

# Prairie Creek Preserve Land Management Plan

June 2018

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## Table of Contents

1.0 INTRODUCTION .....	4
2.0 PURPOSE .....	4
3.0 NATURAL AND CULTURAL RESOURCES.....	6
3.1 Natural Communities .....	6
3.2 Invasive / Exotic Plants and Feral Species Management .....	10
3.3 Restoration.....	10
3.4 Prescribed Burning.....	10
3.5 Listed Species .....	11
3.6 Inventory of The Natural Communities .....	11
3.7 Archeological, Cultural and Historical Resources.....	12
4.0 SITE DEVELOPMENT AND IMPROVEMENT .....	12
4.1 Existing Physical Improvements.....	12
4.2 Proposed Physical Improvements.....	13
4.3 Wetland Buffer .....	13
4.4 Storm Water Facilities .....	13
4.5 Hazard Mitigation.....	13
4.6 Education Programs .....	13
4.7 Permits .....	13
4.8 Easements, Concessions and Leases.....	13
5.0 MANAGEMENT NEEDS.....	13
5.1 Coordinated Management.....	13
5.2 Greenways and Trails .....	14
5.3 Staffing .....	14
5.4 Public Outreach and Education.....	14
5.5 Maintenance .....	14
5.6 Security.....	14
6.0 COST ESTIMATE AND FUNDING SOURCES.....	15
7.0 PRIORITY SCHEDULE.....	16
8.0 MONITORING AND REPORTING.....	16
8.1 Habitat Conservation Plan.....	16
8.2 Habitat Assessment Monitoring.....	16
9.0 REFERENCES .....	17

## EXHIBITS

- Exhibit A – Site Location Map
- Exhibit B – Boundary Map
- Exhibit C – Public Lands Map
- Exhibit D – Natural Communities Map

- Exhibit E – Soils Map
- Exhibit F – Master Site Plan
- Exhibit G – Trails map
- Exhibit H – FLUM Map
- Exhibit I – Zoning Map
- Exhibit J – FEMA Flood Zone Map

## **APPENDICES**

- A – Florida Natural Areas Inventory Report Form
- B – Exotic Pest Council’s List of Florida Most Invasive Species
- C - Priority Schedule

### **Abbreviations and Acronyms**

<b>ATV</b>	<b>All-terrain vehicle</b>
<b>CHEC</b>	<b>Charlotte Harbor Environmental Center</b>
<b>DEP</b>	<b>Florida Department of Environmental Protection</b>
<b>DNR</b>	<b>Florida Department of Natural Resources</b>
<b>DOF</b>	<b>Fl. Dep. of Agri, And Consumer Svc. Div. of Forestry</b>
<b>FNAI</b>	<b>Fl. Natural Areas Inventory</b>
<b>FWC</b>	<b>Fl. Fish and Wildlife Conservation Commission</b>
<b>HCP</b>	<b>Habitat Conservation Plan</b>
<b>MP</b>	<b>Management Plan</b>
<b>Natural Resources</b>	<b>Charlotte County Natural Resources Division</b>
<b>SWFWMD</b>	<b>SWFL Water Management District</b>
<b>USGS</b>	<b>United States Geologic Survey</b>
<b>USFWS</b>	<b>United States Fish and Wildlife Service</b>

## 1.0 INTRODUCTION

Prairie Creek Preserve is a 1,603 acre preserve located in eastern Charlotte County and was purchased in 2008 with Conservation Charlotte funds. It is accessible to the public off Highway 17 (**Exhibit A**) via the easement road approximately 6 miles north of Interstate 75. Prairie Creek Preserve is in Township 40, Range 24, Sections 01, 02, 10, 11, 12 of the USGS quadrangle. Prairie Creek is surrounded by agricultural lands on 3 sides, to the west, north and east and to the south are residential properties known as Prairie Creek Estates.

Prairie Creek Preserve (**Exhibit B**) consists of Bottomland Forest, Scrub, Scrubby Flatwoods, Pine Flatwoods and various wetlands. Its central feature is Prairie Creek, which flows in a southwesterly direction where it eventually merges with Shell Creek and finally the Peace River. In addition to the central feature Prairie Creek, the site contains many other natural resources of interest and is home to several listed species such as the Florida Scrub Jay, Gopher Tortoise, Florida Sandhill Crane, Eastern Indigo Snake and American Kestrel.

The Conservation Charlotte program provided for the acquisition and protection of natural lands. Priority sites within Charlotte County were selected using the following environmental criteria: rarity, connectivity, ecological quality, and manageability, and contribution to protection of a water resource. Prairie Creek was acquired because it met the Conservation Charlotte criteria as it represented the largest, contiguous, block of natural xeric habitat remaining in Charlotte County. Scrub, along with scrub endemics (plants and animals that occur in scrub), is increasingly rare in SWFL.

## 2.0 PURPOSE

Prairie Creek Preserve was acquired to preserve, protect and manage one of the largest single tracts of scrub, scrubby flatwoods and pine flatwoods in Charlotte County. This Preserve is managed by Charlotte County to ensure the conservation, protection and proliferation of its habitats. It is the goal of Charlotte County to continue to restore and manage the preserve for the maximum diversity of the flora and fauna within the communities and habitats found onsite. Priority management objectives are:

- Increase suitable habitat for the Florida Scrub-jay and aid in the implementation of the Charlotte County Habitat Conservation Plan.
- Focus on managing for the Florida Scrub-jay and Gopher Tortoise as an umbrella species where appropriate.
- Protect water resources of Prairie Creek.
- Increase habitat suitability for other known or potential species.
- Manage for appropriate species diversity.

These objectives do not allow for the displacement of any natural habitat or environmental community of another by management design: i.e., it is not acceptable to manage mesic flatwoods for scrub-jay habitat.

The future land use and zoning designations were changed in November 2012. The final future land use designation for Prairie Creek Preserve is Preservation. (*Exhibit H*). The zoning designation for Prairie Creek Preserve is Environmentally Sensitive (ES). (*Exhibit I*).

Objectives of the Natural Resources Element, of the Charlotte County, Smart Charlotte 2050 Plan that would be furthered by managing the Preserve include:

**ENV Policy 1.3.5: Prescriptive Burning**

- The County shall allow for and support the use of prescriptive burning in appropriate land cover types, as permitted by the Florida Forest Service (FFS), to prevent catastrophic wildfires, which greatly reduce air quality, and to mimic the natural cycle of regeneration.

**ENV Policy 2.2.7: Environmental Acquisition and Management**

- The County shall acquire and manage environmental lands using all available opportunities including, but not be limited to: levying an ad valorem tax; obtaining State, Federal and non-profit grant funding; land swaps; public/private partnerships; public/public partnerships (such as Florida Communities Trust); community land trusts; and conservation easements. All lands acquired by the County for preservation shall be managed to retain their environmental value.

**ENV Policy 2.2.9: Conservation Charlotte**

- The County shall continue to administer the Environmentally Sensitive Lands Protection Program (Conservation Charlotte), which generates funds for the acquisition of environmentally sensitive lands.

**ENV Policy 2.2.10: Land Management**

- The County, or duly authorized management agencies, shall develop and implement long range management plans for preservation or conservation lands consistent with the natural resources found on these properties.

**ENV Policy 2.2.11: Public Awareness of Environmental Lands**

- In cooperation with other government agencies and non-profit groups, the County shall work to increase public awareness, appreciation, and (consistent with the resources found at each site) access to the publicly owned preserves and environmental parks within the County's borders.

### **ENV Policy 2.3.6: Exotic Plant Removal**

- The County shall continue to enforce the removal of invasive exotic plants. The County shall also prohibit the planting of species listed as noxious weeds by 5B-57.007, Florida Administrative Code, and listed as invasive species on the Florida Exotic Pest Plant Council Invasive Plant Category I Lists. The County shall discourage the planting of species listed as invasive species on the Florida Exotic Pest Plant Council Invasive Plant Category II List.

### **ENV Policy 2.3.8: Environmental Education**

- The County shall support efforts to increase the public's understanding and stewardship of wildlife, natural communities, and other natural resources through partnerships with non-profit organizations such as the Florida Master Naturalist Program, the Florida Yards and Neighborhoods Program, and the University of Florida Food and Agricultural Sciences program.

## **3.0 NATURAL AND CULTURAL RESOURCES**

Prairie Creek Preserve has a diverse assemblage of natural communities located on the property, including Basin Swamp, Bottomland Forest, Hydric Flatwoods, Palmetto Prairie, Pastureland, Pine Flatwoods, Scrub, Scrubby Flatwoods, Depressional Marsh and Wet Prairies. The natural communities are described in detail below (*Exhibit D*). Charlotte County staff monitors the property on a regular basis throughout the year. When occurrences of previously unknown protected plant and animal species are observed onsite these observations will be reported to FNAI utilizing FNAI Field Reporting Forms or on the FNAI web site at: [http:// www.fnai.org/FNAI data/RareSpeciesDataForm.cfm](http://www.fnai.org/FNAI/data/RareSpeciesDataForm.cfm).

### **3.1 NATURAL COMMUNITIES**

#### **Bottomland Forest**

Prairie Creek contains approximately 362 acres of Bottomland forest. It runs primarily from the south end of property to the north and northeast along the creek. FNAI ranks bottomland forest as (S2) in-state and (G4) globally, (FNAI 2010). Bottomland forest is a deciduous, or mixed deciduous/evergreen, closed-canopy forest on terraces and levees within riverine floodplains and in shallow depressions. Found in situations intermediate between swamps (which are flooded most of the time) and uplands, the canopy may be quite diverse with both deciduous and evergreen hydrophilic to mesophytic trees. Dominant species include sweetgum (*Liquidambar styraciflua*), spruce pine (*Pinus glabra*), loblolly pine (*Pinus taeda*), sweetbay (*Magnolia virginiana*), swamp laurel oak (*Quercus laurifolia*), water oak (*Q. nigra*), live oak (*Q. virginiana*), swamp chestnut oak (*Q. michauxii*), and sugarberry (*Celtis laevigata*). Along oxbows that have become isolated from the main channel, levees persist as high ridges. In some cases, these levees and ridges may be quite dry and support upland communities such as mesic or xeric hammock.

Management goals for this habitat are:

- Monitor/treat exotic/invasive species.
- Maintain prescribed fire intervals of 3-5 years.

### **Scrubby Flatwoods**

Prairie Creek contains approximately 210 acres of scrubby flatwoods. 70% of this habitat is located on the east side of the creek and 30% is on the west side. FNAI ranks scrub habitat as imperiled both in-state (S2) and globally (G2) (FNAI 2010). Scrubby flatwoods have an open canopy of widely spaced pine trees and a low, shrubby understory dominated by scrub oaks and saw palmetto, often interspersed with areas of barren white sand. Principal canopy species are longleaf pine (*Pinus palustris*) and slash pine (*P. elliotii*) in northern and Central Florida. The shrub layer consists of one or more of the four scrub oaks, sand live oak (*Quercus geminata*), myrtle oak (*Q. myrtifolia*), Chapman's oak (*Q. chapmanii*), and scrub oak (*Q. inopina*), and typical shrubs of mesic flatwoods including saw palmetto (*Serenoa repens*), gallberry (*Ilex glabra*), rusty staggerbush (*Lyonia ferruginea*), fetterbush (*L. lucida*), coastalplain staggerbush (*L. fruticosa*), and deerberry (*Vaccinium stamineum*). The shrub layer of scrubby flatwoods is not solely comprised of oaks; grasses and dwarf shrubs make up a substantial portion of the cover. Grasses include wiregrass (*Aristida stricta* var. *beyrichiana*), broomsedge bluestem (*Andropogon virginicus*), and little bluestem (*Schizachyrium scoparium*); dwarf shrubs include dwarf live oak (*Quercus minima*), runner oak (*Q. elliotii*), dwarf huckleberry (*Gaylussacia dumosa*), gopher apple (*Licania michauxii*), and shiny blueberry (*Vaccinium myrsinites*). A variety of forbs, many typical of drier types of mesic flatwoods, are present including coastalplain honeycomb-head (*Balduina angustifolia*), narrowleaf silkgrass (*Pityopsis graminifolia*), October flower (*Polygonella polygama*), and sweet goldenrod (*Solidago odora*). Bare sand openings are often present but are generally small. FNAI ranks scrub habitat as imperiled both in-state (S2) and globally (G2) (FNAI 2010). The scrubby flatwoods here are not disturbed and in good condition.

Management goals for this habitat are:

- Maintain prescribed fire intervals of 3-5 years.
- Continue to manage exotic/ invasive species.

### **Scrub**

The preserve contains approximately 97 acres of scrub habitat. FNAI ranks scrub habitat as imperiled both in-state (S2) and globally (G2) (FNAI 2010). FNAI characterizes scrub to be dominated by evergreen shrubs with or without a canopy of pines. Scrub is found on white sandy infertile soils, and ground cover, if any consists of lichens and herbs. Common vegetation includes Sand Pine, Sand Live Oak, Myrtle Oak, Chapman's oak, Scrub oak, Saw Palmetto, Rosemary (*Ceratiola ericoides*), Rusty Lyonia (*Lyonia ferruginea*), Scrub Hickory (*Carya floridana*), Scrub Palmetto (*Sabal etonia*), Hog Plum (*Ximenia Americana*), Silkbay (*Persia humilis*), Beak Rush (*Rhyncospora* spp.), Milk Pea (*Galactica* spp.), and Staggerbush (*Lyonia* spp.) (FNAI 2010). The scrub habitat within the park is in generally good condition because of past prescribed fire applications.

Management goals for this habitat are:

- Maintain prescribed fire intervals of 3-5 years.
- Manage exotic/ invasive species.

### **Pine Flatwoods - Mesic**

Prairie Creek contains approximately 680 acres of Mesic Pine Flatwoods. FNAI indicates mesic flatwoods occur throughout Florida and the lower southeastern coastal plain. FNAI characterizes mesic pine flatwoods by an open canopy of tall pines with a low ground layer of shrubs and grasses, with little to no mid-story vegetation. Common ground vegetation includes saw palmetto, gallberry (*Ilex glabra*), runner oak (*Quercus minimia*), shiny blueberry (*Vaccinium myrsinites*), wiregrass (*Aristida* ssp.) and broomsedge (*Andropogon* spp.). The mesic pine flatwoods within the property are showing some overgrowth, both in Pine density and palmetto density / height. Mechanical reduction along with future prescribed fires will help to maintain this community.

Management goals for this habitat type are:

- Reduce pine density by 40%.
- Maintain prescribed fire intervals of 3-5 years.
- Manage exotic/ invasive species.

### **Palmetto Prairie/ Dry Prairie**

Prairie Creek has approximately 24.9 acres of dry prairie located in the northwest corner of the property. FNAI characterizes dry prairie as a community of low shrubs and grasses occupying vast, level expanses in three major areas north and west of Lake Okeechobee in south-central Florida. Common shrubs are saw palmetto (*Serenoa repens*), which is often stunted, dwarf live oak (*Quercus minima*), gallberry (*Ilex glabra*), fetterbush (*Lyonia lucida*), shiny blueberry (*Vaccinium myrsinites*), netted pawpaw (*Asimina reticulata*), Atlantic St. John's wort (*Hypericum reductum*), dwarf wax myrtle (*Myrica cerifera* var. *pumila*), and dwarf huckleberry (*Gaylussacia dumosa*). These are mixed with about an equal proportion of herbs, predominantly wiregrass (*Aristida stricta* var. *beyrichiana*), along with bottlebrush threeawn (*Aristida spiciformis*), hemlock witchgrass (*Dichantherium portoricense*), broomsedge bluestem (*Andropogon virginicus*), lopsided indiagrass (*Sorghastrum secundum*), and cypress witchgrass (*Dichantherium ensifolium*), plus numerous forbs, including narrowleaf silkgrass (*Pityopsis graminifolia*), milkworts (*Polygala* spp.), meadowbeauties (*Rhexia* spp.), yellow-eyed grasses (*Xyris* spp.), and wild pennyroyal (*Piloblephis rigida*). Dry prairie differs from scrub and scrubby flatwoods by the absence of scrub oaks, and from mesic flatwoods in the nearly complete absence of pines, stumps, or stump holes. This habitat is in good condition due to previous prescribed burn regimens. FNAI ranks this habitat type as (S2) in-state and (G2) globally.

Management goals for this habitat type are:

- Maintain prescribed fire intervals of 3-5 years.
- Continue to monitor and treat exotic/ invasive species.



### **Wet Prairie**

Prairie Creek contains approximately 31.5 acres of wet prairie. It is located on the northern end of the property. FNAI classifies Wet prairie as an herbaceous community found on continuously wet, but not inundated, soils on somewhat flat or gentle slopes between lower lying depression marshes, shrub bogs, or dome swamps and slightly higher wet or mesic flatwoods, or dry prairie. It is typically dominated by dense wiregrass (*Aristida stricta* var. *beyrichiana*) in the drier portions, along with foxtail club-moss (*Lycopodiella alopecuroides*), cutover muhly (*Muhlenbergia expansa*), yellow butterwort (*Pinguicula lutea*), and savannah meadowbeauty (*Rhexia alifanus*). In the wetter portions, wiregrass may occur with, or be replaced by, species in the sedge family, such as plumed beaksedge (*Rhynchospora plumosa*), featherbristle beaksedge (*R. oligantha*), Baldwin's nutrush (*Scleria baldwinii*), or slenderfruit nutrush (*S. georgiana*), plus longleaved threeawn (*Aristida palustris*).

Management goals for this habitat type are:

- Maintain prescribed fire intervals of 3-5 years.
- Continue to monitor exotic invasive species, treat if needed.

### **Marshes/ Swamps**

The property contains approximately 59 acres of Marsh and Swamp habitats. Small marshes are located throughout the entire property and total 46 acres, the single 12.5-acre basin swamp is located on the southwestern portion of the property. Basin marsh occurs in a variety of isolated or mostly isolated depressions. They occur around fluctuating shorelines of lakes, on the former lake bottoms of “disappearing “lakes, at the head of broad, low basins which were former embayment's of the sea during times of higher sea level, and as large deep inclusions within pyrogenic upland communities, or as inclusions in non-pyrogenic communities such as hardwood forests or basin swamps. They are regularly inundated with water originating from localized rainfall.

Management goals for this habitat type are:

- Maintain prescribed fire intervals of 3-5 years.
- Continue to monitor/ treat exotic – invasive species.

### **Pastureland**

Prairie Creek has approximately 83.5 acres of pastureland located on the east side of the creek, it is dominated by a mix of planted non-native or domesticated native forage species and native groundcover, due to an incomplete conversion to pasture, not regeneration. Semi-improved pastures have been cleared of a significant percentage of their native vegetation and planted in non-native or domesticated native forage species, but still retain scattered patches of native vegetation with natural species composition and structure (most often small areas of mesic flatwoods and scrub habitat) among the pastured areas. The planted areas are usually dominated by bahia grass (*Paspalum notatum*) and can resemble improved pastures. There are no plans to re-plant or restore any areas on the east side of the property. Through use of prescribed burns and exotic treatments, native vegetation in these habitats is slowly beginning to repopulate the units on the east side of property.

Management goals for this habitat type are:

- Maintain prescribed fire intervals of 3-5 years.
- Monitor for exotic/ invasive species, treat as needed.

### **3.2 Invasive / Exotic Plants and Feral Species Management**

Exotic nonnative invasive plant species reduce the quality and quantity of habitat available for native wildlife. Prairie Creek Preserve is surrounded by agricultural farmlands and some residential areas to the south and southwest. Exotics are monitored and treated on a regular basis. Exotic invasive species that have been observed in the preserve include Brazilian Pepper (*Schinus terebinthifolia*), Cogongrass (*Imperata cylindrica*), Caesarweed (*Urena lobata*), Rosary pea (*Abrus precatorius*), Tropical soda apple (*Solanum viarum*) and Primrose willow (*Ludwigia peruviana*). Despite opportunities, exotic encroachment is somewhat sparse and infestations are all at manageable levels. Staff monitors exotics and treats upon discovery. Due to the small areas where exotics are found and treated, there are no plans for revegetating the treated areas.

Prevention is the most effective method of control, staff continually monitors the sites for early detection and control of invasive / exotics. Staff currently utilizes plans recommended by FLEPPC (Florida Exotic Pest Plant Council). Application of the most recent treatment recommendations by species are available via the FLEPPC website (<http://www.fleppc.org/>).

#### **Exotic / Feral Animals**

Prairie Creek Preserve does have an active breeding population of feral pigs (*Sus scrofa*). County staff has contracted with the United States Department of Agriculture since 2016 for the control of exotic/ invasive fauna on county conservation land. Although the trapping program has been successful, the feral hog population persists. The number of feral hogs have been reduced and impacts to the natural community has been minimized.

#### **Monitoring**

The site is monitored on a regular basis to assess the presence of invasive / exotic flora and fauna.

### **3.3 Restoration**

Prairie Creek has been actively managed with fire since the 1920's. There are very few resource enhancement needs. The primary resource enhancement objective is to maintain existing habitat. This shifts most of the prescribed burning to the growing season and increases the emphasis on the removal of nuisance exotic species. There are no plans to re-store or replant native vegetation, the use of prescribed fire and exotic/ invasive treatments are two methods utilized to maintain this preserve.

### **3.4 Prescribed Burning**

Prescribed fire had been used as a management tool for many years by previous landowners, upon our purchase of the property the County continues to use fire for ecosystem restoration

and maintenance. Each of the major vegetation communities found on the property, flatwoods, scrubby flatwoods and scrub are fire adapted and the use of prescribed fire is the best method for county staff to manage a healthy ecosystem.

Burn priorities and rotation schedules are revisited throughout the year as both management resources and growing conditions change. Burning is coordinated with the local Florida Forest Service office.

### 3.5 Listed Species

Charlotte County maintains a list of species observed within Prairie Creek Preserve. The list includes birds, mammals, amphibians and reptiles. As additional species are seen throughout the year, via wildlife surveys, vegetation surveys or during management efforts, the list is updated. Species found on the Federal and or State endangered and threatened species list are referred to as ‘Listed Species’. Charlotte county staff also refers to the biological status as reported by FNAI.

Listed animal species that have been observed throughout the Preserve:

Endangered (E), Threatened (T), Candidate (C)				
Common name	Genus	Species	State	Fed
Eastern Indigo Snake	Drymarchon	D. couperi	T	T
Gopher Tortoise	Gopherus	G. polyphemus	T	C
Florida Scrub Jay	Aphelocoma	coerulescens	F	F
Crested Caracara	Polyborus	plancus	T	T
Florida Panther	Puma	concolor	E	E
American Kestrel	Falco	sparverius	T	
Roseate Spoonbill	Platalea	ajaja	T	
Little Blue Heron	Egretta	caerulea	T	
American Alligator	Alligator	mississippiensis	T	T

Charlotte county is committed to managing the various ecological communities at Prairie Creek Preserve to increase the diversity of flora and fauna, including both the listed and common species found there. Monitoring is a key part the management practices at this property, they include incidental observations, monthly site inspections and formal surveys for certain species. Specific species surveys are conducted for the Florida Scrub jay and Gopher Tortoise. All native wildlife species are protected in the preserve.

### 3.6 Inventory of The Natural Communities

The natural communities will be monitored once per year. In this routine monitoring, photo points will be taken and any information on identified species will be forwarded to [http://www.fnai.org/FNAI data/RareSpeciesDataForm.cfm](http://www.fnai.org/FNAI_data/RareSpeciesDataForm.cfm). **Appendix A**

### **3.7 Archeological, Cultural and Historical Resources**

An initial archeological assessment will be scheduled before 2023.

## **4.0 SITE DEVELOPMENT AND IMPROVEMENT**

### **4.1 Existing Physical Improvements**

Existing physical structures within the preserve include fences and gates, walking trails, equine riding trails, and parking area (*Exhibit F*). These improvements are designed to improve the ability of the public to enjoy the natural resources of the preserve while protecting these resources. All of Charlotte Counties parks and preserves are “pack in – pack out” facilities, trash cans are not provided here.

- **Entrance Signage**

An entrance sign, bearing the Charlotte County logo is located at the entrance to the preserve along the easement road, which designates this property was purchased using funds from the “Conservation Charlotte” program. There is also a park rules sign in the parking area.

- **Fencing**

Four strand smooth wire fencing is installed along the western easement of the roadway and around the parking area. Bollards and board fencing with a walkthrough are located at the eastern end of the parking area and 4 strand barbed wire fencing is what makes up the outer perimeter of the property. Gates with walkthroughs are strategically placed to allow pedestrian, equine and county staff access into designated areas.

- **Walking Trails**

11.38 miles of hiking trails exist throughout the preserve. Most trails are native surface and serve as fire breaks for prescribed burning.

- **Equine Trails**

2.36 miles of equine riding trails exist in the preserve. There is a southern gate that allows access to the easement which takes riders north and around a loop through the flatwoods. These trails again are native surface and serve as fire breaks for prescribed burning. Equine trails are delineated by white capped fence posts.

- **Parking Areas**

Parking is available on the northern end of the property, there is an improved shell roadway and parking area comprised of approximately 6 parking spaces. There is also additional parking available in the compacted grassy area just west of the improved parking area. Access to the preserve other than by foot is prohibited by a gate and pedestrian / equine walkthrough.

#### **4.2 Proposed Physical Improvements**

There are no proposed physical improvements planned now.

#### **4.3 Wetland Buffer**

A 100-foot buffer is provided between parking areas and wetlands.

#### **4.4 Storm Water Facilities**

There are no storm water facilities located on this property.

#### **4.5 Hazard Mitigation**

Portions of Prairie Creek Preserve, mainly along the creek, are located within the 100-year floodplain (*Exhibit J*), as such no major structures are planned for this property. This property will serve as a buffer for wind and storm surge associated with a storm event.

#### **4.6 Education Programs**

Florida Master Naturalist program utilizes this property for teaching classes pertaining to Upland Communities.

#### **4.7 Permits**

There are no permits pertaining to this property now.

#### **4.8 Easements, Concessions and Leases**

There has been an access agreement granted to the equestrian ranches on the southern end of the property. Limited access has been granted and an equine walkthrough has been installed. No revenue has been generated on this property to date. There is a lease agreement with Ryals Ranch, they do have full access to any of the gates on the property for means of entering their fields on both the east and west sides of Prairie Creek Preserve.

### **5.0 MANAGEMENT NEEDS**

#### **5.1 Coordinated Management**

Community Services Parks and Natural Resources Division staff has developed a long-standing relationship with multiple outside agencies including: CCSO, FWC, FDEP and Florida Forest Service. Charlotte County is committed to maintaining these partnerships.

## 5.2 Greenways and Trails

Charlotte County Resolution No. 980440A0 pledged to develop an integrated system of trails, corridors, greenways, preserves and waterways to provide a foundation for the eco-tourism industry, provide wildlife corridors and enhance public access to and appreciation of the County's natural resources (**Exhibit G**). Prairie Creek Preserve has 11.38 miles of hiking trails and 2.36 miles of equine trails. The canoe/ kayak launch provides access to Prairie Creek which eventually leads to the Peace River.

## 5.3 Staffing

The Division will provide staffing, management and maintenance for the Preserve. The Land Management Specialists will be directly responsible for all land management activities. Additional staffing may be obtained through use of volunteers, non-profit organizations and/or contracted services as needed.

## 5.4 Public Outreach and Education

- **Organized excursions into the Preserve.** Organized programs will meet County requirements. Currently the Florida Master Naturalist program uses the preserve in many of its classes.
- **Self-guided excursions into the Preserve.** Hiking trails and equine trail maps will be posted on the County's website, because of printing costs, the county does not plan to provide printed copies at the Preserve.

## 5.5 Maintenance

The Division has the responsibility for managing and maintaining the Preserve. The main goals for the Preserve are visitor and staff health, safety and welfare, preserving aesthetic qualities and protection of natural resources. Trails, both hiking and equine, are inspected during monthly site inspections for maintenance and repair needs. Routine maintenance activities will include mowing and maintaining trails/fire breaks, trimming vegetation along trails, maintenance of parking area and fence repair when needed. Land management activities will include use of prescribed fire and treatment of invasive/exotic vegetation. The division may use contractors and/or volunteer services as needed to assist in maintenance tasks.

## 5.6 Security

Charlotte County is concerned about both safety of visitors and the protection of our natural resources. The Community Services Parks and Natural Resources division staff ultimately has the responsibility for site security, including prevention of vandalism, property damage, unauthorized vehicle access and trespassing. A three-tiered approach to site security is used:

- **Signs and Fencing** – Signs and fencing shall be installed to restrict vehicle access and warn against other restricted or prohibited activities.

- **Staff** – Division staff shall monitor the integrity of the fences, repair damage by vandalism, monitor site for evidence of ATV use and take measures to clarify restricted areas and activities to citizens with signage.
- **Sheriff, Fire/EMS, FWC and Florida Forest Service** – Shall respond to emergency calls from citizens and staff.

Activities that are not compatible with passive natural resource based activities are prohibited. Such activities include alcohol consumption, social gatherings except for nature hikes, personal acts considered indecent or not appropriate for all ages and all groups within the preserve, disturbance of the peace, hunting except for the contracted removal of exotic and or nuisance animals, harassing of wildlife, harvesting or destruction of vegetation, removal of vegetation and any other activity that may have a negative impact on visitors, wildlife and/ or the ecosystem.

All wildlife species are protected, including venomous snakes and other dangerous animals, they shall not be killed, harmed or harassed by visitors or staff unless they present an immediate, clear and unavoidable threat, or are part of an exotic species removal program to be carried out by authorized personnel only. Possessing a firearm, bow, crossbow, trap or other hunting devices with the intent to hunt or take wildlife and is prohibited.

## 6.0 COST ESTIMATE AND FUNDING SOURCES

A portion of this property was acquired using funds from Conservation Charlotte. The remainder was funded by Charlotte County Local Option Sales Tax. The preserve will be managed using Ad Valorem County Taxes.

The cost estimate was broken into five major categories:

- **Natural Resource Protection**
  - Exotic vegetation treatment – in house.
  - Feral animal/ exotic plant monitoring – in house.
  - Listed species survey – in house or volunteer.
- **Resource Enhancement**
  - Prescribed Fire – \$25,648.00 (for one rotation of all mgmt. units, approximately 1603 acres at \$16.00 per acre in house cost).
  - Mechanical thinning – in house.
- **Maintenance**
  - Mowing and pruning of vegetation around the entrance, fence, parking area, trails and fire breaks – \$1500.00 annually - in house.
- **Security**
  - Additional fencing - \$19,000.00 (cost estimate based on current environmental fencing contract).
- **Staffing** – See section 5.3

## **7.0 PRIORITY SCHEDULE**

A priority schedule that details a timeline for major events is included in **Appendix C**. This priority schedule covers 2018-2033.

## **8.0 MONITORING AND REPORTING**

### **8.1 Habitat Conservation Plan**

Prairie Creek Preserve is within the reserve design detailed in the Habitat Conservation Plan (HCP). Charlotte County conducts annual monitoring. The results of these surveys are included in the HCP report.

### **8.2 Habitat Assessment Monitoring**

The goals of habitat assessment monitoring are to evaluate management efforts to ensure they are meeting ideal habitat requirements that are required for the associated plant and animal species to thrive. Evaluations from these monitoring efforts will be included in the Habitat Conservation Plan report.

Monitoring efforts have been described in Sections 3.1,3.4 and 3.5. Those monitoring efforts are summarized as:

- Ongoing inspections for feral pig (or other invasive species) damage.
- Listed Plant Survey.
- Habitat photo monitoring.
- Bird surveys.
- Scrub-Jay surveys.
- Gopher Tortoise surveys.
- General surveys and site inspections.



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