

Peace River Preserve Land Management Plan

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by
Charlotte County
Community Services Department

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Appendix A – Florida Natural Areas Inventory Report Form

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Abbreviations and Acronyms

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

1.0 INTRODUCTION

Peace River Preserve is a 410-acre tract of environmentally sensitive land located in north-central Charlotte County, at the end of Sandhill Drive (*Exhibit A*). The Peace River forms the eastern boundary of the property. Residential communities border the property to the north, west and southwest. To the east and south is the Peace River (*Exhibit B*).

The property is accessible via a power line easement and is located in Township 40 South, Range 23 East, Sections, 10, 11 and 15. The Preserve is within the United States Geological Survey (USGS) Quadrangles Cleveland and Bermont. The Preserve is within one mile of other government and non-profit organization preserve land.

This property was acquired to maintain and manage environmentally sensitive land for the Conservation Charlotte Program, including scrub, scrubby flatwoods, and bottomland hardwoods as well as the protection of water quality of Peace River. Listed species such as the Florida scrub jay (*Aphelocoma coerulescens coerulescens*), the gopher tortoise (*Gopherus polyphemus*), the gopher frog (*Rana capito*), eastern indigo snake (*Drymarchon corais*), Florida mouse (*Podomys floridanus*), Florida pine snake (*Pituophis melanoleucus mugitus*), American alligator (*Alligator mississippiensis*), and sandhill crane (*Grus canadensis*), have the potential to be present.

This Management Plan (MP) outlines the monitoring and management activities for the Preserve. Key management strategies include exotic/invasive species removal and prescribed burns. Activities such as garbage removal and site security will assist in restoring the Preserve to its native state. The Preserve has good manageability potential and this property was purchased by Charlotte County in 2008.

2.0 PURPOSE

The primary purpose in purchasing the Preserve is to assure that the property will be retained forever in its existing natural condition and to prevent any use of the property that will impair or interfere with the environmental value of the property. An important benefit to retaining the Preserve in its natural condition is the additional protection of water resources. The Peace River and Shell Creek provide most of the potable water supply for the city of Punta Gorda. Retention of the natural wetlands of the preserve will filter and protect the water resources for Charlotte County.

Management objectives include:

- Long term protection of the natural resources found on the project site.
- Conduct both vegetative and animal surveys
- Removal of invasive/exotic vegetation.
- Management of habitats utilizing prescribed fire.
- To maintain trails throughout the preserve.

- To provide recreational opportunity for the public through possible enrichment activities

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 final future land use designation for Peace River Preserve is Preservation. (*Exhibit G*). The zoning designation for Peace River Preserve is Environmentally Sensitive (ES). (*Exhibit H*).

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

Peace River Preserve has a diverse assemblage of natural communities located on the property, including Freshwater Tidal Swamp, Hydric Hammock, and Scrubby Flatwoods. The most important tools for the management of the natural resources within the preserve will include prescribed fire and invasive species removal. 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

Freshwater Tidal Swamp

The Preserve is made up of approximately 201.2 acres of Freshwater Tidal Swamp. Freshwater Tidal Swamps occur on floodplains near the mouths of rivers just inland from mangroves or saltmarshes. They are swamp forests with well-developed trees inland and increasingly dwarfed trees towards the coast, often with an extensive mat of convoluted surface roots. The dominant trees are usually cabbage palm (*Sabal palmetto*), black gum(*Nyssa sylvatica*), bald cypress(*Taxodium distichum*), southern magnolia(*Magnolia grandiflora*), and red cedar(*Toona ciliata*). Other typical plants include water tupelo(*Nyssa aquatica*), pumpkin ash(*Fraxinus profunda*), swamp bay(*Persea palustris*), white cedar(*Thuja plicata*), titi(*Cyrilla racemiflora*), wax myrtle(*Myrica cerifera*), cocoplum(*Chrysobalanus icaco*), dahoon holly(*Ilex cassine*), myrtle-leaved holly(*Ilex myrtifolia* Walter), saltbush(*Baccharis halimifolia*) and leather fern(*Acrostichum danacifolium*). Typical animals include those with marine affinities

such as olive nerites(*Neritina reclinata*) and fiddler crabs(*Uca*)genus. Because they are found only near river mouths, their distribution is inherently limited in Florida.

- Continued maintenance of exotic/invasive species

Scrub/Scrubby Flatwoods

The Preserve is made up of approximately 102.65 acres of Scrub/Scrubby Flatwoods. The vegetation is a combination of Scrub and Mesic Flatwoods species: Scrubby Flatwoods often occupy a broad transitions or ecotones between these communities. This community is essentially a Mesic Flatwoods with a Scrub understory. Scrub habitat is best managed using controlled burns. The Florida Natural Areas Inventory, (FNAI) defines Scrubby Flatwoods as widely scattered pine canopy over saw palmetto and scrub oaks; longleaf pine, sand live oak, myrtle oak, Chapman's oak, saw palmetto, wiregrass (FNAI 2015) are some of the common species that grow in these types of environment. Other typical plants include: St. Johns-wort (*Hypericum perforatum*), dwarf huckleberry (*Gaylussacia dumosa*), fetterbush(*Lyonia lucida*), dwarf wax myrtle(*Myrica pusilla*), stagger bush (*Lyonia mariana*), blueberry (*Vaccinium darrowi*), gopher apple (*Licania michauxii*), tar flower (*Barjeria racemosa*), bog buttons (*Lachnocaulon spp.*), blackroot (*Leptandra virginica*), false foxglove (*Agalinis tenuifolia*), white-topped aster (*Sericocarpus linifolius*), yellow-eyed grass (*Xyris difformis var. floridana*) and cutthroat grass (*Panicum abscissum*)(FNAI 2010.)

- Reduce oak overstory by 15-20% to get it back into proper scrub habitat
- Reduce Avian predator perch points by 90%
- Employ mechanical techniques and reduce vegetation by 20%
- Create 15% of open areas in scrub

Hydric Hammock

The Preserve is made up of approximately 48.48 acres of Hydric Hammock. Hydric Hammock is characterized as a well-developed hardwood and cabbage palm forest with a variable understory often dominated by palms and ferns. Typical plants include cabbage palm (*Sabal palmetto*), red cedar (*Toona ciliate*), red maple (*Acer rubrum*), swamp bay (*Persea palustris*), sweetbay (*Magnolia Virginia*), water oak (*Quercus nigra*), southern magnolia (*Magnolia grandiflora*), wax myrtle (*Myrica cerifera*), saw palmetto (*Serenoa ripens*), bluestem palmetto (*Sabal minor*), needle palm (*Rhapidophyllum hystix*), poison ivy (*Toxicodendron radicans*), dahoon holly (*Ilex cassine*), myrsine (*Rapanea pumctata*), hackberry (*Celtis occidentalis*), sweetgum (*Liquidambar styraciflua*), loblolly pine (*Pinus taeda*), Florida elm (*Ulmus americana var. floridana*), swamp chestnut oak (*Quercus michauxii*), American hornbeam (*Carpinus caroliniana*), Walter viburnum (*Viburnum obovatum*), royal fern (*Osmunda regalis*), peppervine (*Ampelopsis arborea*), rattanvine (*Berchemia scandens*), yellow jassamine(*Gelsemium sempervirens*), and Virginia creeper (*Parthenocissus quinquefolia*). Typical animals include green anole (*Anolis carolinensis*), gray squirrel (*Sciurus griseus*) various flycatchers, and warblers. Hydric Hammock occurs on low, flat, wet sites where

limestone may be near the surface and frequently outcrops. Soils are sands with considerable organic material that although generally saturated, are inundated only for short periods following heavy rains (FNAI 2015). The normal hydroperiod is seldom over 60 days per year. Because of their generally saturated soils and the sparsity of herbaceous ground cover, hydric Hammocks rarely burn. Hydric Hammock generally grades into Floodplain Swamp, Strand Swamp, Basin Swamp, Baygall, Wet Flatwoods, Coastal Berm, Maritime Hammock, Slope Forest, Upland Mixed Forest, or Upland Hardwood Forest.

- Continued maintenance of exotic/invasive species

Listed Plant Species

No species of federally or state-listed protected plant species have been observed within Peace River Preserve. Staff will continue to monitor native plants onsite and will update information on this property if listed species are observed.

3.2 Invasive/Exotic Plants and Feral Species Management

Exotic nonnative invasive plant species reduce the quantity and quality of habitat available for native wildlife. Peace River Preserve is surrounded primarily by residential lands, making it slightly more susceptible to invasive nuisance species due to dispersal by birds, wildlife and wind from adjacent ornamental seed sources.

Exotic invasive species that have been observed within the preserve include Brazilian pepper, scissor weed, Cogan grass, melaleuca, and rosery pea. These species are ranked as Category I according to the 2015 List of Invasive Species from the Florida Exotic Pest Plant Council (FLEPPC). Despite all the opportunities, nuisance exotic encroachment is somewhat sparse; all exotic invasive species are at manageable levels. Staff has treated larger infestations through an integrated management that includes both mechanical and herbicide in the past and attempts to eradicate nuisance exotics upon discovery. Due to the small size of current exotic invasive plant infestations there are no plans for re-vegetating treatment areas. Staff will continue to review on a case by case basis if re-vegetation is needed at the time of treatment.

Prevention is the most effective method of control; staff continually monitors the sites for early detection and control of populations. Currently, efforts to eradicate these Category I species closely parallel the exotic species control plans recommended by FLEPPC. Application of the most recent treatment recommendations by species are available via the FLEPPC web site (<http://www.fleppc.org/>) **Appendix B**.

Exotic/Feral Animals

Peace River Preserve does have an active breeding population of feral pigs. Incidental observations including signs of feral animals will be noted as staff monitors the site for exotic vegetation and feral animals. County staff has contracted with the United States

Department of Agriculture since 2016 for the control of exotic/invasive fauna on County conservation lands.

Monitoring

The site is monitored on a regular basis, to exclusively assess the presence of invasive/exotic plant and animal species.

3.3 Restoration

Peace River Preserve has been County owned and maintained since 2008. There are very few enhancement needs. The primary resource enhancement objective would be to maintain the existing habitat. Prescribed burning will be one of the key management practices and will be used when favorable weather conditions occur. There are no plans to re-store or replant native vegetation, the use of prescribed fire, exotic/ invasive treatments, and mechanical reduction are a few methods utilized to maintain this preserve as well as maintain the water quality for potable water in Punta Gorda and Charlotte County.

3.4 Prescribed Burning

Prescribed burning has taken place on Peace River Preserve when it the property was originally acquired back in 2008 for both ecosystem restoration and maintenance. Each of the major vegetation communities found on the park, scrubby flatwoods, and scrub, are fire adapted and the use of prescribed fire is the best way for staff to manage a healthy ecosystem.

Burn priorities will occur when weather conditions are favorable. All management units have perimeter fire-lines which are maintained throughout the year. Burning is coordinated with the DOF. Charlotte County's outreach program to inform residents of the area of the benefits of prescribed burns includes presentations, direct mailings and additional coordination with FFS.

3.5 Listed Species

Charlotte County maintains a list of species observed within the Peace River Preserve by County staff. 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 lists are referred to as "listed species." For management purposes, Charlotte County Community Services also refers to the biological status as reported by FNAI.

Listed Species at Peace River Preserve

Endangered (E), Threatened (T), Candidate (C)

<u>Common name</u>	<u>Genus</u>	<u>Species</u>	<u>State</u>	<u>Fed</u>
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	
American Alligator	Alligator	mississippiensis	T	T
Little blue Heron	Egretta	caerulea	T	
Roseate Spoonbill	Platalea	P. ajaja	T	

Staff will coordinate as necessary with both the Florida Fish and Wildlife Conservation Commission and U.S. Fish and Wildlife Service with regards to management and protection of listed species.

3.6 Inventory of the Natural Communities

The natural communities will be monitored as part of ongoing maintenance activities and any information on identified listed species will be forwarded to the Florida Natural Areas Inventory utilizing the FNAI Field Report Forms or on the FNAI web site at: http://www.fnai.org/FNAI_data/RareSpeciesDataForm.cfm. **Appendix A**

3.7 Archeological, Cultural, and Historical Resources

No archeological survey has been conducted at this time.

4.0 SITE DEVELOPMENT AND IMPROVEMENT

4.1 Acknowledgement Sign

The Community Services Department has provided a main park that displays the department’s logo with a second permanent recognition sign installed below the entrance sign.

4.2 Existing Physical Improvements

Existing physical structures (**Exhibit E**) within the Park includes walking trails and parking areas. These existing physical structures were designed to provide recreational activities while protecting remaining natural resources.

- **Entrance Signage** – An entrance sign, bearing the Charlotte County logo and park name has been installed at the northernmost entrance and includes an additional acknowledgement sign identifying the Park as being purchased with funds from “Conservation Charlotte.” There are also preserve rule signs at each of the gate entrances of the property.
- **Parking** – There is parking in the grass along the FPL easement in front of the main entrance gate that goes into the park.

- **Fencing** – Four strand smooth wire fencing is installed along the Northern easement of the FPL access road and goes around to the west side of the property and ends at the clay creek. and around the parking area. Bollards and board fencing with a walkthrough are located at the eastern end of the parking area. Gates with walkthroughs are strategically placed to allow pedestrian and county staff access into designated areas.
- **Walking Trails** – 1.96 miles of hiking trails exist throughout the preserve. Most trails are native surface and serve as fire breaks for prescribed burning.

4.3 Proposed Physical Improvements

There are no current plans for physical improvements For Peace River Preserve.

4.4 Storm Water Facilities

There are no storm water facilities located on this property.

4.5 Wetland Buffer

There is no wetland buffer on this property at this time.

4.6 Hazard Mitigation

Portions of Peace River Preserve, mainly along the river, 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.

4.7 Education Program

As of right now, there currently are not any educational programs conducted on Peace River Preserve. This will be updated if any programs are offered at this property.

4.8 Permits

There are no permits pertaining to this property now.

4.9 Easements, Concessions and Leases

There is a FPL (Florida Power and Light) easement in order to have access to Peace River Preserve. No concessions have been granted.

Any revenue generated on the site will be placed into a separate account to be used solely for the maintenance of Peace River Preserve. Charlotte County will provide FCT 60-days prior written notice and information regarding any lease, management contract, or concession agreement proposed for the site and will seek FCT approval before granting any such revenue generating contract.

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*). Peace River Preserve has 1.96 miles of hiking trails

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 Education and Outreach

- **Organized excursions into the Preserve.** Organized programs will meet County requirements. Currently there are no programs or organizations that utilize the preserve.
- **Self-guided excursions into the Preserve.** Hiking 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 for hiking, 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 the safety of visitors and the protection of natural resources. Community Services staff ultimately has the responsibility for site security, including prevention of vandalism, property damage, and trespassing. A three-tiered approach to site security is employed:

- **Signage 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

This Preserve was funded by Charlotte County Local Option Sales Tax and ad valorem County taxes. The Park 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
- **Maintenance**
 - Mowing and pruning of vegetation around the entrance, fence, parking area, trails and fire breaks – \$1500.00 annually - in house.
- **Security**
 - None- Property is currently fenced in, with Peace River making it land locked
- **Resource Enhancement**
 - Prescribed fires - \$6560 (for one rotation of all mgmt. units, approximately 410 acres at \$16.00 per acre in house cost).
- **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 2019-2034.

8.0 MONITORING AND REPORTING

8.1 Habitat Conservation Plan

Peace River Preserve is within the reserve design detailed in the Habitat Conservation Plan (HCP). Charlotte County conducts monitoring of Scrub Jays on a 5 year basis for this property. 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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