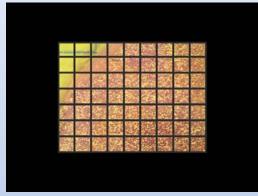
Microplastics are showing up in Cayuga Lake

- Preliminary estimate is that there are tens of millions of microplastics particles in Cayuga Lake.
- ➤ Sampling wastewater effluent, 3 locations in lake and the Inlet for the last two summers
- Using a very fine mesh net (50 microns) and a combination of identification techniques

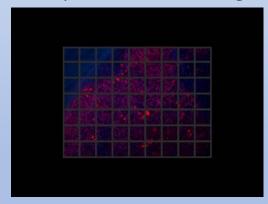
Microplastics in Surface Water of Cayuga Lake



- Research by Ithaca College and the Ithaca Area Waste Water Treatment Facility
 - 2017-2018
- (very preliminary: based on 6 or 40 samples collected)



Sample before Staining



Sample After Nile Red Staining

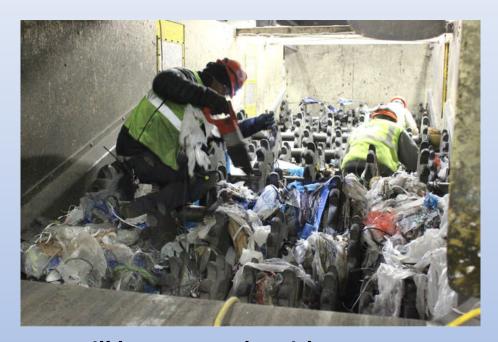
Why Target Single Use Plastic Bags?

- They are intended for single use and disposal
- The average American family takes home 1,500 plastic bags per year
- According to Waste management only 1% of plastic bags are returned for recycling in the proper manner
- Plastic bags that are mistakenly recycled in the zero sort waste stream cost recycling centers thousands of dollars on a daily basis when they clog the machinery
- Plastic bags create litter problems and clog storm sewers

In Tompkins County:

1 bag per person per day X 100,000 people (2015 census)

700,000 bags per week
OR
36.4 million bags per year



It will be easy to do without them! A great first step in controlling plastics pollution.

Plastics and Tompkins County



2013 Proposed Ban Attempt

Resolution by the EMC; tabled by PDEQ Ban concerns:

- Did not specify exemptions
- Unclear of fee for paper bags was retained by stores or not
- Did not address efforts to accommodate lower income sectors of community
- Lack of support among stakeholders and Legislature

NY State Ban 2018

Key provisions

- Exemptions for materials other than plastic; bulk items, meat, dry cleaning, etc.
- Endorsed by Tompkins County Legislature
- Introduced by the Senate; stalled in the Assembly (as of summer recess)

NY State Proposal:

https://www.governor.ny.gov/sites/governor.ny.gov/files/atoms/files/PlasticBag Ban.pdf

What other Communities are Doing

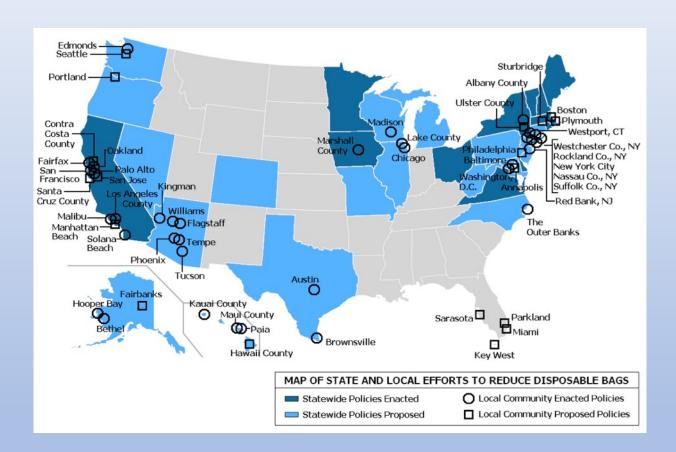
Statewide Bans

- California
- > Hawaii

NYS Communities

Ulster County Legislature voted to approve the Bring Your Own Bag Act on 9/21/2018

East Hampton Village 2/12 ban
Hastings on Hudson, town of Greenburgh 2/15 ban
Village of Mamaroneck 1/13 ban
Town of Newcastle 1/17 ban
Village of New Paltz 4/15 reusable must be 2.25 mils,
paper bags - 40% postconsumer content
Patchogue 9/16 ban plastic must be 2.25mils
City of Rye 5/12ban
Village of Southampton 11/11 ban
Suffolk County 1/18, 5 cents for plastic and /or paper,
reusable 2.25 mils



The Proposed Ban

- Single-use plastic bags are proposed to be banned from retail establishments, food service establishments located in or outside grocery stores, supermarkets, convenience stores, or food marts.
- A carryout bag fee would start on a specified date, and all stores would provide paper checkout bags at the charge of 10 cents per bag to customers who request a bag at the point of sale.
- Exemptions would be as follows: dry-cleaning bags, bags provided by a pharmacy to carry prescription drugs, or thin film plastic bags without handles used to carry produce, meats, dry goods, or other non-prepackaged food.



- Our Goal for Tompkins County:
 - Join the movement to be ecologically responsible
- ➤ Enforcements and penalties would be applied to any store that violates this ordinance and shall be guilty of an infraction.
- The proposed infractions would be:
 - > \$100 for first violation
 - > \$200 for a second violation within the same year, and
 - > \$500 for each subsequent violation within the same year
- Retailers would retain the fee that exceeds their costs to enable them to provide their customers with a free or low-cost reusable bag and/or may use that portion of the fee to support local sustainability initiatives of their choice.
- > Effective Jul.1, 2018

Concerns vs. Benefits

Concerns

- Impact on Retailers localities that banned plastic bags but did not impose a fee saw a huge increase I paper use, increasing their carbon footprint
- Impact on Lower Income Individuals
 Seeking funding for bag program
 for WIC and SNAP participants
- Find this not to be a major issue
- Adjustment by Visitors Propose working with hotels on letting people know and/or bag borrowing or promo bags







Benefits

- > Reduce resource use
- Reduced fossil fuel use eases global climate change
- Reduce waste to landfills given current difficulties in recycling market
- Reduce litter in the county
- Reduce hazards to wildlife
- Reduce municipal costs of storm sewer clean up

Arguments against Banning Plastic Bags

- Less energy and water to make than paper bags
 - >TRUE, but we are not promoting same number of paper bags
- Take up less space in landfills that reusable bags
 - TRUE, but reusable bags do not end up in landfills at same rate
- ➤ Not made from oil
 - ➤TRUE, but made from natural gas
- > Does not decrease litter
 - ➤NOT SURE; 0.2% decrease in one year in California (could be tons and could take more than one year due to latency effect)
- ➤ Plastics are 100% recyclable

 TRUE, but recycling rates are low and contamination rates are high

- ➤ Hurts small businesses
 - ➤ NOT SURE: Slight increase in costs, but allowed to charge for paper bags
- Customers may choose to shop outside ban area
 - ➤ UNLIKELY, due to greater gas costs
- ➤ Reusable bags can harbour bacteria
 - ➤TRUE, but they can be washed. Same as reusing a single use plastic bag
- ➤ People reuse single use plastic bags
 - ➤?, maybe once, so double use plastic bag. Half of 36 million bags a year in Tompkins County is still a lot of bags.

Info from: http://www.bagtheban.com/
By Novolex; the makers of single-use plastic bags

Outreach Plan if the Ban is Passed

- > Press release, public service announcement
- ➤ Notice in January school tax bills
- ➤ Seek grant funding from Park Foundation for distribution of free bags at Southside, GIAC, YMCA, Catholic Charities, Tompkins Community Action, Farmers market,
- > Community outreach events--Tabling at festivals, etc.



Thank You!





