



# Invasive Plant Operations Overview

2016 Everglades Invasive Species Summit



**EVERGLADES CISMA**

# ECISMA Priority Plant Species

	<i>Melaleuca</i>	<i>Lygodium</i>	<i>Schinus</i>	<i>Casuarina</i>	<i>Ardisia elliptica</i>	<i>Colubrina asiatica</i>	<i>Dioscorea</i>	Other FLEPPC Cat. 1	Other
Big Cypress NP									
Biscayne NP									
Everglades NP									
FDOT Dist. 1									
FDOT Dist. 4									
FWC									
FWS (Lox Refuge)									
Miami-Dade Co.									
SFWMD									

# 2015/2016 Newly Detected Plant Species

## Florida Fish & Wildlife Conservation Commission

Cogongrass (*Imperata cylindrica*)

WCA 3A North

Torpedograss (*Panicum repens*)

WCA 3A South

Suckering Australian pine (*Casuarina glauca*)

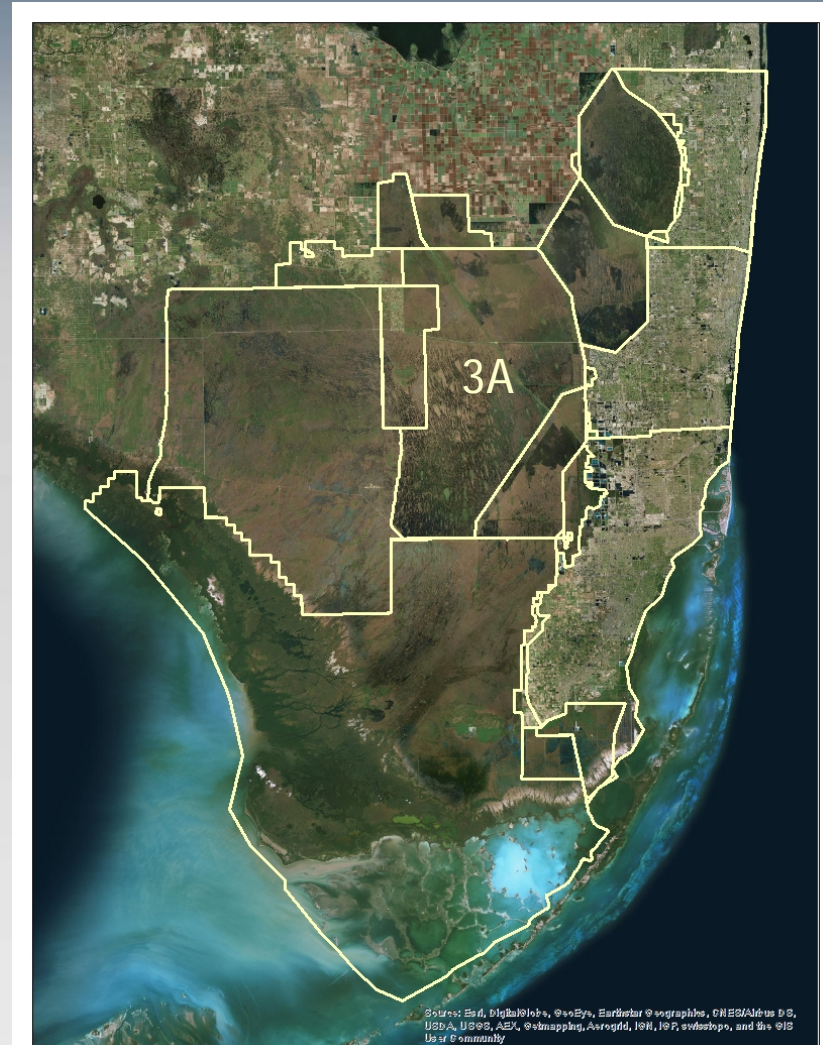
WCA 3A South

Tropical almond (*Terminalia catappa*)

WCA 3A South

Water spangles (*Salvinia minima*)

WCA 3A South

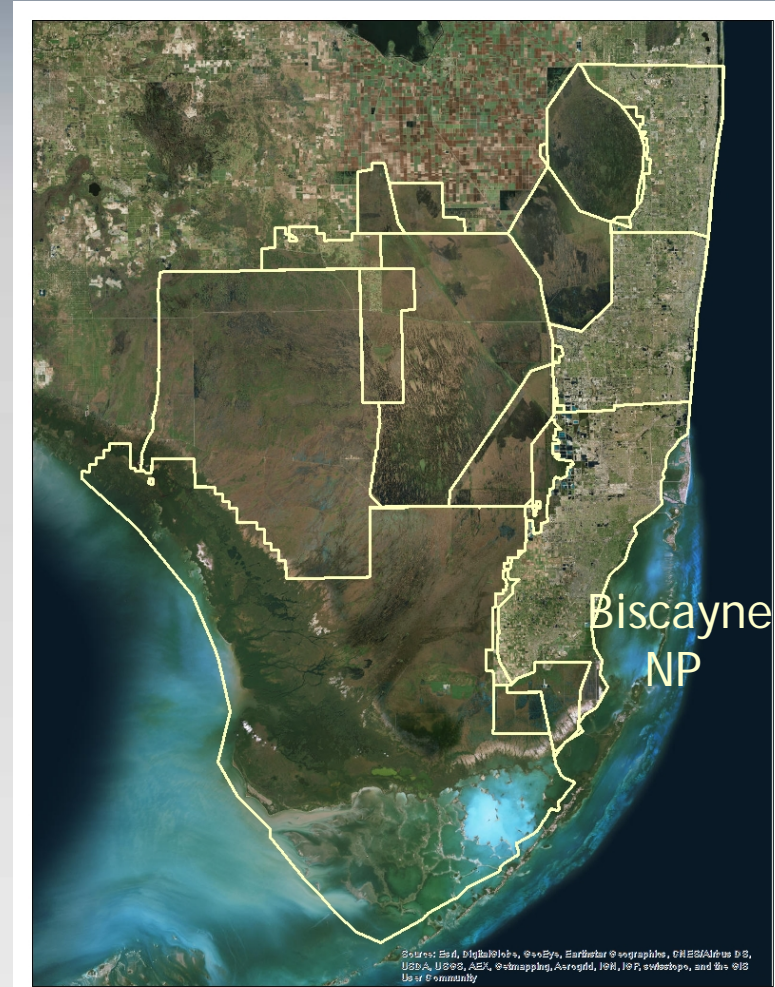




# 2015/2016 Newly Detected Plant Species

## Biscayne National Park

- Indian laurel (*Ficus microcarpa*)
- Sprenger's asparagus-fern (*Asparagus aethiopicus*)
- Lilac tasselflower (*Emilia sonchifolia*)
- Shoebuttan ardisia (*Ardisia elliptica*)
- Umbrella tree (*Schefflera actinophylla*)
- Brazilian jasmine (*Jasminum fluminense*)



# 2015/2016 Newly Detected Plant Species

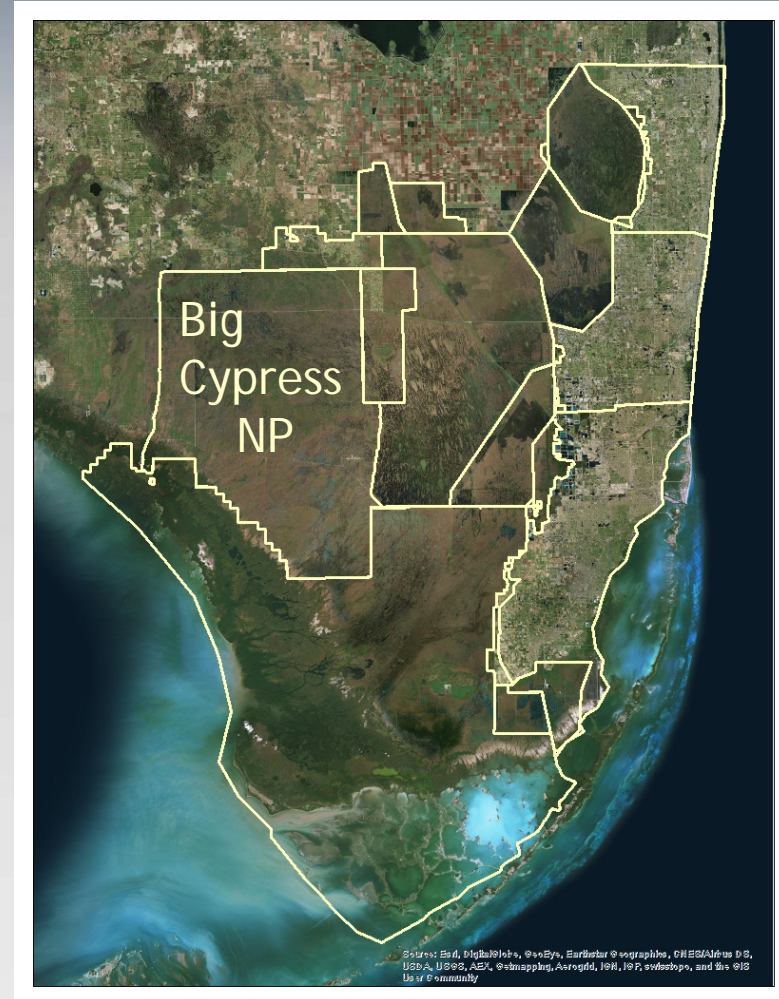
## Big Cypress National Preserve

Downy rose myrtle (*Rhodomyrtus tomentosa*)

Shoebuttan ardisia (*Ardisia elliptica*)

Earleaf acacia (*Acacia auriculiformis*)

China Berry (*Melia azedarach*)



# 2015/2016 Newly Detected Plant Species

## Everglades National Park

Noni (*Morinda citrifolia*) - Flamingo area

West Indian woodnettle (*Laportea aestuans*)

- Chekika area

Whitestar (*Ipomoea lacunosa*)- Chekika area

John Charles (*Hyptis verticillata*) - Chekika area

Cuban Copperleaf (*Acalypha setosa*) - Chekika area

Rock rosemary (*Merremia quinquefolia*)

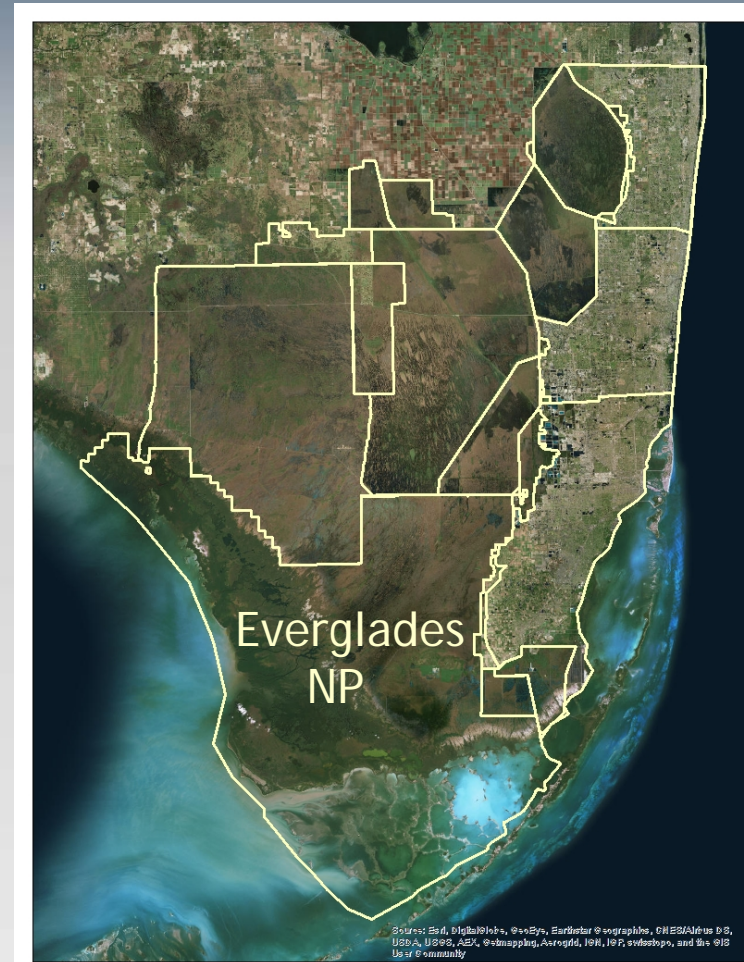
- Chekika area

Pepper-elder (*Peperomia pellucida*) - Chekika area

Hyacinthbean (*Lablab purpureus*) - Chekika area

Bushweed (*Flueggea virosa*)- Chekika area

Scouringrush horsetail (*Equisetum hymenale*) - HID

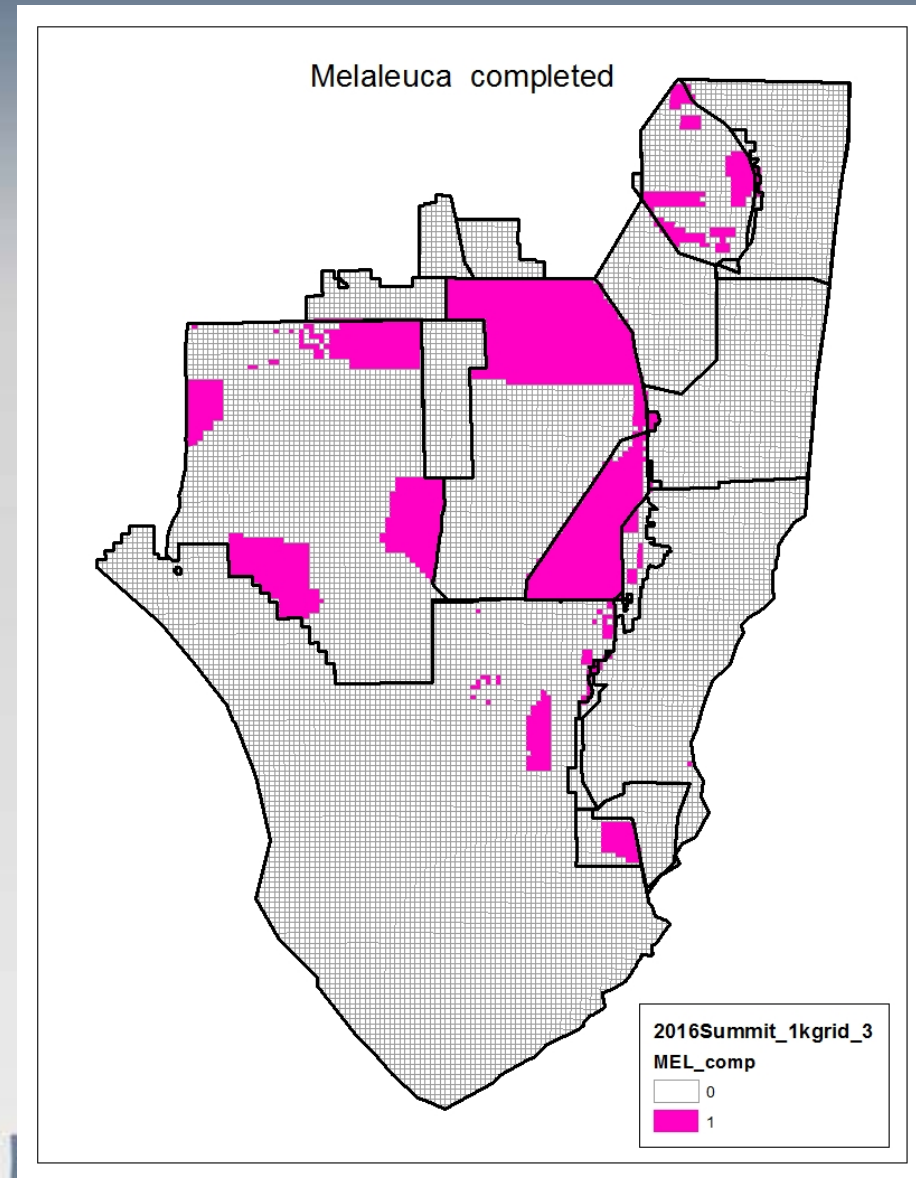


# 2015/2016 Treatments: Melaleuca

~ 517,328 acres  
swept for melaleuca

- Predominantly maintenance control work
- Push to do initial treatments of dense Melaleuca stands in east cost buffer lands by South Florida Water Management District

\* Estimate of acres is sum of grid cell area



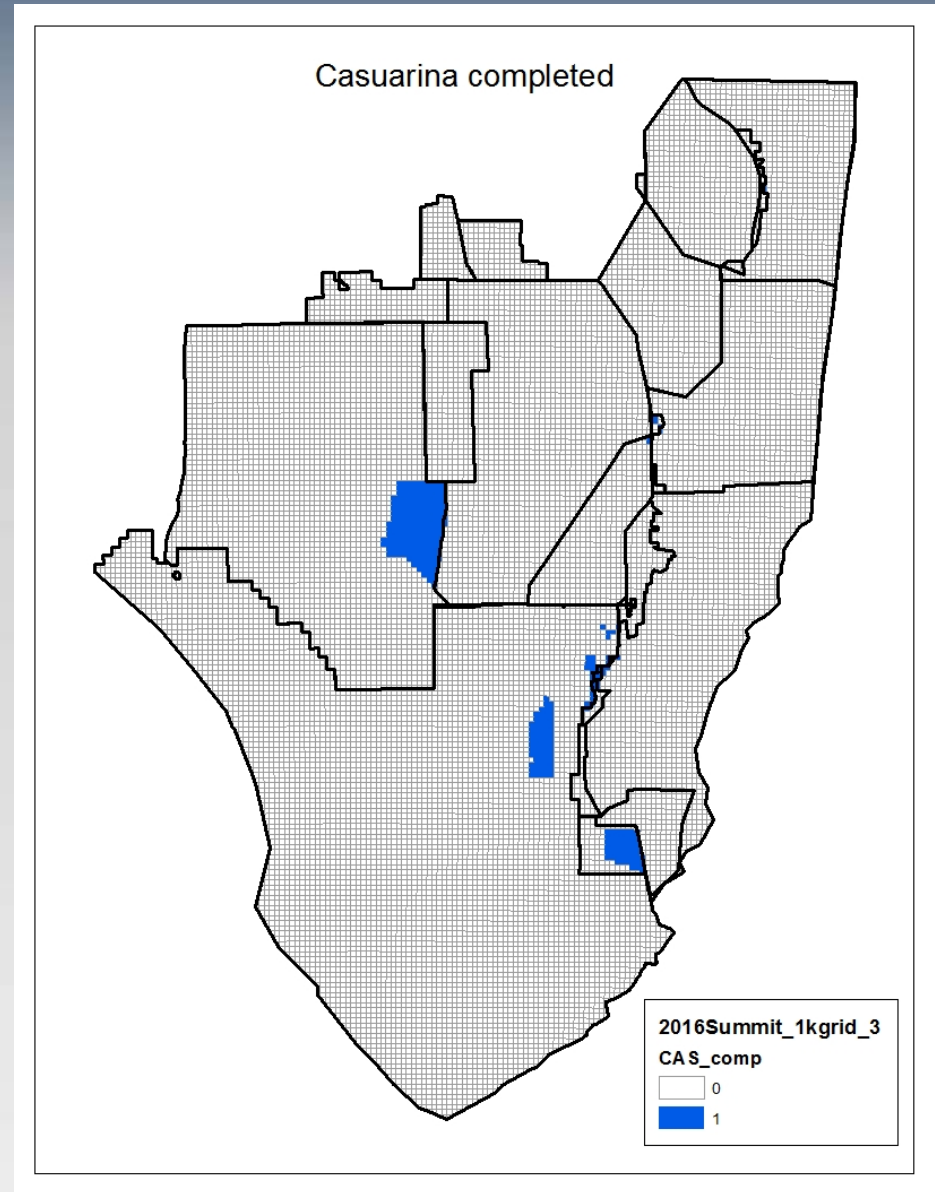
# 2015/2016 Treatments: Casuarina

(Australian pine)

~ 58,993 acres  
swept for Casuarina

Most work in Everglades  
NP, Big Cypress NP,  
and Southern Glades

\* Estimate of acres is sum of grid cell area



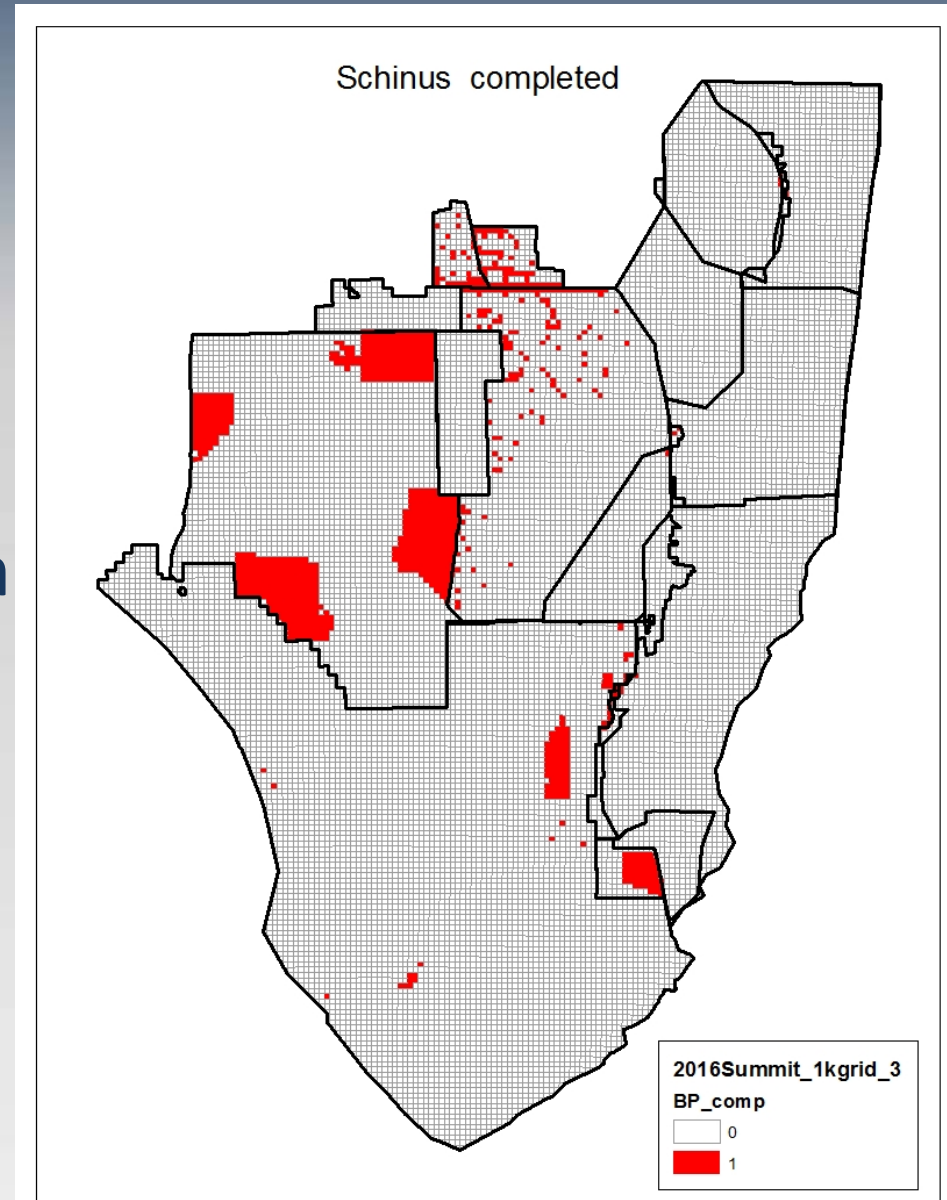
# 2015/2016 Treatments: Schinus

(Brazilian pepper)

~ 251,818 acres  
swept for Schinus

Majority of treatment  
In Big Cypress NP, Southern  
Glades and Florida Fish &  
Wildlife Conservation  
Commission Wildlife  
Management Areas

\* Estimate of acres is sum of grid cell area



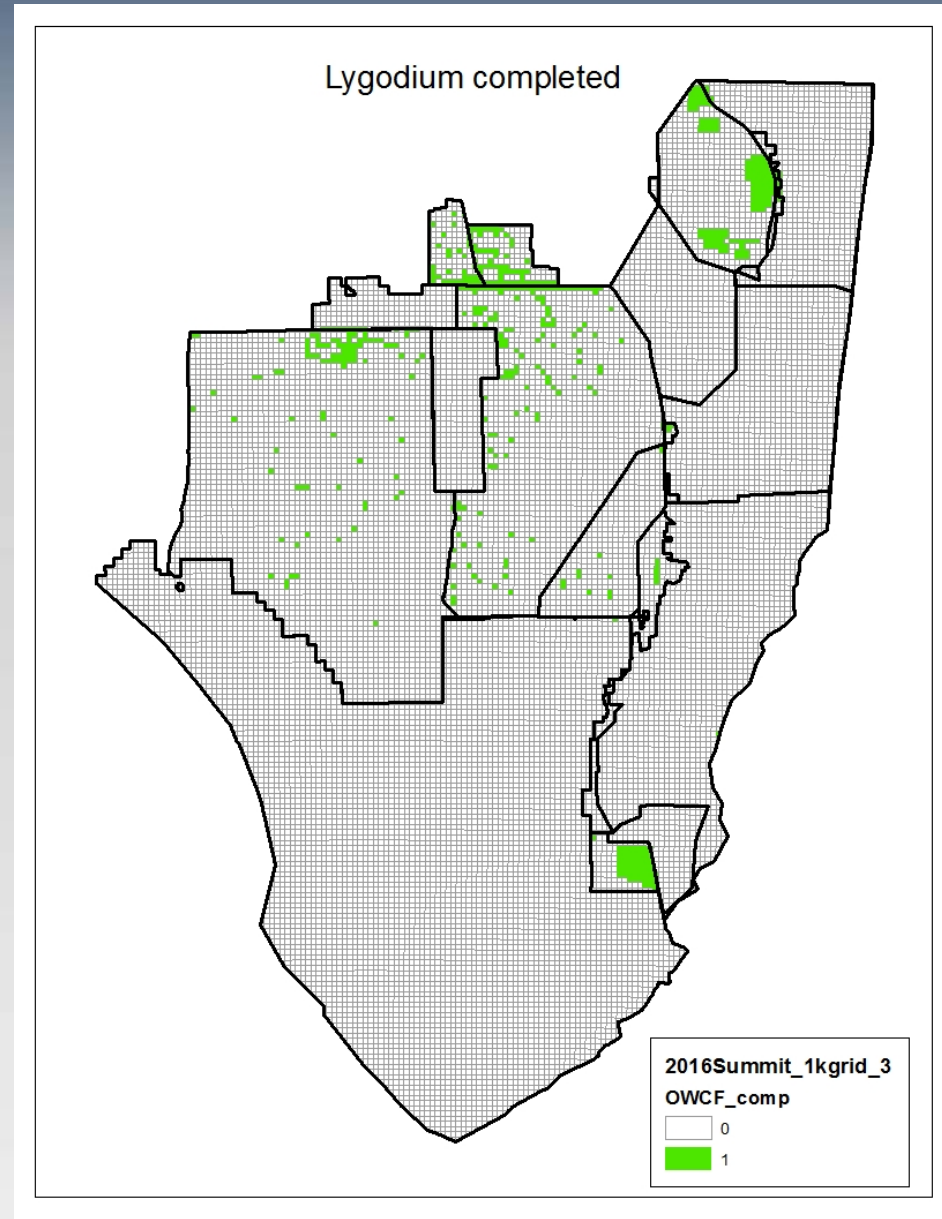
# 2015/2016 Treatments: Lygodium

(Old World climbing fern)

~ 129,623 acres  
swept for Lygodium

Most work Big Cypress NP,  
Southern Glades,  
Loxahatchee NWR,  
Holey Land, and  
Rotenberger

\* Estimate of acres is sum of grid cell area



# 2015/2016 Treatments: Other managed plant species

FWC-WCA 3A, Holey Land and Rotenberger WMAs

*Phoenix reclinata*  
*Syzygium cumini*  
 Tree Island- tree plantings  
 Prescribed fire

SFWMD

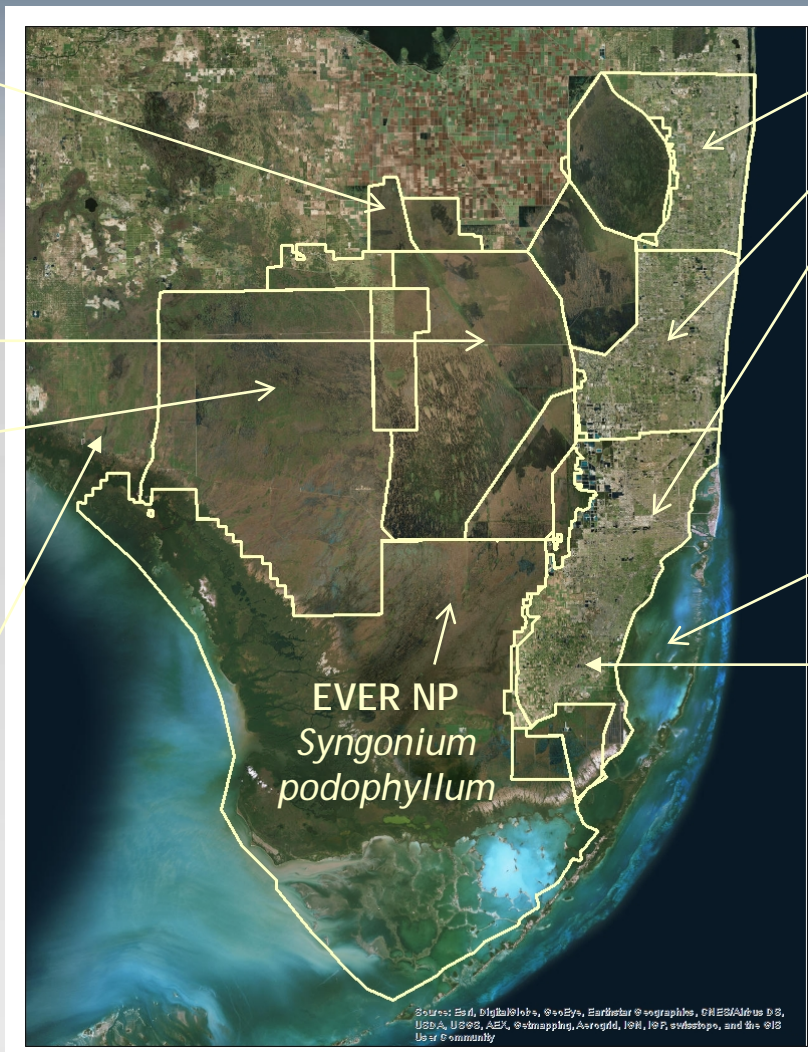
*Ardisia elliptica*

BICY NP

*Melia azedarach*  
*Psidium guajava*  
*Syzygium cumini*  
*Bischofia javanica*

FDOT-District One

*Panicum repens*  
 vines



FDOT-District Four and Turnpike

*Thespesia populnea*  
*Ardisia elliptica*  
*Bischofia javanica*  
*Calophyllum antillanum*  
*Leucaena leucocephala*  
*Imperata cylindrica*  
 Other FLEPPC cat I & IIs

BISC NP

*Thespesia populnea*  
*Colubrina asiatica*  
*Scaevola taccada*

Miami-Dade

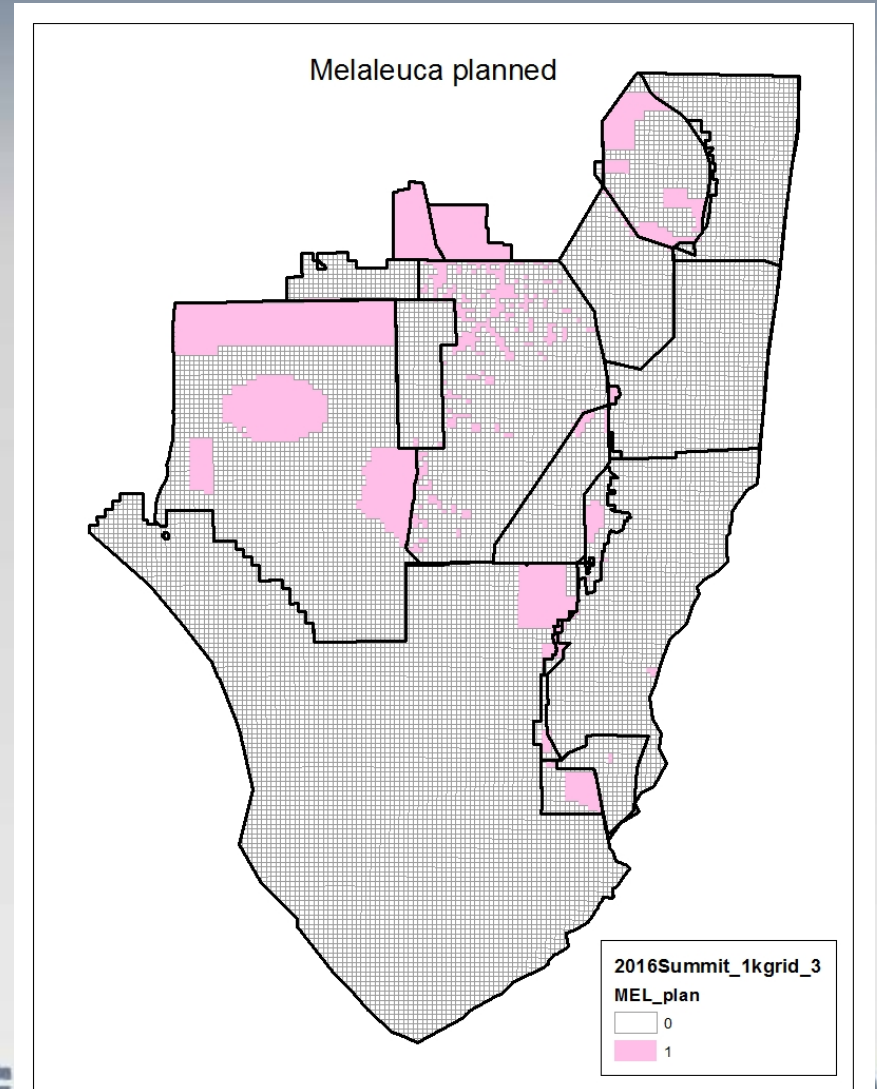
*Ardisia elliptica*  
*Neyraudia reynaudiana*  
*Mikania micrantha*  
*Lumnitzera racemosa*  
*Heteropterys brachiata*  
 Prescribed fire pine rocklands  
 wildfire South Dade Wetlands

EVER NP  
*Syngonium podophyllum*

Sources: Esri, DigitalGlobe, GeoEye, Earthstar @earthstar.com, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, IGP, swisstopo, and the GIS User Community

# 2016-2017 Planned Melaleuca treatments

~489,879 acres planned for Melaleuca treatments

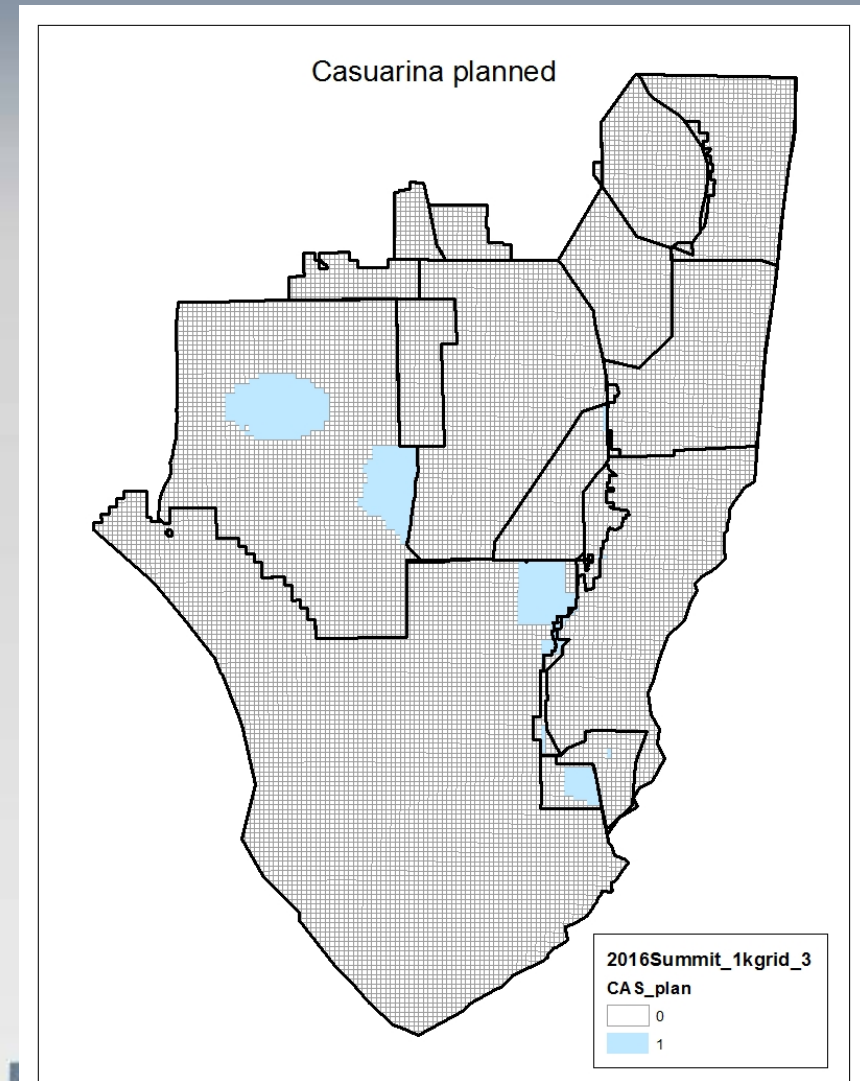


\* Estimate of acres is sum of grid cell area

# 2016-2017 Planned Casuarina treatments

(Australian pine)

~168,0312 acres planned for Casuarina treatments



\* Estimate of acres is sum of grid cell area

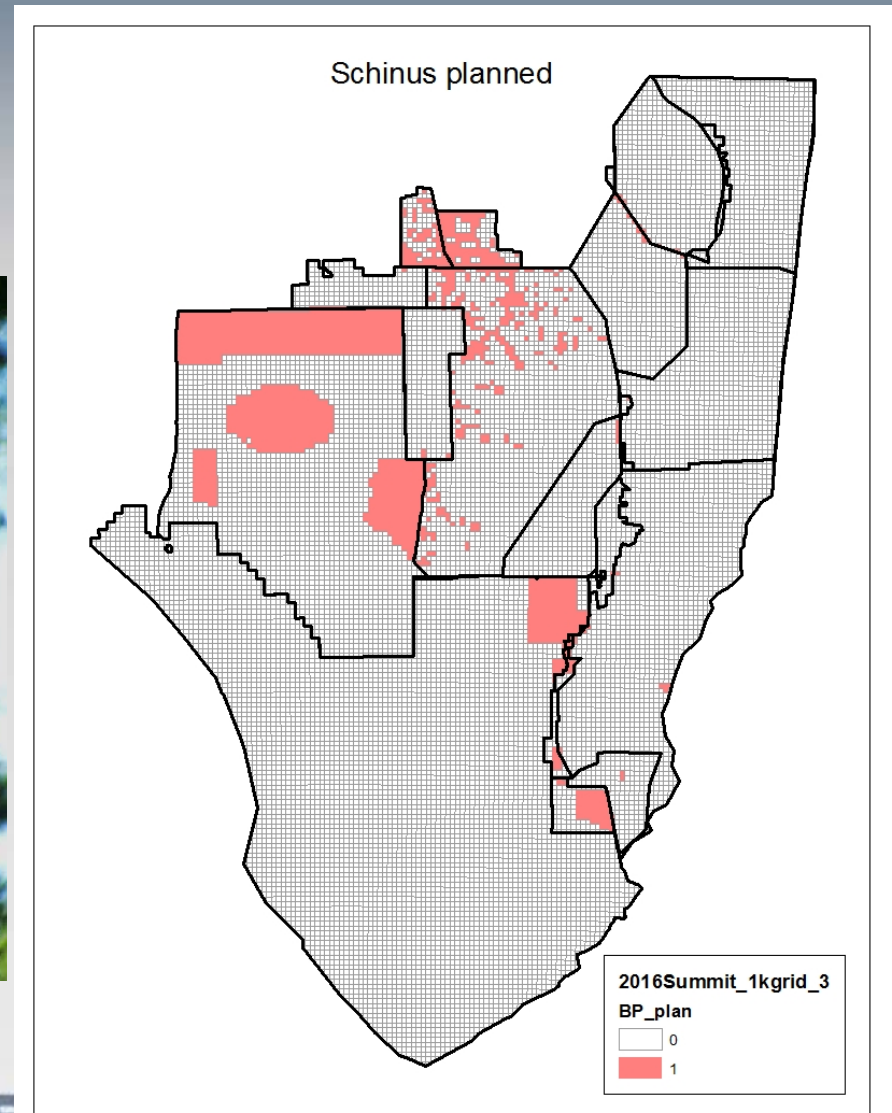
# 2016-2017 Planned Schinus treatments (Brazilian pepper)

~404,670 acres planned for Schinus treatments



\* Estimate of acres is sum of grid cell area

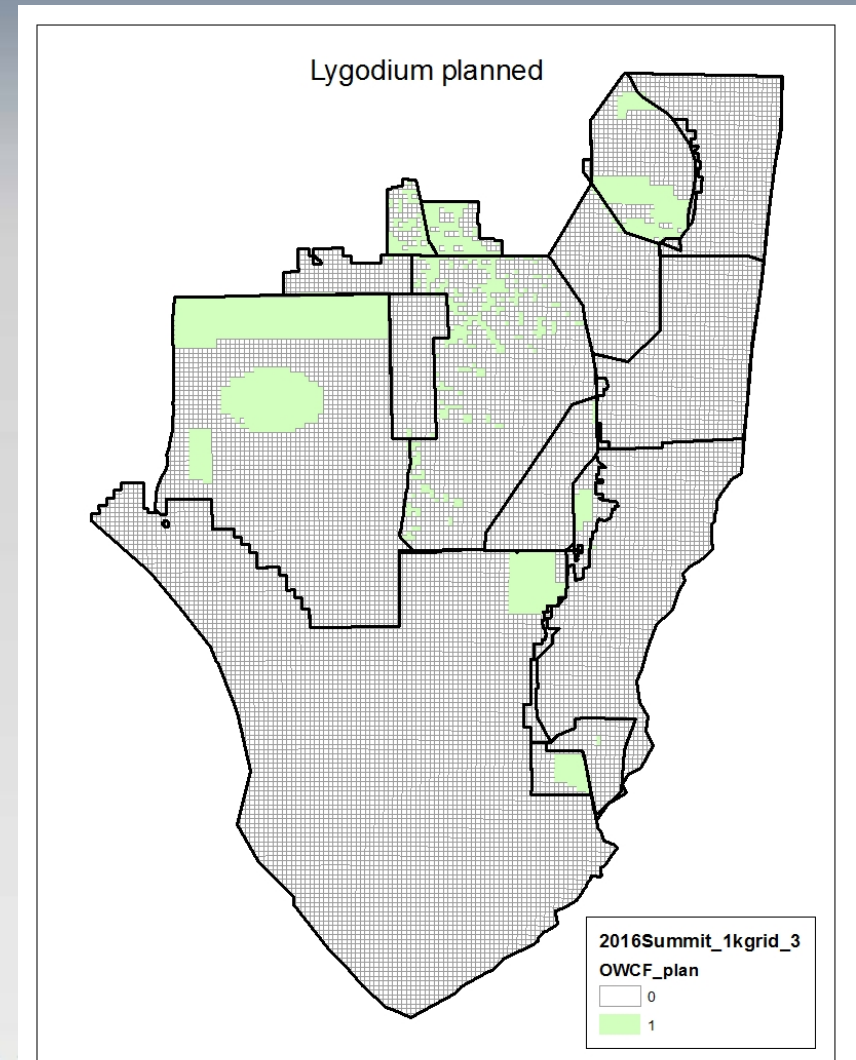
Photo from <http://florida.plantatlas.usf.edu/Photo.aspx?id=3035>



# 2016- 2017 Planned Lygodium treatments

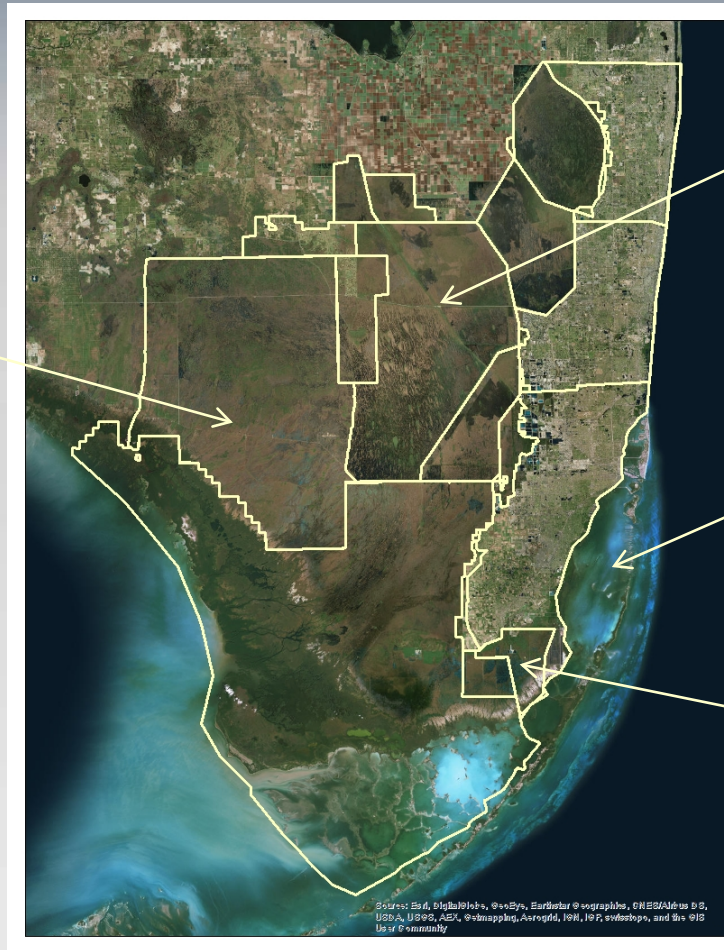
(Old World climbing fern)

~402,820 acres planned for Lygodium treatments



# Planned other species treatments 2016/2017

Big Cypress NP  
crested floatingheart  
*Nymphoides cristata*

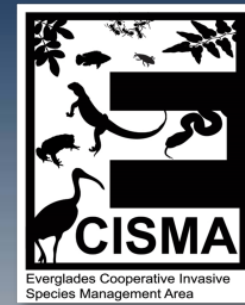


WCA 3A  
Wright's nutrush  
*Scleria lacustris*

Biscayne NP  
sapodilla  
*Manilkara zapota*

Southern Glades  
& Model Lands  
shoebutton  
*Ardisia elliptica*

# Cooperation Thanks



LeRoy Rodgers (SFWMD)  
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Andrew Seibel (FLDOT)

All the others that made this work possible



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