

South Region Transmission Department

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Florida Power and Light



Invasive Species Programs

FPL has historically managed transmission rights of ways such that vegetation species are maintained below 14', with an emphasis on eliminating exotic vegetation. Vegetation with a potential of interfering with the operation of the line(s), such as fuel levels are also taken into consideration. Some of the control methods utilized are herbicide application, mowing and rolling.

Priority Plant Species

- **Priority Plants**

- Melaleuca (*Melaleuca quinquenervia*)
- Australian Pine (*Casuarina spp.*)
- Brazilian Pepper (*Schinus terebinthifolius*)
- Earleaf Acacia (*Acacia auriculiformis*)
- Bishopwood (*Bischofia javanica*)
- Lead tree (*Leucaenea leucocephala*)
- Burma Reed (*Neyraudia reynaudiana*)

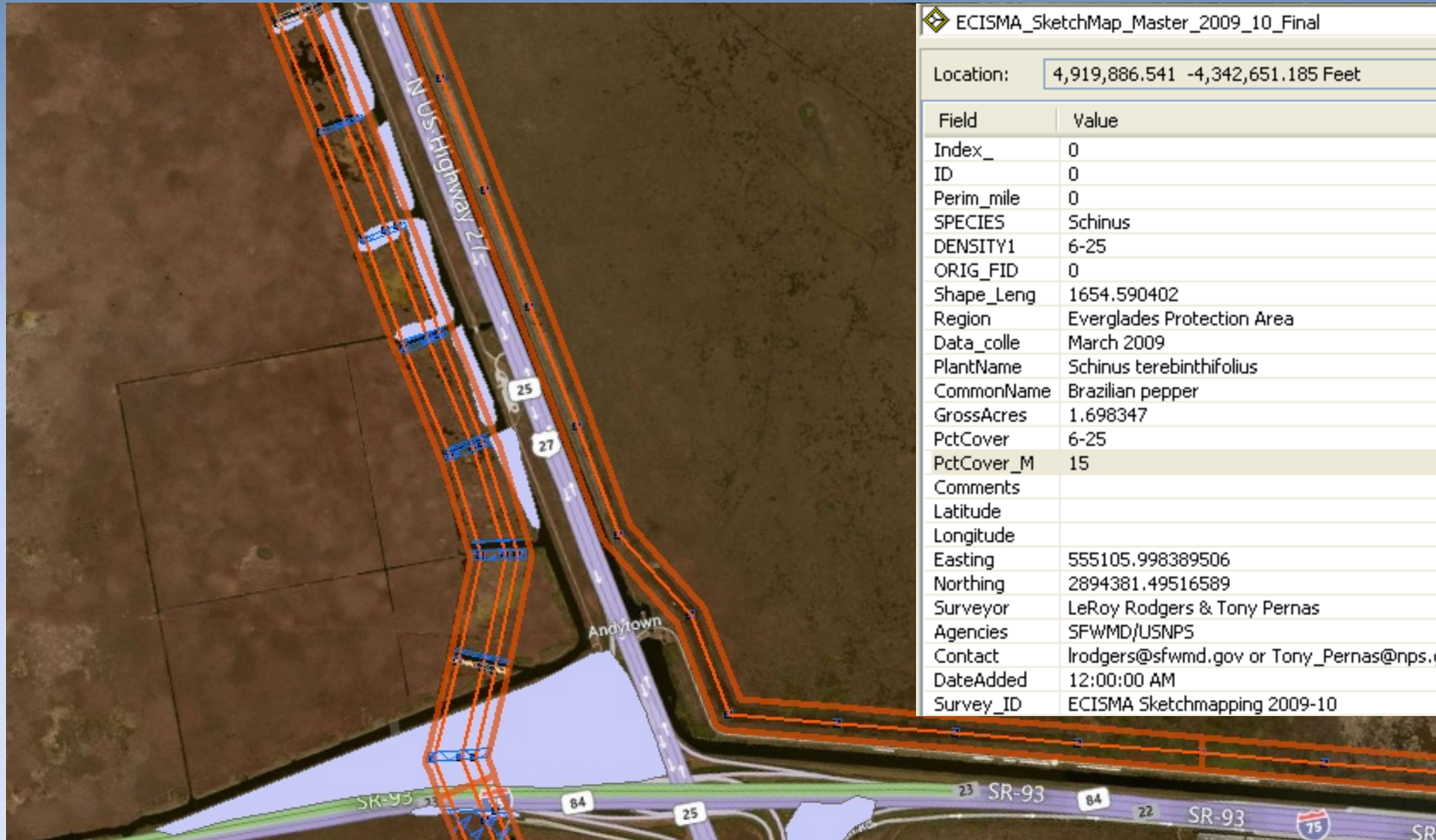
Fiscal Year Treatments (Broward): 2011



- Treatment Area 1
Andytown-Orange River
500 kV ROW
 - Work was planned for 2010 and bumped to 2011. Completed 02/11.
 - Low volume foliar application to Melaleuca, Burma Reed, and Australian Pine, Brazilian Pepper, and Queensland Umbrella for access and reliability on 70 acres of structure pads and spoil areas.

Fiscal Year Treatments (Broward): 2011

- Treatment Area 1



Fiscal Year Treatments (Broward): 2011

- Treatment Area 2



ECISMA_SketchMap_Master_2009_10_Final

Location: 4,963,612.296 -4,316,019.060 Feet

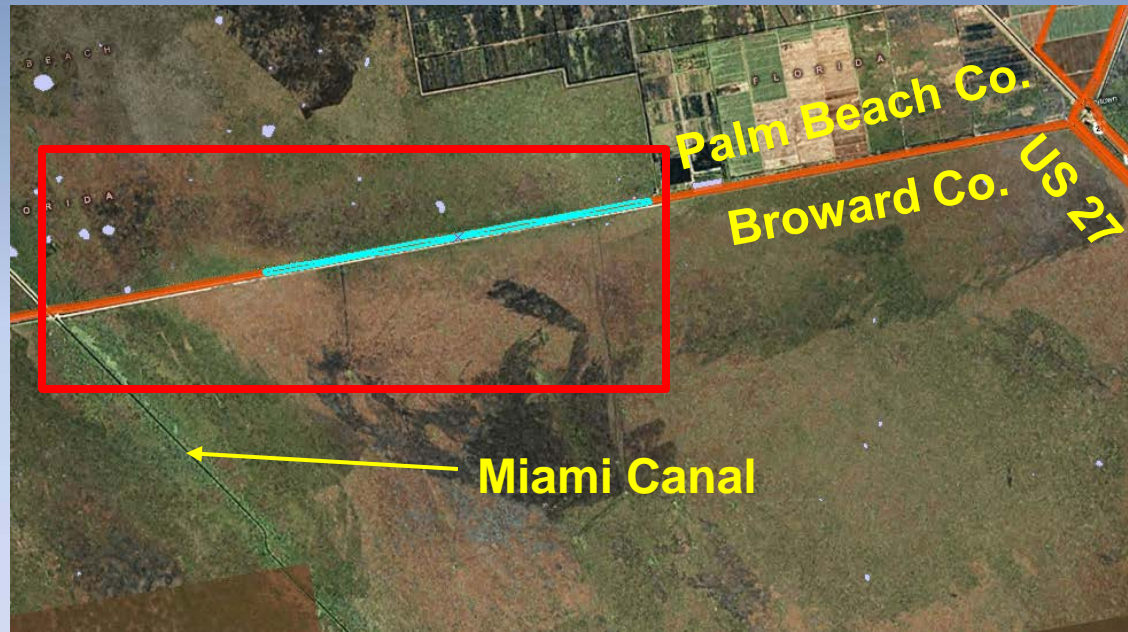
Field	Value
ID	0
Perim_mile	0
SPECIES	Schinus
DENSITY1	6-25
ORIG_FID	0
Shape_Leng	1307.21874
Region	Everglades Protection Area
Data_colle	March 2009
PlantName	Schinus terebinthifolius
CommonName	Brazilian pepper
GrossAcres	2.620006
PctCover	6-25
PctCover_M	15
Comments	
Latitude	
Longitude	
Easting	570154.502170169
Northing	2900216.07685863
Surveyor	LeRoy Rodgers & Tony Pernas
Agencies	SFWMD/USNPS
Contact	lrodgers@sfwmd.gov or Tony_Pernas@nps.g
DateAdded	12:00:00 AM
Survey_ID	ECISMA Sketchmapping 2009-10
TxCode	SCHTER

Fiscal Year Treatments (Broward): 2011

- Treatment Area 3

Andytown-Orange
River 500 kV ROW
Holeyland Mowing
Project

- Mowing of 200 acres of heavy fuel in the row.
- Combination of tracked skid loaders with tree cutters and wheeled machines during dry period.
- Completed June 2011



Fiscal Year Treatments (Broward): 2011



- Treatment Area 4
Andytown-Orange
River 500 kV ROW
Rolling Project
 - Reduction of biomass/fuel created by Sawgrass and Cattails.

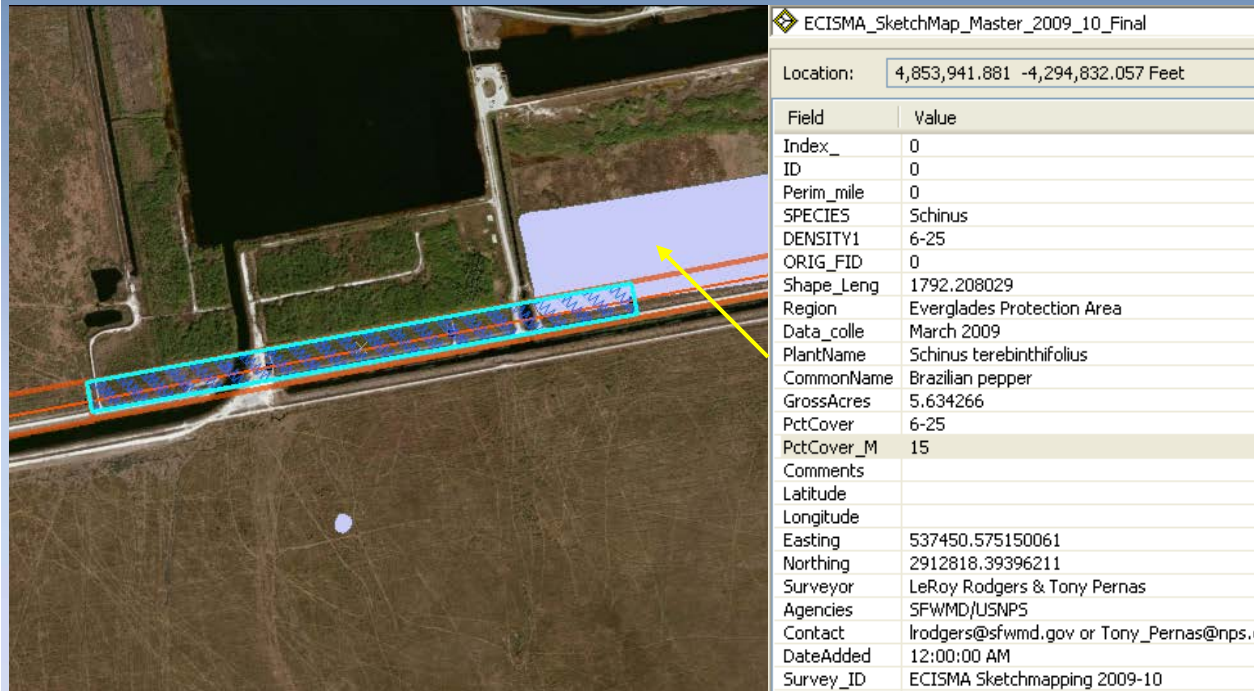
Fiscal Year Treatments (Broward): 2011

- Treatment Area 4
 - Rolling Project



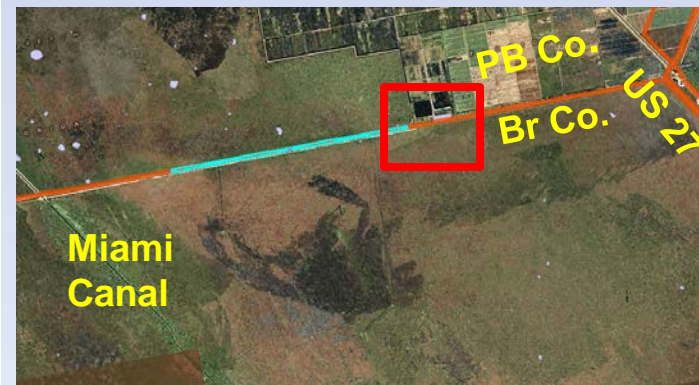
- Work accelerated from 2012
- Planned to begin 09/2011
- Use of large marsh buggies to roll app 1000 acres

Planned Treatments (Broward): 2012



• Treatment Area 1

- Low Volume spot spray to Brazilian Pepper, and spp capable of exceeding 14 feet in height or creating excess fuel. 20 acres
- Date TBD



Planned Treatments (Broward): 2012

• Treatment Area 2

- Low volume application to Brazilian Pepper, Earleaf Acacia, Australian Pine, Melaleuca and Lead Tree from FPL substation to Griffin Rd. 130 acres
- Also minor spot treatment to the north up to Alligator Alley

Location:	4,929,137.862 -4,381,977.864 Feet	
Field	Value	
Index_	0	
ID	0	
Perim_mile	0	
SPECIES	Melaleuca	
DENSITY1	6-25	
ORIG_FID	0	
Shape_Leng	4359.566198	
Region	Everglades Protection Area	
Data_colle		
PlantName	Melaleuca quinquenervia	
CommonName	melaleuca	
GrossAcres	3.748191	
PctCover	6-25	
PctCover_M	15	
Comments		
Latitude		
Longitude		
Easting	555822.85702798	
Northing	2881060.57268586	
Surveyor	LeRoy Rodgers & Tony Pernas	
Agencies	SFWMD/USNPS	
Contact	lrodgers@sfwmd.gov	
DateAdded	12:00:00 AM	
Survey_ID	ECISMA Sketchmapping 2009-10	

Planned Treatments (Dade): 2012

- Treatment Area 3
 - Low volume application to Brazilian Pepper, Earleaf Acacia, Australian Pine, Melaleuca and Lead Tree from FPL substation to at Sheridan St to FPL substation at NW 41st St. 660 acres



Monitoring

- All transmission right-of-ways are inspected two times a year. During these inspections:
 - New threats are identified and work prescriptions and management plans are developed.
 - Previous treatments are inspected and monitored for control.
 - Inspections are done by truck, boat/airboat/marshmaster, or helicopter
 - GIS based data collection

Innovations and Successes

- *Leucaena leucocephala* (Lead Tree) test plots
 - With help from Dupont
 - New blends of herbicide
 - Dupont™ Viewpoint™ and Dupont™ Streamline™
 - Viewpoint
 - Dry Flowable
 - Imazapyr 31.6%, Aminocyclopyrachlor 22.8%, Metsulfuron methyl 7.3%
 - Streamline
 - Dry Flowable
 - Aminocyclopyrachlor 39.5%, Metsulfuron methyl 12.6%

Innovations and Successes

- *Leucaena leucocephala* (Lead Tree) test plots (con't)
 - .64 acre test area in Sunrise, FL
 - Rates per acre
 - Viewpoint (Low and High Rate)
 - 12.5 oz/acre
 - 16.5 Oz/acre
 - Streamline (Low and High Rate)
 - 7.14 oz/acre
 - 9.53 oz/acre
 - Only minor difference in results between rates
 - Streamline low rate
 - So far so good...

Innovations and Successes

Leucaena leucocephala (Lead Tree) test plots

- 1 Week after treatment (5/12/11)



Innovations and Successes

Leucaena leucocephala (Lead Tree) test plots

- 4 Weeks after treatment (6/1/11)



Innovations and Successes

Leucaenea leucocephala (Lead Tree) test plots

- We will continue to monitor, results still look promising.
 - Green cambium slowly residing
- Not yet replicated, but on the way.
- Other invasive, exotics in test area:
 - *Dalbergia sissoo*, Indian Rosewood
 - *Cupaniopsis anacardioides*, Carrotwood

Questions?

Acknowledgements

- Jerry McGukin, Dupont