



CITY OF FORT LAUDERDALE

**MEETING MINUTES  
CITY OF FORT LAUDERDALE  
SUSTAINABILITY ADVISORY BOARD**

Tower 101, Suite 1100

101 NE 3rd Avenue, Fort Lauderdale, FL 33301

June 23, 2025 – 6:00 PM

<b>Cumulative Attendance</b>					
<b>1/2025 through 12/2025</b>					
	<b>Members</b>	<b>Appt by</b>	<b>Attendance</b>	<b>Present</b>	<b>Absent</b>
1	Robert Daoust, Vice Chair	II	P	3	2
2	Kelly Charles	IV	P	5	0
3	David Blattner, Chair (via Zoom)	I	P	5	0
4	Suzee Bailey (arr. 6:07)	C	P	4	1
5	Spencer Lasday	IV	P	3	1
6	Vacant	III	-	-	-
7	Nicole Barnett	M	P	5	0
8	Sarah Rahmankhah	IV	P	2	0
9	Vacant	M	-	-	-
10	Vacant	III	-	-	-
11	Vacant	II	-	-	-
12	Parker Jacobson-Bertanzetti, Non-Voting Youth Chair	C	A	3	2

\*attending via Zoom

**Staff Present**

Glen Hadwen, Sustainability Manager

Dr. Nancy Gassman, Deputy Director of Public Works/Chief Resilience Officer – Sustainability (via Zoom)

Mallory Jones, Sustainability Administrator

Talula Thibault, Sustainability Analyst

Marco Aguilera, Code Compliance (via Zoom)

Melissa Doyle, Program Manager, Solid Waste and Recycling (via Zoom)

K. Cruitt, Recording Clerk, Prototype, Inc.

**Also Present**

Dr. Keith Van der Riet (via Zoom)

Jay Georges

**I. Call to Order/Roll Call**

The meeting was called to order at 6:04 p.m. Roll was called and it was noted a quorum was present.

**Motion** made by Ms. Barnett, seconded by Ms. Charles, to approve Chair Blattner to participate virtually. In a voice vote, the **motion** passed unanimously.

## II. Approval of Minutes

### I. May 19, 2025

**Motion** made by Ms. Charles, seconded by Vice Chair Daoust, to approve. In a voice vote, the **motion** passed unanimously.

## III. Liaison Report

The following Item was taken out of order on the Agenda.

- Low Impact Development: Next Steps

Ms. Jones reported that she had reached out to City Floodplain Manager Mark Hagerty at the Development Services Department. Mr. Hagerty will meet with members of Urban Design and Planning, Zoning, and Engineering Staff to discuss low-impact development strategies. In addition, a consultant will advise Staff on recommended low-impact development strategies necessary to improve the City's Community Rating System (CRS) rating. As a result of these actions, the City Commission may be asked to consider adopting policy or language on this topic into the Unified Land Development Regulations (ULDR). Staff will keep the Sustainability Advisory Board (SAB) abreast of these ongoing efforts.

Ms. Bailey arrived at 6:07 p.m.

- New Sustainability Analyst -- Outreach

Talula Thibault, Sustainability Analyst, introduced herself to the Board members. She will serve as Liaison for the SAB and will work on different community outreach events as well.

- Fleet Electrification Communication

Mr. Hadwen recalled that the Board previously sent a communication to the City Commission asking them to adopt a policy converting the City's fleet to all electric vehicles for light duty, non-emergency vehicles by 2035. This communication was presented to the City Commission at their June 17, 2025 meeting.

- Net Zero Plan

Mr. Hadwen continued that the fleet electrification communication to the City Commission was also related to the presentation on the City's Net Zero Plan also given

at the June 17 meeting. He encouraged the Board members to watch the video available of the presentation and discussion.

The Commission agreed to the following components of the Net Zero Plan:

- Adoption of the full Net Zero Plan by Resolution
- Adoption of policy supporting an electric (light duty, non-emergency) fleet by 2035
- Developing a Community Energy Plan beginning in fiscal year (FY) 2027
  - Expanding of Circuit shuttle service in FY 2027
  - Provision of funding for solar infrastructure on City facilities over the next five years

Mr. Hadwen advised that funding may be subject to change in the future.

Ms. Bailey asked if all the items in the Net Zero Plan were included in a prioritized list for funding. Dr. Gassman reviewed the City's budget process, explaining that each Department submits a list of the projects they would like to see included in the Capital Improvement Plan (CIP). CIP projects must exceed \$100,000 and include the installation of items that will last at least five to ten years. Approved CIP projects are distributed over the five-year time frame of the CIP based on the funding expected in each year.

Dr. Gassman continued that operational projects with less funding which do not qualify for inclusion in the CIP are requested as part of decision packages. They are vetted through individual Departments which prioritize the operational projects and requests and submit them to the City Manager's Office. That office shares these requests with the City's Budget Advisory Board (BAB), which is the only City advisory body which provides comment on the budget and its priorities.

Dr. Gassman recalled that when the Net Zero Plan was considered, the City Commission had asked if the Plan and its components had been considered as part of the budget process. Staff had previously submitted a decision package related to the solar component which requested \$100,000/year to advance solar power on City properties. The Commission is aware of the SAB's interest in moving this component forward.

Ms. Barnett asked if the Commission had voted to adopt any of the specific items included in the Board's communication. Dr. Gassman explained that communications to the Commission are typically presented at Conference Agenda meetings. Votes are not taken at these meetings, although the Commission may reach consensus and provide direction to Staff. They may also take communications under advisement and apply them to action items brought before them at regular meetings.

Dr. Gassman added that because the Board's communication was followed by a presentation on the Net Zero Plan, the Commission was able to connect that communication to Staff's recommendation to approve the Plan, including the development of a fleet replacement policy.

Mr. Hadwen further clarified that Staff is working on a Resolution in support of the Net Zero Plan which will be brought to the Commission after they return from their summer recess. They will vote on adoption of the Plan at that time.

- Electric Vehicle Charging Infrastructure

Mr. Hadwen noted that there are new electric vehicle (EV) charging stations in City parking lots and other City facilities, including the City Hall parking garage.

#### **IV. Presentations**

- Mangrove Reef Walls: Biometric Living Seawalls, Dr. Keith Van der Riet, AIA Founder, Mangrove Reef Walls, LLC

Dr. Keith Van der Riet, founder of Mangrove Reef Walls, LLC, gave a PowerPoint presentation on living seawall designs. The company has installed a number of prototypes on both Florida coasts.

Fort Lauderdale, like all coastal communities, faces challenges related to changing shorelines, which can be hardened using seawalls, riprap, and other infrastructure. He emphasized the importance of tidal ecosystems to the regenerative capacity of the environment, often through coastal construction and dredging activities.

Over the last 50 to 75 years, most seawalls have been constructed using concrete and are now failing. These structures restrict the ability to plant living shorelines and promote invasive species by failing to provide a habitat for native species. There is also typically a great deal of erosion along concrete seawalls due to wave energy.

The goal of living seawalls is to entice nature to inhabit seawalls. Mangroves provide an interface to encourage nature to take up residence on the structures where it is desired. Dr. Van der Riet characterized the project as biomimicry, as it emulates mangroves and the marine life that grows on them, including oysters, barnacles, and other species that grow on roots.

Different structures are used to address different seawall environments. For concrete walls, integrally cast concrete mangrove roots and retrofitted panels can be used. Concrete panels are limited in the amount of structure that can adhere to them and how much complexity can be created. Three-dimensional panels can also provide more flexibility to attract fish and other swimming marine life behind the panels as well as in front of them. These panels double the surface area available to marine life.

Dr. Van der Riet showed examples of previous installations of living seawalls, some of which have been in use for nearly 10 years. The panels use low-carbon-footprint concrete, which is very durable, and blended oyster shells to attract other oysters.

These temper the pH balance of the concrete to make it more hospitable to marine organisms.

Mangrove Reef Walls continues to develop additional types of panels and casting techniques, as well as completing aquarium and lab studies to determine how different creatures use the panels. Other products under development include free-standing structures that would lean on seawalls, mangrove planters suspended from the seawall, and a full structural concrete wall that includes a mangrove pattern.

Monitoring of the panels over the years has shown that they attract organisms including algae, barnacles, oysters, stone crabs, and transient marine life including fish. Dr. Van der Riet pointed out that the earth is facing a potential sixth mass extinction with species being lost at an unprecedented rate. He strongly emphasized the importance of making the built environment more sustainable.

Chair Blattner asked about red tides and living seawalls. Dr. Van der Riet advised that this can depend upon the severity of the event, as severe red tides can result in tremendous loss of marine life through both death and flight from the affected area. He noted that it is difficult to recover from red tides due to limited filtration capacity. Oysters can play a role in the retention of seawalls by growing across panels.

Chair Blattner asked if mangrove reefs can affect entire canals as well as the specific locations in which they are placed. Dr. Van der Riet replied that thousands of oysters can significantly filter the water in canals, improving its quality over time. Results are particular to each waterway and reef.

Ms. Charles asked how the integrity of existing older seawalls can be determined if mangrove reefs or additional panels are placed in front of them. Dr. Van der Riet explained that visibility can depend on how panels are installed. If the panels are anchored using industry-standard mechanical fasteners, they can be removed and/or reinstalled. The method of attachment depends upon the material to which the panels are attached.

Mr. Lasday asked if the simulated root systems are large enough to accommodate a kayak. Dr. Van der Riet confirmed that this is theoretically possible. He also addressed mitigation, stating that the panels can be used toward certification standards to establish specific habitats.

Ms. Rahmankhah asked if it would be possible to replace a failing seawall with mangroves. Dr. Van der Riet explained that this would depend upon site conditions, including tides. The distance to which seawalls or panels may extend into the waterway is limited by the waterway's navigational channel.

Ms. Rahmankhah also requested more information about the materials from which the panels are made, asking if it is possible to use natural materials. Dr. Van der Riet replied that natural materials degrade over time due to weathering, wood-boring insects or

worms, and other conditions. The long-term intent is to use materials that will hold their shapes, particularly in the case of three-dimensional panels.

#### **V. New Business**

None.

#### **VI. Old Business**

- Sustainability Advisory Committee Coalition  
June 10<sup>th</sup> Meeting Updates

It was clarified that no SAB member had attended the June 10, 2025 Sustainability Advisory Committee Coalition meeting.

Chair Blattner recalled that the Board had not yet made a decision regarding whether or not to observe a summer recess. It was noted that the City Commission will take a recess following their second June meeting and will not return until August 17, 2025.

**Motion** made by Vice Chair Daoust, seconded by Ms. Charles, to cancel the SAB July meeting. In a voice vote, the **motion** passed unanimously.

#### **VII. Proposed Communication**

None.

#### **VIII. Comments**

Ms. Jones noted the following upcoming events:

- July 26, 2025: Broward Community Climate Conversation
- December 16-17, 2025: 17<sup>th</sup> Annual Southeast Florida Climate Leadership Summit

Ms. Barnett noted that Broward County will discuss its Net Zero Plan at the Climate Conversation event.

#### **IX. Items for Next Meeting**

Mr. Hadwen requested clarification of whether or not the Sustainability Committee Advisory Coalition will meet in July, and if so, who would attend. He explained that due to the requirements of the Sunshine Law, only one Board member is permitted to attend in addition to the Staff Liaison.

#### **X. Adjournment**

There being no further business to come before the Committee at this time, the meeting

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was adjourned at 7:24 p.m.

Any written public comments made 48 hours prior to the meeting regarding items discussed during the proceedings have been attached hereto.

[Minutes prepared by K. McGuire, Prototype, Inc.]