

Project Name: C&SF: CERP Melaleuca Eradication and Other Exotic Plants (OPE)
Project ID: 2505 (CERP Project WBS # 95)
Lead Agency: USACE / SFWMD
Authority: WRDA 2000 (*Programmatic Authority < \$25 M*)
Funding Source: Federal/State

Strategic Plan Goal(s) Addressed: Primary: 2-B.1

Measurable Output(s): Increase effectiveness of biological control technologies

April 1999 Project Synopsis: Includes: (1) upgrading and retrofitting the current quarantine facility in Gainesville, and (2) large-scale rearing of approved biological control organisms for release at multiple sites within the south Florida ecosystem. The purpose of this feature is to increase the effectiveness of biological control technologies to manage Melaleuca and other invasive exotic species.

Current Project Synopsis: The primary benefits of this project include preventing the expansion of invasive exotic plant species into natural areas, and reducing coverage and density of invasive exotic species. Secondary benefits include promoting the re-establishment of native plants, restoring native habitat for native bird and wildlife species, and reducing stressors on rare, threatened and endangered species.

The Design Agreement between the USACE and the SFWMD was amended 29 July 2004 to include the Melaleuca and Other Exotic Plants–Implement Biological Controls project. The Project Management Plan was approved in 2005 and work began on a PIR focused on the mass rearing and controlled release of biological agents to control Melaleuca, Brazilian pepper, Australian pine, and Old World Climbing Fern throughout South Florida.

The preferred alternative for melaleuca and Australian pine control is inoculate all test areas with approved bio-control agents and to construct a mass rearing annex. This alternative involves releasing insects at a few locations within each project site containing the target invasive plants, and relies on natural dispersal by the insects for full coverage.

The preferred alternative to control Brazilian pepper and Old World climbing fern is inundate all test areas with approved bio-control agents from a constructed mass rearing annex. The invasive plants are inundated with insects, which will be released at many more sites in the project area.

Current Status: An Adaptive Management Strategy was developed in coordination with RECOVER. A draft PIR was submitted to HQ for policy review and concurrent public review in 2008. External review and public workshops were held in February 2009. NEPA requirements were wrapped up and the final PIR/EA was sent to HQ in January, 2010. As an “other program element” in the CERP, this project may be authorized by the Secretary of the Army under the WRDA 2000 Programmatic Authority without additional congressional authorization. The Secretary of the Army approved the PIR on June 23, 2010 and the PPA will be executed in July 2010. With 2010 ARRA funding for the annex facility in Davie, development of Plans and Specifications for a Design-Build contract will be initiated in September 2010.

Est. Cost: \$ 3,718,000

Project Schedule: 2011 - Construction begins.

Detailed Project Budget Information (rounded):

Melaleuca	Expenditures Thru FY 2009
USACE	\$1,739,205
SFWMD	\$53,183
Total	\$1,792,388

Hyperlink: http://evergladesplan.org/pm/projects/proj_95_melaleuca.aspx

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Source: Original project description summarized from the *Central and Southern Florida Project Comprehensive Review Study (Restudy)* (1999). Cost estimate information is updated to reflect current price levels in October 2009 dollars. Actual expenditures include all federal expenditures through FY09 (Sept, 2009) and sponsor verified and recorded in kind credit through 4th quarter FY07. Current status is summarized from the PMP (2005). Schedule is updated based on the approved *Integrated Delivery Schedule Through 2020* (February 10, 2010)

Additional Information:

Melaleuca trees, (*Melaleuca quinquenervia*), known as punk trees or paper bark tea trees, are native to Australia. There, melaleuca is planted in parks, valued by beekeepers, and is attractive to birds and bats. Because of development, melaleuca trees in some parts of Australia are the subject of conservation efforts. In the Everglades, however, melaleuca is a pest, where the trees grow into immense forests, virtually eliminating all other vegetation becoming a "river of trees", a completely alien habitat to the plants and animals that have evolved to live in the glades. Melaleuca grows in terrestrial as well as in completely aquatic situations. During the 50 years since its introduction, melaleuca has taken over hundreds of thousands of acres of Everglades producing huge quantities of seeds, which become small trees. Herbicides are proving to be somewhat effective, but purposely-set management fires (and lightning-started fires) apparently help spread the seeds and trees. Recently, biological control insects have been released against melaleuca, but it will take time before bio-control results are known. SOURCE: University of Florida/IFAS Center for Aquatic Plants.



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