



City of Stuart

A G E N D A

**SPECIAL MEETING OF THE STUART CITY COMMISSION
TO BE HELD June 6, 2019
AT 4:00 PM Commission Chambers - PLASTICS WORKSHOP
121 SW FLAGLER AVE.
STUART, FLORIDA 34994**

CITY COMMISSION

**Mayor Rebecca S. Bruner
Vice Mayor Eula R. Clarke
Commissioner Kelli Glass Leighton
Commissioner Merritt Matheson
Commissioner Mike Meier**

ADMINISTRATIVE

**City Manager, David Dyess
City Attorney, Michael J. Mortell
City Clerk, Mary R. Kindel**

Agenda items are available on our website at <http://www.cityofstuart.us>
Phone: (772) 288-5306 . Fax: (772) 288-5305 . E-mail: mkindel@ci.stuart.fl.us

In compliance with the Americans with Disabilities Act (ADA), anyone who needs a special accommodation to attend this meeting should contact the City's ADA coordinator at 772-288-5306 at least 48 hours in advance of the meeting, excluding Saturday and Sunday.

If a person decides to appeal any decision made by the Board with respect to any matter considered at this meeting, he will need a record of the proceeding, and that for such purpose he may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

(RC) next to an item denotes there is a City Code requirement for a Roll Call vote.

(QJ) next to an item denotes that it is a quasi-judicial matter or public hearing.

WHAT IS CIVILITY? *Civility is caring about one's identity, needs and beliefs without degrading someone else's in the process. Civility is more than merely being polite. Civility requires staying "present" even with those persons with whom we have deep-rooted and perhaps strong disagreements. It is about constantly being open to hear, learn, teach and change. It seeks common ground as a beginning point for dialogue. It is patience, grace, and strength of character. Civility is practiced in our City Hall.*

ROLL CALL

PLEDGE OF ALLEGIANCE

PRESENTATIONS

1. AWARENESS AND EDUCATION
2. PRESENTATION ON THE REGULATION OF PLASTIC POLLUTION

COMMENTS BY CITY COMMISSIONERS

COMMENTS BY CITY MANAGER

APPROVAL OF AGENDA

COMMENTS FROM THE PUBLIC (5 min. max)

PUBLIC COMMENT: *If a member of the public wishes to comment upon ANY subject matter, including quasi-judicial matters, please submit a Request to Speak form. These forms are available in the back of the Commission Chambers, and should be given to the City Clerk prior to introduction of the item number you would like to address.*

QUASI-JUDICIAL HEARINGS: *Some of the matters on the Agenda may be "quasi-judicial" in nature. City Commissioners will disclose all ex-parte communications, and may be subject to voir dire by any interested party regarding those communications. All witnesses testifying will be "sworn" prior to their testimony. However, the public is permitted to comment without being sworn. Unsworn testimony will be given appropriate weight and credibility by the City Commission.*

ADJOURNMENT:

**CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
CITY COMMISSION**

Meeting Date: 6/6/2019

Prepared by: AEllig

Title of Item:

AWARENESS AND EDUCATION

Summary Explanation/Background Information on Agenda Request:

This presentation depicts the current recycling systems in the City of Stuart including those that handle plastics. It also looks at the importance of outreach and public education campaigns in driving any successful change in behavior.

Funding Source:

N/A

Recommended Action:

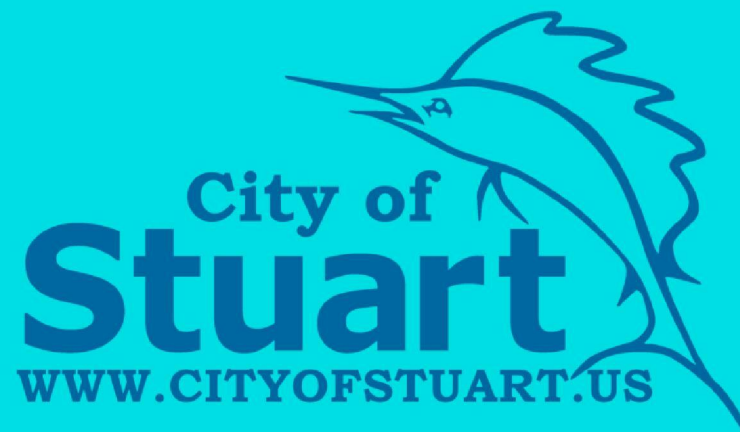
Education is the common denominator for the success of any initiative.

ATTACHMENTS:

Description	Upload Date	Type
□ Awareness	5/28/2019	Presentation

**AWARENESS
SINGLE USE PLASTIC**

JUNE 6, 2019



OUR WASTE MANAGEMENT PRACTICES

CITY OF STUART: 1 BLUE CART, NO SORTING



CITY OF STUART COLLECTS RECYCLING



MARTIN COUNTY LANDFILL & TRANSFER STATION



RECYCLABLES ON THE TIPPING FLOOR



TRANSFERRED TO HAULING TRUCKS

City of Stuart Single-Stream Recycling

Sammy Sailfish says...

DO RECYCLE in the blue cart



Plastics with recycling symbols #1-#7



Folders, colored and white office paper



Shredded paper



Phone books



Junk mail, envelopes



Catalogs/Magazines



Newspapers



Cardboard



Milk containers, juice cartons (non-waxed)



Food boxes, paper egg cartons, tubes from paper towels/toilet paper



Glass food & beverage containers



Aluminum cans, aluminum foil, tin pie pans, tin food cans



Steel or metal food containers and cans

DON'T RECYCLE in the blue cart



Plastic bags, un-numbered plastics, shrink wrap, flexible plastic wrap



Food waste, liquids



Wood



Snack packaging, photo paper, waxed paper



Styrofoam™, PVC



Fabrics



Batteries



Light bulbs, mirrors/window or auto glass, ceramics/porcelain, glass cookware/bakeware



Coat hangers



Paper towels, used paper plates/cups



Electric cords, Christmas lights, garden hoses



Cooking pans/toasters

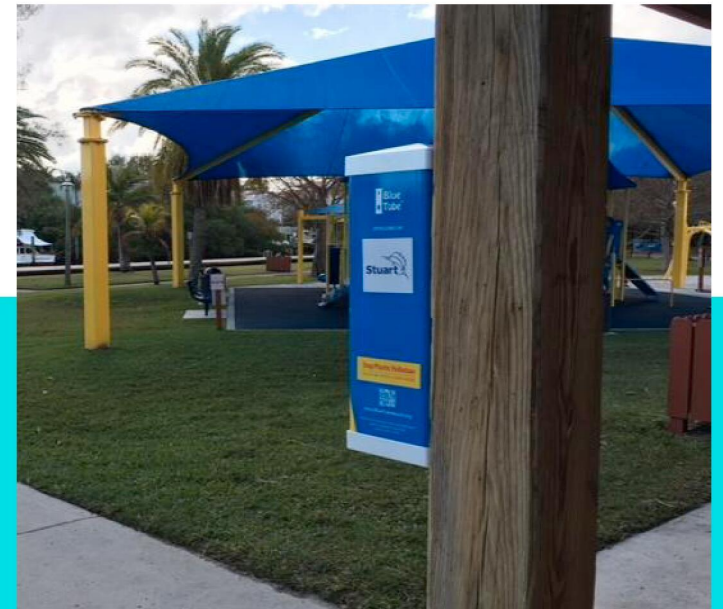


For more information, visit
www.cityofstuart.us
 (772) 600-1206

NO CART STANDS ALONE

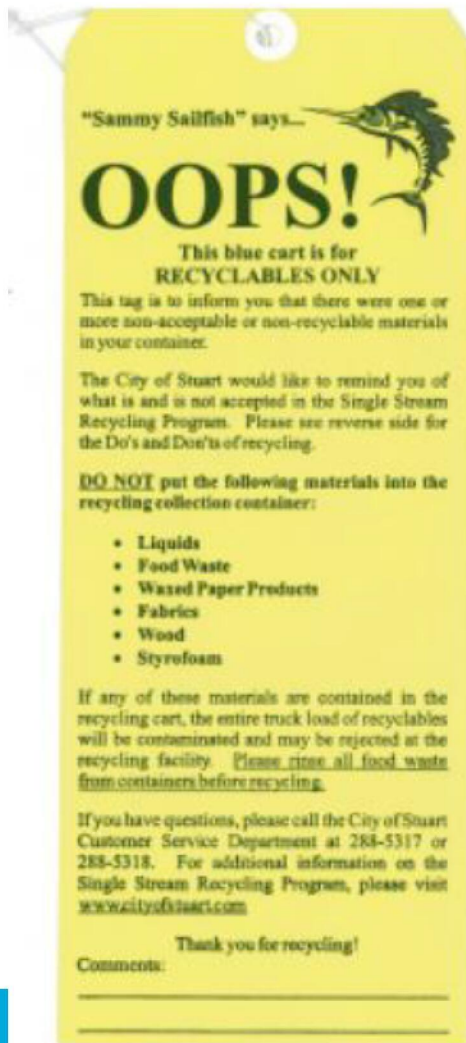


SPECIFIC COLLECTION POINTS



SAMMY SAILFISH TEACHES ABOUT RECYCLING!





Reduce Cart Contamination

12 month monitoring to compare levels before and after education campaign.

Possible Future Action:

- Reduce Garbage Cart size
- Mandatory Recycling
- Eliminate Commercial Credit

CITY OF STUART 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 plastics.

- County Resolution, City Resolution and Legislative Support Related to Plastic Regulation
- Prepare communication, messaging, and education materials for awareness
- City Purchasing policy
- Ocean Friendly Restaurant Program
- K-12 Education and School Programs
- Special Events on City Property



EXISTING STAKEHOLDERS

Martin County

Surfrider Foundation

Students4H2O

Keep Martin Beautiful

Florida Oceanographic Society

UF/IFAS FL Sea Grant

Rivers Coalition

River Kidz

Loggerhead Marine Center

IR Lagoon National Estuary Program

Additional Stakeholders to
engage immediately:

- Retailers
- County and national waste management officers
- Individual citizens



PUBLIC EDUCATION: COMMON DENOMINATOR FOR THE SUCCESS OF ANY INITIATIVE!

Consumers need to be aware of the social, environmental, and economic impacts of mismanaged single use plastics.

Now:

- Print: Info Bits, social media, newspaper
 - Outreach: home owner groups, environmental events, classroom
-
- ❖ Door to door campaigns: distribute bags with informational inserts
 - ❖ Cart wraps or signs – what goes where
 - ❖ Banners and pole banners – clear & simple message
 - ❖ Showcasing alternative options to single-use plastics

**New
ideas:**



RETHINK



**CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
CITY COMMISSION**

Meeting Date: 6/6/2019

Prepared by: bhogarth

Title of Item:

PRESENTATION ON THE REGULATION OF PLASTIC POLLUTION

Summary Explanation/Background Information on Agenda Request:

Presentation on the potential for regulation of plastic pollution in the city.

Funding Source:

N/A

Recommended Action:

N/A

ATTACHMENTS:

Description	Upload Date	Type
▯ Presentation on Regulating Plastic Pollution	5/28/2019	Presentation



Regulating Plastic Pollution



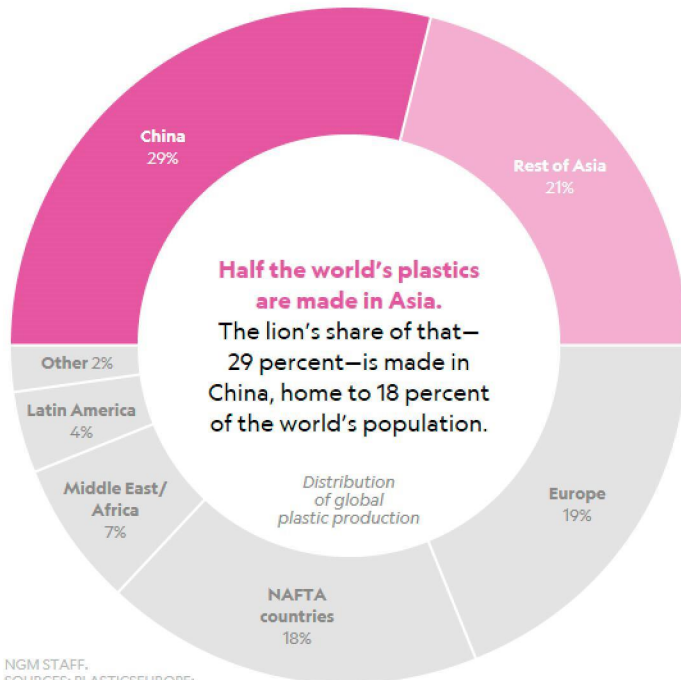
Pollution Statistics

- **300 MILLION** tons of plastic produced every year
- **8 MILLION** tons of plastic are dumped into our oceans every year
- **50 PERCENT** of all plastic is “single-use”
- **40 PERCENT** of all plastic produced is used as packaging
- **550 MILLION** straws thrown away every day in US / UK alone
- **500 BILLION** plastic bottles used every year worldwide
- **27.4 BILLION** disposable diapers thrown away every year in the U.S.
- **1+ TRILLION** plastic bags discarded every year worldwide



Source: "Banning single-use plastic: lessons and experiences from countries" UN Environment report (2018)

Production vs. Recycling



NGM STAFF.
SOURCES: PLASTICSEUROPE;
POPULATION REFERENCE BUREAU



Plastic recycling rates are highest in Europe at 30 percent.
China's rate is 25 percent.
The United States recycles just 9 percent of its plastic trash.

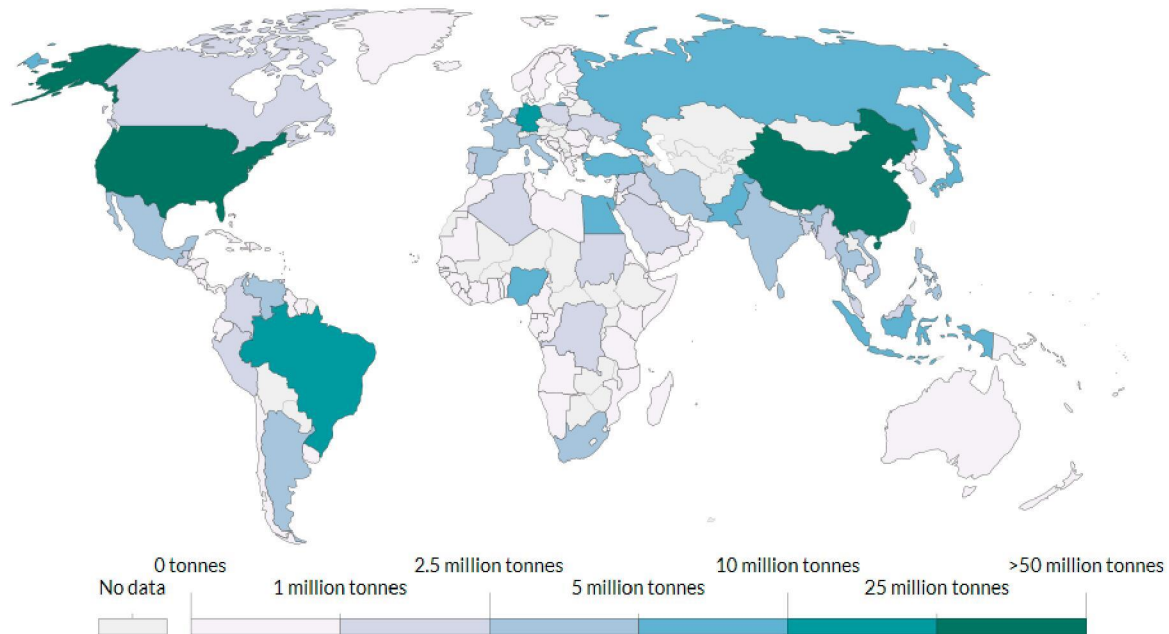
NGM STAFF. SOURCE: ROLAND GEYER, UNIVERSITY OF CALIFORNIA, SANTA BARBARA

Total Plastic Waste – Per Ton

Plastic waste generation, 2010

Total plastic waste generation by country, measured in tonnes per year. This measures total plastic waste generation prior to management and therefore does not represent the quantity of plastic at risk of polluting waterways, rivers and the ocean environment. High-income countries typically have well-managed waste streams and therefore low levels of plastic pollution to external environments.

Our World
in Data



Source: OWID based on Jambeck et al. (2015) & World Bank

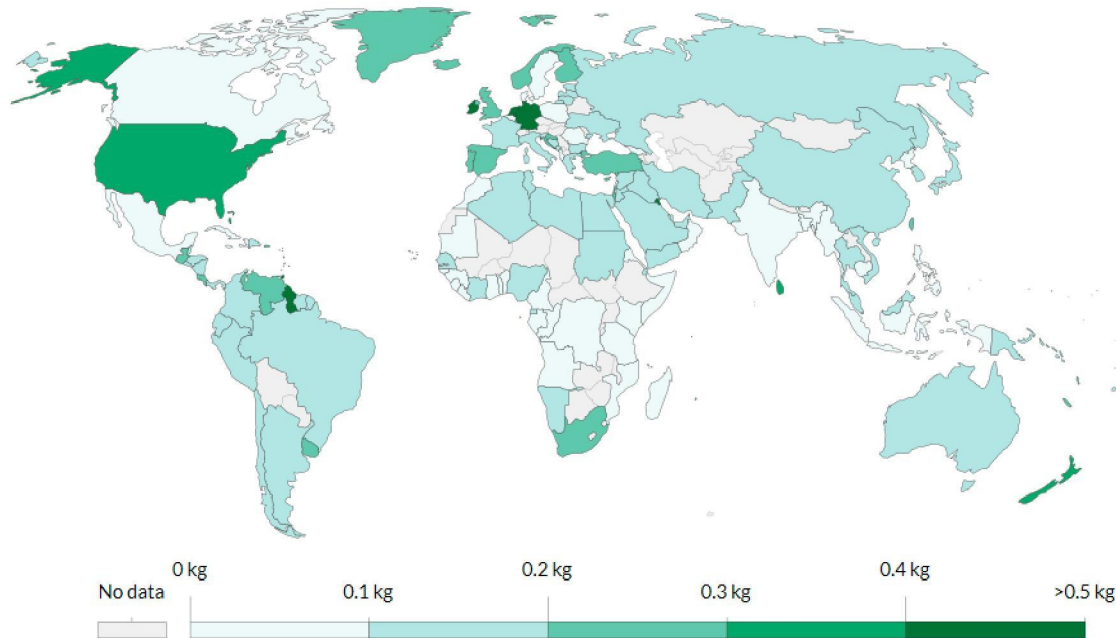
CC BY

Daily Plastic Waste – Per Person

Plastic waste generation per person, 2010

Daily plastic waste generation per person, measured in kilograms per person per day. This measures the overall per capita plastic waste generation rate prior to waste management, recycling or incineration. It does not therefore directly indicate the risk of pollution to waterways or marine environments.

Our World
in Data



Source: Jambeck et al. (2015)

CC BY

Plastic Waste Generation by Nation

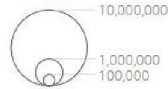
% of inadequately managed plastic waste



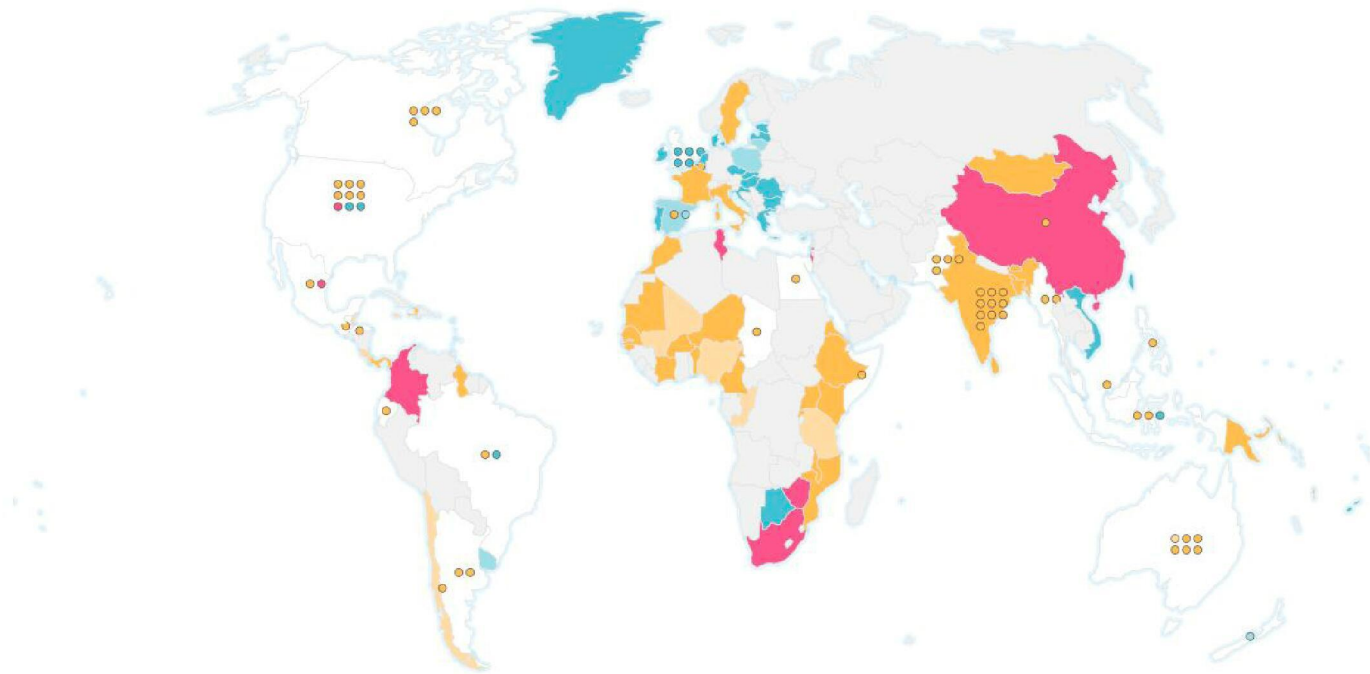
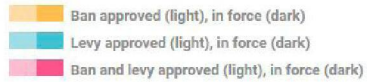
A horizontal color scale bar ranging from 0 to 80. The colors transition from light yellow at 0, through green, to dark purple at 80.

0 20 40 60 80

Tons of plastic waste generated annually



Government Regulations



Rivers to Ocean



10 rivers alone carry more than **90% of the plastic waste** that ends up in the oceans:

1. Chang Jiang (Yangtze River) **1,469,481** tons
2. Indus **164,332** tons
3. Huang He (Yellow River) **124,249** tons
4. Hai He **91,858** tons
5. Nile **84,792** tons
6. Meghna, Brahmaputra, Ganges **72,845** tons
7. Zhujiang (Pearl River) **52,958** tons
8. Amur **38,267** tons
9. Niger **35,196** tons
10. Mekong **33,431** tons

Ocean Conservancy

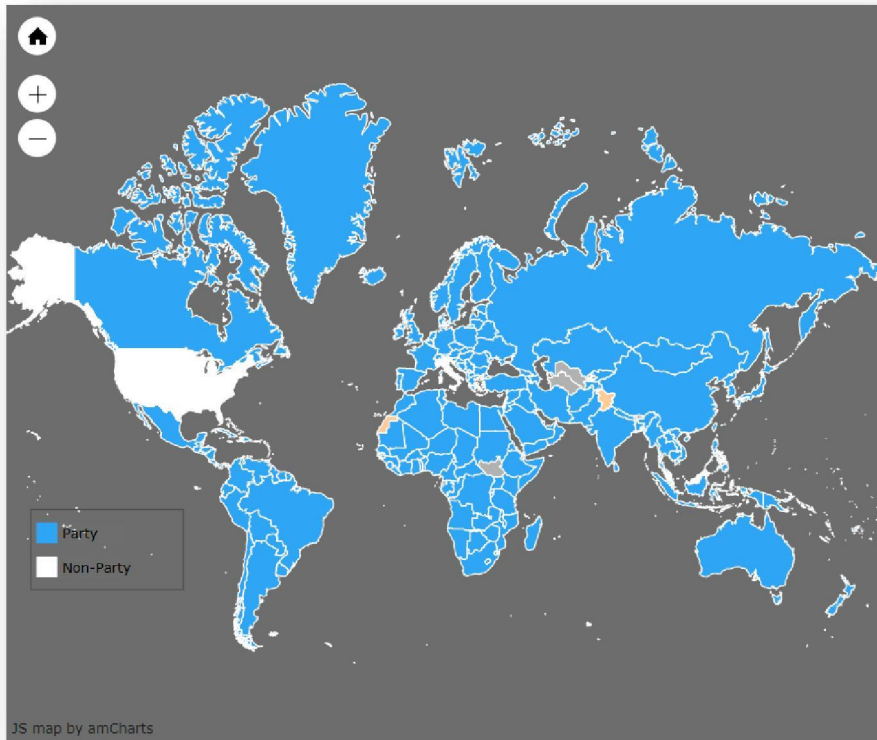
2017 Ocean Cleanup – U.S. Index (FLORIDA)



1. Cigarette Butts	<u>95,679</u>
2. Plastic Bottle Caps	<u>74,420</u>
3. Food Wrappers	<u>37,683</u>
4. Plastic Beverage Bottles	<u>31,948</u>
5. Straws / Stirrers	<u>26,500</u>
6. Plastic Grocery Bags	<u>14,190</u>
7. Other Plastic / Foam Packages	<u>8,431</u>

Plastic Contamination

Polychlorinated Biphenyls (PCBs) and the Stockholm Convention



- ❖ Used in manufacturing in the U.S. from 1929 – 1979 until banned nationally
- ❖ One of 12 Persistent Organic Pollutants (POPs) covered by the Stockholm Convention (2001)
- ❖ Parties of convention committed to eliminating use by 2025
- ❖ U.S. chose not to sign due to restrictions on local, state, and federal government
- ❖ Concerns of POP bioaccumulation in fish / marine life – nearly 60 percent of human population rely on fish as food source

Policy Options

Education vs Regulation

What makes sense for “U.S.” ?



Voluntary Reduction

Education campaigns, special events, partnerships, and voluntary agreements between organizations



Levy / Fee

Levy on suppliers, retailers, consumers, producers, or a combination of the above



Mandate / Penalty

Prohibition of specific uses or activities, or comprehensive policy including requirement of municipal services



Voluntary Reduction

Public Education, Community Outreach, and Public-Private Partnerships



UN Single-Use Plastics Study

“Nationwide campaigns seem to be less effective than **locally targeted campaigns.**”



“Acceptance from the broadest range of stakeholders is of utmost importance, and can be ensured through calls for early inputs, policy discussion meetings, and wide-reaching awareness campaigns.” – UN Environment

Private – NGO Initiatives

(Ellen MacArthur Foundation) – New Plastics Economy Global Commitment

Targets include to:

- **Eliminate** problematic or unnecessary plastic packaging and move from single-use to reuse packaging models
- **Innovate** to ensure 100% of plastic packaging can be easily and safely reused, recycled, or composted by 2025
- **Circulate** the plastic produced, by significantly increasing the amounts of plastics reused or recycled and made into new packaging or products



Reusable vs Single-Use

- About 350 cities, counties, and states in the U.S. have banned or heavily taxed single-use plastic bags
- Where bans / levies were imposed, plastic bag use was reduced dramatically
- Many reusable bags will still end up in a landfill due to challenges with recycling
- Reusable bags will not eliminate need for conventional plastic bags for household waste
- A 2018 Danish Study found that polypropylene bags (green reusable at supermarkets) should be used 37 times
- Similar UK Study concluded various polyethylene bags should be used between 4 and 11 times
- US Study also concluded similar results and found that these reusable (grocery) bags are only more environmentally friendly if used enough times

Ireland Case Study

UN Analysis of levy on plastic bags in Ireland (2002)

- Introduced a tax on plastic bags at point of sale
- Set 6x higher than reported willingness to pay
- Levy revenue paid into an Environmental Fund
- Collected & enforced at the national level
- Proved that a high levy can be successfully introduced
- Requires a high degree of stakeholder buy-in
- Significant investment in education campaigns
- Sensible administration at practicable policy levels – eliminated 90% plastic bags

Regulation Challenges

- Outright prohibitions common in underdeveloped nations
- Varying degree of success due to lack of enforcement / infrastructure
- Lack of stakeholder involvement creates more burdens on gov't
- Local vs. State vs. Federal policy
- Lack of formal education in many communities about alternatives



FLORIDA MUNICIPALITIES THAT HAVE SINGLE-USE PLASTIC STRAW ORDINANCES

- Coral Gables
- Ft. Lauderdale
- Lauderdale by the Sea
- Hallandale Beach
- Hollywood
- Fort Myers
- Dania Beach
- Delray Beach
- Marco Island
- Sanibel
- Largo
- Miami Beach
- Surfside
- Pompano Beach
- St. Petersburg
- Key Biscayne
- Pinecrest
- Deerfield Beach

FLORIDA MUNICIPALITIES THAT ARE CURRENTLY CONSIDERING SINGLE-USE PLASTIC STRAW ORDINANCES

- Sarasota
- St. Augustine Beach
- West Palm Beach

New York City Case Study

Ban on Styrofoam (EPS foam) Containers in 2015

- Originally introduced in 2015 – ban led to lawsuit via recycling firm coalition
- Ban was overturned in the same year by the NY Supreme Court when manufacturers claimed Styrofoam is recyclable
- Reinstated in 2017 following a report that concluded it is not possible to recycle Styrofoam in a manner that is economically feasible or environmentally effective
- Lesson learned – stakeholder involvement early on is imperative

Questions?



References

- <https://www.unenvironment.org/interactive/beat-plastic-pollution/>
- https://marinesanctuary.org/blog/plastic-pollution-ocean-conservation-challenge/?gclid=EAlaIQobChMI_sbshqCv4gIViQOGCh19wAkcEAAYASAAEgJJFPD_BwE
- <https://ourworldindata.org/plastic-pollution>
- <https://news.nationalgeographic.com/2018/05/plastics-facts-infographics-ocean-pollution/>
- <https://plasticoceans.org/>
- <https://www.surfrider.org/initiatives/plastic-pollution>
- <http://chm.pops.int/Home/tabid/2121/Default.aspx>
- http://www.ciel.org/Publications/POPs_Bills_28Feb2006.pdf
- <https://www.epa.gov/pcbs/learn-about-polychlorinated-biphenyls-pcbs>