



## Tracking Miami-Dade County's Tree Canopy Getting to the Root of the Issue



**Beautifying  
Our Community**



ENGINEERING  
ENVIRONMENTAL  
ECOLOGICAL

science that works



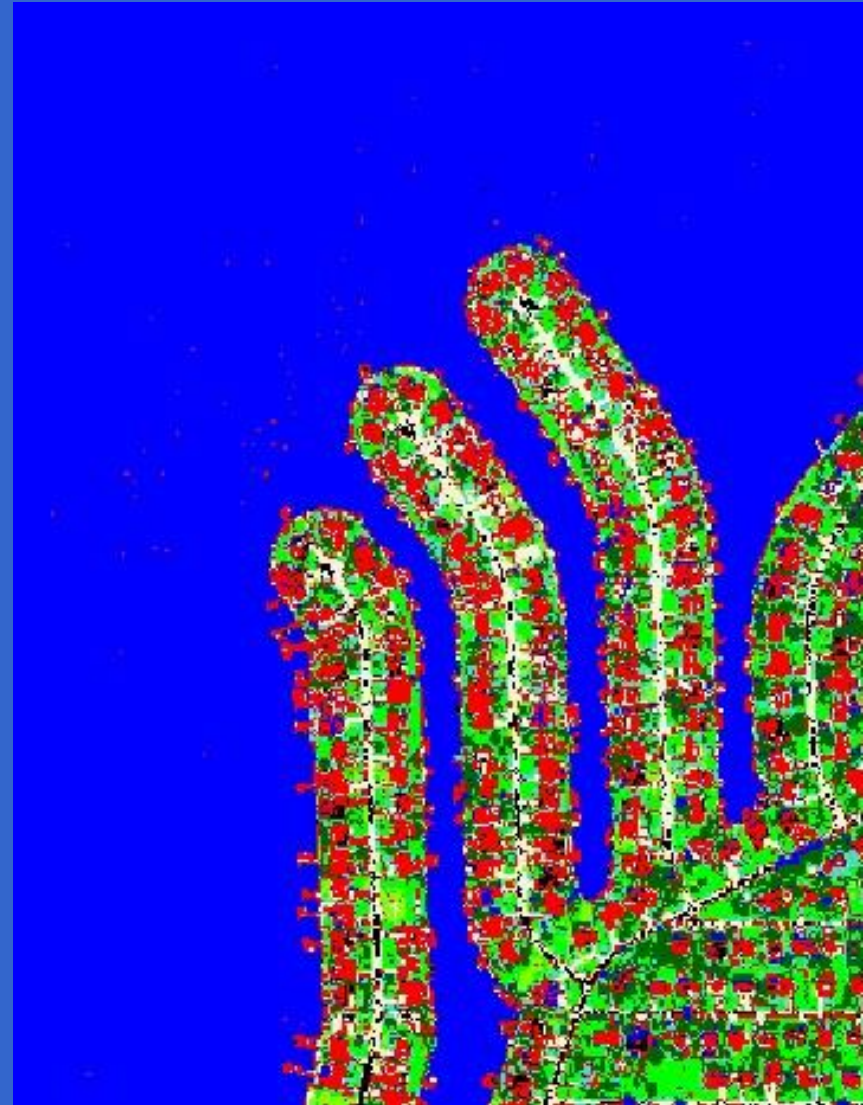
# Tree Inventories

- Assess individual trees
- Usually public space trees
- Roadway rights of way
- Parks
- Municipal properties
- Data can include:
  - Species
  - Size
  - Condition
  - Maintenance needs
  - May also include environmental services



# Canopy Studies

- Assess larger areas
- Public **and** private trees
- Different methods result in different types of data sets. Can be customized to meet needs of study.
- Data may or may not include:
  - Canopy size
  - Other land class sizes
  - Species
  - Size
  - Condition
  - Maintenance needs
  - Environmental services



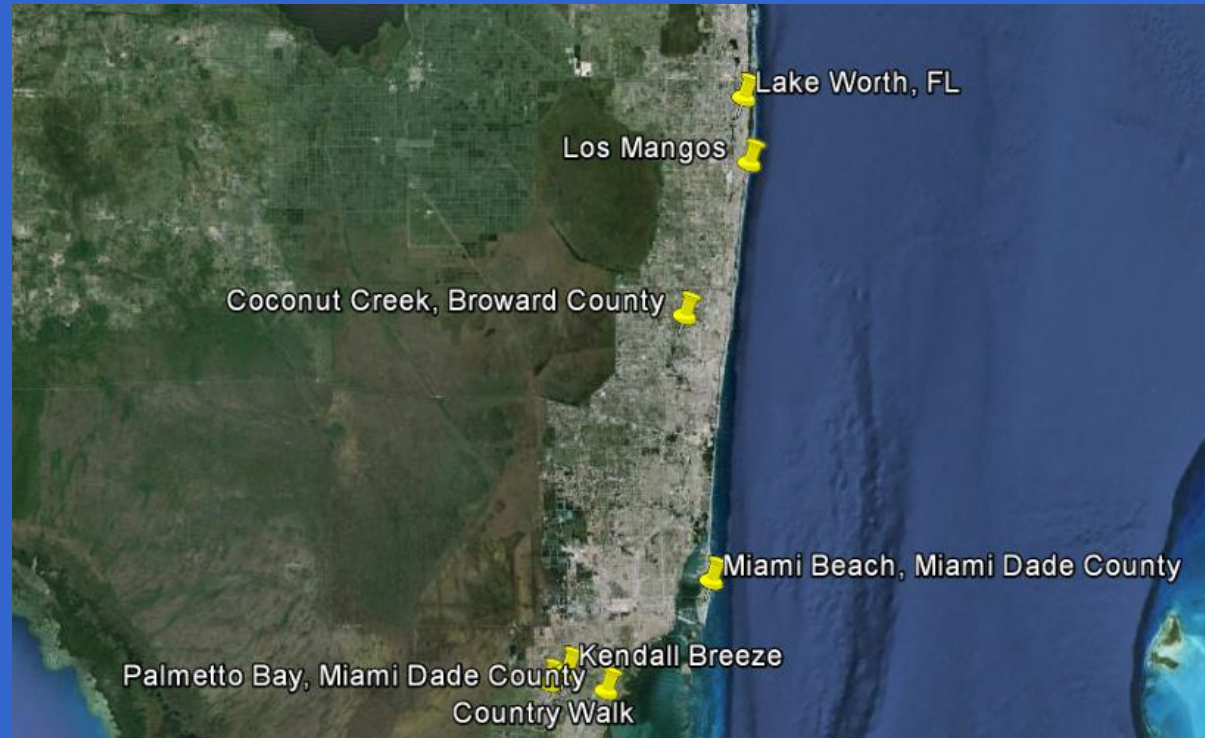
# Tree Inventories in Past 15 Months

## Miami-Dade County:

- Miami Beach
- Palmetto Bay
- Country Walk
- Kendall Breeze

## Other South Florida:

- Coconut Creek
- Lake Worth
- Los Mangos



Total trees...+/- 50,000

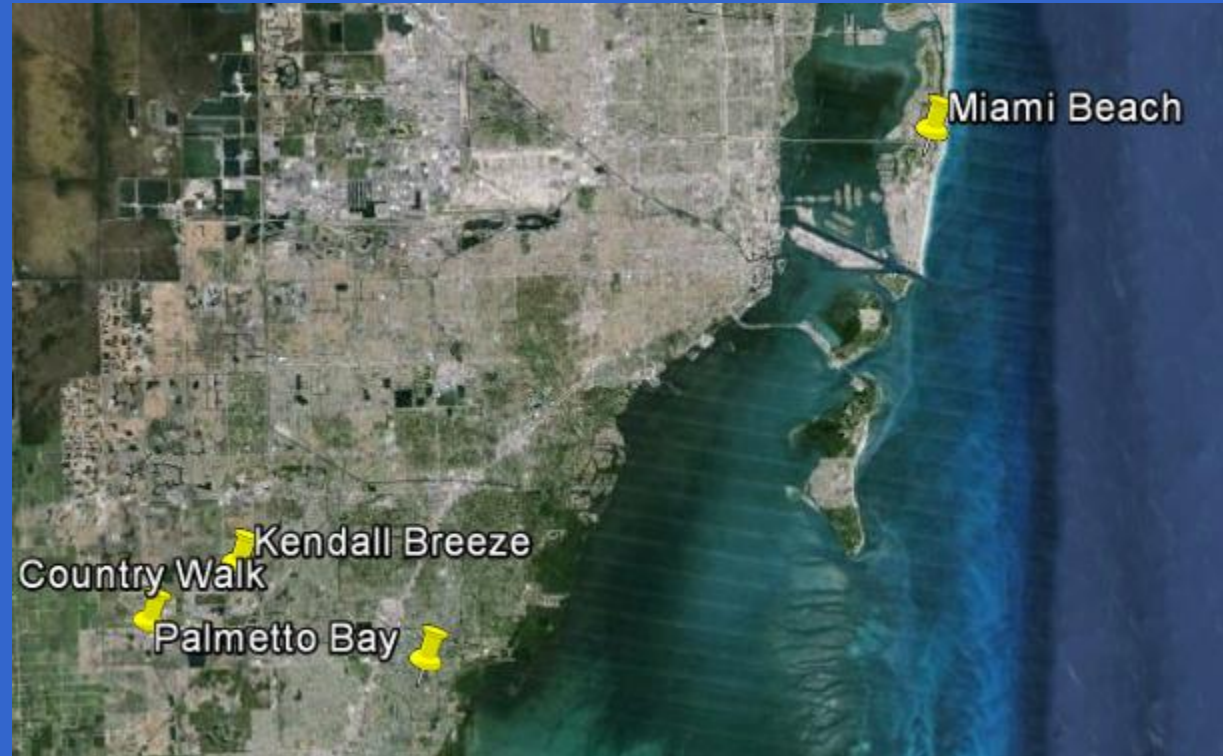
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# What did we learn?

- Diversity is HIGH in Miami-Dade County (182), yet still a few tree species dominate
- Not always the best condition
- Trees are often planted where they shouldn't be (under power lines, in small spaces).



# Recent Canopy Studies

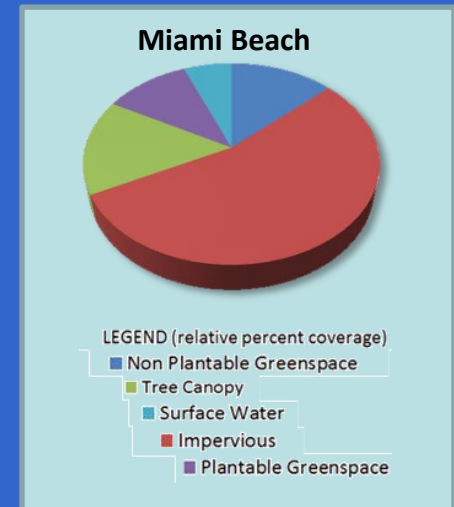
## Miami-Dade County

- Miami Beach (i-Tree Canopy)

## Other South Florida

- Lake Worth (i-Tree Canopy)
- Davie (i-Tree Eco)

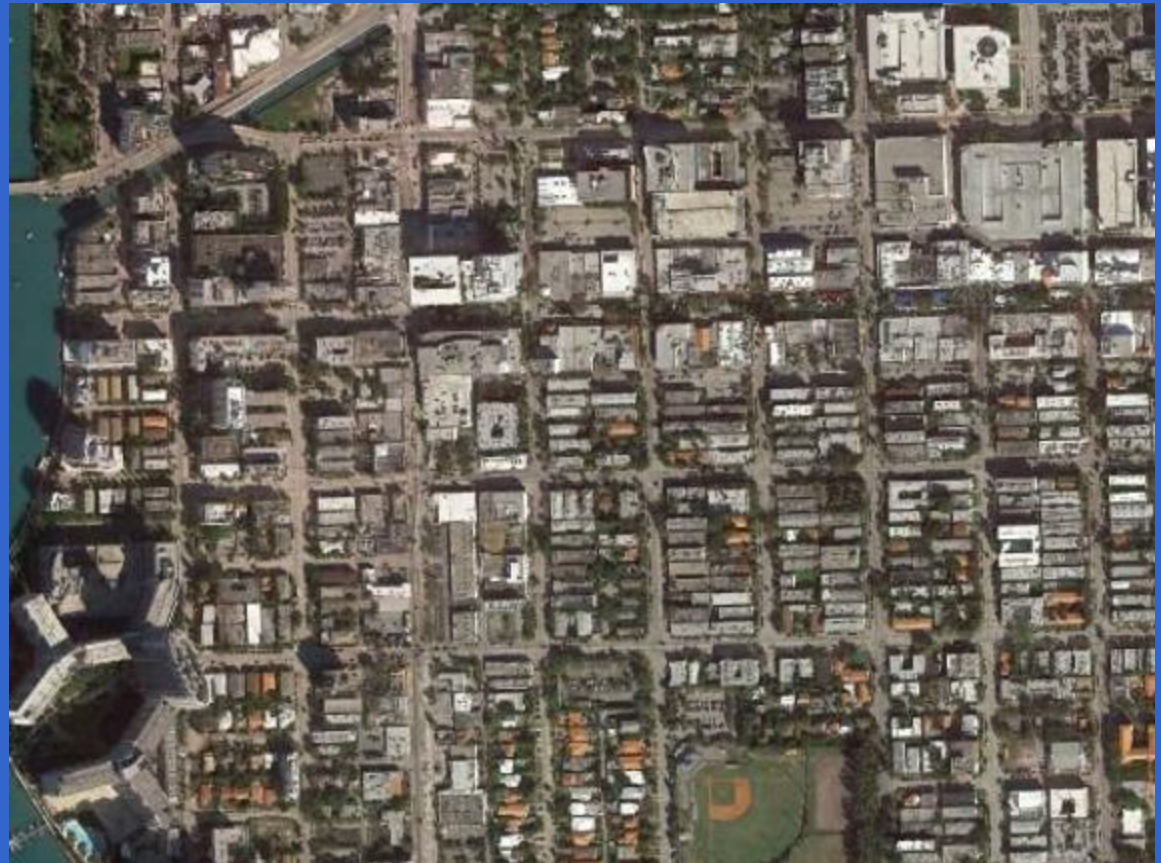
Cover Class	Percent Canopy Coverage/SE		
	Entire City	City Parks	City Properties
Tree Canopy	15.4±1.14	17.0±1.19	16.1±1.16
Plantable Greenspace	10.9±0.99	28.6±1.43	20.7±1.28
Non-Plantable Greenspace	13.2±1.07	30.6±1.46	6.21±0.76
Impervious Surface	54.4±1.58	18.6±1.23	54.1±1.58
Surface Water	6.10±0.76	5.3±0.71	2.9±0.53





# What did we learn?

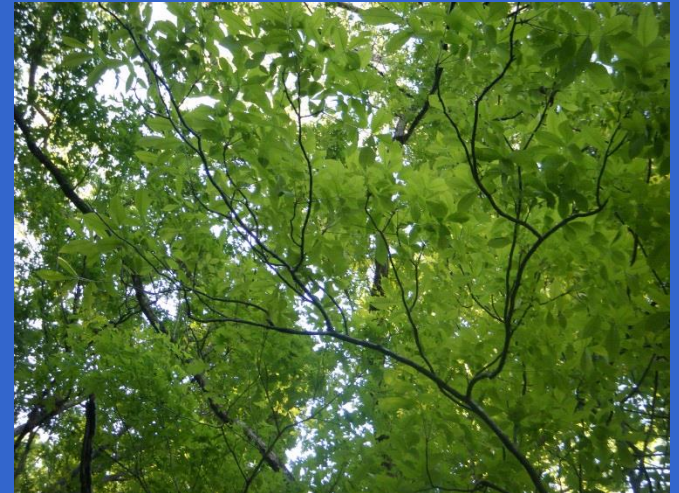
- In some regions, tree canopy has bounced back to pre-hurricane levels
- Some, but not much space is available for planting new trees in public spaces





# What are the goals?

- Maintain existing tree canopy
  - Tree protection codes (and code compliance)
  - Landscape requirements
  - Maintenance and management
- Increase tree canopy coverage
  - Million TREES Miami Campaign - plant 1 million trees by 2020 in order to achieve a 30% tree canopy cover
- Assess and track canopy



# Recommendations

- Coordinate efforts across the County (and region)
  - Tree protection, tree planting
  - Education
  - Work with cities, HOAs, private, state and federal land owners
  - Coordinate canopy assessment activities
- S.O.A.P.
- Add resiliency to tree canopy
  - Address threats of new pests, development, increased flooding (coastal and otherwise), invasive species
  - Add diversity, re-assess tree lists
- Assess role of invasive trees and their replacement in the canopy
- Find ways to get more trees into the urban forest
  - Maximize available public space responsibly (right tree right place)
  - Give trees to residents (Fort Lauderdale)
  - Plant trees in private residential lots (Orlando)
  - Multi-purpose trees (fruit and nut trees)





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