

Lemon Bay Preserve Habitat Improvement Projects

- **Scrub-Jay Compensation,**
- **Hydrologic Restoration, and**
- **Northern Branch Stormwater Improvements**

Lemon Bay Preserve
Scrub-Jay Compensation Project
Restoring the Balance!



Florida Scrub-Jay



Adult jay



Young jay

Scrub-Jay Compensation Areas



Other Species that benefit!



Managing for Scrub Jays:

Requirements for Healthy Scrubby Pine Flatwoods

- 1. Oak Height**

- 2. Oak Cover**

Managing for Scrub Jays:

Requirements for Healthy Scrubby Pine Flatwoods

1. Oak Height
2. Oak Cover
- 3. Bare Sand Patches**
- 4. Tree Canopy Cover**

Vegetative Condition in 1999



Goal: Optimal Habitat



Scrubby Flatwoods Restoration Activities

Property was acquired in 1998



← Roller-chopped in July '00

First Prescribed Fire, Sept. '00→



Scrubby Flatwoods Restoration Activities



← Clear sand patches in Feb. '02

Remove overstory trees
and dense understory trees →
in Spring '02



Measuring Success!

Then and Now



Measuring Success!

Plants of Interest



Measuring Success!

Gopher Tortoise Population

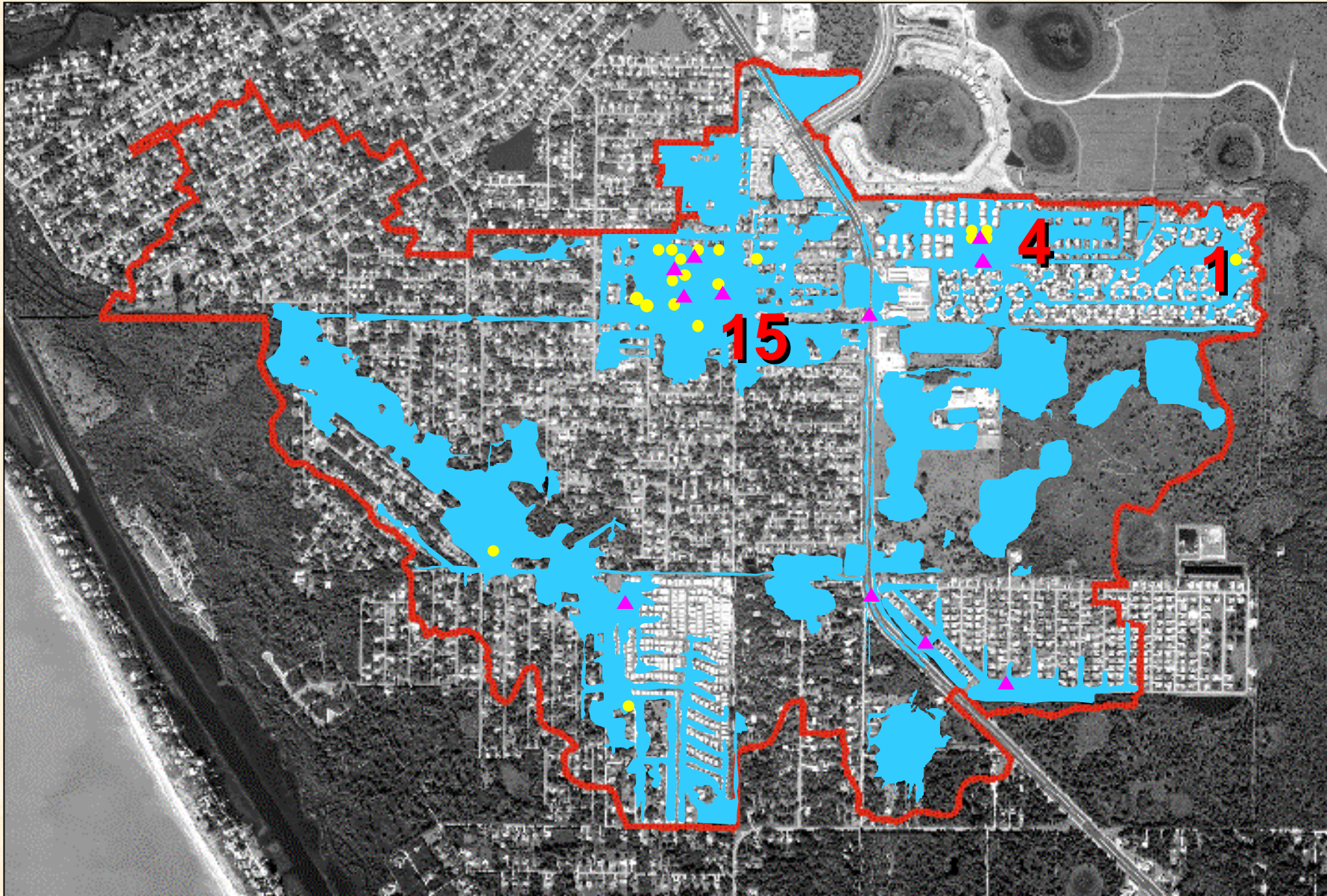


Reason for Northern Branch Stormwater Improvements

- Alleviate structural flooding
- Reduce flooding on neighborhood roads
- Reduce flooding on S.R. 776

BASIN MASTER PLANNING

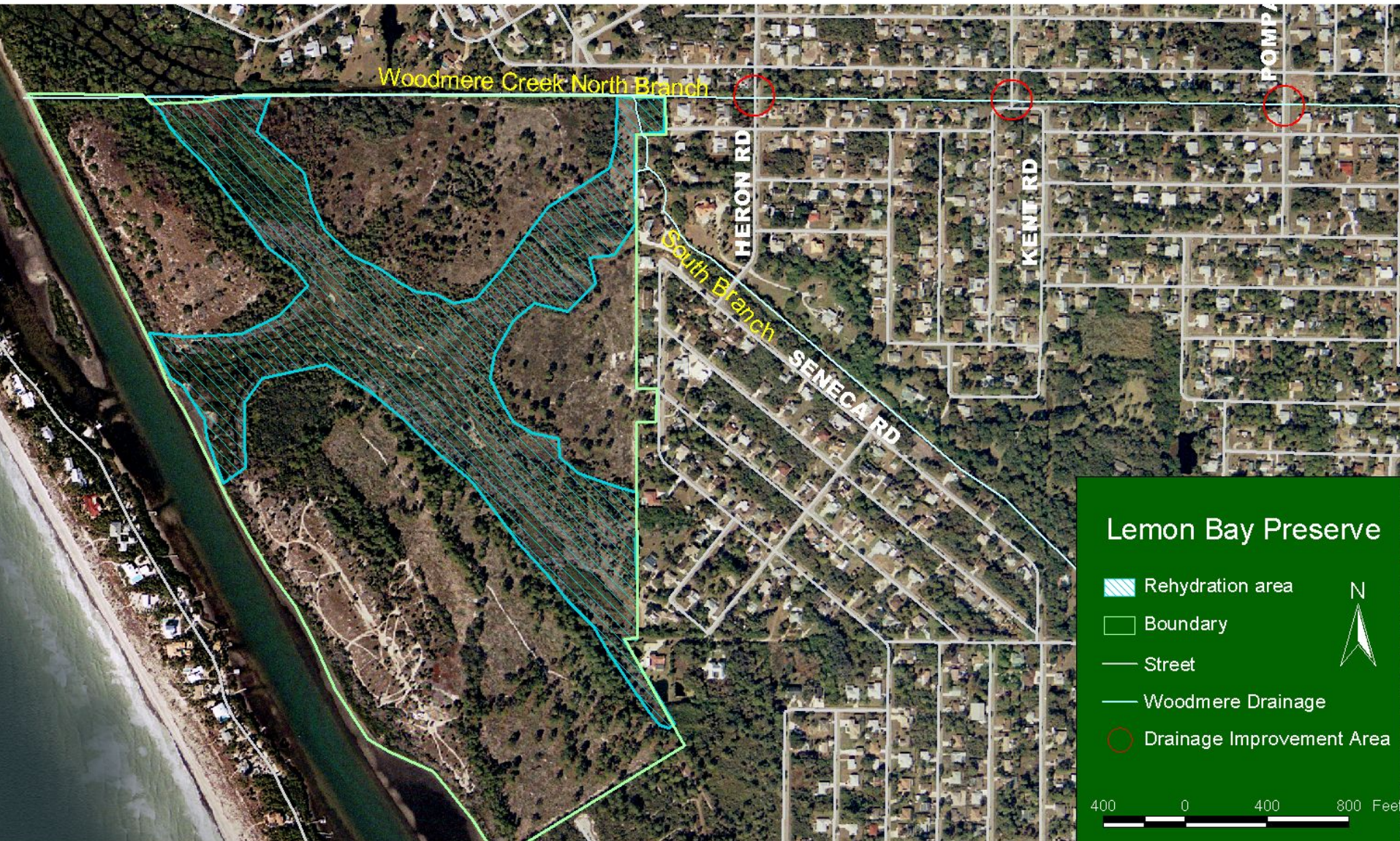
FLOOD PLAIN



Design of Northern Branch Stormwater Improvements

- Heron Road
 - Replace 80' of 60"RCP
- Kent Road
 - Replace 80' of 72" RCP
- Pompano Road
 - Replace 50' of 66" CMP and 50' of 60" CMP
- Channel Regrading

Northern Branch Stormwater Improvements Project Area



Lemon Bay Preserve Freshwater Flow



Lemon Bay Preserve Hydrologic Restoration Project



Goal:

To improve fish and wildlife habitat in mangrove wetlands and to improve water quality in Lemon Bay

Lemon Bay Preserve Hydrologic Restoration Project

Why?

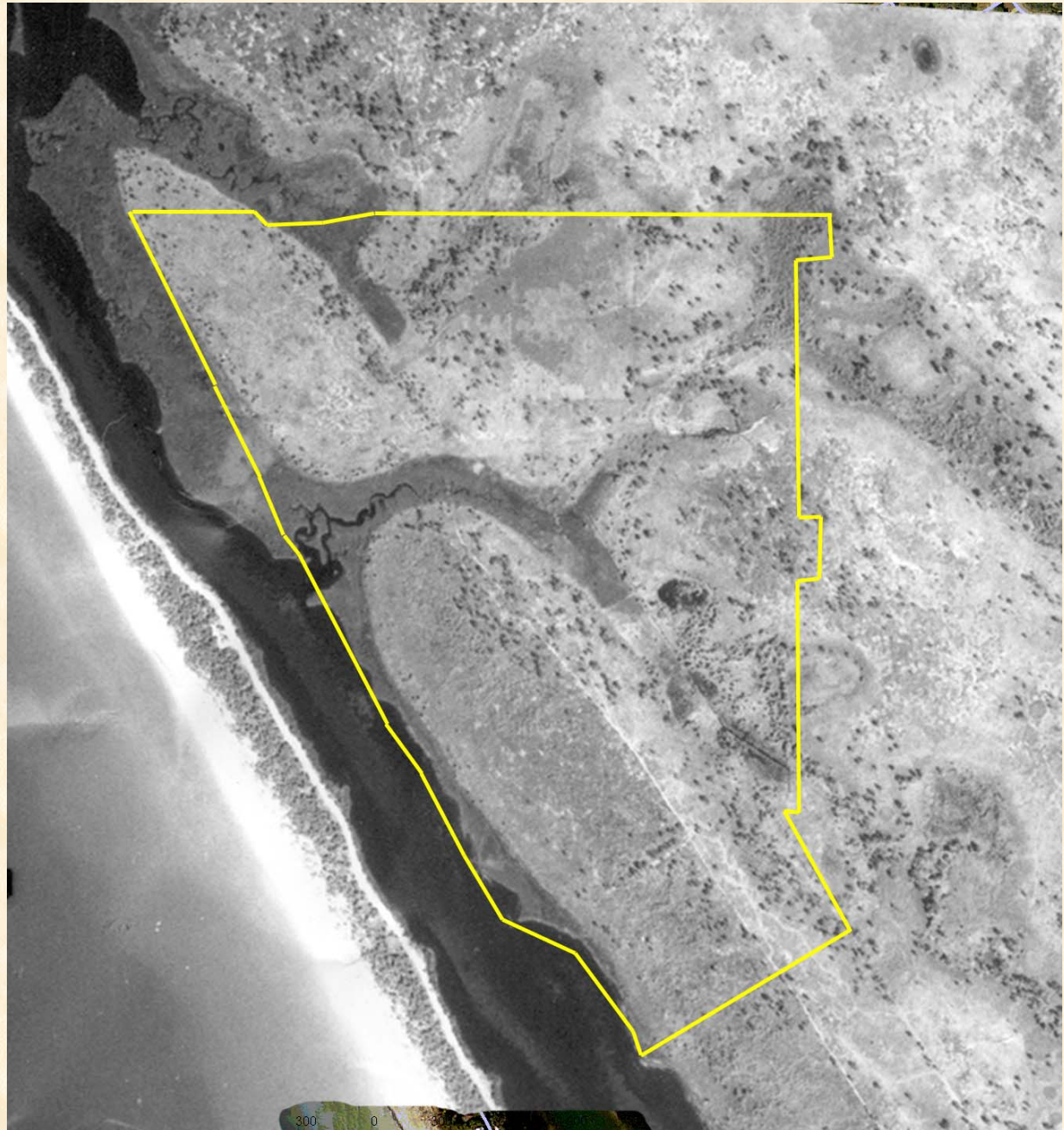
What?

Where?

How?

Who?

When?



Lemon Bay Preserve Ecosystem Restoration Timeline

Surveys and Modeling - May 2002

Tree Density Reduction - June 2002

Vegetation Monitoring - August 2002

Gopher Tortoise Survey - September 2002

Final Permitting - October 2002

Continued Scrub Jay Monitoring - March 2003

Burn Zone 3 and 8 mechanical prep – May-June 2003

Prescription Burn Zone 8 – June 2003

Bid Package Completion and Contracting – July-Aug 2003

Notice to Proceed – August 2003

Restoration Earthwork – September 2003 – January 2004

Volunteer Monitoring – NEST and other - ONGOING