

LAKE COUNTY



**FERNDALE PRESERVE
ON
LAKE APOPKA**

Management Plan

Project 04-030-FF4

February 2005

FERNDALE PRESERVE ON LAKE APOPKA
DRAFT MANAGEMENT PLAN
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I. INTRODUCTION

This Ferndale Preserve on Lake Apopka Management Plan is intended to describe the future use and management of the 192-acre Ferndale Preserve on Lake Apopka (FPLA). The FPLA is one of the properties ringing Lake Apopka that was sought by several entities for public ownership. Lake Apopka, which was once the second largest lake in Florida, is currently undergoing a 25 to 50 year, \$130 million dollar restoration effort by the St. Johns River Water Management District.



The FPLA will provide the only public access in Lake County to the western shore of Lake Apopka for recreation and scenic purposes. The site was once a citrus grove, but has been abandoned for approximately 15 years. Lake County will create a park/nature preserve by returning the site to a more

natural setting with an active restoration program. The site includes a portion of wetlands (45 acres) which will be protected with park designation. The site offers a full view of Lake Apopka and the surrounding unique terrain from the highest point on site at 165' above sea level. A variety of flora and fauna lend this site to multi use park development.

The site supports many active burrows for the gopher tortoise (113 burrows mapped in February 2004). The site provides excellent forage plots for the tortoise. The site is also suitable for the commensals known to inhabit tortoise burrows such as the Eastern Indigo Snake and the Gopher Frog. Bald eagles have been sited but no nests have been identified. The site contains remnants of the original residents. Native American artifacts such as arrowheads and potsherds have been found. Unfortunately there is large scale looting of artifacts along the shores of Lake Apopka. Lake County will conduct an archaeological inventory and preserve the remaining areas if indicated.



The FPLA will have a network of bicycle and pedestrian trails and will connect to the planned Lake Apopka Loop Trail and Greenway. Besides trails the site will offer both passive and active recreational amenities. A canoe launch for access to Lake Apopka, a fishing pier, observation towers, picnic facilities and a playground are planned for the first phases of development of the site. These activities will help Lake County meet the recreation level of service in its comprehensive plan.



The FPLA, for which funds were made available through the Florida Communities Trust (FCT), will provide a 192-acre park/preserve on Lake Apopka. This Management Plan will be developed in accordance with the Grant Award Agreement and in furtherance of the purpose of the grant application.

II. PURPOSE

There are two main reasons for acquiring the FPLA. Primary reason is to provide recreational and scenic access to Lake Apopka within a natural environment of undisturbed uplands and wetland marshes. Secondary is the ability to provide a natural break in the spread of residential and commercial growth in the area.



Lake County has committed that the project site, FPLA, will be managed only for the conservation, protection and enhancement of the natural resources, and for public recreation that is compatible with the conservation, protection, and enhancement of the site.

The following is a prioritized list of management objectives for the site:

1. Protection of existing site resources.
2. Renovation of disturbed upland and wetland areas of the site.
3. Development and operation of outdoor recreational opportunities.
4. Provision of environmental educational programs.
5. Coordination of volunteer opportunities and programs specific to the park.
6. Recognition and education of the historic, archaeological, and cultural aspects of the Lake Apopka Basin Area.

The following major comprehensive plan directives that will be furthered by managing the site as proposed are from the Lake County Comprehensive Plan.

COMPREHENSIVE PLAN IMPLEMENTATION

The acquisition and management of the site as proposed in the original FCT application would further the following key comprehensive plan directives:

Goal 8: Recreation and Open Space. Lake County shall provide recreation and open space in the unincorporated areas of Lake County to meet the anticipated demands created by future growth and development.

Summary: The acquisition and management of the site will improve the adopted level of service standard for activity-based recreation space of .92 acres per 1000 residents in the County.

Goal 7: Conservation, Conserve Natural Resources Conserve, Protect, Restore and appropriately manage the natural resources and environmental amenities of Lake County.

Objective 8-8: Assure provision of open space through protection of natural areas. Lake County shall assure the provision of open space through land acquisition and through designation of land for Open Space use on the Future Land Use Map.

Policy 8-8.2: Protect and preserve environmentally sensitive lands as open space.

Policy 8-1.7: Acquisition of Recreation Lands.

Summary: Through this purchase, Lake County is acquiring natural areas and open space through public acquisition. This supports the Recreation and Open Space Objectives and Policies to “assure the provision of open space through land acquisition”, “provide a mechanism to protect and acquire environmentally

sensitive areas” and “establish a prioritized list of desirable properties to be acquired for recreation...”

Policy 8-8.1: Provision of Access to Lake County's Lakes. Lake County shall ensure the provision of open space by public and private entities throughout the unincorporated area by maintaining access to lakes and waterways through maintenance and enhancement of its public boat ramp parks. Additional boat ramps parks shall be provided when the demand caused by future residents warrants additional sites and facilities.

Summary: This project as proposed in the original FCT application will provide the only public access to Lake Apopka within Lake County.

Lake County agrees to amend the Future Land Use and the Zoning designation assigned to the project site to open space, conservation, or outdoor recreation as appropriate. Lake County is currently in the process of a Comprehensive Plan update and will include the appropriate changes into the update scheduled for December 2005.

Lake County will ensure that the project site is identified in all literature and advertising as acquired with funds from the “Florida Communities Trust” and operated as a natural conservation area, outdoor recreation area or other appropriate descriptive language.

III. SITE DEVELOPMENT AND IMPROVEMENT

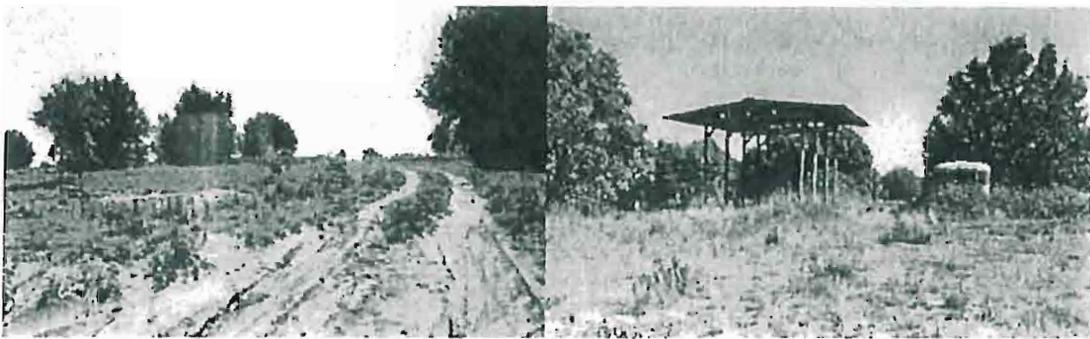
EXISTING PHYSICAL IMPROVEMENTS

The FPLA site was formally a fresh fruit grove and has the remnants of that operation. Most of the fruit trees remaining are the root stock as the main trees have died due to the freezes in 1983 and 1985. There are three (3) old well head sites with some remains of the pump houses visible at two (2) of the sites.

There is perimeter fencing along three sides of the property, barbed wire and wooden poles. The fencing will be replaced after acquisition to help rectify the looting problem currently occurring on site. Two small shed like buildings are on site along with an older travel trailer that will be removed in the initial site improvement phase. The only entrance



to the site is located on CR 455 just north of the intersection of CR 561. The entry road is unimproved sand and will be upgraded in the initial phase to allow for easier entry and exit to the main areas of the site.



PROPOSED PHYSICAL IMPROVEMENTS

Please refer to the Conceptual Site Plan Appendix A

1. Multi purpose paved trail. Paved multi-purpose trail for biking, staking, jogging, walking will be developed on site. This trail will be typical in design to other multi-purpose trails and will adhere to ADA requirements and give for access to all major areas of the site. The trail will be 12' to 15' in width and approximately 1 mile in length on the project site.



2. Scenic Overlook. The project consists of the planning, design and construction of a scenic overlook structure atop a 165 foot hill located in the planned FPLA. The structure will provide one of the most dramatic vistas in the State, with a nearly 360 degree vista of Lake Apopka, some of the highest hills of the Lake Wales Ridge including Sugarloaf Mountain, the Saint Johns River Water Management District's North Shore Restoration Area, and several hundred acres of lowland hammock. The Scenic Overlook pavilion will be approximately 1000 square feet with amenities to accommodate visitors such as interruptive signage, picnic tables, and car and bicycle parking.
3. Picnic Pavilion Camping Area and Associated Elements. Group picnic pavilions will be developed on two separate areas of the site. Each pavilion area will include a playground, grills, trashcans, volleyball court, and open play area and will encompass three to five acres in overall area. One pavilion will be associated with the Canoe Launch and Fishing Pier with access to the multi-purpose trail and nature trails leading to the

Observation Towers. The other pavilion will be associated with the Primitive Camping area to act as a gathering spot for group camping functions. A permanent ADA accessible chemical toilet will be provided in the primitive camping area. Parking areas will be provided at scenic overlook and the Fishing Pier/Canoe Launch areas. Each pavilion will be approximately 1800 square feet with a concrete floor. The Fishing Pier will be a wooded structure of approximately 125' in length and 12' in width and will be ADA accessible.

4. Nature Trails and Bird Observation Deck/Tower. A nature trail system around the wetland and restorations areas will provide education, recreation and hiking opportunities. The trails will extend to the shoreline of Lake Apopka for access to the two (2) observation towers planned for the site. The Observation Towers will be approximately 18 feet in height with a floor area of 144 square feet. The Nature trail system will be a single track trail of approximately 1.25 miles in length.
5. Upland Restoration of Disturbed Areas. Native trees and plant restoration will occur in areas of the site that have been disturbed over the years. Disturbance has occurred on a majority of the uplands on site,



approximately 137 acres. The upland portion of the site shows a vegetative community that consists entirely of successive species following the long-term use of the site for citrus grove. This community if natural, would be been classified by FNAI as Xeric Upland and by FLCFC as Longleaf Pine – Xeric Oak (code 412). Because it has been cleared it is now classified in the FLUCFCS code as Other Open land (code 190). Success in restoration of the disturbed uplands on this site should be accomplished within a reasonable period of years. The proximity of pristine sites should provide seed sources and the current recruitment of many desirable species is a good indicator. Management through the use of controlled burns, removal of exotics, and manipulation of dominant species (such as laurel oak canopy) and the introduction of appropriate species are well-established restoration techniques for natural communities. Please refer to Appendix A, Exhibit F, Natural Communities.

6. Wetland Restoration. Wetland portions of the site consist of two areas of forested wetlands adjacent to Lake Apopka and the actual lake shoreline. The forested wetland on the southeast corner of the site is

actually part of a much larger system and the smaller northeastern section also extends off site. Please refer to Appendix A, Exhibit F, Natural Communities.

7. FPLA Entry Road and Parking: A paved road of approximately one third mile will be constructed providing access to and exit from the main entrance on CR 455. An internal road system will be constructed providing access to the Scenic Overlook and the Canoe Launch/Fishing Pier areas. Parking areas will be constructed for approximately 100 spaces.

Lake County does commit that allowance for recreation use and wildlife habitat in stormwater facilities will be an important element of design consideration on this project. Required stormwater ponds will be designed with shallow slopes without fencing in order to promote access and ease of maintenance. As part of Lake County code, stormwater facilities will be provided for parking areas and other development areas.

8. Canoe Launch and Fishing Pier and Blueway: Lake County will construct a Canoe Launch/Fishing Pier on the shore of Lake Apopka. Lake County is currently developing its Blueway Plan and will adhere to all state and federal guidelines concerning the placement of directional signage along the designated route.

Lake County anticipates completion of the Master Site Plan for the FPLA during the summer of 2006. A copy of this plan will be sent to FCT for review to ensure consistency with the Management Plan.

Human intrusion into any natural setting will have an impact in a variety of ways. It is planned that regulatory/educational signs, site supervision, and proper design will prevent as much impact as possible. Best management practices will be used to offset such occurrences. Closing areas, restricting access, restoration projects in addition to the above methods will be used to maintain site integrity and vitality.

The development of user-based recreation improvements will be limited on the site. Future development of restrooms, based on user demands, may occur.

Alternations to the land as result of improvements to the site will be designed and developed to the highest environmental standards.

Lake County adopted the Lake Apopka Greenway and Trails Master Plan in January 2002. The purpose of this plan was to create a framework for implementing a system of bikeways, trails, and greenways around Lake Apopka. The proposed Lake Apopka Loop Trail will connect the FPLA to the St. Johns

River Water Management District lands on the north shore of Lake Apopka and to the popular West Orange Trail system and the new South Lake Trail.

The provision of bike racks and other bicycle friendly amenities will be provided in the design and development plans for the Scenic Overlook and the Canoe Launch/Fishing Pier areas.

Trash cans will be an important element in the design and development of the park, especially in the high use areas.

It is acknowledged and accepted by Lake County that any proposed modifications of the Management Plan or undertaking any site alterations or physical improvements that are not addressed in our approved Management Plan requires prior FCT review and approval.

LANDSCAPING

Approximately one to two acres of the site will be landscaped. This landscaping will be a combination of native plant restoration to disturbed areas and site improvement for beautification and security. Lake County will use primarily Central Florida native trees and shrubs in the restoration and beautification process. Oaks, pines, and cypress are the predominant trees on site and will be used as appropriate. It is anticipated that the landscaping process will begin within the first year after site ownership is accomplished and will take five years for full completion. Landscaped areas are not included in restoration area totals. Areas to be landscaped are shown in Appendix A, Exhibit D, Restoration Site Plan.

WETLAND BUFFER

As a part of the site design and development a 10 foot buffer will be provided between all paved trails and wetlands, a 25 foot buffer between minor facilities and the wetlands, and a 100 foot buffer between major facilities and any wetlands.

ACKNOWLEDGEMENT SIGN

Lake County will place at least one sign identifying the project site being purchased with funds from "Florida Communities Trust". The sign will include the FCT logo and the year the site was acquired. The sign shall be located at the entrance to the site.

PARKING

The primary access to the site will be as per the conceptual plan in Appendix A. The main entrance will serve vehicle and bicycle traffic entering and exiting the

site from CR 455. A maintenance entrance will be located at the northwest corner of the site utilizing an existing driveway used for the former grove operation. Parking spaces on site will be limited to those designed for the picnic pavilions, canoe launch & fishing pier, the scenic overlook and expected to total approximately 100 spaces. It is anticipated that an environmentally friendly design will be incorporated into the parking areas, where possible, through the use of pervious material. A combination of materials such as fencing, landscaping, and traffic control barriers will be used to contain vehicles in the parking areas.



**Entrance to Project site off CR 455
CSX abandoned Railroad Corridor
Location for the Lake Apopka Loop Trail**

At the current time there is no existing sidewalk or bike trail access to the site. It is anticipated that the Lake Apopka Loop Trail will provide multi-modal access to the site when complete.

STORMWATER FACILITIES

Lake County does pledge that allowances for recreational use and wildlife habitat in stormwater facilities will be an important element of design on the project. Required stormwater ponds will be designed with shallow slopes without fencing in order to promote access and ease of maintenance. As part of Lake County code, stormwater facilities will be provided for parking areas and other developed areas.

HAZARD MITIGATION

Acquisition of the project site will preserve 100-year flood plain areas from commercial and residential development while providing open space and recreational opportunities in these areas. County code requires that major structures be constructed outside of the 100-year flood plain. It is the County's intention to provide restoration and improvement to hazard areas to enable educational and recreational opportunities and awareness of this unique ecosystem.

The County has no Local Mitigation Strategy for this area.

A map of the site indicating the 100-year flood plain is included as Appendix A.

PERMITS

Permits required for this site may include stormwater from SJRWMD, well, septic, driveway connection, drainage, building, and zoning from Lake County, flood plain from FEMA, In addition an environmental permit regarding gopher turtles from Florida Fish and Wildlife Commission will be necessary.

EASEMENTS, CONCESSIONS, AND LEASES

The project site has one easement as shown on Appendix E. This easement was provided to give access to the Karst, Inc. properties on the eastern shore of Lake Apopka. Once the acquisition of the project site is complete the easement will no longer be necessary and can be eliminated.

There are no concessions, or leases associated with this site. There are no proposed or anticipated easements, concessions, or leases for the project site. It is anticipated that there could be fees associated with reservation use of the picnic pavilion on the site. No specific fee has been established at this point.

Lake County will provide FCT 60 day prior written notice and information regarding any lease of any interest, the operation of any concession, any sale or option, the granting of any management contracts, and any use by any person other than in such person's capacity as a member of the general public and no document will be executed without the prior written approval of FCT. It is also understood that prior to the execution of any document it will require prior written approval by FCT.

Fees collected related to the project site will be placed in a segregated account solely for the upkeep and maintenance of the project site.

IV. NATURAL RESOURCES

NATURAL COMMUNITIES

The proposed site for the FPLA consists of 192 acres, located on the western shore of Lake Apopka in Section 27 of Township 21 South, Range 26 East in Lake County. The site has two distinct vegetative communities and open water. The majority of the site is upland (#1 on Appendix G, +/- 137 acres) with two separate wetland communities adjacent to the lakeshore (#2, +/- 26 acres and #3, +/- 24 acres on Appendix G). This community, if natural, would have been classified by FNAI as Xeric Upland and by FLCFC as Longleaf Pine-Xeric Oak (code 412). All of the uplands area of the project site are considered disturbed, approximately 137 acres.

The upland portion of the site shows a vegetative community that consists entirely of successive species following the long-term use of the site for citrus grove. The site shows considerable variation in elevation and soils of several types of sand with excessive drainage. Some portions of the site show more recruited native species than others, possibly because some areas were cleared more recently or were used for other agricultural purposes such as row crops.

Success in restoration of the disturbed uplands on this site should be accomplished within a reasonable period of years. The proximity of pristine sites should provide seed sources and the current recruitment of many desirable species is a good indicator. Management through the use of controlled burns, removal of exotics, and manipulation of dominant species (such as laurel oak canopy) and the introduction of appropriate species are well-established restoration techniques for natural communities. Please refer to Appendix A, Exhibit F, Natural Communities.

Wetland portions of the site consist of the two areas of forested wetlands adjacent to Lake Apopka and the actual lake shoreline. The forested wetland on the southeast corner of the site (#2) is actually part of a much larger system and the smaller northeastern section (#3) also extends off site. Wetland portions of the site would be classified by FNAI as Hydric Hammock and as Mixed Wetland Hardwoods (code 617) by FLCFC. Review of historical aerial photographs indicates that this wetland (#3, +/- 24 acres) was partially cleared and used for truck-farming as late as 1941, so at least a portion of the site is second growth. All the extensive forested wetlands around the lake were altered when the lake levels were permanently lowered around the turn of the century.

Management techniques to protect and enhance the communities will include restoration of disturbed areas with native plants and trees. This site will be able to use prescribed burning to a small degree. The amount of exotic intrusion is widespread but the restoration efforts in the uplands and wetlands will be one of the first steps to perform. A preventative maintenance program to limit exotic intrusion will be instigated as part of the overall maintenance program on site.

LISTED ANIMAL SPECIES

The following wildlife species were observed on site: Five-lined skink, gopher tortoise, black racer, green anole, American alligator, Gray Catbird, Brown thrasher, Mockingbird, Blue Jay, Morning Dove, red-tailed hawk, bald eagle, black vulture, Osprey, white ibis, green heron, great blue heron, Anhinga, northern parula warbler, Northern cardinal, Eastern towhee, red-winged blackbird, and common grackle.

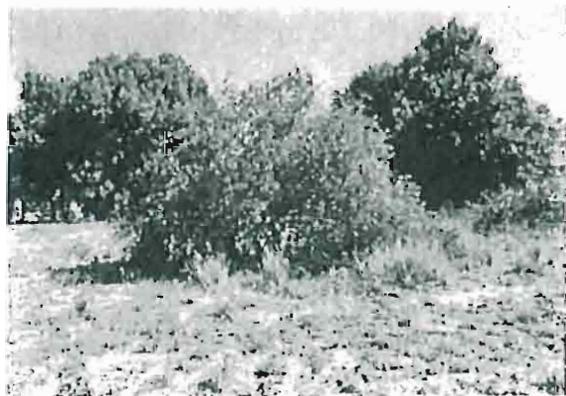
There is no habitat on the site that is identified by the Florida Fish and Wildlife Conservation Commission (FWC) as a Strategic Habitat Conservation Area. While there are no listed species on site the proposed site restoration will provide habitat for such opportunity.

The only mammals sighted were the Eastern cottontail rabbit and otter. Tracks and scat were identified for raccoon, bobcat, and opossum.

Lake County will submit a copy of the draft management plan to the FWC for comments within 30 days of submittal to FCT.

LISTED PLANT SPECIES

In areas that have been cleared for more than 10-15 years, dominant trees found are: Laurel Oak, Live Oak, Black Cherry, Sabal Palm, Hackberry, Persimmon, Hercules Club, and Laurel Cherry. Shrubs, vines and ground covers observed in this area include: Elderberry, broomsedge, dog fennel, Spanish needle, peppergrass, saw palmetto, hairy indigo, beauty berry, catbrier, wild grape, Golden aster, Trumpet vine, sumac, Maypop, Prickly pear cactus, saltbush, peppervine, and dotted horsemint. Two uncommon shrubs were found on site: Firebush and a large pawpaw shrub



Vegetation in the wetlands shows a transitional edge of Hackberry, Elderberry, Laurel Oak, Water Oak, Sabal palm, wild grape, and exotic bananas. The interior of the wetland is dominated by red maple, sweetbay, green ash, dahoon holly, red bay, swamp dogwood and Virginia willow.

The shoreline and littoral zone of the lake, (identified as #4 on Exhibit F, Natural Communities) is dominated by typical transitional species upslope from the shoreline: elderberry, various sedges, blackberry, buttonbush, frostweed, pokeweed, Carolina willow, and rouge plant. Exotic species in this area include paragrass, Taro, and primrose willow. The littoral edge of the lake is densely covered with emergent species: pickerelweed, duck potato, sofrush, and lizard tail.

INVENTORY OF NATURAL COMMUNITIES

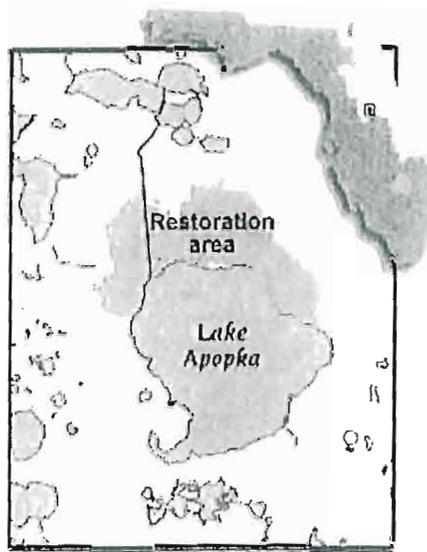
Lake County will seek to initiate a biological inventory survey of the natural communities on the FPLA after acquisition. It is believed that a monitoring cycle

of once every two years will be sufficient to properly keep up with changes in the natural communities.

Lake County will be responsible to report any information on identified listed species to FNAI on the appropriate forms. Forms to report new plant and animal species to FNAI are included in the Appendix C of this Plan.

WATER QUALITY

There are no water bodies on site other than the shoreline of Lake Apopka. Lake County will adhere to the guidelines of the SJRWMD in relation to water quality in the Lake Apopka Basin. The goal of the Lake Apopka program is "to restore the lake to Class III or better water quality."



Lake Apopka has a history of more than 100 years of human alteration, beginning with construction of the Apopka-Beauclair Canal in 1888. In 1941, a levee was built along the north shore to drain 20,000 acres of shallow marsh for farming. The discharge of water rich in nutrients from agricultural and other sources produced conditions that created a chronic algal bloom and resulted in loss of the lake's recreational value and game-fish populations.

The restoration phase of Lake Apopka is expected to continue for at least 25 years. It involves filtration of lake water through a marsh flow-way and annual harvests of gizzard shad to reduce the phosphorous concentration in the lake, adoption and implementation of a waste allocation rule to control phosphorous concentration in the lake, re-establishment of more-natural lake level fluctuations and flows, planting of native emergent plants to stabilize sediments and improve shoreline habitat, and restoration of the former muck farms to aquatic and wetland habitats.

UNIQUE GEOLOGICAL FEATURES

Elevations on the project site range from the USGS reported 66 foot level of Lake Apopka to a prominent hill on the site of 165 feet. From this vantage point one can see the entire Lake Apopka system, as well as the downtown Orlando

skyline. Having access to visual perspectives such as this is critical for Central Floridians to understand Lake Apopka in its regional context.

Long term care and preservation of a natural resource depends largely upon people having an interest in it. The more people that can connect with a resource and begin to feel a sense of ownership with a resource the greater likelihood they will take responsibility for its conservation and protection.

TRAIL NETWORK

The project site is identified as the Lake County Lakefront Preserve in the Lake Apopka Greenways and Trails Master Plan adopted by Lake County in April 2002.

The vision for the Lake Apopka Loop Trail is a 57-mile facility encircling Lake Apopka and linking parks, open space, and communities with a paved multi-use trail. The trail will provide visual access to the lake in some places and physical access in others. It will serve communities within the basin and will help meet regional demand for outdoor recreation. It also is a critical component for pursuing an eco-tourism strategy for the Lake Apopka Basin. Trails are tourist draws in their own right, and also function as important support facilities for other eco-tourism activities.

The Lake County Board of County Commissioners at the March 2005 meeting adopted the Lake County Parks & Recreation Master Plan which included an updated Trails Master Plan in which the implementation of the trails system is described. The citizens of Lake County voted in November 2004 to implement an increase in property tax of .33 mills dedicated to environmental lands, recreation, and trails. These funds will support the goals of the newly adopted Master Plan in implementing and managing the Trails system in Lake County.

Please see [Appendix A](#) for details of the Lake Apopka Loop Trail and the trail system on site.

GREENWAYS, WILDLIFE CORRIDORS, CANOE TRAILS

This project site will provide opportunity for aspects of a greenway and wildlife corridor as well as a canoe trail. As a large open space with natural communities we anticipate that this site will become a bird corridor stopover. Design and operation of the site will include concern for both the public and the wildlife use of the site. Public usage area will be spread so as to provide greenspace and plant restoration areas for wildlife usage.

Resource protection activities and management efforts will be coordinated by Lake County Parks and Recreation with appropriate agencies such as Lake

County Water Authority, Florida Fish and Wildlife Conservation Commission, Florida Forestry Division, St. Johns River Water Management District and others as appropriate. A map depicting the project site and showing the canoe trail is included as Appendix A.

V. RESOURCE ENHANCEMENT

UPLAND RESTORATION

The approximate acreage of the upland acres that will be replanted and maintained to restore project site to a natural community is 94 acres. The restoration plan will include the clearing of the degraded areas of exotic or unwanted materials and planting of locally native species. The initial plan is to re-establish the long-leaf pine overstory that characterized these rolling sandhills. As the overstory is replanted, the focus will shift to ground cover plantings. In the ten year cycle of this plan, the objective is to replant all of the ruderal acreage in longleaf pine. As the pines are thinned to approximate a less dense and widely spaced pine distribution, new areas of ground cover will expand in its coverage, and the distribution of long leaf pine will approach a much lower density stocking and a more scattered distribution typical of the Northern Lake Wales Ridge sandhill community.

The composition of the ground cover planting will include the rare species found in the Northern Lake Wales Ridge sandhill locations. Seed collections will take place at nearby sites depending on owners' permissions. In addition, seeds will be collected from other natural areas with an emphasis placed on staying as geographically close as possible to the project site. An attempt will be made to stay within 50 miles of the project site for all plant material. However, availability and community type compatibility may have more bearing on selection than actual distance.

Lake County will implement a photo-monitoring program for all upland restoration areas on the project site.

Upland restoration areas are shown on the attached Appendix A.

WETLAND RESTORATION

At the project site, Hydric Hammock occurs in two areas adjacent to Lake Apopka. These communities are functioning in a natural state and should continue. This is contingent on hydroperiods not being altered.

Restoration efforts on the wetland areas will begin in early 2006 and take up to five years to accomplish. Exotic removal will be one of the first steps in restoration. Acquisition of replacement plant material will be accomplished in the second year with planting starting the third year of the process.

Lake County will implement a photo-monitoring program for all wetland restoration areas on the project site.

Wetland areas are shown on the attached Appendix A.

INVASIVE EXOTIC PLANTS

Removal efforts will begin with locating and identifying specific types of invasive material. A plan and timeframe will be established to carry out the project. Use of the Exotic Pest Plant Council's List of Florida's Most Invasive Species will be used in identifying exotics on site. This list is provided in the Appendix of this Plan. Proper timing and awareness of animal habitat will be of prime consideration in the planning effort. Typical removal techniques of chemical spray combined with manual and equipment removal will be incorporated into the plan. Cooperative efforts with the Lake County Mosquito and Aquatic Plant Management section and the Lake County Water Authority will be used to accomplish this task. It is anticipated that the removal effort will begin late 2006 and take up to three years to accomplish.

Monitoring of exotic invasion to the site will be accomplished on a yearly basis by Lake County staff as part of the regular park inspection program.

PRESCRIBED BURN PLAN

Lake County will use Prescribed Burning as a method to control wanted exotics and excessive undergrowth in the Uplands areas of the project site. Lake County will coordinate these activities with the Division of Forestry and the Lake County Public Safety Department. Lake County will develop a Prescribed Burn Plan for the project site and a neighborhood outreach program to inform the residents in the area of the benefits of the prescribed burn.

DESIGNATED SPECIES PROTECTION

The welfare of designated species of plant and/or animal is an important concern for Lake County. In many cases, these species will benefit from proper management of their natural communities. At times, however, additional management measures are needed because of poor conditions of some communities, or because of unusual circumstances that aggravate the particular problems of a species. Lake County will consult and coordinate with the appropriate federal, state, and local agencies for management of designated species.

Regular maintenance of the various communities at the project site will facilitate the conservation of designated species that occur in these communities. Monitoring will occur in conjunction with the habitat restoration and maintenance to detect any changes the resource management activities might produce.

FERAL ANIMAL PROGRAM

A feral animal program will be established for the project site as a part of the overall FPLA Standard Operating Procedures. This program will be accomplished by staff on a regular basis and will begin immediately upon staffing

the park. A cooperative effort with the Lake County Animal Control Division will be a standard element of the procedures. Lake County will conduct a feral animal assessment of the project site within 60 days of acquiring the project site. The long term monitoring program for the removal of feral animals will be implemented by the Lake County Animal Control Division.

VI. ARCHEOLOGICAL, CULTURAL, AND HISTORICAL RESOURCE PROTECTION

An Archaeological Assessment and Master Site File Evaluation was completed in accordance with the appropriate federal and State of Florida requirements. Lake County agrees in principle and practice with all the appropriate federal and State of Florida guidelines as applicable to preservation and conservation of archaeological and historical resources. If significant archaeological and/or historical resources, or human remains, are encountered on the project site, a certified professional archaeologist will be contracted and all findings will be documented to the Division of Historical Resources, State Historic Preservation Officer, and the Compliance Review section.

A partial listing of previously recorded archaeological sites located near the subject proposed FPLA site include, 8LA51, 8LA58, 8LA243, 8LA244, 8LA273, 8LA434, 8LA518, 8LA519, and 8LA543.

Lake County will enact the policy that the collection of artifacts or the disturbance of archaeological and historic sites on the project site will be prohibited unless prior authorization has been obtained from the Department of State, Division of Historical Resources. Lake County agrees that the management of the archaeological and historical resources will comply with the provisions of Chapter 267, Florida Statutes specifically Sections 267.061(a) and (b).

Lake County shall perform an archaeological survey of the project site June 2006.

VII. EDUCATION SIGNS AND PROGRAMS

Lake County is committed to providing interpretive signs intended to educate visitors about the natural environment and any known archaeological and historic resources on the project site.

EDUCATIONAL PROGRAMS

Lake County is committed to providing at least 24 regularly scheduled environmental or historical educational programs at the project site conducted by trained educators or resource professionals.

Types of programs intended for the site are plant and animal identification, habitat types and restoration, upland and marsh identification, weather factors,

soil identification, native plant information, prescribed burns, nature crafts, nature art, bicycling, canoeing and others. Target groups for educational program would include senior citizens, special interest groups, children, school groups, scout groups, and environmental groups. These programs will be led by environmental and science professionals from the Lake County Water Authority, Lake County Cooperative Extension Services, Lake County Soil and Water Conservation District, Lake County Government, Lake County School Board and retired professionals from the area.

VIII. COORDINATED MANAGEMENT

Project site is not directly adjacent to other parks or publicly owned lands.

IX. MANAGEMENT NEEDS

MAINTENANCE

Property maintenance, which includes trash removal, security and routine maintenance, will be the responsibility of Lake County Parks & Recreation Department. Responsibility will include budget preparation, equipment maintenance, personnel, volunteer coordination, training and all other aspects of maintenance required by the project site.

SECURITY

Security at the project site will be the primary responsibility of the Lake County Parks and Recreation Section. Security problems requiring law enforcement will be coordinated with the Lake County Sheriffs Office. In general, Lake County Parks & Recreation staff will provide day to day supervision and first contact with security situations. Volunteers will be able to assist the Parks and Recreation staff by providing the eyes and ears in the park and notify staff of concerns or problems.

Measures and design features that will be used to deter security problems such as vandalism and theft can be fencing, gates, signage, staff visibility, law enforcement visibility, landscape borders, and vandal resistant materials.

STAFFING

Staffing for the park will require the use of permanent full time employees to provide supervision, programming, and maintenance. Staffing needs will grow as the park develops. One of the key responsibilities of the Parks and Recreation Section staff will be to promote, and coordinate the use of volunteers who will assist the park in many areas of responsibility.

X. COST ESTIMATES AND FUNDING SOURCES

STRUCTURES AND IMPROVEMENTS

Scenic Overlook	\$ 25,000
Picnic Pavilion x2	\$200,000
Playground	\$ 65,000
Volleyball Court x 2	\$ 2,500
Entry Road and Parking	\$275,000
Site Preparation	\$120,000
Irrigation	\$ 20,000
Multi-Use Trail	\$250,000
Nature Trail	\$ 20,000
Utilities	\$ 25,000
Observation Platform x 2	\$ 25,000
Fishing Pier	\$100,000
Canoe Launch	\$ 7,500

Funding source for these structures and improvements would come from a variety of sources including the Lake County General Fund Tax based budget, Infrastructure Sales Tax Funds, Parks and Recreation Impact Fees, State and Federal Grant Assistance Programs, Florida and Lake County Boating Improvement Funds, Lake County Fish Conservation Funds, donations, and volunteer organization fund raising activities.

NATURAL RESOURCE PROTECTION

It is anticipated that activities and funding for Natural Resource Protection will come from the development and on-going park maintenance process.

RESOURCE ENHANCEMENT ACTIVITIES

Upland Restoration	\$75,000
Wetland & Littoral Zone Restoration	\$37,500

Other associated activities and costs will be included in the general operating budget of the park.

ARCHAEOLOGICAL AND HISTORICAL RESOURCE PROTECTION

It is anticipated that activities and funding for Archaeological and Historical Resources Protection will come from the development and on-going maintenance process.

EDUCATION PROGRAM

It is anticipated that activities and funding for the Educational Programming will be included in the general operating budget of the park.

MAINTENANCE

Lake County will assume all costs of developing, maintaining and enhancing the proposed site. Routine maintenance is estimated not to exceed \$400 per acre per year or \$76,800.

SECURITY

It is anticipated that activities and funding for the Security will be included in the general operating budget of the park.

STAFFING

Specific staffing levels have not been determined at this point. It should be understood that the project site will have sufficient staff from the Parks & Recreation Section and designated staff as the park construction process moves forward.

SUMMARY OF COST ESTIMATES

Site Development, Structures and Improvements	\$1,135,000
Resource Restoration	\$ 112,500
Maintenance and Operation	<u>\$ 76,800</u>
Total Estimate	\$1,324,300

XI. PROIORITY SCHEDULE

Design and construction of paths and support facilities will be phased in the site in accordance with the Lake County Capital Improvements Plan. Resource Enhancement will also be phased in and accomplished with the Lake County Parks & Recreation Section according to the following time schedule:

- Site security construction and temporary entry road construction.

Efforts to secure the site and provide a temporary entry road will begin immediately after acquisition and take 12 months to complete.

June 2005-----June 2006

- Conduct a Biological Inventory Survey of Natural Communities

Immediately after acquisition anticipate one year for completion.

June 2005-----June 2006

- Conduct an archaeological survey of the project site Summer of 2006.

June 2006-----September 2006

- Exotic Removal Program

It is expected that the exotic removal program will begin in 2006 and take up to two years to complete.

January 2006-----June 2008

- Upland Restoration Program

It is anticipated that the upland restoration effort will begin in 2007 take up to ten years to complete.

June 2006-----June 2016

- Wetland & Littoral Zone Restoration Program

It is anticipated that the wetland restoration effort will begin 2006 and take up to five years to complete.

June 2006-----September 2011

- Nature Trail and Observation Decks

The nature trail system will developed in coordination with the restoration of the specific areas. Construction should be able to begin after December 2006 and take up to four years.

December 2006-----January 2011

- Picnic Pavilion/Scenic Overlook/Fishing Pier

Site preparation and construction of these facilities should begin in the summer of 2008 and take up to four years to complete. Assistance in funding for these facilities will be necessary. Details of the site development for these structures will include the playground facilities, volleyball courts, and other user amenities associated with the picnic pavilion and fishing pier.

June 2008-----January 2013

- Multi-Purpose Trail

The multi-purpose trail will be developed in coordination with the site development and restoration of the specific areas. Trail construction will be phased and should begin with the development of the first picnic pavilion/scenic overlook in June 2008. It is anticipated that multi-purpose trail construction will be phased into four parts taking 10 years to complete.

June 2009-----June 2019

- Education Programs

Education programs will begin when the usage areas are considered safe for public access and use. It is anticipated that such programs would be able to begin in late 2008.

September 2008

XII. MONITORING AND REPORTING

Lake County will be responsible for preparing the Annual Stewardship Report due FCT by April 30th of each year, beginning in 2006 of each, which evaluates the implementation of the Management Plan.

Lake County acknowledges that any proposed modifications of the Management Plan and/or undertaking any site alterations or physical improvements that are not addressed in the approved Management Plan requires prior FCT review and approval.

Dugan, Susan

From: Irby, Susan
Sent: Friday, May 30, 2008 3:07 PM
To: Dugan, Susan
Subject: FW: GASB 45 OPEB Report DRAFT
Attachments: Lake County OPEB Report Draft.PDF

FYI – Only a draft, still had not gone through their peer review.

From: Piotr.Krekora@gabrielroeder.com [mailto:Piotr.Krekora@gabrielroeder.com]
Sent: Friday, May 30, 2008 2:13 PM
To: Irby, Susan
Subject: FW: GASB 45 OPEB Report DRAFT

I haven't noticed that Jim did not copy you.
I am really sorry for that. I can imagine the position you were put in.
I truly apologize.
Sorry again

From: Rizzo, Jim (FLP1)
Sent: Thursday, May 22, 2008 4:14 PM
To: 'Barbara Lehman (blehman@lakecountyclerk.org)'
Cc: Neiswender, Matthew (FLP1)
Subject: GASB 45 OPEB Report DRAFT

Attached is a copy of our Actuarial Report concerning your GASB 45 OPEB costs and liabilities, in draft form. We are calling it "draft" for two reasons. It has not yet gone through our final Peer Review step to be considered final. Secondly, if you have any changes, edits or typos that we can make, we will be glad to do so.

Please review the Report and get back with us for a telephone conference or other discussion to answer your questions.

*Please note the **NEW ADDRESS** and office **EXTENSION #** below.*

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