

# Conservation Collier Rivers Road Preserve Interim Management Plan 1<sup>st</sup> Draft



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October 2010

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## 1.0 Purpose and Scope of the Interim Management Plan

A large portion of the Rivers Road Preserve (62.98 acres) was purchased by Collier County in December 2008 with funds from the Conservation Collier Program. Adjoining parcels purchased in 2010 brought the total size of Rivers Road Preserve to 76.74 acres. The property will be managed for conservation, protection, enhancement of natural resources and for public outdoor recreation that will be compatible with the conservation, protection and enhancement of the site and the surrounding lands.

This Interim Management Plan is intended to identify the key management priorities and issues within the preserve 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 outline more specific aspects of site management and public use. The Final Management Plan for this preserve is scheduled to be completed before the two year time period and will replace this plan once approved by the Board of County Commissioners (BCC).

### Key Interim Management Objectives

1. Protect, manage and restore (as appropriate) the native habitat on site

#### **Action Plan**

- 1a.** Create and install Firebreaks.
- 1b.** Map, treat, monitor, and manage invasive exotic vegetation.
- 1c.** Assess the need for native vegetation restoration.

2. Determine what actions will be necessary to open the site for public access

#### **Action Plan**

- 2a.** After initial exotic vegetation removal and/or restoration is complete, determine and begin the appropriate actions necessary for developing public access.

3. Explore opportunities for grant funding and partnerships

#### **Action Plan**

- 3a.** Explore possible exotic vegetation removal grants from U.S. Fish and Wildlife Service (USFWS) and FL Department of Environmental Protection (FLDEP).

4. Meet with community members who have an interest in this property and obtain feedback for Final Management Plan

#### **Action Plan**

- 4a.** Notify surrounding property owners, including adjacent public schools, of the purchase and meet with interested community members to receive input on management plan.
- 4b.** Coordinate with local community groups to assist in trail development.

5. Preserve Use Ordinance

**Action Plan**

5a. Once the Preserve Use Ordinance, in working draft stage at the time this Interim Management Plan was written, is approved by Collier County BCC the Preserve Use Ordinance will apply to Rivers Road Preserve.

**2.0 Management Authority and Responsibilities**

The Rivers Road Preserve was officially named on December 22, 2008. The Preserve is included within the portfolio of properties assigned to the Collier County Facilities Management Department, with the Conservation Collier Program responsible for direct management. Conservation Collier Program staff will handle day to day management activities and will seek to cooperate with and form partnerships with local, state and federal agencies and to obtain various types of grants for management activities when possible.

**3.0 Site Description**

**3.1 Location and Site Description**

The Rivers Road Preserve is located approximately 2.5 miles east of Collier Blvd (CR 951) in Section 30, Township 48 and Range 27 within the Rural Fringe Mixed Use District – Receiving Area, in Collier County, Florida. The properties may only be accessed (currently) via private roads (Rivers Road and Moulder Drive). The total acreage is 76.74 acres. The majority of the property is composed of Cabbage Palm, Inland Ponds and Sloughs, Mixed Wetland Hardwoods, Cypress, Pine flatwoods, Mixed Wetland Forests and Freshwater Marsh.

Current parcel folios are as follows:

<b>00216000001</b>	<b>00216680007</b>
<b>00219120506</b>	<b>00215320009</b>
<b>00216360000</b>	<b>00214760000</b>
<b>00217080004</b>	<b>00215440002</b>
<b>00215480004</b>	<b>00216400009</b>

**3.2 Signage**

Temporary signs identifying the property as Conservation Collier Preserve and listing prohibited activities have been posted at the northern most part of the property along Rivers Road and Moulder Dr. Signs missing or damaged will be replaced.

**3.3 Easements, Concessions or Leases**

An ingress/egress easement exists over Rivers Road. There are no concessions or leases are on the parcels or proposed for the future, unless they further conservation objectives, such as a conservation easement.

### 3.4 Structures

There are no known wells, septic tanks or other type of structures on the property.

### 3.5 Surrounding and Adjacent Land Uses

The Rivers Road Preserve is located approximately 2.5 miles east of Collier Blvd (CR 951). The property may only be accessed (currently) via private roads (Rivers Road and Moulder Drive). Single family homes exist on the north, east and west of property. A tree nursery exists to the NE of property. A conservation easement exists to the south of property.

## 4.0 Interim Management Objectives

### 4.1 Natural Resource Protection

#### Existing Vegetation:

Eight types of intact native plant communities have been documented; including Pine Flatwoods, Cabbage Palm, Inland Ponds and Sloughs, Mixed Wetland Hardwoods, Cypress, Cypress/ Pine/ Cabbage Palm, Mixed Wetland Forests and Freshwater Marsh.

#### Characterization of Plant Communities present:

FLUCCS	Ground cover	Midstory	Canopy
411 – pine flatwoods	grasses, palmetto St. John's-wort primrose willow twinflower bachelor button beautyberry meadow beauty goldenrod musky mint tickseed	wax myrtle bay saltbush myrsine shining sumac	slash pine
428 – cabbage palm	grasses, ferns and forbs, poison ivy vines, wild coffee, dog fennel	cabbage palm	cabbage palm, slash pine
616 - inland ponds and sloughs	Swamp fern, maidencane, pickerel weed, sagittaria	hog plum, rag weed, salt bush	pond apple, cypress, pop ash
617- mixed wetland hardwoods	Swamp fern, frog- fruit, blue porterweed	Dog fennel, beauty berry, myrsine	Red maple, pop ash, red bay, laurel oak
621- cypress	swamp fern, chain fern, smilax	cabbage palm, salt brush, stiff dogwood	cypress, cabbage palm, red bay
624 – cypress-pine- cabbage palm	ferns, dog fennel, grasses, forbs	cabbage palm, myrsine, wax myrtle, dahoon holly	Cypress, slash pine, cabbage palm
630 – wetland forested mixed	Chain fern, alligator flag, braken fern, sagittaria	Sawgrass, dahoon holly, wild coffee, myrsine, saw palmetto	Slash pine, red bay, cabbage palm, willow
641 – freshwater marsh	sagittaria, pickerelweed climbing aster sedges cord grass muhly grass	none	none

**Unique Natural Features:**

The site contains eight observed native plant communities and outstanding examples of pop ash swamps. Rivers Road Preserve contributes significantly to both the Surficial and Lower Tamiami Aquifers and several wetlands are extant on the parcels.

**Listed Plant Species**

Listed plant species found on site include stiff-leaved wild pine (*Tillandsia fasciculata*), hand fern (*Ophioglossum palmatum*), and reflexed wild pine (*Tillandsia balbisiana*).

Common Name	Scientific Name	Protection Status
		FDACS
hand fern	<i>Ophioglossum palmatum</i>	E
Stiff-leaved wild-pine, Cardinal airplant	<i>Tillandsia fasciculata</i>	E
Reflexed wild-pine, Northern needleleaf	<i>Tillandsia balbisiana</i>	T

T: threatened, E: endangered C: commercially exploited

**Wildlife Species Observed on Site:**

Animal	Common Name	Scientific Name	Protection Status	
BIRDS	Mourning Dove	<i>Zenaida macroura</i>		
	turkey vulture	<i>Cathartes aura</i>	--	
	red-shouldered hawk	<i>Buteo lineatus</i>	--	
	wild turkey	<i>Meleagris gallopavo</i>		
	Common Ground-dove	<i>Columbina passerina</i>		
	red-bellied woodpecker	<i>Melanerpes carolinus</i>		
	downey woodpecker	<i>Picoides pubescens</i>		
	blue jay	<i>Cyanocitta cristata</i>	--	
	white eyed vireo	<i>Vireo griseus</i>		
	eastern meadowlark	<i>Sturnella magna</i>		
	red-winged blackbird	<i>Agelaius phoeniceus</i>		
	northern cardinal	<i>Cardinalis cardinalis</i>	--	
	MAMMALS	white-tailed deer	<i>Odocoileus virginianus</i>	
		Florida black bear	<i>Ursus americanus</i>	T (FWC)
REPTILES	Cottonmouth/ Water Moccasin	<i>Agkistrodon piscivorous conanti</i>	SSC (FWC); T (USFWS) <sup>1</sup>	
	Crayfish (molt)	Order Decapoda		
	Tree Snail	Order Pulmanata		
INSECTS	Queen	<i>Danaus gilippus</i>		
	Zebra Longwing	<i>Heliconius charithonia</i>		

T= threatened, E=endangered, SSC=species of special concern

**4.2 Site Security**

It would be desirable to fence the northern most properties along Rivers Road and Moulder Drive and possibly move the Rivers Road access gate north so as to deter further dumping. Field

fencing (approximately 3,200 linear feet), similar to that used at Railhead Scrub Preserve can be used. Cost including installation for this type of fencing is approx. \$2.00 per linear foot. Gates are approx \$500.00. Signage can be placed at both gate entrances. Minimal management activities, like trash removal and trail maintenance can be accomplished using both contracted and volunteer labor.

#### **4.3 Exotic Vegetation Removal and Maintenance Plan**

Exotic invasive plants present include Brazilian pepper (*Schinus terebinthifolius*), earleaf acacia (*Acacia auriculiformis*), ceasar's weed (*Urena lobata*), bougainvillea (*Bougainvillea glabra*), citrus (*Citrus spp.*) air potato (*Dioscorea bulbifera*), lantana (*Lantana camera*), melaleuca (*Melaleuca quinquenervia*), Monk Orchid (*Oeceoclades maculate*), Tabeubua (*Tabebuia spp.*), Wedelia (*Wedelia trilobata*)

The initial cost of exotic removal would be substantial due to the amount present and density of the vegetation. Based on cost estimates provided by a contractor who routinely contracts with the County for exotic removal, costs for the level of infestation observed would be about \$80,000 - \$150,000 to treat exotics with herbicide in place and to mow exotics within firebreaks. It would cost approximately \$30,000 to mechanically mow the Brazilian pepper along the old "road" within the property.

Costs for follow-up maintenance, done anywhere from quarterly to annually have been estimated at close to \$1,875 per acre, per year for a total of close to \$75,000 for approximately 40 acres. These costs would likely decrease over time as the soil seed bank is depleted.

Staff will apply for federal and state grant funding to assist in the costs of invasive, exotic plant removal in areas of the preserve.

The Conservation Collier Program staff will hire contractors to treat the exotic vegetation on the site. Staff will seek assistance from the surrounding community for potential volunteers to supplement contracted exotic maintenance.

#### **4.4 Debris Removal**

Visible and accessible large debris has been removed by sellers. However, hidden debris that must be removed may be uncovered during firebreak installation and exotic plant treatment. No dumping signs and a fence may need to be installed to deter further dumping. Trash removal can be accomplished using both contracted and volunteer labor. Staff will work with the CCSO and their Weekenders Program to assist with the clean up in these areas. Staff will also attempt to coordinate with the homeowners.

#### **4.5 Cultural, Historical and Archeological Resource Protection**

The Rivers Road Preserve is not within an area of historical and archaeological probability, and no historical or archaeological sites appear to be present on the property. The County will notify the Division of Historical Resources immediately if evidence is found to suggest any archaeological or historic resources are discovered. If such resources 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).

#### **4.6 Listed Species Protection**

Staff will evaluate needs for protection if any listed wildlife species are found on the property. The locations where listed species are routinely observed will be identified using a global positioning system (GPS) device and mapped to allow staff to monitor them.

Care will be taken when exotic removal treatment occurs to avoid areas with listed plants and to avoid non-target damage with herbicides.

If wild hogs are present then a wild hog management program will be developed for this property. Feral hogs consume ground-nesting bird eggs and disturb soil and sensitive vegetation during rutting activities which in turn invites invasive exotic plant growth. No public hunting is allowed within the Rivers Road Preserve.

#### **4.7 Public Access**

Public access will be limited to special requests until exotics are removed or in maintenance stage. Appropriate public access will be determined and a public access trail will be established through development of a Final Management Plan. The American Disabilities Act (ADA) requirements and safety concerns will need to be met before the site can officially be open to the public. No public hunting is allowed within the Rivers Road Preserve.

#### **4.8 Site Monitoring and Long Term Management Plan**

Monitoring of the site shall consist of invasive exotic vegetation re-treatment and listed species population surveying. Prescribed fire will be utilized to restore portions of the preserve; however, a prescribed fire program will not be implemented until exotic plant densities are controlled to maintenance levels of 5% or less. Collier County shall be responsible for property maintenance with tasks contracted out as deemed necessary and management partnerships sought with the surrounding community. The property will be monitored on a regular basis to ensure that the fencing, if installed, is not disturbed and that no trespassing or unauthorized activities are occurring. The site will be monitored for exotic vegetation re-growth semi-annually for two years following initial treatment. After two years, exotic vegetation will be monitored on a yearly basis.

#### **4.9 Partnerships**

Staff will seek out and evaluate potential for other types of partnerships for conservation, protection, education, and funding opportunities. Staff will explore possible land management grants for the preserve. These may include but are not limited to grants offered by the USFWS South Florida Coastal Ecosystems Program, USFWS Partners for Fish and Wildlife Program (Conservation Collier Cooperative Agreement Modification would be required), the US Department of Agriculture and/or FWC Upland Weed Management Working Group Funding.



Although fire management may not be addressed during the initial two years of ownership of this property, fire management (or some form of fire substitute) will be necessary in the near future. Staff will contact Florida Department of Forestry to seek partnership opportunities for fire management of this property.

Staff shall also coordinate with the Collier County Boy and Girl Scouts of America for possible project assistance on the preserve and shall continue relationships with the CCSO Weekenders Program.

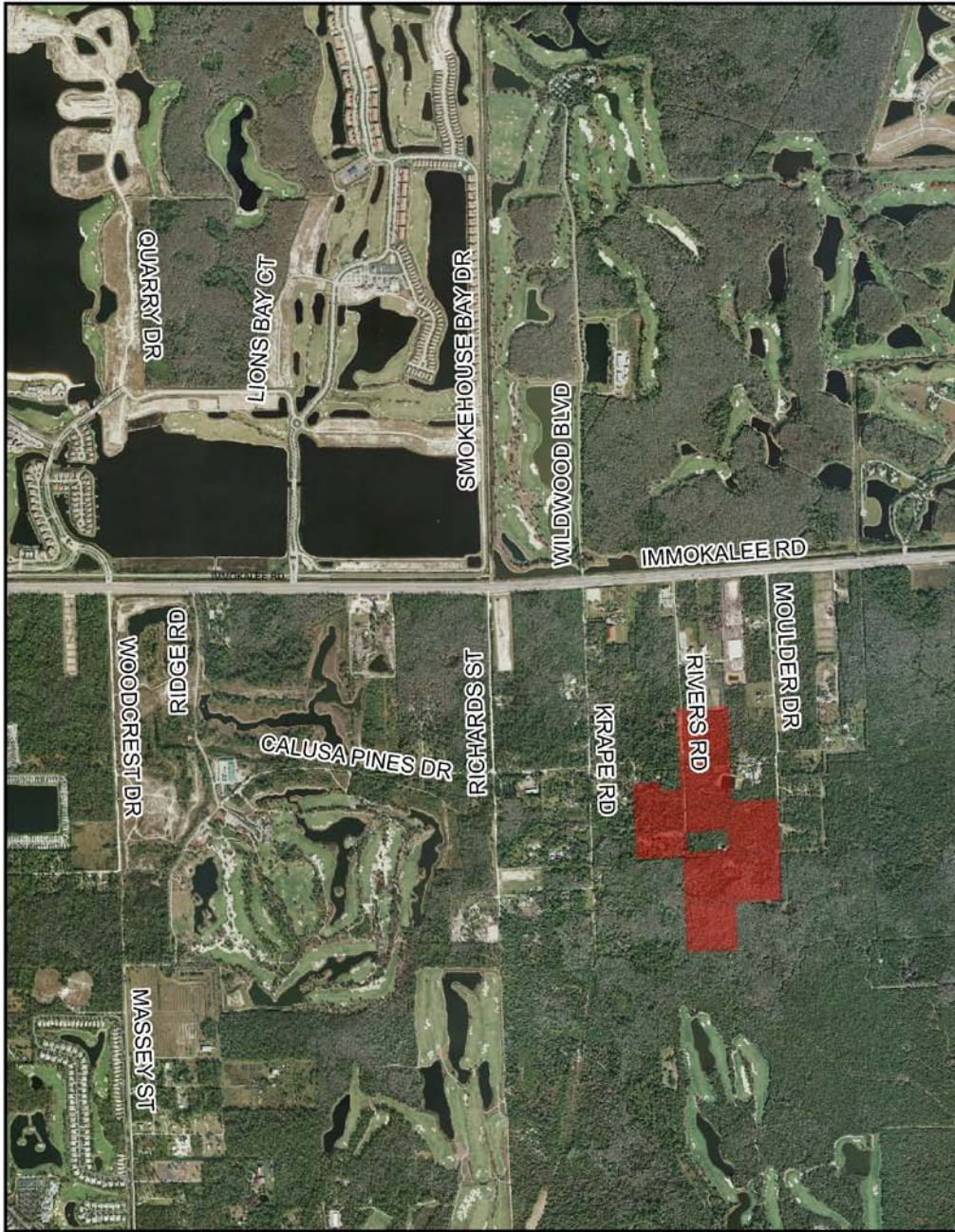
*October 2009*

*Conservation Collier Rivers Road  
Interim Management Plan*

**5.0 Exhibits**

EXHIBIT 1: Location

### Collier County Rivers Road Preserve Location



0 1,000 2,000 4,000 Feet

Data Source: Parcels - Collier County Property Appraiser  
Created By: Facilities Management/  
Conservation Collier/ KW  
G:\Conservation Collier\maps\Acquired  
properties\Rivers Road\Interim Management Plan Maps\Location.mxd and.jpg  
Date: 9.30.09



Collier County



**Legend**

 Rivers Road Properties

EXHIBIT 2: 2009 Aerial Map

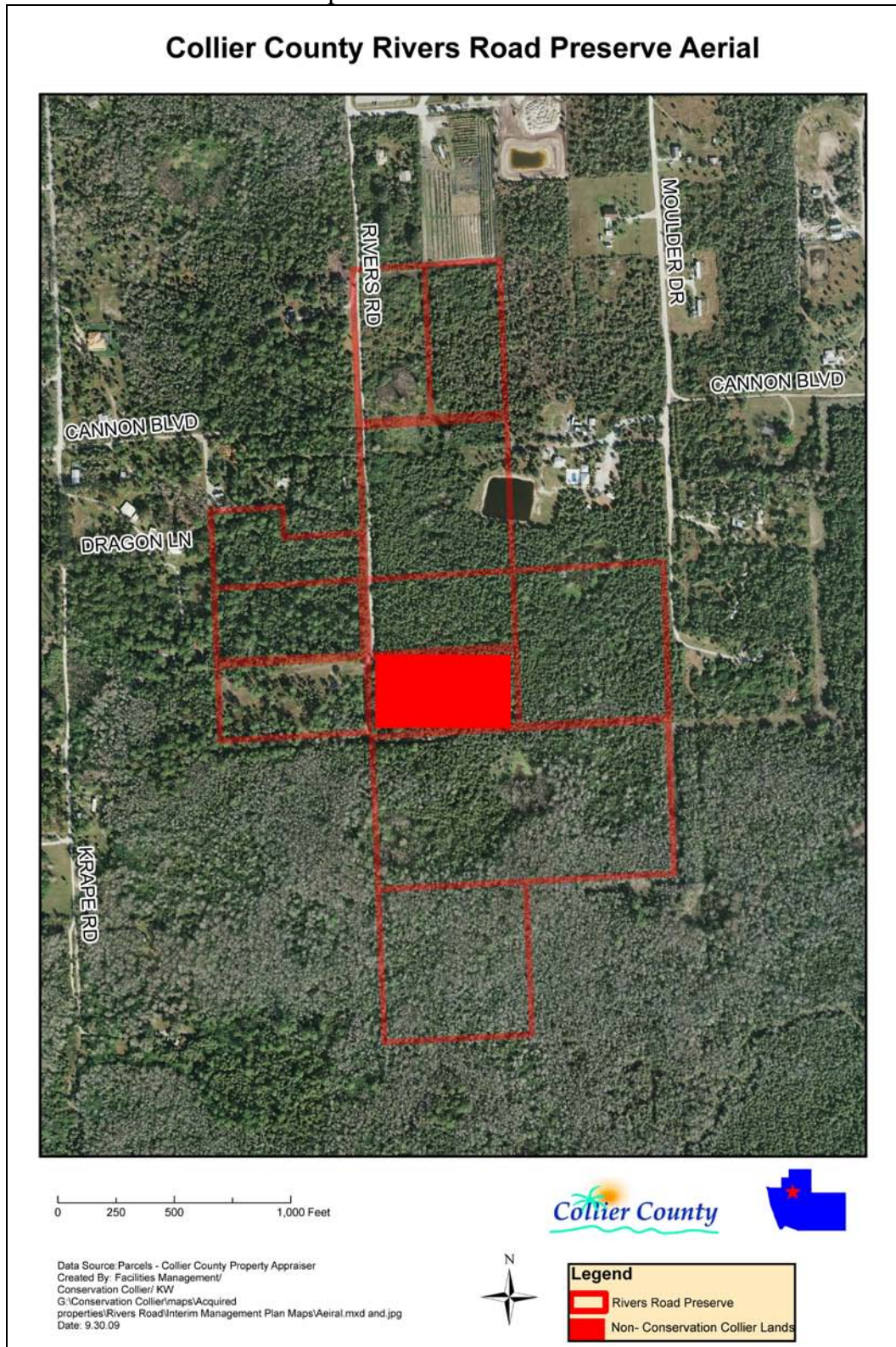


EXHIBIT 3: Estimated Cost Table

<b>Management Element</b>	<b>Initial Cost</b>	<b>Annual Recurring Costs</b>	<b>Comments</b>
Exotics Control and Firebreak creation	\$150,000	\$75,000	Recurring costs are high due to the dense areas of air potato
Fencing	\$6,400	tbd	Field fencing - \$2.00 per foot X 3,200 ft. Gates - \$500 ea. tbd
Trash and Debris Removal	\$10,000 +	n/a	Estimate Only. Based on quote for debris removal at Railhead Scrub Preserve in the event debris
<b>Total</b>	<b>\$166,400 +</b>	<b>\$75,000</b>	

**t.b.d. To be determined; cost estimates have not been finalized.**

EXHIBIT 4: Estimated Implementation Time Line

	JAN 11	FEB 11	MAR 11	APR 11	MAY 11	JUN 11	JUL 11	AUG 11	SEP 11	OCT 11	NOV 11	DEC 11	JAN 12	FEB 12	MAR 12	APR 12	MAY 12	JUN 12	JUL 12	AUG 12	SEP 12	OCT 12	NOV 12	DEC 12	JAN 13	
Explore exotic vegetation grants												x	x			x	x	x								
Determine what actions necessary to open site for public use and develop timeline for opening																			x	x	x					
Fire break creation and initial exotic vegetation removal																						x	x		x	
Completion of final management plan																							x			

- It will be necessary to remove the exotics prior to determining what actions are necessary to open the site for public use and to develop a timeline for opening. The timing will be dependant on whether grant funding is awarded to assist in removal costs.