

# Section 3 Fire Emergency Stabilization and Rehabilitation (ESR) Final Accomplishment Report for 2001-2004



AGENCY/UNIT: U. S. Fish and Wildlife Service  
Arthur R. Marshall Loxahatchee National Wildlife Refuge

LOCATION: Boynton Beach, Palm Beach County, Florida

DATE: August 16, 2005

Submitted by: /s/ *Rolf Olson, Deputy Project Leader, acting for* Date: 08/16/2005  
Mark Musaus, Project Leader, Arthur R. Marshall Loxahatchee National Wildlife Refuge

## List of Preparers

This document has been prepared in conformance with final reporting requirements outlined in the Department of Interior Departmental Manual, Part 620: Wildland Fire Management; Chapter 3: Burned Area Emergency Stabilization and Rehabilitation.

**This report has been prepared by:**

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Table 1: Cost summary Table

| Item                              | Treatment Unit | # Units | Approved ESR Funds | Total Expenditures | Cost per Unit | Implementation Method                  |
|-----------------------------------|----------------|---------|--------------------|--------------------|---------------|--|
| Aerial Treatments                 | acres          | 6,331   | \$495,666          | \$210,258          | \$78.89       | Contract                               |
| Survey/<br>Mapping/<br>Monitoring | acres          | 6,331   | \$0                | \$0                | \$3.14        | Contract and Agency Personnel Services |
| Total                             |                | 2,665   | \$495,666          | \$210,258          |               |  |

U.S. DEPARTMENT OF THE INTERIOR EMERGENCY STABILIZATION  
AND REHABILITATION PLAN

**PART A: FIRE LOCATION AND BACKGROUND INFORMATION**

|                             |                                   |                        |              |
|-----------------------------|-----------------------------------|------------------------|--------------|
| <b>Fire Name</b>            | Section 3 Fire                    | <b>Date Controlled</b> |              |
| <b>Fire Number</b>          | 41560-9261-4025<br>(P80002)       | <b>Jurisdiction</b>    | <b>ACRES</b> |
| <b>Agency Unit</b>          | A.R.M. Loxahatchee<br>NWR         | <b>FWS</b>             | 9,008        |
| <b>Region</b>               | FWS - Region 4                    |                        |              |
| <b>State</b>                | Florida                           |                        |              |
| <b>County(s)</b>            | Palm Beach                        |                        |              |
| <b>Ignition Date/Manner</b> | June 25, 2001<br>Lightning Strike |                        |              |
| <b>Zone</b>                 | Southeast                         |                        |              |
| <b>Date Contained</b>       | July 6, 2001                      | <b>TOTAL ACRES</b>     | 9,008        |

**PART B: NATURE OF PLAN**

**I. Type of Plan (check one box below)**

|   |   |
|---|---|
| X | <b>Short-term Rehabilitation (Complete Parts A, B, C, and H only)</b> |
|   | <b>Long-term Rehabilitation (Complete all parts)</b>                  |
|   | <b>Both Long and Short-term Rehabilitation (completed all parts)</b>  |

**II. Type of Action (check one box below)**

|   |   |
|---|---|
|   | <b>Initial Submission</b>   |
|   | <b>Updating or Revising the Initial Submission</b>                  |
|   | <b>Supplying Information for Accomplishment to Date on Work</b>     |
|   | <b>Different Phase of Project Plan</b>                              |
| X | <b>Final Report (To Comply with the Closure of the EFR Account)</b> |



**Background:**

June 25: On Monday June 25th, 2001, lightning ignited the 7<sup>th</sup> and final wildfire to burn in the Refuge in a 5 day period. Florida Division of Forestry (FL-DOF) and the U.S. Fish and Wildlife Service personnel first noted the fire's smoke at 1500. Norman Masencup, the FL-DOF's local Forest Area Supervisor, and a Senior Ranger viewed the fire from the levee near the western edge of the fire and estimated its size to be about 300 acres.

June 26: at 0900 on June 26<sup>th</sup>, Dawn Greenlee, A.R.M. Loxahatchee's Prescribed Fire Specialist and Keith Boliek, the Refuge's helicopter crew member, met Norman Masencup and a FL-DOF Senior Ranger near S-6 pump station to develop an action plan for the fire. Greenlee and Masencup served as Unified Command Incident Commanders. At 1100 they estimated the fire to be 1,920 acres. Consistent east winds, 6-16 mph were predicted by both short and long-range FL-DOF and National Weather Service forecasts for the day. Each day for the subsequent week, daily and evening thunderstorms were predicted to provide 0.25 to 1 inch of rain. Greenlee and Masencup agreed that because the east winds would prevent smoke from impacting the urban interface areas, and because the fire would likely be put out by rain within 24 hours, as the other size recent wildfires had been, we would not risk personnel safety to take active suppression action at that time. Interagency staff continued to monitor the fire to ensure that it did not spot onto the private land to the west of the Refuge, and that smoke was dispersed away from communities. There was no rainfall on June 26<sup>th</sup>. Masencup and Greenlee estimated fire acreage at 5,000 acres.

June 27: At 0800hrs, Greenlee received a spot weather forecast from the National Weather Service meteorologist Tom Warner, which called for east winds for the next 7 days, a 70% chance of rain for June 27<sup>th</sup> and a 40% chance of rain on June 28<sup>th</sup>. At its average daily rate of spread of 15 chains per hour, without rain, Greenlee predicted that the fire would double in size to 10,000 acres within the next 24 hours. On the morning of June 27<sup>th</sup>, Greenlee met with Refuge Biology staff to prepare an informal fire situation analysis. Suppression resources, including 2 large amphibious tanked vehicles at Merritt Island NWR and one amphibious FL-DOF rologon were available. Wildlife Biologist and Exotic Plant Specialist William G. Thomas Jr., noted that the fire was burning into thicker Melaleuca populations (created by the 1998 wildfire) and that the cost per acre to remove the exotic plant in the area would double if it burned. Wildlife Biologist Laura Brandt, PhD weighed the issues of firefighter safety, public safety, forecasted weather, resource benefits, and resource damages and concluded that we would not take active suppression actions at that time. A few hours after the biologist's meeting, the Refuge received 0.74 inches of rain. After June 27<sup>th</sup>, no smoke was visible in the burned area. On July 6<sup>th</sup>, Greenlee and Thomas flew the fire and declared it out as 9,008 acres.

Section 3 Fire Emergency Stabilization and Rehabilitation Plan was prepared on August 2, 2001 and submitted for approval. Approval of the plan occurred on October 1, 2001. (Attachment A)

**Accomplishments:****A. Invasive Species Control**

Funding (\$495,665) for this contract was obtained through the National Fire Program to be used for habitat restoration within the footprint of the July 2001 wildfire (Section 3 Fire). Since the proposal submittal, there has been a considerable amount of change in refuge personnel. Of the initial eight ESR Team Members only four remain. Funding requires completion within three years of the wildfire; however, monies were not obligated until the third year. Further impacting the contract during 2004 was a spring/summer drought that prevented airboat access for three months and three major hurricanes effecting South Florida. On September 30, 2004, the contract surceased, even though a request for extension was submitted. Two thousand six hundred and sixty-five (2,665) acres of the 6,331-acre Section 3 BAER contract were completed.

#### B. Invasive Species Monitoring

The Section 3 BAER Herbicide contract was awarded to Native Technologies Incorporated (NTI) on August 28, 2003. NTI subcontracted to Colony Services Inc. The contract stated that 100% of the melaleuca trees (*Melaleuca quinquenervia*) and other category one invasive exotic plants in the 6,311 acres would be aerially and ground treated with the herbicides, Arsenal® and glyphosate, respectively.

Due to a drought during the 2004 spring months, the contractors could not access the cells in the contracted area by airboats, thus the herbicide could not be ground applied from May 15 to August 1st. In August when the water levels were high enough to allow airboat access, the contractors did not resume treatment because of hurricanes. Therefore, at the close of the contract on September 30, 2004, only 2,665 acres of the Section 3 BAER were completed.

Wildlife Biologists Bill Thomas, Gayle Martin and Bruce Arrington monitored the progress of the contractor by accessing the completed cells and checking for 100% treatment of all category one invasive plants. If treatment was not 100%, the contractor would return to the cell to retreat.

The treated acres are now available for prescribed fire. The prescribed fire will continue to burn the new melaleuca trees and other category one invasive plants, keeping the area maintained. Pre-and post-burn monitoring will keep the biologists apprised of the growth of the invasive exotic plants.

**Photo documentation:** Section 3 Fire and Rehab Activities



Melaleuca (*Melaleuca quinquenervia*) head in the A.R.M. Loxahatchee NWR prior to application of herbicide.



Melaleuca (*Melaleuca quinquenervia*) head in A.R.M. Loxahatchee, 1 month after being aerially herbicided.



Ground-herbiced Melaleuca (*Melaleuca quinquenervia*) in the A.R.M. Loxahatchee NWR.