

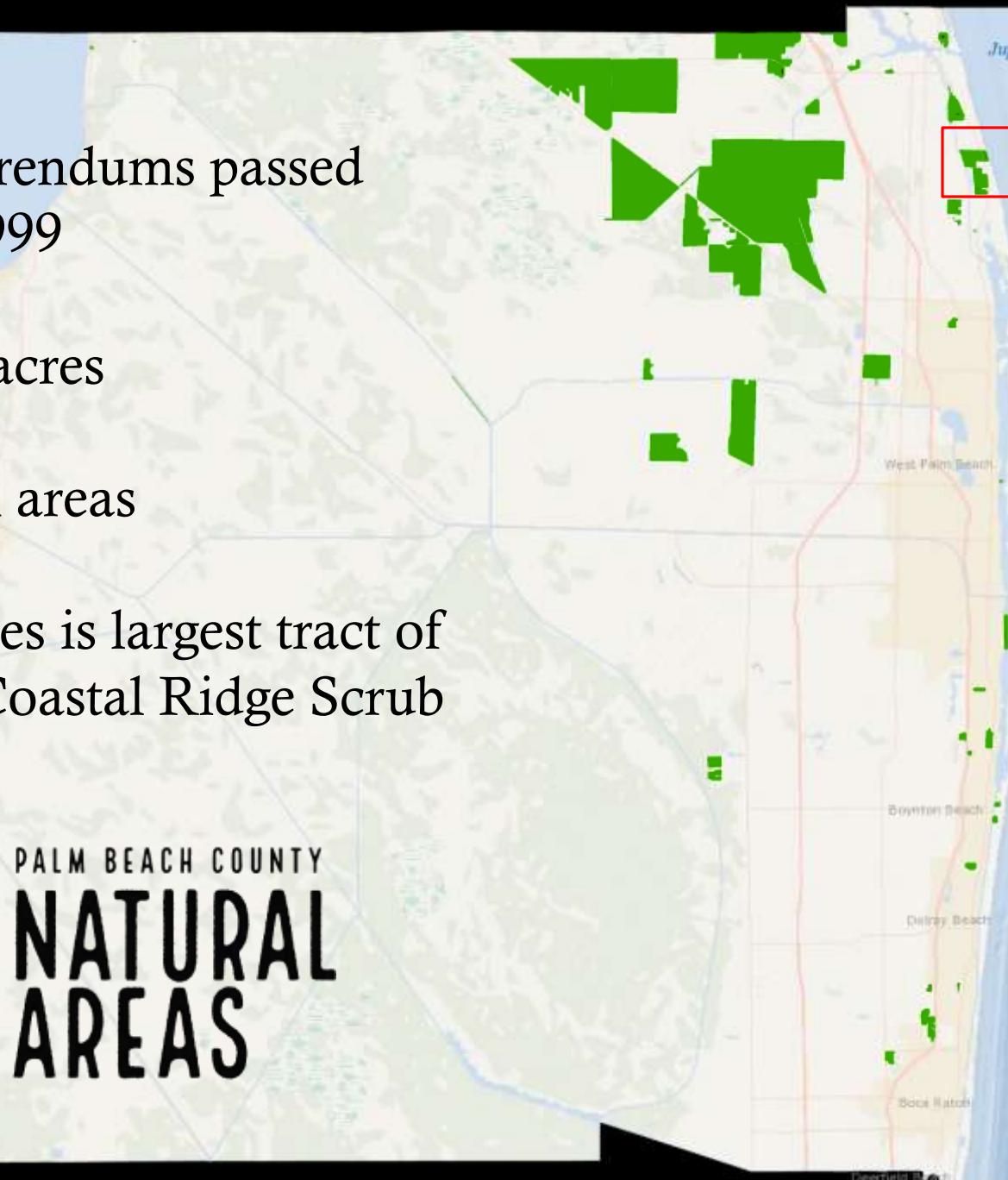
Palm Beach County  
Department of Environmental Resources Management  
Juno Dunes Natural Area



Town of Juno Beach  
Planning & Zoning Meeting  
September 15, 2025



- Bond referendums passed 1991 & 1999
- > 31,000 acres
- 37 natural areas
- Juno Dunes is largest tract of Atlantic Coastal Ridge Scrub

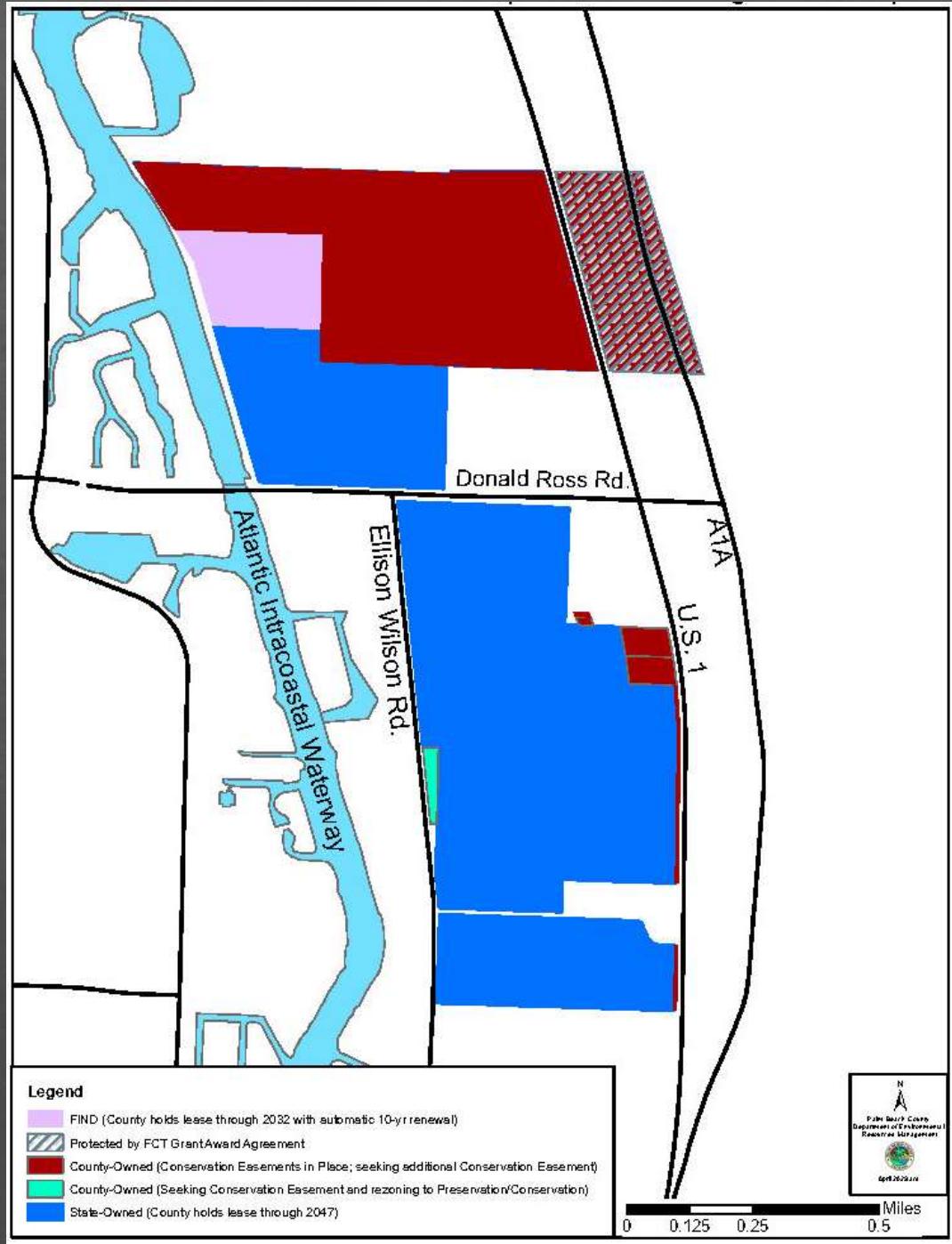


*Our Mission: Acquire, preserve and protect environmentally sensitive lands in Palm Beach County and protect wildlife and endangered species on such lands.*



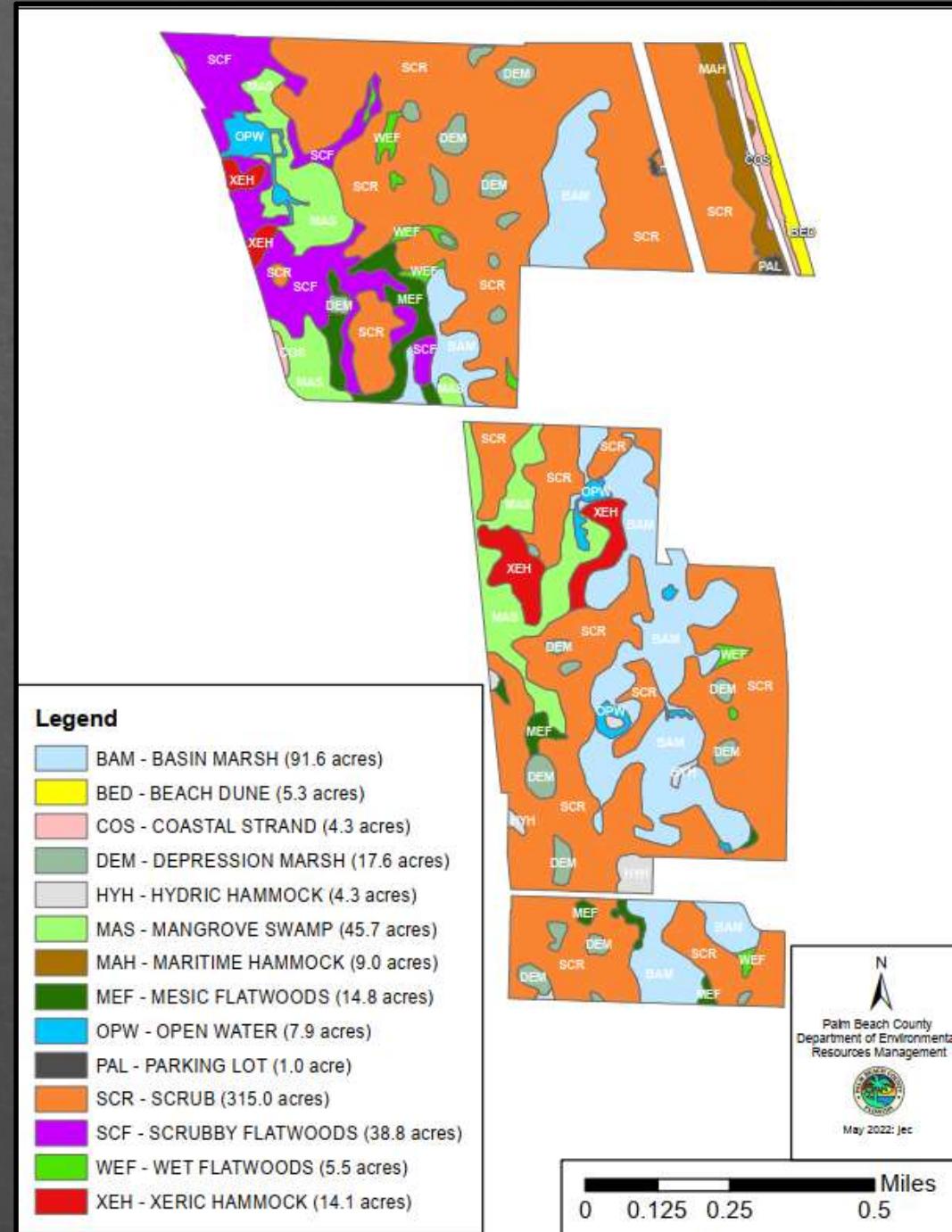
# Tracts / Ownership

- Acquisition 1992-1999
- County owns 203 acres with conservation easements & FCT contributed matching funds for oceanfront tract
- 30 acres leased from Florida Inland Navigation District until 2032 with 10-year renewal
- 336 acres leased from the state until 2047



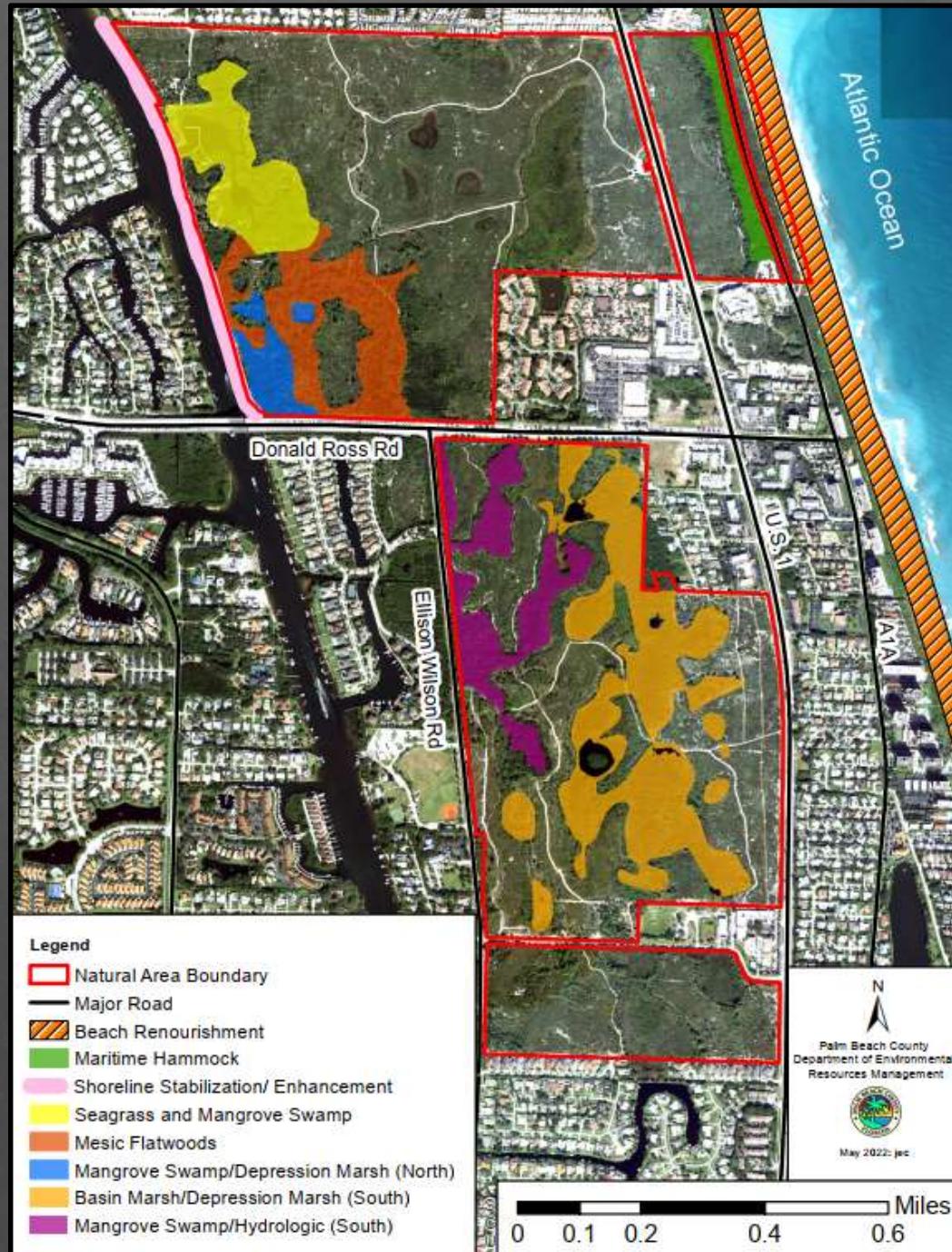
# Vegetation Communities

- Diversity of habitats with scrub being dominant
- Many rare and/or endemic plant & animal species
- < 2% of scrub left in PBC
- ~50% of plants in scrub are endemic
- 667 plant species & 324 animal species have been documented



# Restoration/ Enhancement

- 3 beach renourishments
- Maritime hammock restoration
- FIND mangrove & seagrass restoration
- ICW shoreline stabilization
- Mesic flatwoods restoration
- Hydrologic restoration north & south of Donald Ross Rd



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# Listed Planted Species



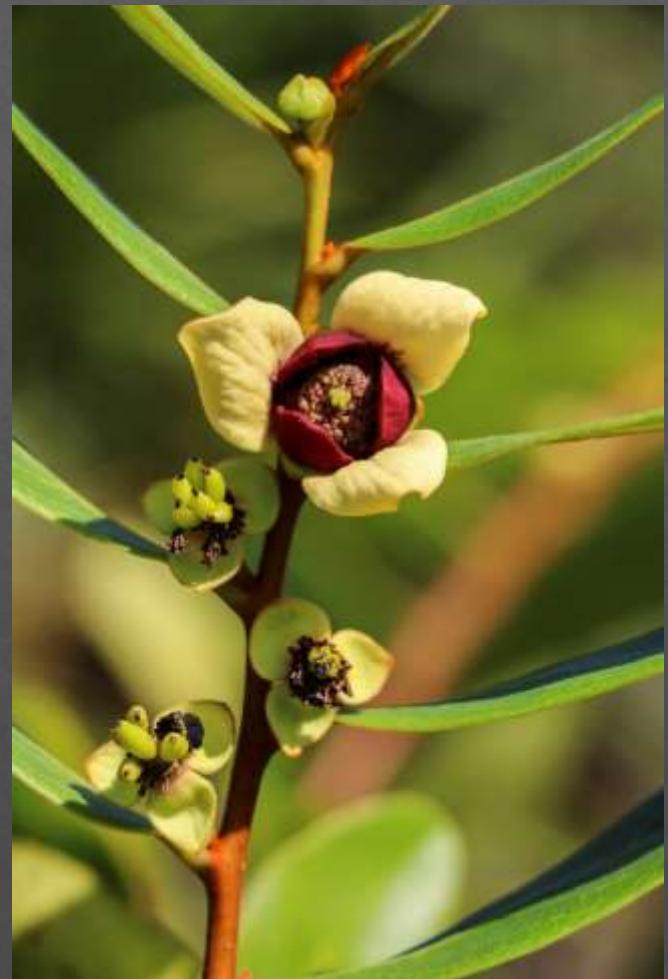
STATUS/RANK DESIGNATIONS				
SCIENTIFIC NAME	COMMON NAME	USFWS	FDACS	FNAI
<i>Acrostichum aureum</i>	Golden leather fern	N	T	G5/S3
<i>Asclepias curtissii</i>	Curtiss's milkweed	N	E	N
<i>Asimina tetramera</i>	Four-petal pawpaw	E	E	G1/S1
<i>Conradina grandiflora</i>	Large-flowered rosemary	N	T	G3/S3
<i>Cyperus pedunculatus</i>	Beachstar	N	E	N
<i>Encyclia tampensis</i>	Butterfly orchid	N	CE	N
<i>Halophila johnsonii</i>	Johnson's seagrass	N	E	G2/S2
<i>Jacquemontia reclinata</i>	Beach jacquemontia	E	E	G1/S1
<i>Lantana depressa</i>	Pineland lantana	N	E	G2T1/S1
<i>Lechea cernua</i>	Scrub pinweed	N	T	G3/S3
<i>Lechea divaricata</i>	Spreading pinweed	N	E	G2/S2
<i>Linum carteri</i> var. <i>smallii</i>	Small's flax	N	E	G2T2/S2
<i>Lycoptidiella cernua</i>	Nodding club-moss	N	CE	N
<i>Okenia hypogaea</i>	Burrowing four-o'clock	N	E	G3?/S2
<i>Cphioglossum palmatum</i>	Hand fern	N	E	G4/S2
<i>Cpuntia stricta</i>	Shell-mound pricklypear	N	T	N
<i>Osmunda cinnamomeum</i>	Cinnamon fern	N	CE	N
<i>Osmunda regalis</i> var. <i>speciabilis</i>	Royal fern	N	CE	N
<i>Pithecellobium keyense</i>	Florida Keys' blackbead	N	T	N
<i>Scaevola plumieri</i>	Inkberry	N	T	N
<i>Serenoa repens</i>	Saw palmetto	N	CE	N
<i>Swietenia mahagoni</i>	Mahogany	N	T	G3G4/S3
<i>Tillandsia balbisiana</i>	Inflated & reflexed wild pine	N	T	N
<i>Tillandsia fasciculata</i>	Common wild pine	N	E	N
<i>Tillandsia flexuosa</i>	Banded airplant	N	T	G5/S3
<i>Tillandsia utriculata</i>	Giant wild pine	N	E	N

# 40 Listed Animal Species



SCIENTIFIC NAME	COMMON NAME	USFWS	FWC	FGNA
<i>Aethocerinus hornii</i>	Aethocerinus long-horned beetle	N	N	G2/S2
<i>Alligator mississippiensis</i>	American alligator	T(S/A)	FT(S/A)	G5/S4
<i>Antigone canadensis pratensis</i>	Florida sandhill crane	UR	ST	G5T2/S2
<i>Aphelocoma coerulescens</i>	Florida scrub-jay	T	FT	?G2/S2
<i>Aphrissa statira</i>	Statira sulphur	N	N	G5/S2S3
<i>Aramus guarauna</i>	Limpkin	N	N	G5/S3
<i>Athene cunicularia floridana</i>	Florida burrowing owl	N	ST	G4T3/S3
<i>Caretta caretta</i>	Loggerhead sea turtle	T	FT	G3/S3
<i>Chelonia mydas</i>	Green sea turtle	T	FT	G3/S2S3
<i>Copris gopheri</i>	Gopher tortoise copris beetle	N	N	G2/S2
<i>Crotalus adamanteus</i>	Eastern diamond-back rattlesnake	UR	N	G4/S3
<i>Dermochelys coriacea</i>	Leatherback sea turtle	E	FE	G2/S2
<i>Drymarchon couperi</i>	Eastern indigo snake	T	FT	G3/S3
<i>Egretta caerulea</i>	Little blue heron	N	ST	G5/S4
<i>Egretta thula</i>	Snowy egret	N	N	G5/S3
<i>Egretta tricolor</i>	Tricolored heron	N	ST	G5/S4
<i>Elanoides forficatus</i>	Swallow-tailed kite	N	N	G5/S2
<i>Falco columbarius</i>	Merlin	N	N	G5/S2
<i>Falco peregrinus</i>	Peregrine falcon	N	N	G4/S2
<i>Falco sparverius paulus</i>	Southeastern American kestrel	N	ST	G5T4/S3
<i>Fregata magnificens</i>	Magnificent frigatebird	N	N	G5/S1
<i>Gobiomorus dormitor</i>	Bigmouth sleeper	N	N	G4/S2
<i>Gopherus polyphemus</i>	Gopher tortoise	N	ST	G3/S3
<i>Haliaeetus leucocephalus</i>	Bald eagle	N	N	G5/S3
<i>Hemimargus ceraunus antibubastus</i>	Ceraunus blue butterfly	T(S/A)	FT(S/A)	N
<i>Latrodectus bishopi</i>	Red widow spider	N	N	G2G3/S2S3
<i>Leptotes cassius theonus</i>	Cassius blue butterfly	T(S/A)	FT(S/A)	N
<i>Lithobates capito</i>	Gopher frog	UR	N	G3/S3
<i>Mycteria americana</i>	Wood stork	T	FT	G4/S2
<i>Nyctanassa violacea</i>	Yellow-crowned night-heron	N	N	G5/S3
<i>Nycticorax nycticorax</i>	Black-crowned night-heron	N	N	G5/S3
<i>Pandion haliaetus</i>	Osprey	N	SSC	G5/S3S4
<i>Passerina ciris ciris</i>	Painted bunting	N	N	G5T3/S3
<i>Platalea leucorodia</i>	Roseate spoonbill	N	ST	G5/S2
<i>Plegadis falcinellus</i>	Glossy ibis	N	N	G5/S3
<i>Sceloporus woodi</i>	Florida scrub lizard	N	N	G2G3/S2S3
<i>Setophaga ruticilla</i>	American redstart	N	N	G5/S2
<i>Sterna antillarum</i>	Least tern	N	ST	G4/S3
<i>Thalasseus maximus</i>	Royal tern	N	N	G5/S3
<i>Thalasseus sandvicensis</i>	Sandwich tern	N	N	G5/S2
<i>Trichechus manatus</i>	West Indian manatee	T	FT	G2/S2

# Federally Listed Species

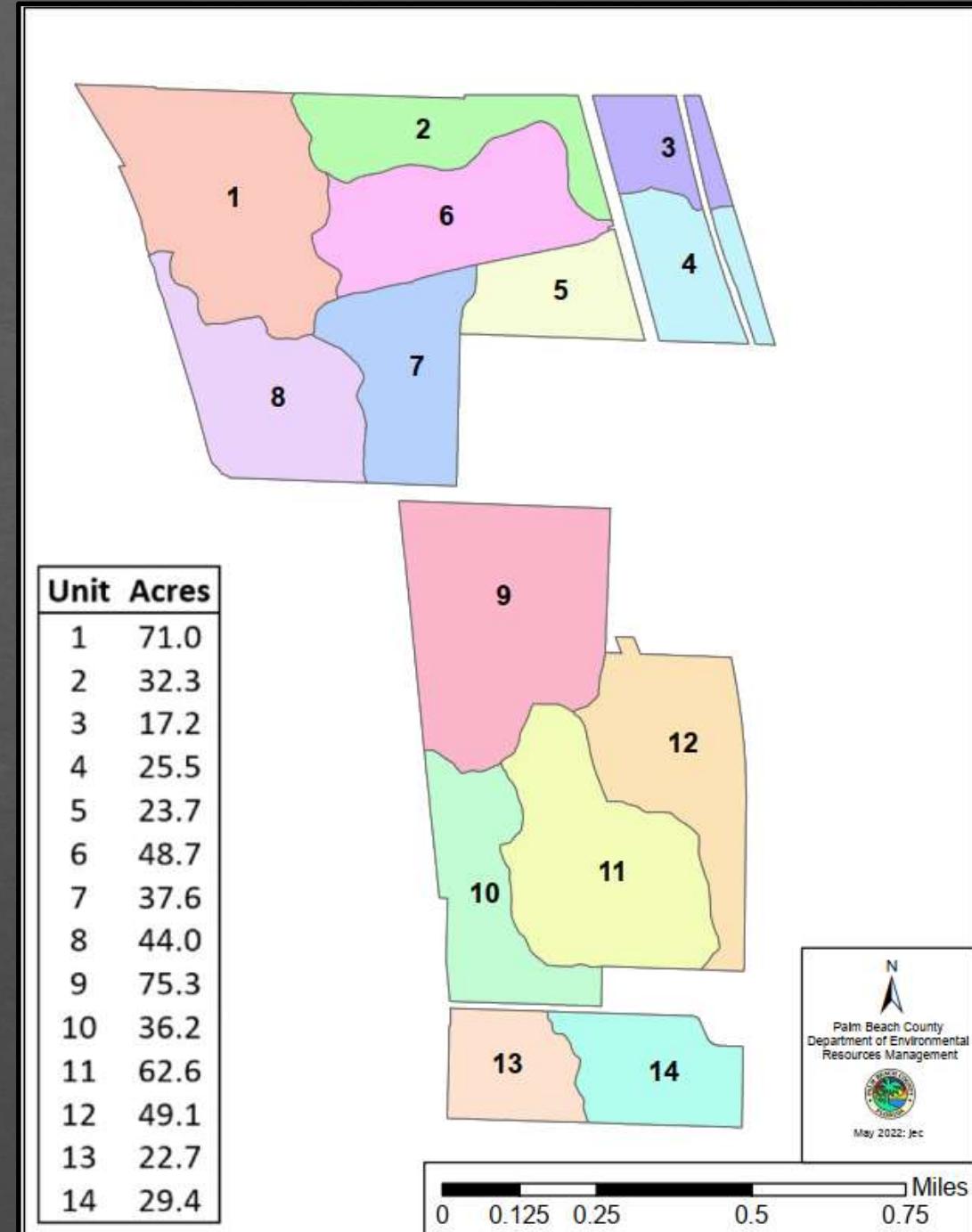




# Examples of State Listed Species

# Management Units

- There are 14 management units within the natural area; they are also considered “burn units”



# Invasive/Nonnative Vegetation Removal

- A multi-phase, initial invasive/nonnative plant removal program began in 1997 and was completed in 2002
- Site is now in maintenance condition (coverage of invasive plant species does not exceed 1 percent of canopy or understory layer)
- Annual sweeps have been conducted since 2002



# Invasive Species

- Juno Dunes is on a maintenance control schedule
- <5% invasive species coverage
- Yearly full site sweeps
- Quarterly weedy species aka Hotspot treatments
- Nuisance vine management, yearly removal and follow-up maintenance



# Mechanical Vegetation Reduction

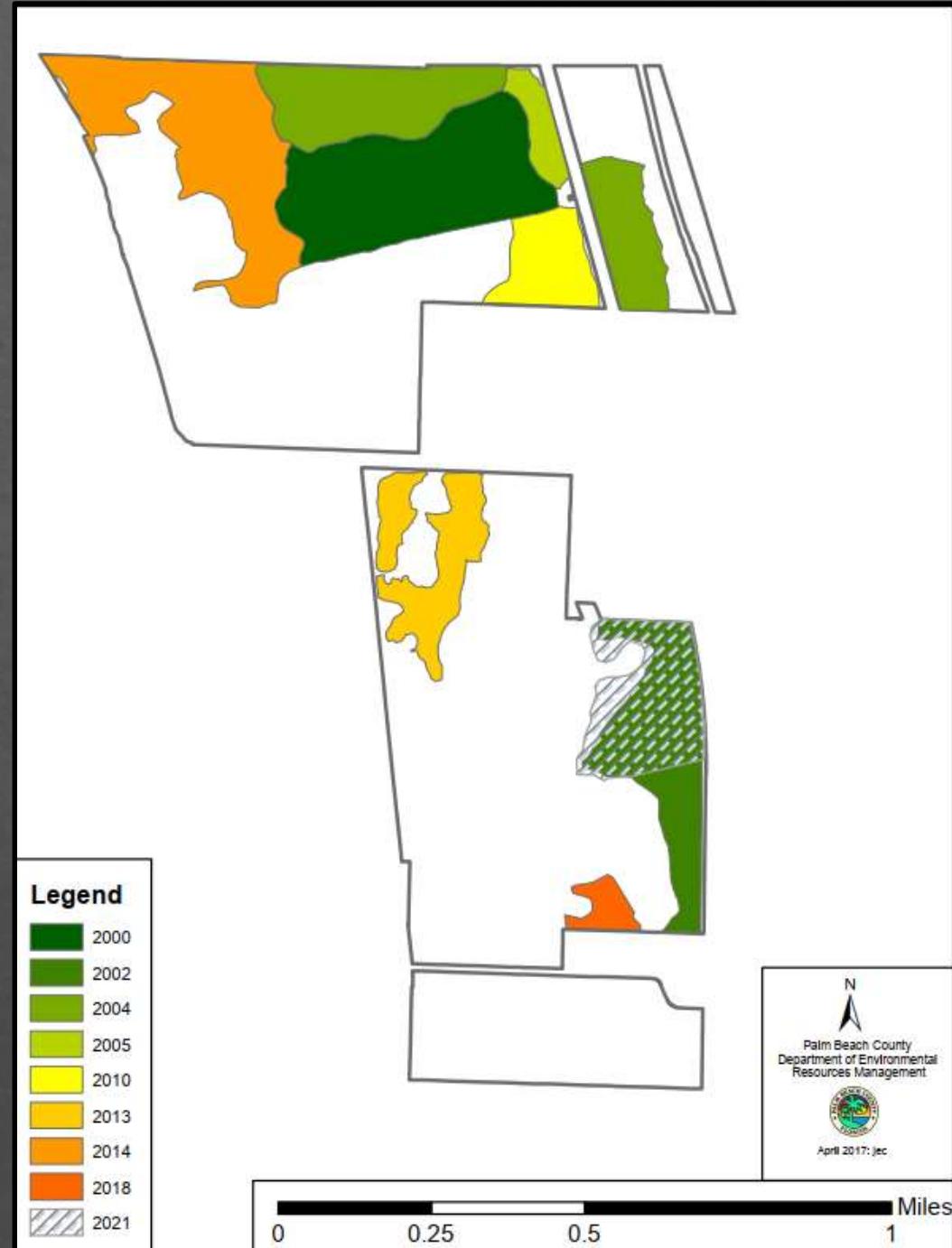
- Between 2010 & 2025: mechanical reduction methods were used for upland restoration, WUI maintenance and prescribed fire preparation



Year	Reduction Type	Management Units
2010	Prescribed Fire Preparation	Unit 9
2011	Mechanical Vegetation Reduction	Units 9 & 10
2013	Prescribed Fire Preparation	Units 1 & 12
2014	Mechanical Vegetation Reduction	Units 13 & 14
2015	Pine Flatwoods Restoration	Unit 8
2016	Mechanical Vegetation Reduction	Units 7 & 11
2020	FEMA Firebreak Improvement	Units 1, 2, 5, 6, 9, 10 & 12
2022	Mechanical Vegetation Reduction	Units 10, 13 & 14
2023	FEMA Firebreak Maintenance	Units 1, 2, 6, 5, <u>7</u> , 9 & 12
2025	Scrub Restoration, Wildfire rehab	Units 1, 8 & 9

# Prescribed Fire

- Ten prescribed burns to date between 2000 & 2022
- 234.25 total acres
- Urban location dictates extremely narrow weather conditions in which prescribed burning may take place. Mechanical fuel reduction may be used as a surrogate for fire



# Wildfires

- Four wildfires have occurred on the site. The largest being 8.6 acres in March 2022



# Existing Public Use Facilities

- East side of the site (east of US-1) opened to the public in August 2001 and the west side opened in April 2004
- 4.1-miles of natural-surfaced hiking trails
- 0.6-miles of accessible paved nature trails
- JUD receives between 1,000 – 2,000 visitors a month – this year we are on target to have >18,000 visitors



# Oceanfront Public Use Facilities



Bike Rack



Nature Trail



Hiking Trail



Dune Overwalk



Observation Platform



Large Kiosk

# Juno West Public Use Facilities



# FIND Public Use Facilities



Boat Dock



Observation Tower



Picnic  
Tables



Large Kiosk

# Security Efforts & Issues

Management access gates, fencing, and signage have been installed.

Wildlands Task Force regularly patrols the site & issues citations

Environmental Tips Hotline  
Posted at kiosk 561-616-BIRD

Common issues: palmetto berry poaching, trash, vandalism and graffiti.



# Guided Hikes and Volunteer Clean-up Events



**JUNO DUNES WEST WORKDAY - MAY 21, 2025**

Palm Beach County Natural Areas

Volunteers helped the Palm Beach County Department of Environmental Resources Management remove 1,560 pounds of trash from this north county natural area. Total volunteer hours = 39

**Palm Beach County ERM Volunteer Program Update**

A collage of 20 small photographs. The top row shows a group photo of volunteers, a man in a boat with trash, a person with a trash bin, and a person with a green trash bag. The middle and bottom rows show various individuals and groups of volunteers in different settings, such as on land and in water, picking up trash and holding trash bags. The bottom right photo shows a group of volunteers standing in a boat filled with collected trash on a body of water.

# Questions?



PALM BEACH COUNTY  
**NATURAL  
AREAS**

