# Conservation Collier Malt Property Interim Management Plan DRAFT

Prepared By:
Collier County Environmental Services Department
2800 North Horseshoe Drive
Naples, FL 34104

September 2005

# **Table of Contents**

1.0	Purpos	e and Scope of the Interim Management Plan	3
2.0	Manag	gement Authority and Responsibilities	3
3.0	Interin	n Site Plan	3
	3.1	Location and Site Description	3
	3.2		
	3.3	Easements, Concessions or Leases	
	3.4		
	3.5	Surrounding and Adjacent Land Uses	
4.0	Interin	n Management Objectives	4
		Natural Resource Protection	
	4.2	Site Security	5
	4.3	•	
	4.4	Cultural, Historical and Archaeological Resource Protection	
		Public Access	
		Site Monitoring Plan	
		Partnerships	
		•	
5.0	Exhibi	its	7
		EXHIBIT 1: Location Map	
		EXHIBIT 2: Aerial Map	
		EXHIBIT 3: Estimated Cost Table	
		EXHIBIT 4: Implementation Timeline	

#### 1.0 Purpose and Scope of the Interim Management Plan

The Malt property was purchased by Collier County in June 2005 through funds from the County's Conservation Collier program and The Conservancy of Southwest Florida. The property will be managed only for conservation, protection and enhancement of natural resources and for public outdoor recreation that will be compatible with the conservation, protection and enhancement of the site and its surrounding lands. Public use of the site will be compatible with the management objectives and recommendations of Rookery Bay National Estuarine Research Reserve (RBNERR).

This interim management plan is intended to identify the key management priorities and issues within the site and give direction for management for the next two years. This document is meant to be the precursor to a final management plan, which will provide more specific aspects of site management.

# **Key Interim Management Objectives**

- 1. Protect and manage the native habitat on site
- 2. Examine options for hydrologic restoration
- 3. Explore opportunities for grant funding and partnerships
- 4. Develop Memorandum of Understanding (MOU) for management with RBNERR

#### Action Plan

- 1a. Treat and manage melaleuca and Brazilian pepper
- 1b. Discuss moving RBNERR gate on Shell Island Road north to limit road access
- 2a. Work with FGCU to develop appropriate research activities in order to develop baseline hydrologic and restoration recommendations
- 3a. Seek partnering opportunities with RB NERR and Conservancy of Southwest Florida for DEP Florida Bureau of Invasive Plant Management grant funding
- 4a. Work with Natural Resource Manger at RBNERR to develop final management plan as appendix to RBNERR management plan

#### 2.0 Management Authority and Responsibilities

The Collier County Environmental Services Department will be responsible for initial invasive exotic removal and initial hydrological restoration. Once initial management activities have been completed, a MOU with RBNERR will be developed for ongoing management of the property in perpetuity.

#### 3.0 Interim Site Plan

#### 3.1 Location and Site Description

The Malt property is located in the southwest corner of Section 15, Township 51 N, Range 26 E, west of State Road (SR) 951 and east of RBNERR. Shell Island Road transects the southeast corner of the property. The 83.18-acre site consists of mangrove forest, freshwater marsh and salt marsh plant communities. The property is located

within the urban boundary of Collier County. A historic road bed (CR 848) cuts diagonally across the property.

# 3.2 Signage

A sign denoting the property as Conservation Land will be installed along the SR 951 property line.

# 3.3 Easements, Concessions or Leases

A 100' Lee County Electric Cooperative easement exists along the western property line. This easement is constructed with Geo-webbing and allows for vehicle access when shallow standing water is present. No other easements, concessions or leases currently exist within the site. There are no other easements, concessions or leases proposed for the future, unless they further conservation objectives, such as a conservation easement.

#### 3.4 Structures

No structures are present on the site at this time other than those associated with the Lee County Electric Cooperative easement. While a viewing platform is contemplated for future public access, no structures will be erected within the time span of this interim management plan.

# 3.5 Surrounding and Adjacent Land Uses

The Malt property is bordered by Rookery Bay NERR to the south and west and is separated from Rookery Bay NERR to the north by one undeveloped privately owned parcel. This parcel (the Schutt property) is currently under consideration in the 3<sup>rd</sup> acquisition cycle of Conservation Collier. Rookery Bay is an Outstanding Florida Water. SR 951 runs adjacent to the east boundary of the Malt property. The Marco Shores/Fiddler's Creek development, consisting of golf courses and residential lots, is located just east of SR 951. Most of the lands across SR 951 are slated for commercial or residential development within the near future.

### 4.0 Interim Management Objectives

#### **4.1 Natural Resource Protection**

#### **Existing Vegetation:**

Three different plant communities are present at the site; however, they are not always distinct. Freshwater and saltwater species co-exist throughout the property. the old roadbed also transects the property contains a mix of different vegetation.

The following is a description of vegetation according to FLUCCS:

FLUCCS 612 – Mangrove Forest – red mangroves (*Rhizophora mangle*), white mangroves (*Laguncularia racemosa*) and black mangroves (*Avicennia germinans*). Other associated species include: buttonwood (*Conocarpus erectus*) and cabbage palm (*Sabal palmetto*).

FLUCCS 641 – Freshwater marsh - black rush (Juncus roemerianus), sawgrass (Cladium jamaicense), spikerush (Eleocharis spp.), spider lilies (Hymenocallis sp.), cattails (Typha spp.), White-top sedge (Dichromena spp.), buttonwood (Conocarpus erectus), wax myrtle (Myrica cerifera) and saltbush (Baccharus halimifolia)

FLUCCS 642 – Salt marsh – saltmeadow cordgrass (*Spartina patens*), sea purslane (*Sesuvium maritimum*), saltgrass (*Distichlis spicata*) and red mangrove (*Rhizophora mangle*)

The old roadbed contains primarily Brazilian pepper (Schinus terebinthifolius) with some wax myrtle (Myrica cerifera), saltbush (Baccharus halimifolia), buttonwood (Conocarpus erectus) and cabbage palm (Sabal palmetto).

#### **Unique Natural Features:**

The property contains a large shallow lake and provides an excellent undisturbed marsh view.

# **Possible Listed Species:**

During the initial site visit to the property in September 2003, federally listed leather fern (*Acrostichum spp.*) **E**, re-flexed wild pine (*Tillandsia balbisiana*) **T**, banded wild pine (*Tillandsia flexuosa*) **E**, and giant wild pine (*Tillandsia utriculata*) **E** were observed. Staff has observed numerous listed wading bird species in the past on the property primarily where the culverts cross SR 951 and enter the creek. Species observed include wood stork (*Mycteria americana*) **Federal and State E**, white ibis (*Eudocimus albus*) **State SSC**, snowy egret (*Egretta thula*) **State SSC**, tricolored heron (*Egretta tricolor*) **State SSC**, little blue heron (*Egretta caerulea*) **State SSC** and American alligator (*Alligator mississippiensis*) **Federal T(S/A)**.

#### **4.2 Site Security**

The site is adjacent to RBNERR. Vehicular access to the FPL easement road is blocked on both the north and south entrances by a locked gate. Thick vegetation along all other borders and canals discourage people from entering the site. Moving the Shell Island Road security gate closer to the intersection of SR 951 may be considered if significant debris deposition occurs within the Malt property along Shell Island Road.

# 4.3 Exotic Vegetation Removal and Maintenance Plan

Invasive exotic plant species observed include: Brazilian pepper (Schinus terebinthifolius) and melaleuca (Melaleuca quinquenervia).

Companies contracted with Collier County or the State of Florida will conduct initial control of all invasive plants. Brazilian pepper adjacent to Shell Island Road will be cut, treated and removed from the site. All other Brazilian pepper will be basally treated in place and left to die. All melaleuca will be felled, treated and remain on site. All work

shall be performed during the dry season. Within 6 months of initial treatment, the site will be monitored and any re-sprouts or seedlings will be treated.

# 4.4 Cultural, Historical and Archeological Resource Protection

The Malt property is not within an area of historical and archaeological probability, although the old roadbed may contain historical artifacts. The County will notify the Division of Historical Resources immediately if evidence is found to suggest any archaeological or historic resources are present at the Malt site. If such properties are identified on-site, staff shall cordon off the area, and a professional survey and assessment shall be instituted. The archaeologist shall prepare a report outlining results of the assessments and issue recommendations to County staff about management of any sites discovered, per provisions of the Land Development Code Section 2.2.25. This report shall be sent to the Division of Historical Resources. The County shall cooperate fully with direction from the Division of Historical Resources on the protection and management of archaeological and historical resources. The management of these resources will comply with the provisions of Chapter 267, Florida Statutes, specifically Sections 267.061 2 (a) and (b).

The collection of artifacts or the disturbance of archaeological and historic sites within the Malt property will be prohibited unless prior authorization has been obtained from the Collier County Board of County Commissioners and the Department of State, Division of Historical Resources.

#### 4.5 Public Access

Access to the property will be available from Shell Island Road. No trail creation is planned at this time. Future management of the property for public access will be consistent with RBNERR's management objectives.

#### 4.6 Site Monitoring Plan

Monitoring of the site shall consist exotic vegetation monitoring and re-treatment. The Environmental Services Department shall be responsible for this treatment with tasks contracted out as deemed necessary. The site will be monitored for re-growth semi-annually for two years following initial treatment. After two years, the site will be monitored on a yearly basis.

#### 4.7 Partnerships

The County will partner with RBNERR and The Conservancy of Southwest Florida to seek funding from the DEP Bureau of Invasive Plant Management for invasive exotic vegetation control on the Malt property and its adjacent properties. RBNERR will manage the site in conjunction with their adjacent properties after the County has facilitated initial invasive exotic vegetation control and hydrologic restoration. The two agencies will enter into a MOU for ongoing management of the property in perpetuity. Florida Gulf Coast University will partner with Collier County through research projects related to hydrologic restoration. Studies to determine the best method of restoration, as well as pre- and post- restoration studies, will be conducted by student researchers.

# 5.0 Exhibits

EXHIBIT 1: Location Map

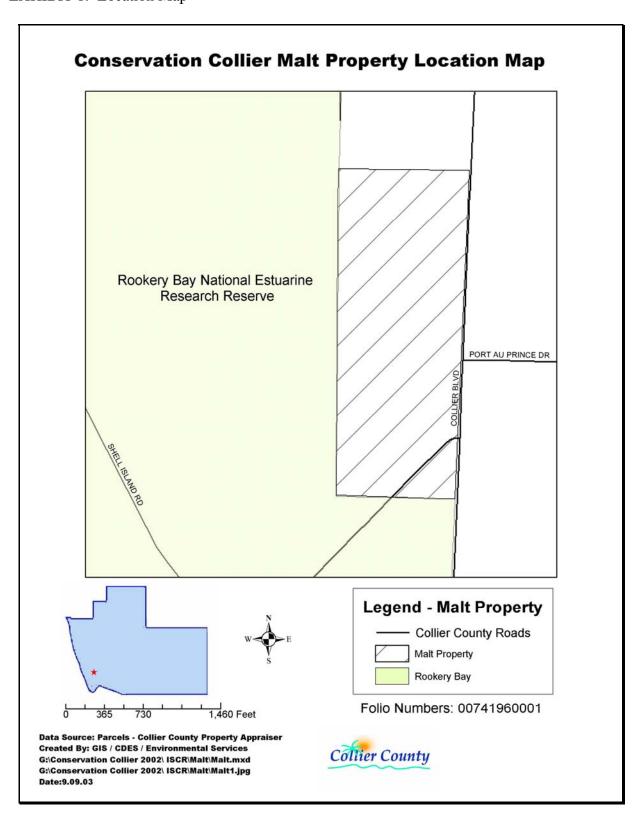


EXHIBIT 2: Aerial Map

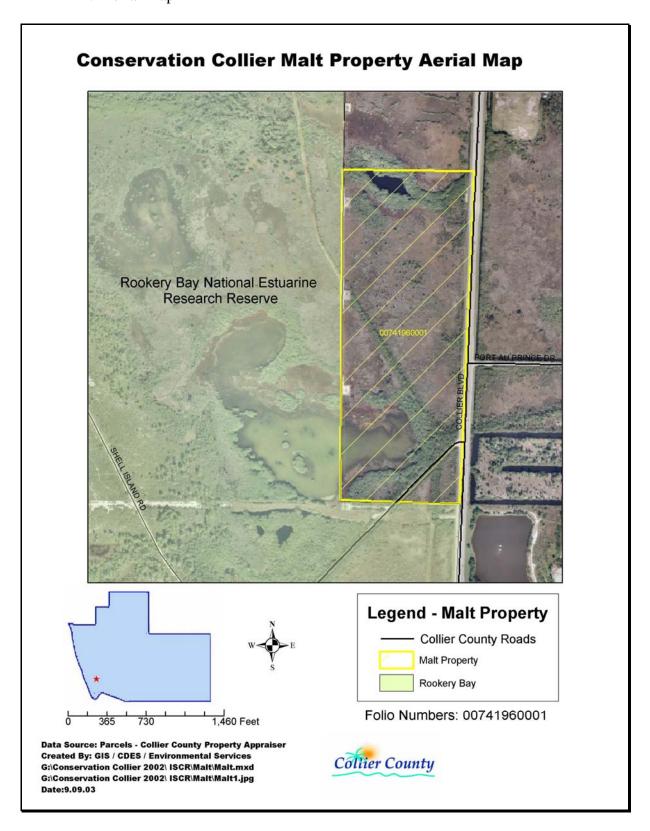


EXHIBIT 3: Estimated Cost Table

Management Element	Initial Cost	Annual Recurring Costs	Comments
Exotics Control	\$25,000 - \$40,000	RBNERR	Initial cost ranges from \$300 - \$500/ acre if no funds can be obtained from Bureau of Invasive Plant Management
Signage	\$350		4' X 5' sign and post
Total	\$25,350-\$40,350		

EXHIBIT 4: Estimated Implementation Time Line

	N	D	J	F	M	A	M	J	J	Α	S	О	N	D	J	F	M	A	M	J	J	A	S	О
	О	Е	Α	Е	Α	P	Α	U	U	U	Е	C	О	Е	A	E	Α	P	Α	U	U	U	Ε	C
	V	C	N	В	R	R	Y	N	L	G	P	T	V	C	N	В	R	R	Y	N	L	G	P	T
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5	5	6	6	6	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	7	7
Invasive Exotic Removal					X	X																		
Begin Hydrologic			X	X	X	X	X	X	X	X	X	X	X											
Research																								
Sign Installation			X																					
Completion of final																								X
management plan																								