



Ocean Conservancy

Changing Our Connection to **PLASTICS IN MIAMI**

CIRCULARITY ASSESSMENT PROTOCOL

KEY FINDINGS & OPPORTUNITIES
FOR LOCAL GOVERNMENT & RESIDENTS



**SHORES
FORWARD**
An Ocean Conservancy Initiative



UNIVERSITY OF
GEORGIA
New Materials Institute



ACKNOWLEDGMENTS

Ocean Conservancy thanks **University of Georgia's Circularity Informatics Lab, Ascendance Sustainability Group, Debris Free Oceans, Healthy Little Havana, Dream in Green, Florida Sea Grant, Florida International University**, and all the individuals that contributed to the wider body of work that surrounds the CAP. It truly takes a community to nurture and take care of our ocean. Thank you.





MIAMI IS CRITICAL TO PROTECTING FLORIDA'S MARINE HEALTH

Florida's landscape is a unique array of land and marine life, its beaches and waterways attracting millions of visitors and residents. As Florida's population has exploded and development increased, we have altered the landscape in remarkable ways, leaving many marine and coastal environments polluted and in danger.

This all-hands-on-deck moment takes us to Miami, where the connection between the ocean and the local community runs deep. The health of Biscayne Bay, the Miami River and the surrounding ocean is critical to Miami's economy and quality of life. Miami is committed to improving its water quality and reducing its environmental impact. The problem must be tackled at the root by influencing corporate behavior and addressing the circularity problem in local ordinance. Success also depends on the people of Miami.

WHAT STEPS HAS MIAMI ALREADY TAKEN? Miami has a dedicated Resilience office that focuses on all manners of climate, economic, and social resilience. The City of Miami, Miami-Dade County and the City of Miami Beach jointly released the Resilient305 Strategy to foster opportunities for the community to be heard during the building processes. Plastic debris is a key issue for the Miami-Dade County Chief Bay Officer. The Department of Resilience and Public Works has contracted a Scavenger Boat, which travels along the Miami River daily, removing litter. The boat removes 128 tons/year from the river, collecting everything from cigarettes to tires.

MIAMI BY THE NUMBERS

The City of Miami's population is

470,000+



Up 20% since 2010,
and continues to grow
1.09% annually

Miami has the largest %
of foreign born residents
in the world

59%



of Miami residents
are foreign-born

Generated Waste in Miami-Dade
County is projected to increase



0.1% a year



The current rate is
7.9 lbs.
per person, per day

generating at least an additional
1.44 tons per capita, per year



77%

speaking languages
other than English

70%

speaking Spanish

More Tourism = More Waste to Manage

The tourism economy in
Greater Miami and Miami
Beach saw a record-breaking



16.5M

annual overnight
visitors pre-pandemic

Miami's economy largely
depends on tourism,
bringing up to



\$18B

per year in
economic impact

OUR VISION: A WASTE-FREE MIAMI

To protect our marine environment, Ocean Conservancy is working with YOU to create evidence-based solutions for a healthy ocean and the wildlife and communities that depend on it. To understand waste management and the circular economy of Miami, Ocean Conservancy and the City of Miami partnered with The Circularity Informatics Lab at the University of Georgia (UGA) to conduct a Circularity Assessment Protocol (CAP).

The CAP provides data to understand waste and debris pollution in Miami. This report will help center ongoing stakeholder engagement around solutions to strengthen waste management infrastructure and the circular economy in Miami. Together we can achieve lasting change to keep our city and ocean beautiful and healthy.

As a follow-up to this report, Ocean Conservancy and the City of Miami will partner with local organizations to run community-based efforts, with priorities informed by the CAP data. Products will include an action guide in three local languages developed in collaboration with community leaders as well as policy goals developed in collaboration with the city.

Our vision is a city that lives in harmony with the ocean, whose residents understand that what happens on land impacts our waters, and what happens to our waters impacts our lives. Our goal is that these reports and guides help Miami residents and leaders take action to turn this magic city from wasteful to waste-free.



TACKLING PLASTICS TAKES A BIG BITE OUT OF WASTE POLLUTION

Pollution from any source can be harmful to the environment, but because of its longevity, ubiquity, and volume, plastic debris is a global challenge.

Research highlights the urgency of preventing plastic-waste leakage, or unmanaged plastic waste reaching the ocean. The use of plastics globally has skyrocketed over the last few decades and is projected to continue increasing. Some of this plastic enters the food chain, and evidence suggests that it has the potential to do significant harm to all living beings, including humans.

WHAT IS A CIRCULAR ECONOMY?

A circular economy is a system in which plastic materials and products are re-circulated to reduce waste, pollution, and harmful emissions, in support of a healthier ocean and more just world.

Ideally, a circular economy for plastics would meet the following principles:

- The use and production of plastics is fully decoupled from the use of finite resources and fossil fuels.
- All plastics are 100% reusable, recyclable, or compostable.
- Elimination of problematic plastics, including single-use plastics, through lifecycle-focused design, material innovation, and reuse models.
- All plastics are free of hazardous chemicals for the health and safety of our community and environment.
- The production, use, and end-of-life management of plastics does not contribute to environmental, social, or health impacts in marginalized communities.



THE CAP AIMS TO ANSWER SOME BIG QUESTIONS FACING MIAMI:

Developed by the Circularity Informatics Lab (CIL) at UGA, the CAP is a protocol to find and deliver valuable information to decision-makers by collecting community-level data on plastic usage. Grounded in a 'big-picture' frame of thinking, the CAP uses a hub-and-spoke to track the lifecycle of plastic products from their use to their disposal to understand its impacts on the environment. Policy, economics and governance are at the center.

In May 2021, a team from CIL conducted fieldwork in the City of Miami with support from Florida International University graduate students. The CAP was conducted with support from local government and Ocean Conservancy. Fieldwork included product and packaging assessments in stores across the city; key stakeholder interviews with government, industry, and non-profit organizations; material type characterizations for consumer plastic items; cost analysis of reusable products and alternatives to plastic available in the city; visual audits of recycling contamination; identification of public waste and recycling collection bins; and litter transects in three population density categories.

Jump Ahead!

CLICK ON EACH ICON TO
JUMP TO THAT SECTION





What We Discovered: **MIAMI IS WELL-POISED WITH KEY OPPORTUNITIES FOR CHANGE**

Meaningful change comes from collective action involving both Miami decision-makers and community members. Based on findings from the CAP, here are some ways Miami can make progress toward a waste-free future.

Social Opportunities

These are opportunities residents can lead and support to reduce waste, increase education and strengthen community power.

KNOWLEDGE IS POWER: Information is critical for building awareness as well as cultivating community ownership and stewardship.

- Increase education in Miami, via public school curriculum and outreach to the general public
- Make waste management infrastructure tours more available to schools and the community
- Combat misinformation and communicate that tap water in the city of Miami is safe to drink
- Target information toward boaters and tourists, mentioned by several interviewees as key contributors to litter

CHILDREN AS CHANGEMAKERS: Focus on inspiring the next generation to ensure sustainable change.

- Support children that want to spearhead cleanups to build local pride and help residents make the connection between everyday items and litter

IT'S IMPORTANT TO KEEP IN MIND:

- Family-oriented and intergenerational events are a great way for families to all learn together
- Alongside awareness campaigns, people need to have the capacity to dispose of their waste
- Each community is different and therefore has different needs, so awareness campaigns, public involvement, and the distribution of resources will look different for each community
- Under-resourced communities should have avenues for people to share their experiences and brainstorm solutions

Local Government Opportunities

These are opportunities for local officials to tackle waste head-on and improve circularity in Miami.

FIND THE RIGHT VOICES TO LEAD THE CHARGE: Trusted messengers and leaders can help community members feel more confident in their activism.

- The city should involve local celebrities and trusted community voices as spokespeople
- Commissioners should increase their engagement in cleanups and other activities that increase visibility for the issue

SUPPORT THE BACKBONE OF THE ECONOMY: Most of Miami-Dade County's jobs are in private businesses. City leadership should support private businesses' needs when it comes to reuse and recycling.

- The city needs to ensure that the products and material designs used by local businesses match waste management infrastructure and capacity, and that businesses can and know how to dispose of them properly
- The city should ensure that local businesses have the resources needed to understand the options available to them, including incentives to explore reuse/refill and alternative options that may require upfront investment

THINK OUTSIDE THE BOX: Creative avenues that can get communities closer to a circular economy, such as partnerships with private businesses, can also address immediate needs.

- Opportunities exist for extended producer responsibility and alternative delivery systems, particularly for the most problematic plastic items such as plastic film and multilayer plastic items
- Local government can leverage contracts to demand more circularity from products sold in government buildings
- The city of Miami may want to explore incorporating water refill stations in the city as well as allowing sponsorships for this program so that people don't have to pay for them
- Bay island maintenance needs to be addressed to reduce leakage from overburdened trash cans and overwhelming litter
- The city should prioritize implementation of the new storm drain filter system, as well as regular maintenance and community outreach

WHAT YOU DO WITH WASTE MATTERS: The infrastructure that currently exists and what's needed for a circular economy are far apart. Efforts should be made to get closer to a circular model.

- The city needs to move away from its dependence on landfill and ensure that the waste management infrastructure matches the products and materials used and collected in the city - this must include improving recycling rates
- Explore the installation of an industrial composting facility or getting access to one, to address the increasing quantity of compostable plastics being used in local businesses in Miami

Opportunities for Civic Participation

These are opportunities for both the community and local government to take action, whether separately or together.

- Invest in outreach – particularly to lower income and immigrant communities – to enhance the sense of community pride for City of Miami residents
- The city should reduce contamination levels for local waste collection and management facilities. This could be addressed in a variety of ways and will likely require more than one intervention – detailed in the full CAP report
- The city may want to invest in supporting recycling efforts outside more affluent neighborhoods, accompanied by messaging around what ‘contamination’ means for different communities
- The Waste and Recycling Department should have more staff to work with community leaders on messaging and actions tailored to neighborhoods
- Educate the public on the link between litter on the street and the health of Biscayne Bay
- Educate the public about storm drains and the stormwater pump system
- The city and relevant groups should conduct more ‘inland’ cleanups, beyond the beaches and waterways



Opportunities in Motion

Ocean Conservancy is advancing many of the recommendations from the CAP.

- Ocean Conservancy and local partners Debris Free Oceans and Big Blue and You are leveraging the new “Plastic-Free 305” program to empower youth working with local businesses to reduce their use of single-use plastics. The focus is on neighboring municipalities adjacent to Miami-Dade County’s ecologically and economically important Miami River watershed. Specific communities include Medley, Hialeah Gardens, Hialeah, Miami Springs, and City of Miami.
- In addition to helping businesses move away from single-use plastics, Ocean Conservancy is working with the City of Miami and Ascendance Sustainable Events to produce and implement a Sustainable Events Action Guide to facilitate the adoption of environmentally-minded event practices.
- Ocean Conservancy is leading a community working group to identify the most relevant actions from the CAP for Miami and build a cohort of champions for a circular economy.
- Ocean Conservancy’s International Coastal Cleanup has supported cleanups across Florida, including inland areas, since 1988.



What We Discovered: INPUT

MOST OF MIAMI'S PLASTIC IS MANUFACTURED RIGHT HERE IN THE U.S.

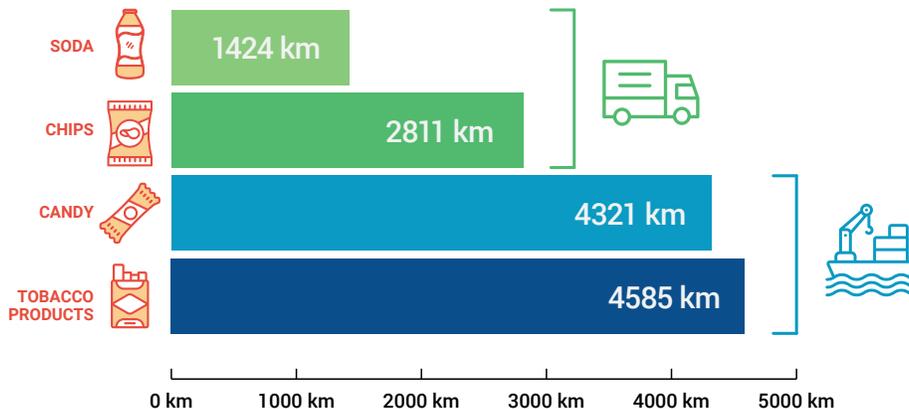
► What products are sold in the community and where do they originate?

Manufacturing and parent company locations were mostly in the United States, followed by Latin America. Most of our issues with inputs start right here at home in the United States. We don't have to go far to seek out solutions. What this means is that influencing U.S. corporate business models and U.S. recycling and waste management policy will have an impact

Across all products sampled, here's the breakdown of the top manufacturer and parent companies and their origin:

| <u>Manufacturer</u> | <u>Parent Company</u> |
|-----------------------|-----------------------|
| 63% United States | 76% United States |
| 11% Venezuela | 11% Switzerland |
| 6% Mexico | |
| 5% Dominican Republic | |

Median distance from store to parent company:



What We Discovered: COMMUNITY

BUILDING A SENSE OF AWARENESS AND COMMUNITY OWNERSHIP IS IMPORTANT NOW MORE THAN EVER

► What conversations are happening and what are stakeholders' attitudes and perceptions?

Many people do not know what happens to their waste. There is a need to build awareness of the connection between individual behavior and environmental health and resilience.

STAKEHOLDER INTERVIEWS

To understand current attitudes and perceptions of plastic waste, semi-structured interviews were conducted with 14 key stakeholders from non-profit organizations, government, private waste companies, academia, and local business. Below are key takeaways and a selection of the interviews:

Most interviewees agreed plastic waste is a problem within the community. Interviewees frequently cited low awareness of the connection between waste on land and waste ending up in waterways.

“People do not understand the relationships between trash on land and trash in the ocean.”

– NGO/Activist

“The general level of awareness in the public is kind of split. The districts that are bay facing are very aware, but when you start to get westward and even those on the river are not as aware.”

– Government Official

Several interviewees mentioned that storm drains are an area where awareness can be improved:

“People think that if they can’t find a bin, they can put litter in the storm drain then it isn’t littering. Really [storm drains] are just a direct conduit to the Bay.”

– Government Official

Other interviewees brought up the misconception that household waste management begins and ends with throwing waste in the trash or recycling bin. “Wish-cycling,” or hopefully putting contaminated or non-recyclable items in the recycling bin, was also frequently cited.

“What does disposing of waste ‘properly’ even mean? There is an attitude of ‘my job is done when I put it in the trash.’ The public perception is ‘my job is to just get it in the bin.’”

– NGO/Activist

“What mostly drives wish-cycling is that people see the recycling arrows on everything and it all goes in [the recycling bin]. Anything that looks remotely like plastic [goes in.]”

– Government Official

While offering alternatives to plastics is a step in the right direction, interviewees noted that their success might be hampered by familiarity or local capacity for disposal.

“There is a lack of awareness among the public on how to dispose of compostable plastic alternatives. The city wants to get a composting facility, but the cost and staff are resource barriers...As a city we need to make composting more available or increase awareness among the public on those products.”

– Government Official

“There are no industrial composting facilities in the state of Florida.”

– NGO/Activist

Interviewees noted the importance of bans on single-use plastics, yet they also felt concern that previous local policies have been undone at the state level.

“In Miami you have the headache of local, municipal, state etc. regulations that are all conflicting and unclear.”

– Academic

“Three years ago there was [a] regulation [in Coral Gables] on plastic bags and as soon as people started to make changes based on that regulation to comply, the city lost its appeal in court in Tallahassee against the retail industry lobby. The ban was banned.”

– NGO/Activist



RESIDENT SURVEY RESULTS

Miami residents helped identify ways to engage communities in efforts to reduce waste and increase circularity.

Drivers of change and transformation:

1. Simple and easy means of acting
2. Responsibility for future generations
3. Belief and determination

Motivations for sustainable behavior:

1. The environment
2. Community benefits
3. Health benefits

How we learn about waste management:

1. Personal experience
2. Experts
3. Media

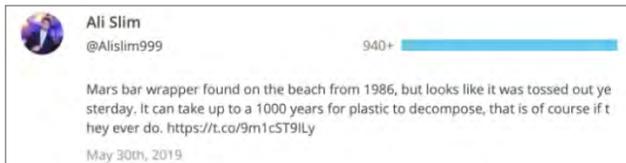
Who should be responsible:

1. Private sector / Corporations
2. Government / Politicians
3. The public / Community Members

EFFECTIVE LEADERSHIP IN SOCIAL MEDIA: THE TOP 5

Using social media to seek change is an easy means of action. An analysis of posts across platforms revealed positive, environmentally-based messages perform better.

- Combine fact-based calls to action with appeals to emotion. The desire to keep turtles from suffering was convincing enough for many to say that they would change their actions and encourage others to do the same.
- Utilize location-specific tags to promote events. Hashtags relevant within a certain area are often used by organizations to update followers about events such as cleanups. The tags #Florida and #Miami rank highly in the Instagram data set.
- Penetrate a plastic-conscious audience through positive posts. Negative conversations are crowded. Common examples of positive posts include the impact of activists and beauty of wildlife.
- Address the concerns of citizens who are concerned of legislation impacts. While organizations may support acts like the Miami Straw Ban, citizens might feel that more should be done or that efforts will have negative effects.
- Pitch stories to local colleges and news stations, which offer bridges to specific audiences through their social media accounts.

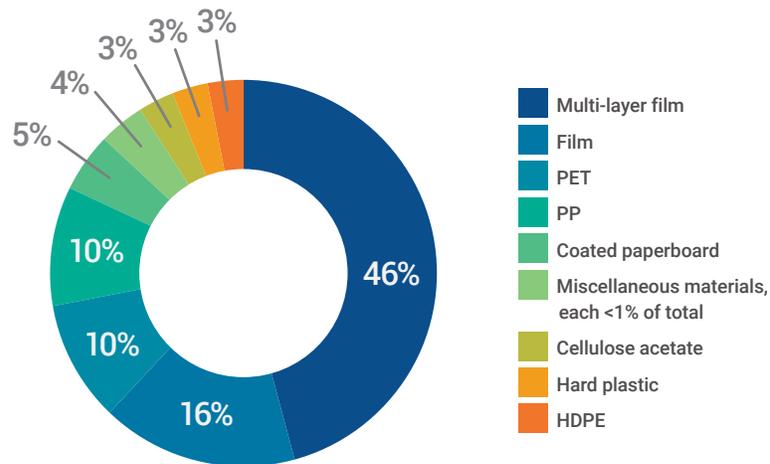




What We Discovered: **PRODUCT DESIGN**

**SO MANY PLASTIC TYPES CONTRIBUTES TO CONFUSION
OVER HOW TO PROPERLY DISPOSE OF WASTE**

Material breakdown of top convenience items:



► *What materials, formats, and innovations are found in products, particularly packaging?*

Many compostable items were documented from food vendors and restaurants, though there is no city or state composting infrastructure. To-go food packaging is made from a wide variety of material types, contributing to confusion around recycling.

Unlabeled hard plastic was the most common material type documented in food vendor products. This is emblematic of a lack of transparency around labeling, and confusion around proper handling.



What We Discovered: USE

MORE SUSTAINABLE USUALLY MEANS MORE EXPENSIVE

► What are the community trends and realities around use and reuse?

Biodegradable or reusable alternatives come at a premium for both consumers and businesses, in some cases costing 700x more than the single-use plastic equivalent. Some businesses implement eco-fees to share these higher costs with consumers. Others suggest tax incentives could help promote alternatives. Reuse and refill schemes are hampered by perceptions around drinking water in Miami, low willingness to pay extra fees, and availability/level of adoption in the city.

“Price is the biggest barrier.” – Local Business Owner

Miami vs. U.S. average waste generation rates:



What We Discovered: COLLECTION

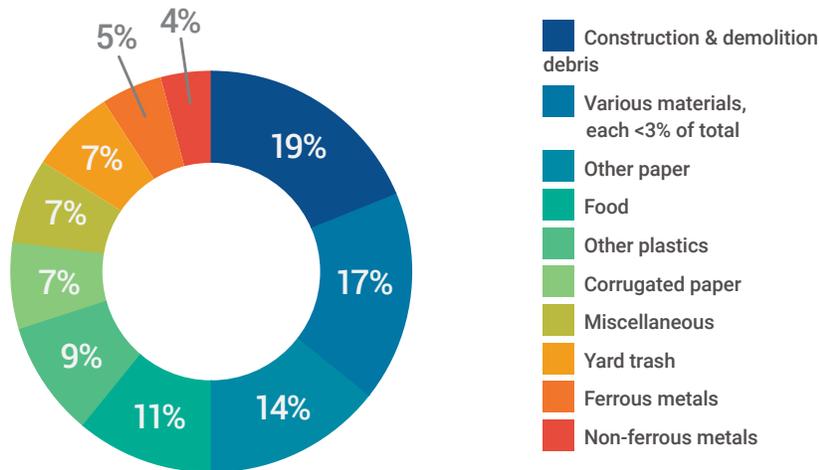
NOT ALL WASTE COLLECTION IS CREATED EQUAL

► *How much and what types of waste are generated? How much is collected and what infrastructure exists?*

Household solid waste collection in Miami and several surrounding municipalities is handled by the Miami-Dade County Public Works and Waste Management Department (PWWM). According to the Florida Department of Environmental Protection (FDEP), of the over 4.3 million tons of Municipal Solid Waste (MSW) collected in Miami-Dade County in 2020, around 16% was identified specifically as plastic. There are likely plastic polymers in other categories of MSW as well, such as textiles and paper products with plastic.

On paper all residents of the City of Miami have access to waste management and recycling, but there are reported discrepancies in the availability of those services for multi-family units. Unclear, unequal, and confusing collection practices contribute to high levels of illegal dumping in the city.

Types of Waste Collected



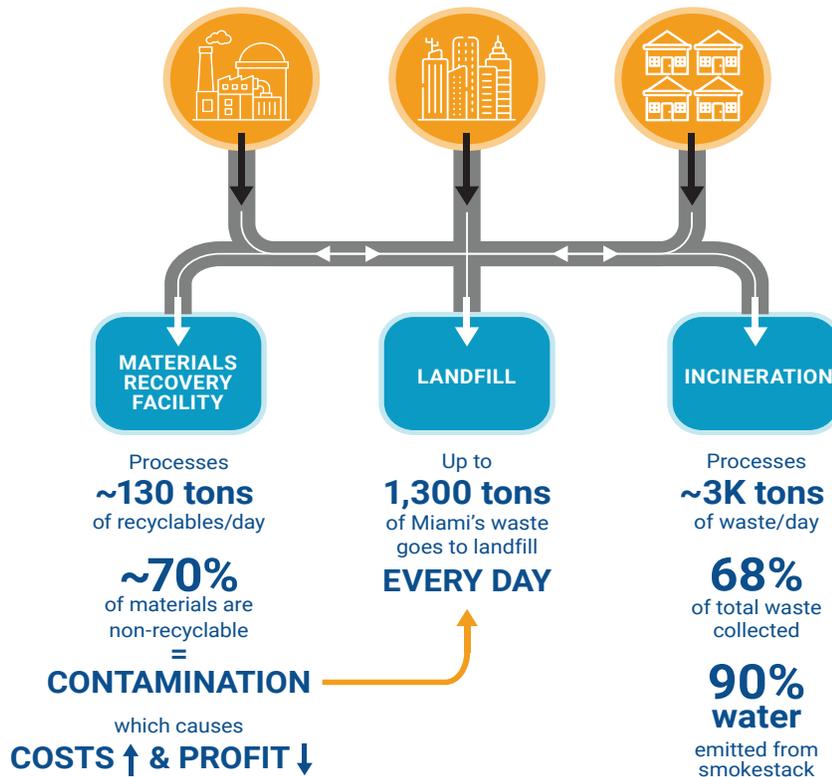
What We Discovered: END OF CYCLE

WASTE DOESN'T JUST GO "AWAY"

How is waste disposed? What is the fate of waste once it is properly discarded? How is it treated?

Solid waste management in the City of Miami is reaching a turning point. Strides have been made in waste management infrastructure in Miami. The city should ensure that future infrastructure meets its needs based on waste characteristics, and also that residents are aware of best practices for handling different types of waste. To the extent possible, the city should continue to pursue the alternatives outlined in the Environmentally Preferred Scenario that was selected as part of the SWMMP development in 2014.

The Current Journey of Trash After It's Collected



Adding a composting waste stream could reduce the waste stream currently going to the existing Waste to Energy (WtE) facility, which is processing 68% of the city's waste at capacity, though contamination may still be a problem. Miami's existing recycling stream has high levels of contamination - this may plague recycling and composting waste collection without simultaneous education and awareness campaigns and/or financial incentives. Furthermore, compostable plastic products come at a higher cost to businesses (see Use section), and behave exactly the same as regular plastics in the ocean. Focusing on switching away from single-use products altogether and increasing the availability of alternative materials might be a more sustainable alternative for both businesses and the city in terms of cost and waste management.

Potential Alternatives

FOR TACKLING MIAMI'S WASTE ISSUES*

SOURCE REDUCTION:

- Ban plastic bags
- Regulate excessive and non-reusable/recyclable packaging
- Partner with local companies, organizations, and schools to create a lottery for used and surplus items
- Support extended producer responsibility (EPR)

RECYCLING AND REUSE:

- Increase information programs to raise public awareness of recycling programs
- Encourage recycling programs for the County's Public School System
- Expand recyclables accepted by the curbside recycling program
- Provide incentives to vendors for using recycled products

COLLECTION AND TRANSPORT – CURBSIDE WASTE AND RECYCLABLES COLLECTION:

- Enforce residential solid waste rules
- Institute a variable rates system to charge residents by weight or volume
- Charge fees for bulky waste collection

COLLECTION AND TRANSPORT – TRASH AND RECYCLING CENTERS (TRC):

- Site additional facilities for disposal of home chemical waste, like household cleaners
- Redesign the TRCs to allow for more efficient operations (e.g. use of transfer trailers, compactors, material separation)
- Reduce the operating hours/days at the TRCs

LANDFILL:

- Recover recyclable materials at active landfills
- Construct a wind or solar panel farm at existing/closed landfills
- Mine County landfills to recover additional waste disposal capacity, soil, and recyclable materials
- Adopt policies against new landfill construction in Miami-Dade County
- Close one or more existing landfills (North Dade)
- Construct a bio-reactor landfill (South Dade landfill)

COLLECTION AND TRANSPORT – TRANSFER STATIONS:

- Reduce operating hours at transfer stations
- Redesign transfer stations to allow for more efficient operations (e.g., material separation, compactor elimination, tipping floor expansion)

***THESE POTENTIAL ALTERNATIVES ARE OUTLINED AS PART OF THE SCENARIO SELECTED BY THE MIAMI-DADE COUNTY SOLID WASTE ADVISORY COMMITTEE DEVELOPED IN 2014.**

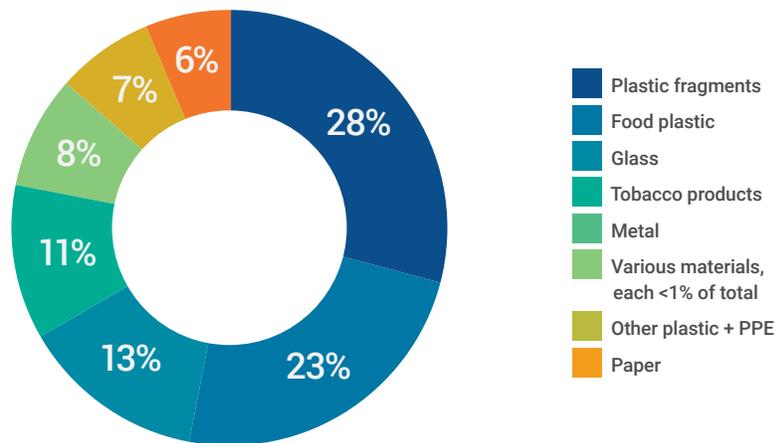
What We Discovered: LEAKAGE

IT'S THE LITTLE THINGS THAT ADD UP

What waste ends up in the environment? How and why is it getting there?

In total, 10,122 litter items were recorded by the CAP in May 2021 in sample areas across all five commission districts in Miami. The highest litter densities were found in the lowest population count areas. It is likely the city cleans high population and high visibility areas more regularly. Below is the material breakdown of all litter tracked.

Types of Litter



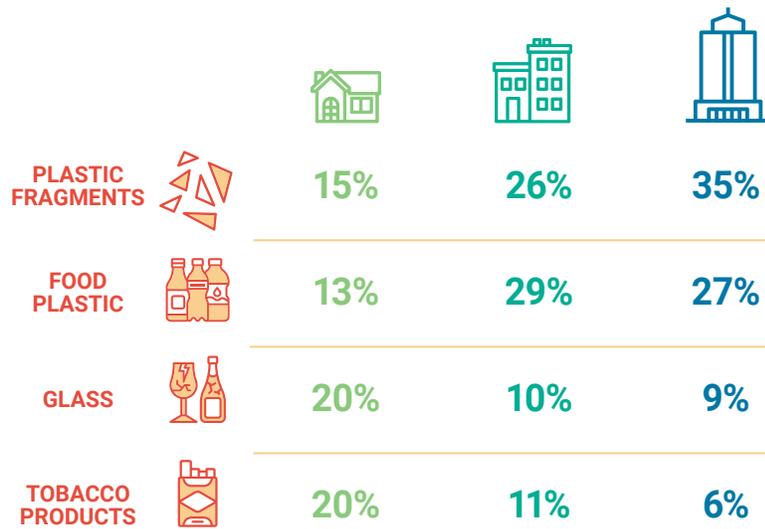
Plastic fragments, food wrappers, and tobacco products are the top items contributing to urban litter in Miami. The largest percentage of litter everywhere was plastic fragments. 55% of the litter items documented were common plastic items. High, middle, and low population density areas had different proportions of the types of litter found.

The two areas with the highest average litter density were along the Miami River and on one of the Biscayne Bay islands, Pace Picnic Island, which is important to note for environmental health. It is notable that at least two and up to four of the top five litter items in each area were plastic fragments. These items are particularly difficult to capture and manage. High levels of plastic fragments and the prevalence of litter originating from other locations within the Miami area suggest that an integrated, cross-city, and cross-sector effort is needed to reduce litter at the source.

Given the diverse nature of Miami and its districts, it is critical to analyze data at the neighborhood level and understand hyper-local contexts, behaviors, and barriers that may contribute to the situation. For example, District 2 largely comprises the low population count areas along the coastlines and spoil islands where there are high influxes of tourists, which corresponds to the high litter density and high amount of plastic fragments that may have been in the environment for a longer time or transported from elsewhere.

The pathways for litter don't just traverse rivers and canals but also stormwater infrastructure. There are concerns from the Biscayne Bay Health Coalition (BBHC) and residents about storm drains polluting Biscayne Bay. Miami-Dade County has over 95,000 stormwater inlets, catch basins, and grates. It is estimated that over 16 million pounds of debris enter those inlets every year. Storm drains also act as pathways for problematic items beyond plastic, such as pesticides and leaf litter, that cause chemical disturbances in the Bay. A major fish kill in Biscayne Bay in August 2020 could be partially traced back to water quality issues (City of Miami 2020). An Eco-Vault filter system added to the Department of Public Works' storm drain pump station in downtown Miami has reportedly removed over 5,000 tons of trash to date.

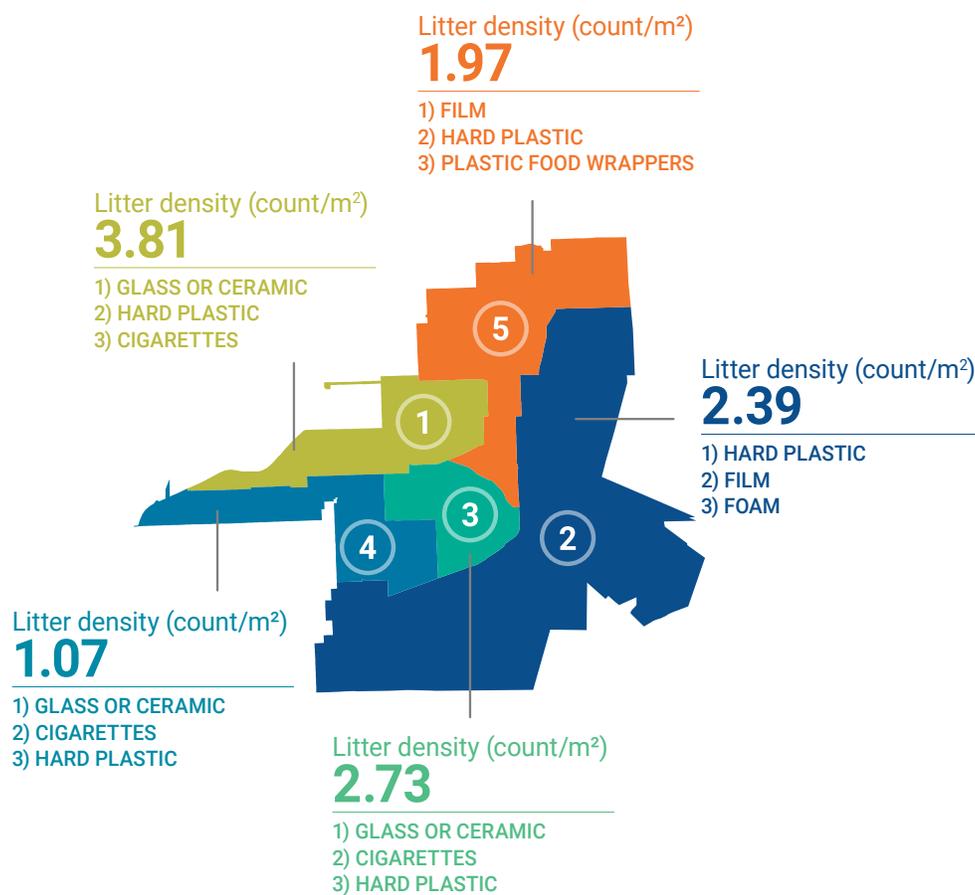
Litter Found Across Single-Family, Multi-Family, and Mixed-Use Neighborhoods



As of September 1, 2021, an initiative to improve storm drains launched, with 1,000 filters – 200 for each district – scheduled to be installed (Aguirre 2021). With this initiative come exciting opportunities for outreach to ensure that people know about the investment and the infrastructure and what they can do to support it. This will maximize their effectiveness and establish among the general public the connection between street litter and Biscayne Bay health.

The culture of cleanups should be normalized in inland neighborhoods to increase awareness and reach a broader audience. Debris Free Oceans, a local cleanup organization and International Coastal Cleanup partner, tracked litter collected on Virginia Key. Their litter characterization was similar to what was documented by Circularity Informatics Lab, particularly the abundance of plastic fragments.

Litter Found per City of Miami Commission Districts



While upstream interventions are critical to reduce mismanaged waste in Miami, it is important to note the challenges associated with the litter currently in the environment. The large proportion of plastic fragments presents a problem for cleanup efforts and preventative interventions such as storm drain filters. Large floatable items are likely to be filtered out through the updated storm drain pump system or filter project, but this must be accompanied with regular maintenance and increased public awareness. There may also be value in supporting inland and community cleanups, in addition to beach cleanups, so that local residents can more strongly make the connection between the litter in their own neighborhood and the health of the environment and city.

How Litter and Trash Affect Our Ocean and Waterways



What's Next: COLLABORATION IS KEY

Together with the City of Miami, Ocean Conservancy will work with community organizations and residents across Miami to increase education, build advocacy opportunities, and engage elected officials. Ocean Conservancy is working with residents of different commission districts to create an action guide that will narrow down recommendations and actions from the CAP report that communities can take now and establish goals to work toward in the coming months and years.

TO LEARN MORE ABOUT CURRENT COLLABORATIONS AND NEXT STEPS, PLEASE VISIT:

<https://oceanconservancy.org/MiamiCAP>