

City of Delray Beach Office of Sustainability



Sustainability and Resilience Initiatives

Ana Puszkin-Chevlin, Ph.D. Sustainability Officer September 11th, 2018 City Commission Workshop

Agenda Overview

- 1. 2017/18 Progress by the numbers
- 2. Priorities of Green Implementation Advisory Board (GIAB)
- 3. Rising Waters Task Force Update (RWTF)
- 4. Advancing the Textile Recycling Program
- 5. Advancing the Plastic Straw Ordinance
- 6. Direction on Green Building Ordinance
- 7. Questions and Response

2017/18 Office of Sustainability & GIAB ROI

- 1,009 trees with a lifetime ecosystem value of \$1 million were planted by Community Greening with support of Sustainability & Parks & Recreation Department
- 51 Property Assessed Clean Energy (PACE) projects funded in Delray Beach totaling \$944,500
- 5 New Electric Vehicle Charges (3 replaced and 2 new at City Hall)
- Tree Canopy Analysis Started July 2018
- Greenhouse Gas Inventory (GHG Inventory) Started August 2018
- 13 GIAB meetings with a quorum; reviewed 15 development projects
- 7 Public Outreach events reaching nearly 700 residents
 - King Tide, Earth Day, Daylight Hour, Eco-Double Feature (Beach Property Owners Association BPOA), Skip the Straw Campaign, Kiwanis Club, Sharon Club
 - Carver Middle School Sustainability Collaboration (new 2018)







Green Implementation Advancement Board (GIAB) Directives & City Commission Direction Needed

Greener City

- 1. Eliminate Styrofoam and single use plastic from City operations
- 2. Create an internal 'Green Team'
- 3. Increase zero-emission fleet
- 4. Develop a social media channel to publicize sustainability initiatives & information
- 5. Install solar array on City property
- 6. Schedule annual report to the Commission in early 2019

Greener Community

- 1. Promote solar installation on private development
- 2. Create a coral reef safe sunscreen campaign
- 3. Address the post-recycling era
- 4. Advocate for green businesses (designation and recruitment)
- 5. Support additional sustainability education for youth & community
- 6. Expand 'alternative' transportation options

Rising Waters Task Force Update

Goal 1. Proactive & Process Driven

- Sustainability Officer moved to City Manager's Office (1A)
- Community Vulnerability Assessment is included in 2018-19 CIP Budget Request (1B)
- South Florida Water Management District met with staff about saltwater intrusion risk (1B)
- Seawall Analysis Underway (1C)

Goal 2. Plan Comprehensively

- New Coastal Element and Conservation, Sustainability and Resilience Element (2A)
- Florida Building Code added 12+" to BFE (2D)
- Storm Water Master Plan examines storage issue (2D)
- Greenhouse Gas Inventory is underway

Goal 3. Allocate Resources

- Submitted Community Rating System audit waiting results. Approximately \$2,600 in saving for the city to reinvest (3A)
- Veteran's Park Seawall (3B)

Rising Waters Task Force Update

Goal 4. Leverage Insurance

- Eco-double Feature event (4A)
- King Tide 2018 speaker (4B)
- Business Continuity Planning Workshops (4B)

Goal 5. Educate the Public

- King Tide Event 2017 & 2018 and Climate Art Weekend in 2019 (5A)
- Resilient Delray Website featuring infrastructure projects (5A)
- GIAB meets with developers and have reviewed 15 projects this year (5E)

Goal 6. Harness Economic Development

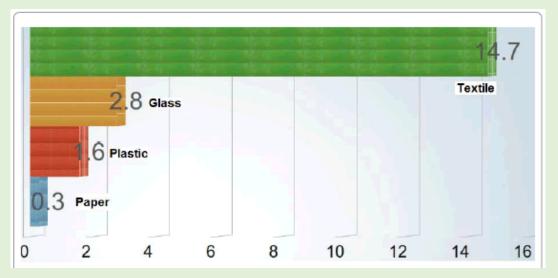
- Professional Outreach --Shore and Beach Conference; Urban Sustainability Directors Network
 in Denver; SF Regional Climate Compact; The Seawall Coalition(6A)
- Press Coastal Star and Palm Beach Post featured the King Tide Event and the Straw Campaign (6B)

Textile Recycling Program

PROBLEM STATEMENT

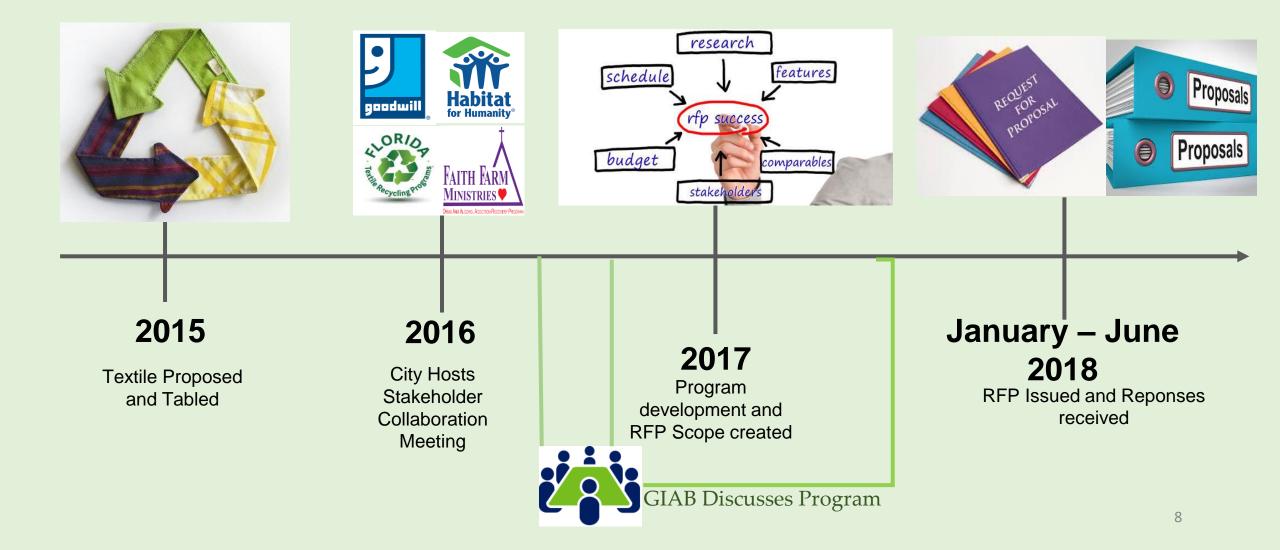
- The average American discards 70 lb of clothing annually, less that 15% of that is recycled
- Thrift store donation is less convenient
 - Destination trip
 - Limited hours
- Thrift stores don't accept all textiles types

Tons of GHG Prevented by Reuse or Recycling



Source: Jo. Of Textile Science and Engineering https://www.omicsonline.org/open-access/environmental-sustainabilitythrough-textile-recycling-2165-8064.S2-007.php?aid=26508

Textile Recycling Program History



Textile Recycling Program

Recommended Program

- 10 custom-wrapped bins only at specific city facilities - Bins will not proliferate throughout city.
- Municipal property locations allow staff to monitor cleanliness.
- City will be paid a minimum of \$10,000 annually, a total of \$50,000 over 5 years.
- Revenue could be slighter higher as the vendor may pay \$0.10 per pound for collection at events.

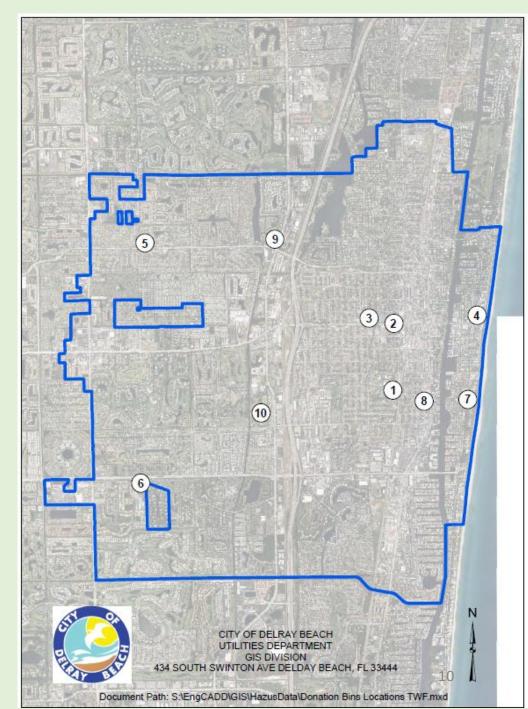




Textile Recycling Bin Proposed Locations

Locations were determined as part of stakeholder outreach process in 2016/2017. Locations were intentionally limited for monitoring purposes.

- 1) Swinton Operational Complex
- 2) City Hall Parking
- 3) Fire Stations #111
- 4) Fire Station #112
- 5) Fire Station #114
- 6) Fire Station #115
- 7) Ocean Rescue Parking lot
- 8) 505 Teen Center
- 9) Family Recreational Playground
- 10) Lakeview Golf Club



'Skip the Straw Delray '

Problem Statement

- Plastic straws are non-recyclable plastics and a threat to marine life and birds.
- Approximately 500,000,000 straws are used daily in the US, most for less than 20 minutes.



Precedent & Drive

- Straw elimination campaigns have gained national momentum.
- Nine cities, including Ft. Meyers Beach, Miami Beach and Marco Island in FL, have adopted <u>ordinances</u> limiting or prohibiting plastic straws.
 - Hallendale could be next; second reading in December 2018
- Major Corporations have joined this campaign: American Airlines, Disney, Starbucks, McDonald's.

'Skip the Straw Delray'

In May 2018, GIAB passed a resolution requesting the City Commission adopt a two-phase straw ban <u>ordinance</u>.

- Ordinance would initially limit distribution of plastic straws to patrons that specifically request them. 'On Request Only'.
- 2. After 18 months, plastic straws would be prohibited. Only reusable or compostable straws would be permitted.



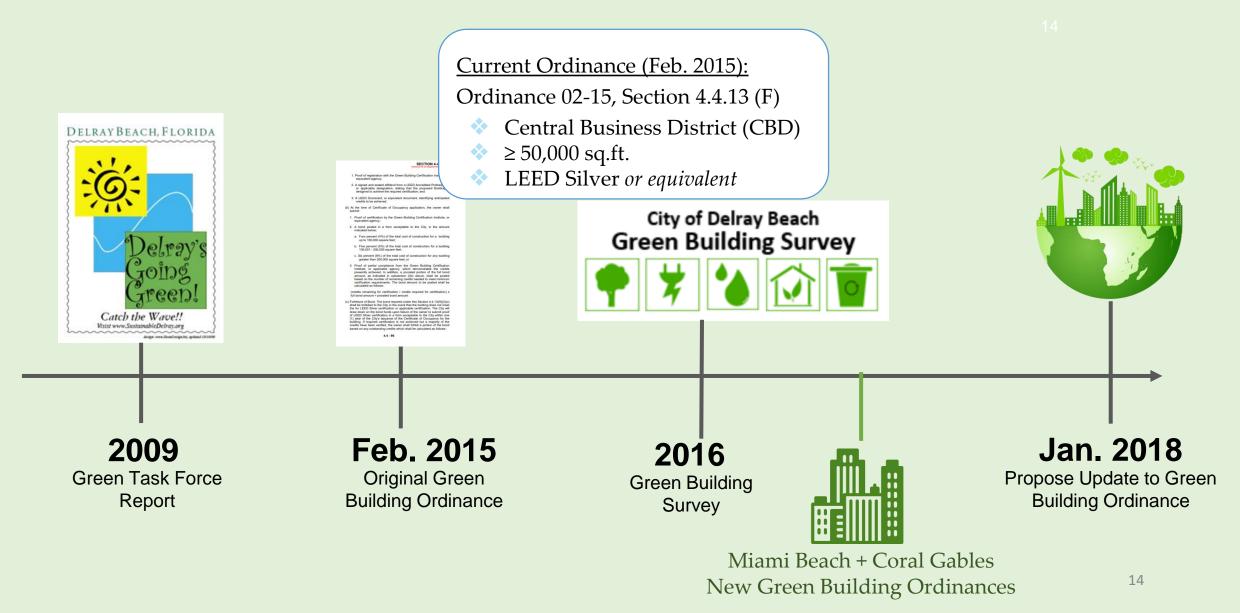
'Skip the Straw Delray' Recommendation

Staff supports active education and outreach programming with partner organizations

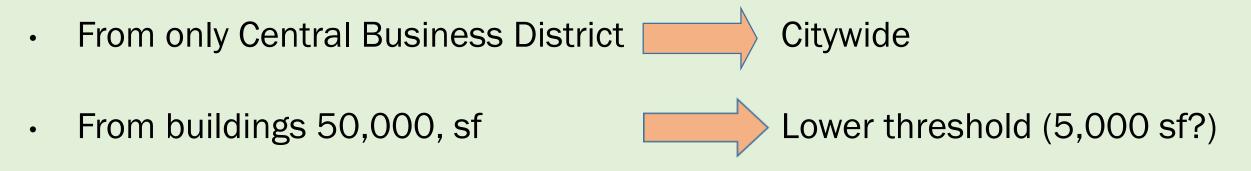
Staff supports GIAB's two-phased Ordinance

- Allows for consumer preferences to change
- Allows establishments to gradually change to more sustainable alternatives
- Allows the market to create better products in response to growing demand
- Allows for market to increase stock of available alternatives and prices to fall
- Resolution will not force behavioral change

Green Building Ordinance



GIAB's Proposed Change to Green Building Requirement



 A strong, consistent green certification – LEED* Silver (or other Certifications?)





* LEED stands for Leadership in Energy and Environmental Design





Challenges with Updating Green Requirement

Developers Concerns



- Extra weeks or months depending on program
- Communication during process
- Recertification



- Construction cost can be 3%-5% more
- Certification costs \$2,500 to \$15,000
- Florida Building Code is already 'green' no need to pay for certification

Green Building Requirement - Rationale



Environmental Benefits

- 40% of Green House Gases are building related
- Use 25% less energy
- Consume 11% less
 water
- Have 34% lower CO2 emissions



Health Benefits

- † Employee Health
- ↑ Productivity
- "Feel Better Environment"



Cost Premium

- ↓ Operating Costs
- ↓Maintenance Costs
- **† Revenue** (indirectly)

Considerations for Updating Requirement

- Lead by example and require new City buildings to certify.
- Clarify the certifications that are acceptable. They are not equivalent



- Determine applicable geography or building type
- Determine the square footage for applicability
- Decide if incentives and exclusions are needed

Green Building Requirement Staff Recommendation

| City | Geography | Square footage size | Green Building Standard | Incentives |
|---|-----------------------|--|---|---|
| Miami | T5, T6, CI & CS zones | >50,000 | LEED Silver or Equivalent | only outside the zone |
| Maat Dalm Baaab | | | LEED or Equivalant | extra sf, based on |
| West Palm Beach | | | LEED or Equivelent | LEED level |
| Doral | | >25,000 Commercial, all residential | Nationally recognized/ FGBS or Energy Star | none |
| Coral Gables | | >20,000 + smaller requiring considerations | LEED Silver or Equivelent | none |
| Hollywood | , | > 20,000, smaller buildings have mandatory practices | LEED or other program agreed upon with CM | |
| North Miami | | all private must meet North Miami green requiements | LEED Certified, Public & CRA buildings must be LEED Silver | fast tracking, reduced permit fee, city recognition |
| Miami Beach | | > 7,000 | LEED Gold or Living Bld, Challenge | none |
| Staff Recommended Direction (Refinement needed) | | >5,000 private sector >25,000 private sector All City Facilities | National recognized green standard (or Delray specific standard.) LEED Silver or <i>Better</i> >25,000 | LEED Gold or better (sf bonus, roof uses, setback, parking etc) |

City Commission Direction

- Textile Program Can we award the envisioned program of 10-bins at City facilities?
- Skip the Straw- Do you direct staff to write the plastic straw ordinance that applies citywide, has an 18 month period of "upon request", then bans plastic, non-compostable straws?
- Revision Green Building Ordinance Are you supportive of making the Green Building requirement more stringent and apply citywide? Do you direct staff to refine the specification for threshold size and program details?



City of Delray Beach Office of Sustainability



Sustainability and Resilience Initiatives

Ana Puszkin-Chevlin, Ph.D. Sustainability Officer September 11th, 2018 City Commission Workshop