

**Draft**  
**CITY OF FORT LAUDERDALE**  
**SUSTAINABILITY ADVISORY BOARD**  
**CITY HALL CONFERENCE ROOM**  
**100 NORTH ANDREWS AVENUE – 8<sup>th</sup> FLOOR**  
**FORT LAUDERDALE, FLORIDA 33301**  
**October 28, 2019 - 6:15 PM**

<b>Cumulative Attendance</b>					
<b>1/2019 through 12/2019</b>					
	<b>Members</b>	<b>Appt By</b>	<b>Attendance</b>	<b>Present</b>	<b>Absent</b>
<b>1</b>	Jason Liechty, Chair	IV	P	9	1
<b>2</b>	Lawrence Clark, Vice Chair	I	P	10	0
<b>3</b>	Carol Tamburry	III	P	9	1
<b>4</b>	Carolann Mazza	III	P	8	2
<b>5</b>	Cushla Talbut	II	P	7	3
<b>6</b>	Douglas Meade	I	P	6	4
<b>7</b>	Elizabeth Adler	M	P	9	1
<b>8</b>	Enrique Vadiveloo	IV	P	8	2
<b>9</b>	Muge Nurgun	II	P	8	2
<b>10</b>	Owen Cylke	C	P	9	1
<b>11</b>	Susan Wood	M	P	9	1

**Staff Present**

Public Works Department

Nancy J. Gassman, Ph.D., Assistant Director of Public Works – Sustainability

Todd Hiteshew, Environmental Compliance Manager

Melissa Doyle, Program Manager – Solid Waste and Recycling

Kimberly Pearson, Sustainability Coordinator

Carina Flores, Green Your Routine Coordinator

Aneisha Nicholas, Staff Liaison

Guests

Jeff Dorian, Citizens' Climate Lobby

Jason Miller, Resident

Rafael Santoni, Tesla Owners South Florida

Vaughn English, Citizens' Climate Lobby

### **Call to Order/Roll Call**

The meeting was called to order by Chair Liechty at 6:16 p.m. The roll was called and a quorum was present. Mr. Cylke and Ms. Nurgun arrived at 6:20 pm.

### **Communication to the City Commission**

The Sustainability Advisory Board (SAB) provides the following Communication to the City Commission:

*Mayor Trantalis requested that the Sustainability Advisory Board ("SAB") research and review potential regulation of sunscreens containing oxybenzone and octinoxate, due to the deleterious effects of these chemicals on our fragile coral reef system.*

*The SAB received in-depth presentations from experts, John E. Fauth, Ph.D., a biologist and Professor at the University of Central Florida, and Kenneth Banks, Ph.D., P.E., from Broward County's Environmental Planning and Community Resilience Division. In addition to these presentations, the SAB independently researched and debated this issue over several months. **For all of the reasons outlined below, the SAB strongly recommends to the City Commission that it consider and approve a ban on the sale and distribution of sunscreens containing oxybenzone and octinoxate within the City of Fort Lauderdale.***

*By way of background, the coral reefs located within Broward County's 24 miles of coastline are part of the Florida Reef Tract. This coral reef system is the third-largest barrier reef ecosystem in the world and the only living coral reef system in the continental United States.*

*Coral reefs are vitally important, yet remain one of the most threatened ecosystems in the world. Although they only occupy 1% of the world's marine environment, they are the foundation for the creation of marine habitat and provide a home for a variety of sea life.*

*In addition to their biological importance, the Florida Reef Tract is an essential component of Florida's, and Broward County's, economy. It is estimated that the Florida Reef Tract supports more than 70,000 jobs in South Florida and \$6.3 billion in annual revenue for South Florida. A study from June 2000 to May 2001 concluded that reef-related expenditures generated \$2.1 billion in annual revenue for Broward County alone. The Florida Reef Tract is also Florida's first line of defense against hurricanes and other storm waves, protecting coastlines from beach erosion and storm surge, as well as protecting upland infrastructure (such as buildings and roads).*

The Florida Reef Tract is being ravaged by a disease outbreak that is decimating the coral at an alarming rate; the exact cause of this disease is still unknown. The scale and mortality of the reef system impacted is unprecedented, and affects the entire Florida Reef Tract. According to a 2018 guide issued by the Florida Department of Environmental Protection, nearly half of Florida's 45 reef-building coral species have been affected (including 5 species listed as endangered under the Endangered Species Act). Once a coral becomes infected, mortality of that coral occurs quickly (sometimes within weeks). For instance, the oldest and largest known coral in Broward County recently died; it began its life in 1694, making it more than 300 years old, growing up to 15 feet in length and 9 feet high.

Based upon the information SAB received from experts, compounding the disease's impact on the reef are the additional stressors that stem from its proximity to urban areas, such as poor water quality, dredging, fertilizer runoff, and chemical sunscreen (particularly those containing oxybenzone and octinoxate, two common sunscreen ingredients).

These stressors cause coral bleaching, which is a process by which the corals lose their nutrients and turn white.

Chemical sunscreen containing oxybenzone and octinoxate is particularly damaging to the coral, because these chemicals have a synergistic effect on the coral that accelerates the bleaching. Oxybenzone is highly toxic to juvenile corals and other marine life. Not only does this chemical cause coral bleaching, it is both a genotoxin which damages the coral's DNA, and a skeletal endocrine disrupter, causing coral larvae to encase themselves in their own skeleton, preventing growth. Further, oxybenzone is phototoxic, meaning its effects are exacerbated in sunlight – which is a particular problem as it relates to coral.

Chemical sunscreens containing oxybenzone and octinoxate also have notable negative impacts on human health. These chemical compounds are particularly problematic, as they are quickly absorbed into the bloodstream upon application. The US Food & Drug Administration (FDA) conducted a study this year and determined that oxybenzone is absorbed into one's bloodstream in as little as two hours from application. As noted above, oxybenzone is an endocrine disruptor, and its impacts are applicable not only to coral, but also to humans. In scientific trials studying oxybenzone, it has been found that exposure to the chemical can cause significant decreases in male testosterone levels. Further, studies have shown a significant association between a pregnant mother's exposure to oxybenzone and altered birth rates, decreased head circumferences, and other birth defects. Sunscreens are considered over the counter drugs, and are therefore regulated by the FDA. Of the 16 currently-

*marketed active sunscreen ingredients, only zinc oxide and titanium dioxide are Generally Recognized As Safe and Effective (GRASE) by the FDA, and sunscreens containing these two GRASE ingredients are readily available.*

*The SAB's proposal for the ban on chemical sunscreens containing oxybenzone and octinoxate is not a novel concept. Numerous jurisdictions around the globe have adopted bans, including:*

- *Key West, Florida*
- *State of Hawaii*
- *U.S. Virgin Islands*
- *Aruba*
- *Bonaire*
- *Mexico's Riviera Maya, including Cancun, Playa del Carmen, Cozumel, Xcaret and Xel Ha*
- *Palau*
- *The Association of Southeast Asian Nations (ten countries, 650 million people) requires warning labels on any products containing more than 0.5% oxybenzone*

*While a ban on the use of chemical sunscreens containing oxybenzone and octinoxate alone, will not instantly cure the threat to the coral, removing these pollutants from the equation will reduce a very significant source of pressure on Florida's fragile coral reef system.*

*Some companies have begun phasing out the use of these chemicals in their sunscreens, notably CVS and its house brands. The City can encourage the spread and acceleration of these efforts by adopting a ban on oxybenzone and octinoxate.*

*We therefore respectfully urge the City Commission to direct staff to develop an ordinance banning the sale and distribution of sunscreens containing oxybenzone and octinoxate within the City, and to approve the ordinance.*

### **Motion**

Motion made by Vice Chair Clark, seconded by Mr. Meade to advance the above Communication to the City Commission. The motion passed unanimously.