

Seminole Tribe of Florida

Big Cypress Reservation

Presented by

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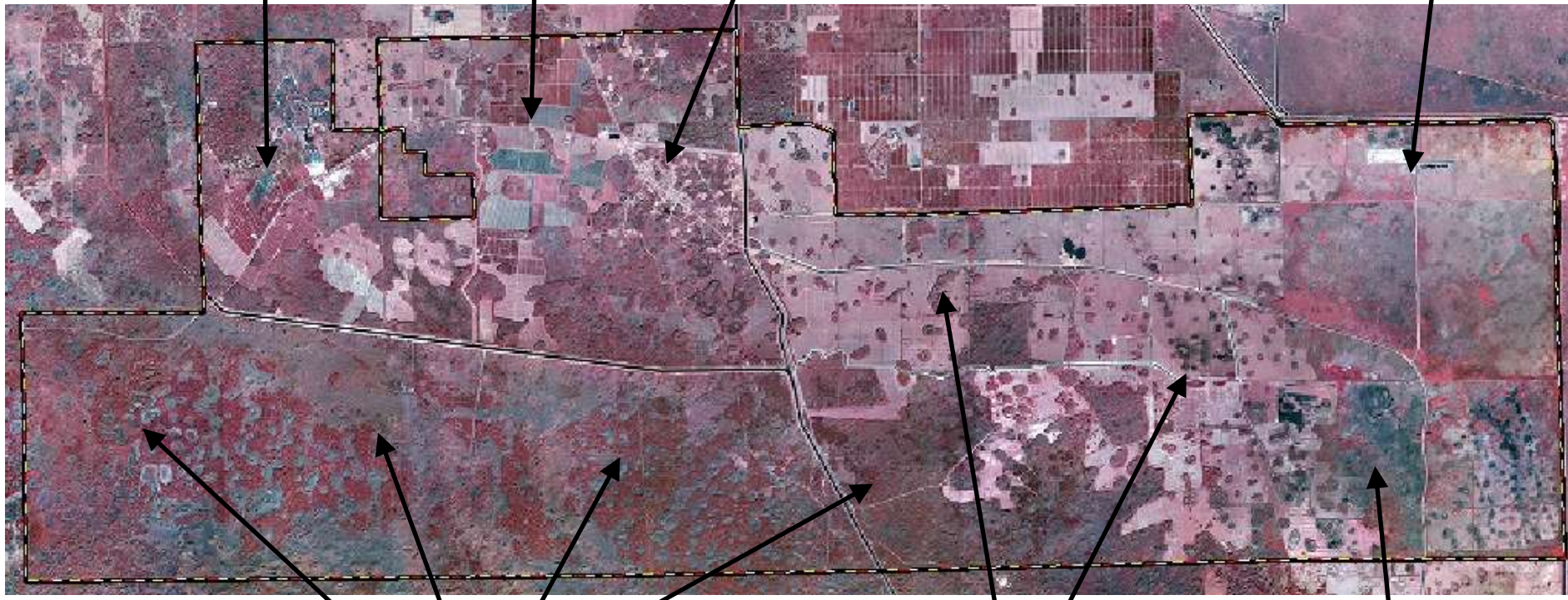
Big Cypress Reservation (>52K acres)

Recreation

Farming

Community

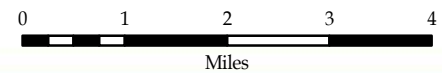
Mining



Native Land

Ranching

Native Land



Invasive Species Removal Efforts

Community Development

Project-Specific Mitigation

- For development resulting in wetland impacts
- Enhance existing wetlands through IS removal

Advanced Mitigation Program

- Generates credits for future development impacts through enhancement of existing wetlands through IS removal

Infrastructure Maintenance

- Maintain easement/clearance around water supply equipment and utilities



Invasive Species Removal Efforts

Grants

USDA NRCS Grazing Lands Conservation Initiative (GLCI)

- Improve productivity/health of privately owned grazing lands for ecological purposes

USFWS Tribal Wildlife Grant (TWG)

- Improve productivity/health of privately owned grazing lands for ecological purposes

Cooperative Actions

CERP “critical project” (Section 528 of WRDA ‘96): Big Cypress Water Conservation Plan

- Continue farming/ranching activities while improving ecology via water quality and hydroperiod enhancement
- Enhance/expand habitat for flora/fauna of BC Rez, BCNP & ENP

Invasive Species Removal Efforts

Project-Specific Mitigation Areas

- ~ 300 acres treated to date
 - Maintenance treatments planned for FY '09



Invasive Species Removal Efforts

Project-Specific Mitigation Areas

- ~ 300 acres treated to date
 - Maintenance treatments planned for FY '09
- Removal of Cat. 1 or 2 plants through chemical and/or mechanical methods
- Mitigate for wetland impacts resulting from development
- Permitting Agencies: USACE and SFWMD
- Term: began in 1990s; ongoing
- Funded internally, project by project



Invasive Species Removal Efforts

Advance Mitigation Program Areas

- Total project will encompass ~ 4145 acres (6 parcels)
 - ~ 1250 acres (Parcels 4 & 5) treated to date
 - Currently undergoing retreatment for permit compliance



Invasive Species Removal Efforts

Advance Mitigation Program Areas

- Total project will encompass ~ 4145 acres (6 parcels)
 - ~ 1250 acres (Parcels 4 & 5) treated to date
 - Currently undergoing retreatment for permit compliance
- Removal of Cat. 1 or 2 plants through chemical and/or mechanical methods
- Generate credits for future development wetland impacts
- Permitting Agencies: USACE and SFWMD
- Term: began in 2006; ongoing
- Funding: internal; \$ confidential



Invasive Species Removal Efforts

Infrastructure Maintenance

- ~ 50 acres treated to date
 - More treatments planned for FY '09
- Removal of Cat. 1 or 2 plants through chemical and/or mechanical methods
- Maintain easement/clearance around water supply equipment and utility service lines
- Term: began in 1990s; ongoing
- Funded internally, project by project



Invasive Species Removal Efforts

NRCS GLCI Grant

- ~ 611 acres treated to date
 - Currently treating new location (~563 acres)



Invasive Species Removal Efforts

NRCS GLCI Grant

- ~ 611 acres treated to date
 - Currently treating new location (~563 acres)
- Removal of Cat. 1 or 2 plants through chemical and/or mechanical methods
- Improve pastures for sustainable agricultural and ecological uses
- Partner Agency: USDA NRCS
- Term: FY '07 through FY '08
- Funding: \$360,000 (50% NRCS + 50% Tribe match)



Invasive Species Removal Efforts

USFWS Tribal Wildlife Grant

- FY '07: ~ 9000 acres treated



Invasive Species Removal Efforts



USFWS Tribal Wildlife Grant

- FY '07: ~ 9000 acres treated
- Removal of Cat. 1 or 2 plants through chemical and/or mechanical methods
- Improve panther prey habitat through prescribed burning and/or invasive species removal
- Partner Agency: USFWS
- Term: FY '07
- Funding: \$250,000 from FWS (+ 25% add'l Tribe match)



Invasive Species Removal Efforts

Critical Project

- Total project will encompass > 11,000 acres (4 basins)
 - Initial treatments planned for FY '09 
 - Future areas to be treated 



Invasive Species Removal Efforts

Critical Project

- Total project will encompass > 11,000 acres (4 basins)
 - Initial treatments planned for FY '09
 - Future areas to be treated
- Removal of Cat. 1 or 2 plants through chemical and/or mechanical methods
- Objectives
 - Improve water quality & hydroperiods
 - Enhance habitat for flora/fauna of BCNP & ENP
 - Generate credits for future development wetland impacts
- Partner Agencies: USACE, USEPA and SFWMD
- Term: Began in 2006; Ongoing
- Funding: millions (\$ confidential); 50% Tribe + 50% USACE



Priority Plant Species

Native Land

- Brazilian pepper (*Schinus terebinthifolius*)
- melaleuca (*Melaleuca quinquenervia*)
- Old World climbing fern (*Lygodium microphyllum*)
- air potato (*Dioscorea bulbifera*)

Improved Pasture

- tropical soda apple (*Solanum viarum*)
- cogon grass (*Imperata cylindrica*)
- para grass (*Urochloa mutica*)
- torpedo grass (*Panicum repens*)
- smut grass (*Sporobolus indicus*)



Priority Animal Species

Known to Occur

- Burmese python (*Python molurus bivittatus*)
- brown anole (*Anolis sagrei*)
- Cuban treefrog (*Osteopilus septentrionalis*)

Potential to Occur*

- Indopacific gecko (*Hemidactylus garnotii*)
- tropical house gecko (*Hemidactylus mabouia*)
- Tokay gecko (*Gekko gekko*)
- Brahminy blind snake (*Ramphotyphlops braminus*)
- Boa constrictor (*Constrictor constrictor*)
- Greenhouse frog (*Eleuthrodactylus planirostris*)

* Occur in BCNP and/or ENP



Current Monitoring Efforts

Project-Specific Mitigation

- Permit-specific; annual or semiannual

Advanced Mitigation Program

- Semiannual

GLCI

- Semiannual

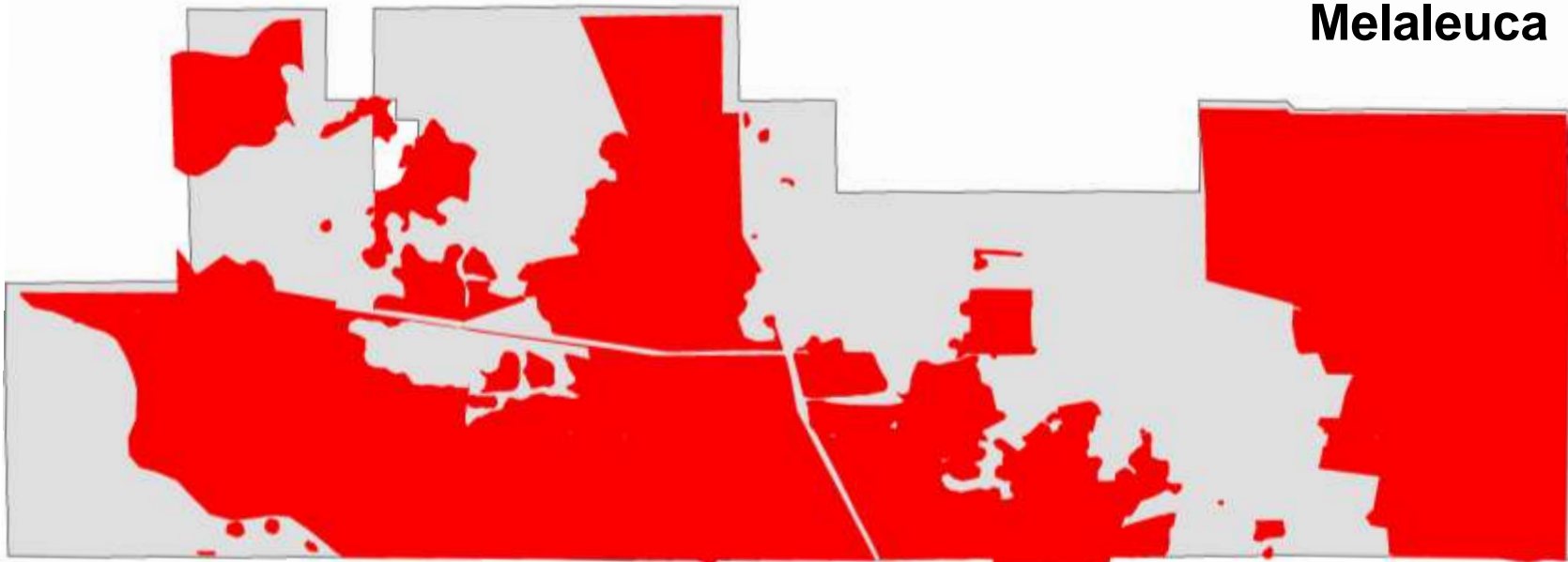
CERP “critical project”

- Semiannual (1st event Aug. '08)



Digital Aerial Sketch Mapping

Melaleuca



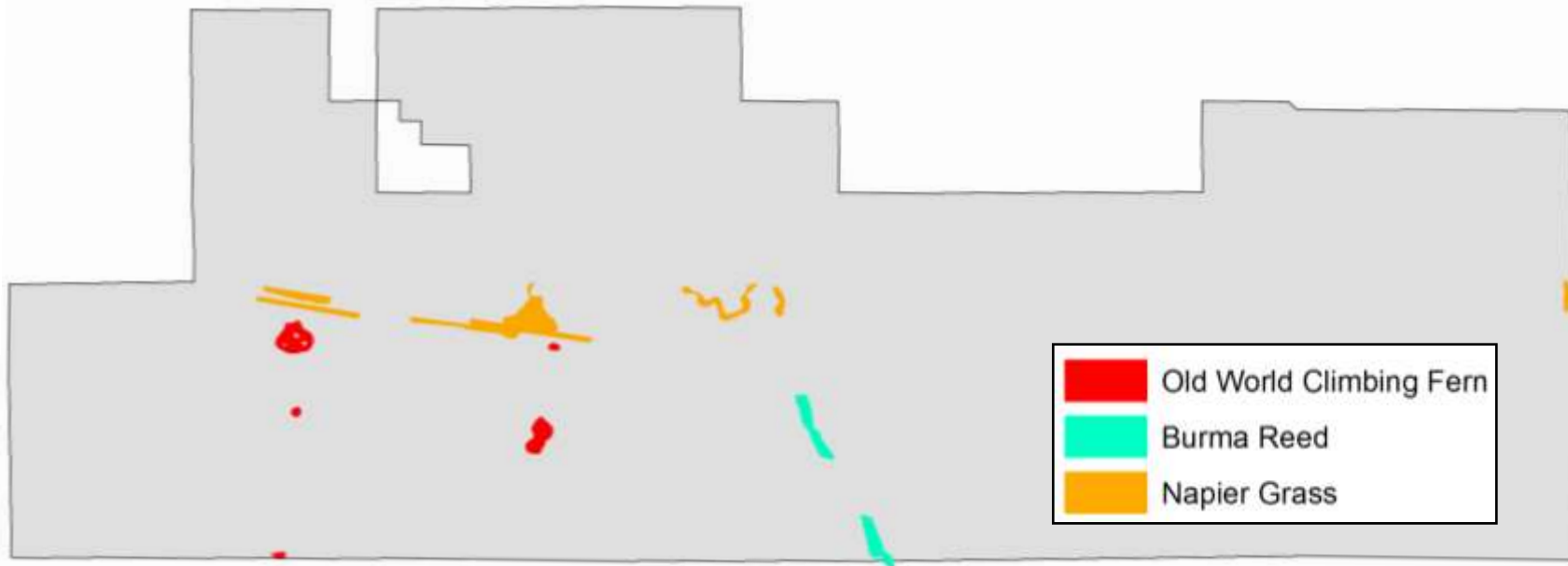
<u>Coverage Class</u>	<u>Acres</u>	
High	3,337	
Medium	6,459	
Low	21,718	
Total	31,515	~ 60%

Digital Aerial Sketch Mapping



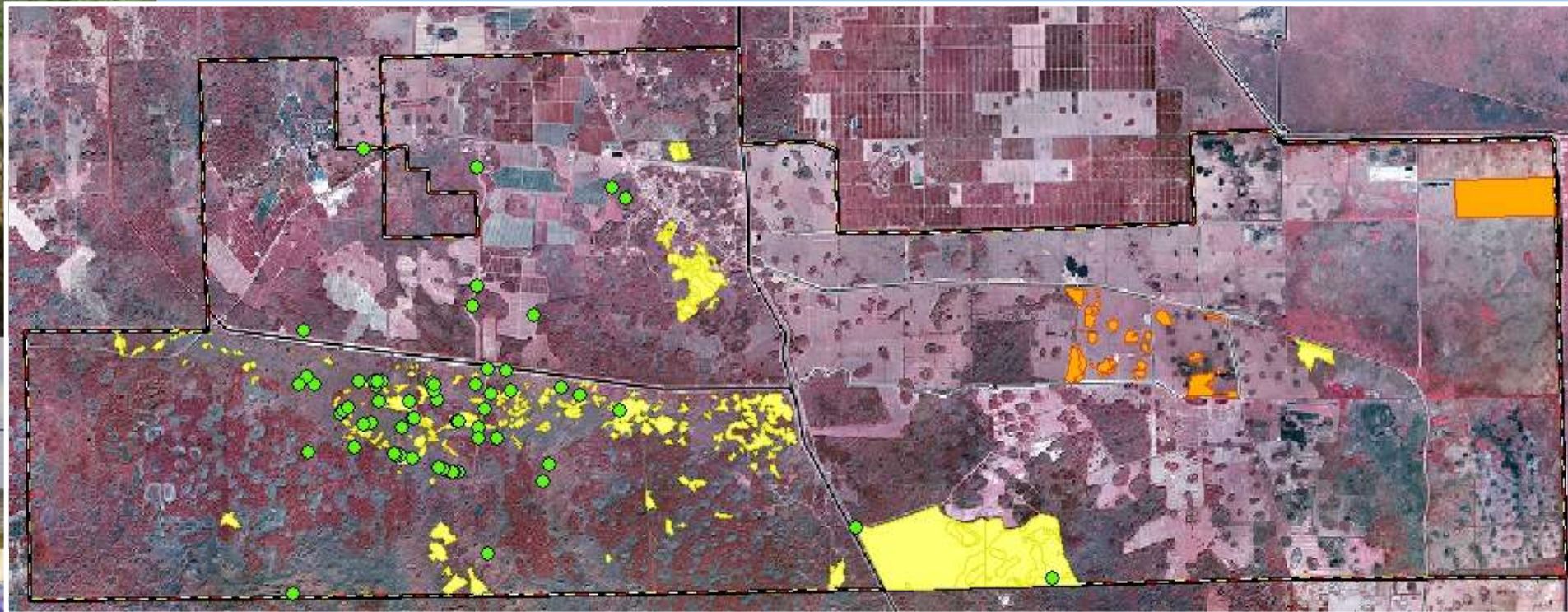
<u>Coverage Class</u>	<u>Acres</u>	
High	2,581	
Medium	5,057	
Low	442	
Total	8,079	~ 15%





Digital Aerial Sketch Mapping



Coverage Class	Acres		
	<i>climbing fern</i>	<i>Burma reed</i>	<i>Napier grass</i>
High	0	0	13
Medium	114	97	275
Low	0	0	0
Total	114	97	288
	~0.2%	~0.2%	~0.5%

Dynamic Invasive Species Monitoring Database



-  *Lygodium microphyllum*
-  *Melaleuca quinquenervia*
-  *Schinus terebinthifolius*
-  Reservation Boundary

