# Plastic Pollution

Sarasota City Commission February 4, 2019 Stevie Freeman-Montes, Sustainability Manager

## Agenda

#### **The Plastics Problem**

Local Data and Research

State Policies, Current Litigation, Current Bills

Summary of Actions by Other Jurisdictions

Local Organizations and Initiatives Working on the Issue

Staff Recommendations

Discussion

## The Plastics Problem



Estimated at least 8 million metric tons of plastics entering the ocean annually.

(<u>Plastic waste inputs from land to ocean</u>. Jambeck, Jenna R. *Science* 13 Feb 2015: Vol. 347, Issue 6223)



Plastics do not biodegrade in the marine environment



Plastics break into smaller pieces called microplastics



Microplastics are prevalent in local wildlife and waters





### Which plastics float and which sink in seawater?





Whitaker Bayou Clean Up

## Local Data

- International Coastal Cleanups through Keep Sarasota County Beautiful
- Found on our local beaches between 2013 – 2017:
  - 70,424 Cigarette butts
  - 17,049 bottle caps
  - 12,379 "plastic pieces"
  - 6,789 plastic bottles
  - 6,649 straws/stirrers
  - 6,249 beverage cans
  - 6,192 plastic bags
  - 2,113 plastic lids
  - 1,562 foam take-out containers



MICROPLASTICS are found in waters around the world (see tiny.cc/microplastics). To test local waters, UF/IFAS **Extension Sarasota County** enrolled students and teachers from Sarasota and Riverview high schools into the Florida **Microplastics Awareness** Project, a citizen science initiative. Samples collected across the county and analyzed by students revealed:

- Fibers: from clothing, fleece, sheets and more;
- Fragments: from larger plastics, deodorants, mascaras, and others;
- Microbeads: spherical pieces of plastic added to scrubs, soaps, toothpastes and more; and



## Local Data - Loggerhead Hatchlings

- 142 dead washback loggerhead hatchlings necropsied in 2015
- 72% had synthetic marine debris in digestive tracts
- 326 total pieces found in all hatchlings (36% hard plastics, 32% soft plastics, 28% plastic line/netting, 4% foam/twine/balloon)
- From Mote Marine Laboratory Stranding Data: You are what you eat: examination of marine debris in stranded post-hatchling loggerhead seaturtles (Caretta caretta) from Sarasota and Manatee counties, Florida. Gretchen N. Lovewell



# State Policies and Current Litigation

	Can a city regulate on public property?	Can a city regulate for commercial businesses?
Plastic Bags	х	Х
Polystyrene	$\checkmark$	x
Plastic Straws	1	

- A state pre-emption policy prevents cities from regulating plastic bags in any way.
- Polystyrene cannot be regulated for commercial establishments on private property, but can be regulated by the City on public property.
  - Coral Gables regulated polystyrene among private businesses. They were brought into litigation by Florida Retail Federation and SuperProgresso. A lower court ruled the state pre-emptions for polystyrene and plastic bags unconstitutional. This was appealed and is awaiting the decision of a higher court.
- Plastic straws currently have no state pre-emption policies.

## **Recent Bills Proposed**



Preemption of Recyclable & Polystyrene Materials: SB 88 (Stewart) would repeal current state laws that preempt local government regulation of plastic bags and containers, and local government regulation of the use and sale of polystyrene products.



**Prohibition of Plastic Carryout Bags and Straws:** SB 502 (Rader) would prohibit stores and food service businesses from providing plastic carryout bags to customers. The bill provides exceptions for specified items. The bill also prohibits a food service business from selling or providing single use plastic straws to customers. The business may provide a straw upon request to a person who requires a straw due to a disability or medical condition. The bill outlines penalties and enforcement.

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588 (Hutson) would authorize a food service establishment to distribute a single-use plastic straw only if requested by the customer. The bill provides for various exceptions, including take-out orders, use by healthcare facilities and allows distribution through a self-service straw dispenser. It preempts the regulation of single-use plastic straws to the state and prohibits adoption or enforcement of any local ordinance that would further restrict the distribution of straws to customers.

Single Use Plastic Straws: SB

## Summary of actions by other jurisdictions

Material	Number of jurisdictions that have regulated in some form	Name of jurisdictions that have regulated in some form
Plastic Bags	2	Coral Gables, Gainesville
Polystyrene	5	Miami Dade, Coral Gables, St. Petersburg, Gainesville, Hollywood
Straws	10	St. Petersburg, Miami Beach, Surfside, Sanibel, Marco Island, Ft. Meyers, Hallandale Beach, Deerfield Beach, Dania Beach, Hollywood

Who is already working on this locally?

### î2 **ReThinking Plastics** Skip the Straw Suncoast 5 -× Florida Microplastics Awareness Project **NOAA Marine Debris Tracker** Palmetto High School Work Mote Marine Laboratory Research Alle UF/ IFAS Plastics Reduction Working Group (currently surveying local businesses)



Science and Environment Council

## THE BAD FIVE



## **ReThinking Plastics**

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- Strives to help individuals and businesses become "BadFive Free" through education and targeted assistance
- Helps identify alternatives
- Already has 40 restaurants involved in Skip the Straw Campaign
- 501c3

# Impacts for Local Businesses

- Financial impacts vary based on:
  - Type and quantity of material a business is currently purchasing
  - Type and quantity of material a business switches too
  - Whether reduction or reuse is an option
  - Example: a business purchases 1,000 polystyrene takeout containers per year at \$0.10 each. If they replaced with a biodegradable alternative (sugarcane) they would pay \$0.16 each.
    - \$100 vs. \$160 a 62.5% increase
  - If that same business currently purchases 1,000 plastic 8" square to-go containers at \$0.21 cents each, replacing with the biodegradable alternative at \$0.16 would save money.
    - \$210 vs. \$160 a 24% reduction
  - Some cities offer waivers for financial hardships



### Recommendations



Watch

Watch plastic bag litigation



Collaborate

Educate

Meet with Disability Advisory Board and business stakeholders

Support and partner with ReThinking Plastics campaign. Public art efforts.



Act

Consider action for polystyrene and straws on public property:

- City Facilities (mandatory)
- City Leaseholds, Sidewalk Café Permits, Special Events\*



Two Choices for Leaseholds, Sidewalk Café Permits, Special Events:

- 1. Pass ordinance that applies to these locations (This would require more research on enforcement and staff capacity)
- 2. Encourage these establishments to join ReThinking Plastics campaign and voluntarily participate. We target with education and see how many we can get to join in the first year. Reassess after one year for regulations.

## Questions for Commission

Would you like additional data or research on a particular issue within the plastic pollution topic?

Do you have any direction regarding the recommendations?