

Chapter 7: Mitigation Donation Annual Report

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INTRODUCTION

The information in this chapter of the *2009 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 2008 (FY2008) (October 1, 2007–September 30, 2008). In accordance with Section 373.414(1)(b)(2), Florida Statutes (F.S.), this chapter provides a description of these endorsed mitigation projects, including the available mitigation fund balance, expenditures during this time frame, and where applicable, success criteria, monitoring, and long-term management activities. 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 funding provides land acquisition, chemical treatment of exotics, hydrologic enhancement, monitoring of restoration progress, and management through security control and prescribed burning.

The associated environmental benefit of land acquisition in CREW contributes to corridor building and improved wildlife habitat for threatened and endangered species. Conservation and protection of water resources in CREW also provide improved water quality and flood protection.

ACQUISITION

The Summary of Wetlands Mitigation Balances by Project¹ (also referred to as the financial summary report), dated September 30, 2008, prepared by the SFWMD Accounting and Financial Services Division, indicates a balance of \$143,544 is available in the CREW land acquisition fund. During FY2008, the District spent \$166 for land acquisition-associated costs in CREW. The SFWMD plans a budget amendment in January 2009 to appropriate \$143,710 for acquisitions in Southern CREW, which will fully debit the acquisition account. **Table 7-1** provides a summary of the mitigation lands acquired to date within the CREW boundary.

¹ Adair, R. 2008. Summary of Wetlands Mitigation Balances by Project. South Florida Water Management District, West Palm Beach, FL.

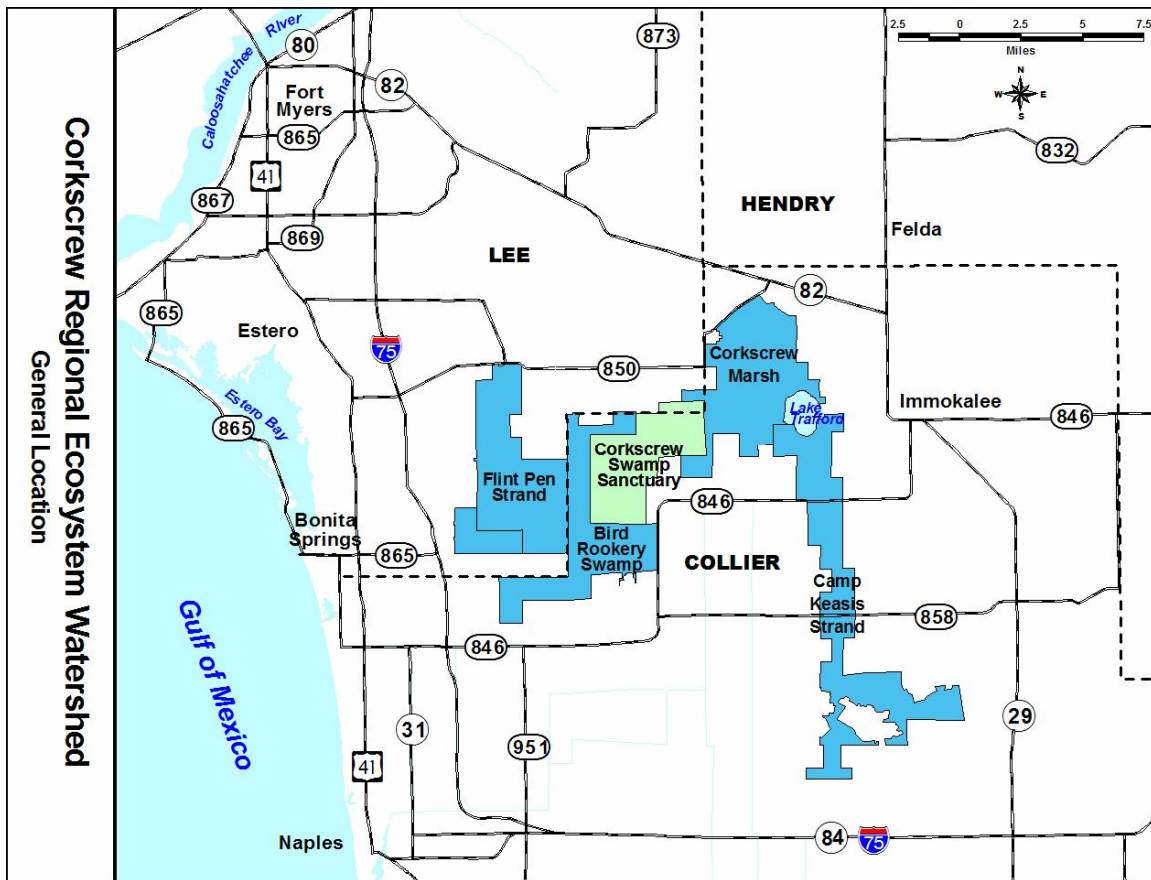


Figure 7-1. Location of the Corkscrew Regional Ecosystem Watershed (CREW).

RESTORATION

The financial summary report indicates an available balance of \$835,708 in the restoration fund as of September 30, 2008. During FY2008, the District spent \$335,218 for contractual services for the initial and follow-up treatment of exotic species, such as melaleuca (*Melaleuca quinquenervia*); Brazilian pepper (*Schinus terebinthifolius*); downy rose myrtle (*Rhodomyrtus tomentosa*); Old World climbing fern (*Lygodium microphyllum*); West Indian marsh grass (*Hymenachne amplexicaulis*); creeping signalgrass (*Urochloa plantaginea*); napier grass (*Pennisetum purpureum*); leadtree (*Leucaena leucocephala*); cogongrass (*Imperata cylindrica*); and wedelia (*Wedelia sp.*), on 4,412 acres in CREW. In addition to exotic control costs, other restoration expenditures included \$74,662 for staff support of contractors, \$49,751 for security, and \$74,544 for contractual services to support restoration and monitoring projects. The total amount for restoration expenditures was \$534,175. For FY2009, \$109,272 is budgeted for land management services to the CREW Trust; \$250,000 for exotic species removal; \$1,000 for chemicals; \$15,000 for equipment rental to support restoration activities; \$5,000 for construction materials associated with maintenance activities; \$60,000 for vegetation management; \$50,000 for security patrol by the Florida Fish and Wildlife Conservation Commission; \$21,500 for ground cover restoration; and \$8,500 for continued monitoring of restoration projects. The CREW restoration funding in FY2009 will total \$520,272.

Table 7-1. CREW acquisition parcels using mitigation funding as of September 30, 2008.

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 & 27
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
Total	1,076.8	\$3,798,574	

During FY2008, the District spent \$8,500 on monitoring four CREW restoration sites: (1) Tree Wizard, (2) Bird Rookery Swamp, (3) Youngquist, and (4) East Corkscrew Marsh. The monitoring documented vegetative changes in response to hydrologic improvements, ground cover restoration, exotic plant control, and revegetation activities. Restoration progress is measured by the reduction of exotic species and recruitment of target native species within the four sites, which are in various stages of exotic treatment, revegetation, and hydrologic restoration (**Figure 7-2**). Monitoring activities also included water level and/or soil saturation, observed aquatic macrofauna, wildlife utilization, and/or indicators of wildlife (i.e., tracks, scat) at randomly located plots within the three larger sites, and at plots along a single transect on the 10-acre Tree Wizard site. During FY2008, the District's contractor, KCI Technologies, Inc., submitted its ninth (December 2007) and tenth (June 2008) semiannual monitoring reports. The last monitoring report shows little change in vegetative composition, although native beard grasses (*Andropogon spp.*) and native dog fennel (*Maruta cotula*) have both increased.

MANAGEMENT

The financial summary report indicates that as of September 30, 2008, a balance of \$233,685 as interest earned on the corpus amount is available for use toward management activities. The interest on the land acquisition and restoration account is \$560,552, which can be used toward land acquisition, restoration, or management. The total amount of funding available as interest is \$794,237. Utilization of monies from this fund will commence when initial and follow-up exotic treatments are completed, and the entire project achieves maintenance level for treatment.

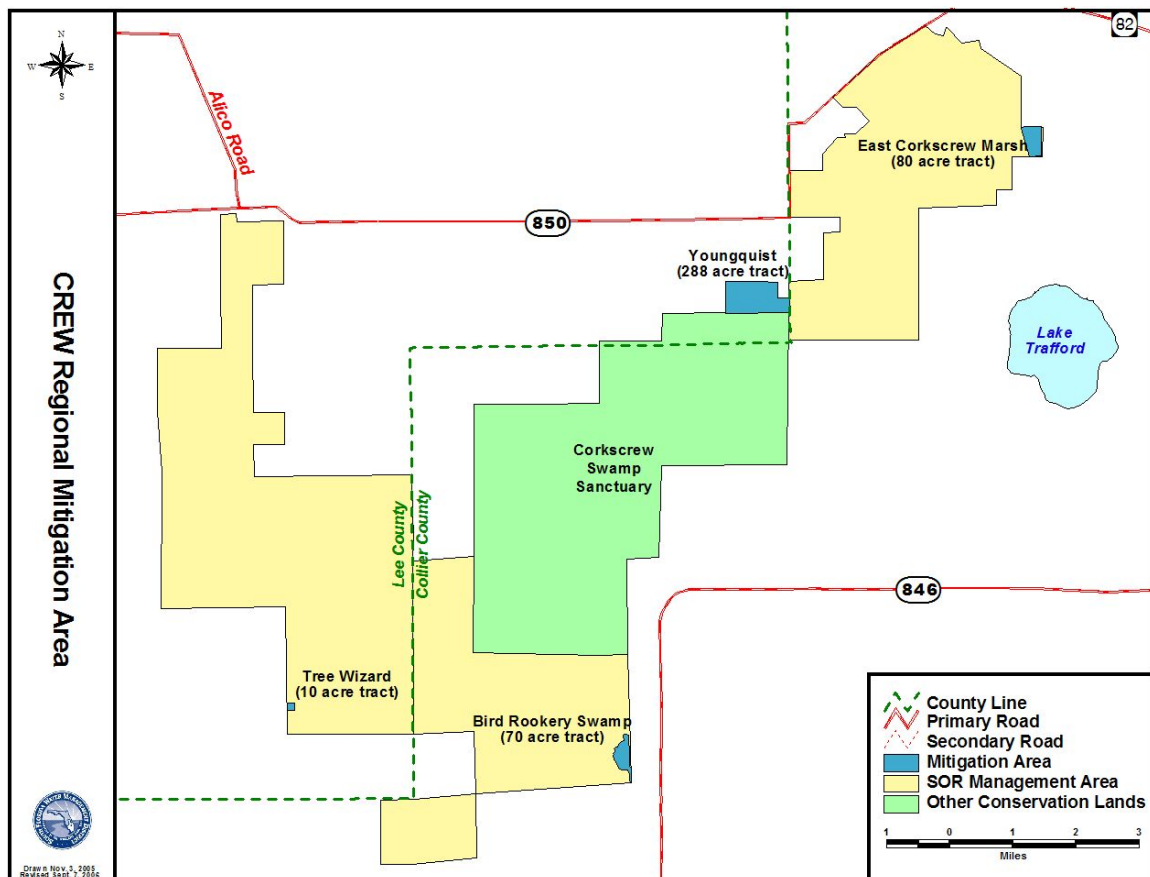


Figure 7-2. CREW monitoring sites.

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 7-3**) 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 was 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., authorizing the mitigation fee and its use. The environmental benefit provides protection, enhancement, and management of the floral, faunal, and hydrologic resources of Pennsuco parcels. Pennsuco emphasizes the enhancement of a degraded ecosystem that likely will continue to degrade and further impact adjacent natural areas unless actions are taken 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, 2008, a balance of \$0 is available in the Pennsuco land acquisition fund. **Table 7-2** summarizes the acquisitions to date in Pennsuco.

RESTORATION

The exotic treatment program involves a multiyear herbicidal and manual removal program with a follow-up controlled burn. At the end of year five, it is expected that the melaleuca can be controlled by routine maintenance through the use of the long-term management fund. 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 \$5,857,231 as of September 30, 2008. During this reporting period, the District spent \$762,764 for contractual services and \$115,056 for chemicals for the initial and follow-up treatment of 4,283 acres of exotics. In addition to exotic control costs, other restoration expenditures included \$9,744 for staff support of contractors and \$9,383 for security surveillance. **Figure 7-4** provides a summary of the tracts subjected to exotic treatments to date as well as the plans for FY2009. **Figure 7-5** shows a visual depiction of the response of vegetation over time as a result of these exotic treatments.

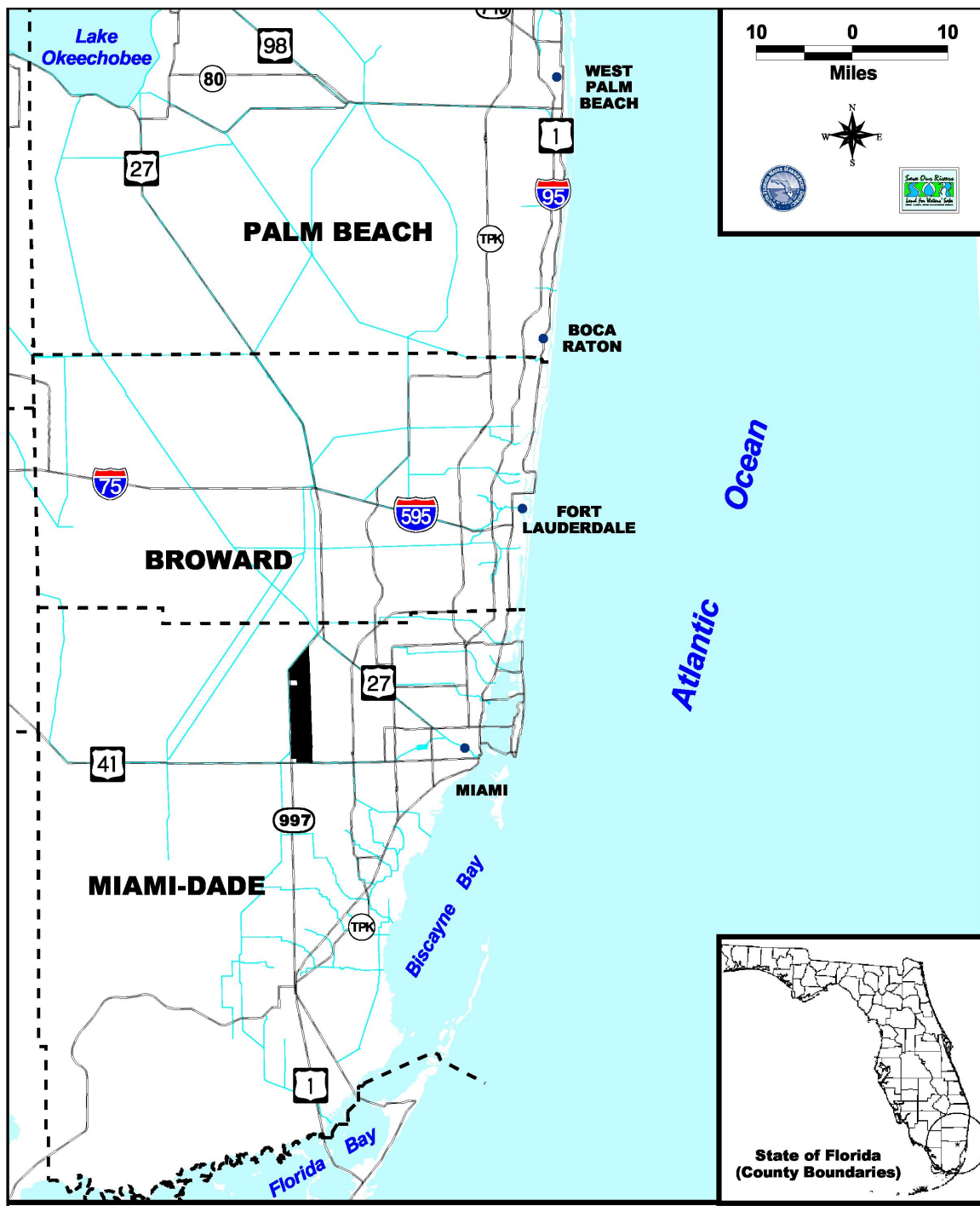


Figure 7-3. Location of the Pennsuco Regional Mitigation Area.

Table 7-2. Pennsuco acquisitions using developers' mitigation funding (211) as of September 30, 2008.

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 fund 211 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.

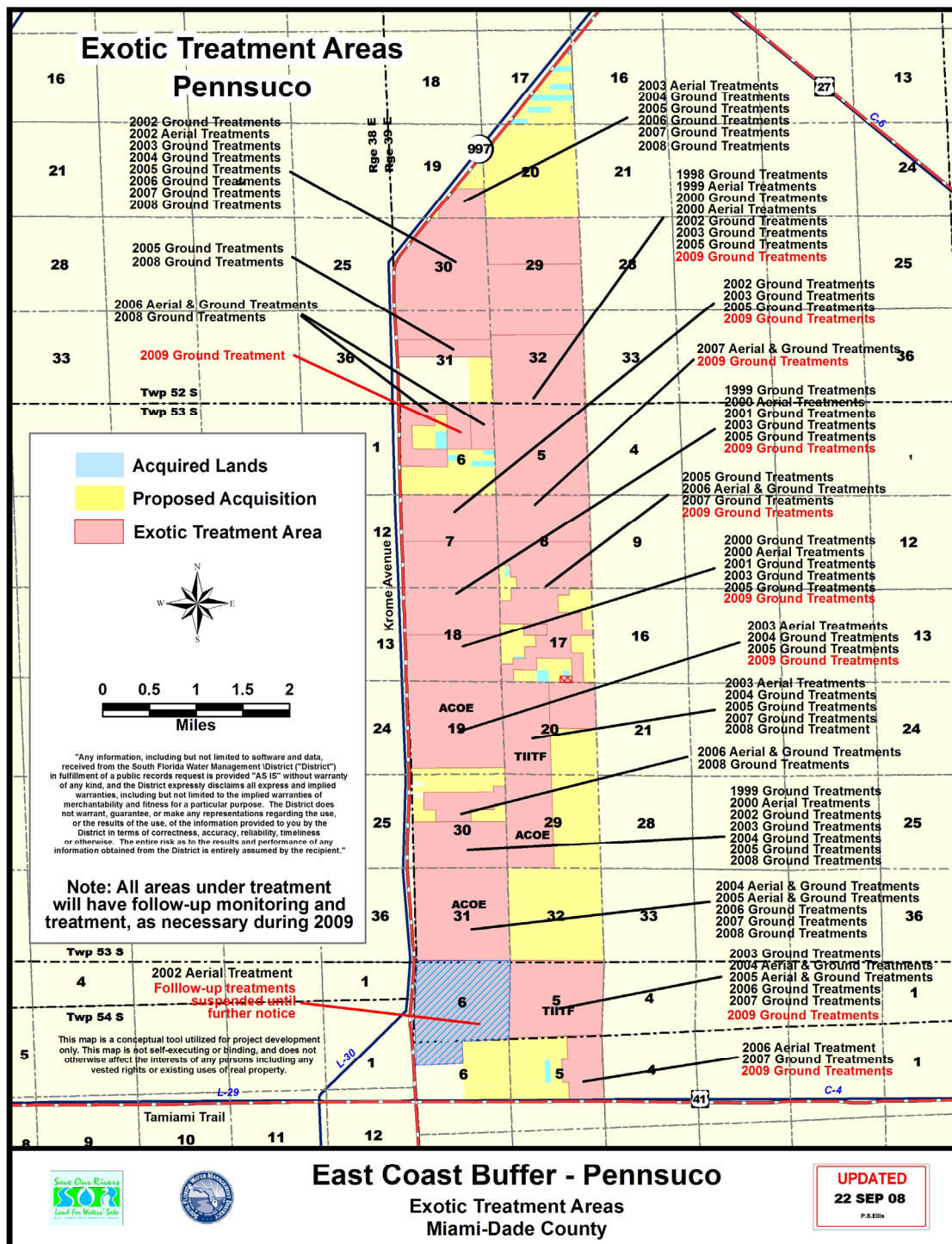


Figure 7-4. Pennsuco exotic treatment areas.

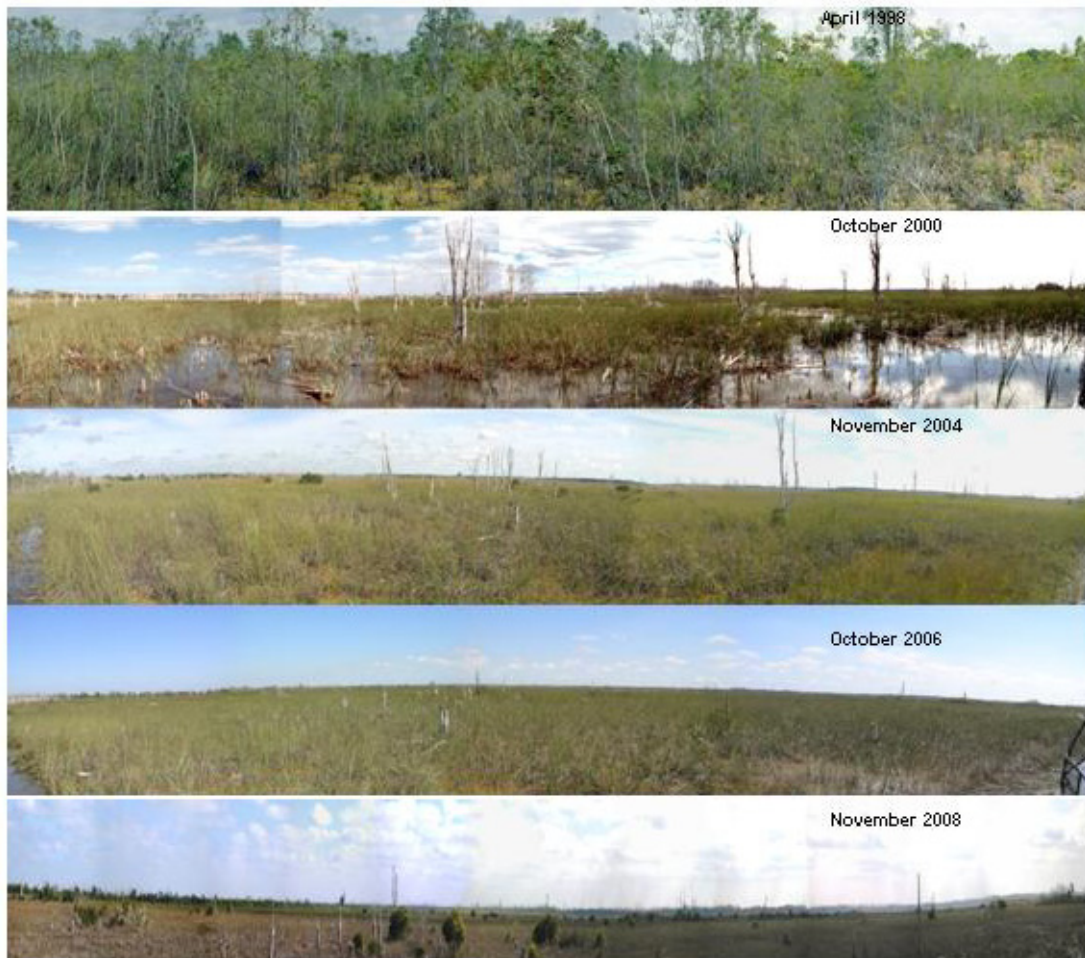


Figure 7-5. Maintenance control of melaleuca in the Pennsuco Regional Mitigation Area.

During this reporting period, KCI submitted its eleventh (December 2007) and twelfth (June 2008) semiannual monitoring reports, which evaluate the treatment efforts. The monitoring requires qualitative and quantitative assessments documenting the success of the vegetative restoration, reduction of exotic species, and recruitment of target native species — sawgrass (*Cladium jamaicense*) in particular. Water level and/or soil saturation, observed aquatic macrofauna, wildlife utilization, and/or indicators of wildlife (i.e., tracks, droppings) were also recorded. The latest monitoring report shows that melaleuca is under control, declining from 3 percent in 2007 to 1 percent in 2008. Coverage of sawgrass increased moderately from 24 percent to 32 percent during the same time period. Funding of \$8,060 to support this effort was also debited from the restoration account.

The total restoration expenditure in FY2008 was \$1,676,047. Due to efficiencies in conducting exotic treatments, a surplus of restoration funds was available over and above the amount needed to complete the required treatments in Pennsuco. Therefore, \$771,040 was spent on projects outside of Pennsuco for exotic species removal, security control, debris removal, repairs to facilities, and mowing services. For FY2009, \$800,000 is budgeted for exotic species removal in Pennsuco, \$29,000 for enhanced patrol, and \$8,060 for continued monitoring of restoration projects. Due to efficiencies in conducting exotic treatments in Pennsuco in FY2009, a surplus of funds has been directed to fund projects outside of Pennsuco including \$603,479 for security surveillance; \$136,000 for aerial overflights; \$150,000 for exotic plant control; \$30,000 for law enforcement officer housing; \$5,000 for posting materials; and \$5,000 for contract burning. The Pennsuco restoration funding in FY2009 will total \$1,766,539.

MANAGEMENT

According to the financial summary report, a balance of \$989,522 as interest earned on the corpus amount is available as of September 30, 2008. Utilization of monies from this fund will commence when initial and follow-up exotic treatments are completed, and the entire project achieves maintenance level for treatment. Additionally, \$3,579,624 in the acquisition and restoration interest account is available for acquisition, restoration, or management. The total amount of funding available as interest is \$4,569,146.

SUMMARY

Table 7-3 shows the balances available in the acquisition, restoration, and management categories in the financial summary, as of September 30, 2008.

Table 7-3. Financial summary as of September 30, 2008.

Project	Land Acquisition	Restoration	Long-Term Maintenance*	Total
CREW	\$143,544	\$835,708	\$794,237	\$1,773,489
Pennsuco	\$0	\$5,857,231	\$4,569,146	\$10,426,377

* Includes only 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, 2007–September 30, 2008.

Table 7-4. Expenditure summary for period of
October 1, 2007 – September 30, 2008.

Project	Land Acquisition	Restoration	Long-Term Maintenance	Total
CREW	\$166	\$534,175	\$0	\$534,341
Pennsuco	\$0	\$1,676,047	\$0	\$1,676,047
Total	\$166	\$2,210,222	\$0	\$2,210,388