

Chapter 7: Mitigation Donation Annual Report

Marjorie R. Moore and Ross Adair

INTRODUCTION

The information in this chapter of the *2012 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 2011 (FY2011) (October 1, 2010–September 30, 2011). 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 developer’s 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, 2011, indicates a balance of \$23,459.46 available in the CREW land acquisition fund. During FY2011, no mitigation funds were provided for CREW acquisition; however, conservation easements were recorded for over 1244.29 acres of mitigation protected lands in Lee and Collier counties, with the Florida Department of Environmental Protection as the beneficiary. **Table 7-1** summarizes the 1260.3 acres protected as mitigation lands in CREW through direct acquisition and filing of conservation easements.

¹ Adair, R. 2011. Summary of Wetlands Mitigation Balances by Project. South Florida Water Management District, West Palm Beach, FL.

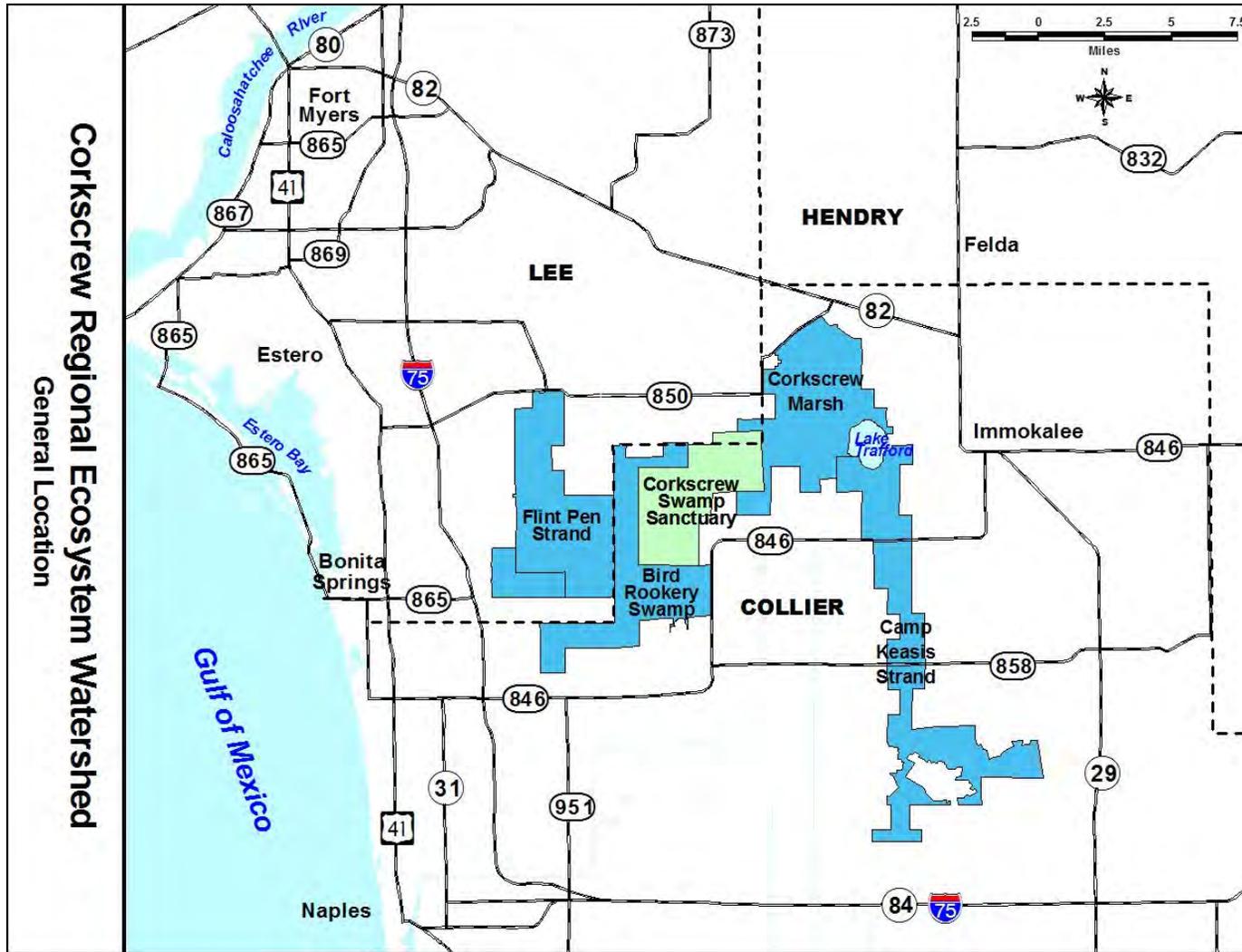


Figure 7-1. Location of the Corkscrew Regional Ecosystem Watershed (CREW).

Table 7-1. CREW lands protected as mitigation as of September 30, 2011.

Tract	Parcel Acreage	Net Acreage*
09001-002	237.4	237.4
09003-488	40.0	40.0
09003-765	5.0	4.6
09003-757	5.0	5.0
09003-776	5.0	4.3
09003-761	5.0	4.3
09003-766	5.0	4.6
09003-758	5.0	4.6
09003-772	5.0	4.4
09003-804	25.0	23.9
09003-805	2.5	2.3
09003-806	5.0	4.1
09003-807	2.5	2.5
09003-808	2.5	2.3
09003-809	2.5	2.3
09003-815	185	182.0
09003-816	10	10.0
09003-826	30	29.3
09003-828	5.0	4.6
09003-829	65.76	65.76
09003-833	2.5	2.5
09003-760	5.0	4.6
09003-755	10.0	8.8
09001-091	273.56	273.56
09001-090**	10.01**	10.01**
09003-234	5.0	5.0
09003-245	5.0	4.7
09003-256	5.0	4.6
09003-277	5.0	4.7
09003-278	5.0	4.7
09003-302	5.0	4.3
09003-304	5.0	4.6
09003-307	5.0	4.6
09003-308	5.0	4.3
09003-325	10.0	10.0
09003-358	10.0	10.0
09003-226	5.0	4.3
09003-896	5.0	4.5
09003-957	5.0	4.8
09005-017	5.0	4.8
09003-774	30.0	27.95
09003-777	30.0	27.95
09002-010	52.48	52.48
09003-936	41.53	40.0
09003-952	61.56	60.0
09003-674	6.67	6.5
09003-676	3.33	3.3
09003-756	5.0	5.0
09003-640	3.93	3.7
09003-751	3.35	3.2
09005-014	5.00	4.45
09005-270	2.50	2.14
09005-035***	6.0***	6.0***
Total	1285.58	1260.30****

*Excludes canal and road easements

**Tract No. 09001-090 was previously conveyed to the Trustees of the Internal Trust Fund of the State of Florida subject to a conservation easement and was not included in the conservation easements conveyed to FDEP.

***Tract No. 09005-035 was acquired with mitigation funds 6/26/2009, however, because it was also acquired with DOI funds, a conservation easement will not be filed. The land will be protected by virtue of it showing as a mitigation acquisition in the database.

****Conservation easement conveyed to FDEP on September 27, 2011, comprised 1244.29 acres, more or less [i.e. 1260.20 acres less Tract Nos. 09001-90 (10.01 acres) and 09005-035 (6.0 acres)]

RESTORATION

The financial summary report indicates that there is no available balance in the restoration fund as of September 30, 2011. During FY2011, the District provided contractual services for the initial and follow-up treatment of exotic and invasive species, including 1973 acres of melaleuca (*Melaleuca quinquenervia*), 491 acres of Brazilian pepper (*Schinus terebinthifolius*), 303 acres of downy rose myrtle (*Rhodomyrtus tomentosa*), 126 acres of cogon grass (*Imperata cylindrica*), 126 acres of Old World climbing fern (*Lygodium microphyllum*), 895 acres of willow (*Salix caroliniana*), and 487 acres of exotic grasses and sedges. Restoration expenditures included \$260,000 for exotic species removal; \$6,442 for equipment rental to support restoration activities; \$38,838 for law enforcement patrol by the Florida Fish and Wildlife Conservation Commission (FWC); \$48,466 for land management staff support; and \$4,114 for miscellaneous procurement card charges associated with land management expenses. The total amount for restoration expenditures was \$357,860. For FY2012, \$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; and \$5,200 for construction materials associated with maintenance activities. The CREW restoration funding in FY2012 will total \$331,840.

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 exotic infestation. The target established as a success indicator in the SFWMD's Strategic Plan is for a minimum of 73 percent of all conservation lands to be at an acceptable level of exotic infestation. Acceptable is defined as land with at least 90 percent of the area being categorized as having a low infestation rate (greater than 1 percent but less than 10 percent exotic occurrence) or as being in maintenance mode (1 percent or less exotic occurrence). Pasture grasses such as Bahia (*Paspalum notatum*) are not included in the exotics coverage. In the CREW project area, a total of 25,925 acres is under active management. Of the managed lands, 91 percent of the area is at an acceptable level of exotic infestation (7.8 percent low and 83.2 percent at maintenance) and only 9 percent of the area is at an unacceptable level of exotic infestation (7.6 percent at heavy and 1.4 percent at medium). Lands at an acceptable level of exotics exceed the target established for success on District conservation lands by 18 percent.

MANAGEMENT

The financial summary report indicates that as of September 30, 2011, a balance of \$339,952 in interest earned on the corpus amount is available for use toward management activities. The interest on the land acquisition and restoration account is \$44,223 through this same time period, which can be used toward land acquisition, restoration, or management. The total amount of funding available as interest is \$384,175.

PENNSUCO REGIONAL MITIGATION AREA

The Pennsuco Regional Mitigation Area (Pennsuco), 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 Miami-Dade County.

In 1995, the District 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 through the spread of exotic vegetation. 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, 2011, a balance of \$0 is available in the Pennsuco land acquisition fund. During FY2011, \$80,487 was expended for land acquisition and associated costs in Pennsuco including \$80,000 for a 10-acre parcel, \$460 for title fees, and \$27 for court recording fees. **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 \$5,875,440 as of September 30, 2011. The total restoration expenditure in FY2011 was \$703,315. Of this, the District spent \$515,150 for contractual services on the initial and follow-up treatment of 2,394 acres of exotics. In addition to exotic plant control costs, other restoration expenditures included \$28,137 for law enforcement patrol provided by the FWC; \$6,589 for staff support; \$15,458 to restore impacts from fire line creation to control a wildfire; and \$137,981 for expenditures associated with Lake Belt mitigation 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 FY2012. **Figure 7-4** shows a visual depiction of the response of vegetation over time from these exotic treatments.

Table 7-2. Pennsuco acquisitions using developers' mitigation funding (211) as of September 30, 2011.

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
W9306-901	10.0	\$80,000	100
Total	2,433.0	\$9,317,091	

* 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.

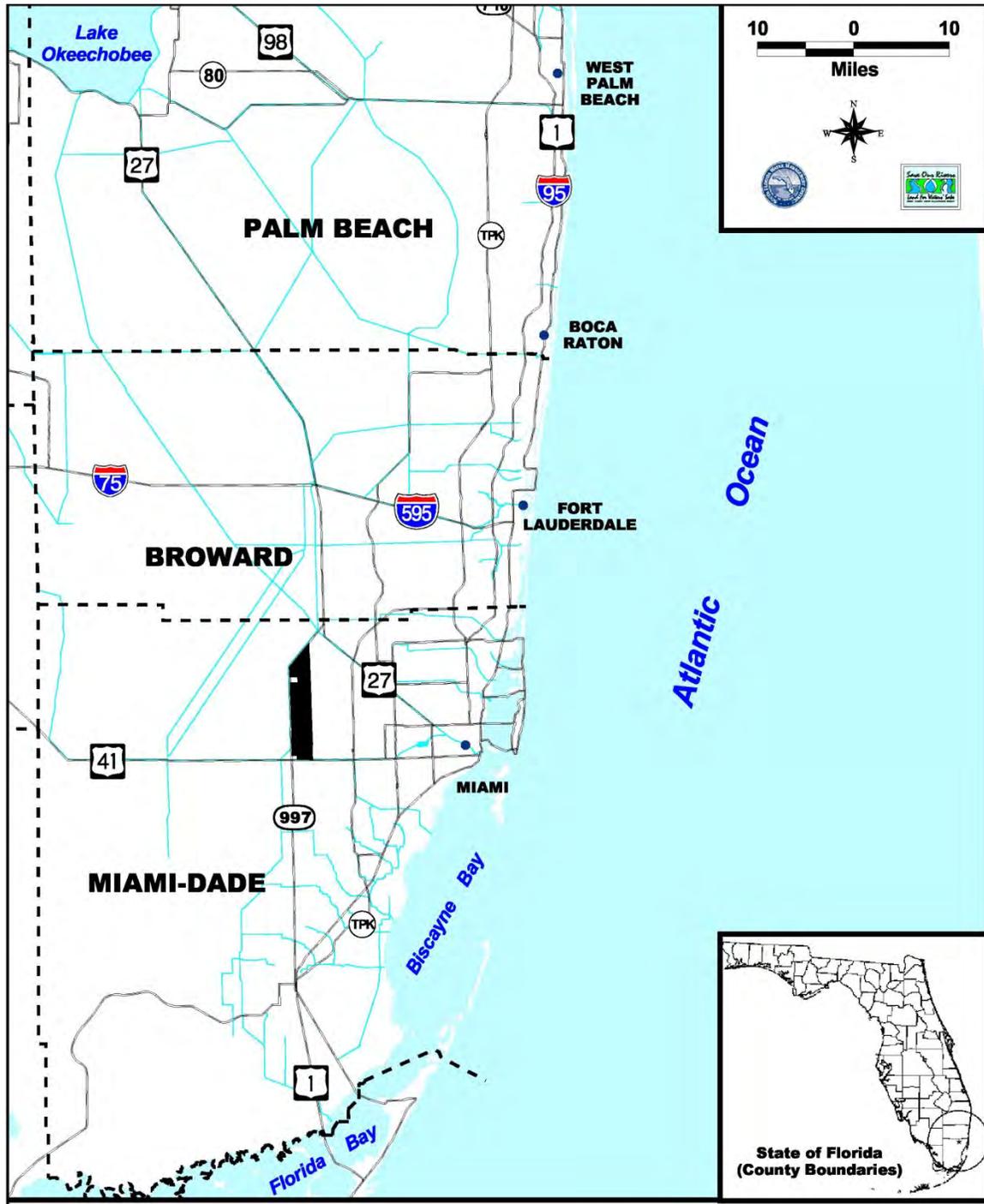


Figure 7-2. Location of the Pennsuco Regional Mitigation Area.

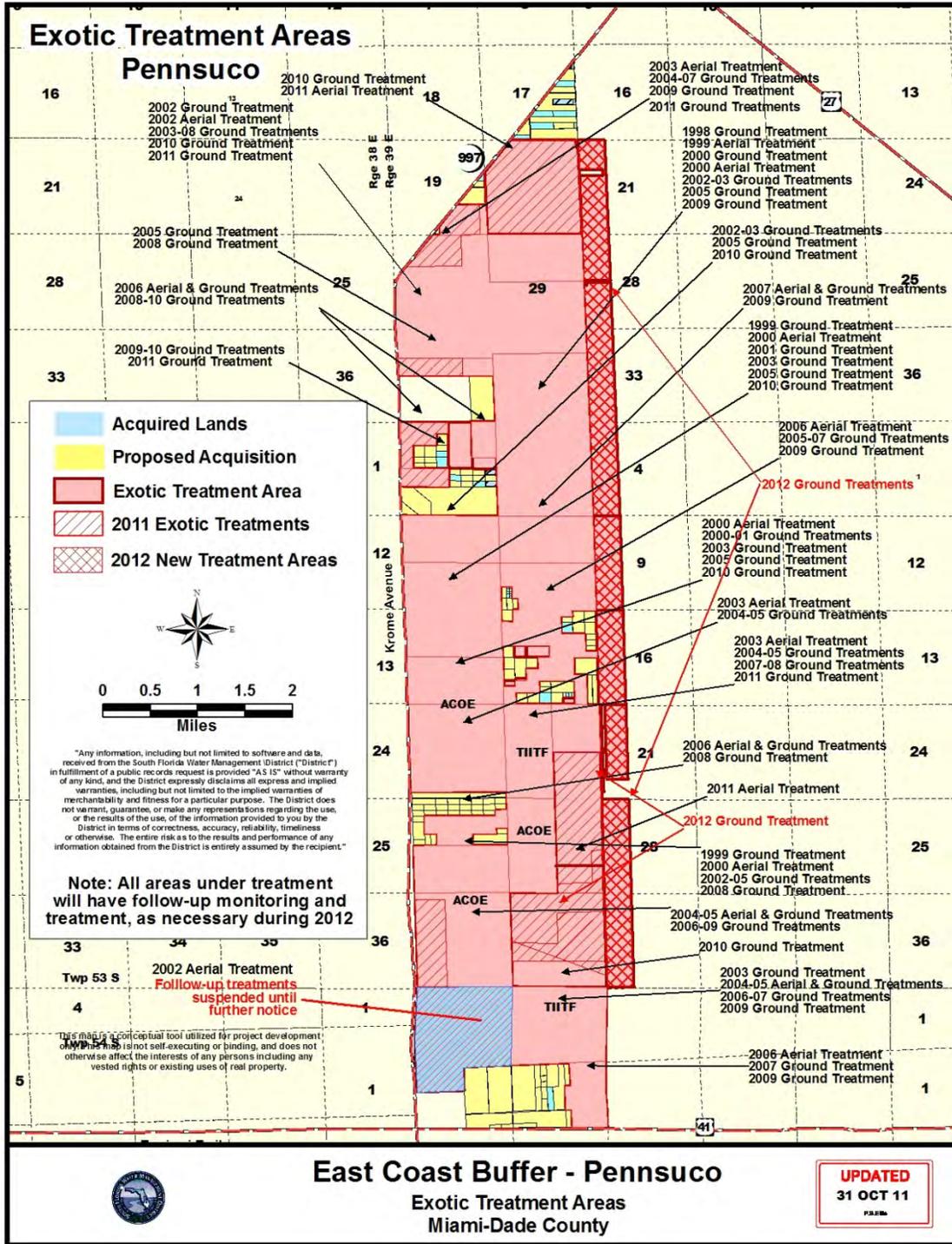


Figure 7-3. Pennsuco exotic treatment areas.

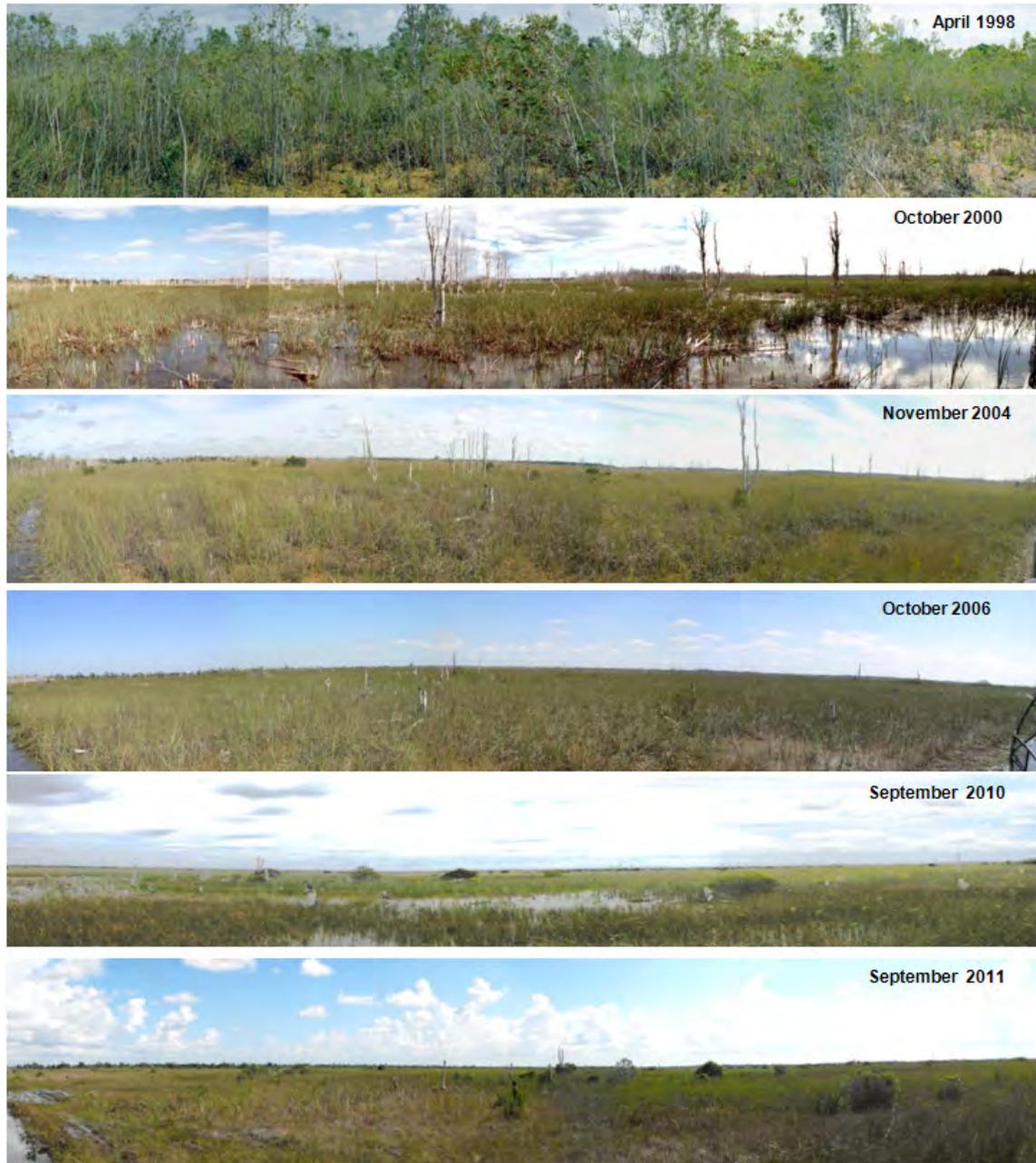


Figure 7-4. Maintenance control of melaleuca in the Pennsuco Regional Mitigation Area.

During this reporting period, invasive species, primarily melaleuca, continue to decline in the areas treated including some areas treated for the first time. A summer wildfire caused the aerial melaleuca treatments to be less successful than anticipated. However, the newest melaleuca biocontrol agent, *Lophodiplosis trifida*, is demonstrating success at suppressing the new growth of fire impacted trees. Due to drought conditions, areas of the site have been extremely dry which has limited access and treatments with ground crews.

For FY2012, \$600,000 is budgeted in Pennsuco for exotic species removal, and \$29,000 for law enforcement patrol by the FWC. The Pennsuco restoration funding in FY2012 will total \$629,000.

MANAGEMENT

According to the financial summary report, a balance of \$1,334,329 as interest earned on the corpus amount is available as of September 30, 2011. Utilization of monies from this fund will commence when initial and follow-up exotic treatments are completed, the entire project achieves maintenance level of control for exotics, and the restoration account has been depleted. Additionally, \$4,137,390 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 \$5,471,719.

FINANCIAL SUMMARY

Table 7-3 shows the balances available in the acquisition, restoration, and management categories in the financial summary, as of September 30, 2011.

Table 7-3. Financial summary as of September 30, 2011.*

Project	Land Acquisition	Restoration	Long-Term Maintenance**	Total
CREW	\$23,459	\$0	\$384,175	\$407,634
Pennsuco	\$0	\$5,875,440	\$5,471,719	\$11,347,159

* Excluding 4th quarter fiscal year interest earnings

** 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, 2010–September 30, 2011.

Table 7-4. Expenditure summary for October 1, 2010–September 30, 2011.

Project	Land Acquisition	Restoration	Long-Term Maintenance	Total
CREW	\$0	\$357,860	\$0	\$357,860
Pennsuco	\$80,487	\$703,315	\$0	\$783,802
Total	\$80,487	\$1,061,175	\$0	\$1,141,662