



# Lower Suwannee NWR

*Past, Present, and Future*

Lower Suwannee National Wildlife Refuge est. April 10, 1979.

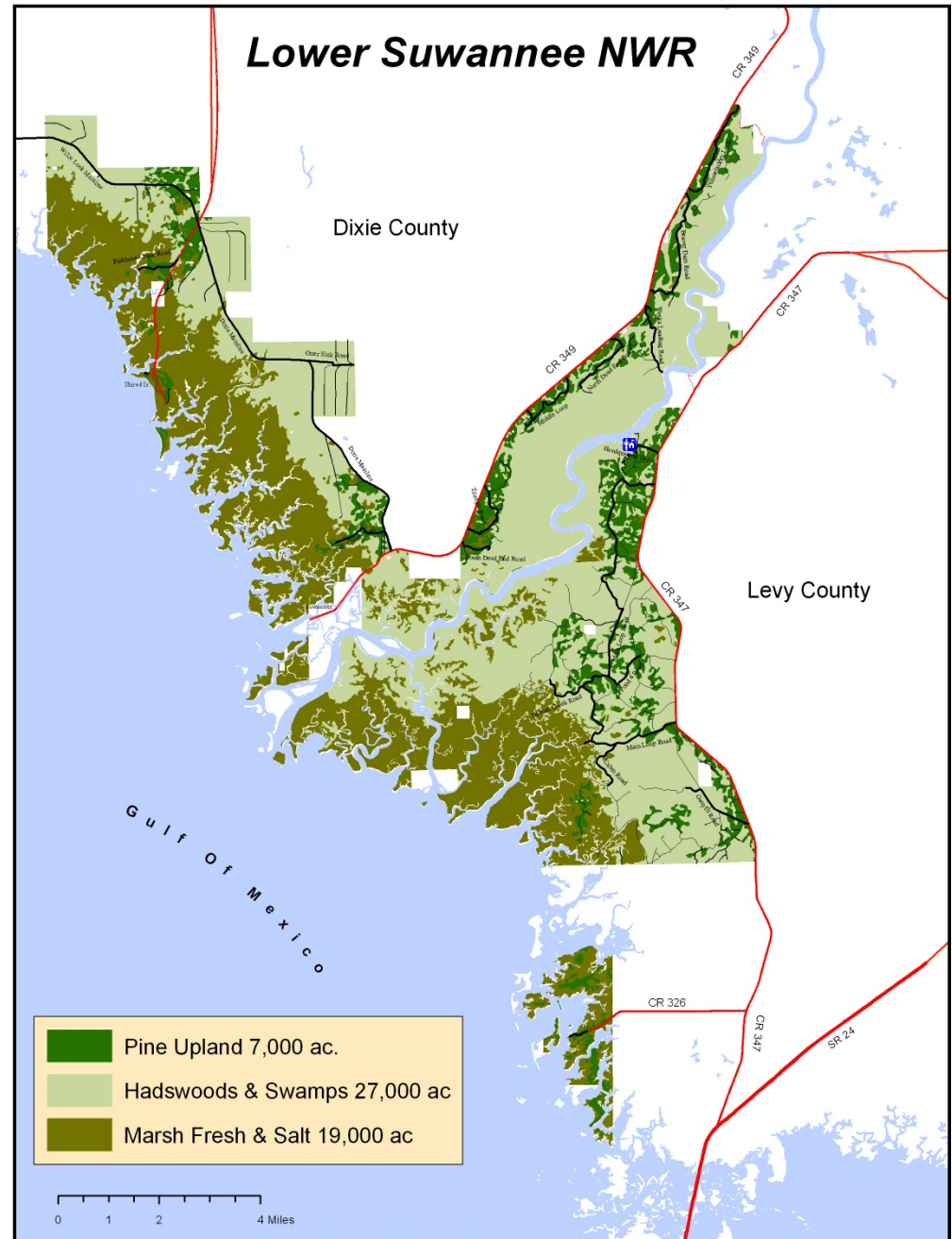
Lands acquired from timber companies and private parties for over 36 years

Present size - 53,000 acres.

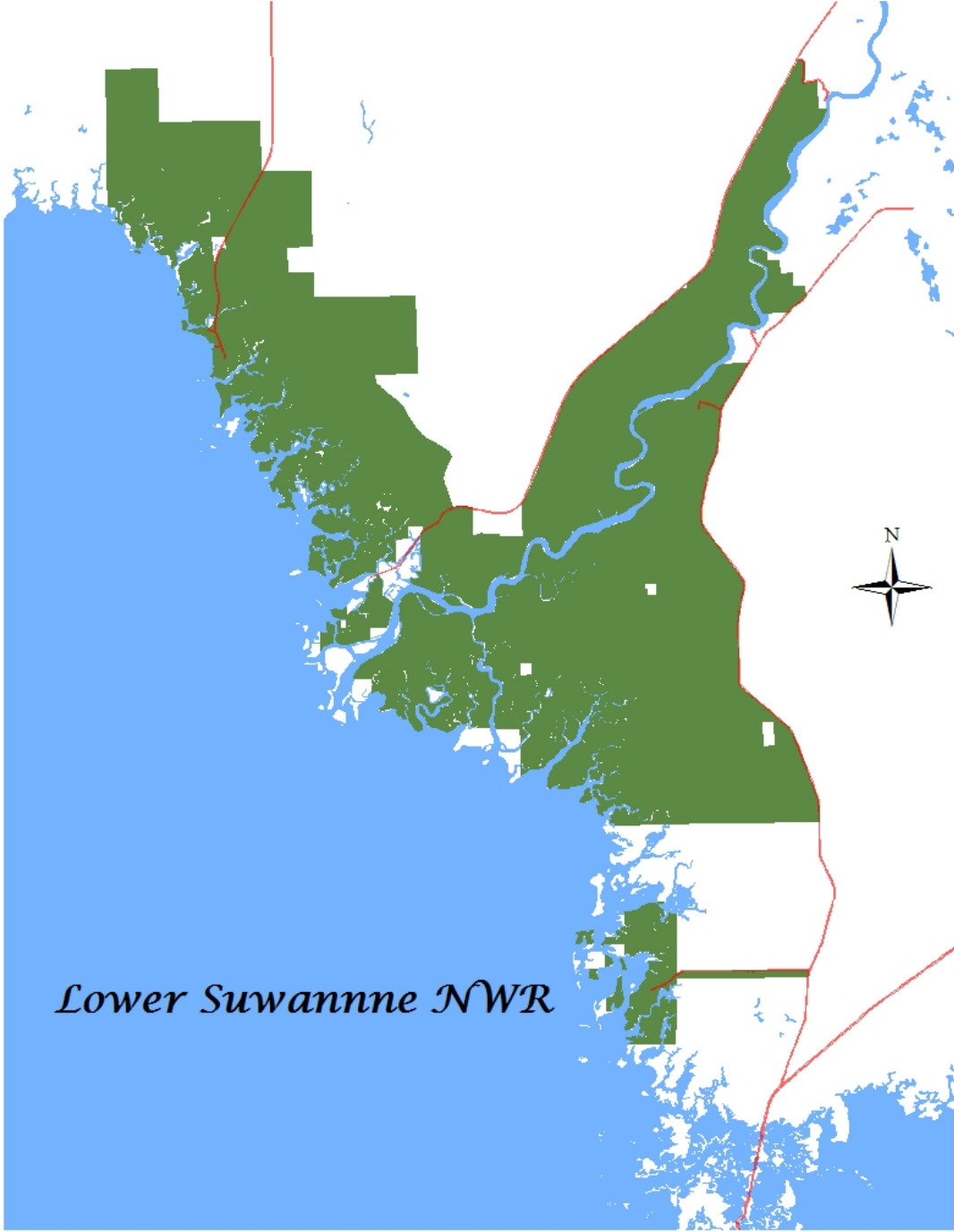
Also, manage ~2,000 acres of land for other parties.

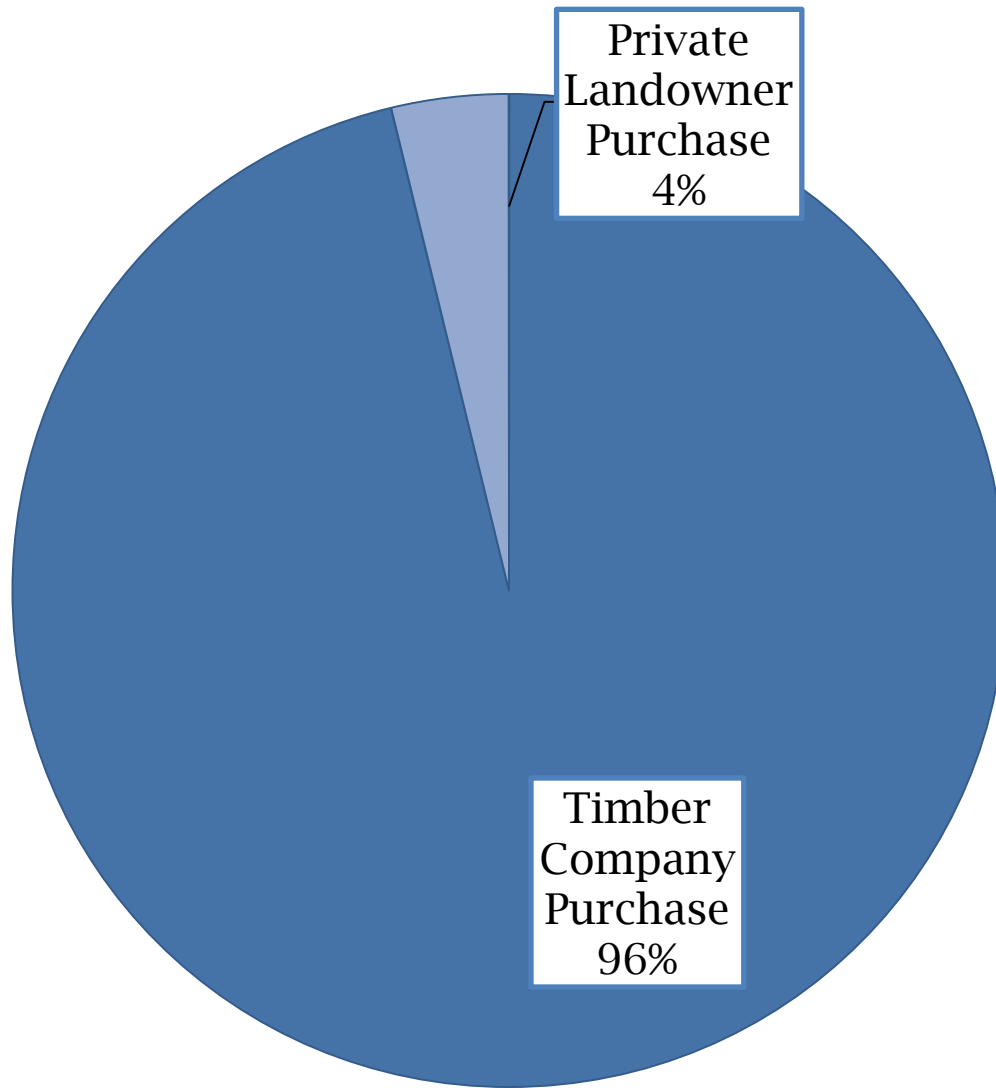
20 miles of Suwannee River.  
30 miles of Gulf Coast marsh and islands (including Cedar Keys NWR).

Refuge habitats: predominantly fresh and brackish wetlands



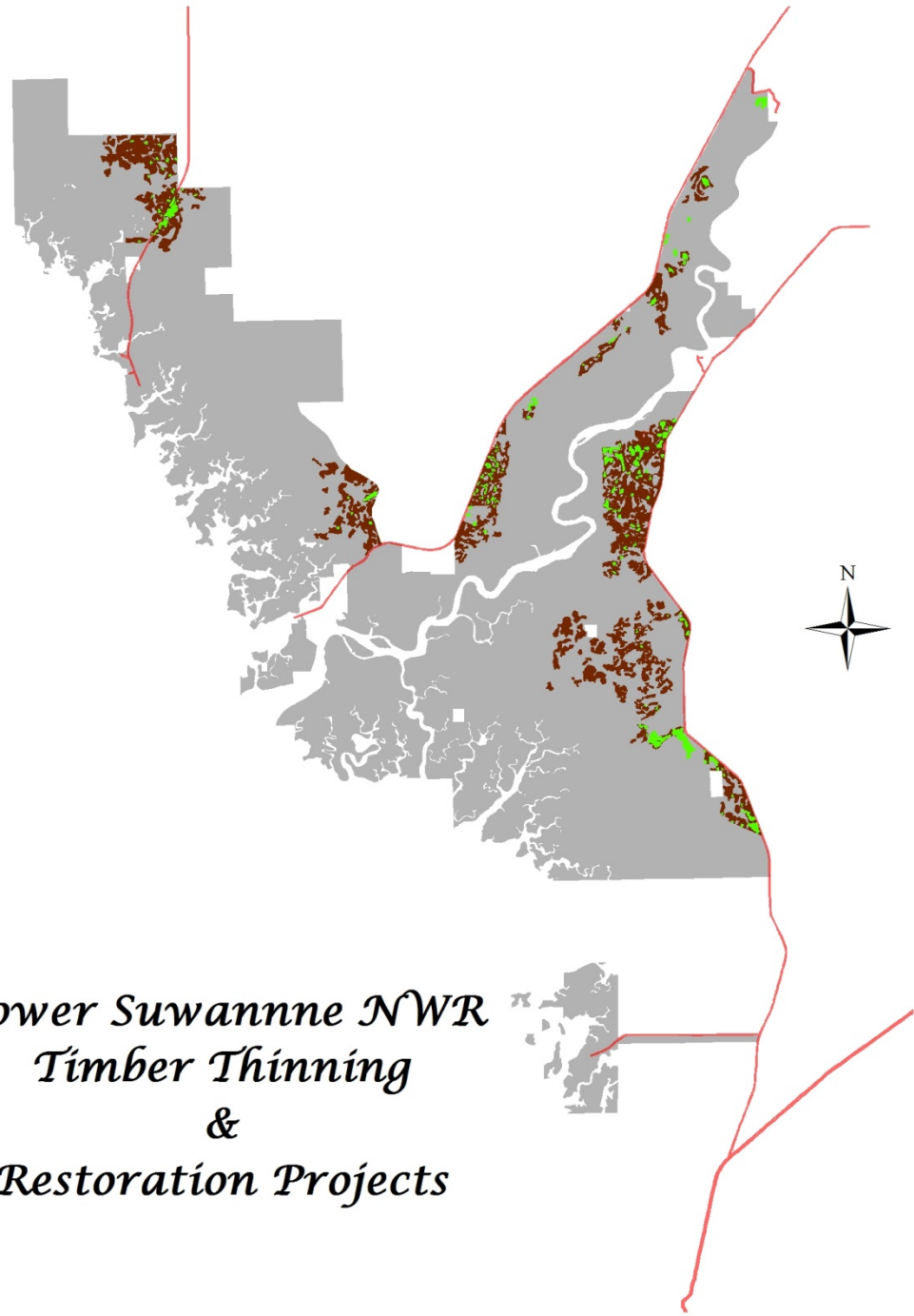
# Refuge History





# Refuge Progress

*Lower Suwannee NWR  
Timber Thinning  
&  
Restoration Projects*



# Timber Thinning

<b># OF TIMBER SALES</b>	<b>30</b>
<b>SITES</b>	<b>108</b>
<b>ACRES TREATED</b>	<b>4,594</b>
<b>AVERAGE AGE</b>	<b>23</b>

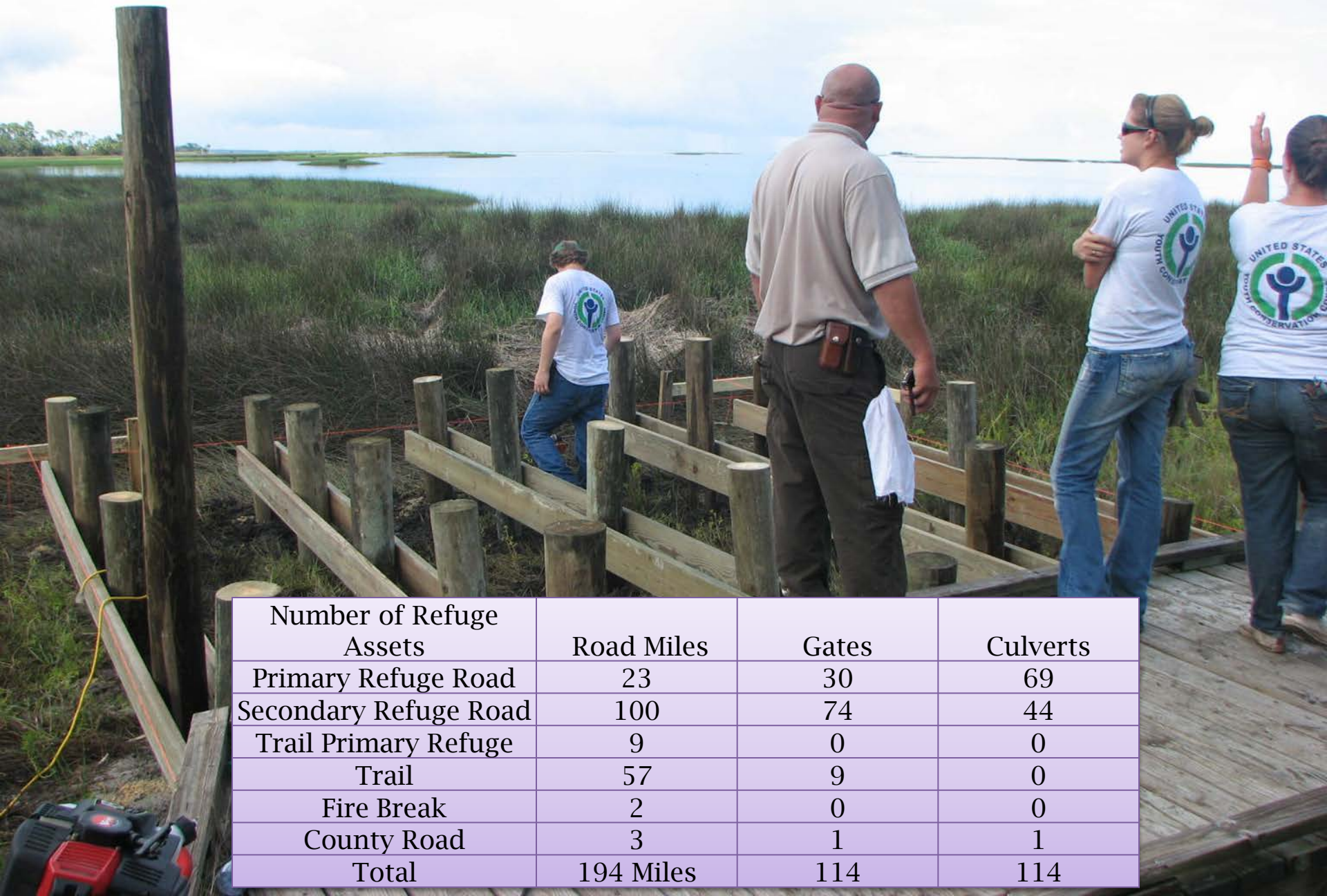
2006 Timber Sale Compartment 7A  
Harvested October 2007  
Compartment 7A Photo Point # 6



# Restoration Projects

<b>Project Sites</b>	<b>298</b>
<b>Acres Manipulated</b>	<b>525</b>
<b>Longleaf Planted Stems</b>	<b>370,000</b>
<b>Wiregrass Planted Plugs</b>	<b>255,000</b>

# Maintenance and Improvements



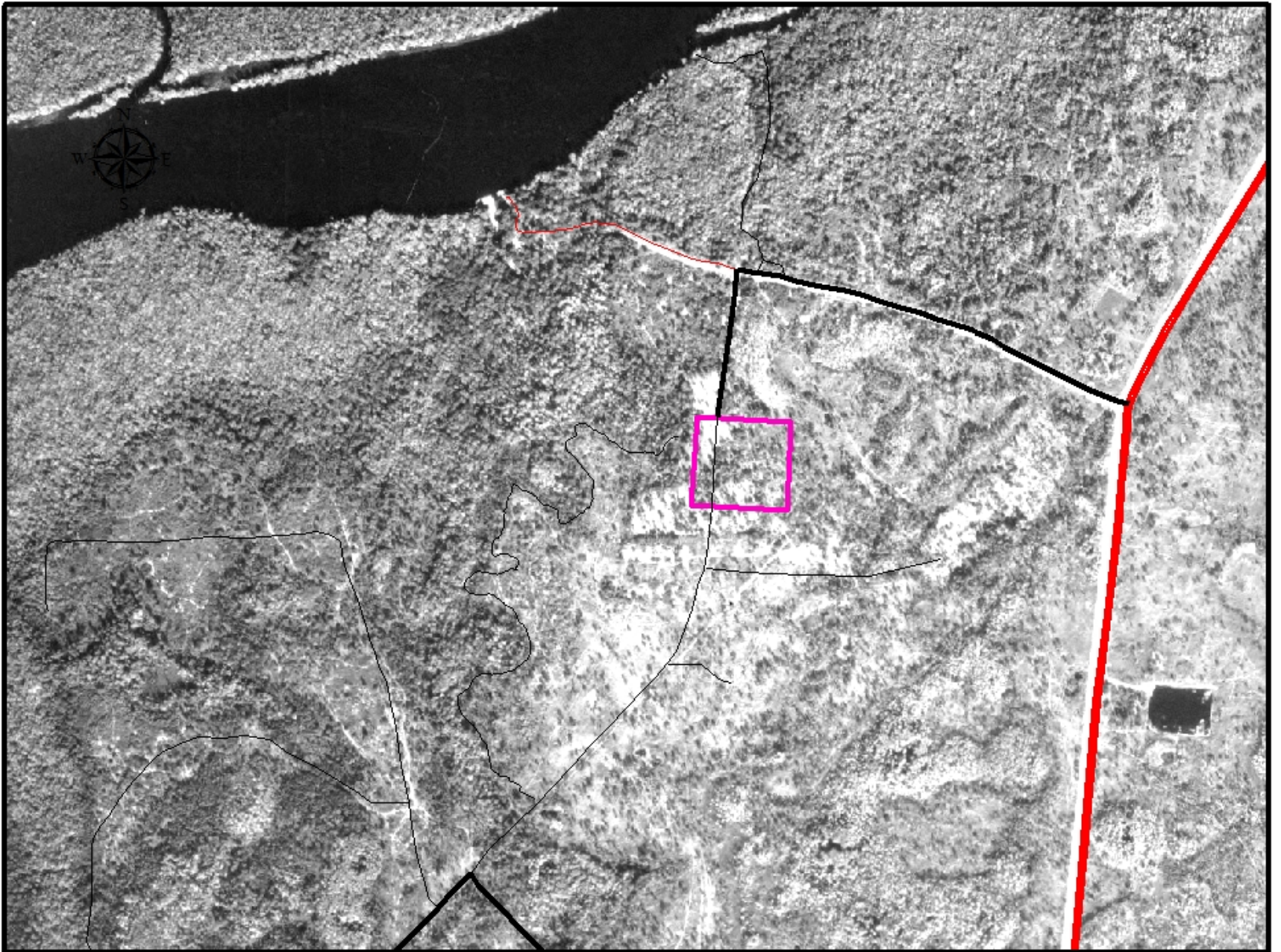
Number of Refuge Assets	Road Miles	Gates	Culverts
Primary Refuge Road	23	30	69
Secondary Refuge Road	100	74	44
Trail Primary Refuge Trail	9	0	0
57	9	0	
Fire Break	2	0	0
County Road	3	1	1
Total	194 Miles	114	114



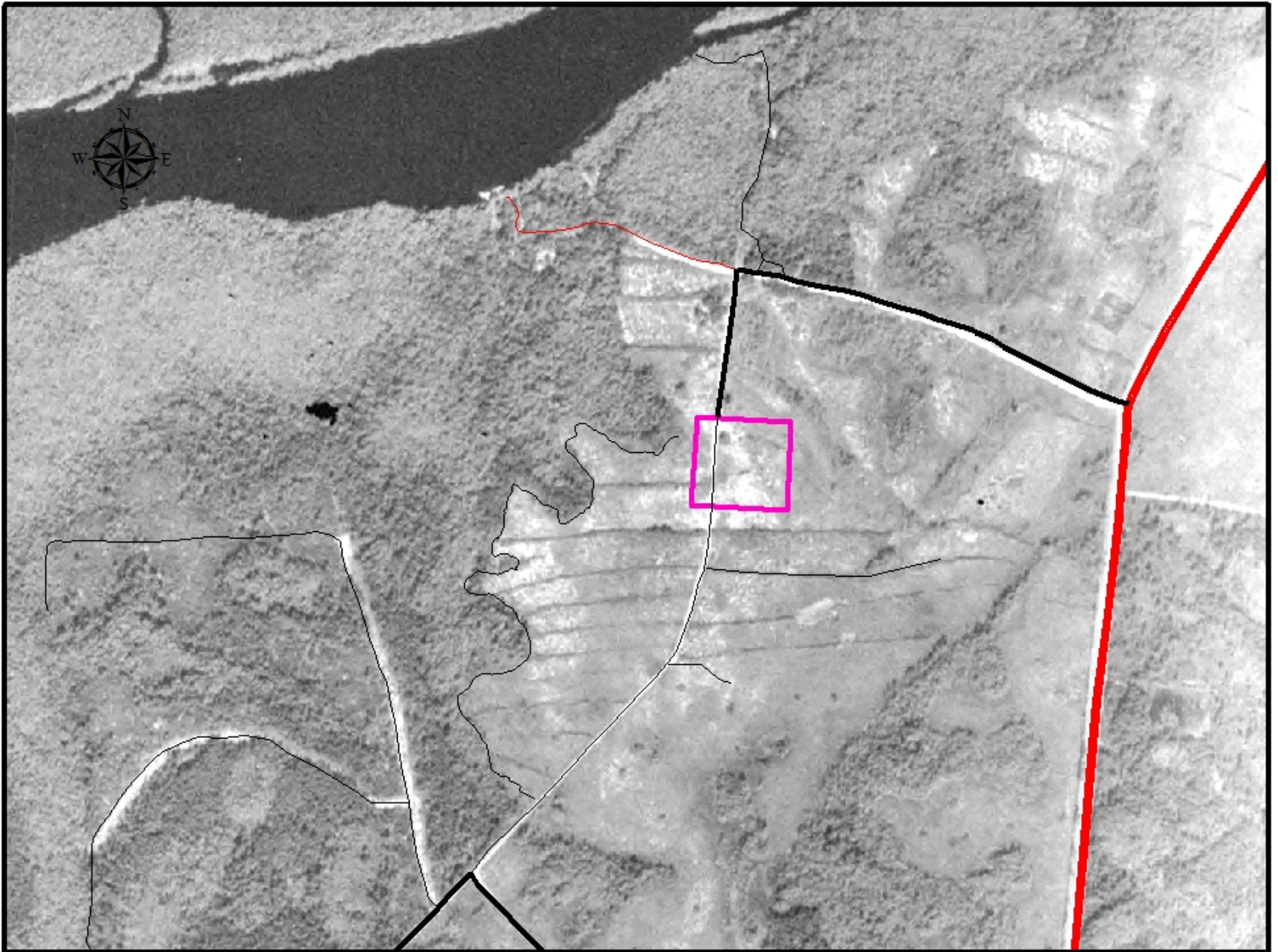
1940



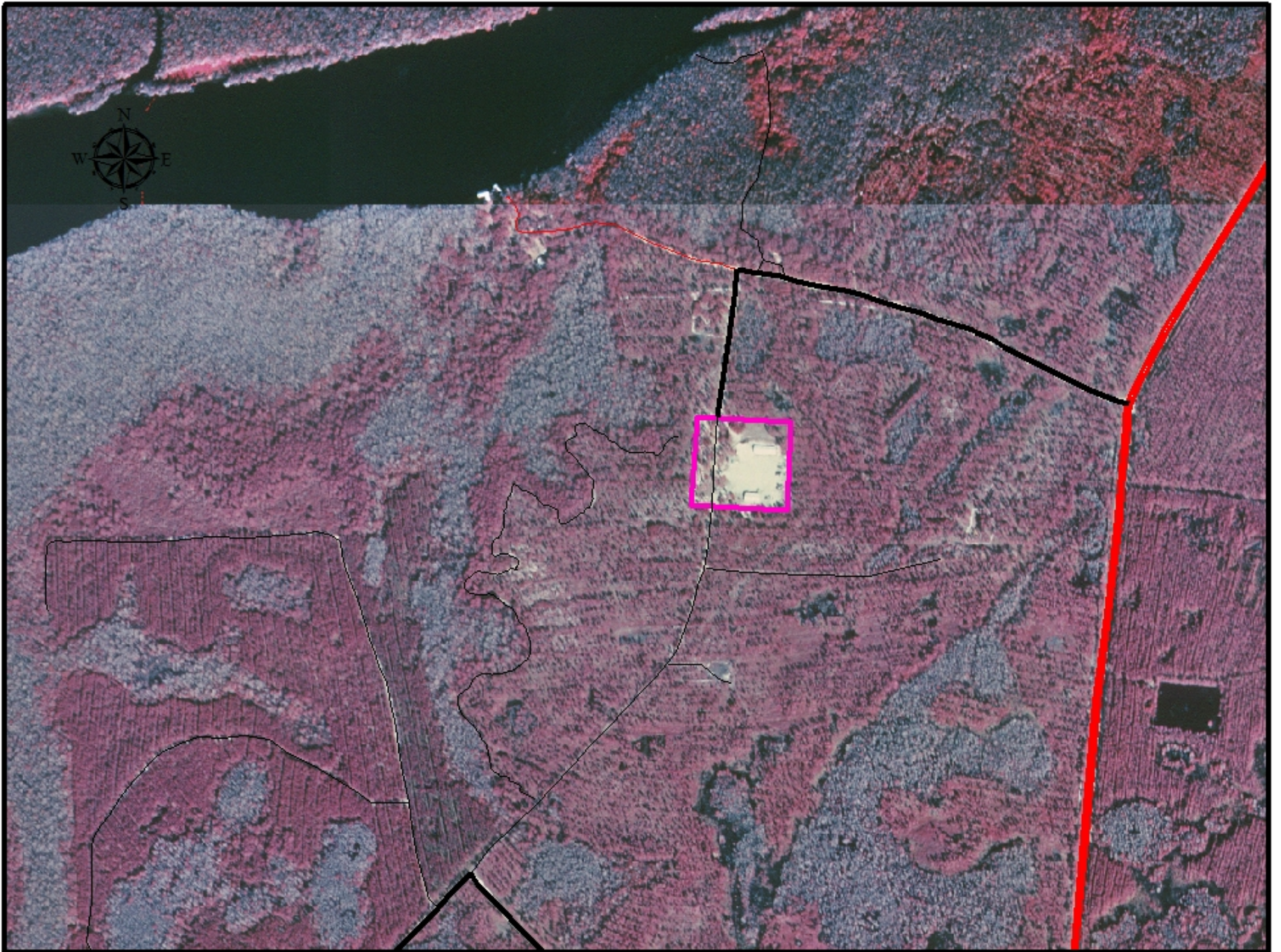
1961



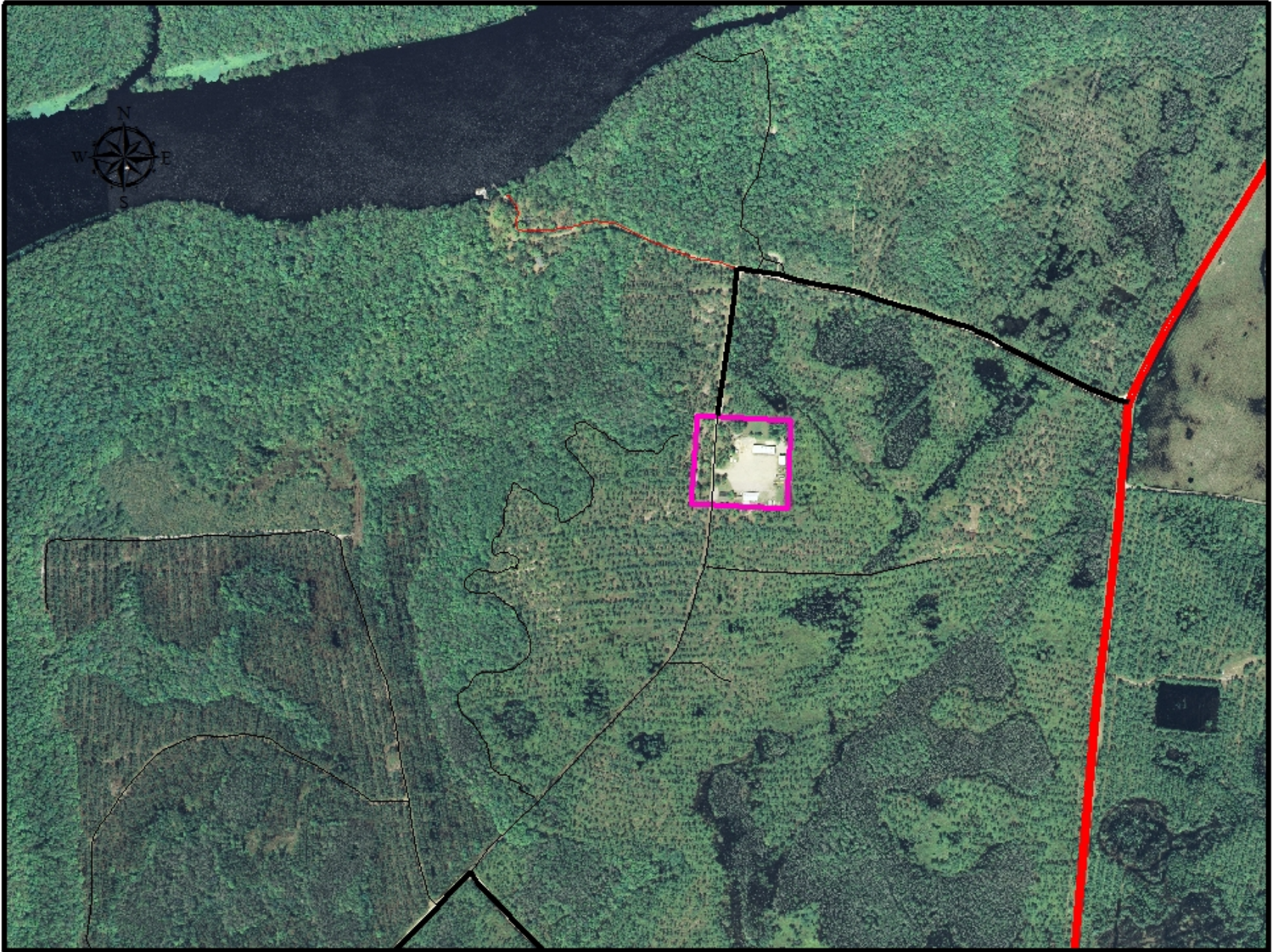
1970



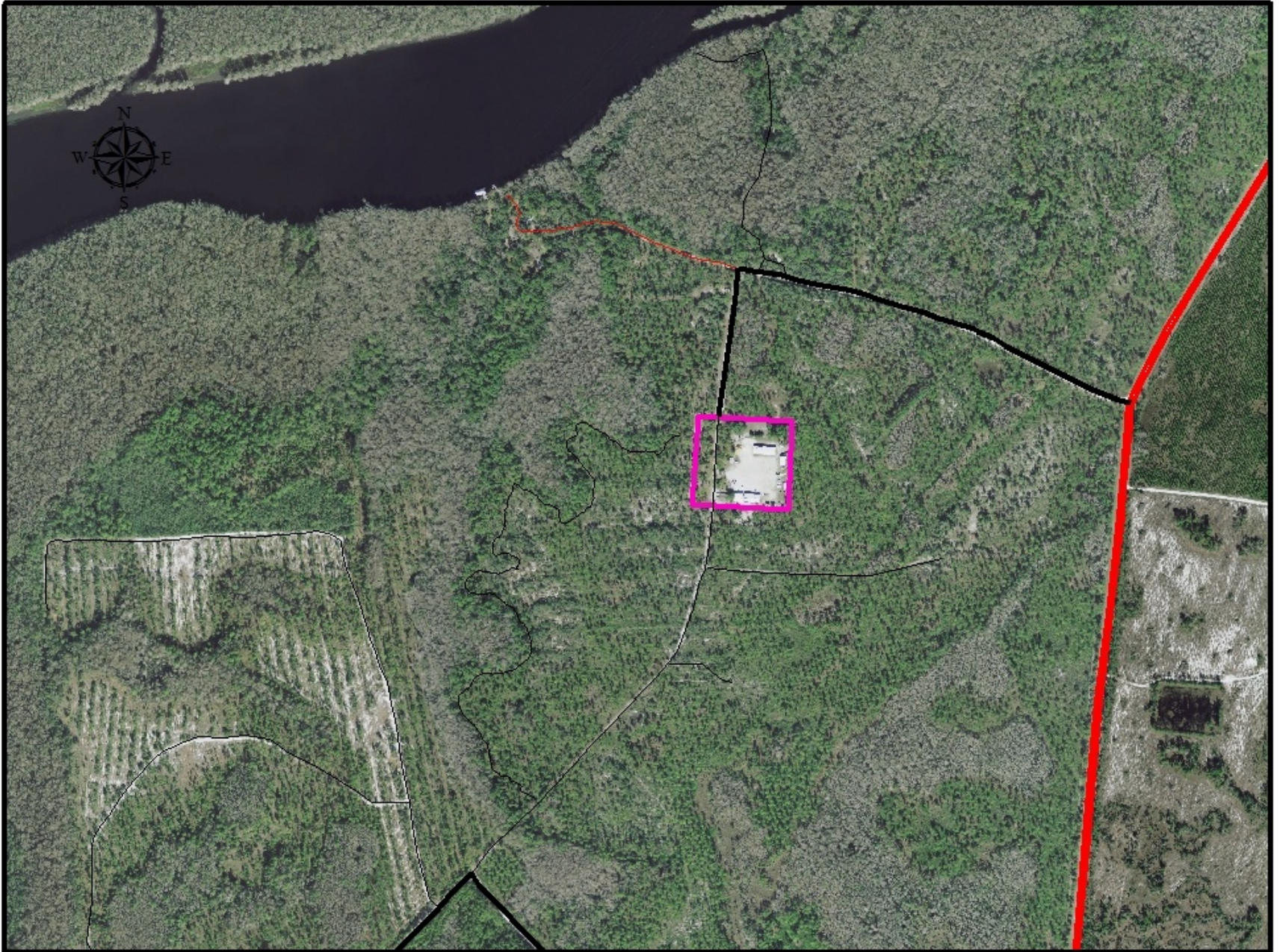
1999



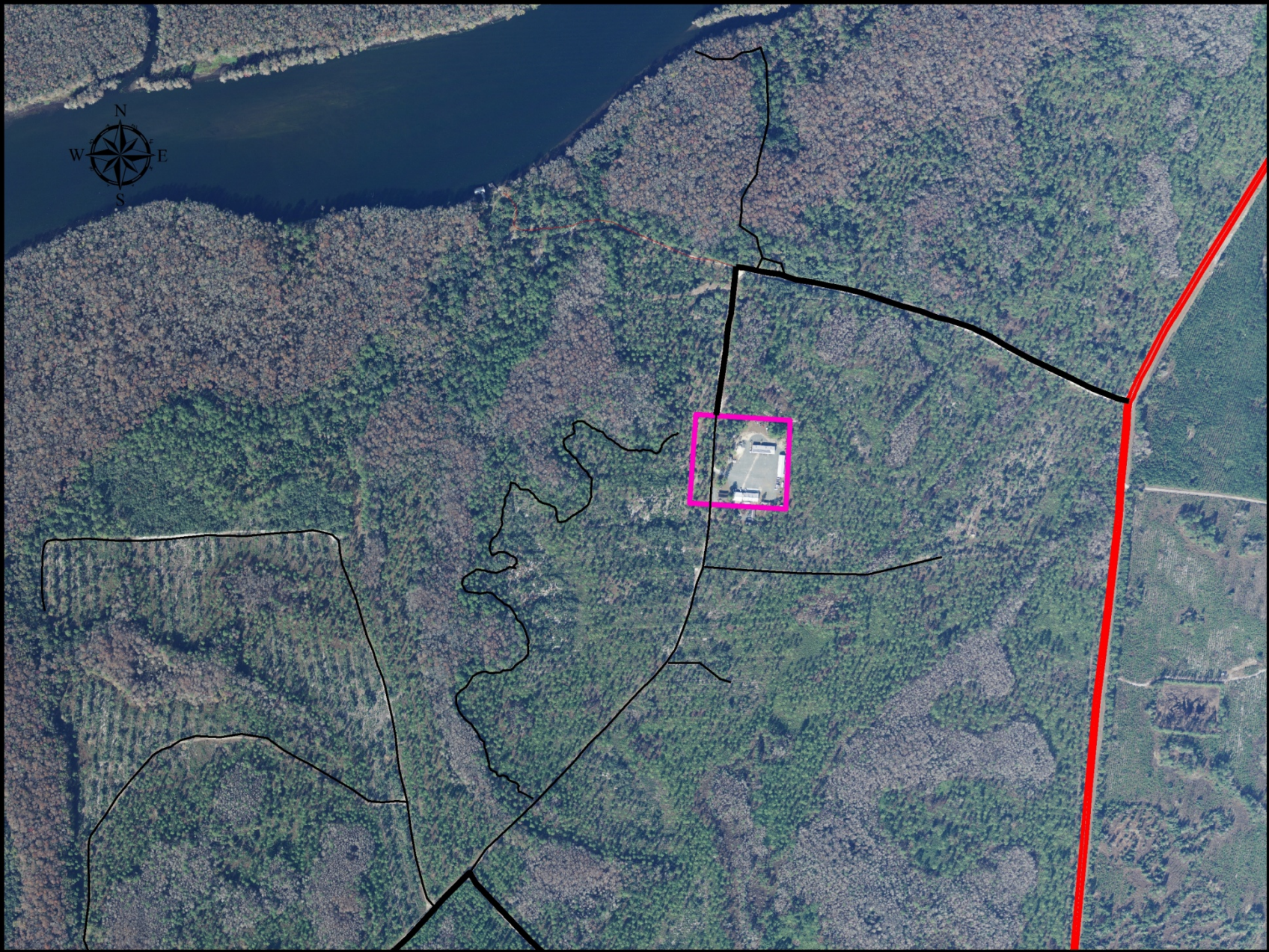
2004



2007



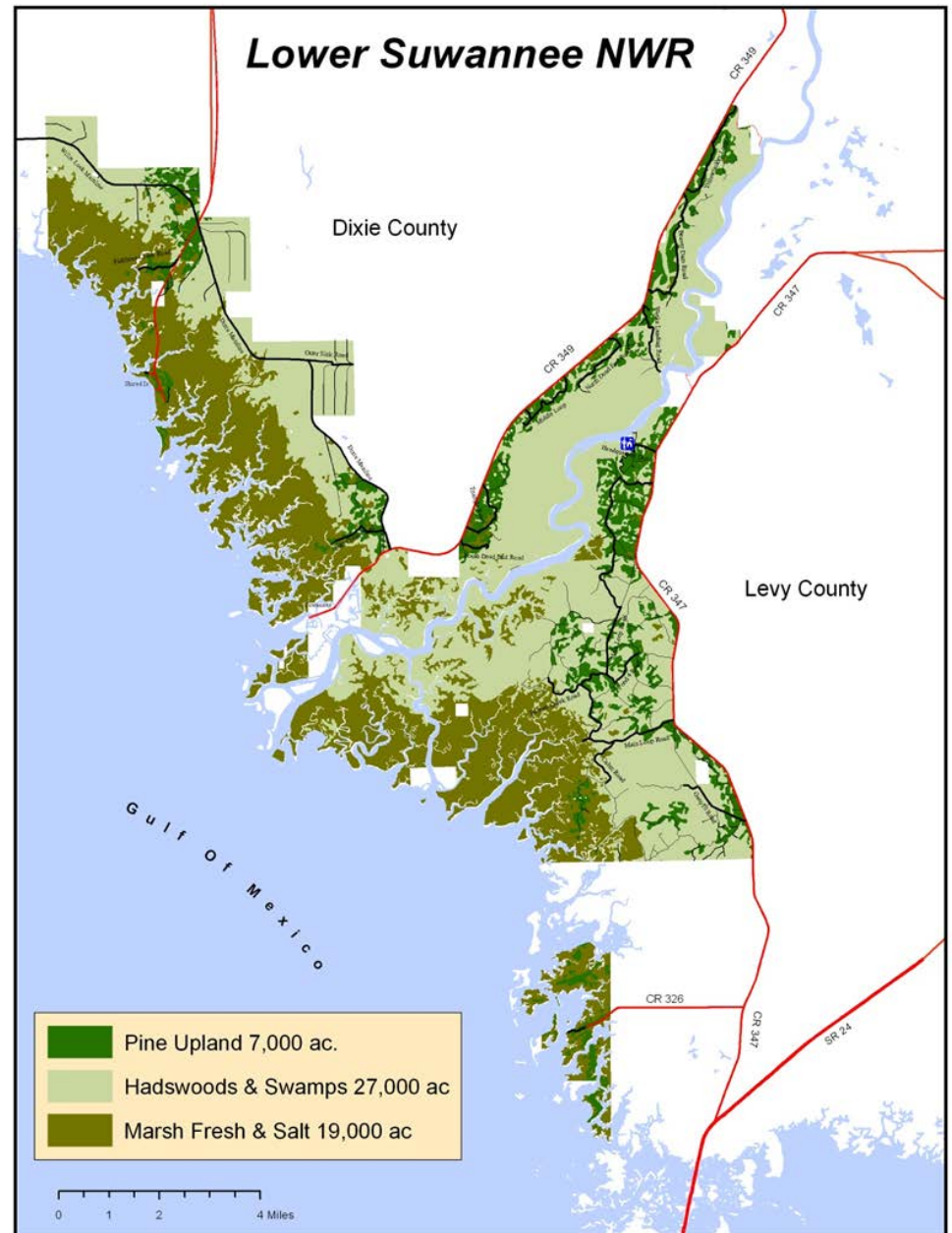
2011

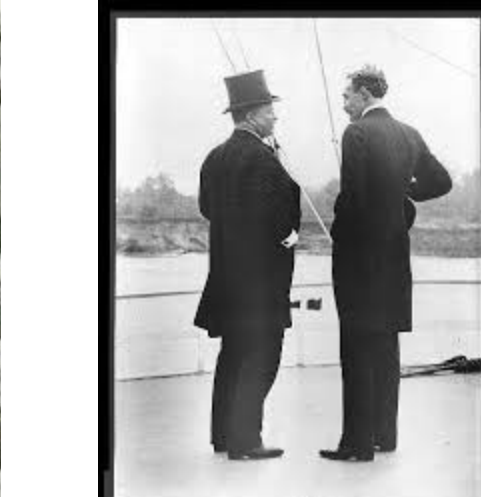
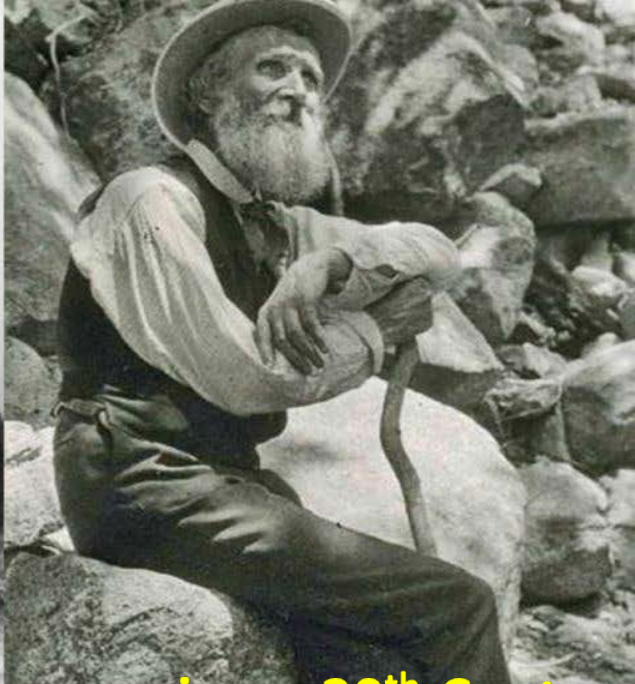




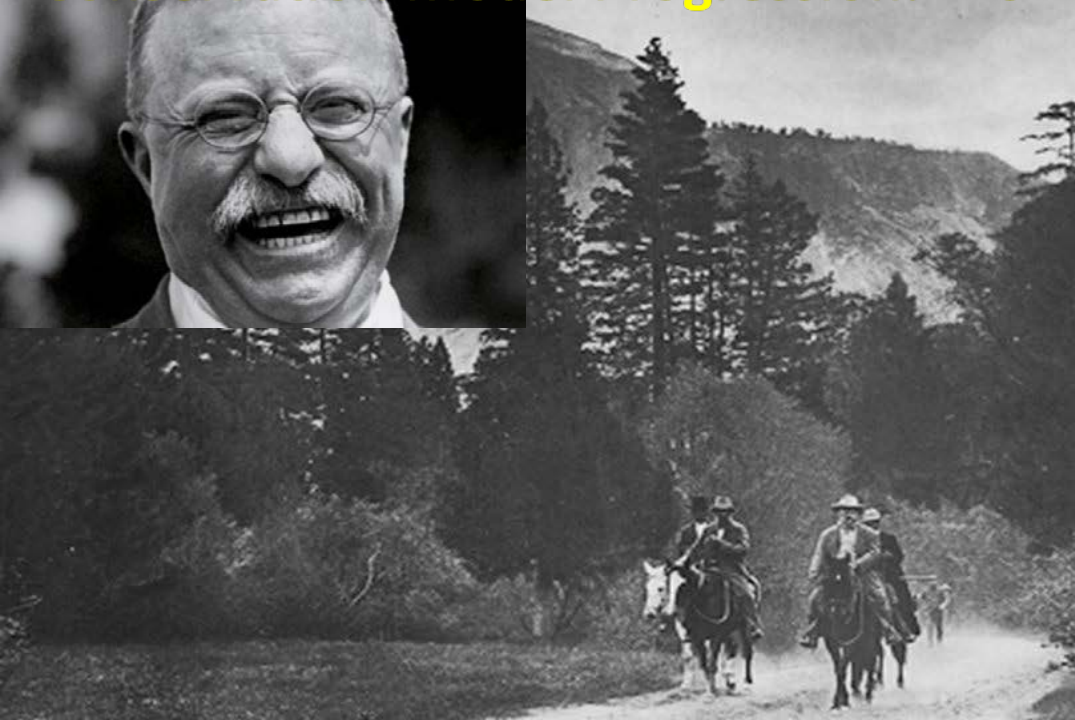


# The Future ...



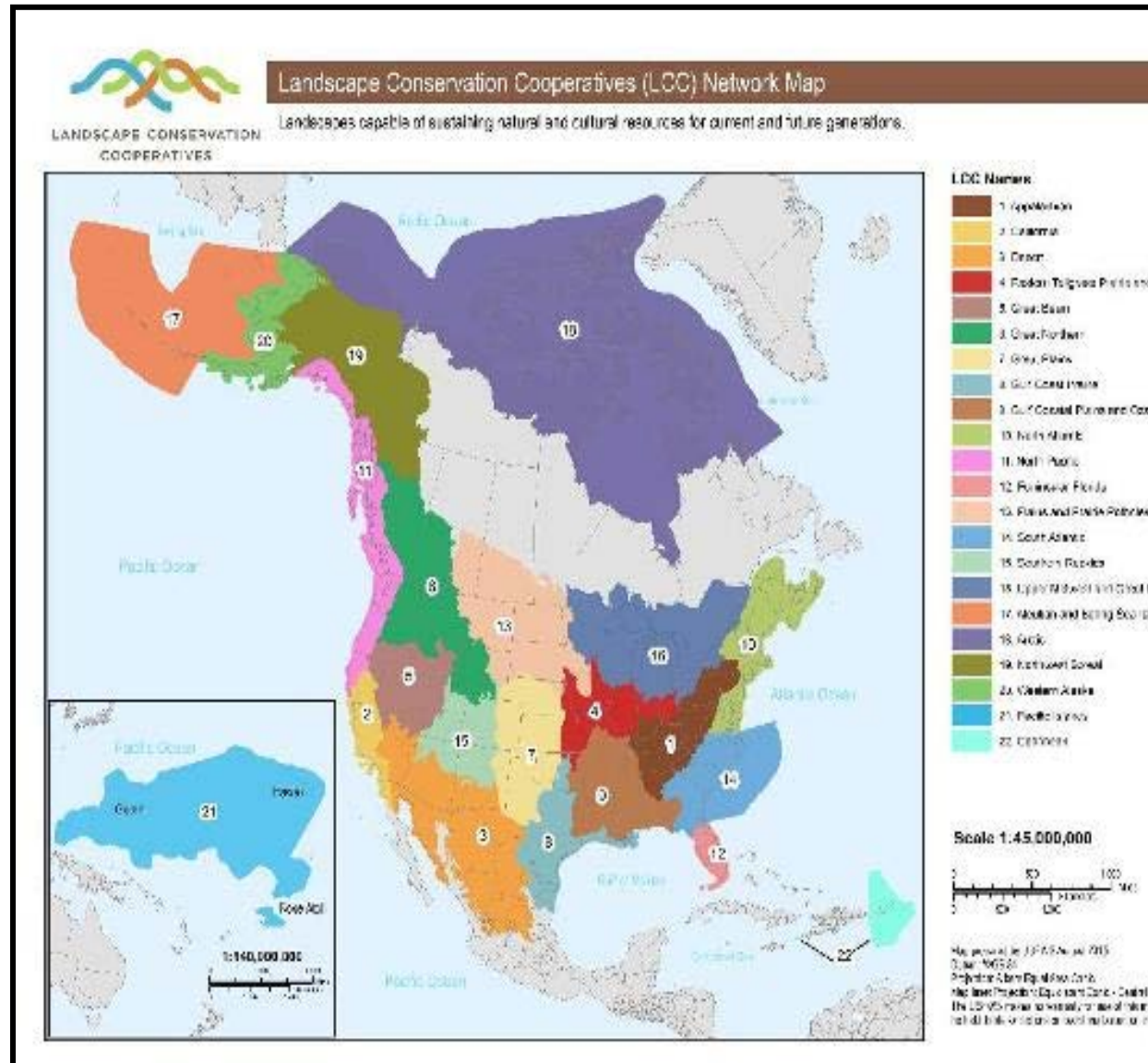


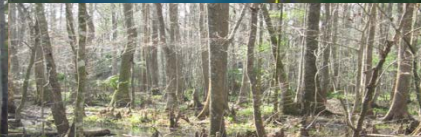
Conservation Model Progression: 20<sup>th</sup> Century to 21<sup>st</sup> Century



# Landscape Conservation Cooperatives: 22 LCCs

- Integrate science and management.
- Address climate change and other landscape-scale issues.
- A holistic network of resource managers and scientists
- LCCs work to ensure the sustainability of our economy, land, water, wildlife, and cultural resources.







Wakulla

Taylor

Franklin

Lafayette

Jefferson

55

90

75  
41

27

Dixie

98

St. Vincent Island

Suwannee River

Levy

Cedar Key

19

Citrus

Hernando

Google earth

# Florida's Big Bend Region

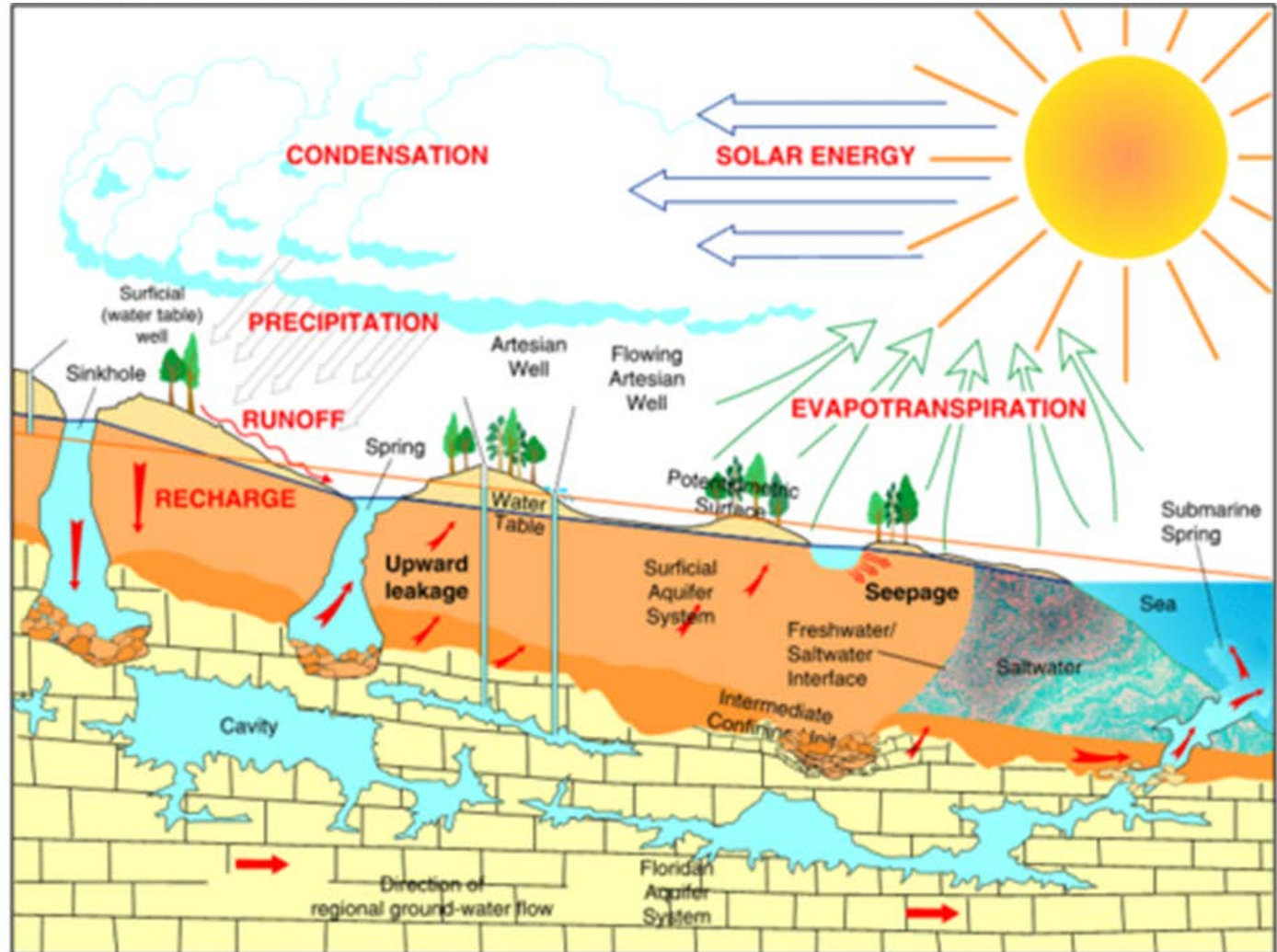
## Springs



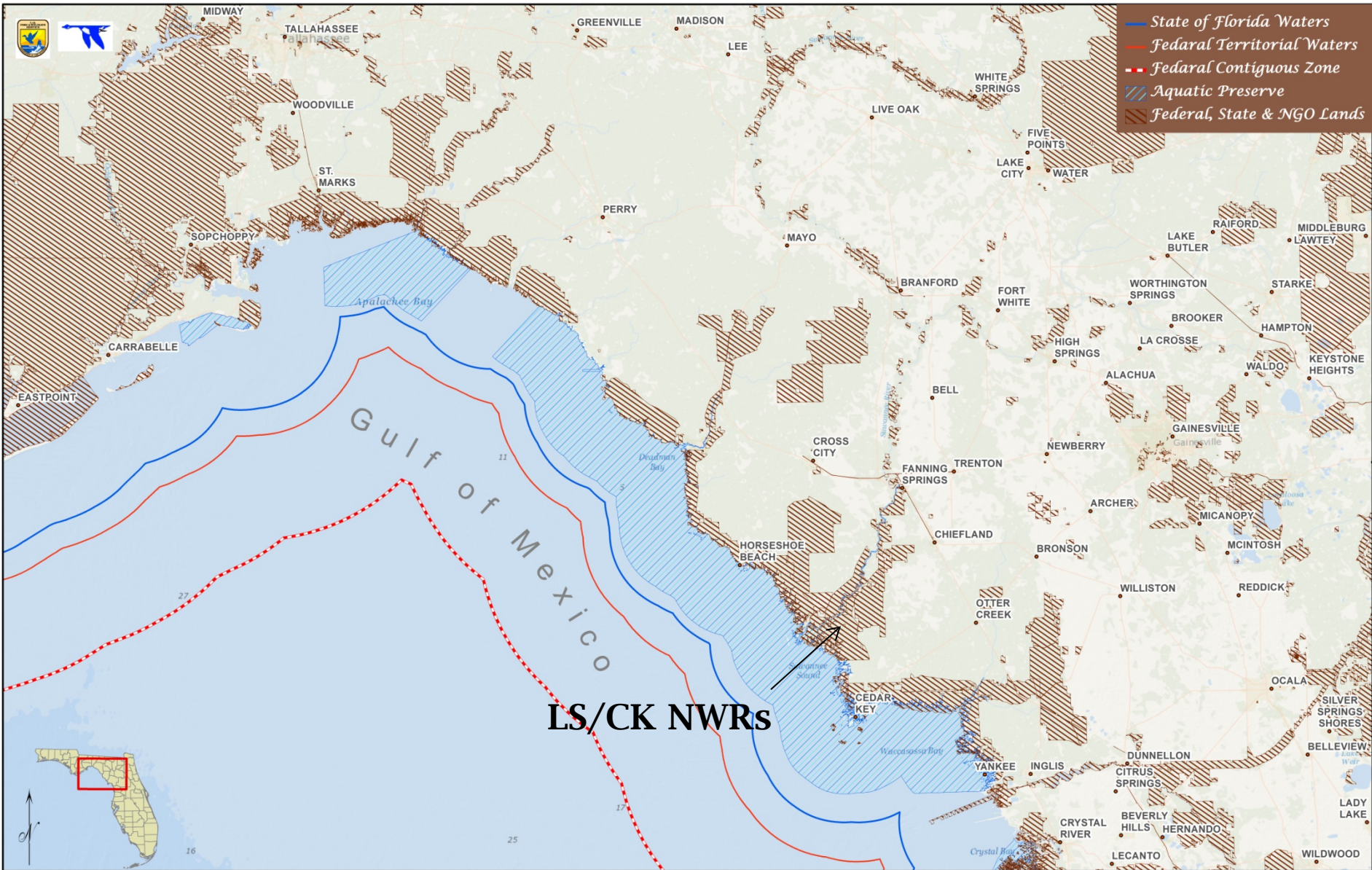
# WATER: Surface & Groundwater

Surface water  
travel times =  
days, weeks,  
months

Ground water  
travel times =  
months, years,  
decades

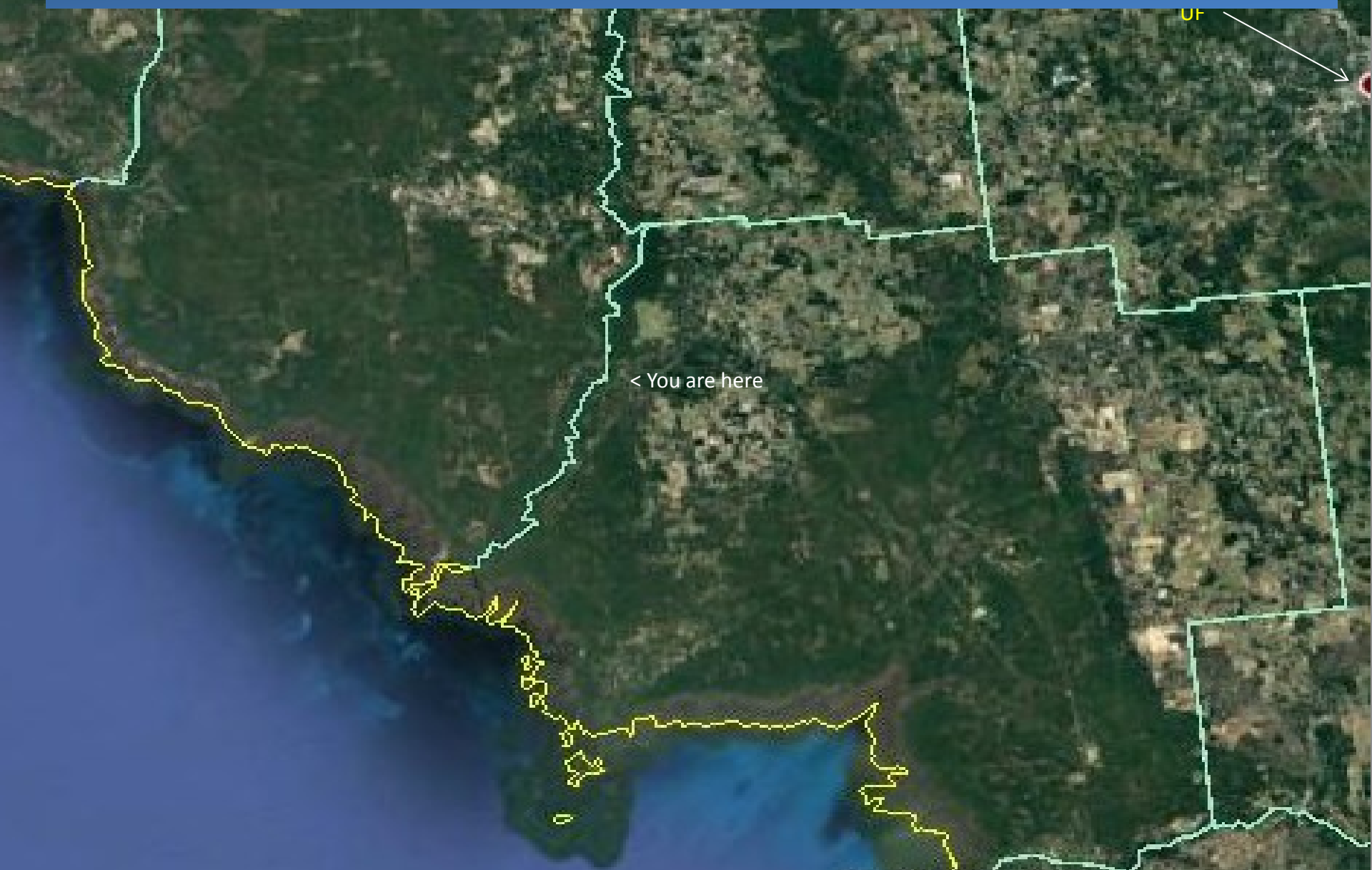


# Big Bend Area Public Lands

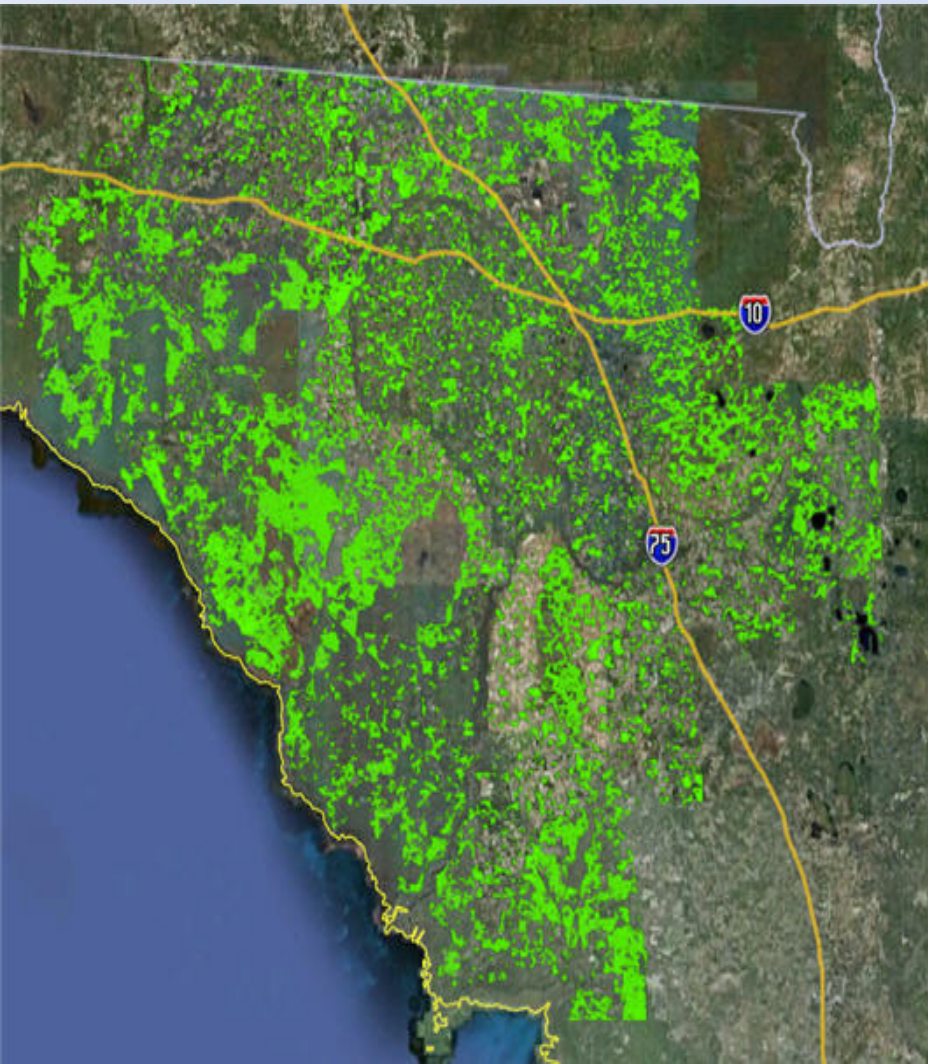


# #1 THREAT

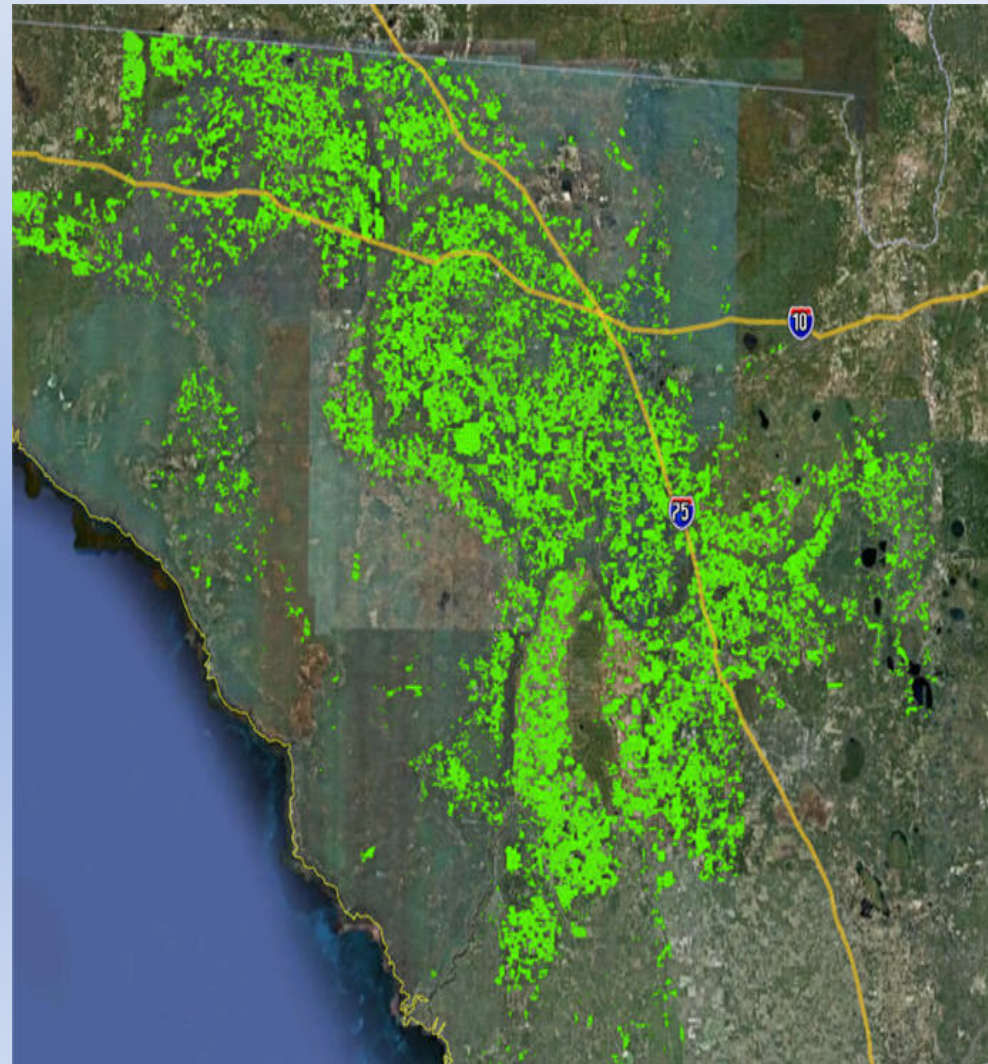
Landscape conversion: forests to fields; dark green to lighter colors.







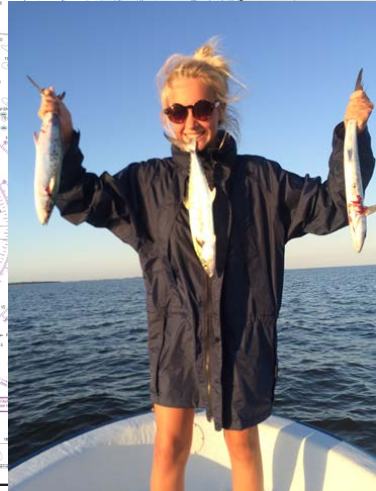
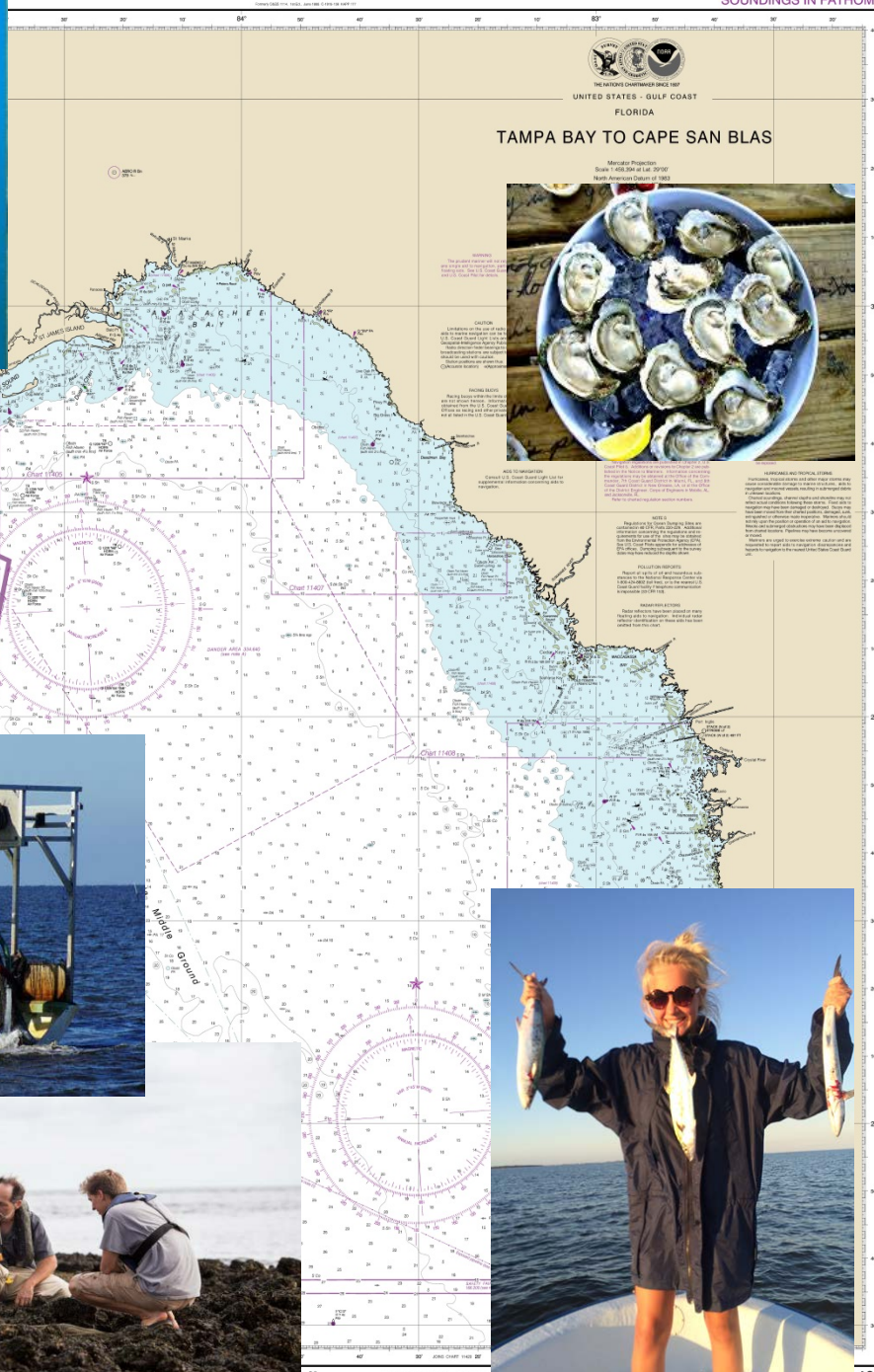
Silviculture



Agriculture



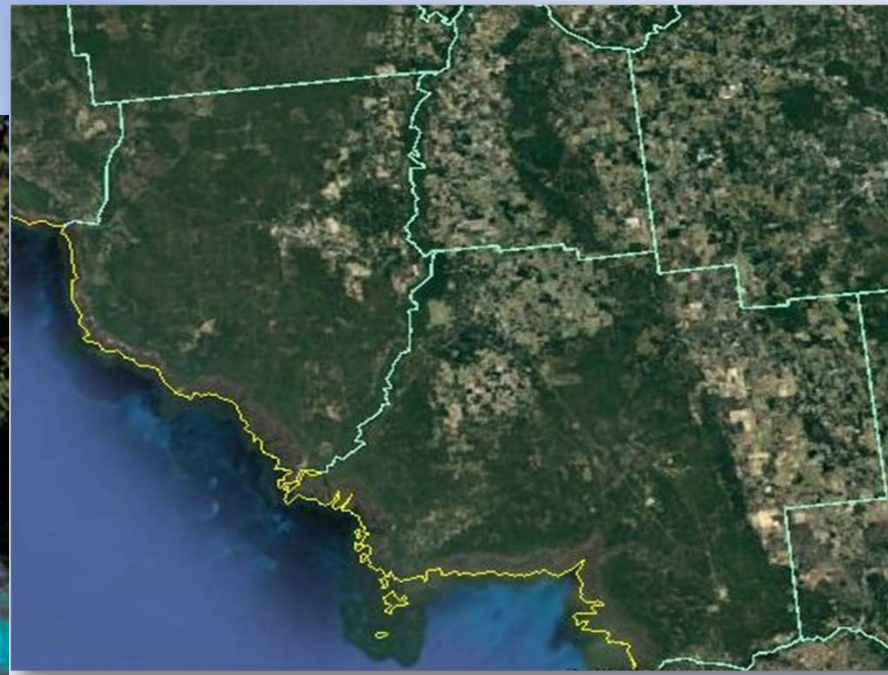
Algae blooming in the water column on the Santa Fe River. Photo by Merrilee Malwitz-Jipson



# Preserve/enhance our existing natural environment and the ecosystem services.

## WHY?

These are the drivers of this area's *natural resource-based economies and rural lifestyles & cultural heritage.*



# How?

## **Develop a Big Bend public-private conservation network.**

To conserve working lands and waters, and ecosystem services and biodiversity, for present and future generations.



## **Focus on private partners and communities.**

- Supported by State and Federal agencies, UF, The Conservation Fund and many others.

# **TOOL** = *Conservation Easements*

With willing, private forest-land owners.

To keep the working forests in commercial production and not convert to other uses.



**\$\$\$\$ - Deepwater Horizon**

## **Conservation Easement defined:**

Voluntary legal agreements between landowner and qualified organization.

Land owner places restrictions on use of their property and protects the natural values of the land.

A conservation easement protects land permanently while keeping it in private ownership and provides permanent protection of the natural values of the site.

The land owner retains ownership of the property and all rights and privileges for its use, except for the uses restricted under the easement.



What is the role of the Refuge?



*Thank You and Questions*

*Lower Suwannee & Cedar Keys NWR*

