

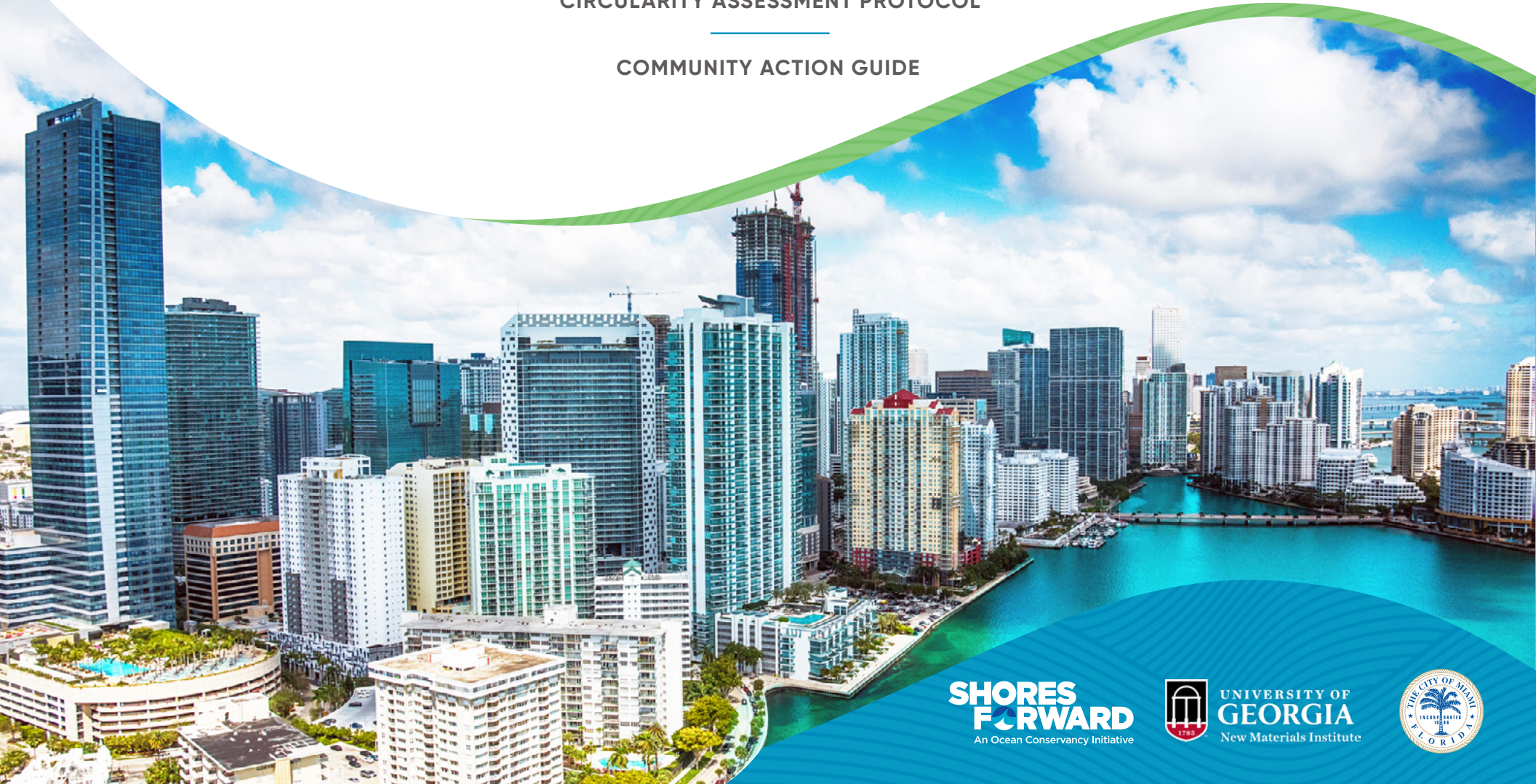


Ocean Conservancy

Changing Our Connection to **PLASTICS IN MIAMI**

CIRCULARITY ASSESSMENT PROTOCOL

COMMUNITY ACTION GUIDE



**SHORES
FORWARD**
An Ocean Conservancy Initiative



UNIVERSITY OF
GEORGIA
New Materials Institute



Working toward 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 communities that depend on it. To understand waste management and the potential 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 report provided data that helped us understand Miami's waste and pollution issues in order to strengthen waste management infrastructure and promote the transition to a circular economy.

As a follow-up to the CAP's release, Ocean Conservancy partnered with local organizations to create a resident working group that took a deep dive into the CAP's data and recommendations. The resident working group was recruited across all five of Miami's districts utilizing communications in three different languages to promote diversity and inclusion.

The working group's final members consisted of multilingual individuals, speaking more than three languages, representing four of the five city commission districts. All written working group communications were provided in both English and Spanish and each meeting was professionally translated in real time.

Throughout the five meetings, facilitated by Miami-Dade County's Sea Grant Extension Agent, the group participated in a rigorous process of combing through the lessons of the CAP and its recommendations to prioritize and strategize their implementation.



Ocean Conservancy is the nation's oldest marine conservation non-profit, working across the country and globe to tackle the greatest threats facing our ocean today. In Florida, Ocean Conservancy has been protecting our natural environment for 30 years and creating state-level change through local investments and partnerships with municipalities for the past four years. Ocean Conservancy partners with local governments through the Shores Forward initiative, launching the first partnership with the City of Miami in 2019.

In addition to Shores Forward partnerships, Ocean Conservancy works in Tallahassee to advocate for stronger protections for our coastal habitats and has been organizing cleanups through our International Coastal Cleanup for decades. The Miami CAP creates a pathway to reduce marine debris in an important watershed in Florida, Biscayne Bay, and move the City of Miami closer to a circular economy.



Using this guide to implement the lessons of the CAP

In the pages ahead, you will find the CAP recommendations your resident working group voted to be **highest priority**, along with suggested strategies for successful implementation. They are sorted into three categories: **social actions**, **government actions** and **civic actions**. Below each recommendation, you will find the following graphics, representing: **cost**, **timeline** and **collaborators**.

Cost:



\$5,000 OR LESS



\$5,001 - \$20,000



\$20,000 +

Timeline:



LESS THAN
2 YEARS



2 - 5
YEARS



5 + YEARS

Collaborators:

Local groups that are
important to involve



Social Actions



Residents
can make a
change!

Government Actions



Government
leaders can
use their
power to help
the ocean!

Civic Actions



Together,
residents and
government
officials can
have a big
impact!



Social Actions

Increase education via public school curriculum and outreach to the general public.

- Miami-Dade County School Board could propose a mandated subject inclusion on environmental sustainability and the Florida Department of Education could include it in core curriculum in schools. This should build on the existing work of smaller NGOs that have been working with schools and teachers directly. Mandated curriculum should be realistic and intersectional so it can speak to many needs and realities.
- Use existing wide-reaching channels, such as City social media accounts, email newsletters and public library communications to distribute more sustainability-related education content. Engage influential City partners in sharing and interacting with this content.



\$5,001 - \$20,000



2 - 5
YEARS



COLLABORATORS

- Dream in Green
- Students
- School officials
- Local influencers
- Businesses

Target information towards boaters and tourists.

- Education campaigns for boaters could be made prevalent at marinas and the same for tourists at the airport.
- Working with vendors and operators of water vessels could also target both boaters and tourists.



\$5,000 OR LESS



2 – 5
YEARS



COLLABORATORS

- Chamber of Commerce
- MIA airport
- GMCVB (Greater Miami Convention & Visitors' Bureau)
- Miami Dade County Office of Resilience
- Biscayne Bay Water Management Advisory Board
- Biscayne Bay Marine Health Coalition
- Miami-Dade County Department of Environmental Resources Management
- Marinas and boaters associations
- Respected journalists
- Businesses
- Advertising agencies in the city

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

- To incentivize more youth-led cleanups, Miami-Dade County Schools can host contests and partner with local cleanup organizations to educate participants and their families, both on the issues of pollution and on how to host their own local cleanups.



\$5,000 OR LESS



LESS THAN
2 YEARS



COLLABORATORS

- Baynanza
- Ocean Conservancy's International Coastal Cleanup
- Local cleanup organizations
- School board members
- Teachers
- Students





Government Actions

Require extended producer responsibility and alternative delivery systems, particularly for the most problematic plastic items.

- It is crucial for local government to work with the corporations who sell and/or distribute everyday items in plastic packaging in our city to reduce these sources of problematic litter.
- Immediate opportunities for improvement may be found in the city vendor contracts that control what products are sold on City of Miami properties.
- Coordinate with other local governments to multiply impact by sharing best practices on improving producer responsibility.



No cost



2 – 5
YEARS



COLLABORATORS

- Local government
- Corporations who sell/
distribute plastic products

Prioritize implementation of the new storm drain filter system, as well as regular maintenance and community outreach.

- The new storm drain filter system is an excellent intervention for marine debris as it catches pollutants before they enter storm drains that lead to Biscayne Bay. Neighborhoods that face regular flooding should be prioritized and all filters must be cleaned regularly.
- As the City expands its drain filter system, it should also educate residents to reduce trash build up near storm drains.



\$20,000 +



5 + YEARS



COLLABORATORS

- Elected officials
- Law enforcement





Civic Actions

Invest in outreach — particularly to lower income and immigrant communities — to enhance the sense of community pride for City of Miami residents.

- The goal of outreach should be to share information, tools and opportunities to act.
- Prior to outreach, assumptions about communities thought of as lower-income or immigrant should be grounded in facts. Social factors such as cultural assimilation for immigrants and job opportunities for lower-income residents should be considered.
- Working in communities adjacent to rivers could help immediately reduce environmental impact.
- Use existing wide-reaching channels, such as locally respected social media accounts, organizations, email newsletters, broadcast media and faith-based organizations, to distribute sustainability-related education content. Engage influential City partners in sharing and interacting with this content.



\$5,001 - \$20,000



2 – 5
YEARS



COLLABORATORS

- Organizations already doing work in these communities
- Relevant city commissioners
- Staff that are linguistically competent and have cultural awareness of these communities

Increase staff in Waste Management and Recycling departments in order to work with community leaders on messaging and actions tailored to specific neighborhoods.

- Before outreach to local community leaders, city and county staff should be trained to effectively communicate and work with different communities, mindful of their cultural nuances and linguistic needs.
- Reducing household waste should be the first and most emphasized method to increase sustainability.
- Proper recycling practices should be tailored to contamination rates and composition for each neighborhood.
- Neighborhoods with high population density and near rivers and Biscayne Bay should be prioritized to address environmental impact. A community of practice should be established to relay crucial information and best practices across communities.



\$20,000 +



2 – 5
YEARS



COLLABORATORS

- City and county staff
- Community leaders
- Waste haulers



Additional opportunities identified by the CAP

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



Social Opportunities

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

- 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

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



Government Opportunities

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 small private businesses. City leadership should work with private businesses' to increase 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.

- 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

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



Civic Opportunities

- 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
- 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 already advancing many of the recommendations from the CAP.

- Ocean Conservancy and local partners Debris Free Oceans and Big Blue and You created “Plastic Free Cities” to empower high school students and work with local businesses to reduce their use of single-use plastics. The focus is on cities adjacent to Miami-Dade County’s ecologically and economically important Miami River. Plastic Free Cities is working in five municipalities: 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 mindful 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.
- These are opportunities for both the community and local government to take action, whether separately or together.



What's next:

Collaboration is key. Together with the City of Miami, Ocean Conservancy continues to work with community organizations and residents across Miami to increase education, create advocacy opportunities and engage elected officials. To advance the recommendations prioritized by the CAP working group, work is being coordinated across the three categories of social actions, government actions and civic actions to create a swell of support and progress towards a sustainable and circular economy in Miami.

To stay engaged and support Ocean Conservancy's Florida Conservation work,
PLEASE SCAN THIS QR CODE:



To learn more about the Miami CAP, its progress and read the full report,
PLEASE VISIT: <https://oceanconservancy.org/MiamiCAP>

Acknowledgments

Ocean Conservancy thanks **University of Georgia's Circularity Informatics Lab**, **Ascendance Sustainability Group**, **Debris Free Oceans**, **Healthy Little Havana**, **Florida Sea Grant** 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.



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