

Partnerships for Restoration of the Wild and Scenic Loxahatchee River

Water Resource
Advisory
Committee
April 3, 2008

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Martin County Office of Water Quality



Loxahatchee River



Legend

- Wild and Scenic Portion of River
- 1 River Mile
- Dam
- S-46 Structure
- Aerial Photography Flown In 2003*

0 1
Mile



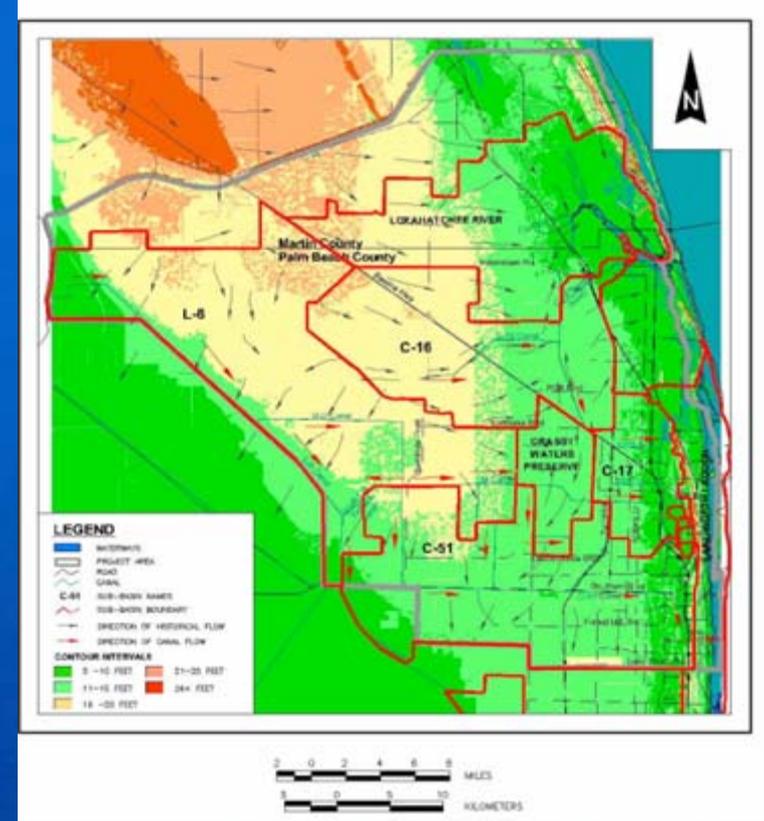
Loxahatchee River – Why is it Important?

- Southern Extent of the Indian River Lagoon - Biodiversity
- Wild and Scenic Designation
- Part of the Northern Palm Beach County CERP Program
- Made Famous by Clyde Butcher

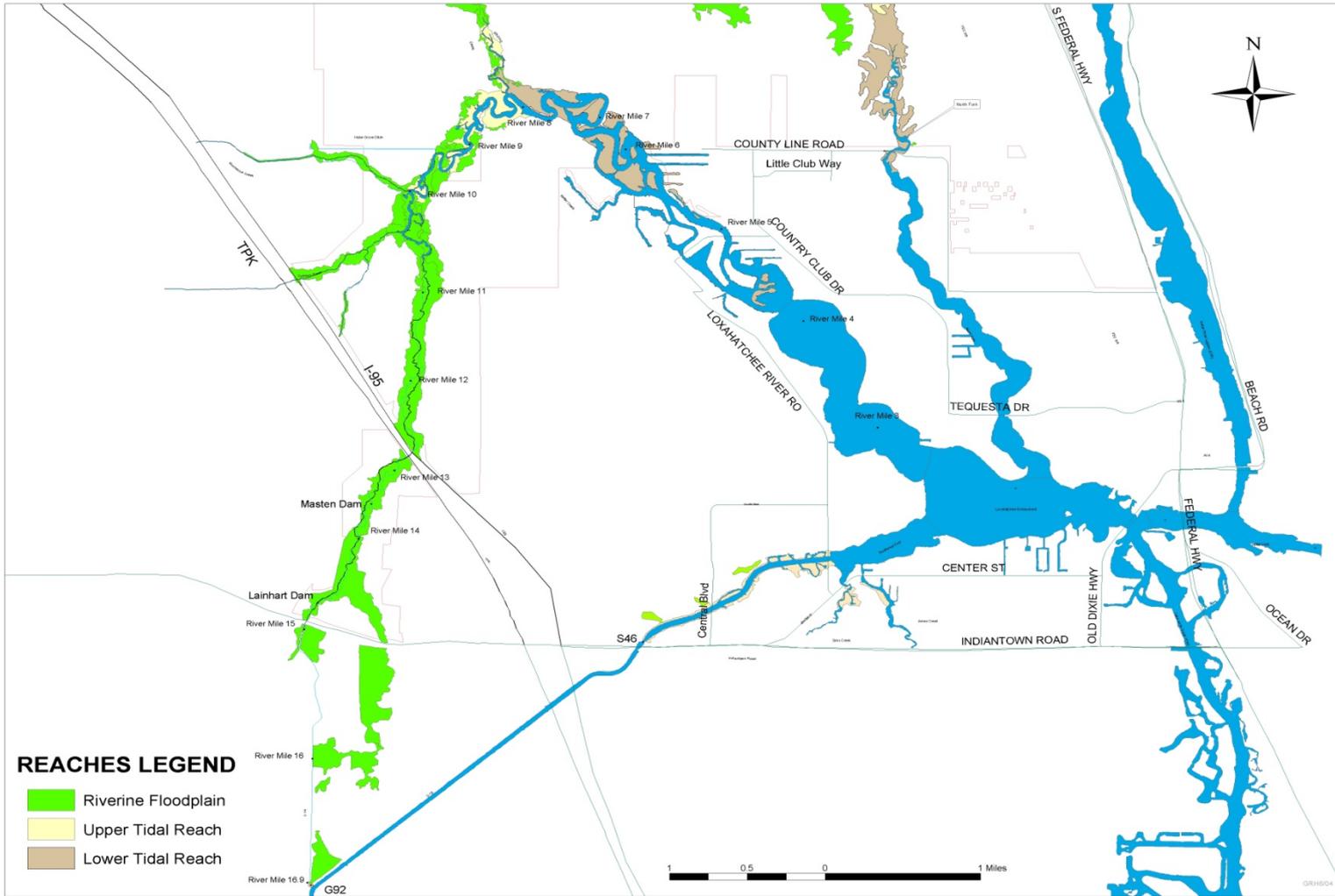


Historic Changes

- Compartmentalization of the watershed
- Inlet openings
- Construction of canals and other water control structures
- Consumptive Water Use



Reaches of the Loxahatchee River



Ecosystems of the Northwest Fork of the Loxahatchee River





**Cabbage Palm:
Riverine Hydric Hammock
Inundation 1-2 months/yr.**





**Bald cypress,
Riverine Floodplain Swamp:
Inundation 4-8 months/yr**





Upper Northwest Fork





Pond Apple, Bald Cypress, Red Maple,
Pop Ash, Wax Myrtle, White Mangrove,
Cabbage Palm: Upper Tidal Mixed,
Transect 7, (RM9.1)





**Bald cypress surrounded by red
mangroves
Transect 6 (RM 8.6)**



Components of Restoration

- Establish Your Partners
- Develop a Restoration Strategy
- Acquire the Land
- Restore the Ecosystem
 - Exotic removal
 - Hydroperiod Restoration
- Provide for Passive Recreation



Restoration Partners



- Martin County
- Palm Beach County
- SFWMD
- FDEP/State Parks
- DCA/Florida Communities Trust
- NRCS/Wetland Reserve Program
- Loxahatchee River District
- FEMA/Hazard Mitigation Grant Program
- Florida State Legislature - LRPI

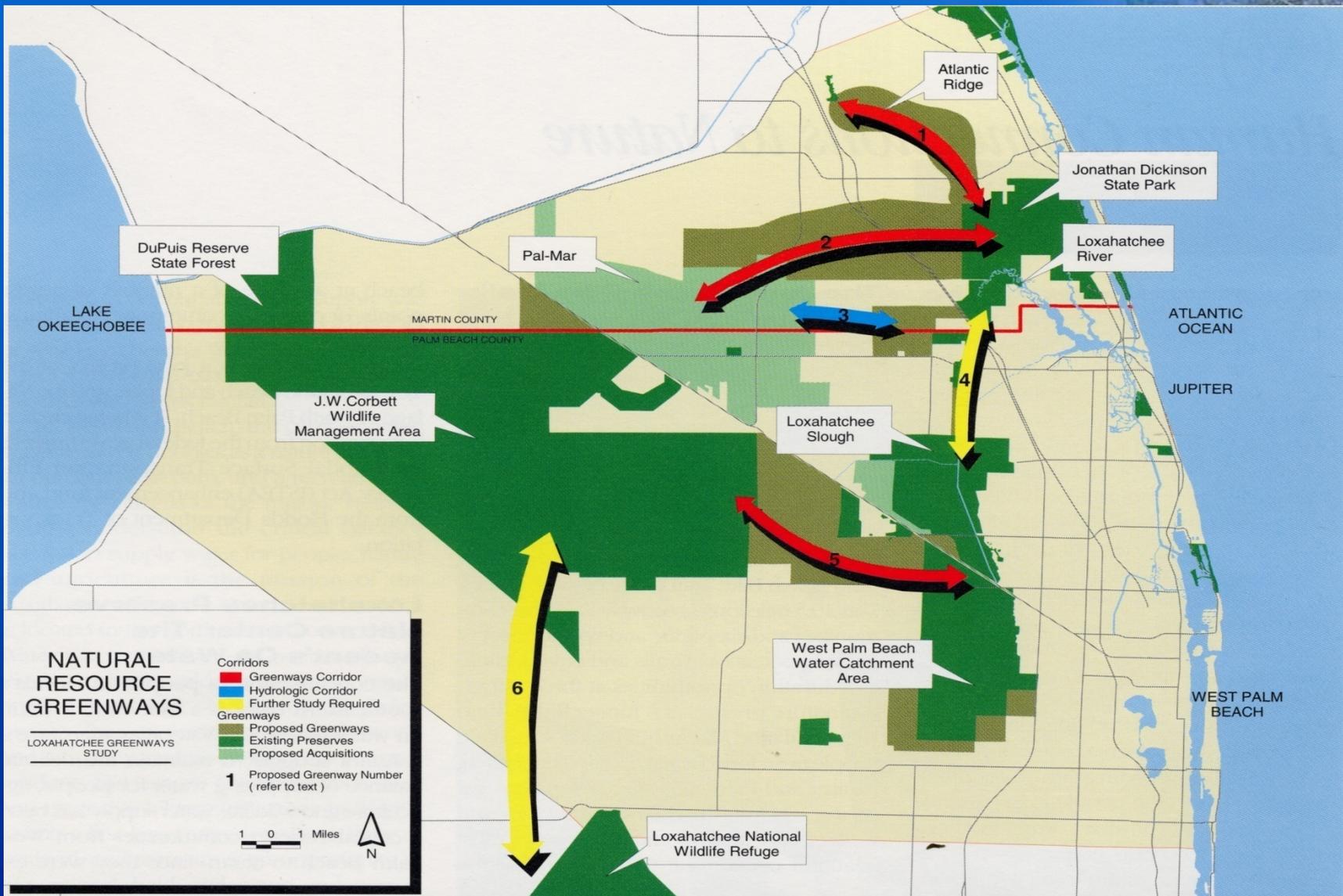
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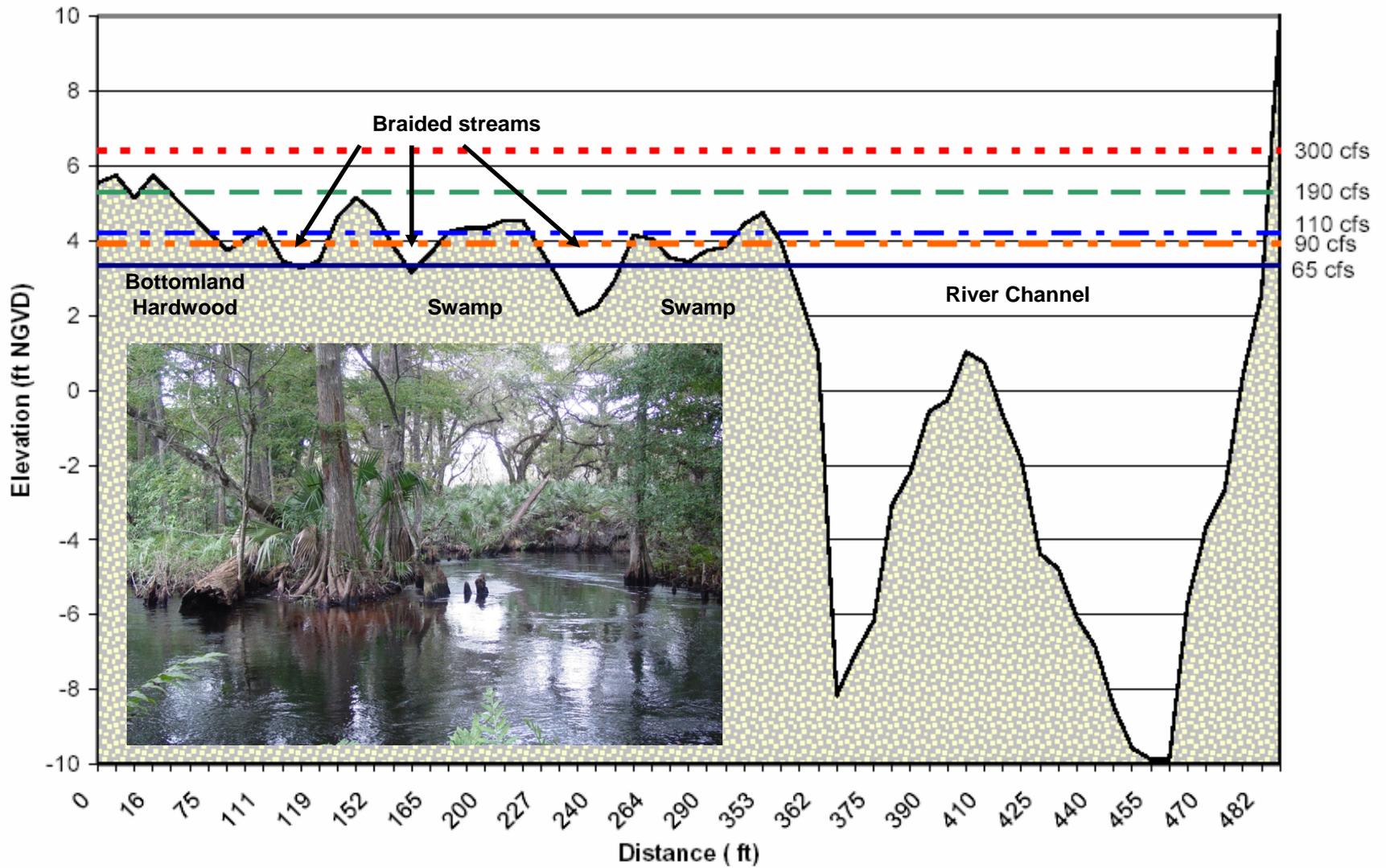


Northwest Fork of the Loxahatchee River Restoration Plan

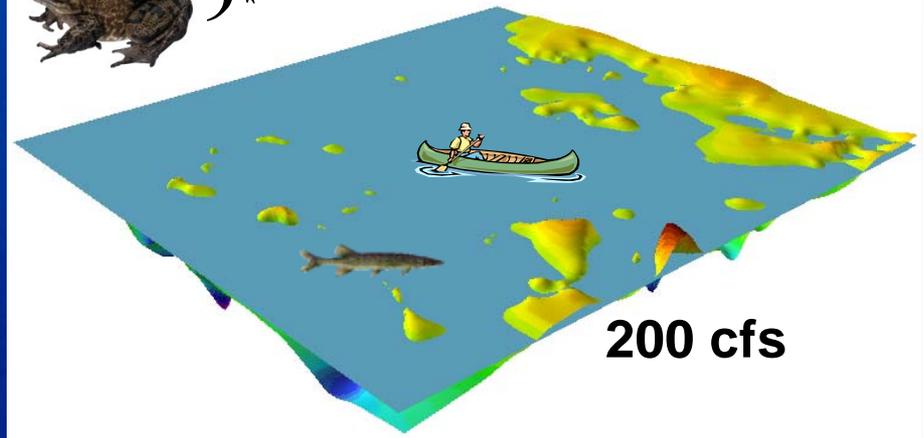
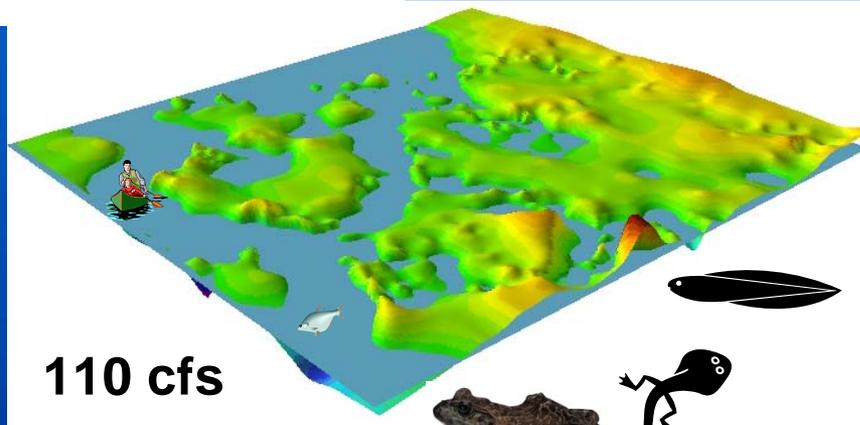
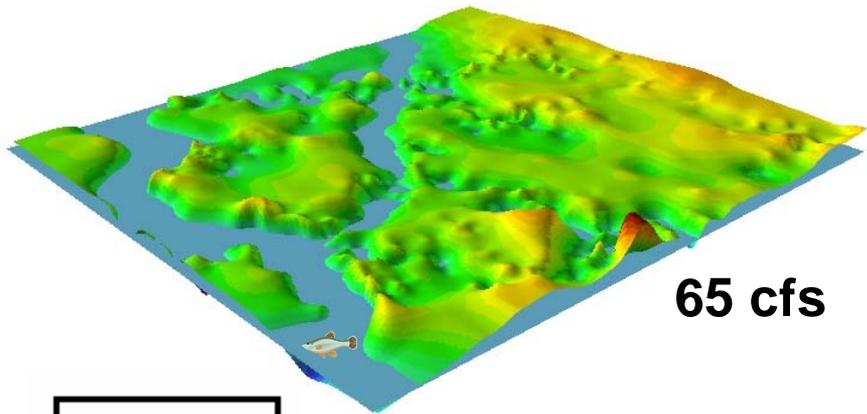
- **Restoration Plan to protect and restore freshwater riverine floodplain**
- **Determine maximum dry season flows too minimize salt water intrusion**
- **Dry season protection of floodplain swamp**
- **Wet season protection of hydric hammock/bottomland hardwood**



Transect 3



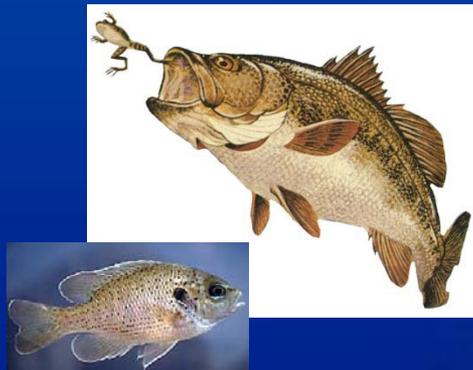
Floodplain Inundation at Transect 3



Cypress seedling

Legend

9.1 - 10
8.1 - 9
7.1 - 8
6.1 - 7
5.1 - 6
4.1 - 5
3.1 - 4
2.1 - 3
1.1 - 2
0.01 - 1
-0.9 - 0
-1.9 - -1
-2.9 - -2
-3.7 - -3



North Palm Beach County- Part I

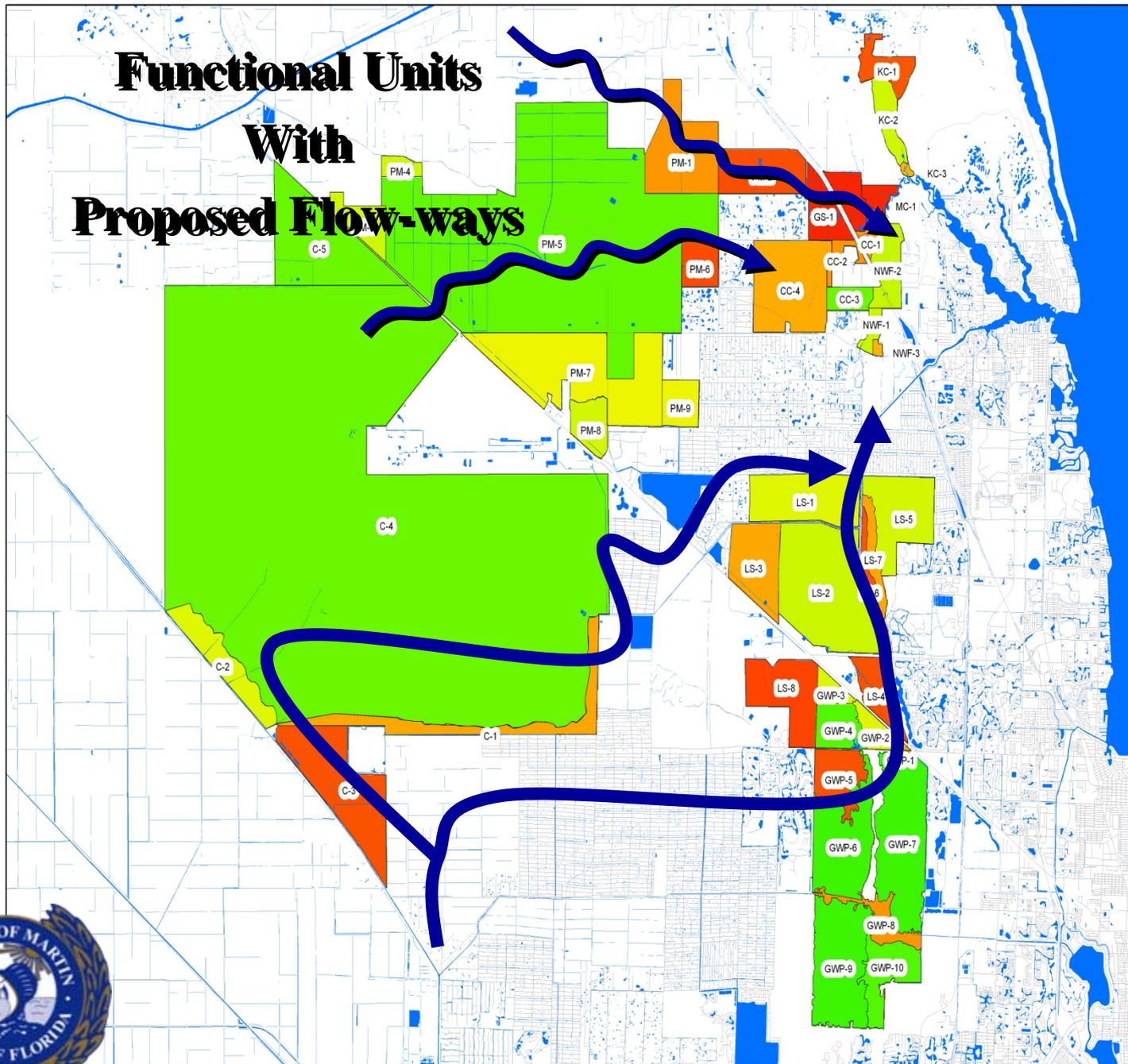
- Increase water storage capacity
- Restore hydrologic connections
- Restore habitat connections
- Protect/Improve WQ



**Comprehensive Everglades Restoration Plan
NORTH PALM BEACH COUNTY-PART I**



Functional Units With Proposed Flow-ways



FUNCTIONAL UNIT OF
EVALUATION POLYGONS

FUNCTIONAL UNITS

Value

High : 100.0

Low : 0.0



0 0.5 1 2



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Acquire Conservation Properties

- **Fee Simple** - includes eminent domain
- **Conservation/Flowage Easements**
- **Transfer of Development Rights (TDRs)**
- **Donation**
- **Land Exchange**

Stepping Up to the Plate

Martin County (pop. 143,000)

- 1998 – (3 year) One Cent “Healthy Rivers Sales Tax”
 - \$47,226,000 + \$5,442,000 (interest) = **\$52,668,000**
- 2006 – (5 year) One Half Cent Sales Tax
Clean Water, Wildlife Habitat, Beaches and Parks
Estimated **\$60,000,000**

Nine Gems

State Owned (Mitigation)

Ranch Acres

Ranch Colony

Colony Park

Old Trail

Citrus Groves

Citrus Groves

Loxahatchee River

Culpepper Ranch

Cypress Creek Canal

Detention Area

Loxahatchee River

The Links

Mack Dairy Road

Cypress Creek / Loxahatchee

Row Crops

Martin County

Gulfstream Citrus Road

Palm Beach County

Palm Beach County Ownership

Loxahatchee River

706

Indian town Road

95

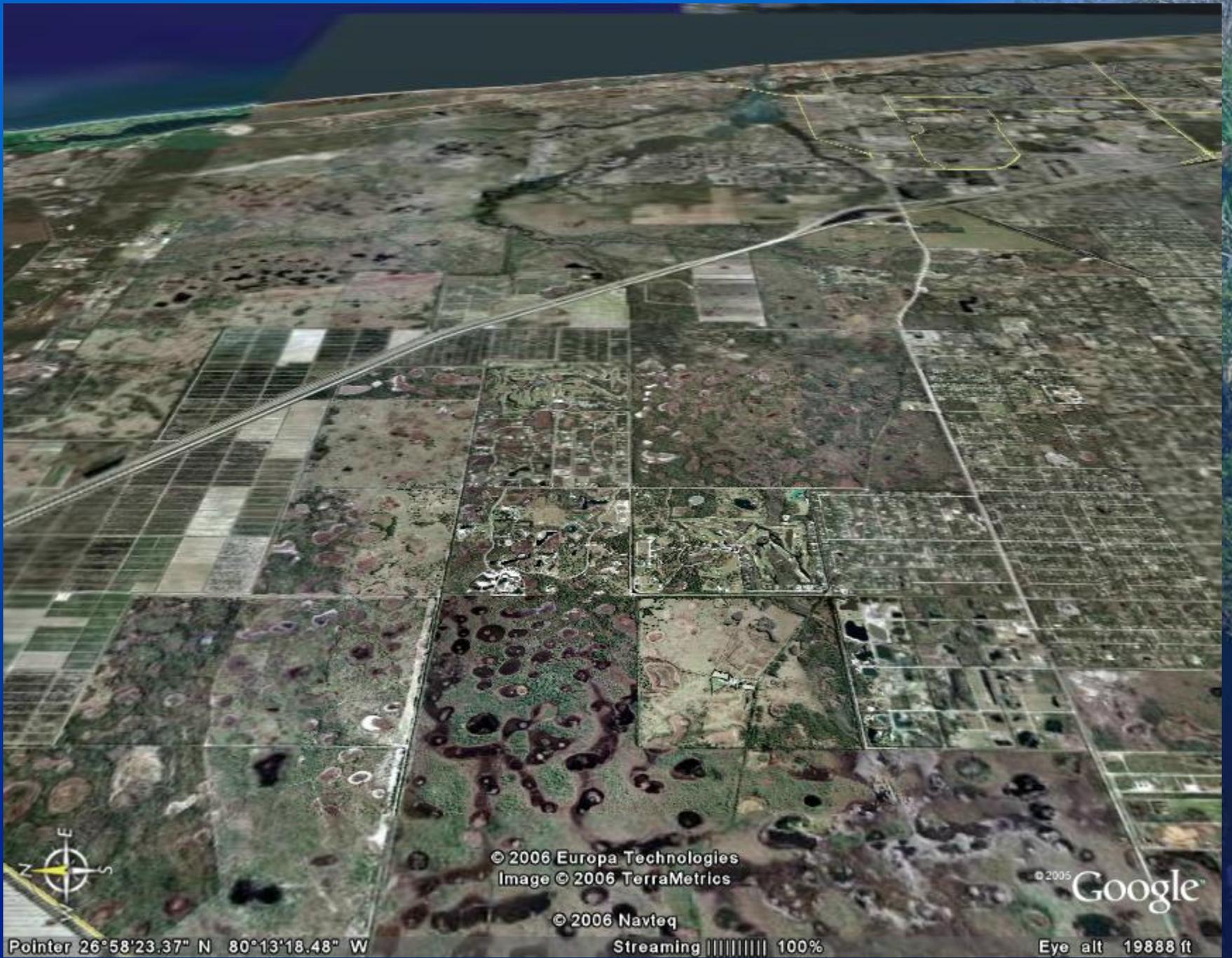
TPK

Jupiter Farms

706

Riverbend Park





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© 2006 Navteq

© 2005 Google

Pointer 26°58'23.37" N 80°13'18.48" W

Streaming ||||| 100%

Eye alt 19888 ft

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Pal-Mar East (Nine Gems)



Proposed Hydrologic Restoration



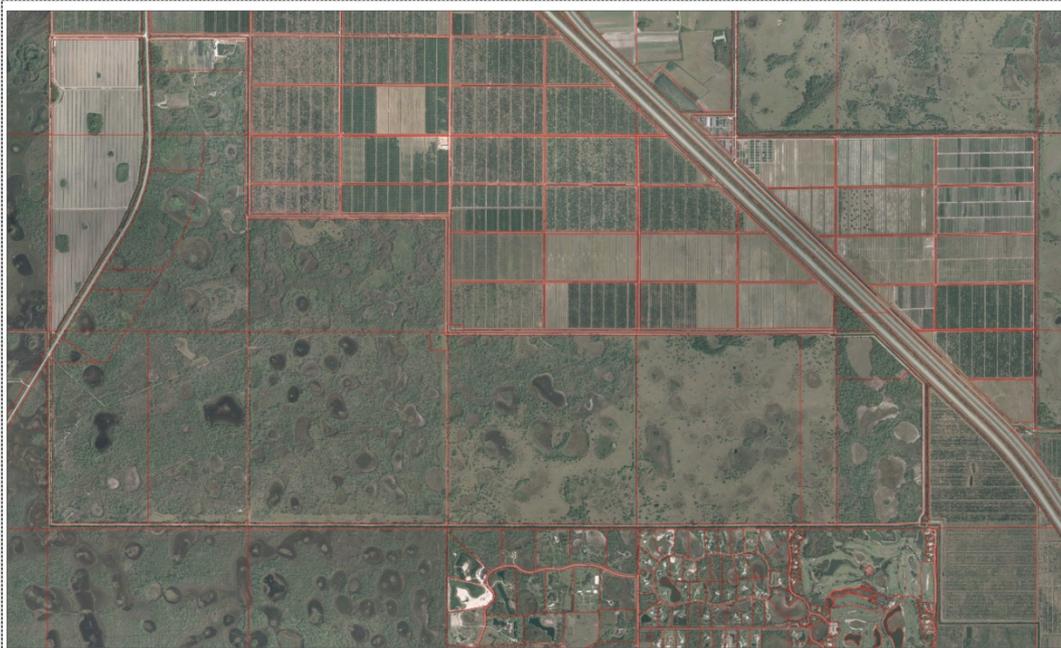


Old World Climbing Fern 10 2:45PM



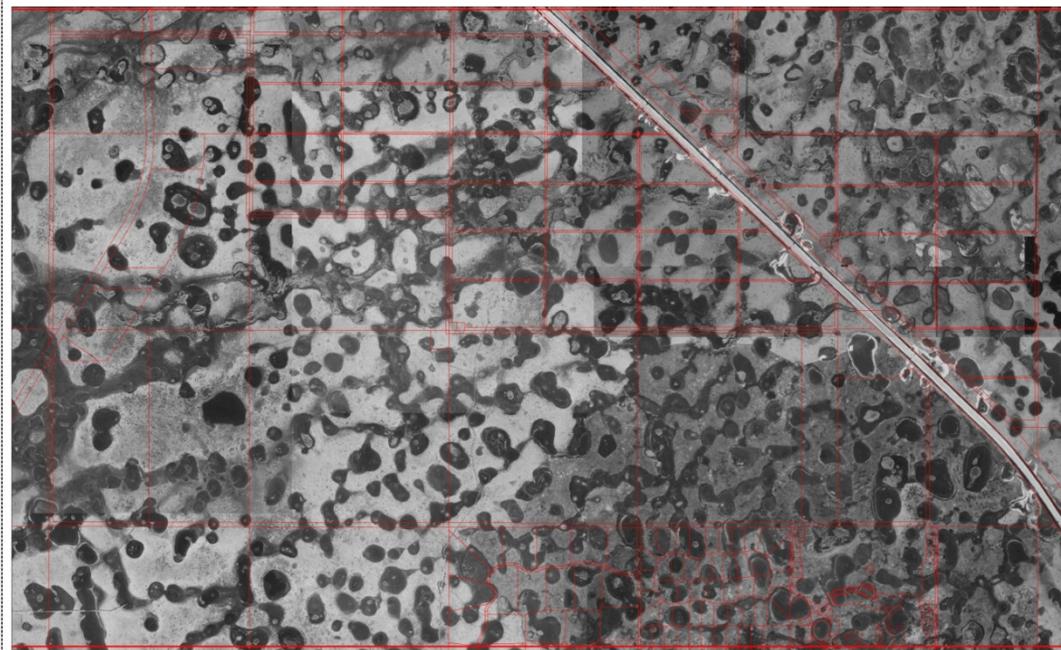
Downy Rose Myrtle



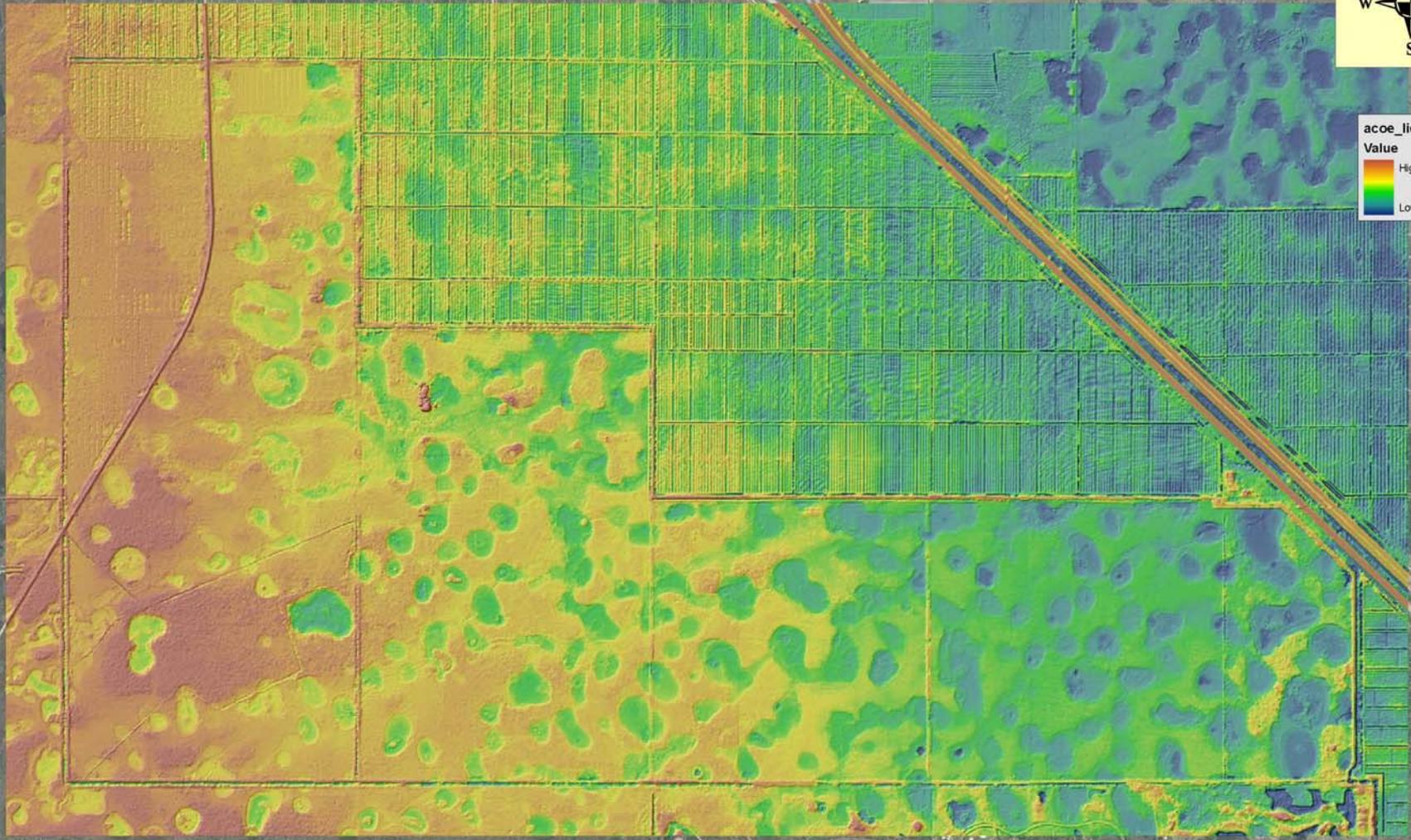
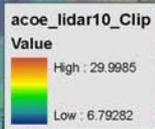


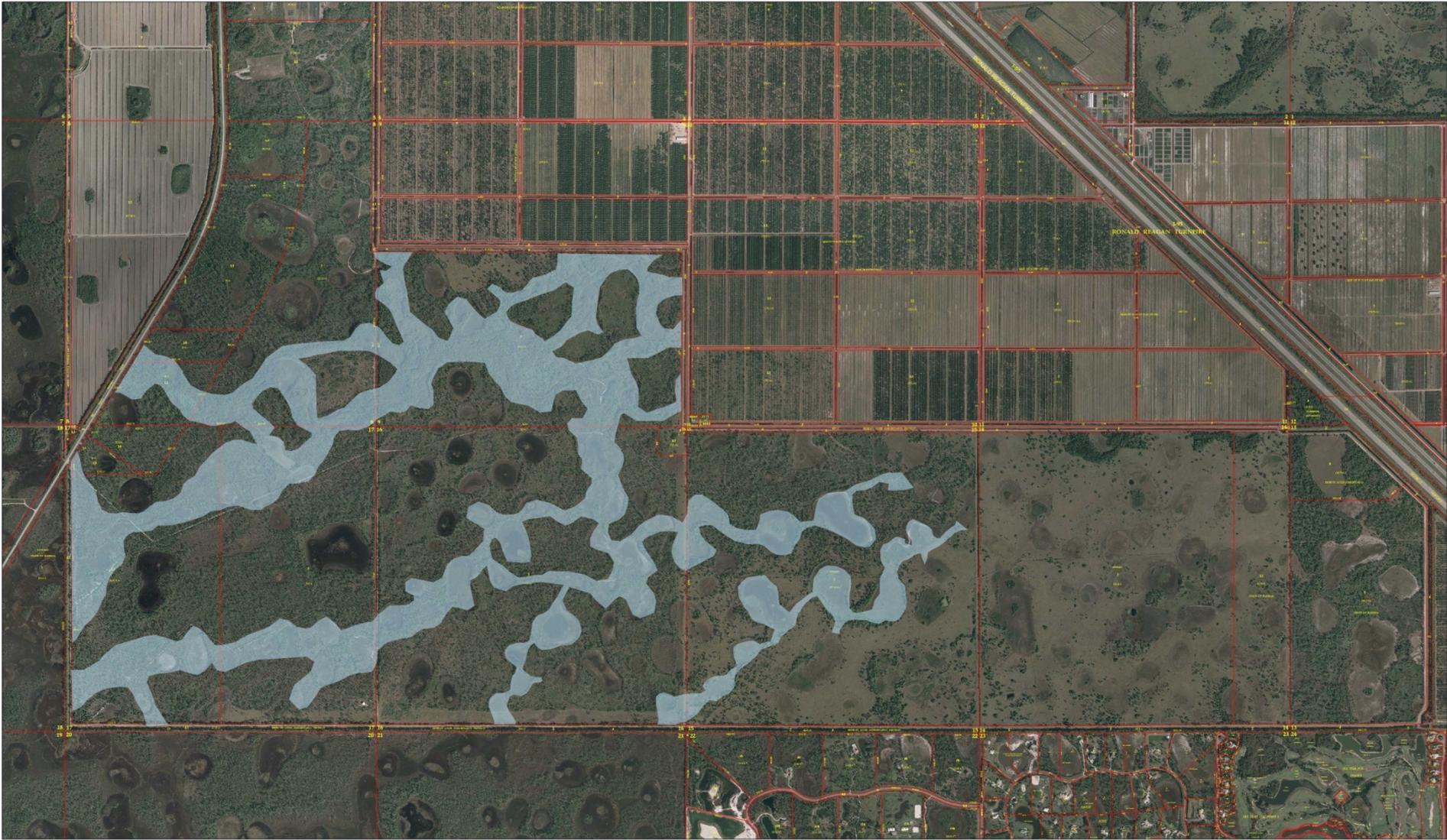
0 800 1,600 3,200 4,800 6,400 Feet

Nine Gems
2006 and 1958 Aerial Imagery

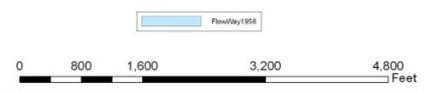
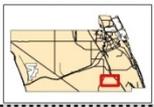


NineGems-1999 ACOE LIDAR
2006 Imagery





Nine Gems
with Partial 1958 Flow Ways



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Recreational Opportunities







Managing Conservation Lands



- Size Matters – when possible:
 - Large tracts
 - Contiguous parcels
 - Link environmental resources
 - Lakes
 - Streams
 - Upland habitats
 - Upland/wetland mosaics
 - Environmentally sensitive lands

Managing Conservation Lands (Cont)

- Leave majority ownership and management up to the experts – keep partial ownership and have an interest in the Management Plans:
 - Departments of Environmental Protection
 - State Park Services
 - Fish And Game Commissions
 - Water Management Districts



stay focused



form partnerships



make the effort



take a risk



Questions?

