

# MIAMIBEACH

City of Miami Beach, 1700 Convention Center Drive, Miami Beach, Florida 33139, [www.miamibeachfl.gov](http://www.miamibeachfl.gov)

## **Sustainability Committee**

Margarita Kruff, Chair – Appointed by Mayor Dan Gelber

Michael DeFilippi, Vice-Chair – Appointed by Commissioner Kristen Rosen Gonzalez

Maria Algarra, Member – Appointed by Commissioner Alex J. Fernandez

Johann Moore – Appointed by Commissioner Laura Dominguez

Sophie Ringel – Appointed by Vice Mayor Ricky Arriola

Isaiah Mosley – Appointed by Commissioner Steven Meiner

Katie Luddy – Appointed by Commissioner David Richardson

Juanita Ballesteros, City Liaison

**DATE:** September 28, 2023

**SUBJECT:** Meeting of the Sustainability Committee

A meeting of the Sustainability Committee was scheduled for September 28, 2023, at 1:00 pm. The meeting was held through Zoom.

**Attendees were as follows:** Margarita Kruff, Maria Algarra, Johann Moore, Sophie Ringel, Isaiah Mosley, Michael DeFilippi, Katie Luddy

**City Staff:** Juanita Ballesteros, Sustainability and Resilience Manager; Alyssia Berthoumieux, Senior Sustainability Specialist; Rolando Martinez, Sustainability Specialist; Ander Alvarez, Urban Forester; Cristina Ortega, City Engineer; Teresa Kaimrajh, Planning and Design Manager

Members of the public were also in attendance.

## **1. Committee Responsibilities**

- a. **Introductions** – City staff and Committee members introduced themselves.
- b. **Resolution 2022-32050** - A resolution of the Mayor and City Commission of the City of Miami Beach, Florida, reaffirming the policy direction adopted in resolution no. 2020-31474 to allow the city's advisory boards and committees to continue to meet virtually.
- c. **Review of the July 27, 2023 minutes** – **MOTION:** Motion to approve the July 27, 2023, meeting minutes. Motion by Michael DeFilippi, seconded by Margarita Kruff. Motion passed 7-0.

## **2. Sustainability Committee Work Plan**

### **a. New business**

- i. **G.O. Bond Reforestation Initiative** – Ander Alvarez, Urban Forester, presented on the G.O. Bond Reforestation Initiative and reviewed where the City is currently at, what can be done and how the projects are planned. Mr. Alvarez highlighted that the G.O. Bond has funded over 1,500 canopy trees to date, intending to add between 3,500 and 5,000 trees. Mr. Alvarez presented a heat map showing the location of G.O. Bond Reforestation projects. Mr. Alvarez also discussed the North Beach pilot program and the challenges of planting trees in dense, urban environments. Margarita Kruff, Chair, inquired if there were any resolutions or long-term plans referencing how trees fit within the urban environment, that could be supported by the Sustainability Committee. Mr. Alvarez highlighted a few issues with Planning and Zoning that could be addressed, such as how properties are sometimes unable to plant a tree due to limitations on space and end up paying into the tree trust fund. He further elaborated on the possibility of changing the planning and zoning language to make spaces, such as pools, not count as

permeable spaces. Johann Moore, member, asked if trees not at ground level count and if the City can incentivize trees not at ground level. Mr. Alvarez highlighted that any trees that are not planted at ground level do not count for tree permits, but the City can explore the possibility of counting them. The Committee continued to discuss trees on Miami Beach.

- ii. **Suspended Pavement Systems** – Mr. Alvarez presented on suspended pavement systems, providing an overview on what they are, how they are used, benefits of using them and why the system works. Mr. Alvarez highlighted a 9-year Bartlett Tree study which concluded that the trees using the suspended pavements grew larger compared to trees not placed in a suspended pavement. Mr. Alvarez further mentioned that as great as suspended pavements are, the issue with them is cost. In a recent estimate by the Capital Improvement Projects Department, the cost to plant 24, 18-foot-tall trees in suspended pavement systems would estimate around \$1.6 million or around \$67,000 per tree. The Committee continued to discuss suspended pavement systems.
- iii. **Injection Wells** – Cristina Ortega, City Engineer, presented on injection wells and provided the Committee with an overview of the City's flood mitigation and water quality treatment approach for stormwater. Ms. Ortega spoke on how the City has been discussing new generation stormwater treatment systems that incorporate injection wells to capture the first flush of contaminants, among other water treatment mechanisms. Ms. Ortega highlighted that City consultants calculated that the new systems could capture approximately 80% of the average total annual runoff. Ms. Ortega continued to show the Committee the "next generation" of stormwater treatment systems, which include a membrane filtration water quality treatment device. Ms. Ortega explained that the filters provide a high surface area to effectively remove fine sand and silt-sized particles as well as chemicals like nitrogen, phosphorus, metals and hydrocarbons. The consultants concluded that the City could obtain very high levels of runoff treatment on an annual average basis. Teresa Kaimrajh, Planning and Design Manager, clarified that over 90% of the water can be treated and that some storms will be able to treat 100% while other storms may have diminishing returns. Mr. Moore inquired if injection wells remain in the upper aquifer rather than the lower connected aquifer. Ms. Ortega confirmed that these wells are relatively shallow but also clarified that the potable drinking water is further west of Miami Beach and that it's not something Miami Beach would affect at this point. Isaiah Mosley, member, inquired about the depth considered for the injection wells. Ms. Ortega mentioned they are in the 100-foot range. Ms. Ortega further mentioned that the membrane filtration system is currently being piloted by the county and the City is hopeful to see favorable results in 2024.
- iv. **Vulnerability Assessment** – Juanita Ballesteros, Sustainability and Resilience Manager, presented on the 2024 Vulnerability Assessment being conducted by the City which will identify and analyze the impact of compound flooding and sea level rise on local communities. The assessment will specifically look at City and community assets such as transportation networks and evacuation routes, critical infrastructure and facilities, emergency facilities, and natural, cultural and historical resources. The process focuses on community engagement, hoping to understand better how the community perceives and experiences risk, how the community thinks about priorities and what is important to different neighborhoods. Eight small virtual focus groups were held this summer and future in-person pop-up events have been scheduled throughout Miami Beach. The Committee continued to discuss the vulnerability assessment.

# MIAMIBEACH

City of Miami Beach, 1700 Convention Center Drive, Miami Beach, Florida 33139, [www.miamibeachfl.gov](http://www.miamibeachfl.gov)

v. **G.O. Bond** – No updates.

### 3. **Public Comment and Announcements**

Mr. Moore announced that he had heard from Amy Knowles, Chief Resilience Officer, in response to questions on the Back Bay project. Ms. Ballesteros reiterated that the response received from the county was on the Coastal Atlantic Alignment, which is the collection of gates. The in-depth analysis is not a part of this plan, but there will be a broad look, which has been requested to be approved.

Ms. Ballesteros updated the Committee that while there is no current recommendation by any commissioner for a balloon ban, but the Environment and Sustainability Department can launch an educational campaign to alert the community of state regulations and the detrimental effects on the environment. The Committee continued to discuss balloon bans.

Mr. Moore requested Rachel Silverstein be invited to discuss the Port of Miami dredging and the impact on coral reefs.

Sophie Ringel, member, highlighted that the same places she has previously reported about their use of plastic straws are continuing to use plastic straws.