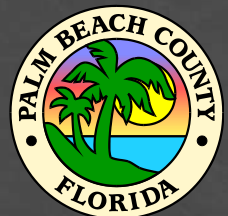


**Palm Beach County
Department of Environmental Resources Management
Juno Dunes Natural Area**



PALM BEACH COUNTY
**NATURAL
AREAS**

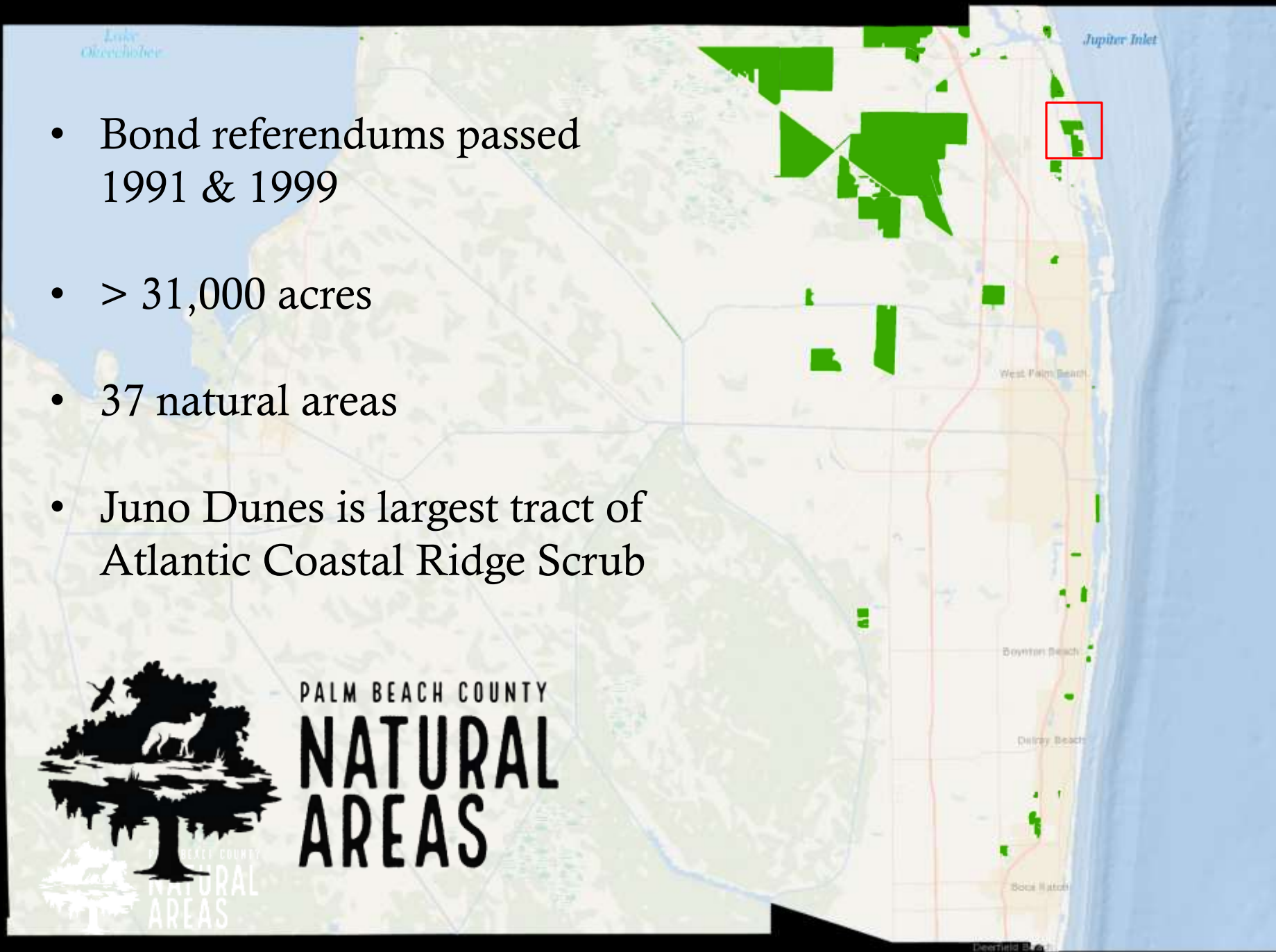
**Town of Juno Beach
Planning & Zoning Meeting
September 15, 2025**



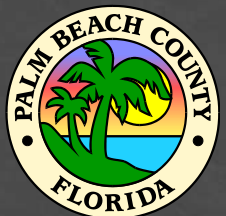
- Bond referendums passed 1991 & 1999
- > 31,000 acres
- 37 natural areas
- Juno Dunes is largest tract of Atlantic Coastal Ridge Scrub



PALM BEACH COUNTY
**NATURAL
AREAS**

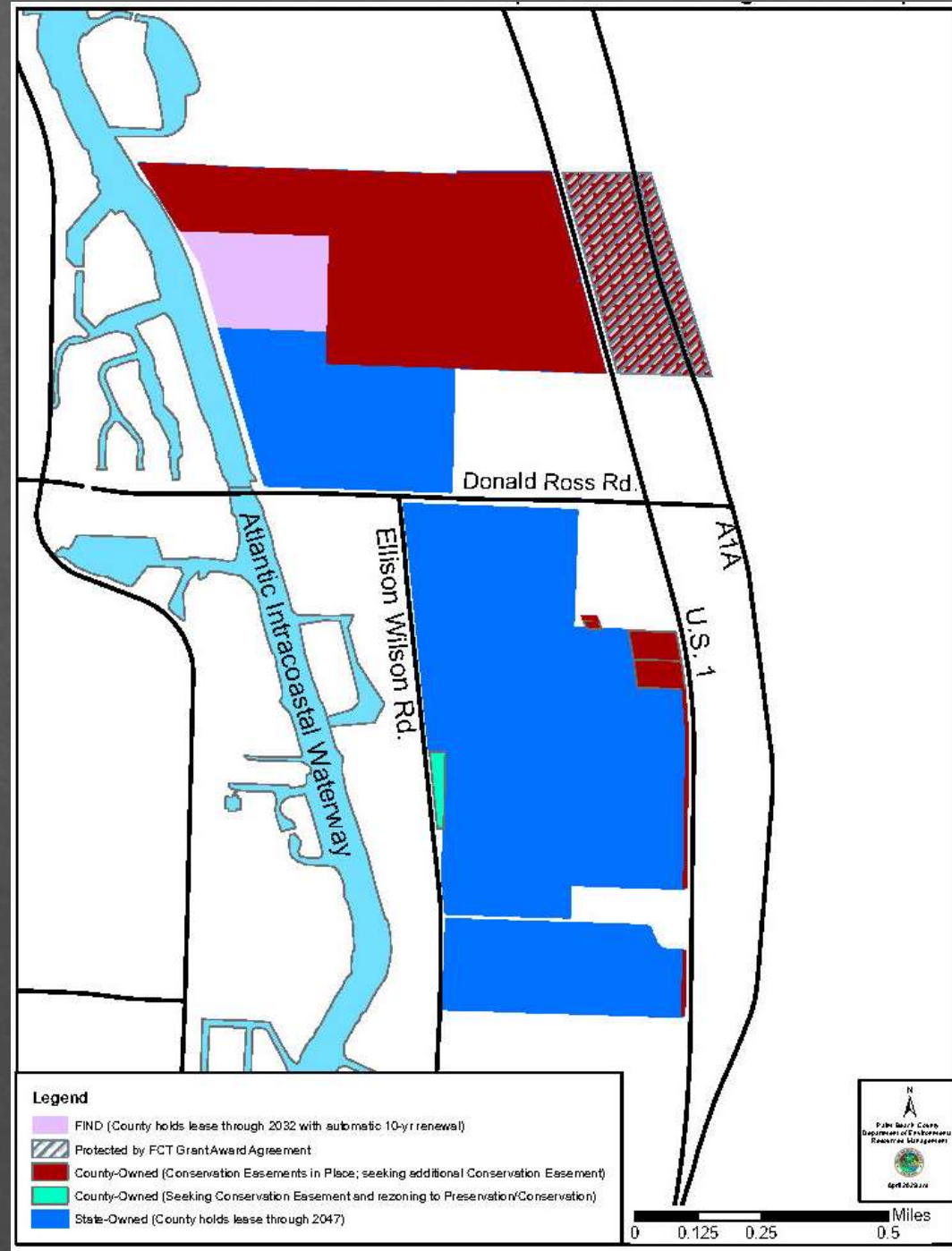


Our Mission: Acquire, preserve and protect environmentally sensitive lands in Palm Beach County and protect wildlife and endangered species on such lands.



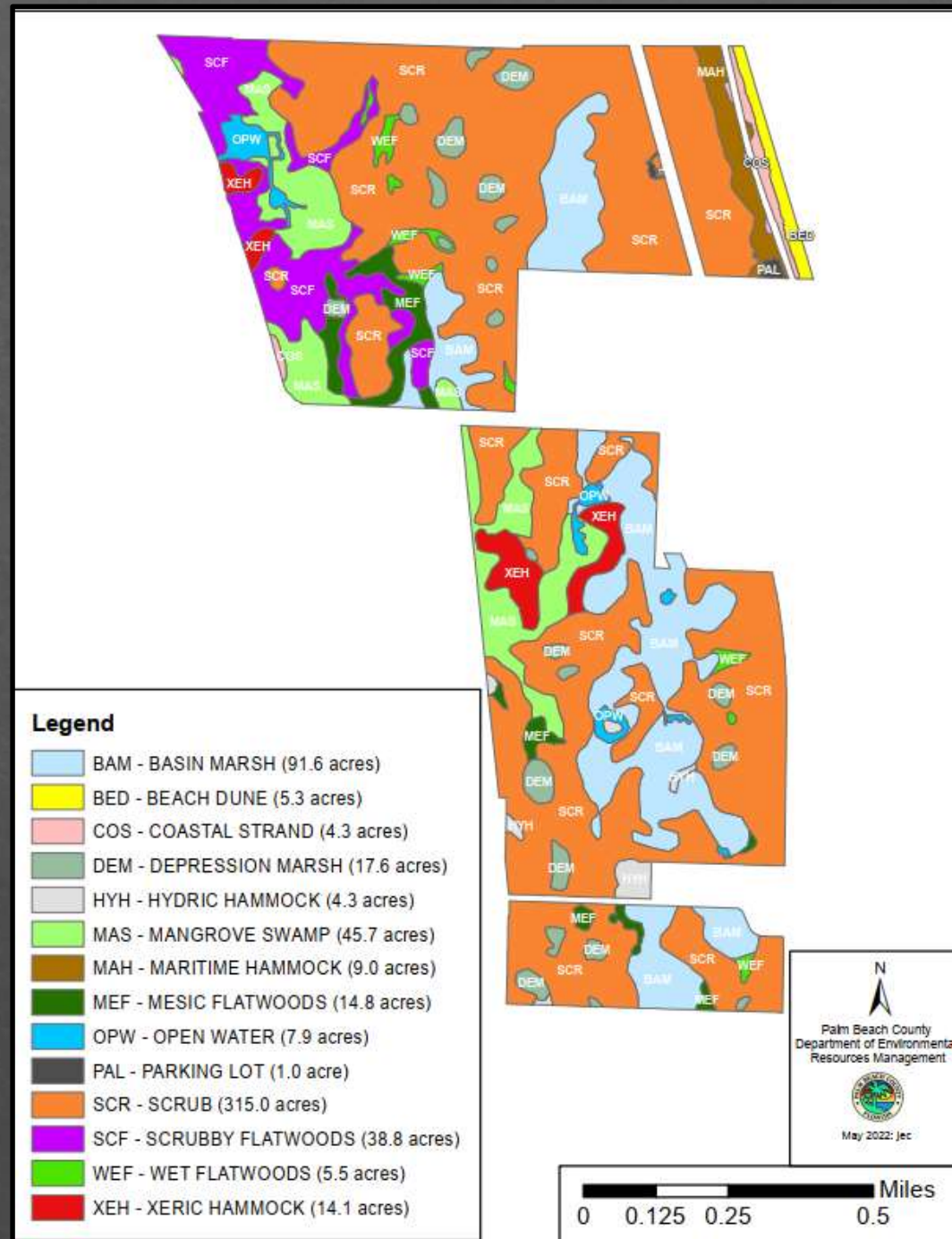
Tracts / Ownership

- 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



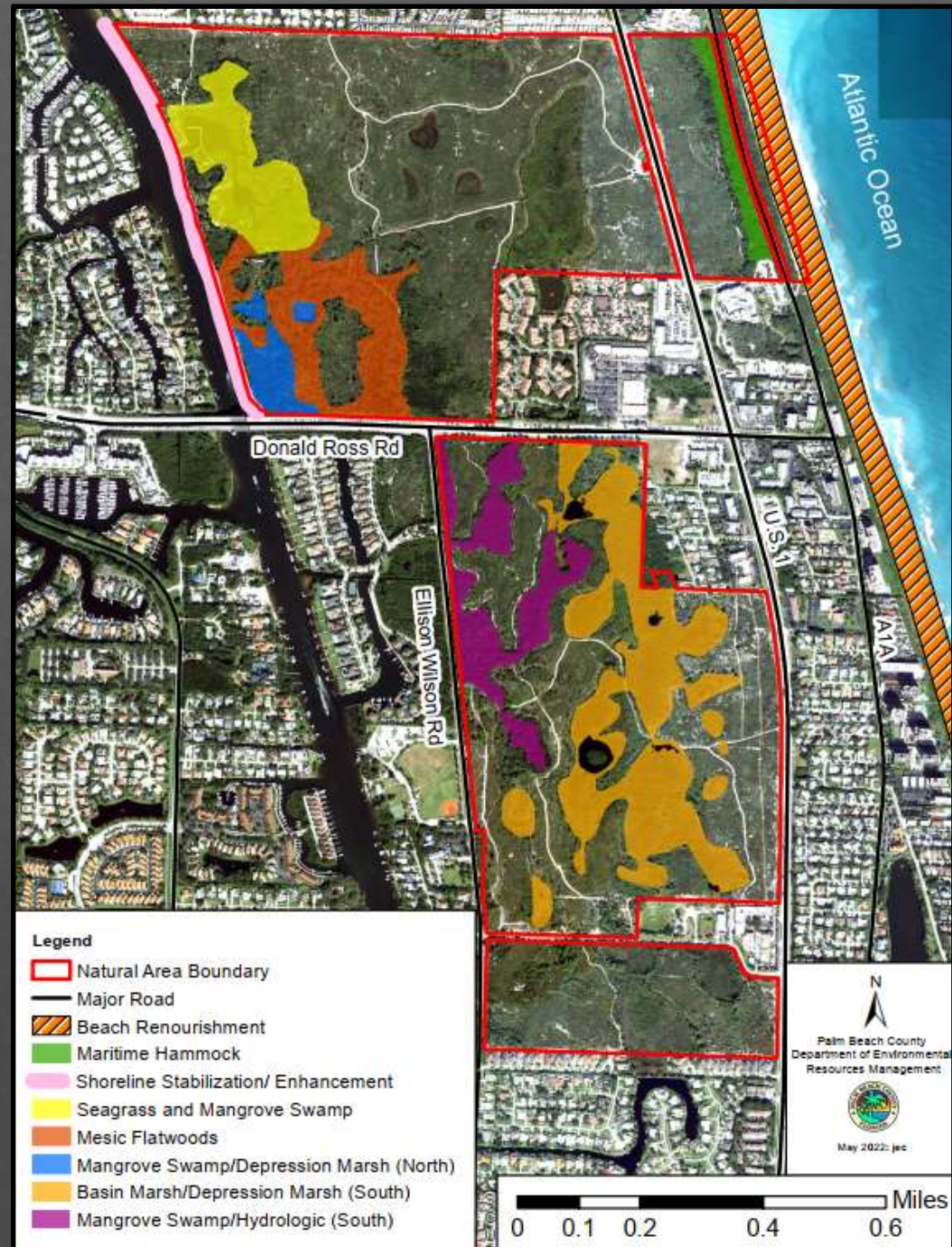
Vegetation Communities

- 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



26 Listed Planted Species



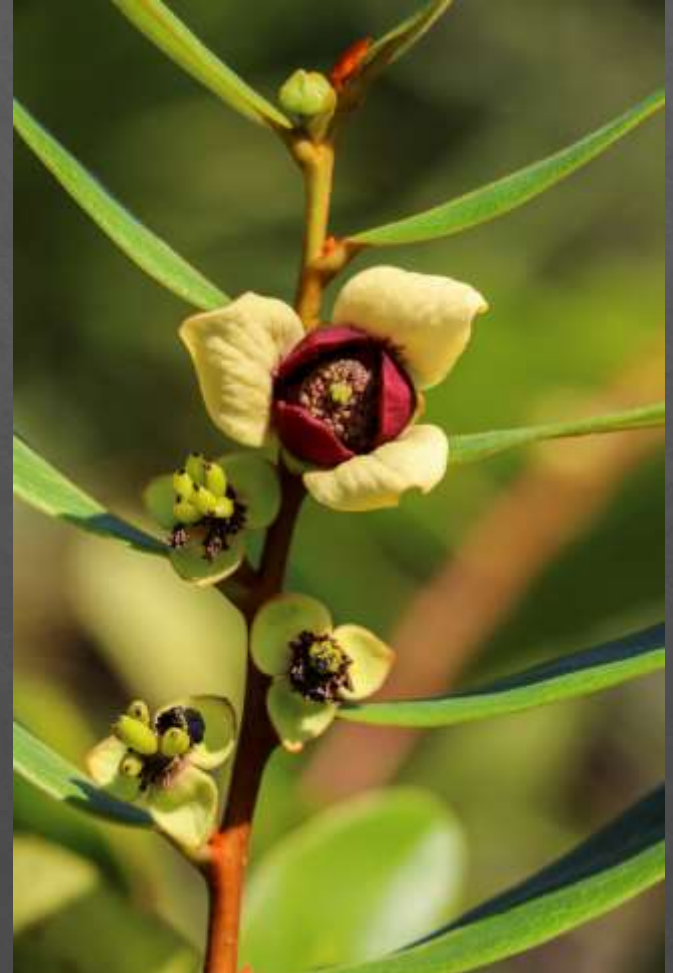
SCIENTIFIC NAME	COMMON NAME	STATUS/RANK DESIGNATIONS		
		USFWS	FDACS	FNAI
<i>Acrostichum aureum</i>	Golden leather fern	N	T	G5/S3
<i>Asclepias curtissii</i>	Curtiss's milkweed	N	E	N
<i>Asimina tetramera</i>	Four-petal pawpaw	E	E	G1/S1
<i>Conradina grandiflora</i>	Large-flowered rosemary	N	T	G3/S3
<i>Cyperus 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>Lyccopodiella 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>spectabilis</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



		STATUS/RANK DESIGNATIONS		
SCIENTIFIC NAME	COMMON NAME	USFWS	FWC	FNAI
<i>Aethecerinus hornii</i>	Aethecerinus 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>Hemiarctus 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 theonius</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 ajaja</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

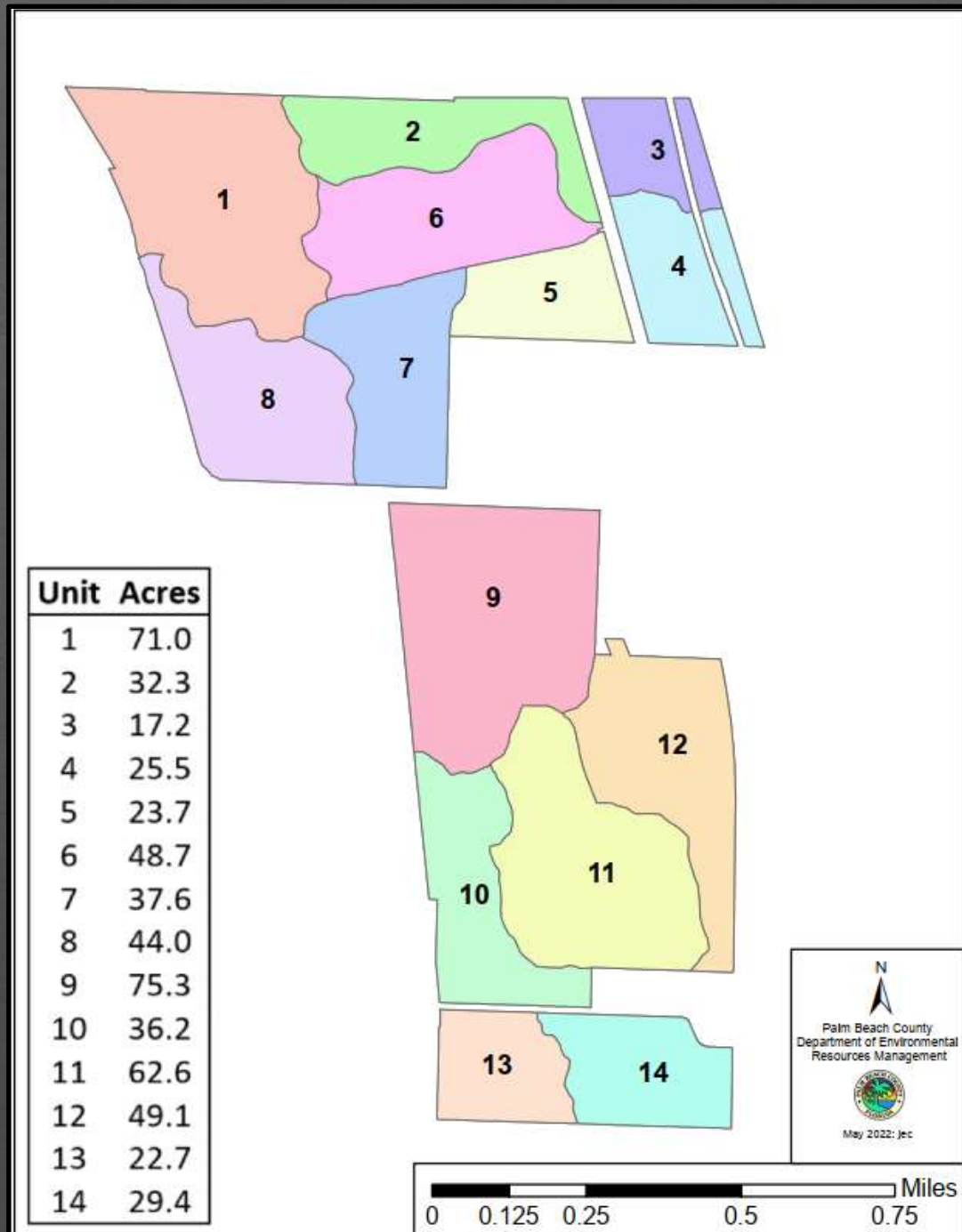




Examples of State Listed Species

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

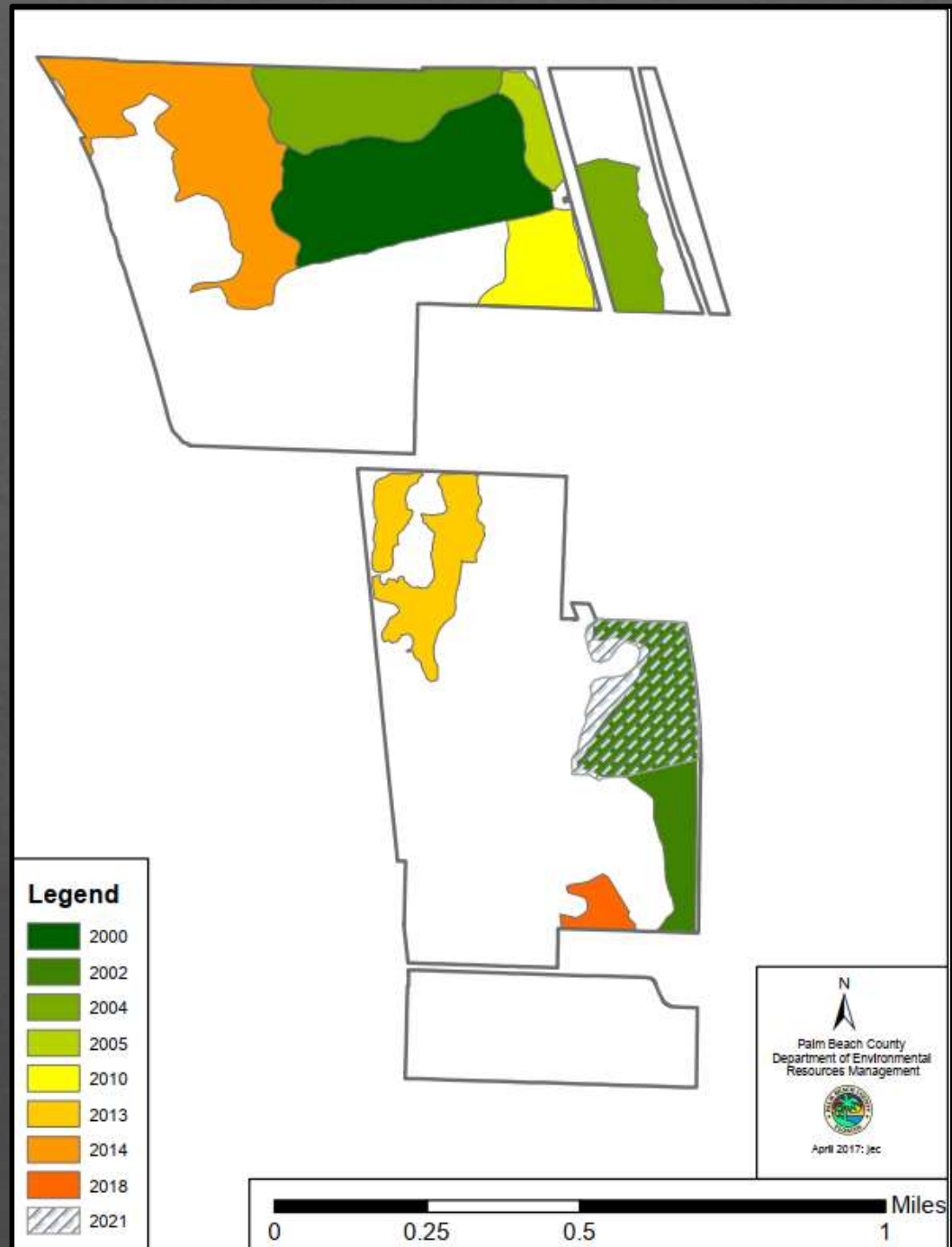
- Between 2010 & 2025:
mechanical reduction
methods were used for
upland restoration, WUI
maintenance and
prescribed fire preparation



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, 9</u> & 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



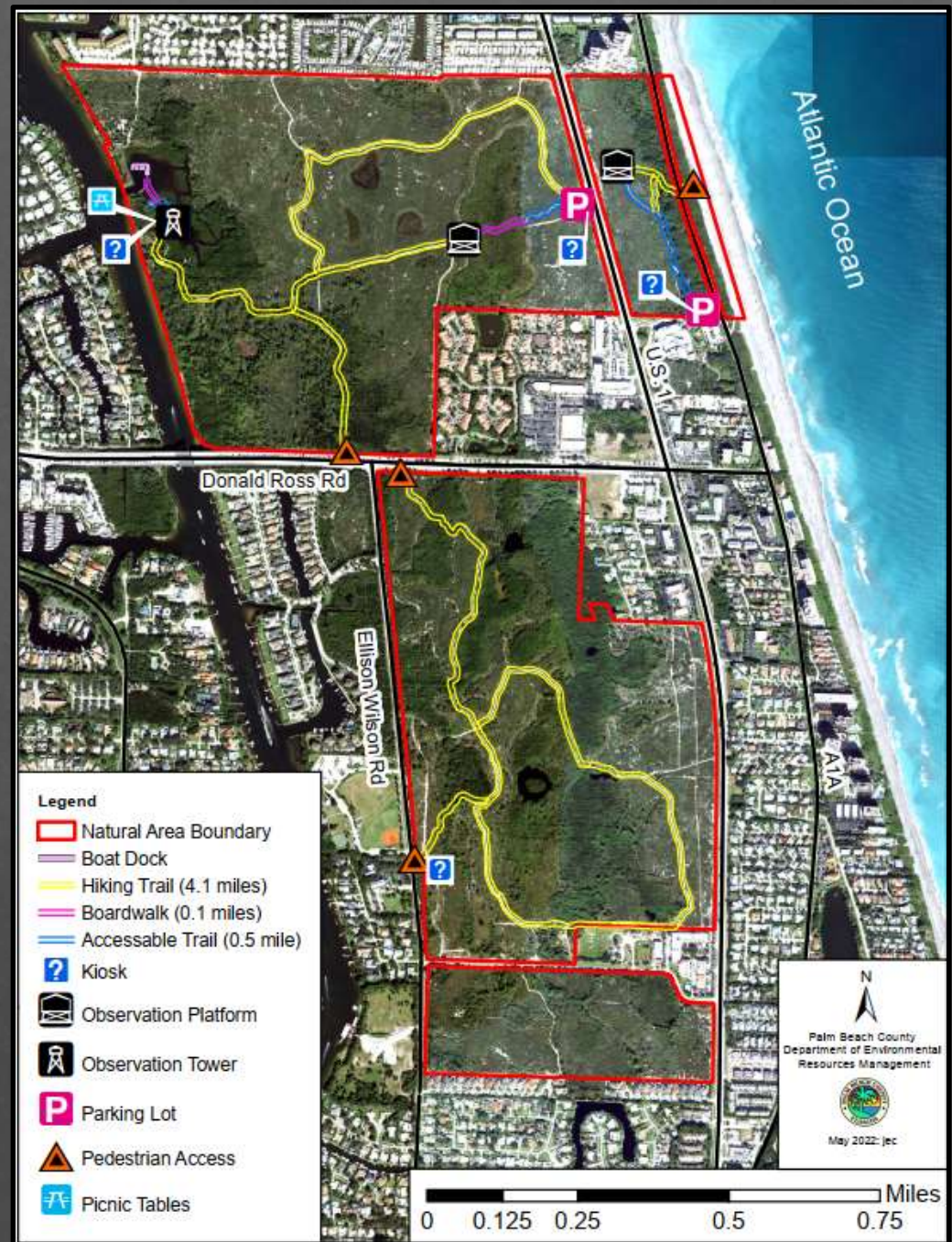
Wildfires

- 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

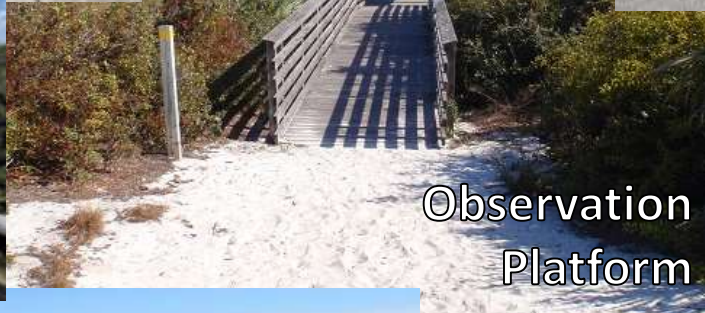
Kiosk &
Trail Head



Parking Lot



Observation
Platform



Bike Rack



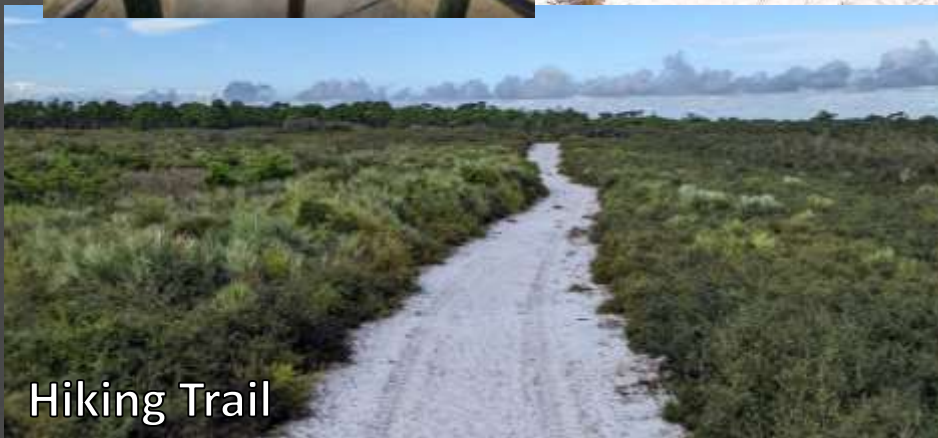
Boardwalk



Nature Trail



Hiking Trail



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



Palm Beach County ERM Volunteer Program Update



JUNO DUNES WEST WORKDAY - MAY 21, 2025

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



THANK YOU, VOLUNTEERS & STAFF!



Palm Beach County Board of County Commissioners
Department of Environmental Resources Management

Questions?



PALM BEACH COUNTY
**NATURAL
AREAS**

