

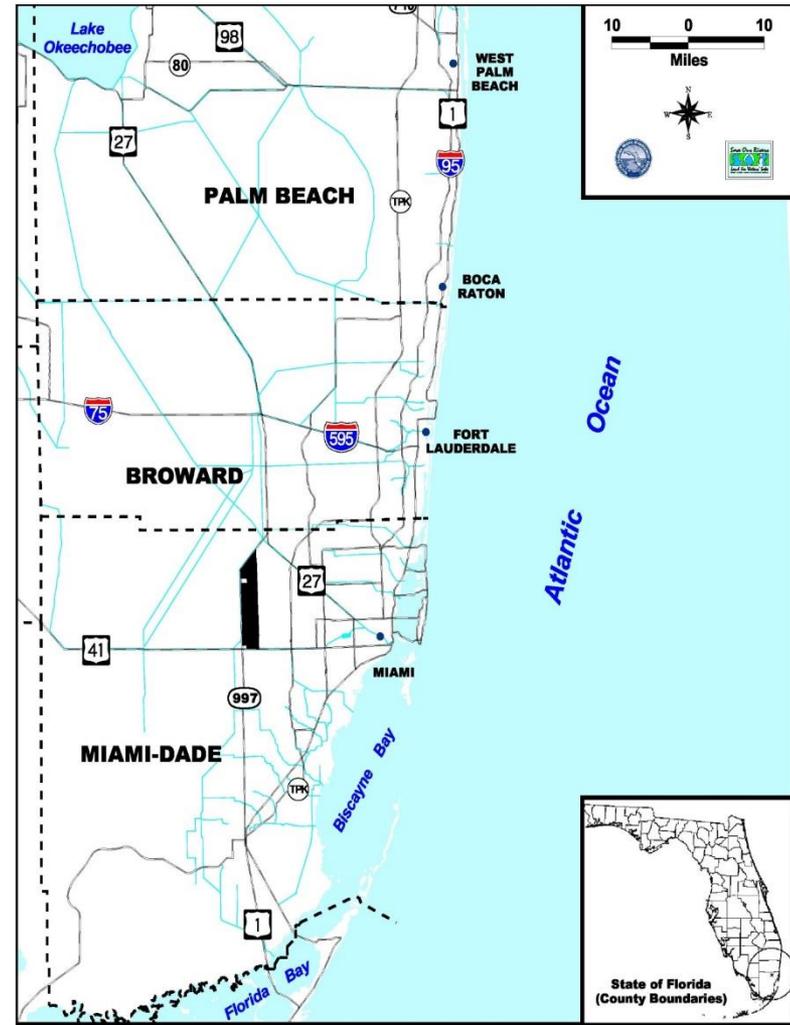


## **Pennsuco Wetlands Update**

July 15, 2016

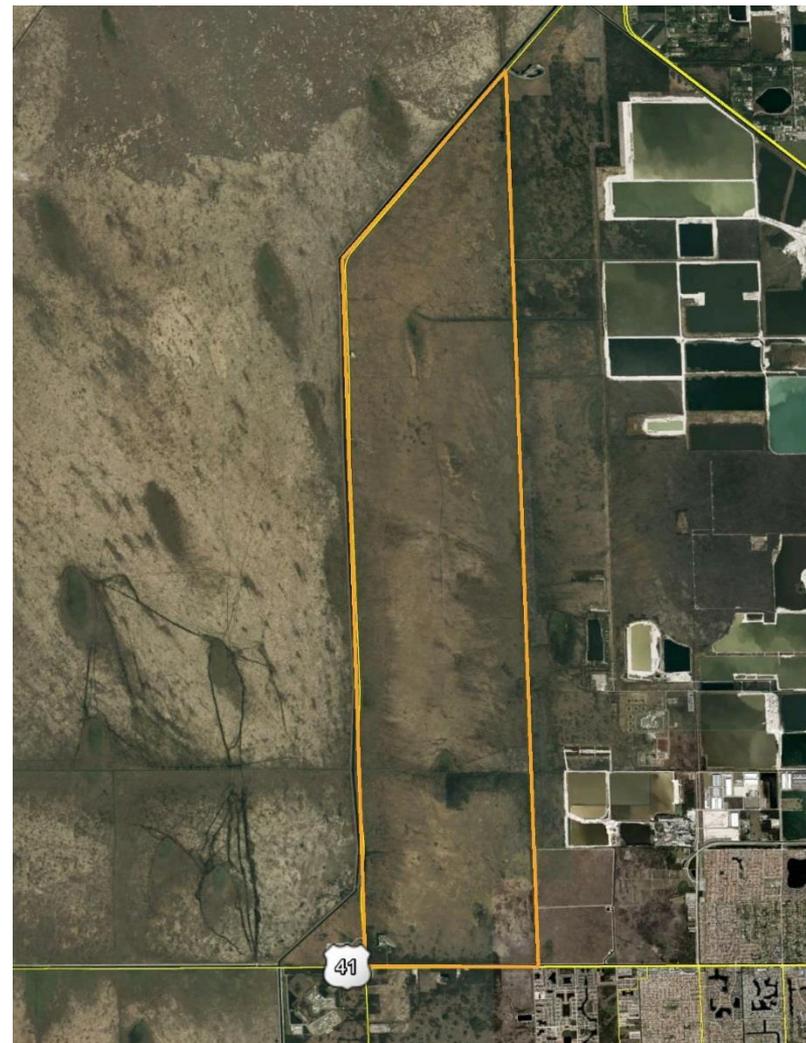
# PENNSUCO WETLANDS LOCATION

- Pennsuco is located between the Dade-Broward Levee, Krome Avenue, and Tamiami Trail (U.S. 41).
- The Pennsuco Wetlands cover approximately 13,000 acres.
- ‘Pennsuco’ is an abbreviation of ‘**Penn**sylvan**ia Sugar Company**’



# PENNSUCO WETLANDS RESTORATION: GOALS

- Wetland acquisition, restoration, and long-term management provides mining mitigation per Section 373.4149(1), F.S.
- Restoration of a degraded ecosystem that would otherwise continue to decline.
- Provide benefits to regional floral, faunal, and hydrologic resources.



# RESTORATION EFFORTS: 1998-2015



April 1998



October 2000



November 2004



October 2006



September 2010



October 2013



October 2015

## PENNSUCO WETLANDS: PRE-RESTORATION

- The Pennsuco Wetlands were originally highly degraded by exotic melaleuca trees



## RESTORATION STRATEGIES

- **When invasive melaleuca coverage is very dense, selective aerial treatments can be used.**



## RESTORATION STRATEGIES

- **Trained ground crews are more effective. However, cutting melaleuca by hand is labor intensive.**



## RESTORATION STRATEGIES

- The papery trunk of melaleuca trees is cut with a machete and then sprayed with herbicide (blue).



## RESTORATION STRATEGIES

- A large melaleuca seed bank still remains onsite. New seedlings are hand pulled and piled on the grass – if left in the water, they will resprout.



## RESTORATION STRATEGIES

- Crews currently walk transects through the marsh to pull seedlings *before* they mature and can produce more seeds.



## RESTORATION STRATEGIES

- **Two biocontrol insects are now also present. These drain the melaleuca trees of their energy, making their growth dramatically slower.**



## RESTORATION STRATEGIES

- This particular area of Pennsuco is now considered to be in “maintenance mode.”



## WELCOME WILDLIFE AT PENNSUCO

- Deer are happy in Pennsuco -



## UNWELCOME WILDLIFE AT PENNSUCO

- However, three pythons have been discovered and killed this year.



# PENNSUCO LAND ACQUISITION

- Several closings with willing sellers have occurred in 2015-2016.
- In addition, land exchanges between the state and mining companies are also proceeding.

## PENNSUCO LAND ACQUISITIONS

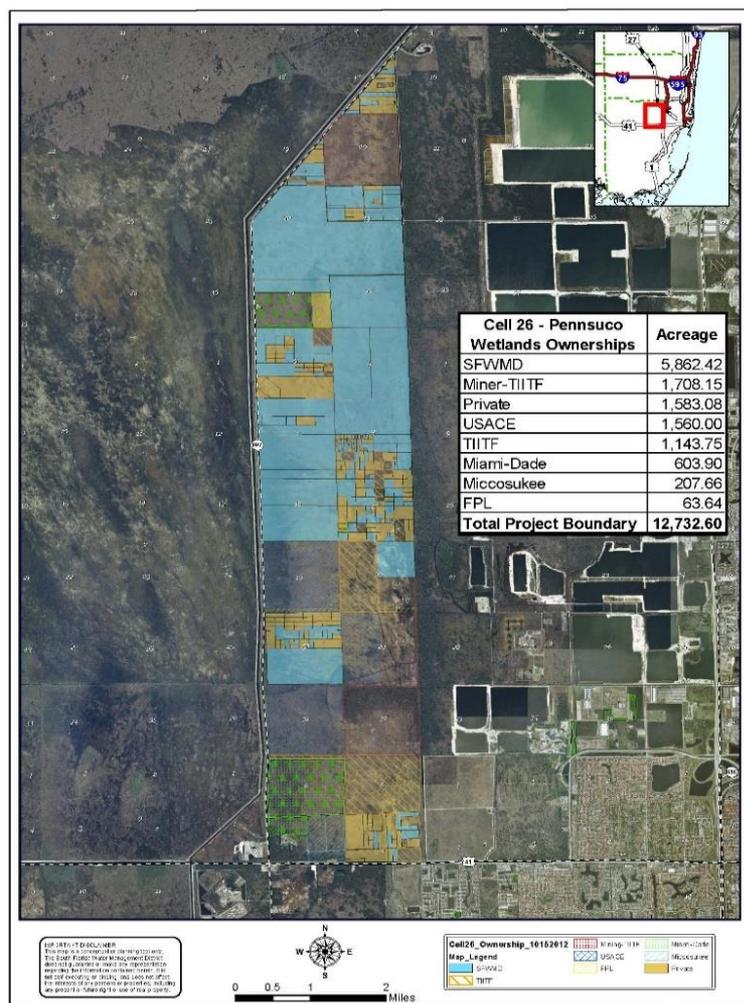
2015

Tract	County	Owner	Status	Acreage	Closing Date	Purchase Amount
W9300-923	Miami-Dade	Barbro, LLC	Willing Seller	10.00	8/28/2015	\$80,000.00
W9304-969	Miami-Dade	Ramesh R Goyal & Shanti R Goyal	Willing Seller	20.00	9/11/2015	\$160,000.00
<b>TOTAL</b>				<b>30.00</b>		<b>\$240,000.00</b>

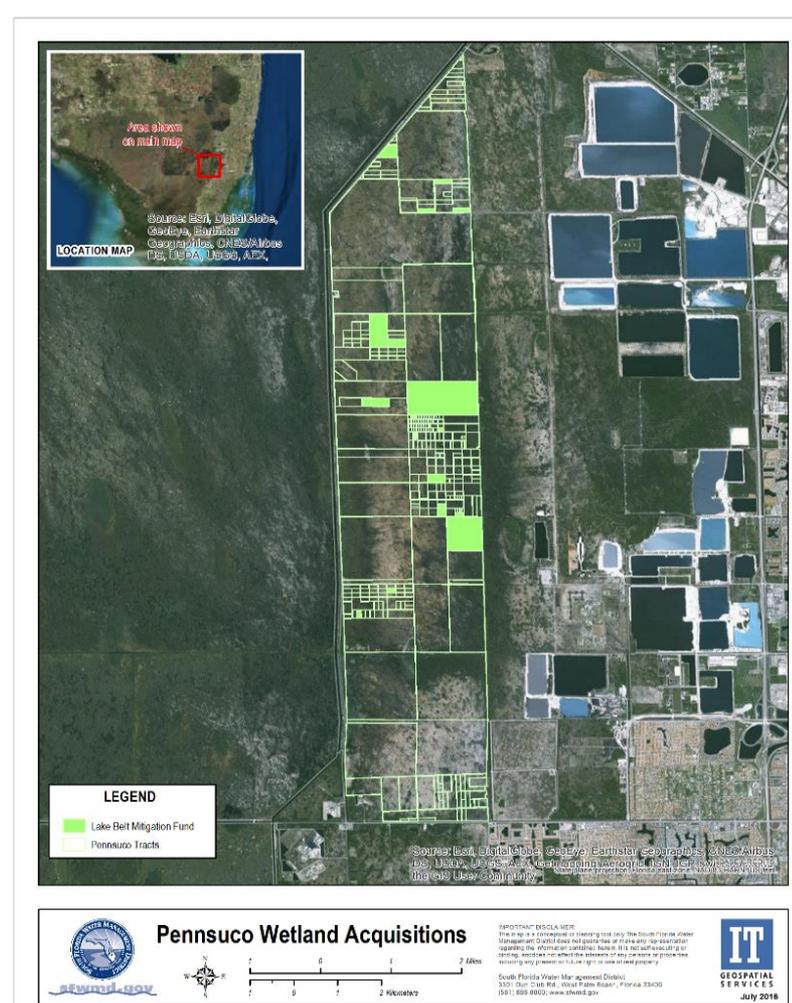
2016

Tract	County	Owner	Status	Acreage	Closing Date	Purchase Amount
W9306-960	Miami-Dade	Celso & W Noelia Hernandez	Willing Seller	5.00	4/22/2016	\$40,000.00
W9300-927	Miami-Dade	Athion Holdings LLC	Willing Seller	8.70	5/26/2016	\$69,600.00
W9303-956	Miami-Dade	Stewart Pate	Willing Seller	28.20	5/26/2016	\$225,600.00
W9305-926	Miami-Dade	Athion Holdings LLC	Willing Seller	1.36	5/26/2016	\$10,880.00
W9305-937	Miami-Dade	Athion Holdings LLC	Willing Seller	1.44	5/26/2016	\$11,520.00
W9307-911	Miami-Dade	Athion Holdings LLC	Willing Seller	5.00	5/26/2016	\$40,000.00
W9307-933	Miami-Dade	Athion Holdings LLC	Willing Seller	5.00	5/26/2016	\$40,000.00
<b>TOTAL</b>				<b>54.70</b>		<b>\$437,600.00</b>

# LAND ACQUISITION



Parcel Status



Parcel Acquisitions

## PENNSUCO WETLANDS RESTORATION: AN OVERVIEW

- It has been a very wet winter, allowing extended site treatment by airboat crews.
- *Melaleuca* abundance continues to significantly decline within the Pennsuco Wetlands.
- However, *lygodium* has now begun to capitalize on canopy openings.
- Krome Avenue expansion is underway – through coordination, site access has been maintained.
- Must also maintain access east of the Dade-Broward Levee for future exotic treatment.
- Willing seller parcel acquisition continues.



# Pennsuco Wetlands Today

