

Upland Invasive Exotic Plant Control Projects

Fiscal Year 2011-2012

Over one-and-one-half million acres of Florida's public conservation lands have been invaded by alien (exotic, nonnative, nonindigenous) plants such as melaleuca, Brazilian pepper, cogon grass, and climbing ferns. However, invasive alien plants respect no boundaries and millions of acres of agricultural and private land are also affected. Florida's nearly 11 million acres of public conservation land support a nature-based tourism economy valued at \$8 billion annually (total tourism spending in 2011 was around \$57 billion).

The Fish and Wildlife Conservation Commission's Invasive Plant Management Section (IPMS) is the designated lead entity in Florida responsible for coordinating and funding the statewide control of invasive aquatic and upland plants in public waterways and on public conservation land. The Upland Invasive Exotic Plant Management Program was established in 1997 to address the need for a statewide coordinated approach to the terrestrial (vs. aquatic) invasive exotic plant problem. The "Uplands Program" incorporates place-based management concepts, bringing together regionally diverse interests to develop flexible, innovative strategies to address weed management issues at the local level. The Uplands Program (a subsection of IPMS) funds individual exotic plant removal projects statewide on public conservation land. Projects are considered for funding based upon recommendations from eleven Regional Invasive Plant Working Groups.

The mission of the Uplands Program is to achieve maintenance control of invasive exotic plants like cogon grass (*Imperata cylindrica*), melaleuca (*Melaleuca quinquenervia*), Brazilian pepper (*Schinus terebinthifolius*), Old World climbing fern (*Lygodium microphyllum*), and Japanese climbing fern (*L. japonicum*) on public conservation land.

Once invasive plants become established in native habitats, eradication is difficult, if not impossible to achieve; therefore, continuous maintenance of invasive nonnative plants is needed to sustain wildlife habitat and recreational opportunities while preserving native plant communities on public conservation land.

Upland invasive plants infested approximately fifteen percent of public conservation land statewide in 2012. Forty-two percent (625,000 acres) of the affected area is currently under maintenance control. The Uplands Program expended approximately \$5 million controlling 150,000 acres of upland invasive plants on over 80 publicly managed areas during fiscal year 2012. The Uplands Program also provided herbicide to assist public land managers with maintenance control treatments on 56,000 acres for a cost of \$263,000¹.

Funding for the Uplands Program is provided through the Invasive Plant Control Trust Fund as set forth in Section 369.252(4), Florida Statutes, which reads: "use funds in the Invasive Plant Control Trust Fund as authorized by the Legislature for carrying out activities under this section on public lands. A minimum of 20 percent of the amount credited to the Invasive Plant Control Trust Fund pursuant to Section 201.15(6), F.S., shall be used for the purpose of controlling nonnative, upland, invasive plant species on public lands."

Since 1997, the Uplands Program has expended over \$115 million to treat invasive plants on 615 public management areas, by funding nearly 2,000 projects comprising over 1.8 million² acres. Cooperating agencies contributed over \$41 million in matching funds and in-kind services towards projects funded by the program.

¹Includes FY11 cost of chemicals that were distributed in FY12.

²Annual maintenance figures include areas that were re-treated in previous years, so the cumulative acreage is greater than the estimated total area infested.

IPMS FY2011-12 Uplands Project Acres and Dollars by Managing Agency

Agency	Acres	Funds
Fish & Wildlife Conservation Commission	140,608	\$1,230,600
Florida Forest Service	3,817	\$191,289
Florida Park Service	14,664	\$871,478
Non-Designated (BTIITF/DEP)	1,550	\$88,103
Office of Coastal and Marine Areas (DEP)	361	\$51,004
Office of Greenways & Trails (DEP)	625	\$30,126
Water Management Districts ¹	19,600	\$1,052,222
Department of Defense	32	\$52,247
National Park Service	600	\$149,155
US Fish & Wildlife Service	4,890	\$505,053
US Forest Service	269	\$96,000
Local government agencies	37,295	\$898,422
TOTAL	224,311	\$5,211,021

¹Includes \$1 million Melaleuca Program, as required by §206.606(1)(a), F.S.

IPMS Uplands Program Projects for Fiscal Year 2011-12

Abbreviations used in following table.

MGR	manager (managing agency)
CAMA	Office of Coastal and Marine Areas (DEP)
CTY	county government agency
DEP	Department of Environmental Protection
DOD	U.S. Department of Defense
DOF	Division of Forestry, Florida Department of Agriculture and Consumer Services
DRP	Division of Recreation and Parks, DEP
FWC	Florida Fish and Wildlife Conservation Commission
FWS	U.S. Fish and Wildlife Service
IPM	Invasive Plant Management Section, FWC
NPS	National Park Service
OGT	Office of Greenways and Trails, DEP
UNV	public university
USFS	U.S. Forest Service
WMD	water management district
TASK#	task assignment number (project identifier)
WG	working group (first two letters in TA#)
EC	East Coast
FK	Florida Keys
MC	Mosquito Coast
NE	Northeast
PH	Panhandle
SC	Sun Coast
SE	Southeast
SW	Southwest
TC	Treasure Coast
WC	West Central
WR	Withlacoochee River
I-AC	initial control acres; first time control of established plant populations
M-AC	maintenance control acres; retreatment of areas where initial control was previously conducted
Herbicide Bank	only chemical was provided to agency.
IPMS COST	IPMS funds expended
COOP COST	funds or in-kind time and materials expended for project by managing agency

TASK #	PROJECT NAME	MGR	I-AC	M-AC	IPMS COST	COOP COST
EC-084	City of Casselberry Parks	City		69	\$27,892.15	\$6,850
EC-088	Lake Lotus	City		125	\$20,342.00	
FK-105	Key West Botanical Garden	City		15	\$40,260.00	
WR-126	Cofrin Nature Park	City		18	\$17,211.84	
WR-132	Bivens Arm	City		44	\$7,987.80	
	City Total				\$113,693.79	\$6,850
EC-078	Spring Hammock Re-Do	CTY		*	\$44,362.80	
EC-086	Spring Hammock	CTY		29	\$24,956.17	
EC-087	Orange County Lands 1	CTY		1,412	\$24,920.00	
EC-089	Orange County Lands 2	CTY	74	138	\$28,841.00	
FK-103	Monroe County Techs	CTY		2,000	\$78,356.03	\$55,124
FK-104	Monroe County Lands	CTY		20	\$49,871.25	\$25,444
MC-118	Brevard EEL South Region	CTY		125	\$38,692.54	
NE-069	Alpine Groves Park	CTY		21	\$16,061.46	
SC-115	Lake Seminole Park	CTY		150	\$16,997.00	\$27,909
SC-123	Rocky Creek Trails Nature Preserve	CTY		16	\$10,564.04	\$15,429
SE-167	Central Lox Slough	CTY		2,152	\$100,000.00	\$105,200
SE-169	ECISMA Lumnitzera EDRR	CTY		20	\$19,900.20	\$3,500
SE-170	Riverbend Park	CTY		705	\$55,795.39	\$36,413
SE-172	South Dade Wetlands	CTY		2,496	\$100,000.00	\$97,100
SW-144	Pepper Ranch SSA 7	CTY		722	\$49,904.32	
SW-152	Yellow Fever Creek	CTY		339	\$42,610.00	
WC-106	Sun-N-Lakes	CTY		50	\$17,100.00	\$4,500
WR-133	Upper Pithlachascotee River Preserve	CTY		16	\$18,497.24	
	County Total				\$737,429.44	\$370,619
SW-145	Keywaydin Island	CAMA		340	\$50,816.00	
	CAMA Total				\$50,816.00	
SW-136	Babcock Ranch Preserve	DEP	250		\$32,984.11	
SW-151	Babcock Ranch Head of Cypress	DEP		700	\$42,300.00	
	DEP Total				\$75,284.11	
FK-106	Key West NAS	DOD		32	\$47,569.34	
	DOD Total				\$47,569.34	
NE-076	Four Creeks SF	DOF		97	\$24,837.00	
SC-121	Myakka SF	DOF		215	\$21,230.56	\$6,465
WC-104	Okaloacoochee Slough SF	DOF		1,056	\$39,610.00	\$92,242
WC-105	LWR SF Arbuckle Tract	DOF		220	\$62,190.50	
	DOF Total				\$147,868.06	\$98,707
EC-082	Wekiwa Springs SP	DRP		59	\$23,859.97	
MC-119	Tomoka SP	DRP	105		\$32,309.48	
MC-120	IRLSP	DRP	42		\$9,422.84	
MC-121	Blue Springs SP	DRP	108		\$24,256.52	
MC-122	St. Sebastian River PSP	DRP		24	\$77,632.34	
NE-072	Suwannee River SP	DRP		51	\$17,922.00	
NE-073	Lafayette Blue Springs SP	DRP		50	\$7,138.75	
NE-074	Faver-Dykes SP	DRP		120	\$36,082.00	
SC-114	Hillsborough River SP	DRP		675	\$75,135.94	\$61,827
SC-120	Myakka River SP	DRP		40	\$27,436.00	\$21,753
SC-122	Alafia River SP	DRP		46	\$12,465.59	\$24,650

TASK #	PROJECT NAME	MGR	I-AC	M-AC	IPMS COST	COOP COST
SC-124	Little Manatee River SP	DRP		20	\$22,237.00	\$8,839
SW-147	Gasparilla Island SP Interior	DRP		87	\$27,433.84	
SW-148	Collier-Seminole SP	DRP		50	\$35,032.60	
SW-150	Charlotte Harbor PSP Cape Haze	DRP		132	\$53,796.00	
TC-133	JD State Park	DRP		3,038	\$61,521.00	\$8,050
TC-141	Seabranh SP	DRP		146	\$63,845.92	\$5,406
TC-144	Savannas Preserve SP	DRP		200	\$59,900.00	\$3,500
WC-102	Colt Creek State Park	DRP		500	\$24,973.94	\$141,344
WR-125	Rainbow Springs State Park	DRP		370	\$44,979.15	
WR-129	Waccasassa Bay PSP	DRP		32	\$11,298.43	
WR-131	Silver River SP South	DRP		30	\$17,657.50	
	DRP Total				\$766,336.81	\$275,369
EC-083	Tosohatchee WMA	FWC		209	\$24,508.50	
EC-085	3 Lakes WMA	FWC		120	\$29,193.59	
FK-102	FL Keys WEA	FWC		2,000	\$57,662.30	
PH-105	Apalachee WMA	FWC		937	\$38,038.69	
PH-106	Apalachicola River WEA South - River Maint	FWC		45,750	\$54,886.00	
PH-112	Apalachicola River WEA South - Sauls Maint	FWC		9,600	\$27,040.00	
SE-168	Corbett WMA West South	FWC		7,350	\$200,000.00	\$4,450
SE-171	Corbett WMA Central	FWC		8,649		\$253,969
SE-173	Holey Land WMA	FWC		666	\$60,000.00	\$49,242
SE-174	Mimosa Pigra Maintenance	FWC		10	\$20,345.59	
SE-176	Corbett WMA East	FWC		8,031	\$86,200.00	
TC-137	Hungryland WEA	FWC		3,127	\$87,916.00	\$53,365
WC-100	LWR WEA	FWC		9,084	\$80,277.19	\$80,000
WC-101	Okaloacoochee Slough WMA	FWC		3,000	\$143,940.00	\$98,879
WC-103	Fisheating Creek WMA	FWC		5,724	\$269,081.45	\$51,092
	FWC Total				\$1,179,089.31	\$590,997
FK-101	USFWS Refuges	FWS		2,000	\$89,635.63	
MC-115	MINWR	FWS		500	\$21,772.85	
MC-124	Archie Carr NWR	FWS		52	\$44,909.00	
PH-110	St. Marks NWR	FWS		1,180	\$41,215.90	\$17,730
SW-141	Ding Darling NWR	FWS		300	\$42,775.33	
SW-146	Panther Refuge NWR	FWS		358	\$33,007.10	
	FWS Total				\$273,315.81	\$17,730
MC-123	CNS North	FWS	200		\$229,249.11	\$50,000
MC-125	CNS South	NPS		600	\$149,154.67	
	NPS Total				\$149,154.67	
FK-107	Overseas Heritage Trail	OGT		625	\$30,125.87	\$6,250
	OGT Total				\$30,125.87	\$6,250
PH-101	Apalachicola River NF	USFS		269	\$95,999.71	
	USFS Total				\$95,999.71	
PH-113	Apalachicola River WEA - Cutoff Island	WMD		9,600	\$53,459.95	
SE-166	SFWMD Melaleuca Program	WMD		10,000	\$998,762.35	\$1,000,000
	WMD Total				\$1,052,222.30	\$1,000,000
	Control Projects Total		779	148,753	\$4,948,154.33	\$2,416,522
	Herbicide Bank Total			55,603	\$347,411.83	
OPERATIONS TOTAL			205,135		\$5,295,566.16	\$2,416,522