

Chapter 7: Mitigation Donation Annual Report

Marjorie R. Moore and Ross Adair

INTRODUCTION

The information in this chapter of the *2011 South Florida Environmental Report (SFER) – Volume II* is specific to two mitigation projects: (1) Corkscrew Regional Ecosystem Watershed (CREW), located in Lee and Collier counties, and (2) Pennsuco Regional Mitigation Area, located in Miami-Dade County, for Fiscal Year 2010 (FY2010) (October 1, 2009–September 30, 2010). In accordance with Subsection 373.414(1)(b)(2), Florida Statutes (F.S.), this chapter provides a summary of these endorsed mitigation projects including the available mitigation fund balance, expenditures during this time frame, a description of the restoration and management activities, success criteria, and monitoring. The two mitigation sites no longer accept mitigation funds as a means of offsetting wetland impacts, but they continue as expenditure sites.

CORKSCREW REGIONAL ECOSYSTEM WATERSHED

The Corkscrew Regional Ecosystem Watershed is a vast project covering approximately 60,000 acres in Lee and Collier counties (**Figure 7-1**). The CREW lands contain some of the largest remaining pristine cypress wetlands in the United States, providing habitat to a number of rare, threatened, and endangered species. In June 1995, the South Florida Water Management District (SFWMD or District) began accepting cash payments for projects in CREW as a form of mitigation to offset impacts to wetlands. Mitigation monies have provided funding for land acquisition, chemical treatment of exotics, hydrologic enhancement, monitoring of restoration progress, security management, and prescribed burning.

ACQUISITION

Land acquisition in CREW provides improved wildlife habitat for threatened and endangered species, and protection of water resources that provide improved water quality and flood protection.

The Summary of Wetlands Mitigation Balances by Project¹ (also referred to as the financial summary report), dated September 30, 2010, prepared by the SFWMD Accounting and Financial Services Division, indicates a balance of \$23,459.46 available in the CREW land acquisition fund. During FY2010, no mitigation funds were provided for CREW acquisition. **Table 7-1** summarizes the acquisitions to date in CREW.

¹ Adair, R. 2010. Summary of Wetlands Mitigation Balances by Project. South Florida Water Management District, West Palm Beach, FL.

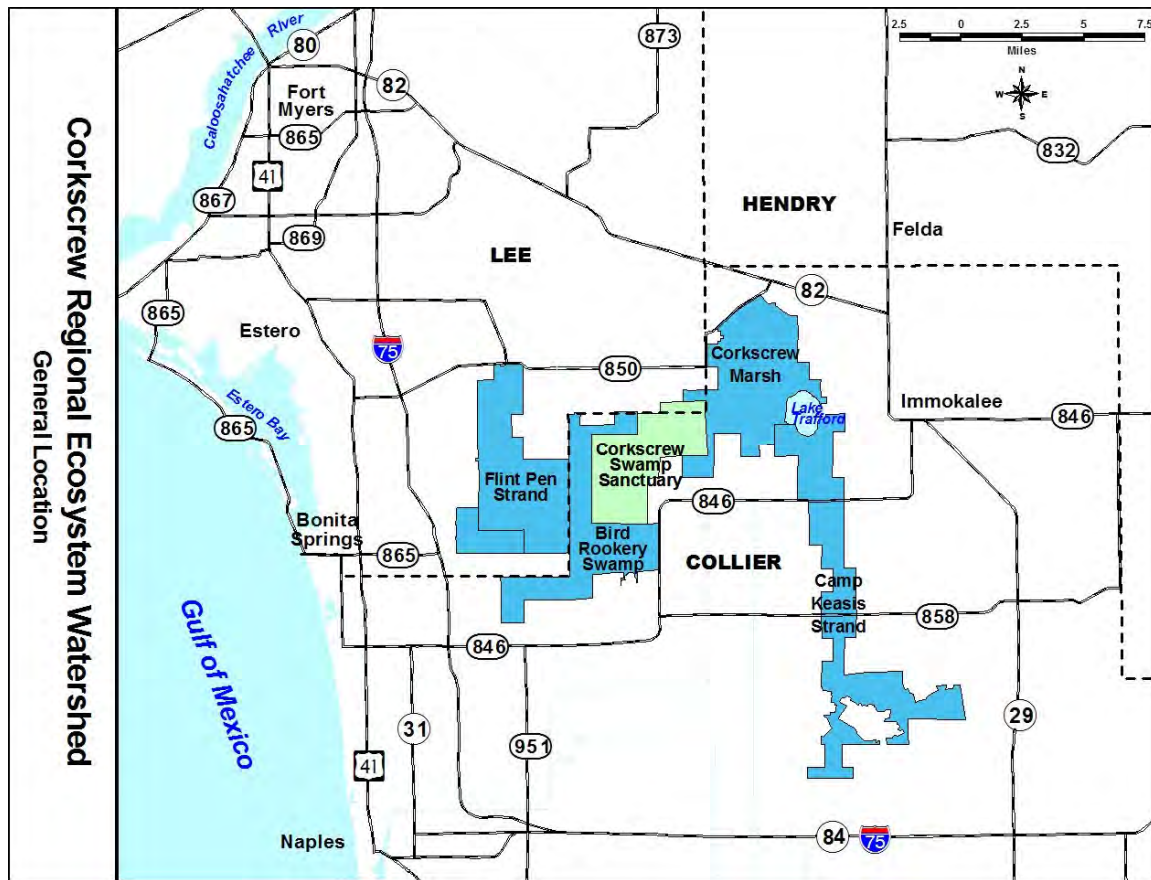


Figure 1. Location of the Corkscrew Regional Ecosystem Watershed (CREW).

RESTORATION

The financial summary report indicates an available balance of \$0 in the restoration fund as of September 30, 2010. During FY2010, the District provided contractual services for the initial and follow-up treatment of exotic and invasive species, including 80 acres of melaleuca (*Melaleuca quinquenervia*); 1,740 acres of Brazilian pepper (*Schinus terebinthifolius*); 1,243 acres of downy rose myrtle (*Rhodomyrtus tomentosa*), 120 acres of creeping signal grass (*Urochloa plantaginea*); 120 acres of cogon grass (*Imperata cylindrica*); 65 acres of napier grass (*Pennisetum purpureum*), 175 acres of Old World climbing fern (*Lygodium microphyllum*), and 665 acres of willow (*Salix caroliniana*). Restoration expenditures included \$260,273 for exotic species removal; \$943 for chemicals; \$18,519 for equipment rental to support restoration activities; \$50,000 for law enforcement patrol by the Florida Fish and Wildlife Conservation Commission (FWC); \$9,800 for groundcover restoration and monitoring; \$68,833 for land management staff support; and \$4,096 for miscellaneous procurement card charges associated with land management expenses. The total amount for restoration expenditures was \$412,464. For FY2011, \$260,000 is budgeted for exotic species removal; \$1,040 for chemicals; \$15,600 for equipment rental to support restoration activities; \$50,000 for law enforcement patrol by the FWC; \$5,000 for monitoring of restoration projects; and \$5,200 for construction materials associated with maintenance activities. The CREW restoration funding in FY2011 will total \$336,840.

Table 7-1. CREW acquisition parcels using mitigation funding
as of September 30, 2010.

Tract	Acreage	Cost	Location
001-002	237.4	\$200,840	R27, T45, S13
003-488	40.0	\$61,000	R26, T47, S24
003-765	5.0	\$20,000	S35
003-757	5.0	\$20,000	S35
003-776	5.0	\$20,000	S35
003-761	5.0	\$20,000	S35
003-766*	5.0	\$20,000	S35
003-758*	5.0	\$20,000	S35
003-772	5.0	\$20,000	S35
003-804	25.0	\$45,000	S21
003-805	2.5	\$4,500	S21
003-806	5.0	\$9,000	S21
003-807	2.5	\$4,500	S21
003-808	2.5	\$4,500	S21
003-809	2.5	\$4,500	S21
003-815	185.0	\$333,000	S22, S27
003-816	10.0	\$10,500	S22
003-826	30.0	\$54,000	S24
003-828	5.0	\$9,000	S24
003-829	65.8	\$117,000	S24
003-833	2.5	\$4,500	S21
003-760	5.0	\$130,000	S35
003-755	10.0	\$45,000	S35
001-038	283.5	\$992,984	R27, T46, S35
100-005	20.0	\$250,000	R26, T47, S31
003-234	5.0	\$17,000	S27
003-245	5.0	\$12,500	S27
003-256	5.0	\$23,000	S27
003-277	5.0	\$23,000	S27
003-278	5.0	\$23,000	S27
003-302	5.0	\$17,000	S27
003-304	5.0	\$23,000	S27
003-307	5.0	\$23,000	S27
003-308	5.0	\$23,000	S27
003-325	10.0	\$25,000	S28
003-358	10.0	\$25,000	S28
003-226	5.0	\$23,000	S27
003-896	5.0	\$17,500	S22
003-957	5.0	\$18,750	S28
005-017	5.0	\$250,000	S32
09-003-774	11.2	\$417,500	S35
09-003-777	11.4	\$417,500	S35
09005-035	6.0	\$120,000	S32
Total	1,082.8	\$3,918,574	

Restoration progress is measured by the reduction of exotic species and recruitment of target native species. The District measures exotic treatment success by the percentage of land at an acceptable level of exotics infestation. The target established in the SFWMD's Strategic Plan Success Indicators is that 73 percent of all conservation lands are at an acceptable level of exotics. Acceptable is defined as land with less than or equal to 10 percent exotic coverage to include low- and maintenance-level infestations. Low designation refers to an area at 10 percent or less exotics coverage but more than 1 percent exotics coverage. The maintenance-level designation is when the area has 1 percent or less exotics coverage. Unacceptable is defined as land with more than 10 percent exotics. Pasture grasses such as Bahia (*Paspalum notatum*) are not included in the exotics coverage calculation, but tropical soda apple (*Solanum viarum*) scattered throughout the pasture is included in the determination. In the CREW project area, a total of 25,293 acres are under management. Of these, 8 percent are at an unacceptable level of exotic infestation (7 percent at heavy and 1 percent at medium), and 92 percent of the lands are at an acceptable level (6 percent low and 86 percent maintenance level). Lands at an acceptable level of exotics exceed the target established for success on all SFWMD conservation lands by 19 percent. Were it not for the anomalous, recently acquired, highly degraded lands in East Bonita or Critical CREW that account for 14 percent of the CREW lands, the amount of unacceptable lands would be at 2 percent (1 percent heavy and 1 percent medium) and the balance at acceptable (0 percent low and 98 percent maintenance level). During FY2010, the East Bonita or Critical CREW area of CREW were targeted for initial and follow-up exotic control treatments. It is expected that this will continue during FY2011, such that the unacceptable level of exotics show a marked reduction.

The financial summary report indicates that as of September 30, 2010, a balance of \$314,114 in interest earned on the corpus amount is available for use toward management activities. The interest on the land acquisition and restoration account is \$397,682 through this same time period, which can be used toward land acquisition, restoration, or management. The total amount of funding available as interest is \$711,796.

PENNSUCO REGIONAL MITIGATION AREA

The Pennsuco Regional Mitigation Area, also known as Pennsuco, in Miami-Dade County is part of the Pennsuco Wetlands, or Cell 26 (**Figure 7-2**), of the East Coast Buffer. Pennsuco Wetlands/Cell 26 covers an area of approximately 13,000 acres. Pennsuco is located between the Dade-Broward Levee, Krome Avenue (State Road 997), and Tamiami Trail (U.S. 41).

In 1995, the SFWMD began using Pennsuco as a regional off-site mitigation area, allowing permit applicants to make mitigation contributions for the acquisition, enhancement, and long-term management of Pennsuco lands as compensation for permitted wetland impacts. Although the developers' mitigation obligation was met in July 2002 and Pennsuco is no longer available as a mitigation option for developers with impacts to wetlands, Pennsuco acquisition, restoration, and long-term management continues as a mitigation option for Lake Belt miners under legislation adopted in Section 373.4149(1), F.S. The environmental benefit provides protection, enhancement, and management of the Pennsuco floral, faunal, and hydrologic resources. Pennsuco emphasizes the enhancement of a degraded ecosystem that would otherwise continue to decline and impact nearby natural areas without efforts to reduce the spread of exotics. The enhancement of Pennsuco has the potential to yield regional ecological benefits and contribute to the goals of Everglades restoration.

ACQUISITION

The financial summary report indicates that for the period ending September 30, 2010, a balance of \$49,740 is available in the Pennsuco land acquisition fund. This funding, provided by the Lake Belt mitigation fund, reimbursed the associated acquisition costs of 10 acres (\$2,954) and 135 acres (\$46,786) previously acquired by the District. The reimbursement authorization allows the Lake Belt miners to provide the full cost funding for land acquisition in Pennsuco for lands the SFWMD acquired. **Table 7-2** summarizes the acquisitions to date in Pennsuco.

RESTORATION

The restoration involves a multiyear herbicidal and manual exotic vegetation removal program. At the end of year five, the District expects the melaleuca to be at maintenance level with 1 percent or less total coverage. When the project is at a maintenance level and the restoration fund is fully expended, interest on the long-term management fund will be used for management of the property. Land managers conduct semiannual aerial and on-ground monitoring to evaluate exotic treatments and provide timely, adaptive follow-up treatment.

The financial summary report indicates an available balance of \$5,178,507 as of September 30, 2010. The total restoration expenditure in FY2010 was \$817,887. Of this, the District spent \$696,968 for contractual services and chemicals on the initial and follow-up treatment of 3,525 acres of exotics. In addition to exotic control costs, other restoration expenditures included \$28,999 for law enforcement patrol provided by the FWC; \$5,682 for staff support; \$7,953 for miscellaneous maintenance activities; and \$78,285 for expenditures associated with funds provided by the Lake Belt mitigation account for seepage analysis. **Figure 7-3** provides a summary of the tracts where exotic treatments have been conducted to date as well as the plans for FY2010. **Figure 7-4** shows a visual depiction of the response of vegetation over time from these exotic treatments.

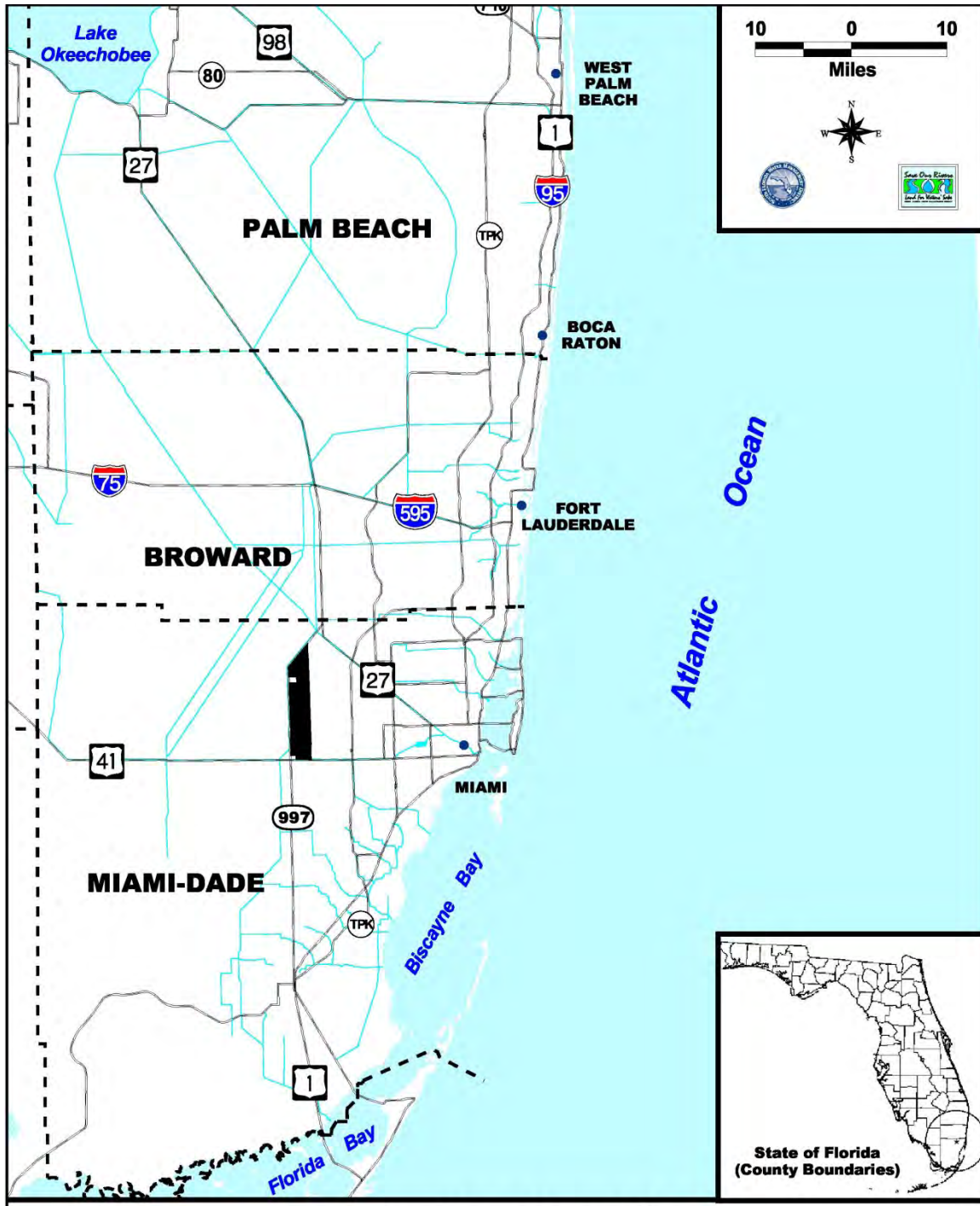


Figure 7-2. Location of the Pennsuco Regional Mitigation Area.

Table 7-2. Pennsuco acquisitions using developers' mitigation funding (211) as of September 30, 2010.

Tract Number	Acreage Acquired	Mitigation Funded	% of Tract
300-932	482.5	\$868,500	100
300-912	160.0	\$400,000	50
300-913	320.0	\$800,000	100
301-916	160.0	\$400,000	50
301-917	120.0	\$300,000	50
300-962	160.0	\$400,000	50
304-973	320.0	\$800,000	100
304-940	5.0	\$15,000	100
304-941	10.0	\$30,000	100
304-952	10.0	\$30,000	100
305-967	5.0	\$15,000	100
306-920	10.0	\$30,000	100
305-951	1.4	\$4,800	100
306-926	2.5	\$8,750	100
305-968	5.0	\$15,000	100
305-915	1.4	\$5,100	100
305-912	5.0	\$15,000	100
305-956	.7	\$2,400	50*
305-957	.7	\$2,400	50*
305-927	2.0	\$7,150	50*
300-919	40.0	\$100,000	50*
303-965	5.0	\$15,000	50*
**	407.2	\$2,011,750	**
300-964	120.0	\$1,800,000	100
304-934	60.0	\$900,000	100
B7100093***	2.5	\$60,315	100
B7100073***	2.1	\$51,804	100
B7100094***	2.5	\$60,315	100
B7100095***	2.5	\$88,807	100
Total	2,423.0	\$9,237,091	

* Lands acquired with 50 percent miners' mitigation funds and 50 percent developers' mitigation; acreage represented is amount acquired with developers' mitigation funds only.

** 56 parcels total, with federal share contributing 50 percent of the acquisition price for 40 of these parcels, which are indicated in bold italics. The balance of the tracts and other 50 percent of federally acquired tracts were acquired with P2000. Mitigation funds were used to swap out the P2000 acquired land with 50 percent coming from developers' (fund 211) and 50 percent from the Lake Belt miners. The 56 parcels included 300-914, 300-917, 300-920, 300-921, 300-925, 300-928, 300-929, 300-931, **300-959**, 300-961, 300-963, **300-987**, **300-988**, **300-989**, **300-990**, **300-991**, **300-992**, **300-993**, **300-994**, **300-995**, **300-996**, 301-900, **301-903**, **301-904**, **301-906**, **301-907**, 301-908, 301-910, **301-913**, **301-914**, **301-915**, **304-932**, **304-971**, **305-903**, **305-921**, **305-928**, **306-929**, **306-935**, **306-943**, **306-948**, **306-966**, **306-976**, **306-977**, **307-923**, **307-924**, **307-925**, **307-926**, **307-928**, **307-929**, **307-930**, **307-934**, **307-936**, **307-938**, 304-966, 304-968, and 304-974.

*** Parcels acquired in L-31 North Project using Pennsuco restoration funds.

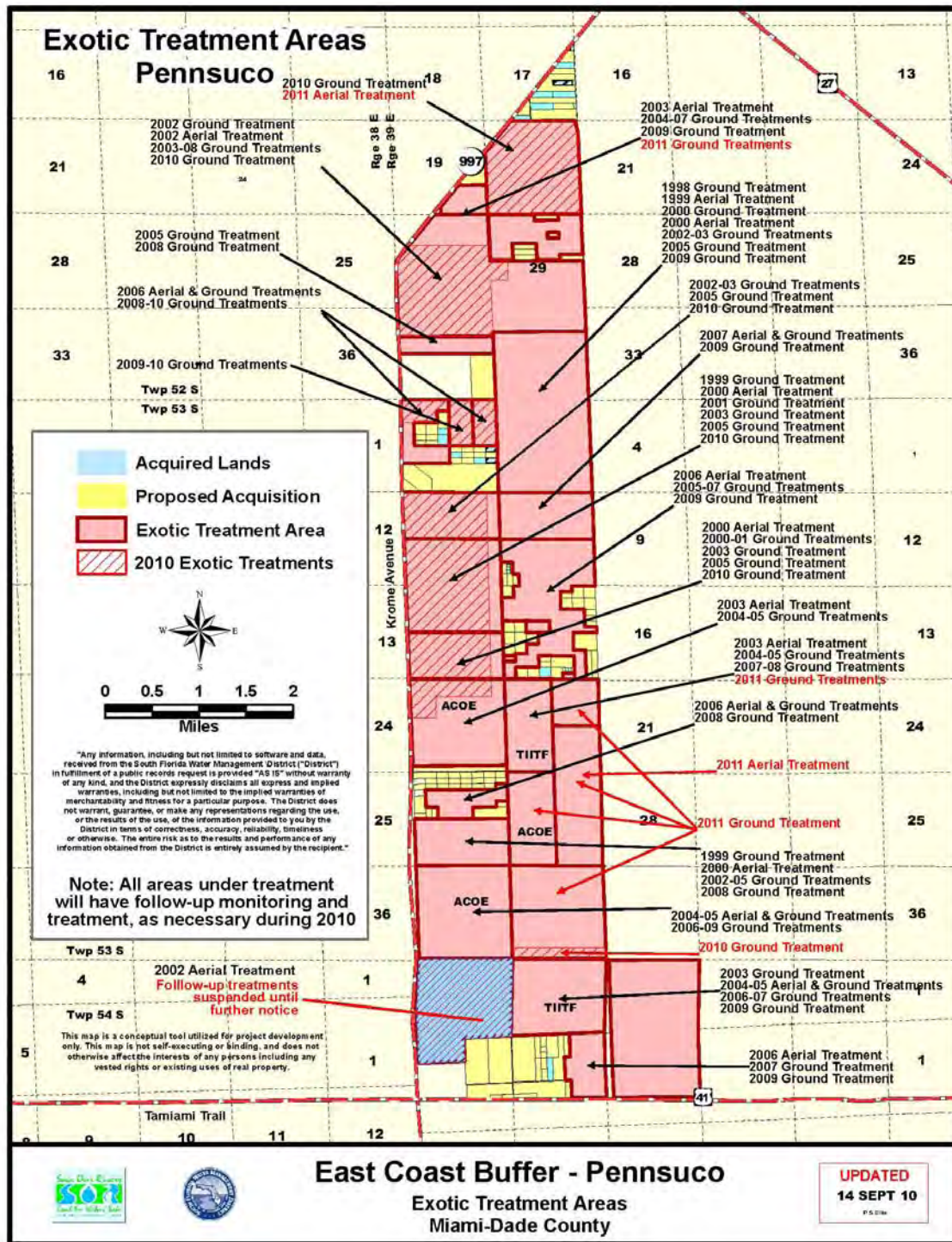


Figure 7-3. Pennsuco exotic treatment areas.

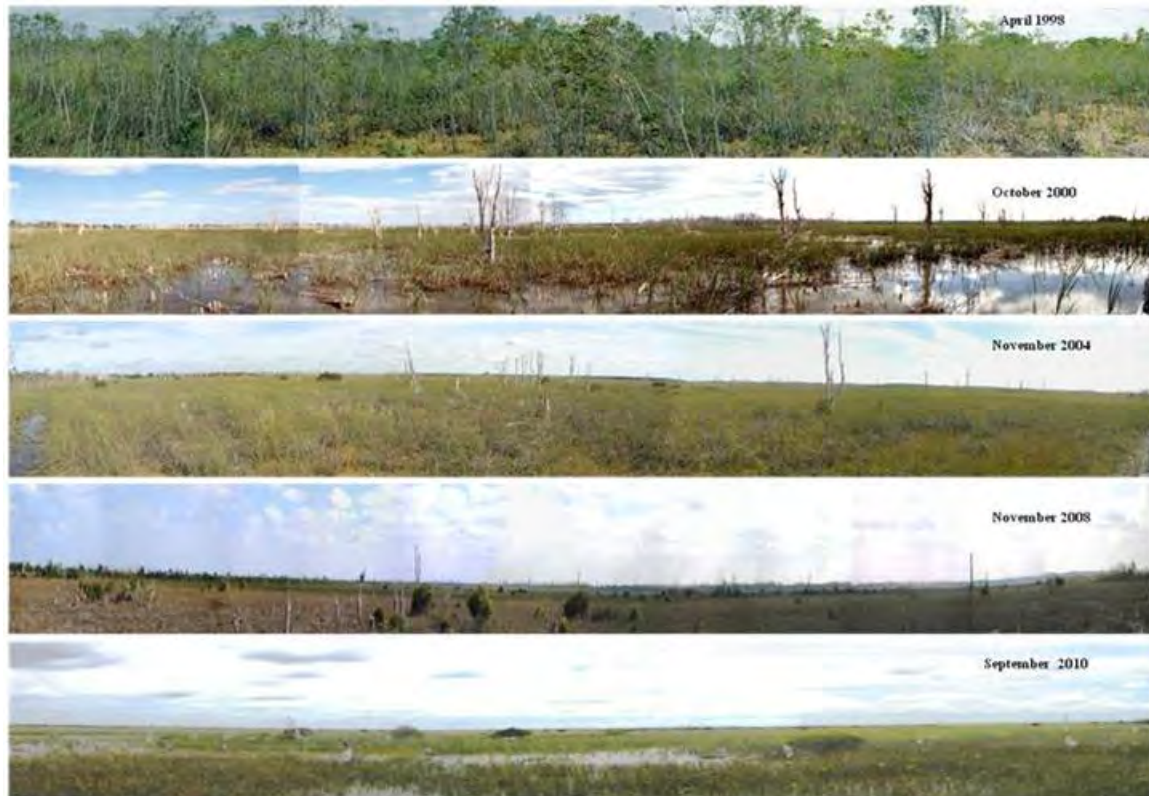


Figure 7-4. Maintenance control of melaleuca in the Pennsuco Regional Mitigation Area.

During this reporting period, invasive species, primarily melaleuca, continue to decline in the areas treated including a new treatment area in the north. Small lygodium plants were found and treated throughout the treatment areas. The site was particularly wet during the early months of 2010, allowing airboat access for follow-up treatment in areas typically difficult to access.

For FY2011, \$400,000 is budgeted in Pennsuco for exotic species removal, \$29,000 for law enforcement patrol by the FWC, and \$5,000 for restoration monitoring. The Pennsuco restoration funding in FY2011 will total \$434,000.

MANAGEMENT

According to the financial summary report, a balance of \$1,224,055 as interest earned on the corpus amount is available as of September 30, 2010. Utilization of monies from this fund will commence when initial and follow-up exotic treatments are completed, the entire project achieves maintenance level for treatment, and the restoration account has been depleted. Additionally, \$4,016,746 in the acquisition and restoration interest account through this same time period is available for acquisition, restoration, or management. The total amount of funding available as interest is \$5,240,801.

FINANCIAL SUMMARY

Table 7-3 shows the balances available in the acquisition, restoration, and management categories in the financial summary, as of September 30, 2010.

Table 7-3. Financial summary as of September 30, 2010.

Project	Land Acquisition	Restoration	Long-Term Maintenance*	Total
CREW	\$23,459	\$0	\$711,796	\$735,255
Pennsuco	\$49,740	\$5,178,507	\$5,240,801	\$10,469,048

* Includes interest on long-term management fund corpus and interest on land and restoration funds.

Table 7-4 shows the expenditure summary, which categorizes mitigation fund spending into components of acquisition, restoration, and management for the period October 1, 2009–September 30, 2010.

Table 7-4. Expenditure summary for period of
October 1, 2009–September 30, 2010.

Project	Land Acquisition	Restoration	Long-Term Maintenance	Total
CREW	\$0	\$412,464	\$0	\$412,464
Pennsuco	\$0	\$817,887	\$0	\$817,887
Total	\$0	\$1,230,351	\$0	\$1,230,351