

# Brooker Creek Preserve Management Plan 2008 Update







# Brooker Creek Preserve Management Plan 2008 Update

Plan approved by the  
Board of County Commissioners  
Pinellas County, Florida  
19 August 2008



Pinellas County Department of Environmental Management  
Environmental Lands Division  
Tarpon Springs, Florida 34688

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Includes:

- Florida Communities Trust P2000/Florida Forever Funded Lands (569 acres)  
Project Numbers: 92-007-P2A, 94-004-P4A, 03-006-FF3
- Southwest Florida Water Management District Owned Lands (1,621 acres)





## EXECUTIVE SUMMARY

Brooker Creek Preserve is approximately 8,000 acres and is located in the northeast corner of Pinellas County (PC). It is the largest remaining natural open space in this highly urbanized county. Brooker Creek Preserve (BCP) was established in the early 1990's by the Pinellas County Board of County Commissioners (BCC) for the conservation, protection and restoration of native wildlife habitats. It provides flood storage within its wetlands and creek floodplains, maintains natural groundwater recharge, and protects the Lake Tarpon Watershed. It was also created for residents to experience, understand, and enjoy native Florida through compatible resource-based recreation and programs at the Brooker Creek Preserve Environmental Education Center (BCPEEC).

The Pinellas County Department of Environmental Management's Environmental Lands Division (DEM/ELD) manages the Preserve including 1,621 acres owned by the Southwest Florida Water Management District (SWFWMD). Funds from the voter-approved Penny for Pinellas Endangered Lands Fund, Florida Communities Trust's (FCT) P2000/Florida Forever Grant Program, and donations allowed acquisition of 2,716 additional acres of Preserve lands. The remaining 3,623 acres were purchased in the 1980's by Pinellas County Utilities (PCU) for wellfield production and protection. When the Preserve was established these acres were included within the boundary. An understanding between DEM and PCU was that these acres could still be used, as needed, for purposes related to potable water supply. Proposed changes to the Future Land Use Map category Preservation-Resource Management (P-RM) and zoning districts P-RM and Preservation/Conservation (P/C) will define PCU uses and their locations within the Preserve. There are currently several water distribution pipes, production and monitoring wells and various other infrastructure related to potable water supply within the Preserve. Access is provided to PCU and Tampa Bay Water for replacement, repair and monitoring of these facilities.

Progress Energy (PE) has several transmission line easements in various locations within the Preserve that were established prior to the establishment of Brooker Creek Preserve. The power company also owns a 177-acre, 300- to 500-foot-wide transmission corridor that bisects part of the Preserve. Although this is not officially part of the Preserve it provides valuable wildlife habitat and a connection between the west and east sides of the Preserve. PC and PE work cooperatively when any work is needed within these powerline corridors.

Several policy, guiding, and contractual documents govern the management and use of the Preserve. Grant contracts between FCT and PC require several natural resource management activities and resource-based recreation facilities on the 569 acres acquired with these funds. The SWFWMD lease intent is "the County's use of the property for the purpose and associated responsibilities of essential site management, habitat enhancement, and resource-based recreational activities." The PC Ordinance 08-29 provides rules and regulations controlling the public's use of PC preserves and

management areas. Most of the Preserve falls under the wellhead protection zone and therefore, falls under the regulations of the Wellhead Protection Ordinance. This ordinance provides information on the prohibition or restriction of all non-residential activities that use, handle, produce, dispose, and/or store regulated substances within the protected zone. Several PC resolutions were adopted to amend the boundaries of the Preserve as new parcels were acquired along with Resolution No. 99-196 that reestablished the commitment of the BCC to the protection and management of BCP and wellfield areas within the boundaries. The BCC Strategic Plan and Strategic Business Plan 2007-2012 “provides overall Board direction on a number of priority issues” including protection and use of preserve lands. The Preserve management plan implements the goals, objectives, and policies of many elements of the County’s Comprehensive Plan. DEM/ELD is currently drafting a five-year strategic plan. And, finally, the PC Recreation, Open Space and Culture System Master Plan (September 2005) provides guidance on the use and protection of regional parks and preserves.

The Preserve is approximately 55% uplands and 45% wetlands. Upland areas are predominantly pine flatwoods with some areas of hammocks, sandhills, and disturbed plant communities. Wetlands consist of shallow, braided channels of Brooker Creek as well as bottomland hardwoods, cypress domes and strands, hardwood and mixed wetland forests, borrow pit lakes, and marshes/wet prairies. There are currently 626 verified floral species, of which 12 are State-listed. Also verified are 20 mammal, 196 bird, 60 herpetofaunal and 194 invertebrate species. Seventeen of the vertebrate wildlife species are State-listed.

The primary focus of the Preserve is the management of its natural resources. With the use of the Pinellas County Wildlands Fire Team and assistance from Florida’s Division of Forestry (FDOF) the established prescribed burn program will continue to restore and maintain the health of these fire-dependent ecosystems and help reduce the risk of high intensity wildfires. Restoration of hydrology and disturbed sites back to their natural conditions is another focus for the Preserve. To date, 19 sites have been restored, totaling over 120 acres. Twenty additional projects totaling over 630 acres are targeted for restoration work.

Fire suppression has created areas of unhealthy dense stands of pine trees and thick understory vegetation. Timber thinning was used within 130 acres of pine flatwoods as a way to decrease tree density. Another method used to treat overgrown, fire-suppressed areas is mechanical thinning of the understory. Over 200 acres have been roller-chopped or hydro-axed to help restore plant biodiversity.

Invasive exotic flora and fauna control, species inventories and security measures (fencing, signage, and law enforcement) continue. Additionally, potential future acquisition of adjacent lands (including the Wilde Trust and CSX properties) not only would expand the Preserve and protect open space, but would also support the goals of the County’s Comprehensive Plan and the ELD strategic plan.

A secondary focus of the Preserve is to provide resource-based recreational opportunities that are compatible with the management and protection of the natural resources. There are currently two hiking trails, two horseback riding trails, and a primitive group camping site. Future resource-based recreational facilities include a potential hiking trail in the Oldsmar area and canopy walkway with an observation tower and amenities associated with the FCT grant contract requirements for Brooker-Anclote Corridor and Four Lakes Hammock areas (i.e. hiking trails, boardwalks, observation platform, fishing docks, canoe/kayak landing, picnic pavilion, and restroom).

The Brooker Creek Preserve Environmental Education Center's (BCPEEC) three-building complex opened in June 2004. Through exhibits, educational programs, and guided hikes, visitors can experience, discover, and better understand the connections between people and the land. Programs offered at the BCPEEC by staff and various partners help visitors make informed decisions about natural and cultural resources and identify personal actions they can take to reduce negative impacts on natural resources. Facilities at the BCPEEC can also be rented through short-term facility license agreements.

Brooker Creek Preserve Management Plan  
2008 Update

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- Pinellas County Environmental Science Forum
- Southwest Florida Water Management District
- Florida Communities Trust
- Progress Energy, Inc.
- The Friends of Brooker Creek Preserve, Inc.
- Florida Division of Forestry
- City of Oldsmar Parks, Recreation & Cultural Affairs

## INTRODUCTION

The Pinellas County Board of County Commissioners established Brooker Creek Preserve (BCP) in the early 1990's (Figure 1). The Preserve was created for the conservation, protection and restoration of native wildlife habitats. It provides flood storage within the wetlands and creek floodplains, maintains natural groundwater recharge, and provides protection of the Lake Tarpon Watershed. It was also created for residents to experience, understand, and enjoy native Florida through compatible resource-based recreation and programs at the Brooker Creek Preserve Environmental Education Center (BCPEEC).

Pinellas County (PC) is approximately 180,000 acres and is the most densely populated county in the state of Florida. At approximately 8,000 acres, Brooker Creek Preserve is by far the largest remaining natural open space in this highly urbanized landscape making it an important regional natural resource (Figure 2). The Preserve's boundaries are roughly the Pasco County line to the north, the Hillsborough County line to the east, the Progress Energy's transmission line right-of-way on the south, and numerous subdivisions (east of East Lake Road) to the west. North of Trinity Boulevard, the Preserve extends westward to the Anclote River.

The Preserve lands are owned by Pinellas County and the Southwest Florida Water Management District (SWFWMD). Management of Brooker Creek Preserve falls under the jurisdiction of the PC Department of Environmental Management's Environmental Lands Division (DEM/ELD). ELD is also responsible for management of 18 other preserves and management areas. Including Brooker Creek Preserve, these lands total over 15,000 acres.

The Preserve is approximately 55% uplands and 45% wetlands. The upland areas are predominantly pine flatwoods with some areas of hammocks, sandhills, and disturbed plant communities. The wetlands consist of shallow braided channels of Brooker Creek, bottomland hardwoods, cypress domes and strands, hardwood and mixed wetland forests, borrow pit lakes, and marshes/wet prairies.

The first management plan was written in 1993 by a team of consultants lead by the University of South Florida. At that time there were several privately owned parcels included within the boundary of the Preserve. Some have been acquired; however, the Wilde Trust and Progress Energy properties remain under private ownership (Figure 3) and are not included within the current Preserve boundary. Since 1993, approximately 2,100 additional acres were acquired, a prescribed burn program established, several upland and wetland restoration projects completed, an exotic control program put in place, numerous dumpster loads of trash removed, long-term ecological data collected, two areas of public hiking trails opened, two horseback riding trails established, the BCPEEC was built and opened, the Friends of Brooker Creek Preserve, Inc. organized, the Environmental Lands Unit of the PC Sheriff's Office were contracted, and the Environmental Lands Division was created with a corps of professional staff and volunteers.



Figure 1. Location of Brooker Creek Preserve, Pinellas County, Florida

# PINELLAS COUNTY ENVIRONMENTAL LANDS

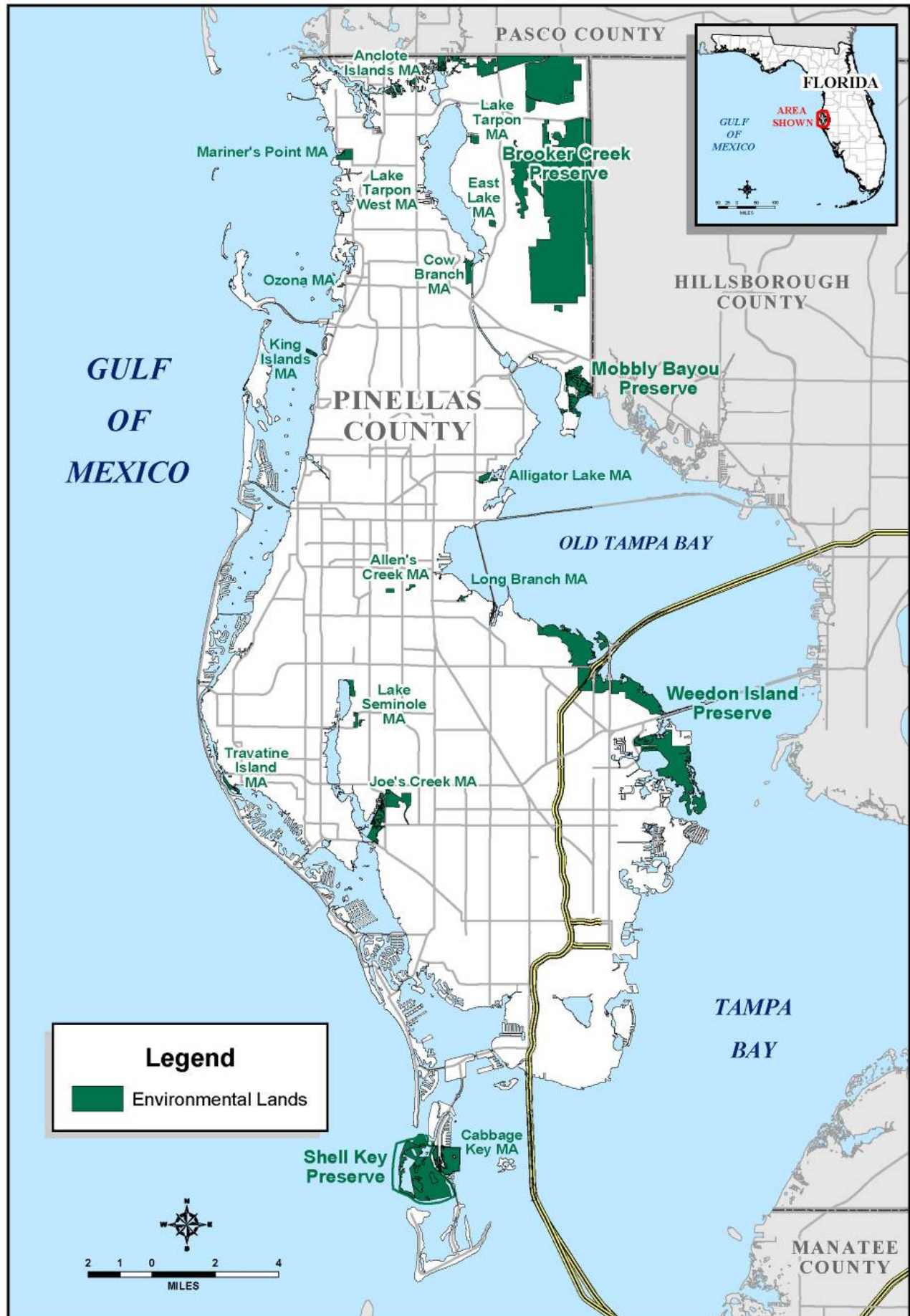


Figure 2. Pinellas County Environmental Lands

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