APPENDIX G

Restoration Status Report

RESTORATION STATUS REPORT

INTRODUCTION

Restoration activities conducted during 2003 include the supplemental planting of the restored mixed hardwood wetlands, the planting of approximately 160 acres of xeric oak, scrubby pine flatwoods, and pine flatwoods, weir repairs, and continued exotic/nuisance species maintenance. The supplemental wetland planting was conducted in January 2003 and consisted of the plating of 15,000 wetland trees including 7,500 pop ash (*Fraxinus carolinianus*), 3,500 blackgum (*Nyssa sylvatica*), 3,750 sweetgum (*Liquidambar styraciflua*) and the 2,600 cabbage palm (*Sabal palmetto*) not planted during the initial planting. The planting of 160 acres of upland habitat was conducted during the summer and fall of 2003. Over 41,401 tree, shrub and herbaceous species were planted throughout the site. Weir repairs were made in June 2003 and consisted of minor earthen berm and structure stabilization efforts. Exotic/nuisance species maintenance efforts consisted of the herbiciding of various pasture and exotic/nuisance grasses in the uplands and torpedo grass, para grass, cattail, and primrose-willow in the wetlands.

The purpose of this status report is to present an update for ongoing work and work not currently completed at the Lake Wales Forest Mitigation/NEB site. Included in this report are an update for the wetland and upland supplemental planting efforts, weir repairs, and exotic/nuisance species maintenance.

RE-SEEDING AND SUPPLEMENTAL WETLAND TREE PLANTING

Wetland Supplemental Planting

Due to lower than desired tree densities in portions of the hardwood planting zone a supplemental planting of 15,000 wetland trees was conducted in January 2003. Species include approximately 7,500 pop ash (*Fraxinus carolinianus*), 3,500 blackgum (*Nyssa sylvatica*), 3,750 sweetgum (*Liquidambar styraciflua*) and 2,600 cabbage palm (*Sabal palmetto*) that were not planted during the initial summer 2002 planting. Planting methods were similar to those used during the initial planting, except specific areas with low tree densities were located in the field and planted with a pre-determined number of trees per species. The number of trees and species composition depended on the number of trees needed to obtain desired densities and hydrologic regime of the area.

The trees planted during the January supplemental planting have shown growth during the 2003 growing season have increased tree densities within the planting zone.

Supplemental Upland Planting

Approximately 160 acres of xeric oak, scrubby flatwoods, pine flatwoods, and live oak were planted during the summer and fall of 2003 (Photo 1). The plantings were conducted with one-pint and one-gallon plants placed on 12 foot centers. Thirty-three

tree, shrub, and herbaceous species totaling 41,401 plants were planted during the summer and fall of 2003. In addition to planting, a crew hand watered each installed plant several times through the late summer and fall to ensure plant establishment and survival through the dry season.

Photo 1. Planting of the xeric oak planting zone in Sector A-1, summer 2003.

Weir Repairs

Repairs were made to the weirs in June 2003 in order to reinforce the structures and decrease erosion created by the scouring of water flowing over the structures. Structure repair included strengthening the earthen berms, reinforcing the side slopes adjacent to the structures, filling in the scour areas on the downstream side of the weirs, removing the foam sealant between the wing-wall and the weir box and using a silicone caulking to fill the gap, and minimizing or eliminating leaks around the aluminum weir box. As of December 2003, the June maintenance efforts have increased the integrity the weirs and reduced water flow through and around the weirs.

Exotic/Nuisance Species Maintenance

Species targeted for eradication included primrose willow (*Ludwigia peruviana*), cattail (*Typha* spp.), tropical soda apple (*Solanum viarum*), Caesar weed *(Urena lobata)*, torpedo grass (*Panicum repens)*, smut grass (*Sporobolus indicus*) Bahia grass (*Paspalum notatum*), Bermuda grass (*Cynodon dactylon*), and all Category I and II

species listed in the Florida Exotic Pest Plant Council's 2001 List of Invasive Species report.

The 2003 treatment effort was divided into wetland treatments and upland treatments. The wetland treatments consisted of back-pack spraying of torpedo grass and primrose willow in the restored forested and herbaceous wetlands and use of an air boat to treat primrose willow, torpedo grass, and para grass along the ditch system. Upland treatments consisted of back-pack spaying of various pasture grasses and exotic/nuisance grass and forb species. Certain species were targeted at different times of the year to coordinate herbicide treatment efforts with optimum growth periods for the targeted species.

Conclusion

As of December 2003, all restored forested wetland and upland habitats have been planted and/or seeded. Growth has been observed on a large number of plants for both the upland and wetland plantings conducted in 2002 and early 2003. Weir repairs conducted in June 2003 aided in the stabilization of the structures which ensures continued hydrologic restoration. The exotic/nuisance species maintenance effort will continue over time in order to prevent exotic/nuisance species from negatively affecting the establishment of desirable native plant species and the restoration effort.