



# **Multi-species Conservation under the CERP**

**– Part 1 –**

**Initial CERP Update (ICU)  
Footprint Analysis**

March 11, 2004

Photo: Sandra Sneckenberger

# ICU Footprint Initial Analysis

## Purpose:

- Planning tool to assist in the siting and construction of CERP infrastructure.

## Anticipate:

- Actual impacts to be both different and smaller.
- Updating this information as new project and species becomes available.
- A second PAR to address hydrologic effects.

# ICU Footprint Initial Analysis

What this is:

- Initial assessment of possible impacts and benefits (in acres) resulting from CERP project construction, with . . .
- Recommendations for maximizing the benefits and minimizing the impacts.
- Guidance on affirmative actions to conserve and further recovery of listed species and natural ecological communities.

# ICU Footprint Initial Analysis

What this is:

- Based on the most detailed information available on CERP projects.
- Based on the best available science.
- A worst-case scenario analysis.
- Information PDTs will need to move from this worst-case scenario toward alternatives that maximize benefits and minimize impacts.

# ICU Footprint Initial Analysis

**NOT** what this is.

- **NOT** a final analysis of possible CERP footprint impacts.
- **NOT** an assessment of hydrologic effects in the remaining Everglades.
- **NOT** a biological assessment or biological opinion pursuant to the Endangered Species Act (ESA).
- Does **NOT** include an incidental take statement as defined by the ESA.

# ICU Footprint Initial Analysis

## Contents:

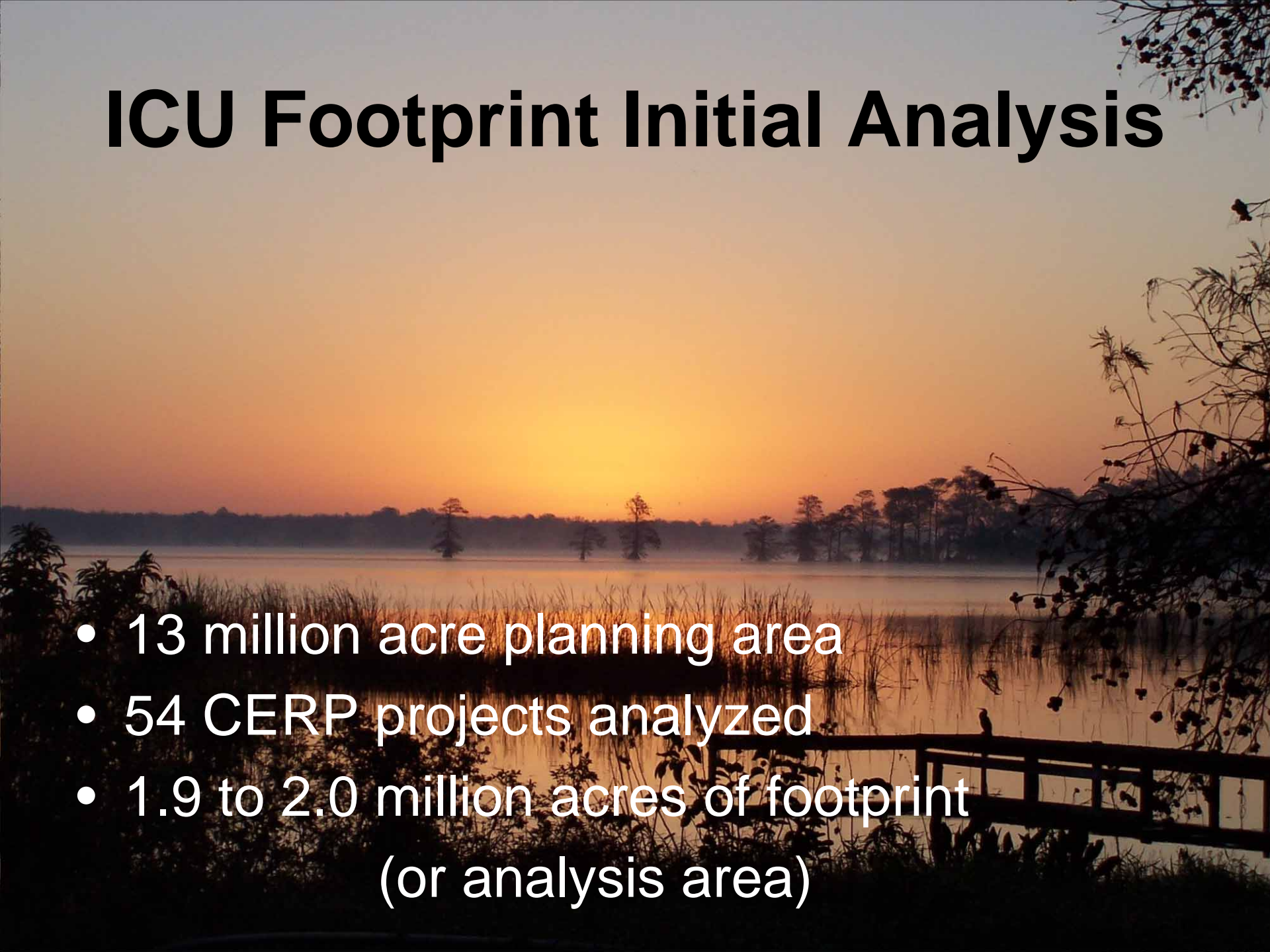
- Service letter of transmittal to Corps
- The Planning Aid Report – Part 1
- Appendix A – Listed Species
- Appendix B – Vertebrates/Vascular Plants
- Appendix C – Conservation of Ecosystems
- Appendix D – Draft Manatee Protocols
- Appendix E – STA-R Recommendations

# ICU Footprint Initial Analysis

Major sections of the ICU PAR – Part 1:

- Executive Summary
- Introduction
- Methods
- Project Descriptions and Initial Analyses
- State-listed species
- Summary and Conclusions
- Recommendations
- Literature Cited

# ICU Footprint Initial Analysis

A scenic landscape at sunset or sunrise over a body of water. The sun is low on the horizon, casting a warm orange glow across the sky and reflecting on the water. In the foreground, there are silhouettes of trees and a wooden bridge. The background shows a line of trees on the far shore.

- 13 million acre planning area
- 54 CERP projects analyzed
- 1.9 to 2.0 million acres of footprint  
(or analysis area)

# ICU Footprint Initial Analysis

Critical habitat for 4 species

16 individual federally listed species:

- 2 Mammals
- 8 Birds
- 2 Reptiles
- 1 Invertebrate
- 3 Plants

See Table M-1.

# ICU Footprint Initial Analysis

4 groups of federally listed species:

- 2 Skinks
- 5 Sea turtles
- 2 Pine rockland plants
- 20 High pine – scrub plants

29 Additional listed species. See Table M-1.

17 Ecological communities. See Table M-2.

# Initial Analysis - Critical Habitat

No. Projects	+	(acres)	-
1 American crocodile	236		529
1 Cape Sable seaside sparrow	0		0
2 Everglade snail kite	0		1,690
2 West Indian manatee	0		0

- See Table S-1.

# Initial Analysis - Birds

No. Projects	+	(acres)	-
13 Caracara	75,050		82,639
33 Bald eagle	78,441		35,217
1 Cape Sable sparrow	0		0
29 Snail kite	67,883		22,082
6 Grasshopper sparrow	0		33,635
9 Scrub-jay	1,081		32,579
10 RC woodpecker	15,159		20,162
44 Wood stork	80,022		154,633

# Initial Analysis - Reptiles

No. Projects		+	(acres)	-
9	American crocodile	444		647
49	Eastern indigo snake	135,506		166,009
2	Sand/bluetail mole skinks	0		0
7	Sea turtles	920		0

See Table S-1.

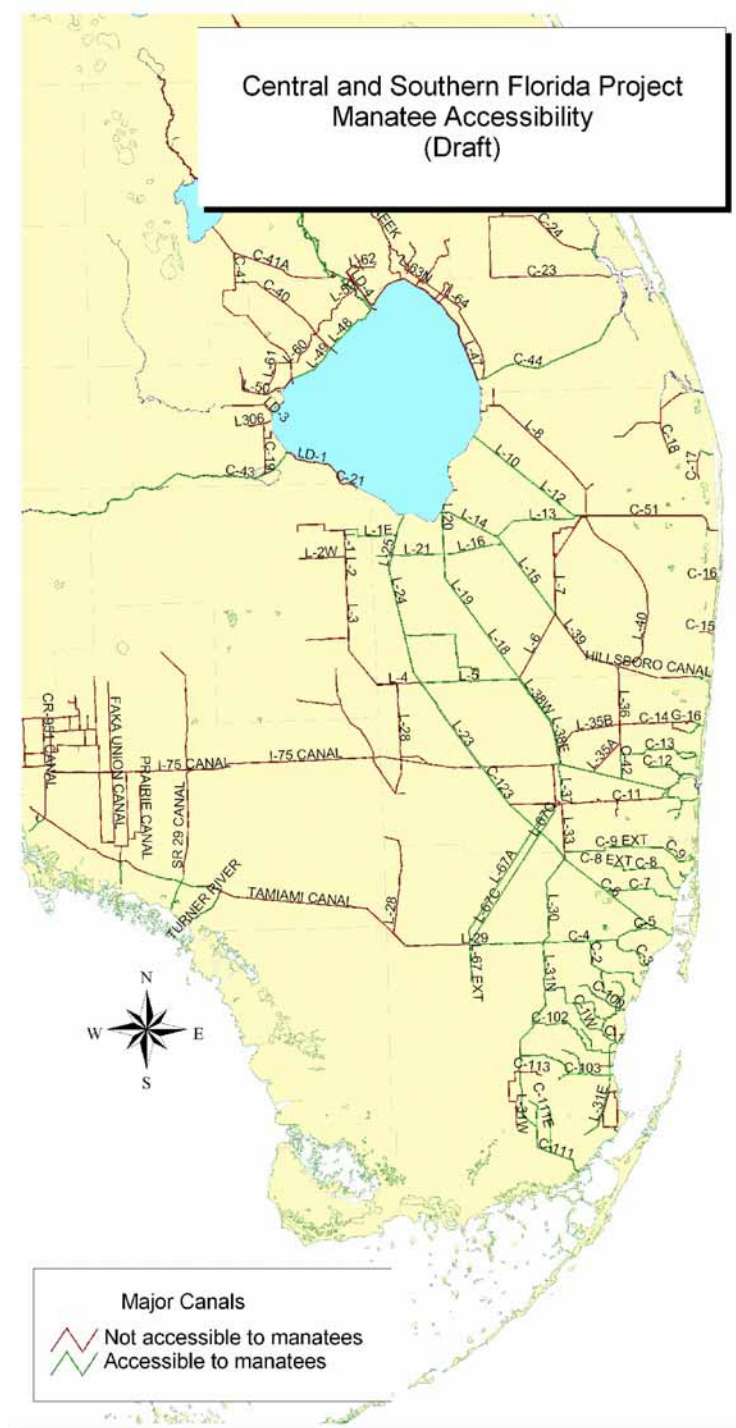
# Init. Analysis-Invertebrate, Plants

No. Projects		+ (acres)	-
1 Schaus swallowtail		5	0
4 Beautiful pawpaw		0	72
11 Okeechobee gourd		3,500	1,343
3 High pine - scrub plants		1,081	0
3 Tiny polygala - Pine rockland		0	0
	plants		

See Table S-1.

# ICU Footprint Analysis Manatee

Figure 14. Central and Southern Florida Project Manatee Accessibility (Draft) map developed by the Comprehensive Everglades Restoration Plan (CERP) Interagency Manatee Task Force.

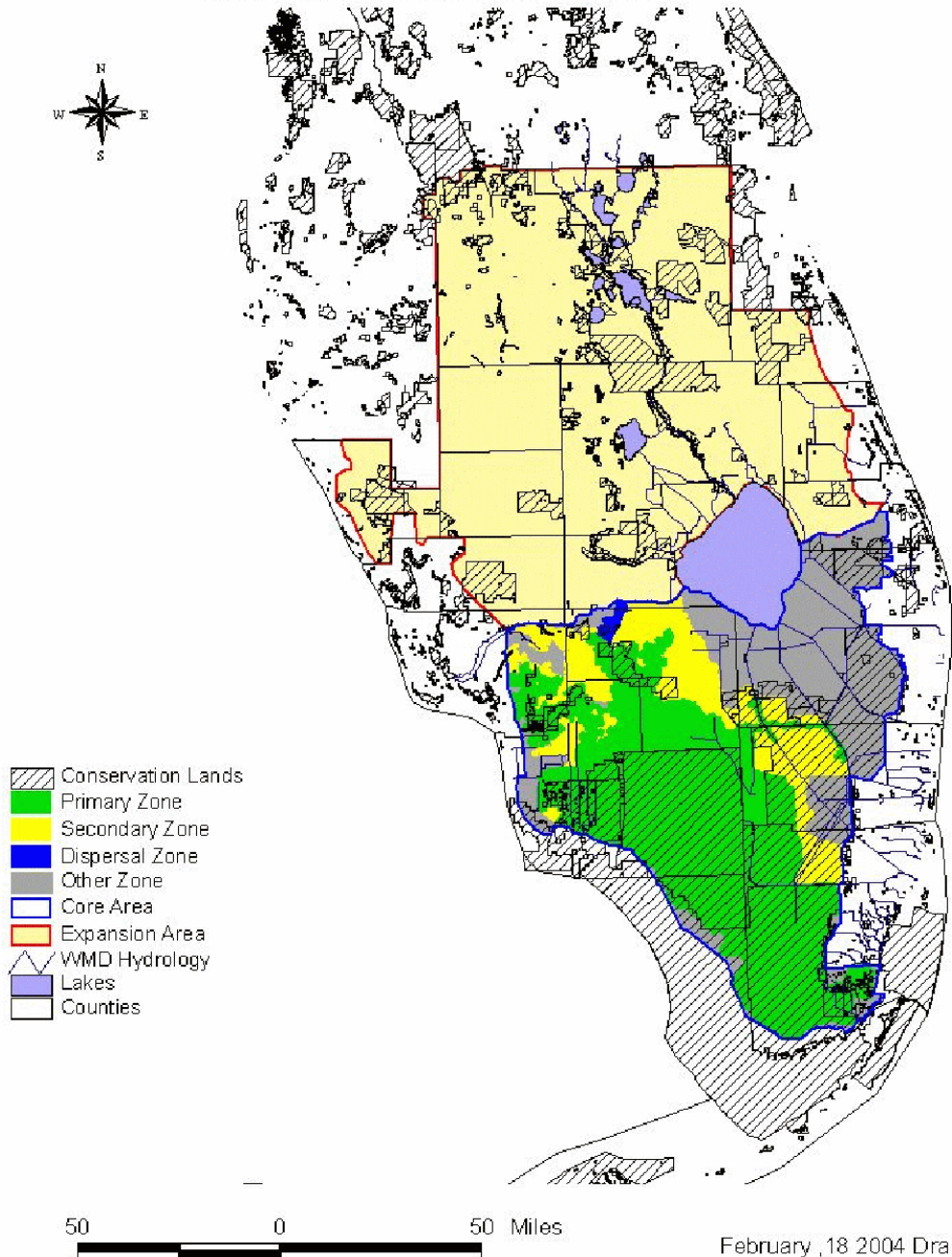


# Initial Analysis - Manatee and Manatee Critical Habitat

The background of the slide is a photograph of a sunset over a body of water. The sun is low on the horizon, creating a warm orange and yellow glow. In the foreground, there are silhouettes of reeds and a wooden railing. The water reflects the light from the sunset. The sky is a mix of orange, yellow, and light blue.

- Access to 32 project sites.
- Hydrological effects from additional projects.
- See Table S-3, App D.

CERP Landscape Level Project Planning/  
Siting Map For Panther Conservation



# ICU Footprint Analysis Panther

Figure 15.  
Comprehensive  
Everglades  
Restoration Plan  
Landscape Level  
Project  
Planning/Siting Map  
for Panther  
Conservation.

# Initial Analysis - Panther

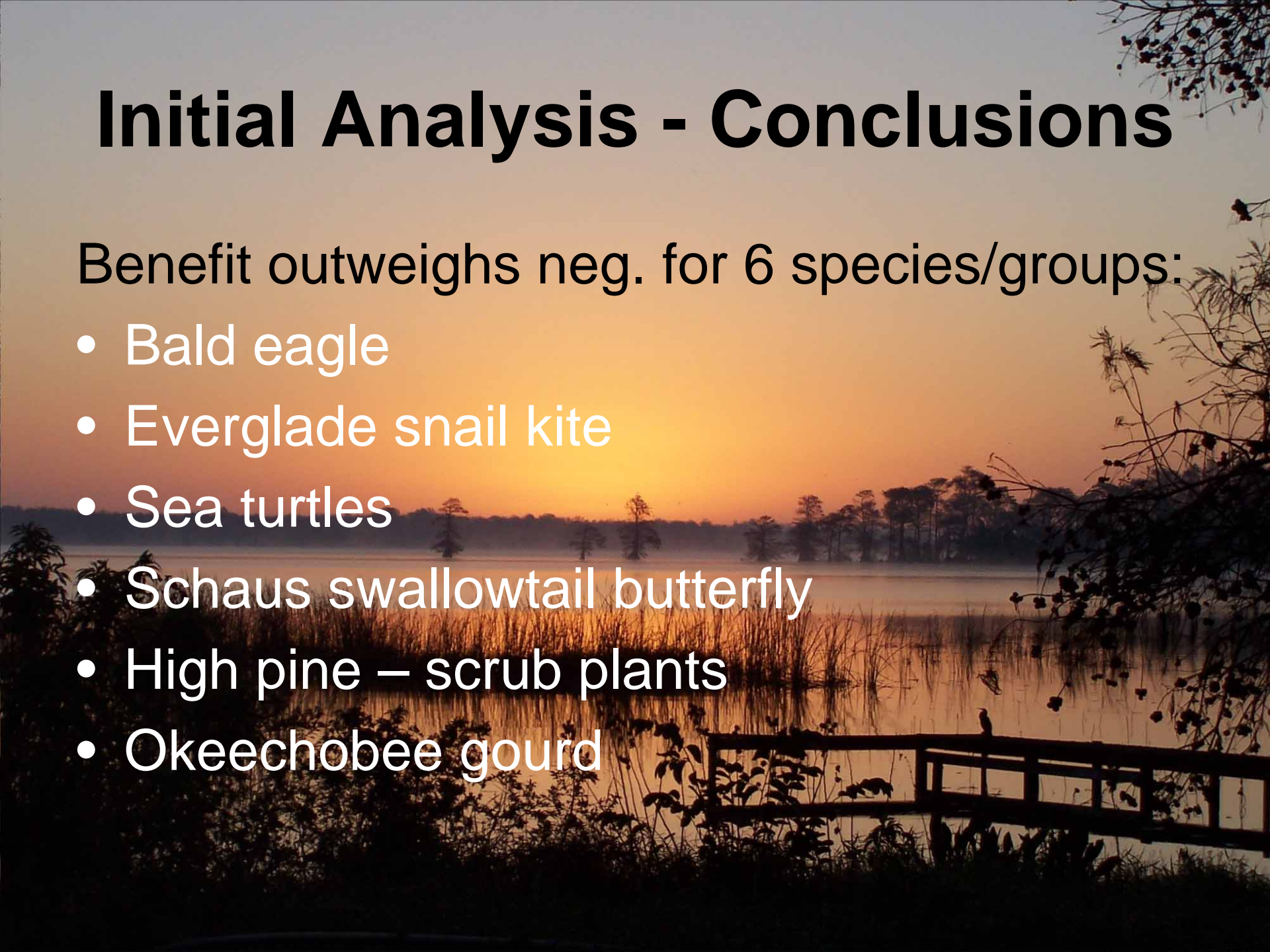
No. Projects	+	(acres)	-
16 Primary/Dispersal	68,623		7,451
6 Secondary	246		28,968
6 Other	15,550		44,691
7 Expansion	94,971		72,283

Several key projects could change analysis.  
See Table S-2.

# Initial Analysis - Conclusions

Benefit outweighs neg. for 6 species/groups:

- Bald eagle
- Everglade snail kite
- Sea turtles
- Schaus swallowtail butterfly
- High pine – scrub plants
- Okeechobee gourd



# Initial Analysis - Conclusions

Negative outweighs positive for 8 species:

- Audubon's crested caracara
- Florida grasshopper sparrow
- Florida scrub-jay
- Red-cockaded woodpecker
- Wood stork
- American crocodile
- Eastern indigo snake
- Beautiful pawpaw

# August 7, 1998 biological opinion

No effect – 8 species

- Panther
- Grasshopper sparrow
- RC woodpecker
- Crenulated lead plant
- Deltoid spurge
- Small's milkpea
- Tiny polygala
- Garber's spurge

Ben. effect – 5 spp/ch

- Am. crocodile
- Am. crocodile ctrl hab
- WI manatee
- WI manatee ctrl hab
- Okeechobee gourd

# August 7, 1998 biological opinion

AA, overall beneficial –  
5 species/critical hab

- Snail kite
- Snail kite crtcl habitat
- CS seaside sparrow
- CSSS critical habitat
- Wood stork

Adversely Affect –  
4 species

- Bald eagle
- Caracara
- Eastern indigo snake
- Florida scrub-jay

18 species and 4 critical habitats

# Initial Analysis

## Ecological Communities

No. Projects

14 High pine - scrub

13 Mesic temperate hammock

1 Pine rocklands

14 Mesic pine flatwoods

4 Hydric pine flatwoods

4 Dry prairie

8 Cutthroat grass

See Table S-4.

# Initial Analysis

## Ecological Communities

No. Projects

22 Wet prairie

33 Freshwater marsh

30 Swamps (Seepage, Flowing water, Pond)

8 Mangrove

4 Saltmarsh

3 Seagrass

1 Nearshore reef

See Table S-4.

# Initial Analysis

## State-listed Species

33 state-listed species, not including species also federally listed

2 Fish

1 Amphibian

5 Reptiles

17 Birds

7 Mammals

1 Mollusc

Strategic Habitat Conservation Areas

# Initial Analysis

## State-listed Species

### Species-Habitat Assemblage Groups

- Marsh, swamp, and wetland shrub complex
  - Colonial wading birds
  - Other protected wetland species
- Xeric upland complex
- Upland and swamp complex
- Coastal complex

# Initial Analysis - Species Listed

<u>App A</u>	<u>Taxon Group</u>	<u>App B</u>
9	Fish	142
1	Amphibians	35
22	Reptiles	120
44	Birds	405
20	Mammals	93
347	Vascular Plants	2,511
4	Inverts/Coral	4
<hr/>		<hr/>
447	TOTAL	3,310

# Acknowledgements

- Service CERP project biologists and staff
- FWC CERP biologists

Yvette Alger, Tim Towles

- Interagency Manatee Task Force
- Service STA-R Team
- Multi-species/Ecosystem Recovery Implementation Team (MERIT)

# Acknowledgements

Service ICU PAR - Part 1 Team

Heather McSharry

Marilyn Stoll

Mary Peterson

Sandra Sneckenberger