

Single Use Plastic Reduction Initiative Update

Staff Presentation
Martin County BOCC Meeting
April 23, 2019

Brief History on Initiative

- June 19, 2018 BOCC directed staff to investigate banning plastic straws
- In late June research was initiated on general plastic use including straws and its impacts, local, state and national plastic reduction campaigns and related state and local laws. As a result, Staff prepared and submitted ***Overview of Single Use Plastics and Recommended Strategies to Reduce*** to leadership on July 24, 2018
- Meetings of the Single Use Plastics Initiative Team including Public Works, Attorney's Office, Tourism, Communications & Outreach, Parks & Recreation, Utilities & Solid Waste and the City of Stuart began on July 18, 2018
- By February 2019 partnerships between Martin County and Surfrider, Loggerhead Marineline Center and UF/IFAS FL Sea Grant were formed to build on and support existing science-based plastic reduction platforms
- April 23, 2019 request the BOCC approve the proposed resolution

Why Plastic Straws and Polystyrene?

History of Legislative Actions on Plastics in Florida:

- In 2008, Florida's Governor signed a law prohibiting with minor exception any local government from passing a law regarding plastic bags.
- On February 1, 2010, FDEP submitted a report to Governor Christ entitled *Retail Bags Report For the Legislature* in accordance with 403.7033 F.S.
- No action to date on lifting state preemption of local restrictions on plastic bag bans
- Many bills have been filed over the years including three in the 2019 legislative session
- Focusing on "Gateway plastics" like straws and polystyrene helps jumpstart changing behavior to reduce other single use items

Martin County Single Use Plastic Reduction Program Initiatives

THE PURPOSE OF THE SINGLE USE PLASTIC INITIATIVE IS TO PRESERVE, PROTECT AND ENHANCE LOCAL FLORIDA WATERWAYS AND PREVENT PLASTIC POLLUTION FROM ENTERING THE MARINE ENVIRONMENT. THE PRIORITY INITIATIVES ARE FOCUSED ON REDUCTION AND ULTIMATE ELIMINATION OF SINGLE USE PLASTIC STRAWS AND POLYSTYRENE AND THE OVERALL REDUCTION OF PLASTIC S.

1 County Resolution/ Legislative Support Related to Plastic Regulation	2 Communication/ Messaging/ Branding/ Educational Materials	3 K-12 Education and School Programs	4 Ocean Friendly Restaurant Program	5 Martin County Vendors
--	---	---	--	--------------------------------

SINGLE USE PLASTIC REDUCTION PARTNERS

Indian River Lagoon National Estuary Program

Trash Free Indian River Lagoon

City of Stuart

**Keep Martin Beautiful
Discover Martin**

**Florida
Oceanographic
Society**

Martin County

**Surf Rider
Foundation**

Loggerhead Marine Center

**Ocean Friendly
Restaurant Program**

K-12 Student Outreach

Students For H2O

**UF/IFAS FL
Sea Grant**

**Rivers
Coalition**

K-12 Student Outreach

River Kidz

Conclusion

Request the BOCC to approve the proposed resolution to support voluntary reduction and ultimate elimination of single use plastic straws and polystyrene and plastics in general by businesses, residents and visitors

A LIFETIME OF PLASTIC

The first plastics made from fossil fuels are just over a century old. They came into widespread use after World War II and are found today in everything from cars to medical devices to food packaging. Their useful lifetime varies. Once disposed of, they break down into smaller fragments that linger for centuries.

Growth in Asia

As the economies in Asia grow, so does demand for consumer products—and plastics. Half the world's plastics are made there, 29 percent in China.

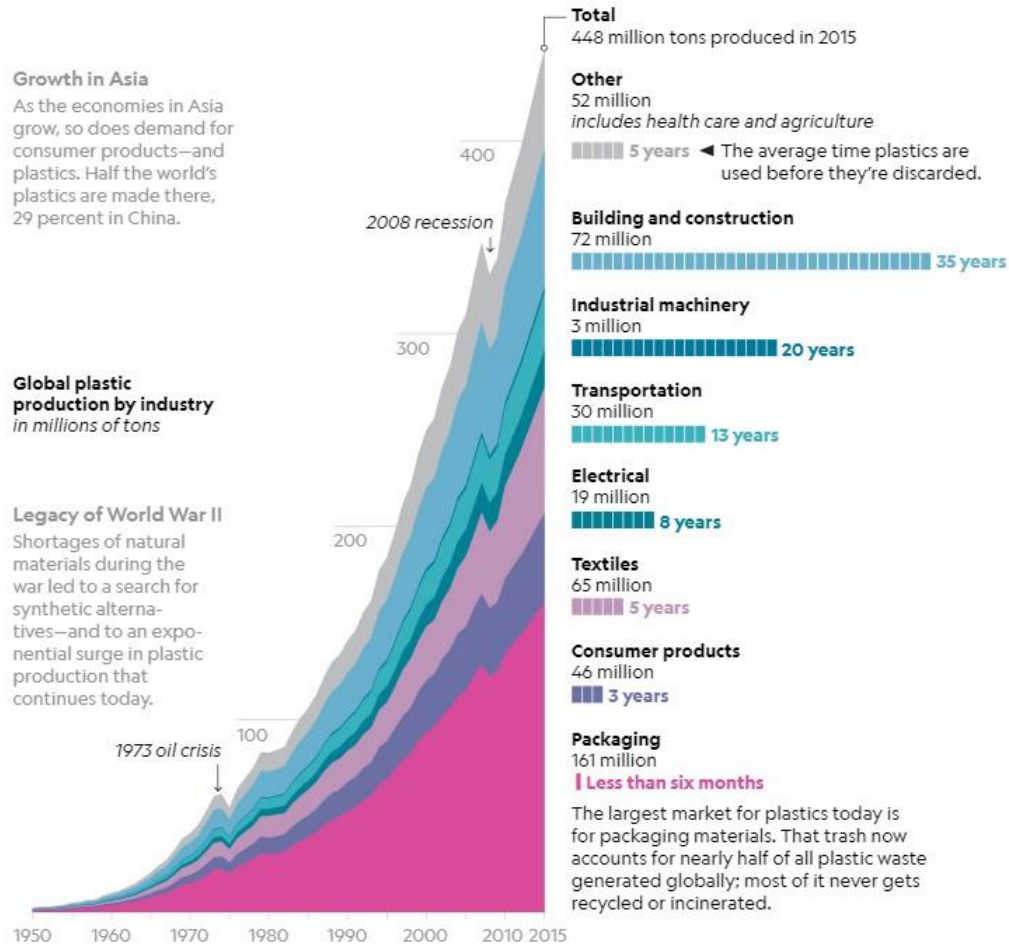
Global plastic production by industry in millions of tons

Legacy of World War II

Shortages of natural materials during the war led to a search for synthetic alternatives—and to an exponential surge in plastic production that continues today.

1973 oil crisis

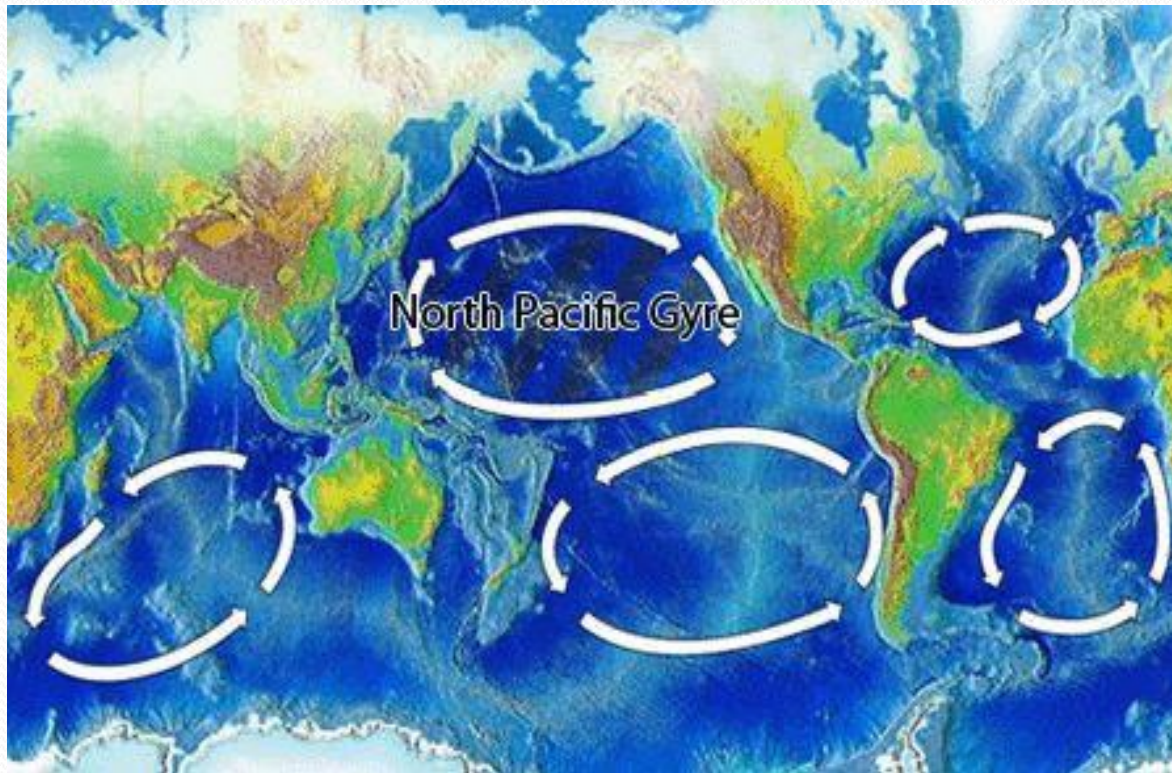
2008 recession



JASON TREAT AND RYAN WILLIAMS, NGM STAFF

SOURCE: ROLAND GEYER, UNIVERSITY OF CALIFORNIA, SANTA BARBARA

Current-Produced Ocean Gyres of Plastic Debris



Source: *Retail Bags Report for the Legislature*, FDEP February 1, 2010

The North Pacific Gyre is roughly twice the size of the U.S.

Impact of Marine Plastics



Source: National Geographic



Photograph by Cynthia Vanderlip



Size of Plastics Entering Environment

Sizes of plastic debris in our oceans

Small microplastics
(0.33–1.00 mm)



Large microplastics
(1.01–4.75 mm)



Mesoplastic:
4.76–200 mm



Macroplastic:
>200 mm



SOURCE: "Plastic Pollution in the World's Oceans" (2014; Eriksen, Lebreton, et al)

Vox

But We Recycle

Myth Buster #1 – But We Recycle. According to the EPA, the U.S. consumes 380 billion plastic bags each year and recycles less than 5%. Those that are recycled are costly compared to market value. According to the Clean Air Council, one ton of bags costs \$4,000 to recycle and has a market value of \$32. Plastic bag recycling causes costly clogging of sorting equipment and oftentimes contaminates the recycling stream resulting in diversion to landfills for disposal. There is also a cost associated with litter clean up from blowing bags at waste facilities. And finally, plastic bags can only be down-cycled into other recyclable plastic products not into new bags.



Myth Buster #2 – It Should Be Easy, We’re Doing the Right Thing. Plastic industry opposition to plastic bag fees and bans shows up in number of ways including local ordinances, litigation, and support of preemptive policies to prevent local bans and fees. The argument that secondary use of bags *is* recycling is often used but doesn’t really hold up since the bulk of single use bags enter the waste stream and environment.



Source: FDEP, Retail Bags Report for the Legislature, February 1, 2010

What is the Status of Florida's Plastic Reduction Efforts?

With little or no wiggle room to ban or impose plastic bag fees in Florida, there has been a movement to ban plastic straws. Cities leading the charge include Ft. Myers, Marco Island, Miami Beach and Surfside. Jupiter is considering a straw ban and St. Pete is toying with a voluntary ban rather than a government mandate. Straws aside, Hollywood has limited polystyrene use on public property. These Florida cities join several others with similar initiatives in the U.S. in the states of California, Washington, and New Jersey. Each of these efforts looks a little different with some focusing on government vendors or concessions and public property while others focus on beachside restaurants and there are varying associated exemptions and fines.



**U.S. CONSUMPTION = ENOUGH STRAWS
TO WRAP AROUND THE
EARTH'S CIRCUMFERENCE
2.5 TIMES A DAY!**



Plastic straws may not be as big a deal as plastic bags and food containers but they are still a big deal. According to the National Park Service, Americans use an estimated 500 million plastic straws a day. Plastic straws are non-biodegradable and non-recyclable, mostly because of their size and weight, so they are typically landfilled, if they get that far.



Breaking the Plastic Cycle

