

# **PRESERVE AREA MONITORING AND MAINTENANCE PLAN**

**For:**

**Oak Alley  
St. Lucie County, Florida**

**Prepared by:  
EW Consultants, Inc.**

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## **INTRODUCTION**

This Preserve Area Monitoring and Maintenance Plan (hereafter "the Plan") has been prepared for the Oak Alley Project in St. Lucie County. The 75+ parcel is located in northeastern St. Lucie County, Florida. The site contains a range of conditions from heavily impacted to relatively undisturbed. Portions of the property have been cleared and others have a significant amount of overgrowth due to the lack of burning and other management techniques. Parts of the site have been impacted by cattle grazing. The Preserve Areas are noted in the construction drawings.

## **PRESERVE AREA PROTECTION PLAN DURING CONSTRUCTION**

The Preserve Areas will be barricaded using four-foot high silt fencing trenched in at least six inches below natural grade. The location of the silt fencing will be shown on the construction drawings. The erosion and turbidity control plan will be included as part of the construction drawings. The four-foot high silt fencing will be installed around the perimeter of the property. ~~This silt fencing will be installed around the Preserve Areas as well which will effectively eliminate incursion of construction equipment and reduce erosion and turbidity within the Preserve Areas.~~ All barricades and silt fencing on site will be inspected by appropriate staff on a regular basis. The silt fences are to remain in good condition throughout construction. Activity in the area will be halted if it becomes apparent that protective barrier(s) have been altered or removed. Activities will not commence until the barrier(s) have been properly restored.

Professional environmental staff will monitor the property to ensure vegetation and preserve areas are treated as planned. In addition, monthly monitoring reports will be sent to St. Lucie County environmental staff summarizing construction activities and their affect on the site's habitat.

## **EXOTIC REMOVAL WITHIN PRESERVED UPLAND AREAS**

Exotic vegetation within the Preserve Areas will be identified by vegetation experts. Once identified and marked, these plants will be removed by trained professionals using best available technology and knowledge. Both herbicides and physical removal will be employed to ensure eradication to the fullest extent possible.

## **REPLANTING OF NATIVE VEGETATION IN IMPACTED AREAS**

Once construction is completed, native vegetation will be replanted in impacted areas. Environmental staff will assess the environmental conditions of the newly constructed areas and recommend native plants accordingly to ensure maximum survival. Likely vegetation to be planted may include, but is not limited to: cabbage palms, red maple, and various oak, pine, and holly species.

## **RELOCATION OF THREATENED FLORAL SPECIES**

Threatened floral species will be clearly identified by an experienced professional and, where practical, will be relocated to an appropriate Preserve Area. Where feasible, the entire host tree will be moved.

## **PRESCRIBED BURNING**

Due to the proximity of residential development, it is not practical to implement prescribed burning as a preserve management method for this property. Reduction of fuel load will be achieved through manual cutting and, where appropriate, roller chopping. This method will be employed for both the initial habitat enhancement as well as the ongoing maintenance.

## **ANNUAL MONITORING**

Annual monitoring and report writing is to be conducted by a qualified environmental professional and submitted under his/her signature to the St. Lucie County Department of Public Works Environmental Resources Division. Vegetative cover data will be collected to document the occurrence of native and non-native plants. This data shall be documented in a summary monitoring sheet. Monitoring shall be done for a period of 5 years from the date of completion of the project or project phase encompassing the monitored area.

- a) Reports will document any vegetation changes including encroachment and/or over growth of noxious and exotic vegetation.
- b) Monitoring reports shall include the quantitative vegetation cover data from designated areas within the preserve area. Each monitoring station will cover approximately 2,500 square feet.
- c) The vegetation shall be measured in percent coverage of the canopy and understory layer and groundcover. Each species documented will be reported in common and Latin names.
- d) The coverage shall be measured by visual observation in each of four quadrants from the fixed monitoring point. Observations extend approximately 50 feet from the observer in each direction thus covering approximately 2,500 square feet at each station. The data from each quadrant observation is combined to calculate the vegetative coverage. Station locations are to be permanently marked to ensure consistency in data collection.
- e) At least one panoramic photo shall be collected from each of the established monitoring stations to provide documentation of vegetative coverage.

- f) The monitoring report shall include recommendations for maintenance, if necessary.
- g) Provision shall be made for continued eradication of nuisance and non-native vegetation that may occur in the Preserve Area and for long-term habitat management to maintain the type and quality of habitat originally intended for the project.
- h) Provision shall be made for financial assurance for not less than five years that monitoring and maintenance of the Preserve Area will be conducted per the Plan.
- i) The Preserve Area Maintenance Plan and provisions shall be included in the deeds and covenants, which run with the property.

A Preserve Area Maintenance Plan compliance analysis report shall be filed annually with the County for each of the first five years following completion of the project. The report shall detail compliance with the Plan, and shall include an update of the specific monitoring criteria as listed above and a description of the effort needed to comply with the Plan on an annual basis.