Lee County Board Of County Commissioners
Agenda Item Summary **Blue Sheet No. 20031312**

1. REQUESTED MOTION:

ACTION REQUESTED: Request approval of the Hickey's Creek Mitigation Park Land Stewardship Plan.

WHY ACTION IS NECESSARY: The procedure for management of preserves owned by Lee County is part of joint agreements with the Florida Communities Trust and the Florida Fish and Wildlife Conservation Commission.

WHAT ACTION ACCOMPLISHES: Gives Lee County Parks and Recreation staff authority to implement the plan.

2. DEPARTMENTAL CATEGORY: COMMISSION DISTRICT # 5	3. MEETING DATE:
C11A	12-02-2003

4. AGENDA:	5. REQUIREMENT/PURPOSE: (Specify)	6. REQUESTOR OF INFORMATION:
X CONSENT	STATUTE	A. COMMISSIONER
ADMINISTRATIVE	ORDINANCE	B. DEPARTMENT Parks & Recreation
APPEALS	ADMIN. CODE	C. DIVISION
PUBLIC	X OTHER	BY: John Yarbrough
WALK ON	Agreement	John Yarbrough
TIME REQUIRED:		

7. BACKGROUND:

The Hickey's Creek Mitigation Park is owned by Lee County and managed jointly with the Florida Fish and Wildlife Conservation Commission. The HCMP Stewardship Plan is revised every five years and includes specific descriptions of landforms, animal and plant populations and an action plan. The action plan contains details of management activities to be implemented in the next 5 years by both Lee County Parks and Recreation and the Florida Fish and Wildlife Conservation Commission.

8. MANAGEMENT RECOMMENDATIONS:

CCM

9. RECOMMENDED APPROVAL:

A Department Director	B Purchasing or Contracts	C Human Resources	D Other	E County Attorney	F Budget Services (CA for 11/18/03)				G County Manager
					OA	OM	Risk	GC	
11-3-03				11/14/03	CA 11/17/03	11/20/03	11/17/03	11/17/03	

10. COMMISSION ACTION:

_____ APPROVED
_____ DENIED
_____ DEFERRED
_____ OTHER

Rec. by CoAtty
Date: 11/14/03
Time: 9:14 am
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RECEIVED BY COUNTY ADMIN: CA
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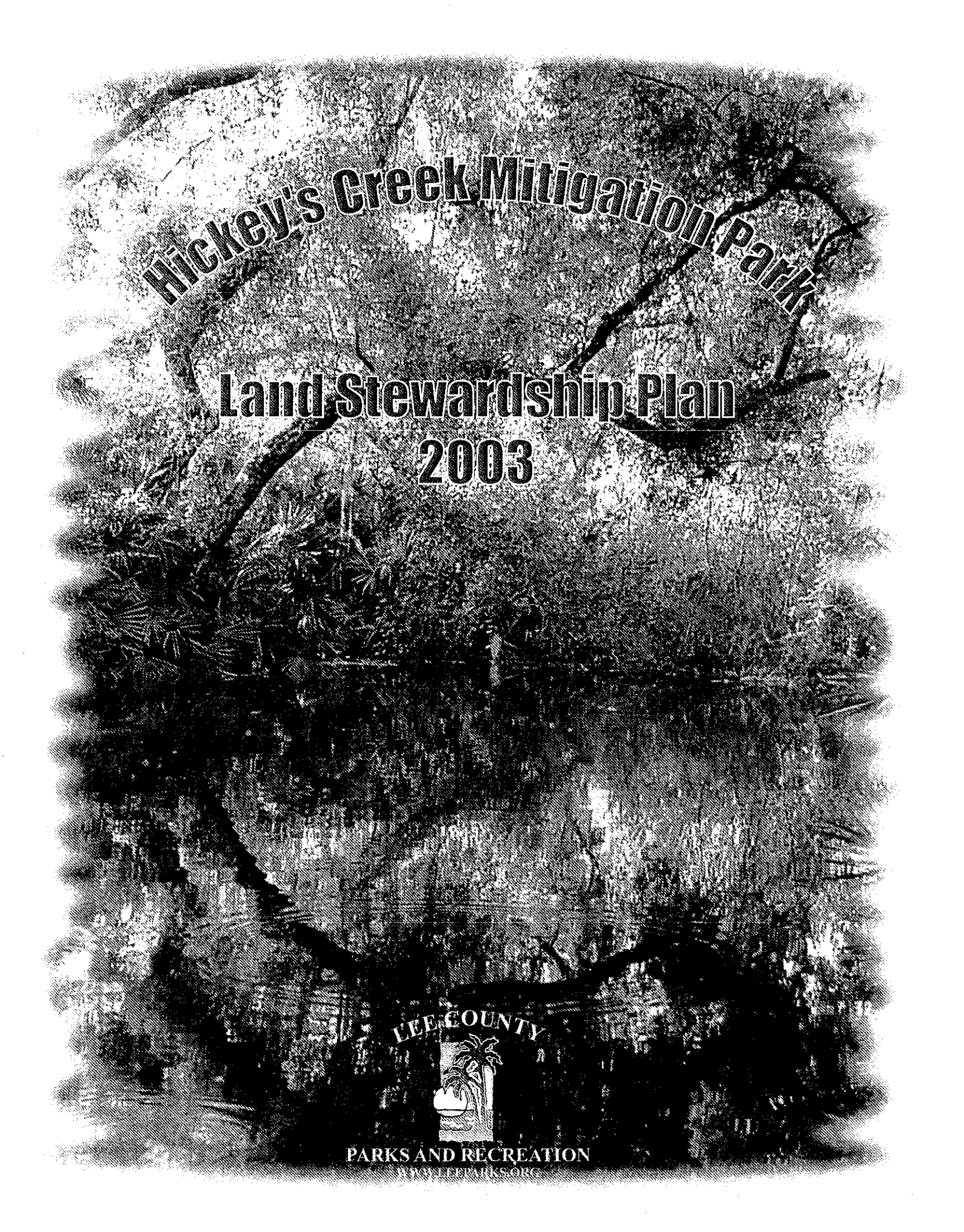
1:10 PM SUT
COUNTY ADMIN FORWARDED TO: DP
11/20 3:10


Hickey's Creek Mitigation Park
Land Stewardship Plan
2003
LEE COUNTY
PARKS AND RECREATION
WWW.LEEPARKS.ORG

HICKEY'S CREEK MITIGATION PARK
STEWARDSHIP PLAN

September 2003

Prepared By:
Lee County Department of Parks and Recreation
Land Stewardship Section
3410 Palm Beach Boulevard
Fort Myers, Florida 33916
In Cooperation With
Florida Fish and Wildlife Conservation Commission
620 South Meridian Street
Tallahassee, Florida 32399-1600

Approved by:
Lee County Board of County Commissioners
Date: _____

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LIST OF FIGURES

VISION STATEMENT

It is the mission of Lee County Department of Parks and Recreation and the Florida Fish and Wildlife Conservation Commission to preserve, maintain, protect, and improve the biological integrity of the wildlife resources within Hickey's Creek Mitigation Park. Exotic vegetation and feral hogs will either be controlled or eliminated. Restoration will occur on altered areas and effort will be made to create productive, functioning natural systems. Hickey's Creek will be protected and maintained as a viable natural flowway. Public use will be managed to minimize impacts to wildlife and native plant communities. Visitors will be encouraged to learn and understand the importance of preserving natural areas. Public use programs, including environmental education and interpretation, will emphasize the biological, historic, and archaeological resources of the Hickey's Creek region.

I. EXECUTIVE SUMMARY

Acquisition of Hickey's Creek Mitigation Park (HCMP) began in 1994. The original park, 10 acres of which were already owned by Lee County, encompassed approximately 770 acres in eastern Lee County. Its purpose was to establish a mitigation park for listed wildlife species, primarily gopher tortoises *(Gopherus polyphemus)*, and to support the Florida Fish and Wildlife Conservation Commission (FWC) off site mitigation program as well as to provide for public use compatible with resource protection.

Funds from Lee County's Environmentally Sensitive Lands Funds Program and the Florida Communities Trust (FCT) through Preservation 2000, were used for the original acquisition. In 1998, the Office of Greenways and Trails (DEP) began acquisition of the Greenbriar Connector. Preservation 2000 Acquisition Funds through the Florida Department of Environmental Protection (FDEP) Greenways Program were used to purchase 6.9 of the total 1,115 acres of HCMP. The Conservation 20/20 program has enabled Lee County to purchase five additional parcels totaling approximately 227.65 acres, adjacent to HCMP. With the purchase of these sites and the addition of lots in the Greenbriar area purchased by and/or donated to Lee County, the total acreage has been increased to 1,115 acres (Table 1). These acquisitions provide additional protection for Hickey's Creek, its watershed, and a connection to Greenbriar Swamp Preserve.

The ecosystems of HCMP consist of a variety of plant communities, many of which, are adapted to extremes of water levels and fire. Hydroperiod and maximum water depth determine the species composition in both forested and herbaceous wetland systems. In upland systems, fire intensity, frequency, and season burned determine the recovery rate and species composition. Wildlife populations are, therefore, dependent on these factors to provide viable habitat. The function of these systems is dependent upon a stewardship strategy which mimics the natural processes and preserves the biological integrity of HCMP.

Hickey's Creek is the most unique natural feature within the park. Its meandering channel extends approximately 6,000 feet through the park (Figure 6). The ordinary water level is as much as 3' to 5' below the stream bank, particularly in the northwestern portion of the park where the bank is the steepest. In other areas, the bank slopes gently to the creek creating elevations suitable for forested wetlands. Ordinary creek depths vary from 2' to approximately 6'. Waters are normally clear and support a variety of fish, reptiles, amphibians, aquatic insects, and other species dependent on a riverine aquatic system.

On April 20, 2002, public use facilities were opened at HCMP. Hiking trails and other resource based facilities offer opportunities to experience the sites' unique diversity of plant communities and associated wildlife

TABLE 1

HICKEY'S CREEK ACREAGE & ACQUISITION COSTS

Site Name	Acreage	Date	Cost
Original Purchase	10	09/17/1945	
Hickey's Creek Mitigation Park	770*	06/30/1994	$2,480,000
Lehigh Corporation Donation	61	1997	61,000+
Greenways Purchase	7	1999	197,300
Conservation 20/20 # 4	40	12/03/1998	157,300
Conservation 20/20 # 57	132	04/30/1999	423,360
Conservation 20/20 # 101	32	11/27/2000	171,343
Conservation 20/20 # 127	25	12/07/2000	54,000
Conservation 20/20 # 136	38	11/09/2000	371,000
Totals 9 Purchases	**1115 Acres**		**$ 3,915,303**

* Includes land in Hickey's Creek buffer

+ Payment of Taxes

The Florida Fish and Wildlife Conservation Commission is responsible for the resource management of HCMP while Lee County provides funding and staffing for the operation of recreational facilities, boundary protection, and exotic vegetation control.

This plan updates the original 1994 HCMP Management Plan and provides management details which will guide ongoing and future stewardship of the park to protect its valuable wildlife resources. Along with descriptions of the natural resources present within the park, this document contains management thresholds, public use descriptions, and the current action plan.

Road access to the site is provided by State Road 80, which extends in an east west direction at the northern boundary of HCMP. The entrance to the public use facility is located 8.6 miles east of I-75. Bateman Road is adjacent to the eastern boundary of the park and provides access to the site at the FPL powerline right-of-way and at a gated entrance south of the FPL powerline (Figure 3). Water access to the site is possible from Hickey's Creek, which transects the park from the southeast to the northwest. The confluence of Hickey's Creek and Hickey's Creek Canal occurs at the southwest corner of the original 10-acre parcel owned by Lee County (Figure 2A).

II. INTRODUCTION

The purpose of this plan is to outline and promote all requirements and agreements associated with the establishment of Hickey's Creek Mitigation Park and assure the continuance of a resource based stewardship strategy designed to preserve the natural systems upon which listed species located within the park are dependent.

HCMP was established in 1994 through the cooperative efforts of Lee County, Florida Fish and Wildlife Conservation Commission (FWC), and the Florida Communities Trust (FCT). A "Memorandum of Agreement" (MOA) between Lee County and the FWC (May 12, 1994) details the terms relative to the establishment of a Mitigation Park (Appendix A). In addition, a "Grant Award Agreement" (Appendix A-1) and a "Conceptual Approval Agreement" were entered into with the FCT which "imposed terms and conditions on the use of the proceeds of certain bonds, hereafter described, and the lands acquired with such proceeds (Project Site), as shall be necessary to ensure compliance with applicable Florida Law and Federal income tax law and to otherwise implement provisions of chapters 253, 259, and 380, Florida Statutes" (Appendix B). FCT also requires that the HCMP Management Plan comply with "Management Plan Requirements". Lee County and the FWC are currently in compliance with these agreements. State of Florida Sublease #4278-01 transferred 6.997 acres from FDEP to Lee County for the Hickey's Creek - Greenbriar Swamp Preserve Greenway. The sublease was executed July 10, 2001 and ends on May 4, 2050. As per the sublease, no third party agreements are permitted without approval in advance by FDEP Division of State Lands and performance under the sublease is to be coordinated with the FDEP Office of Greenways and Trails. Subleases are too voluminous to be included in this document, however, they are available for review at HCMP.

In 1996, Lee County voters passed a referendum which increased property taxes by 0.5 mills for the purpose of purchasing and protecting environmentally sensitive lands to be managed by Lee County Parks and Recreation. As a result, the Lee County Board of County Commissioners established the Conservation 20/20 Land Acquisition and Stewardship Program which is administered through Lee County Division of County Lands. It is the responsibility of FWC and Lee County Department of Parks and Recreation to manage HCMP and Conservation 20/20 acquisitions. Five parcels, adjacent to HCMP, have been purchased through the Conservation 20/20 program. Details of these acquisitions will be addressed later in this plan.

The HCMP area has been identified by the Southwest Florida Regional Planning Council, Lee County, and the FWC as a "riverine corridor" on wildlife habitat protection planning maps. The site offers refuge for various listed species including the Florida scrub jay *(Aphelocoma coerulescens)*, Eastern indigo snake *(Drymarchon corals couperi)*, and gopher tortoise *(Gopherus polyphemus)*. The park is within the range of the Florida panther *((Felis concolor coryi)* and Florida black bear *(Ursus americanus floridanus)*. FWC telemetry data has documented Florida panthers within HCMP and a Florida black bear was documented in the park in June of 2003 (pictures from neighbor). Protection of the project site may provide these species passage from more frequently utilized lands to the south (Corkscrew Regional Environmental Watershed - CREW) to other large forested areas in northeastern Lee County and Charlotte County.

Currently, HCMP's greenway function is related to Hickey's Creek's role as a riverine corridor from HCMP and the surrounding areas to the Caloosahatchee River and its tributaries. This function will continue as long as the quality of the creek habitat is maintained through environmental permitting requirements, set backs from the creek, and other regulatory mechanisms and effective stewardship.

III. LOCATION and SITE DESCRIPTION

A. Site Location

HCMP is located in northeastern Lee County in Section 25, Township 43 South, Range 26 East, and Sections 30, 31, and 32, Township 43 South, Range 27 East (Figures 1, 2, and 2A). The northern boundary is adjacent to State Route 80 and is located approximately 3 miles west of the village of Alva. Lehigh Acres, including the Greenbriar Swamp watershed, is to the south. To the west, HCMP is bounded by the Hickey's Creek Canal, single family homes, Zeligro Road, and the proposed Hawk's Haven golf course development. The eastern boundary is adjacent to widely scattered single family homes, agriculture, and pasture.

B. Site Description

HCMP consists of a mosaic of both human altered and natural land forms. Within the boundaries of HCMP are pine flatwoods, hydric hammocks, cypress swamps, freshwater marshes, temperate hardwood hammocks, riparian wetlands, inland ponds, mixed wetland forests, xeric oak, and scrubby pine flatwoods. Hickey's Creek, a tributary of the Caloosahatchee River, meanders through the site in a southeast to northwest direction and provides both permanent aquatic habitat and scenic beauty. Abandoned and human altered features include a former citrus grove, logging tram, pastures, and three excavations associated with a rock mine. A Florida Power and Light right-of-way (formerly the Atlantic Coast Line Railroad) bisects HCMP from east to west and is located near the section line between sections 30 and 31 (Figure 3).

Figure 1: Hickey's Creek Mitigation Park Location within Florida

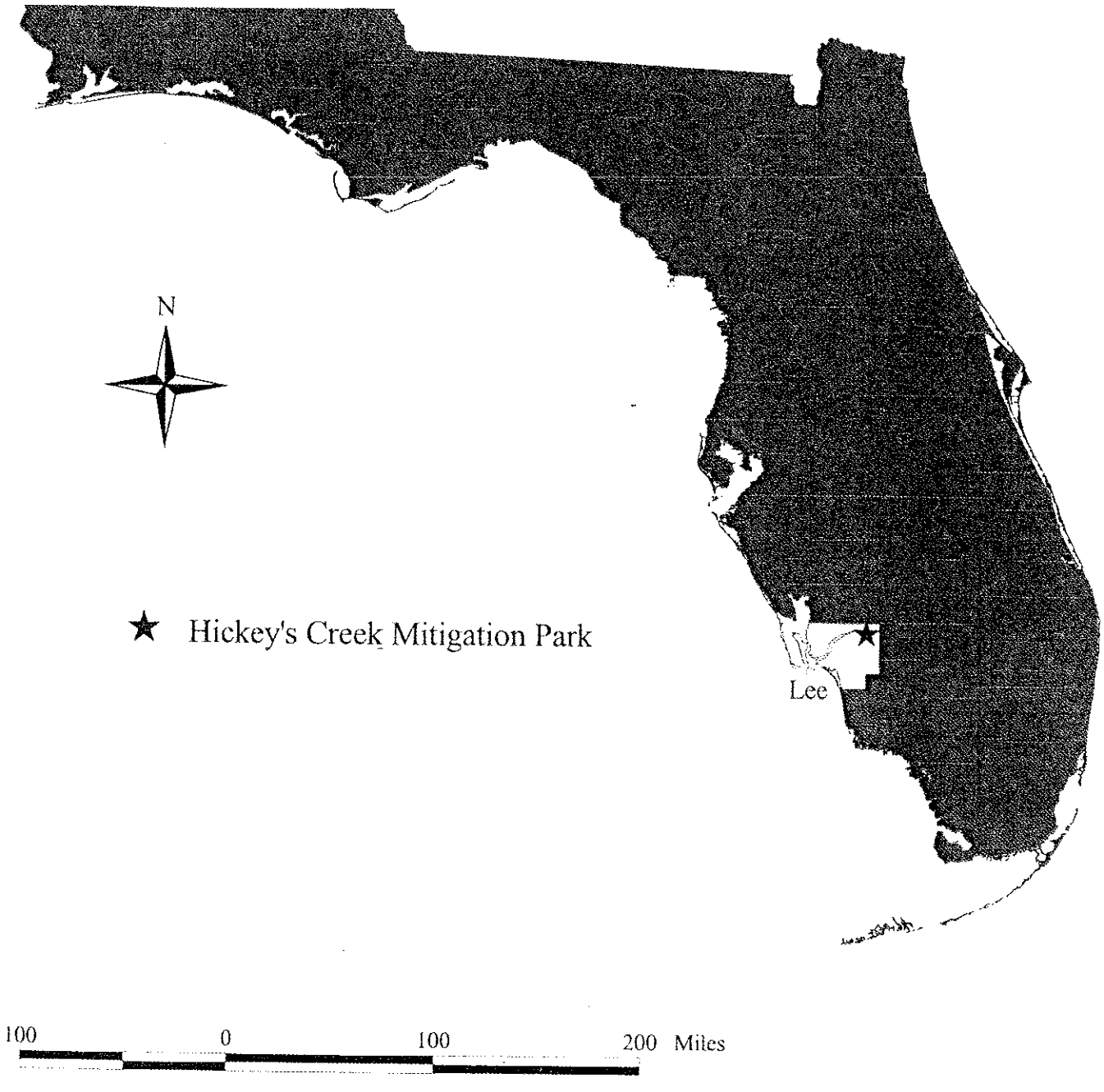
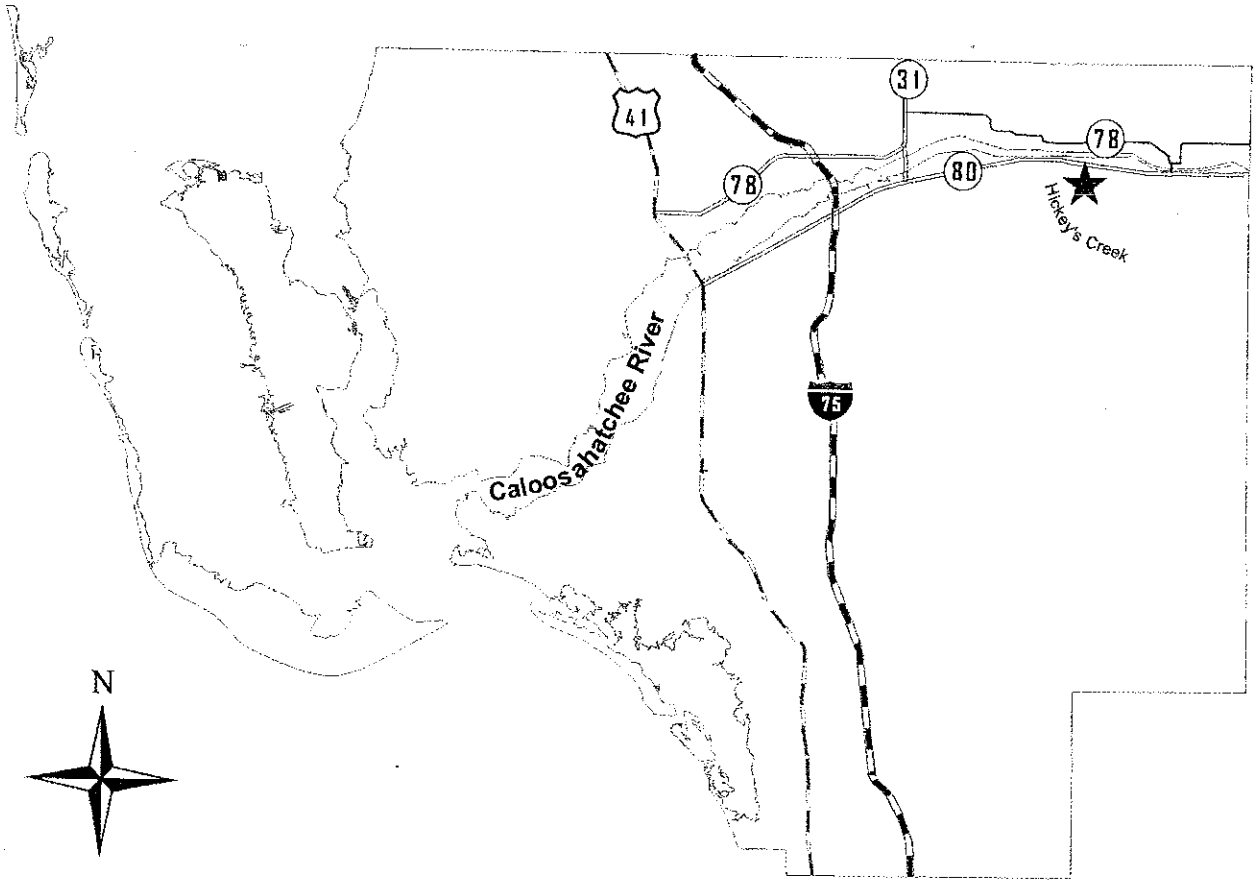


Figure 2: Hickey's Creek Mitigation Park Location within Lee County



Hickey's Creek Mitigation Park

10 0 10 20 Miles

Figure 2A: Hickey's Creek Mitigation Park
2002 Aerial Photograph

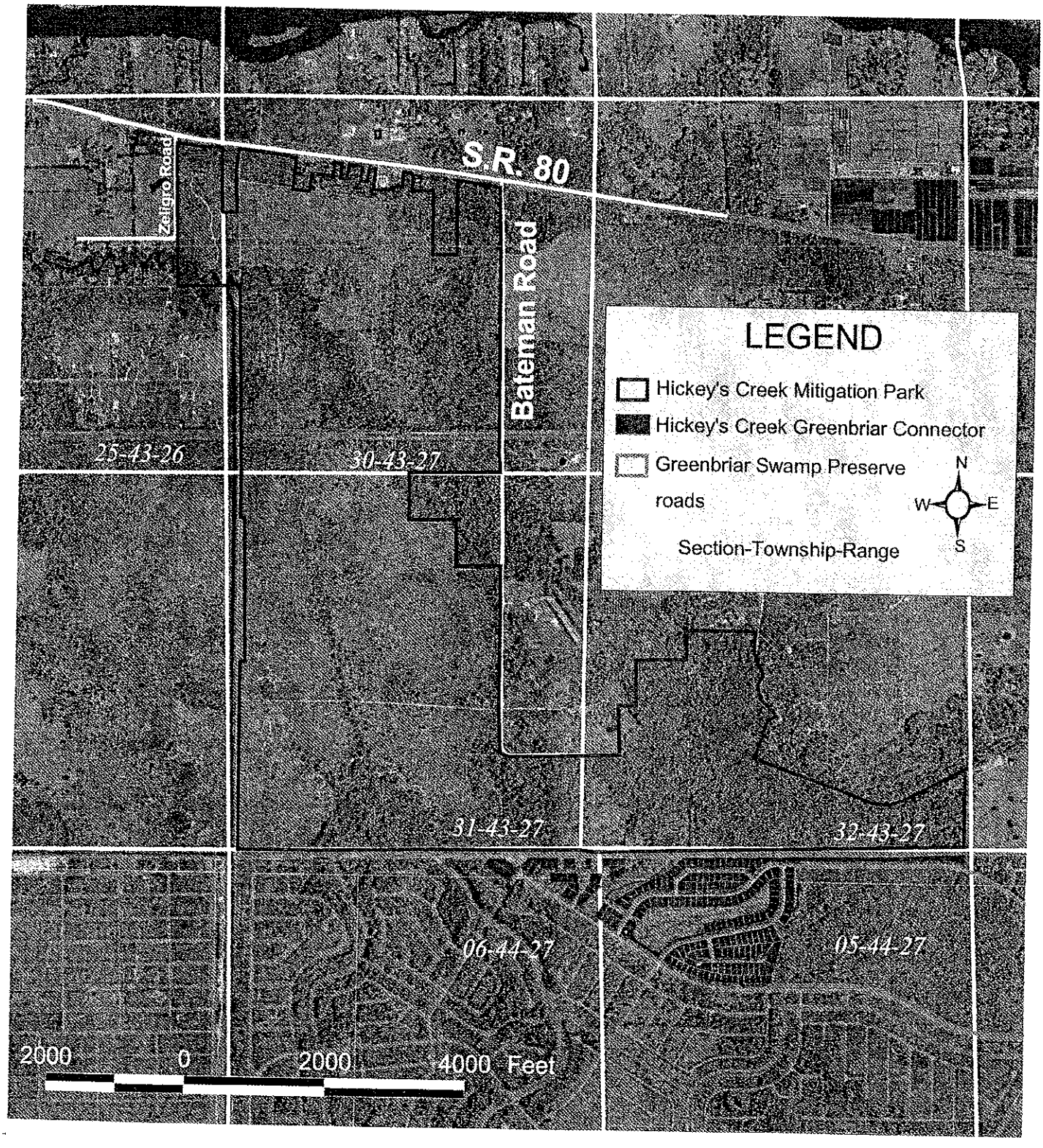
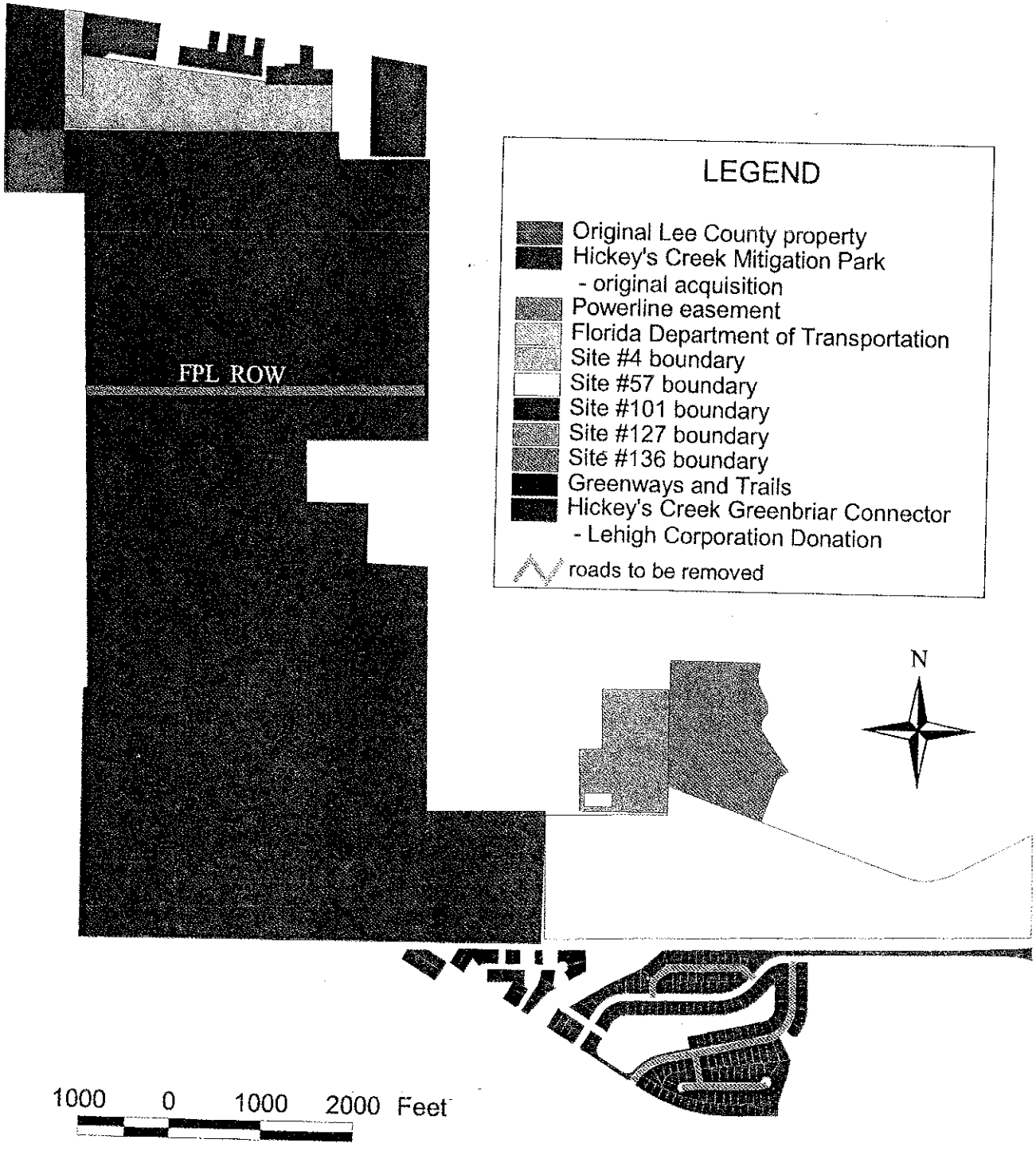


Figure 3: Hickey's Creek Mitigation Park Acquisitions

Conservation 2020

&

Hickey's Creek Greenbriar Connector



IV. NATURAL RESOURCES DESCRIPTION

A. Physical Resources

1. Climate

South Florida's climate is subtropical and humid with an average annual rainfall between 40 and 65 inches. More than half of the rainfall occurs in the wet season, which is June through October. This wet and warm season is followed by a cool and dry season lasting from November through May. The beginning of the warmer, rainy season comes in June and the typical pattern is daily, primarily afternoon, rains with temperatures ranging from the mid 70s for a low to the upper 90s for a high. Rain comes from thunderstorms that build up in the central part of the state and then move towards the coasts in the late afternoons. Frequent lightning and heavy downpours are common features of these rainmaking events. This is also the season for tropical storms and hurricanes which have the potential to significantly add to the annual rainfall total. The beginning of the cool and dry season means an end to the daily rains and tropical storm season. It is also the time of year when cold fronts have enough energy to move down from the northwest and pass over the peninsula. Generally, temperatures below freezing are seldom recorded in South Florida.

The average annual rainfall in South Florida and in the Hickey's Creek region is between 40 and 65 inches. Except for collecting rainfall data, a weather station has not been established at HCMP.

2. Geology

The Florida Platform lies on the south-central part of the North American Plate, extending to the southeast from the North American continent separating the Gulf of Mexico from the Atlantic Ocean. The Florida Platform, as measured about the 300 foot (91 meter) isobath, spans more that 350 miles (565 kilometers) at its greatest width and extends southward more than 450 miles (725 kilometers) at its greatest length. The modern Florida peninsula is the exposed part of the platform and lies predominately east of the axis of the platform. Most of the state of Florida lies on the Florida Platform.

The basement rocks of the Florida Platform include Precambrian-Cambrian igneous rocks, Ordovician-Devonian Sedimentary rocks, and Triassic-Jurassic volcanic rocks. Florida's igneous and sedimentary foundation separated from what is now the African Plat when the super-continent Pangea rifted apart in the Triassic and sutured to the North American craton (a specific section of the earth's crust).

A thick sequence of mid-Jurassic to Holocence sediments (unlithified to well lithified) lies unconformably upon the eroded surface of the basement rocks. Carbonate sedimentation predominate from mid-Jurassic until at least mid-Oligocene on most of the Florida platform. In response to renewed uplift and erosion in the Appalachian highlands to the north and sea level fluctuations, siliciclastic sediments began to encroach upon the carbonate-depositing environments of the Florida Platform. Deposition of siliciclastic-bearing carbonates and siliclastic sediments predominated from mid-Oligocene to the Holocene over much of the platform. Numerous disconformities that formed in response to nondeposition and erosion resulting from sea-level fluctuations occur within the stratigraphic section. Much of the state is blanketed by Pliocene to Holocene siliciclastic-bearing sediments that were deposited in response to the late Tertiary and Auatemary sea level fluctuations. (Randezzo & Jones, 1997) (USDA, 1984)

The Hickey's Creek area is located in the Southern or Distal Zone of Florida and mostly in the Caloosahatchee Valley physiographic province. The Caloosahatchee Valley is an almost flat, elongate plain over which the Caloosahatchee River flows westward to the Gulf of Mexico. The river rises just west of Lake Okeechobee. Prior to human-made alterations to the lake's drainage system, the Caloosahatchee probably received some of the overflow from the lake. The river is now part of the Okeechobee Cross Florida Waterway and is connected to Lake Okeechobee via a canal-and-lock system.

The present-day geomorphology of South Florida is quite new, in geological terms. The region is underlain by Plio/Pleistocene-Epoch shallow marine and lagoonal sediments. These were deposited and reworked during Pleistocene interglacial high stands of the sea. A geologic map of Lee County (Missimer and Scott 1993), shows that the study area is underlain by the Pliocene-Epoch Tamiami Formation, a sandy limestone with sandy clay and marl members. Generally this is overlain by Pleistocene sediments that have been locally divided into the Caloosahatchee and Fort Thompson Formations. Both formations consist of fossiliferous limestone and shelly sand and close examination of their faunal composistion is necessary to distinguish one from the other.

With the advent of deglaciation of the Wisconsin ice sheets *circa* 20,000 years ago, the sea rose to near-modern levels some 4,000 to 6,000 years ago. The Caloosahatchee Valley became a very shallow low-energy lagoon between the sandy Immokalee Rise to the south and the Gulf Lowlands to the north. Pre-Pleistocene-Epoch faults and solution depressions may be the controlling mechanisms that determine the overall shape of the valley as well as the northwest shore of Lake Okeechobee. Sediments from lake overflows, the Immokalee Rise, marsh debris, and small-scale sea-level oscillations filled the lagoon and created the valley, a process that is still going on today in the lower end of the valley. The river, flowing over the almost-flat terrain and probably in part in old tidal marsh cannels, followed a very sinuous path prior to being altered into the Okeechobee Waterway. At times of peak flow, it was subject to frequent shifts of its cannel and braided flow over its very low-gradient valley. Indeed, one early account from 1884 supports the sinuous characterization.

"The actual distance from the sea-border to the site of this old fort (Fort Thompson) is not more than fifty miles, but measured along the sinuosities of the channel, which are especially well marked in the upper course, and more particularly in the reach of the last few miles below the rapids, the distance is nearly twice as great."

Hickey's Creek, which flows northwestward through the park, is a sluggish meandering tributary of the Caloosahatchee River. The head of Hickey's Creek is near the foot of the Immokalee Rise and probably, at times of heavy flow, carries sediment into the Caloosahatchee Valley. Currently, within the study area, the creek is incised several feet into its valley floor.

The potentiometric surface of the Floridan Aquifer is above ground level over much of southern Florida. However, it is confined by impervious Miocene-aged layers above the aquifer; thus artisian conditions exist. Water - from the average 54 inches of annual rainfall - in the overlying intermediate and surficial aquifers does not recharge the Floridan Aquifer. Because of this, many lakes and swamps dot the landscape, including the everglades and Lake Okeechobee. (Walker, Denson, Ellis, 1996)

3. Topography

The topography of the site is low relief, ranging from a low of approximately 5 feet along the creek to a high of 22 feet on the tram road bed. Elevations on most of the site are between 14 feet and 19 feet. The tram road bed, which runs for approximately one mile through the site, has elevations 3-5 feet higher than the natural topography. In some sections, the tram is up to 10 feet above natural grade. Elevations are based on National Gedetic Vertical Datum (NGVD).

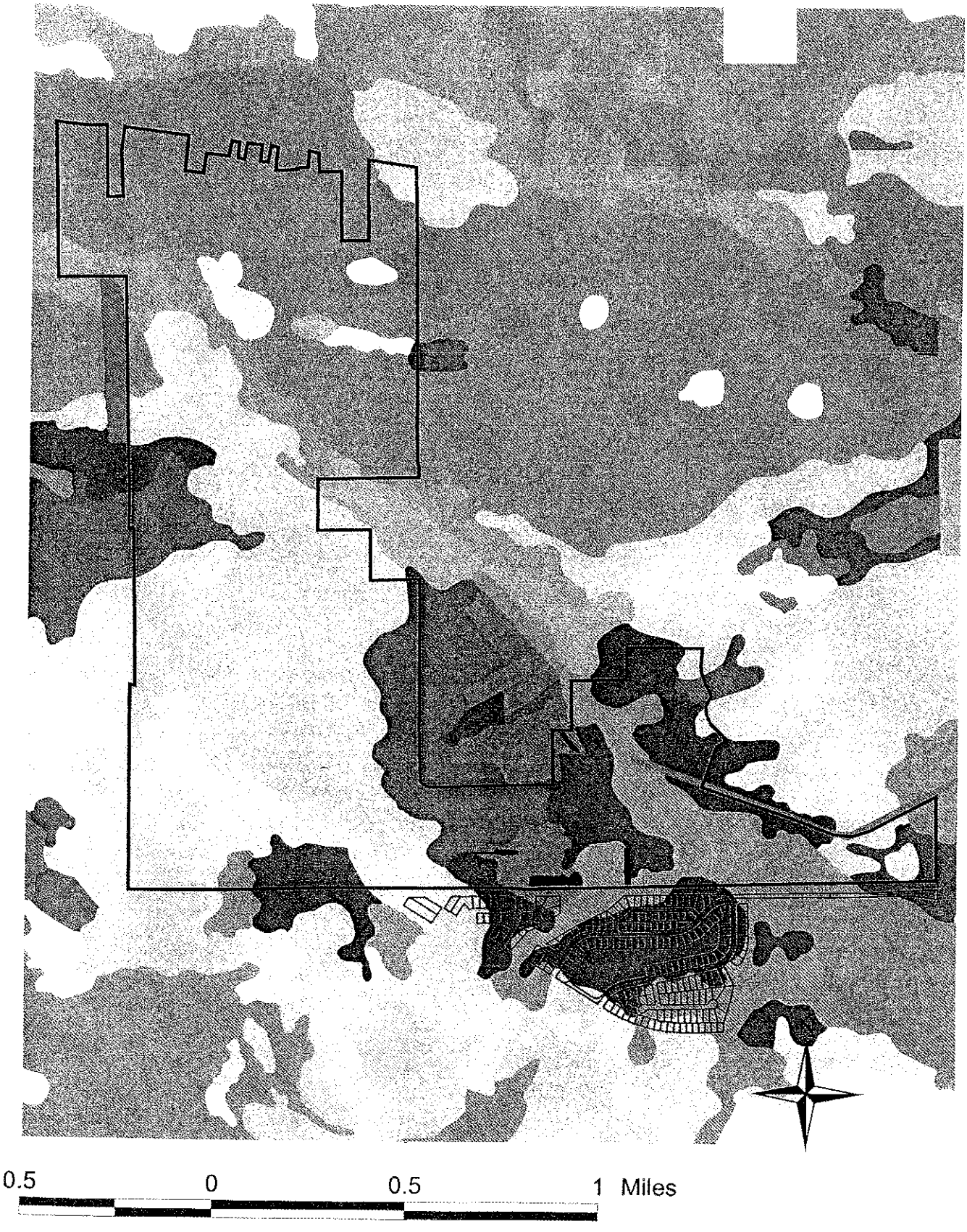
4. Soils

Beneath the soil of South Florida is limestone, a type of rock formed over millions of years by deposits of shells and bones of sea creatures and chemicals evaporated from shallow sea water. Bare limestone is visible at the land surface in some parts of HCMP. In other places limestone is covered by a thin layer of sand. Slash pines and palmettos are usually found on these sandy soils.

Where water is present much of the year, richer soils develop as a result of decaying vegetation and plant litter. These soils are referred to as organic and are generally found in association with wetlands such as marshes and swamps. The visible peat at HCMP is an example of an organic soil found in South Florida.

HCMP has 24 different soil types (Figure 4, Page 14, with key on page 15) (USDA, 1984). Soil disturbances include an abandoned rock mine, power line right-of-way, abandoned railroad grade, agricultural use, and remnants of timbering operations. The most common soil type, Oldsmar Sand, coincides approximately with the scrubby flatwoods habitat. The disturbed area soil, Matlacha gravelly fine sand, coincides with the rock mining area. The hydric soils (slough, depressional, and hammock), generally, underlie areas characterized by wetland vegetation and hydrology. There has been some organic soil subsidence in forested wetlands at the south boundary. This condition was caused by alteration of the hydrology by the East County Water Control District (ECWCD). Both maximum water depth and hydroperiod have been decreased resulting in organic soils being exposed for longer periods than would have occurred under normal circumstances. This impact decreases in the central and northern part of the park. (USDA, 1984)

Figure 4: Soils of Hickey's Creek Mitigation Park



Hickey's Creek Mitigation Park
Soils Key and Description

Soils

BOCA FINE SAND -
A nearly level, poorly drained soil on flatwoods. Slopes are smooth and range from 0 to 2 percent.

BOCA FINE SAND, SLOUGH -
A nearly level, poorly drained soil in sloughs. Slopes are smooth to slightly concave and range from 0 to 1 percent.

BRADENTON FINE SAND -
A nearly level, poorly drained soil in hammock areas along rivers, creeks, and swamps. Slopes range from 0 to 2 percent.

CALOOSA FINE SAND -
A nearly level, somewhat poorly drained soil formed by dredging and filling and by earthmoving operations.
Slopes are smooth to slightly convex and range from 0 to 2 percent.

COCOA FINE SAND -
A nearly level to gently sloping, moderately well drained soil on ridges. Slopes are smooth to slightly convex and range from 0 to 2 percent.

COPELAND SANDY LOAM, DEPRESSIONAL -
A low nearly level, very poorly drained soil in depressions. Slopes are concave and less than 1 percent.

DAYTONA SAND -
A nearly level to gently sloping, moderately drained soil on low ridges in flatwoods. Slopes are smooth to convex and are 0 to 5 percent.

FELDA FINE SAND -
A nearly level, poorly drained soil on broad, nearly level sloughs. Slopes are smooth to concave and range from 0 to 2 percent.

FELDA FINE SAND, DEPRESSIONAL -
A nearly level, poorly drained soil in depressions. Slopes are concave and less than 1 percent.

HALLANDALE FINE SAND -
A nearly level, poorly drained soil on low, broad flatwoods. Slopes are smooth and range from 0 to 2 percent.

IMMOKALEE SAND -
A nearly level, poorly drained soil in flatwoods. Slopes are smooth to slightly concave and range from 0 to 2 percent.

MATLACHA GRAVELLY FINE SAND -
A nearly level, somewhat poorly drained soil formed by filling and earthmoving operations.
Slopes are smooth to slightly convex and range from 0 to 2 percent.

MATLACHA GRAVELLY FINE SAND, LIMESTONE SUBSTRATUM -
A nearly level, somewhat poorly drained soil that formed as a result of earthmoving poration in areas
that are underlain by limestone. Slopes are smooth to slightly convex and range from 0 to 5 percent.

MYAKKA FINE SAND -
A nearly level, poorly drained soil on broad flatwoods. Slopes are smooth to slightly concave and range from 0 to 2 percent.

MYAKKA FINE SAND, DEPRESSIONAL -
A nearly level, poorly drained soil in depressions. Slopes are smooth to concave and are less than 1 percent.

OLDSMAR FINE SAND, LIMESTONE SUBSTRATUM -
A nearly level, poorly drained soil in flatwoods. Slopes are smooth to slightly convex and range from 0 to 2 percent.

OLDSMAR SAND -
A nearly level, poorly drained soil on low, broad floatwoods. Slopes are smooth to slightly convex and range from 0 to 2 percent.

PINEDA FINE SAND -
A nearly level, poorly drained soil on sloughs. Slopes are smooth to slightly concave and range from 0 to 2 percent.

PINEDA FINE SAND, DEPRESSIONAL -
A nearly level, very poorly drained soil in depressions. Slopes are concave and are less than 1 percent.

PINEDA FINE SAND, LIMESTONE SUBSTRATUM -
A nearly level, poorly drained soil in sloughs. Slopes are smooth to slightly concave and range from 0 to1 percent.

POMPANO FINE SAND, DEPRESSIONAL -
A nearly level, poorly drained soil in depressions. Slopes are concave and less than 1 percent.

WABASSO SAND -
A nearly level, poorly drained soil in flatwoods. Slopes are smooth to slightly convex and range from 0 to 2 percent.

WABASSO SAND, LIMESTONE SUBSTRATUM -
A nearly level, poorly drained soil on broad flatwoods. Slopes range from 0 to 2 percent.

WATER - Open water resulting from abandoned mining operations.

5. **Hydrology and Watershed**

a. Surface Aquifer

The park is within the 27.5 square mile Hickey's Creek Watershed (Figures 5 & 5a). The watershed is approximately 5 miles wide by 4.5 miles long with an additional 5-square-mile area to the west. The watershed boundary has not changed significantly since the 1979 "Water Management In Lee County" report by Johnson Engineering (JEI) or since the "Lee County Interim Surface Water Management Plan" (Johnson Engineering, 1992).

Hickey's Creek becomes increasingly narrow and overgrown upstream (to the southeast) of HCMP. The creek changes from natural to channelized a short distance upstream of the southeastern boundary of HCMP. The channel ends at Packinghouse Road. This portion of the watershed is currently occupied by rangeland, improved pasture, citrus, inactive cropland, upland areas (vegetated by live oak, slash pine, and saw palmetto), forested wetlands, and widely scattered single family homes (Lee County 1999 aerials).

Surrounding future land use in the upper watershed consists of Rural Community Preserve and Resource Protection Areas. Lee County will monitor future development of the Hickey's Creek Watershed to insure that further negative impacts on the water quality or hydrology of the site does not occur. Monitoring will be accomplished by perimeter inspections of HCMP and adjacent Conservation 20/20 parcels. Reports will be prepared and kept on file at both HCMP and the Conservation 20/20 office at Terry Park. Development orders from the east Lee County area will be reviewed and a determination will be made as to the possible impacts to HCMP and adjacent 20/20 parcels.

Groundwater elevations vary in a manner similar to land surface elevations within the watershed. Groundwater levels adjacent to the creek are relatively low. Wet season water elevations farther from the creek come relatively close to the land surface. This is especially true in areas that have not been impacted by channelization or filling. The significant difference in elevation from the water surface in the creek channel to the land surface causes the groundwater table to change in similar proportions. The hydrological information discussed above is from the Lee County Water Management Plan (JEI, 1992). This information indicates that there may be significant lowering of the water table on at least portions of the park. As discussed earlier, this situation is apparent from the obvious successional changes occurring in the forested wetland adjacent to the southern boundary of the park.

Evidence that at least portions of HCMP have been impacted by drainage is indicated by changes in plant species composition of the wetland areas near and adjacent to the southern boundary. As the hydroperiod was reduced, these formerly forested cypress systems are being replaced by transitional and upland species less tolerant of the historic hydroperiod characteristic of a cypress system. The isolated wetlands near the northeast corner of the park appear to have a hydroperiod favorable to unimpacted wetland systems. This is based upon observation of vegetative associations and seasonal water levels.

It is difficult to assess the impact drainage has had on uplands but two possibilities exist. One is that the lowered water table is still within the tolerance of the original scrub vegetation. The other is there has been or will be a shift towards a more xeric vegetative species composition. It is possible that conditions may be more favorable now, in at least portions of the site, to wildlife species adapted to xeric conditions, such as Florida scrub jay and gopher tortoise.

A low volume flowing well is located just south of the powerline near the center of the park. This well has been inspected by a Lee County well inspector. Results of this inspection indicate the flowing well had been plugged but the plug was leaking. The volume of water was very low but the inspector felt it was not a problem. However, it may be possible to improve the well in the future as a water source for prescribed burning or fighting wildfires.

b. Surface Water

Maintaining good water quality in the creek is essential to the park, aquatic organisms, and the Florida Manatee. The Lee County Division of Natural Resources, Environmental Laboratory, has been collecting water quality samples since 1992 from Hickey's Creek at a station located at the upstream side of the bridge at State Road 80. ECWCD has been collecting water quality data at three sampling stations located at the Hickey's Creek canal and Hickey's Creek since 1984. The Lee County Hyacinth Control District also has a monitoring station south of the S.R. 80 Hickey's Creek Bridge with data available from 1989 to present. Availability of current water quality sampling stations provides an opportunity to monitor the water quality of both the Hickey's Creek canal and Hickey's Creek. Lee County Parks and Recreation will request periodic water quality data from the above-mentioned agencies and monitor the development activities within the Hickey's Creek watershed for trends.

The water elevation of Hickey's Creek is contingent upon several artificial water management structures. One is the Franklin Lock, which is the last lock in the Caloosahatchee River before it enters San Carlos Bay. It is located approximately 2 miles downstream and to the west of HCMP and is operated by the U.S. Army Corps of Engineers. The other structure is a counterbalance weir (Amil Gate) operated by the ECWCD and located in Hickey's Creek Canal north of the powerline right-of-way along the west park boundary. This weir was designed to provide continuous flow to Hickey's Creek. It is believed that normal creek water fluctuations have been influenced by the Franklin Lock. Consequently, water levels are artificially maintained at a higher level than would normally occur.

The Hickey's Creek Canal along the west boundary and the swale along the south boundary of HCMP have undoubtedly caused drawdown of the water table. Discussions are currently underway to explore the possibility of conducting a hydrological study to identify problems associated with the drainage structures within the watershed. If serious hydrological impacts can be documented then restoration may be possible through the South Florida Water Management District (SFWMD) or the ECWCD.

The ECWCD, which is a special Chapter 298 taxing district setup to provide management and maintenance of the surface water within the Lehigh Acres development and an adjacent area, consists of 63,000 acres containing 300 miles of canals plus water control structures within the Lehigh Acres and Hickey's Creek watersheds. It also includes several preserves including Greenbriar Swamp. Since 1995, Lee County has been assessed by the ECWCD for water conveyance and control structures planned for the site while it was part of the Lehigh Corporation Development Plan. Despite repeated efforts by Lee County Parks and Recreation staff, County Attorney's office, and consultants, the assessment issue to date has not been resolved. To date, over $500,000 has been paid to the ECWCD for water control structures and the operation and maintenance of those structures, which do not exist. By the year 2011, after the bond debt has been paid, Lee County will have paid $1.2 million in taxes to the ECWCD for which no benefits have been received. For the past year, a concerted effort has been made by Lee County Parks and Recreation to solve the problem. As of this writing, these efforts have met with limited success.

Hickey's Creek is a natural conveyance, from its intersection with the Caloosahatchee River through and beyond the park boundaries. There are no water control structures along the length of Hickey's Creek from its confluence with the Caloosahatchee River to its upper channelized end. There are no known right-of-ways or easements along the creek. Easements do exist for the portion of Hickey's Creek Canal located along the park's western boundary (JEI, 1992). The canal is within the East County Water Control District.

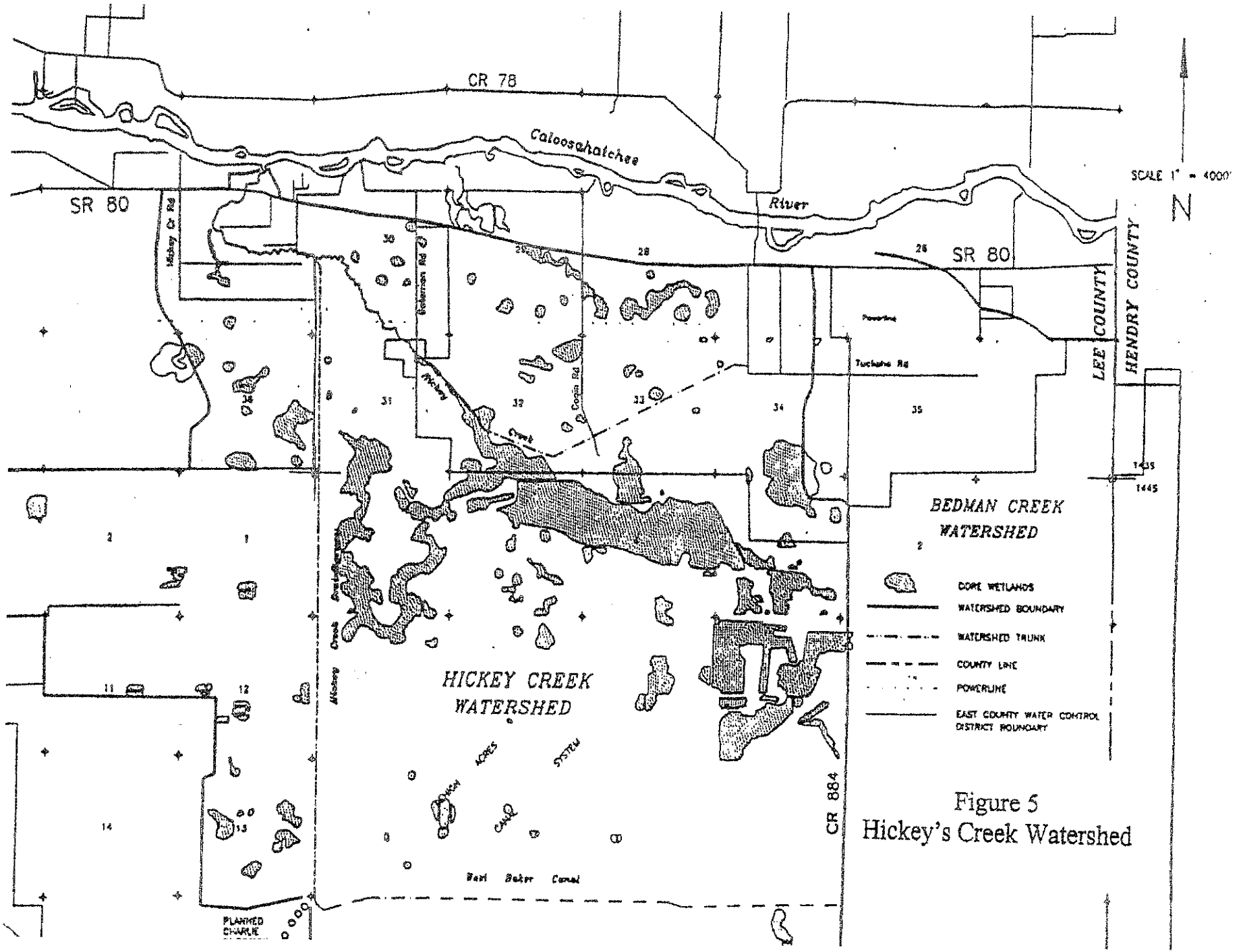
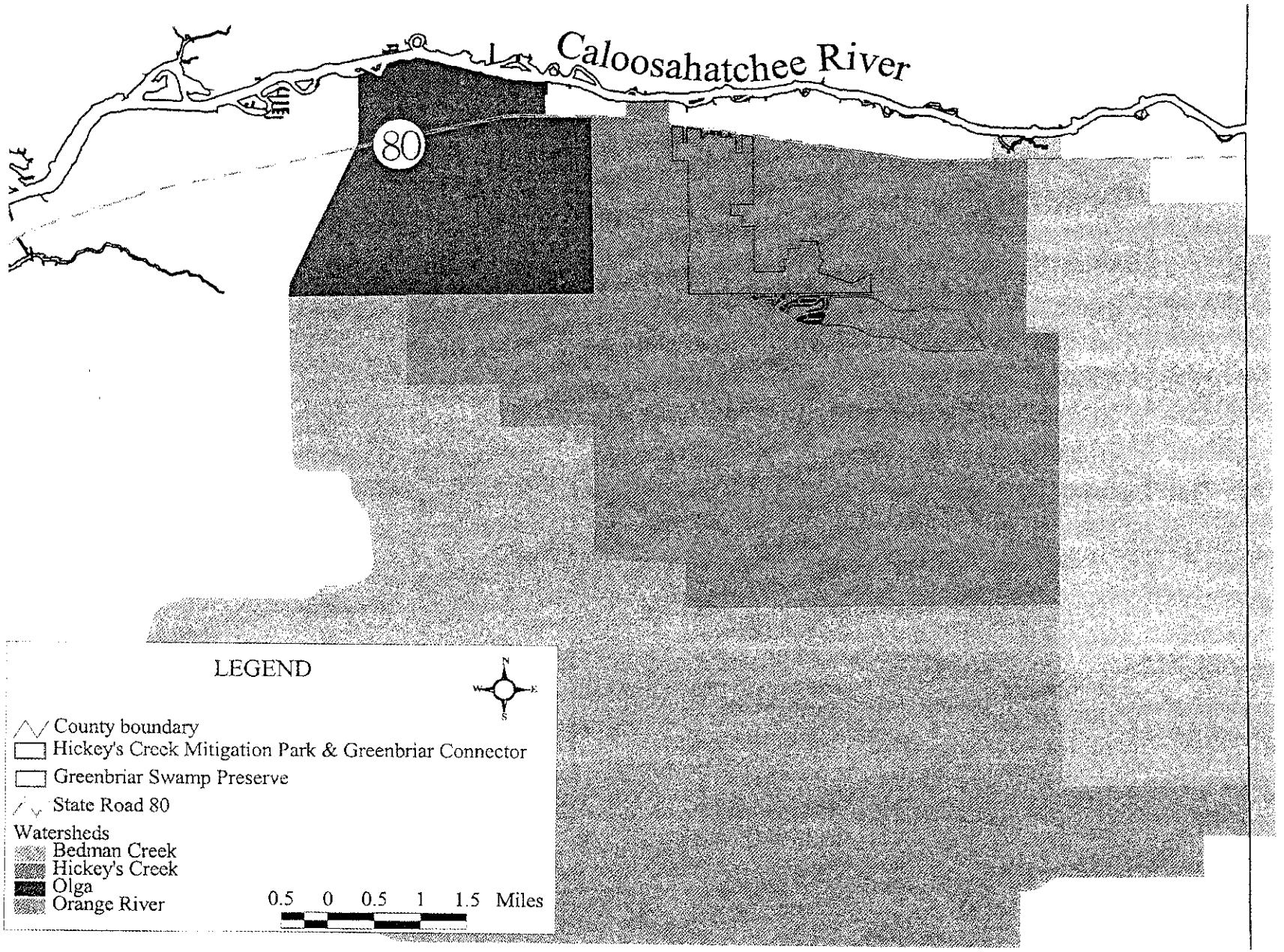


Figure 5
Hickey's Creek Watershed

Figure 5a: Hickey's Creek Watershed



B. Biological Resources

1. Ecosystem Function

The function of ecosystems at HCMP is dependent upon extremes of water and fire. Maximum water depths in wetlands during the wet season provide habitat for aquatic organisms. As water levels recede in the winter and spring these organisms become concentrated in shallow pools providing food for wading birds, reptiles, and mammals. It is, therefore, essential that the water levels of wetland systems be allowed to fluctuate naturally and, if impacted, restored as much as possible. Efforts are underway to restore the hydrology to some of the impacted wetlands within the park. Fire recycles nutrients and is recognized as a major factor which maintains uplands and results in an increase in herbaceous plants important to foraging animals. Prescribed burning is ongoing and essential if the ecosystem function of HCMP uplands are to be maintained in an optimum condition for wildlife. The methods and techniques of how these goals are to be met are addressed within this plan.

2. Natural and Ruderal Communities

HCMP has been mapped and classified according to the Florida Land Use, Cover and Forms Classification System (FLUCFCS) developed by the Florida Department of Transportation (FDOT) in 1985 and revised in 1999. The FLUCFCS mapping shown in Figure 6 is based on 1999 FDOT mapping which has been ground-truthed and updated by Lee County Parks and Recreation staff and FWC staff. Twenty-two FLUCFCS areas are identified within the site, many of which have been altered.

Major natural areas include pasture (FLUCFCS 211), abandoned citrus grove (FLUCFCS 329), pine flatwoods (FLUCFCS 411), pine flatwoods with scrub component (FLUCFCS 4111), temperate hardwood hammock (FLUCFCS 425), shrub and brushland (FLUCFCS 320), live oak (FLUCFCS 427), streams and waterways (FLUCFCS 510), freshwater marshes (FLUCFCS 616), other open lands rural (FLUCFCS 616), electrical power transmission lines (FLUCFCS 832), mixed rangeland, abandoned logging camps (FLUCFCS 3301), fill areas highways - railways (FLUCFCS 744), spoil areas (FLUCFCS 743), vegetated non-forested wetlands (FLUCFCS 640), mixed wetland hardwoods (FLUCFCS 617), borrow areas (FLUCFCS 742), cypress-impacted (FLUCFCS 6211), pine-mesic oak (FLUCFCS 414), waterways and flowways (FLUCFCS 5101), and the Hickey's Creek/ Greenbriar Connector.

Following are descriptions of the dominant plants found within each FLUCFCS area along with the approximate acreage covered as well as the percentage of total HCMP acreage. Appendix C lists dominant plants and characteristic animals found in each FLUCFCS area. Appendix D lists most plant species which have been documented on HCMP during field site inspections by federal, state, and county biologists from 1991-2000.

a. Pasture (FLUCFCS 211) (43.04 acres - 4%)

The improved pasture areas are dominated by Argentine bahia grass *(Paspalum notatum)*, pawpaw (*Asimina reticualate)*, rabbit tobacco *(Pterocaulon virgatum)*, Caesar weed *(Urena lobata)*, broomsedge *(Andropogon glomeratus)*, and dog fennel *(Eupaturium capillifolium)* and are currently being grazed by cattle. The largest pasture is located north of the creek. This is Conservation 20/20 acquisition, #4. Smaller pasture areas are located at the east end of #4 and the west side of Conservation 20/20 acquisition, #127.

b. Abandoned Citrus Grove (FLUCFCS 329) (50.42 acres - 5%)

The citrus grove was planted during the late 1950's and early 1960's. In 1998, the FWC planted both slash *(Pinus elliottii)* and longleaf pine *(Pinus palustris)* and the site has changed to a shrub and brush land dominated by wax myrtle *(Myrica cerifera)*, native and nonnative grasses, oaks and palms. The citrus was treated with herbicides in 1996 and mowed with a hydroax in October 2000.

c. Pine Flatwoods (FLUCFCS 411) (49.03 acres - 4%)

Pine flatwoods range from xeric or pine flatwoods with a scrub component to mesic and hydric. The overstory is characterized by slash pine, while the midstory includes saw palmetto *(Serenoa repens)*, a variety of oaks, lyonia , wax myrtle, dahoon holly *(Ilex cassine)*, gallberry *(Ilex glaba)*, winged sumac *(Rhus copallina)*, cabbage palm *(Sabal palmetto)*, and groundsel tree *(Baccharis halimifolia)*. The understory consists of wiregrass *(Aristida stricta)*, panicum *(Panicum sp.)*, running oak *(Quercus pumila)*, gopher apple *(Licania michauxii)*, yellow-eyed grass *(Xyris sp.)*, redroot *(Lachnanthes caroliniana)* sedges, rushes, and sundew *(Drosera capillaris)*. Prior to acquisition by Lee County, wildfires have occurred in the pine flatwoods north of the powerline. One occurred in April of 1992 (40 acres) and the other in June of 1993 (35acres). Causes of both fires are unknown.

d. Pine Flatwoods with Scrub Component (FLUCFCS 4111) (553.86 acres - 50%)

Xeric conditions throughout the pine flatwoods are conducive to a scrubby flatwoods community characterized by myrtle oak *(Quercus myrtifolia)*, Chapman's oak *(Quercus chapmanii)*, sand live oak *(Quercus geminate)*, and dwarf live oak *(Quercus minima)*. Because of the lack of fire, some of the xeric scrub has reached xeric hammock stage. Midstory includes wax myrtle, tarflower *(Befaria recemosa)*, palmetto, and hog plum *(Ximenia americana)*. Understory plants include gopher apple, wiregrass, shiny blueberry *(Vaccinium myrsinites)*, lichens, reindeer moss *(Cladonia spp.)*, and earth stars *(Geastrum saccatum)*. Most of the scrub communities occur in linear clumps and appear to have survived some partial land clearing activities that occurred in the late 1950's. The clearing activities were not completed and the oaks revegetated the area.

e. Temperate Hardwood Hammock (FLUCFCS 425) (133.6 acres - 12%)

This community is characterized by an overstory of cabbage palm, slash pine, live oak *(Quercus virginiana)*, and laurel oak *(Quercus laurifolia)*. Midstory includes saw palmetto, wax myrtle, and beautyberry *(Callicarpa americana)*. Epiphytes include Spanish moss *(Tillandsia usneoides)*, golden polypody fern *(Phlebodium aureum)*, shoestring fern *(Vittaria lineata)*, and several species of airplants. Understory plants include wild coffee *(Psychotria nervosa)*, common nightshade *(Solanum nigrum)*, and greenbriar *(Smilax spp.)*.

f. Shrub and Brushland (FLUCFCS 320) (4.53 acres - .4%)

This area is adjacent to and west of the pasture on Conservation 20/20 acquisition #4 and has been partially cleared. It is characterized by saw palmetto, wax myrtle, Argentine bahia, Brazilian pepper *(Schinus terebinthifolius)*, slash pine, oaks, and a herbaceous groundcover.

g. Live Oak (FLUCFCS 427) (28.42 acres - 3%)

The area adjacent to Hickey's Creek is dominated by live oaks and borders the intermittent forested wetland associated with the creek. Plant species in this area consist of live oak, saw palmetto, dwarf live oak, laurel oak, hog plum, cabbage palm, Spanish moss, shoestring fern, and golden polypody.

h. Streams and Waterways (FLUCFCS 510) (4.96 acres - .4%)

Hickey's Creek is a meandering tributary of the Caloosahatchee River. Riparian vegetation associated with Hickey's Creek include bald cypress *(Taxodium distichum)*, laurel oak, water hickory *(Carya aquatica)*, cabbage palm, strangler fig *(Ficus aurea)*, Carolina willow *(Salix caroliniana)*, myrsine *(Myrsine quianensis)*, buttonbush *(Cephalanthus occidentalis)*, water lettuce *(Pistia stratiodes)*, spatter-dock *(Nuphar luteum)*, fire flag *(Thalia geniculata)*, redroot, pickerelweed *(Pontederia cordata)*, arrowhead *(Sagittaria sp.)*, climbing aster *(Aster carolinianus)*, royal fern *(Osmunda regalis)*, leather fern *(Acrostichum danaeifolium)*, and cinnamon fern *(Osmunda cinnamomea)*.

i. Freshwater Marshes (FLUCFCS 641) (6.15 acres - .6%)

These depressional, herbaceous wetlands are surrounded by pine flatwoods. Vegetation zones within the marshes are well defined indicating that they are relatively pristine. Vegetation includes, fire flag, pickerel weed, arrowhead, maidencane *(Amphicarpum muhlenbergianum)*, cordgrass *(Spartina bakerii)*, St. John's wort *(Hypericum myrtifolium)*, buttonbush, and wax myrtle.

j. Inland Ponds and Sloughs (FLUCFCS 616) (2.94 acres - .3%)

The western portion of this wetland is primarily herbaceous. However, it transitions into a shrub wetland dominated by coastal plain willow to the east. A hydric hammock dominated by cabbage palm and laurel oak borders this wetland to the west.

k. Other Open Lands Rural (FLUCFCS 260) (6.79 acres - .6%)

Historically, this area was a pine flatwoods with a scrub component. It was partially cleared apparently for agricultural purposes. This site is dominated by slash pine, saw palmetto, live oak, Chapman's oak, myrtle oak, running oak, wire grass, and Indian grass (*Sorghastrum nutans*).

l. Electrical Power Transmission Lines (FLUCFCS 832) (8.84 acres - .8%)

The electrical transmission line bisects HCMP in an east - west orientation. The line is managed by the Florida Power and Light Co. (FPL). With the power line management guidelines, the growth of potentially large trees is strictly controlled. The power line right-of-way was mechanically mowed in 2001. Species composition consists of saw palmetto, wire grass, Argentine bahia, tarflower, and dog fennel.

m. Mixed Rangeland, Abandoned Logging Camps (FLUCFCS 3301) (3.95 acres - .4%)

These areas were associated with the logging operation conducted at HCMP between 1932 and 1943. Vegetation is somewhat sparse with some areas of exposed sand. Species composition consists of saw palmetto, tarflower, running oak, wire grass, Argentine bahia, and Brazilian pepper.

n. Abandoned Fill Areas Highways-Railways (FLUCFCS 744) (10.77 acres - 1%)

This is the site of the logging tram that is oriented in a southeast to northwest direction. The elevation is approximately 5 feet higher than natural grade and 20 feet wide. Historically, this grade was connected to the east west railroad that is now the site of the powerline. A detailed description of the logging operation at HCMP is contained in the "Archaeological Survey Of The Hickey Creek Mitigation Park" (1996). Species composition of the grade includes live oak, saw palmetto, Brazilian pepper, cabbage palm, wax myrtle, greenbriar, and wire grass.

o. Spoil Areas (FLUCFCS 743) (less that .5%)

This spoil area is a result of dredging the Hickey's Creek Canal which borders the western boundary of the park and discharges into the creek. Species composition consists of Brazilian pepper, cabbage palm, cogon grass, slash pine, and a mostly herbaceous ground cover.

p. Vegetated Non-Forested Wetlands (FLUCFCS 640) (6.54 acres - .6%)

This area was once a transitional plant community located adjacent to and around the perimeter of the impacted forested wetland at the southern boundary of the park. Because of the impact of the Hickey's Creek Canal and the swale that borders the south end of the park, this area no longer exhibits the hydroperiod and maximum water depth of a viable wetland system. The site has large areas of exposed sand and is characterized by scattered bald cypress, live oak, saw palmetto, and a variety of sedges and grasses.

q. Mixed Wetland Hardwoods (FLUCFCS 617) (34.97 acres - 3%)

This former cypress swamp has been severely impacted by drainage operations associated with Lehigh Acres. Cypress trees are stressed and the swamp has been invaded by both transitional and upland species. Reduction of the hydroperiod and maximum water depth has resulted in oxidation of exposed organic soil and caused significant subsidence. Species composition includes bald cypress, live oak, laurel oak, Brazilian

pepper, cabbage palm, and wax myrtle.

r. Borrow Areas (FLUCFCS 742) (4.6 acres - .4%)

These borrow areas are cow wells located in the pasture within Conservation 20/20 acquisition, #4. Brazilian pepper is present on the spoil piles and the open water has no littoral zone and tends to become dry during the dry season. The borrow areas near the south end of the park were part of a rock mining operation during the late 1950's to the late 1960's. The borrow area that parallels the south boundary of the park is dominated by cowlily and has a large littoral zone dominated by spikerush (*Eleocharis sp.)*.

s. Cypress-Impacted (FLUCFCS 6211) (80.22 acres - 7%)

This moderately impacted cypress strand is part of the Greenbriar Swamp water shed which converges into Hickey's Creek on Conservation 20/20 acquisition, #127. Dominant plant species include bald cypress, live oak, laurel oak, cabbage palm, wax myrtle, dahoon holly, wild coffee, and groundsel tree.

t. Pine-Mesic Oak (FLUCFCS 414) (9.99 acres - .9%)

Historically, this area was a herbaceous wetland and an extension of the flowway from the impacted forested wetland to the south. A reduction in hydroperiod and maximum water depth has resulted in the invasion of upland and transitional species. As with the forested wetland area to the south, this area has also been impacted by the Hickey's Creek Canal. The area is characterized by live oak, laurel oak, slash pine, wax myrtle, and areas of remnant wetland herbaceous ground cover including sedges and grasses.

u. Waterways and Flowways (FLUCFCS 5101) (less than .5%)

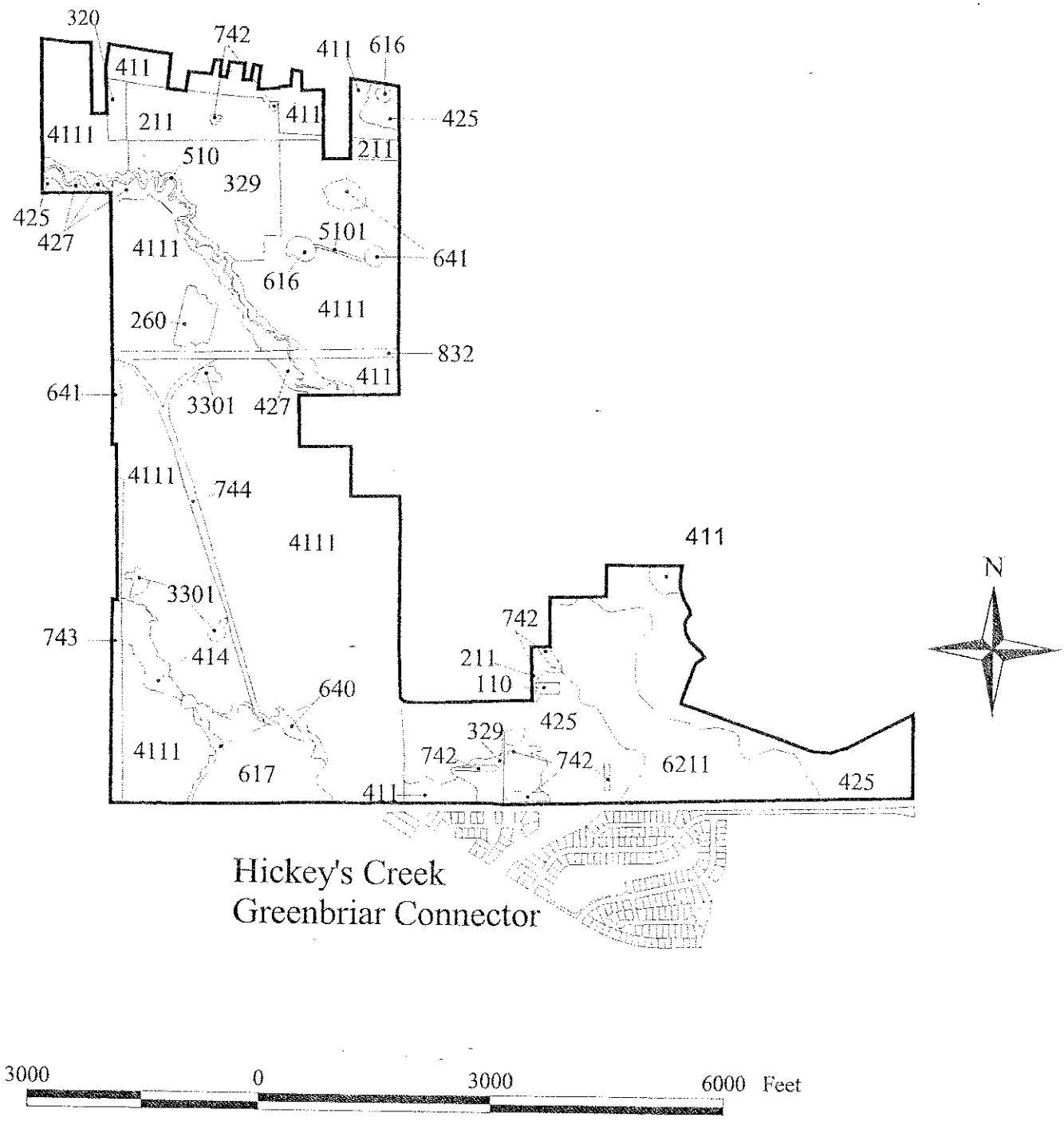
This flowway connects two wetlands located in the northeast portion of the park. The configuration of the flowway suggests that it is man made. Vegetation includes cordgrass, maidencane, wax myrtle, cabbage palm, live oak, laurel oak, and greenbriar.

v. Hickey's Creek/Greenbriar Connector (FLUFCS designations have not been completed for this area.)

The Connector is located south of the HCMP south boundary, consists of approximately 64 acres and serves to connect Greenbriar Swamp and HCMP. The area was prepared for development as part of Lehigh Acres with the construction of roads, water control structures, retention ponds, ditches, and culverts. As a result of past construction, plant communities have been impacted and consist of both forested and herbaceous wetlands, pine flatwoods, and temperate and hydric hammock. Brazilian pepper occupies approximately 25 acres of the site. A restoration plan has been completed and funding will be sought from Lee County and the Office of Greenways and Trails (see Appendix J).

Figure 6: Hickey's Creek Mitigation Park
Plant Communities and Land Forms

(Florida Land Use, Cover and Forms Classification System)



3. Fauna

The park is utilized by a broad range of wildlife species, including migratory and resident birds, wading birds, predatory and omnivorous mammals, small mammals, reptiles and amphibians (both aquatic and upland), and endemic species. These species are resident, transitory, or seasonal occupants of the plant communities on the site.

Appendix E lists birds, mammals, and plant species, which have been documented on the Hickey's Creek site during several site visits by federal, state, and county biologists from 1991 through 2002.

4. Designated Species

HCMP provides habitat for a variety of endangered and threatened plant (see Table 3) and animal (Table 2) species. It is, therefore, imperative that the protection of these essential habitat areas receive a high priority.

a. Management Thresholds for Listed Species

Because HCMP was established as a gopher tortoise *(Gopherus polyphemus)* mitigation preserve, it is essential that habitat for this species be managed and maintained in its optimum condition. To achieve this condition, attention must be given to the concept of "biological thresholds" (Noss & Cooperrider, 1994). This concept is defined as follows:

"A biological threshold is a point at which an irreversible change in a population or ecosystem may occur. Managing down to a biological threshold or minimum standard is extremely dangerous, especially when that standard is poorly documented. Therefore, management thresholds need to be identified. Management thresholds are points where management must be changed to avoid an unacceptable risk to some element of biodiversity. Said another way, they are points at which the risk of reaching biological thresholds is unacceptably high".

In addition to the gopher tortoise, other listed species including the eastern indigo snake *(Drymarchon corais couperi)* and Florida scrub jay *(Aphelocoma coerulescens)* are, to some degree, dependent on the same upland habitat parameters. Prescribed burn intensity and frequency and exotic vegetation control are critical to maintaining optimum habitat conditions for upland species.

b. Listed Animal Species

Table 2 includes wildlife species which have been documented on the site and are listed by the FWC and/or the U.S. Fish and Wildlife Service. Following are descriptions of each listed wildlife species.

Gopher Tortoise *(Gopherus polyphemus)*

The gopher tortoise is a large, terrestrial turtle (9-11 inches long) that excavates and utilizes burrows (averaging 14.8 feet in length) in well-drained soils throughout Florida. This species occurs in the Southeastern coastal plain from extreme eastern Louisiana to southern South Carolina. The burrow provides safety from predators, fire, and climate extremes and is remarkable in its utilization by over 300 other native animal species. The gopher tortoise eats herbaceous ground cover, including grasses, legumes, sedges, and asters as well as fruits such as blackberries, pawpaws, gopher apples, sea grapes and saw palmetto berries. The gopher tortoise does not reach sexual maturity until 10-20 years of age (females) and may live from 40-60 years. Nests are usually constructed in the burrow mounds from mid May to mid June, and bright yellow-orange hatchlings (average 6) emerge 80-110 days after the tortoise deposits eggs.

Gopher tortoises on HCMP are located primarily south of the creek and in the northwest portion of the site, in well-drained soils vegetated by xeric oak scrub, xeric hammock, palmetto prairie, and scrubby flatwoods. Gopher tortoise surveys performed by FWC south of Hickey's Creek in May of 2001 resulted in an estimate of .89 tortoises per acre.

The FWC identified the HCMP as a proposed regional mitigation park for the gopher tortoise. This site was selected from nine surveyed sites in the region under selection criteria, which included rare and unique habitat concerns, project location, project size, and project price per acre. HCMP offers additional habitat protection for this species, which is in decline in the region.

In April of 1999, the FWC conducted an Upper Respiratory Tract Disease Survey of Gopher Tortoises At Hickey's Creek Mitigation Park. The survey report summary indicated that, of the nine tortoises sampled, all tested positive for the presence of anti- Mycoplasma agassizii antibodies indicating exposure to the causative agent of Upper Respiratory Tract Disease. (Auffenberg and Franz, 1982) Specific management thresholds and performance standards will be developed in cooperation with FWC.

Management Thresholds: Prescribed burning provides a more abundant herbaceous ground cover preferred by gopher tortoises. A prescribed burn cycle of approximately 5 years will fulfill that requirement. In addition, some areas dominated by saw palmetto in the southern sector of the park are extremely dense and prevent the growth of herbaceous plants. The FWC plans to roller chop those areas in an attempt to restore the herbaceous ground cover. Gopher tortoise monitoring occurs every 3 years and provides population trends. Gopher tortoise burrows will be surveyed within each prescribed burn unit.

Eastern Indigo Snake *(Drymarchon corais couperi)*

The Eastern indigo snake is a large, iridescent black snake with a red, coral, or white throat (record length, 8.6 feet). This species is found in a large spectrum of habitats throughout Florida and southern Georgia, often associated with gopher tortoise burrows. The indigo snake utilizes a home range of approximately 125-250 acres, and the males are territorial during the breeding season. The indigo snake feeds diurnally on fish, frogs, toads, lizards, snakes, small turtles, birds, and small mammals, often around the edge of wetlands. The Eastern indigo snake breeds from November through April and lays 5-10 eggs in May or June.

The majority of habitats on HCMP are available for utilization by the indigo snake. The relatively high density of gopher tortoise burrows on the southern portion of the site provides refuge for indigo snakes utilizing the site. (U. S. Fish and Wildlife Service, 1982)

Management Thresholds: Little is known about the specific management thresholds of the Eastern indigo snake. However, since this species is often considered a gopher tortoise commensal, it may be safely assumed that the same habitat requirements would benefit this species. The Eastern indigo snake is found in a variety of habitats and has been documented at HCMP at the headquarters area, Greenbriar Swamp, at the main east west fire lane, and at the north end of the ECWCD right-of-way.

Tricolored Heron *(Egretta tricolor)*

The tri-colored heron is a medium sized heron with a bluish back and white belly. It forages in salt and freshwater wetlands on the East and Gulf coasts, and the Caribbean. Prey includes small vertebrates, invertebrates, and fish obtained by waiting, stalking, running, or occasionally by raking a foot through the water. The tricolored heron nests communally with other wading bird species in rookeries or occasionally alone, usually in spring, but the time may vary with water levels in Florida. Nests consist of a loosely built platform of twigs and sticks, in willows, cypress, or popash. Incubation lasts 21-25 days, young fledge at 35 days thereafter, and young are usually able to climb and swim at 3 weeks of age. (Ehrlich, Dobkin, and Wheye, 1988)

The HCMP has a variety of altered and unaltered wetland systems, including the creek, an inland pond with a central willow head, freshwater marsh, wet prairie, and the borrow pit and canal areas that can be utilized for cover, roosting, and foraging by the tricolored heron. The nearest documented rookery (#619040) for this species is located west of the site on an island in the Caloosahatchee River. (Runde, 1991)

Management Thresholds: The tricolored heron is rarely observed in forested areas. It prefers open marshes and coastal areas. The marshes and borrow pits will remain and provide foraging habitat for this species during the dry season. These areas will be maintained in their current state.

Little Blue Heron *(Egretta caerulea)*

The little blue heron is a medium sized slate blue heron that forages in salt and freshwater wetlands on the East and Gulf coasts, and the Caribbean. Prey includes small vertebrates, invertebrates, and primarily fish (Ehrlich, Dobkin, and Wheye, 1988). The little blue heron nests communally with other wading bird species in frail twig and stick nests in willows, cypress, or popash. Incubation lasts 20-23 days and the young fledge 42-45 days thereafter.

The HCMP contains a variety of wetlands, as listed above, which can be used by the little blue heron for foraging. The rookery (#619040) referenced above is also the nearest rookery documented for use by the little blue heron. (Runde, 1991)

Management Thresholds: As with the tricolored heron, the little blue heron prefers open areas and is only rarely seen in forested sites. Maintaining marshes and borrow pits as they are will provide foraging areas for this species during the dry season.

Wood Stork *(Mycteria americana)*

The wood stork is a large, white wading bird with large black edges on the wings, a naked head, and long, recurved bill. The wood stork primarily breeds in Florida although nesting occurs in South Carolina, southeast Georgia, and Mexico south through Central and South America to Northern Argentina. The largest rookery for this species in North America is located in Corkscrew Swamp Sanctuary (National Audubon Society), southeast of the HCMP site. The wood stork forages in wetlands characterized by seasonal fluctuations in rainfall and water levels. Foraging behavior includes wading with open bill and sweeping from side to side for crayfish, fish, tadpoles, frogs, and insects. Stick and twig nests lined with Spanish moss and green leaves are built in the tops of cypress or mangrove trees from November to May. Incubation of 2-5 eggs usually takes 28-32 days, and by nine weeks of age, young will leave the nest. Feeding young requires wood storks to locate concentrated food sources, often requiring frequent changes in feeding grounds and long distance flights from the rookery site. (Ogden and Patty, 1981)

Most wetlands in South Florida in proximity to the rookery site at Corkscrew Swamp Sanctuary are important potential feeding areas for the endangered wood stork, especially on the rapidly developing Southwest Florida coast. Seasonal wetlands on the site include freshwater marshes, wet prairies, ditches, and an inland pond, as well as the borrow pits and Hickey's Creek canal. (Kahl, 1964)

Management Thresholds: As previously mentioned, when water levels recede during the dry season, wood storks tend to feed in areas with high concentrations of fish as a result of lower water levels. Wood storks have been observed feeding in borrow pits and "cow watering ponds" at HCMP. These areas will be maintained as possible foraging areas for wood storks.

Snail Kite *(Rostrhamus sociabilis)*

The snail kite or Everglades kite is a large hawk-like bird with a sharply down-curved bill that is endemic to large, inland subtropical freshwater marshes in Florida. The male snail kite is all black except for a broad white band across the base of its tail, and the female is heavily streaked on a buffy body, with a white stripe over the eye and a white band across the black tail. The snail kite forages almost exclusively on apple snails, for which its hooked beak is especially adapted. The snail kite is primarily associated with Lake Okeechobee, well east of HCMP, but is documented utilizing canals in nearby Lehigh Acres and Cape Coral, agricultural impoundments, and Hickey's Creek. The snail kite nests in loose colonies, often in proximity to anhingas *(Anhinga anhinga)* or herons. This species usually nests in willows, cattails, wax myrtle, hummocks of marsh grass, or other shrubby vegetation, in a nest made of sticks, sawgrass, and vines lined with green leaves, and grass stalks. (Sykes, 1987) Nesting occurs from February through April, and young are usually independent at 10 weeks. (Ehrlich, Dobkin, and Wheye, 1988)

Hickey's Creek and Hickey's Creek canal have a population of apple snails. The Hickey's Creek site provides forage for snail kites associated with area canal and impoundment systems, especially during periods of low water levels, when kites appear to disperse from Lake Okeechobee. Snail kites have been sighted at Harn's Marsh which is southwest of HCMP.

Management Thresholds: The snail kite has not been observed at HCMP since the early 1990s. Habitat requirements consist of expansive marshes with abundant apple snail populations. This habitat is not present at HCMP.

Florida Scrub Jay *(Aphelocoma coerulescens)*

The Florida scrub jay is similar to the blue jay *(Cyanocitta cristata)*, but is a more subtly marked blue bird with no crest and a white eyeline. Scrub jays have an indistinctly striped throat and upper breast, bordered by blue to form a dickey (Fitzpatrick, Woolfenden, and Kopeny, 1991). The scrub jay is endemic to the rare xeric oak scrub, including dry prairie and scrubby flatwoods areas associated with this habitat, in central peninsular Florida. It is Florida's only indigenous bird. The scrub jay is totally dependent on this rare habitat and does not migrate or disperse to other types of habitat. Florida scrub jays have a broad diet, including insects, tree frogs, lizards, and small snakes. However, only one plant food, acorns from several species of scrub oaks, is crucial to their existence. The scrub jay annually harvests and buries 6,000-8,000 acorns, an activity known as caching, usually in sandy open areas in the scrub. The Florida scrub jay is a cooperative breeder that lives in groups (2-12, usually 3), with only one breeding pair. The remainder of the family ("helpers") assists in defending territories and feeding young. Scrub jays maintain well-defined territories, and construct nests, distinctive because of their small stick construction and lining, entirely with fibers from Sabal palmettos or palms (Fitzpatrick, Woolfenden, and Kopeny, 1991). Nesting usually occurs from March through June, and 3-4 eggs are laid. Incubation is 15-17 days, and fledgling occurs 18-19 days after hatching (Ehrlich, Dobkin, and Wheye, 1988).

Florida scrub jays in Lee County are primarily associated with the Caloosahatchee River and tributary stream scrubs. Scrub jays are located east, west, north, and south of HCMP. Florida scrub jays have been observed throughout most of HCMP, with a majority of the population concentrated south of Hickey's Creek, near the powerline, and in the northwestern portion of the site.

Scrub jay surveys are conducted annually by FWC with the 2002 survey being completed in August (Appendix F). Future surveys will continue to be conducted annually with reports prepared and records kept on file by FWC and at HCMP.

Management Thresholds: The Florida scrub jay is extremely habitat-restricted to areas where oaks have not exceeded a height greater than 10 or 12 feet and the vegetation is of an open character. The scrub jay habitat at HCMP has been described as pine flatwoods with a scrub component. A prescribed burn frequency of 5 to 7 years will maintain the scrub character of the habitat. It is also recommended that not more than 1/3 of a territory be burned at a time. In addition, it has been discovered that open sand areas benefit scrub jays by providing caching habitat (Steve Shattler, Personal Communication). These areas have been created at HCMP and are being maintained by rotor tilling. More caching areas are planned for the near future. HCMP has been divided into burn units and FWC is responsible for the management of these units.

Note: West Nile Virus Biologists within FWC have raised concerns about possible impacts of West Nile Virus on bird populations in Florida. There is a possibility that listed species populations, including scrub jays, may be impacted. LCPR staff will report any dead birds found at HCMP to the FWC web site (http://wld.fwc.state.fl.us/bird/). If the decision is made to collect the bird, FWC collection protocol will be followed.

Limpkin *(Aramus guarauna)*

The limpkin is a medium sized water bird with long legs, neck, and bill. It is brown in appearance with white spotting on the neck, back, and upper wings. Wings and tail are olive brown, the bill is ochre colored at the base with a black tip curved to the right for extracting snails from their shells. The limpkin occurs from Mexico south through Central and South America and from Southeastern Georgia through peninsular Florida to Cuba, and Jamaica. The species is non-migratory, but moves considerable distances during the post - breeding season, perhaps in search of new feeding areas. The limpkin is associated with slow moving freshwater rivers, streams, marshes, mangroves, and lake shores, feeding in shallow water. The limpkin nests on aquatic vegetation matted together, with a central depression, from December through September in Florida (probably year-round). The 4-8 eggs are pale, dull, buffy spotted and stained with brown and purplish-gray. Very little is known about the breeding biology of this species, but they may occasionally nest in loose colonies, and the young are able to leave the nest the day after hatching. Young stay close to the adults until fledging. The primary food of the limpkin is apple snails, other snails, and freshwater mussels, and to a lesser extent lizards, insects, frogs, worms, and crustaceans (Kale, 1978). The limpkin's dependence on a specialized food source, the apple snail, in riparian habitats, makes this species particularly vulnerable. The limpkin has been observed continuously on Hickey's Creek within the park.

Management Thresholds: Limpkins have been observed feeding in the forested wetlands adjacent to Hickey's Creek, herbaceous wetlands, and borrow pits. These areas will be maintained in their current state.

Florida Sandhill Crane *(Grus canadensis pratensis)*

The Florida sandhill crane is a long-necked, heavy-bodied, gray-brown bird, approximately 4 feet in height, with a red, unfeathered, reddish crown closely resembling other subspecies of migratory sandhill cranes. The Florida sandhill crane is sedentary in its home range (Kale, 1978) which includes more than 2/3 of peninsular Florida and extends to southeastern Georgia, and mingles with other migratory sandhill cranes when they migrate to Florida. This species is most common on improved or semi-improved pasture lands, dry and wet prairie, with scattered seasonal ponds. Prey includes aquatic invertebrates, insects, worms, small mammals, young birds and eggs, lower vertebrates, seeds, grass shoots, grain, bulbs, berries, lichen, and aquatic plants (Ehrlich, Dobkin, and Wheye, 1988). The Florida sandhill crane establishes a long-term pair bond, and nests in pulled up aquatic vegetation in about one foot of water, usually from January through April, depending on water levels (Kale, 1978). The clutch of two eggs is constantly guarded by at least one of the pair, and pairs will establish permanent territories. Incubation lasts 28-32 days, and young fledge 35-42 days thereafter (Ehrlich, Dobkin, and Wheye, 1988). Young may remain with adults for 10 months. The HCMP site has two freshwater wetlands that have been used by the Florida sandhill crane for nesting (Jan Brown, Personal Communication). Florida sandhill cranes have been observed feeding within the Conservation 20/20 acquisition #4.

Management Thresholds: Continue grazing and mow Conservation 20/20 acquisition #4 annually to maintain open character of pasture.

Bald Eagle *(Haliaeetus leucocephalus)*

The adult bald eagle is a large raptor with white head and tail plumage and chocolate brown body plumage, a yellow beak and yellow legs. In Florida bald eagle nesting season occurs from October through May. The eagle feeds primarily on fish, but also forages on cattle egrets, rabbits and other vertebrates. Nests are generally constructed in large slash pine trees in close proximity to waterways. No eagle nests are documented within the boundaries of HCMP, but flyovers occasionally are documented. With the increased development of areas around HCMP it is not unlikely that eagles will nest here. The Hickey's Creek canal and the Caloosahatchee River provide foraging areas within reasonable distance from the park. To date the closest documented eagle nest is at the Able Canal in Lehigh Acres. The primary zone for protection of a bald eagles nest is 350 feet from the nest tree and secondary zone is 750 feet. If a nest is built at HCMP all management activities within the secondary zone will cease from October through May and depending on the location pedestrian traffic will be re-routed or trails will be closed during this time.

Management Thresholds: The bald eagle is an infrequent visitor to HCMP. There are no records of nesting or consistent roosting. Surrounding development and the resulting destruction of natural systems is themost serious threat to the bald eagle. Maintaining HCMP as a natural area with the current management practices may provide habitat for future use by this species. Large slash pine and bald cypress trees will be protected to serve as possible rest trees.

Sherman's Short-Tailed Shrew *(Blarina brevicauda shermani)*

The Sherman's short-tailed shrew is a medium-sized stocky, dark-colored shrew with a short tail, larger in body proportions and skull size, darker in winter pelage, and lacking the brownish tinge of other Blarina populations in Florida. This subspecies is considered very rare and is possibly eliminated in parts of its original range. Information on this species is lacking, but the shrew is known to use drainage ditches with dense grass and mole runways, pine/palmetto habitat with dense grass cover, and possibly mesic hammock habitat. In other places in Florida, Blarina is found in moist forests or dense herbaceous habitats (Humphrey, 1992).

The short-tailed shrew usually constructs its own burrows and runway system, but may use the burrows of other small mammals. Nests of leaves, grasses, and fur are constructed underground. Food consists of worms, insects, crustacea, small vertebrates, mollusks, centipedes, arachnids, millepedes, and plant materials. Very little life history information is available on this subspecies.

HCMP is vegetated by moist oak/cabbage palm hammocks, some wet flatwoods, and hammock-like vegetation associated with the stream swamp along Hickey's Creek. These areas are potential habitat for the Sherman's short-tailed shrew, which was collected at HCMP in December 1982 (Jan Brown, Personal Communication). Trapping of the short-tailed shrew has not been conducted because current techniques usually result in the death of the shrew.

Management Thresholds: Little is known about the habitat requirements of this species. However, managing HCMP for other listed species may provide suitable habitat for this species as well.

Pine Island Rice Rat *(Oryzymys palustris)*

The Pine Island rice rat is a subspecies (status debated by mammalogists) of the rice rats found throughout Florida. The Pine Island rice rat is a medium-sized, long-tailed rodent with short, fine, dense pelage that is generally brownish above and gray below. This subspecies is brownish gray on the upper parts, with the head and mid-dorsum darker with a tendency to have a buff suffusion on the sides and flanks. The underparts of the rice rat are dull white.

On Pine Island, the rice rat was taken from a garbage dump and adjoining wetland with a dense stand of cordgrass (*Spartina patens*). The rice rat was feeding on the stems of spartina, sporobolus, and sea purslane (*Sesuvium portulacastram*). The only other recorded location for this subspecies is at Hickey's Creek in December of 1982 (Jan Brown, personal communication). Most rice rats utilize marshy habitats typical of the freshwater wetlands and stream swamp on the HCMP.

Management Thresholds: Open marshes will be maintained in their current state.

Florida Panther *(Felis concolor coryi)*

The Florida panther is a large, long-tailed cat with a great deal of color variation: pale brown or rusty upper parts, dull white or buffy under parts, tail tip, back of ears, and sides of nose are dark brown or blackish. Mature male panthers examined in the wild in Florida since 1978 have weighed from 102 to 154 pounds and measured nearly 7 feet from nose to tip of tail. Females were considerably smaller, with a weight range of 50 to 108 pounds and measuring 6 feet. (Kautz, 1994)

Preliminary analyses of panther diets in the southwest Florida study area indicate that panthers subsist on a variety of mammalian prey dominated by white-tailed deer, wild hog, and in some areas raccoon. Analysis of 83 scats and 22 kills since 1986, indicate a difference in food habits between the north and south portions of the study area. Deer and hogs accounted for 42 percent and 22 percent, respectively, in south, and 23 percent and 63 percent, respectively, in the north. Occurrence of small prey appeared similar between areas. (Land, 1994)

The panther's historic range included Texas or western Louisiana and the lower Mississippi River valley east through the southeastern states (Arkansas, Louisiana, Mississippi, Alabama, Florida, Georgia, Tennessee, and South Carolina). The only known self-sustaining population of the Florida panther occurs in Florida, generally within the Big Cypress Swamp region and centered in Collier and Hendry Counties. Within the last decade, radio-instrumented panthers have also utilized habitats in Broward, Dade, Glades, Highlands, Lee, and Monroe Counties. Currently, the wild population is estimated to be 30 to 80 adult animals. (Layne, 1978)

Between July 1, 1998 and March 31, 1999, FWC telemetry data from radio-instrumented panthers documented three individuals in the Greenbriar Hickey's Creek region and on HCMP. These panthers were #28, #65 and #74.

Management Thresholds: Continue monitoring FWC telemetry data to determine the presence of the Florida panther at HCMP and Greenbriar swamp. Maintain HCMP natural systems in their current state.

Florida Manatee *(Trichechus manatus latirostris)*

Florida manatees are large, gray-brown aquatic mammals with bodies that taper to a flat paddle shaped tail. They have two flippers with three to four nails on each, and their head and face are wrinkled with whiskers on the snout. The manatee's closest relative is the elephant and hyrax (a small furry animal which resembles a rodent). Manatees are believed to have evolved from a wading, plant eating animal. The Florida manatee is related to the West African manatee, the Amazonian manatee, the dugong, and Steller's sea cow, which was hunted to extinction in 1768. The average adult manatee is about 10 feet long and weighs about 1,000 pounds. (Hartman, 1979a)

Manatees can be found in shallow, slow moving rivers, estuaries, saltwater bays, canals, and coastal areas. Manatees are a migratory species. Within the United States, Florida manatees are concentrated in Florida in the winter, but can be found in summer months as far west as Alabama and as far north as Virginia and the Carolinas. Florida manatees can also be found in the coastal and inland waterways of Central America and along the northern coast of South America, although distribution in these areas may be spotty.

Manatees are gentle and slow moving. Most of their time is spent eating, resting, and in travel. Manatees are completely herbivorous. They eat aquatic plants and can consume 10-15% of their body weight daily in vegetation. They graze for food along water bottoms and on the surface. They may rest submerged at the bottom or just below the surface, coming up to breathe on the average of every three to five minutes. When manatees are using a great deal of energy, they may surface to breathe as often as every 30 seconds.

The reproductive rate for manatees is slow. Female manatees are not sexually mature until five years old, and males are mature at approximately nine years of age. It is believed that one calf is born every two to five years. Twins are rare. The gestation period is approximately 13 months. Mothers nurse their young for a long period and a calf may remain dependent on its mother for up to two years. (Humphrey, 1978)

Florida manatees have no natural enemies, and it is believed they can live 60 years or more. Many manatee mortalities are human-related. Most human-related manatee mortalities occur from collisions with watercraft. Other causes of human-related manatee mortalities include being crushed and/or drowned in canal locks and flood control structures, ingestion of fish hooks, litter, and monofilament line, and entanglement in crab trap lines. Ultimately, however, loss of habitat is the most serious threat facing manatees today. There are approximately 2,600 Florida manatees left in the United States. (Above information is provided by the Save The Manatee Club.)

The Lee County Manatee Park is located approximately 1.5 miles east of I-75. Warm water discharge from the Florida Power and Light power plant attracts manatees during the winter months. Manatees have been documented within HCMP during August of 2002 and previously.

Management Thresholds: Monitor water quality data collected by both the ECWCD and Lee County annually. Prevent disturbances of manatees by visitors to HCMP and maintain Hickey's Creek in its current state.

Florida Black Bear *(Ursus americanus floridus)*

In June 2003, the Florida black bear was documented (photographed) by an HCMP neighbor. The bear was within Conservation 20/20, #57. Black bears in Florida continue to exist in a mosaic of 6 core, 2 remnant, and several peripheral areas that vary in size , distribution, habitat, and isolation. The FWC refers to the 6 core areas as the Apalachicola, Big Cypress, Eglin, Ocala, Osceola, and St. Johns Rover bear populations and the 2 remnant areas as the Chassahowitzka and Glades/Highlands bear populations. Peripheral areas with potential to hold bears include the Blackwater River State Forest, Big Bend, and Greenswamp. Core populations appear to be stable to increasing, but the smaller, remnant populations face an uncertain future because of habitat loss and fragmentation from human development. The FWC lists the black bear in Florida as threatened statewide except for those in Apalachicola National Forest and Baker and Columbia Counties, where bears were considered a game animal until seasons were closed in 1994. Since 1994, black bears retain no special status in these aforementioned areas. The USFWS declined to list the Florida black bear as a federally threatened species, but the U.S. District Court directed the agency to re-evaluate the adequacy of existing regulations for ensuring the conservation of he subspecies. To date, no official response from the USFWS has been published.

Management Thresholds: The Florida black bear is an occasional visitor to HCMP. This species utilizes a variety of habitats including pine flatwoods, forested and herbaceous wetlands, and hammocks. Habitat for this species will be maintained by prescribed burning and exotic vegetation control. Because the home range of this species is quite extensive (female 10 sq. mi., male 50 sq. mi.), it is unlikely that HCMP could support a home range. However, by preserving a natural area corridor, it is likely that bears will use HCMP to move to larger natural areas.

TABLE 2

LISTED FAUNA DOCUMENTED AT HICKEY'S CREEK MITIGATION PARK

Common Name	Scientific Name	FWC Status	USFWS Status
REPTILES			
Gopher tortoise	*Gopherus polyphemus*	SSC	
Eastern indigo snake	*Drymarchon corais couperi*	T	T
BIRDS			
Little blue heron	*Egretta caerulea*	SSC	
Tricolored heron	*Egretta tricolor*	SSC	
Wood stork	*Mycteria americana*	E	E
Limpkin	*Aramus guarauna*	SSC	
Snail kite	*Rostrhamus sociabilis*	E	E
Florida scrub jay	*Aphelocoma coerulescens*	T	T
Florida sandhill crane	*Grus canadensis pratensis*	T	
Bald eagle	*Haliaeetus leucocephalus*	T	
MAMMALS			
Sherman's short-tailed shrew	*Blarina brevicauda shermani*	SSC	
Pine Island rice rat	*Oryzymys palustris*	SSC	
Florida manatee	*Trichechus manatus latirostris*	E	E
Florida panther	*Felis concolor coryi*	E	E
Florida black bear	*Ursus americanus floridus*	T	

LEGEND:

SSC- Species of Special Concern

T- Threatened

E-Endangered

FWC- Florida Fish and Wildlife Conservation Commission

USFWS- United States Fish and Wildlife Service

c. Listed Plant Species

Table 3 identifies plant species which are listed by the Florida Department of Agriculture and Consumer Services (FDA), the U.S. Fish and Wildlife Service (USFWS), and the Convention on International Trade in Endangered Species (CITES), documented on the site from 1990-2002.

TABLE 3

LISTED FLORA DOCUMENTED AT HICKEY'S CREEK MITIGATION PARK

Common Name	Scientific Name	FDA Status	USFWS Status	Cites Status
Giant leather fern	*Acrostichum danaeifolium*	C		
Wild coco	*Eulophia alta*	T		II
Rein orchid	*Habenaria distans*	E		II
Long-lip ladies tresses	*Spiranthes longilabris*	T		II
Thelypteris	*Thelypteris kunthii*	T		
Hand fern	*Ophioglossum palmatum*	E		
Wild pine	*Tillandsia setacea*	T		
Simpson's stopper	*Myrciathes fragrans*	T		

LEGEND:

SSC- Species of Special Concern

T- Threatened

E- Endangered

C- Commercially Exploited

FDA- Florida Department of Agriculture and Consumer Services

USFWS- United States Fish and Wildlife Service

CITES- Convention of International Trade of Endangered Species

I- Appendix I Species

II- Appendix II Species

5. Biological Diversity

A high degree of biological diversity is present in all natural systems within HCMP. These are specifically described under the sections entitled "Natural Plant Communities" and "Fauna". Prescribed burning, exotic vegetation control, and prevention of illegal uses will serve to preserve the biological diversity of HCMP.

C. Cultural Resources

1. Archaeological

Based on preliminary archaeological survey work, HCMP has a strong likelihood of containing historical elements worthy of protection. Due to the limited scope of site development, protection of archaeological resources should be compatible with the long-term management of the site. Protection procedures will comply with the provisions of Chapter 267, F.S. Collection or disturbance of any identified area will be prohibited unless prior authorization is obtained from the Department of State, Division of Historical Resources.

Lee County will develop and implement a protection plan in conjunction with the Division of Historic Resources for the protection of identified historic sites within the park. An initial reconnaissance survey will be performed by Lee County to insure that proposed facilities do not negatively impact archaeological sites. Information obtained from these surveys will be used in designing and presenting interpretive programs to the public.

2. Land Use History

Lee County's recorded and archaeological history is strongly related to its coastal areas. However, settlement of inland areas by Europeans was delayed until the 19th century due to difficulty of access from the land. The Caloosahatchee River provided limited navigability prior to its initial dredging in the 1880's. Additional channelization occurred in the 1930's and 1960's.

Dennis O. Hickey, an Irish immigrant, and the namesake of Hickey's Creek, homesteaded in the area after participating in both the third Seminole war (1849-1858) and the Civil War (1861-1865). His livelihood consisted of cattle ranching and timbering. Dennis Hickey died in 1897.

The park site was one of the last to be timbered in the area. A sawmill camp was located south of the creek and the powerline. An abandoned logging tram, which was the elevated road bed for the logging railroad, transects the site in a northwest to southeast orientation. A few rotted ties remain on the tram, which is vegetated with live oak and palmetto. Dowling & Camp's Hickey Creek Railroad (1944) formerly occupied the site of the powerline right-of-way. Railroad bridge pilings can be seen where the creek crosses the right-of-way.

Other historical uses for the land which is now HCMP includes a long history of cattle grazing and other agricultural uses. An orange grove was located north of Hickey's Creek. Also, a commissary to provide supplies for those involved in logging was located in the vicinity of the present day powerline.

3. Mitigation Park Program

Off-site mitigation programs are used to compensate for impacts of land development on upland listed wildlife populations in a more efficient manner than traditional forms of mitigation. Past attempts to provide wildlife mitigation have usually resulted in small, isolated preserves that lack control and management capability.

The Mitigation Park program is intended to serve a support function for FWC's Statewide Incidental Take (IT) permitting process. To date, the gopher tortoise has been the primary species involved in the issuance of the IT permits. The IT permit option may be used by land development projects to mitigate gopher tortoise impacts incurred by development.

HCMP as a Mitigation Park: In 1992, FWC prepared a site evaluation and analysis report of nine potential gopher tortoise mitigation park sites within the Southwest Florida Regional Planning Council jurisdiction. This report included the HCMP site. On November 20, 1992, the governing board of the FWC approved a staff recommendation to acquire the Hickey's Creek site in cooperation with Lee County through an application to the FCT Preservation 2000 program. Since its purchase in 1994, HCMP has been managed cooperatively by Lee County and FWC as an upland mitigation park pursuant to a Memorandum of Agreement (MOA) executed between the two agencies on April 20, 1994 (Appendix A). Lee County provided approximately 60% of the funding with a matching grant of 40% from FCT to acquire HCMP. FWC agreed to direct mitigation funds received from the issuance of gopher tortoise incidental take permits to Lee County up to the amount of its FCT match pursuant to the terms of the MOA.

The primary purposes of HCMP are to establish a listed species mitigation park to support FWC's off-site mitigation programs and to provide resource based public use facilities and programs. As of April 20, 2002, HCMP is accessible to the public as a resource based park. Both Lee County and FWC consider the advance acquisition of the Hickey's Creek site by using FCT grant monies to be the most biologically and economically effective approach for establishing an interagency mitigation facility.

4. Agency Coordination

Hickey's Creek Mitigation Park is managed in accordance with all applicable Federal, State, and County regulations. Those agencies having a direct role in the management of the park are discussed below. Coordination between these agencies occurs by comparing management methods and schedules, and by sharing personnel while performing onsite activities when possible.

FWC is responsible for all activities which could potentially affect natural resources and enforces state laws pertaining to wildlife, freshwater fish, and other aquatic life within the HCMP boundaries. FWC has implemented wildlife management programs and has primary responsibility for natural resource management activities within HCMP.

In July of 1994, Lee County granted a conservation easement (south of the powerline) to FWC which is addressed in greater detail under Legal Obligations and Constraints. (see Appendix G). The Florida Division of Forestry within the Department of Agriculture and Consumer Services has assisted in fire preparation, permitting, implementation of prescribed burning, and wildfire emergency plans. The Department of State, Division of Historical Resources assists as needed to assure protection of any archaeological and historical sites or artifacts discovered within the project site. The South Florida Water Management District (SFWMD) has been contacted on matters relating to surface water drainage and water quality of Hickey's Creek. There has been a cooperative effort with the East County Water Control District (ECWCD) on exotic vegetation control and issues regarding the hydrology of the Greenbriar Swamp/Hickey's Creek area.

The Lee County Department of Parks and Recreation is responsible for control of exotics and facilities maintenance. They are also responsible for natural resource based public programs and they coordinate recreational activities with other county recreational programs, including activities at the Caloosahatchee Regional Park. The Lee County Division of Natural Resource has been contacted regarding environmental permitting and hydrological concerns. The Lee County Division of Construction and Design coordinated the public use facility development. Lee County Parks and Recreation has worked closely with the Division of County Lands regarding Conservation 20/20 nominations adjacent to and near HCMP.

V. FACTORS INFLUENCING MANAGEMENT

A. Natural Trends and Disturbances

Dense palmetto growth in the southern portion of the park is shading herbaceous vegetation upon which gopher tortoises depend. Natural succession, without prescribed burning would exceed scrub jay tolerance for height and density of oaks. The prescribed burning regime at HCMP is designed to prevent natural succession of oaks and other species of trees from exceeding the habitat requirements of scrub jays and gopher tortoises. Lightning induced wild fires could seriously impact scrub jay habitats. The prescribed burn program is designed and executed to eliminate fuel for wild fires. The hydrological cycle of wet and dry seasons influences species composition of many plant communities.

B. Internal Influences

The design and construction of the HCMP public use facilities are intended to minimize impacts on natural habitats and protected species. Negative human influences from public use will be monitored and minimized. Past land uses include logging, grazing, citrus production, and minor agriculture impacts. Remnants of these uses are still evident, however, natural succession, along with the control of exotic vegetation and prescribed burning, has allowed these areas to resemble natural systems.

C. External Influences

The Hickey's Creek watershed has been impacted by drainage activities of the East County Water Control District and related drainage structures in Lehigh Acres to the south. Future development within the State Road 80 (Palm Beach Boulevard) corridor between Fort Myers and Labelle will result in continued growth and intensified land uses. The Hawks Haven residential development to the west and adjacent to HCMP will stimulate further development that may negatively impact the hydrology and natural systems of the park. Although trespassing and incompatible and illegal uses have tended to decrease, park staff must remain diligent to prevent these impacts and contact the appropriate authorities when violations occur. Agriculture and horticultural uses within the Hickey's Creek region have the potential to affect water quality. The expansion of State Road 80 to four lanes will result in a two acre retention pond approximately one hundred feet east of the park entrance. County staff will cooperate with the Florida Department of Transportation to assure that a biologically sound design is implemented and management of the pond is conducted in a way conducive to accepted biological principles.

D. Legal Obligations and Constraints

The Memorandum Of Agreement (MOA) (Appendix A) between the FWC and Lee County is the most significant management document related to HCMP. This MOA defines management responsibilities of both FWC and Lee County Department of Parks and Recreation. In addition, a Conceptual Approval Agreement (Appendix B) was executed between the Florida Communities Trust and Lee County on October 20, 1993. This agreement addresses funding, site title conditions, land uses, bond proceeds, and subjects to be included in the management plan. A Deed of Conservation Easement (Appendix G) was executed between FWC and Lee County on July 14, 1994. This easement applies only to that portion of the park designated as the gopher tortoise mitigation area and includes the lands south of the powerline. This easement also requires specific management strategies for mitigation parks that are applicable to HCMP. The intent of this easement is to provide FWC with access and management control and to prevent development and recreational activities that could be incompatible with listed species protection. The FCT funded portion of the site may be developed for complementary recreational facilities such as restrooms or picnic facilities. Any such facilities will be subject to the approval of the FWC to ensure that no adverse impacts occur to listed species.

A Right-Of-Way Consent Agreement between Florida Power & Light Company and Lee County (Appendix K) provides for the routing of the Palmetto Pines Trail access the powerline. This agreement specifies requirements applicable to the right-of-way management and restricts uses which may jeopardize power transmission.

There are no concessions or leases (except for cattle leases) planned for HCMP. FCT and FWC will be provided 60 days written notice and information regarding any future proposal to lease or operate a concession within the park, excluding Conservation 20/20 parcels, by non-governmental persons or organizations.

E. Management Constraints

The principle management emphasis at Hickey's Creek Mitigation Park is the protection and enhancement of habitat important to state and federally listed wildlife populations. Activities which have occurred following site acquisition included the reintroduction of a prescribed burn regime, invasive exotic plant control, baseline survey information for future performance monitoring, imposing security measures at the perimeter of the site, and opening of the public use facility. While public use and recreation are encouraged within HCMP, such use will be controlled in a manner which minimizes disturbance to listed wildlife resources.

Management responsibility for the HCMP is divided between FWC and Lee County. FWC controls natural resource management activities while Lee County assumes management control for exotic vegetation removal, boundary fencing, and public use activities. Both agencies coordinate and cooperate with all aspects of management and administration.

FWC has established HCMP as a Wildlife and Environmental Area pursuant to Rule 39-17.002 F.A.C. and assumed primary management responsibility for the site. Specific regulations to control public use of the site have been promulgated by FWC pursuant to Rule 39-17.005 F.A.C. As previously mentioned, the principal management emphasis at HCMP will be the protection and enhancement of habitat important to state and federally listed wildlife populations. Public use will be encouraged within the project, and such use will be controlled in a manner which minimizes disturbance to wildlife and native plant communities.

1. Exotic Vegetation Control

Exotic plant and animal species have become established in the numerous vacant niches throughout south Florida in the relatively short time period since European settlement and since south Florida was most recently under the sea. The sandy soils of varying depths over limestone cap rock or bed rock, high seasonal water tables, subtropical temperatures with occasional freezes and high evidence of lightning-induced fire have provided conditions that are not favorable to many of the temperate plant species that occur in north Florida or other southeastern states. Occasional freezes limit tropical species abundance, particularly in inland areas.

Florida has one of the highest diversity of plant species in the United States. But southwest Florida and particularly Lee County are somewhat limited in plant diversity for the reasons described above. For example, only eleven species of native trees are present at HCMP.

These environmental factors apparently have allowed exotic species to invade south Florida and, in some cases, out compete native species. The result is loss of habitat quality and diversity, since most of the exotic plants tend to have minimal wildlife habitat value and often form monotypic stands uncommon in native plant associations.

It is essential that exotic species at least be controlled if not eradicated. A continual, long term commitment of funds and staff time by Lee County is essential to meet the challenge exotic species pose. The alternative is loss of habitat value for which the park was purchased. The MOA assigns responsibility for the control of exotic species to Lee County Parks and Recreation.

There has been a concerted effort to eradicate melaleuca from HCMP. This effort has met with significant success by bringing melaleuca infestation to a maintenance level. However, Conservation 20/20 acquisition, #101 has been infested with melaleuca and will require a significant effort to eradicate this exotic species from this parcel.

As previously stated, HCMP has been disturbed by logging, drainage, and agricultural activities over the past century. These conditions have been conducive to occurrence of exotic plant species that have invaded or were planted on HCMP (Table 4). Brazilian pepper is found in the most communities, occupies the greatest acreage, and poses the greatest threat to the functional viability of the site.

Hickey's Creek Mitigation Park currently exhibits a moderate level of exotic plant infestation. Table 4 lists the invasive exotic trees and shrubs observed on the site. Most non-native plants (Brazilian pepper, cogon grass) occupying HCMP occur within existing disturbed areas such as the East County Water Control District right-of-way, located along the western and southern

boundary. Brazilian pepper is the primary problematic exotic plant within the park. It forms a fairly dominant understory in the impacted oak cypress wetland area near the southern boundary. It also occurs along the canal maintenance areas, the powerline right-of-way, the pasture edges, and the stream bank/floodplain. Although Brazilian pepper does not exist in a monoculture at HCMP, it is widespread and has the potential of replacing native habitats. Lee County Parks and Recreation and the Department of Corrections inmate crew have made significant progress in controlling both Brazilian pepper and melaleuca. These efforts will continue and are included in the HCMP action plan.

Lee County funds and assumes responsibility for exotic plant removal within HCMP. Field logs maintained by FWC and Lee County staff will document and monitor the status of exotic infestation. Chemical control of exotics, using Triclopyr or other suitable herbicides, will occur during those periods considered optimum for eradication. In most cases the exotic woody vegetation occurs within existing native plant communities. The gradual die back and decomposition of the exotic trees and shrubs will release adjacent native vegetation and allow it to occupy the available space through growth of existing plants or seeding of new plants. Thus, in most cases, planting native vegetation will not be necessary.

Once exotic plant control was initiated, these areas were routinely monitored for herbicide effectiveness and the possibility of additional infestation. The exotic plant control plan is contained in Appendix H. Table 4 contains a list of documented invasive exotic plant species at Hickey's Creek Mitigation Park.

TABLE 4

INVASIVE EXOTIC PLANT SPECIES DOCUMENTED AT HICKEY'S CREEK MITIGATION PARK

Common Name	Scientific Name	FLUCFCS - DOT	*EPPC Category of Infestation
Woody Plants			
Brazilian pepper	*Schinus terebinthifolius*	321, 630, 832	I
Guava	*Psidium quajava*	321	I
Java plum	*Szygium cumini*	211	I
Rosewood	*Dalbergia sisso*	746	II
Mango	*Mangifera indica*	425	II
Melaleuca	*Melaleuca quinquenervia*	643, 616	I
Bischofia	*Bischofia javanica*	427	I
Queen palm	*Syagrus romanzoffiana*	329	II
Eucalyptus	*Eucalyptus globules*	329	not classified
Herbaceous Plants			
Tropical soda apple	*Solanum viarum*	221	I
Japanese climbing fern	*Lygodium japonicum*	6211	I
Old World climbing fern	*Lygodium microphyllum*	6211	I
Rosary pea	*Abrus precatorius*	4111, 616, 329	I
Air potato	*Dioscorea bulbifera*	411, 425	I
Bahia grass	*Paspalum notatum*	221	II
Torpedo grass	*Panicum repens*	832	I
Caesar weed	*Urena lobata*	411, 260, 427, 617, 425	II
Cogon grass	*Imperata cylindrica*	411	I
Natal grass	*Rhynchelytrum repens*	221, 832	II

Sources: Field site inspections conducted from 1991-2002 by federal, state, and county biologists
** Florida Exotic Pest Plant Council's 2003 List of Invasive Species*

LEGEND:
FLUCFCS - Florida Land Use, Cover and Forms Classification System
DOT - Department of Transportation
EPPC Category I - Invasive exotics that are altering native plant communities by displacing native species, changing community structures or ecological functions, or hybridizing with natives.
EPPC Category II- Invasive exotics that have increased in abundance or frequency but have not yet altered Florida plant communities to the extent shown by Category I species.

2. Exotic Animal Control

Cattle and horses were removed from the original HCMP site immediately before acquisition. The occurrence of feral animals is monitored through periodic surveys by management personnel. To date, feral hogs pose a moderate threat to soil structure and vegetation at HCMP. FWC has retained the services of a contractor to remove feral hogs using cost effective techniques. To compliment this effort, all new fencing will have specifications that will restrict access by feral animals into the site.

3. Prescribed Fire

Prescribed burning is the primary management tool to protect the natural character and biological integrity of HCMP. The primary objective of the site's burning program will be to promote vegetative characteristics most preferred by listed wildlife within the site. Variations in the seasonality and frequency of burning will occur depending upon individual unit objectives and the type of plant community involved. FWC developed a resource/prescribed burn unit map to assist with the planning and implementation of specific management activities (Appendix I). Twenty-two (22) individual burn units have been identified based on an examination of soils, natural features, plant communities and existing man-made parameters. Targeted burning frequencies include the following: flatwoods (3-12 years); xeric oak scrub (7-15 years); marsh (3-12 years). The fire management prescriptions for HCMP will identify smoke sensitive areas, fire contingency plans, biological constraints, and unit-based burning prescriptions to guide the burning program within the site.

Lee County Parks and Recreation and Land Stewardship Staff have developed prescribed burn procedures, a checklist, and a prescribed burn form (Appendix I). Five Parks and Recreation staff members received training and are certified by the Florida Division of Forestry to be Burn Managers. Prescribed burning is conducted in cooperation with the FWC and DOF.

4. Site Security

Law enforcement security at HCMP is provided by FWC conservation officers, Lee County Sheriff's Department, and Lee County Parks and Recreation park rangers. Pursuant to Rule 39-17.005 F.A.C., FWC has adopted the following specific regulations governing allowable uses within the original land acquisition of HCMP: Note: not applicable to Conservation 20/20 or the Greenbriar/HCMP connector

Hunting and possession of firearms will be prohibited

Cutting and removal of vegetation will be prohibited

Non-authorized vehicles will be prohibited

Camping and camp fires will be prohibited

Dogs, horses, and other pets or livestock will be prohibited

Hiking is restricted to established trails

Access is restricted to foot traffic only

Access during daylight hours only (7:00 am to 6:00 pm daily)

5. Resource Monitoring

The FWC is responsible for the monitoring of both gopher tortoises and scrub jays at HCMP. Gopher tortoise monitoring is conducted every three years and scrub jay monitoring is conducted annually. FWC also prepares activity reports regarding management and monitoring that include maps, data collected, methods and results. (Appendix F) It is anticipated that other monitoring activities may be conducted by students from Florida Gulf Coast University.

F. Public Access and Resource Based Recreation

The ground breaking ceremony for the HCMP public use facilities was conducted on August 26, 2001 and the ribbon cutting ceremony was held on April 20, 2002 with construction of all park facilities occurring within the time period between these two events. The Recreation Facilities Master Plan (Figure 8, page 51) details the type and location of the HCMP recreational facilities. The park facilities include an office, restrooms, a maintenance garage, five miles of hiking trails, fishing pier, amphitheater, two foot bridges across Hickey's Creek, two marsh boardwalks, two overlooks, two rain shelters/rest areas, two picnic areas, a canoe launch/landing, and a 16 space parking area.

Standardized signage indicating hours of operation, rules, regulations, and directions are posted at appropriate locations. All signs, brochures, and dissemination of information regarding the mitigation concept indicate that the site is publicly owned and was purchased with funds from FWC, Lee County, and FCT. The site is also listed in FWC publications identifying the location of this and other mitigation parks throughout the state.

HCMP provides resource-based, outdoor recreational uses such as hiking, canoeing, nature study, photography, and environmental education. These recreational uses are generally considered to be compatible with the underlying wildlife habitat protection management emphasis. However, any uses which are found to interfere with wildlife habitat protection management are subject to modification by FWC. Lee County coordinates the recreational uses at HCMP with recreational uses at the nearby Caloosahatchee Regional Park.

Site alterations not identified in the recreation facilities master plan (Public facilities) or other alterations associated with resource management activities identified in this management plan are subject to notification of and approval by FCT.

Facilities were planned by Lee County to provide an interpretive educational experience, both for individual visitors as well as for groups. Keeping this in mind, program elements interpreted through facility design, brochures, and signs include:

State and federally listed plant and animal species and their relationship to human activities occurring in Florida

Protection of critical wildlife habitat including scrub (palmetto and oak), pine flatwoods, and riparian areas

Relationship of upland areas to wetland watershed drainage, corridors, transitional areas, and habitat diversity

Historical land uses and relationships to current land uses at HCMP and in Southwest Florida

Land management activities including prescribed burning and exotics removal

Facilities and interpretive elements are designed to demonstrate environmental awareness and to provide a strong sense of place. The terrain, vegetation, and wildlife of the park allow visitors to develop a sensitivity and awareness of upland habitats, including rare xeric scrub habitat. With this in mind, Lee County Parks and Recreation offered limited public programs prior to the opening of the public use facility on April 20, 2002. Now that the public use facility is completed, regularly scheduled or special event programs are offered at least once a month, provided the intensity of such use does not adversely impact habitat quality or wildlife populations. Interpretive facilities are maintained on a regularly scheduled basis by the Lee County Department of Parks and Recreation. Lee County staff requirements for maintenance activities and environmental education programs (interpretive activities) are listed in Table 5.

Programs offered by Lee County Parks and Recreation staff include guided hikes, canoe trips, and seasonal celebrations. Programs are available to residents of Lee County as well as to visitors. School classes, scout groups, and environmental organizations are also encouraged to attend the public programs and can schedule special group programs throughout the year.

The Manager/Biologist position for HCMP was approved by the Lee County Board of County Commissioners and filled in April of 1999. A Senior Program Specialist position was filled in November of 2002. A maintenance staff employee cleans all structural facilities and assists with maintenance of signage and trails.

FWC personnel perform and fund maintenance activities related to wildlife and habitat management. Lee County funds and maintains activities related to exotic plant removal, fencing, and public use facilities. Some activities may be conducted by sub-contractors working for either FWC or Lee County. Decisions regarding use of sub-contractors are based on cost and equipment availability.

FWC personnel retain the responsibility for wildlife and habitat management of HCMP The resource management of HCMP has proved to be a cooperative and productive effort between the FWC and Lee County Parks and Recreation.

Access to HCMP is directly off S.R. 80 (8.6 miles east of I-75) with parking in the northwestern corner of the park. The parking area is located where minimum environmental impact results and where proximity to trail head area is provided. A canoe launch is not planned at this time for the park. Rather, the site is seen as a destination from the Caloosahatchee Regional Park, located directly across the Caloosahatchee River, where a canoe launch is planned. A canoe landing exists at HCMP to allow canoeists to enter the park at a designated area. The landing provides controlled access and allows a unique experience of canoeing and hiking in a natural setting. It is acceptable to launch canoes and kayaks into Hickey's Creek by transporting them from the headquarters either by carrying or carting. Canoe and kayak access to HCMP is presently available from the Corps of Engineers Franklin Lock Park and the Alva Boat Ramp located 2 miles west and east, respectively, on the Caloosahatchee River. There are no public access points to Hickey's Creek from S.R. 80 or Bateman Road.

Lee County has constructed a trail system that is approximately 5 miles long. As shown in Figure 8, page 51, the configuration of the trails is a large, off-shaped figure eight with an additional side loop. The trail system utilizes existing trails and the tram road to minimize disturbance of native plant communities. Location of trails was determined with emphasis on limiting disturbances to the Florida scrub jay population on site. The trails are unimproved, natural substrate and trail maintenance is done primarily with hand tools to limit impacts. An ADA compliant trail leads from the parking area to the amphitheatre providing public access to programs and a view of Hickey's Creek. Future plans include extending the ADA crushed shell path 300 feet to provide access to the fishing pier/creek overlook.

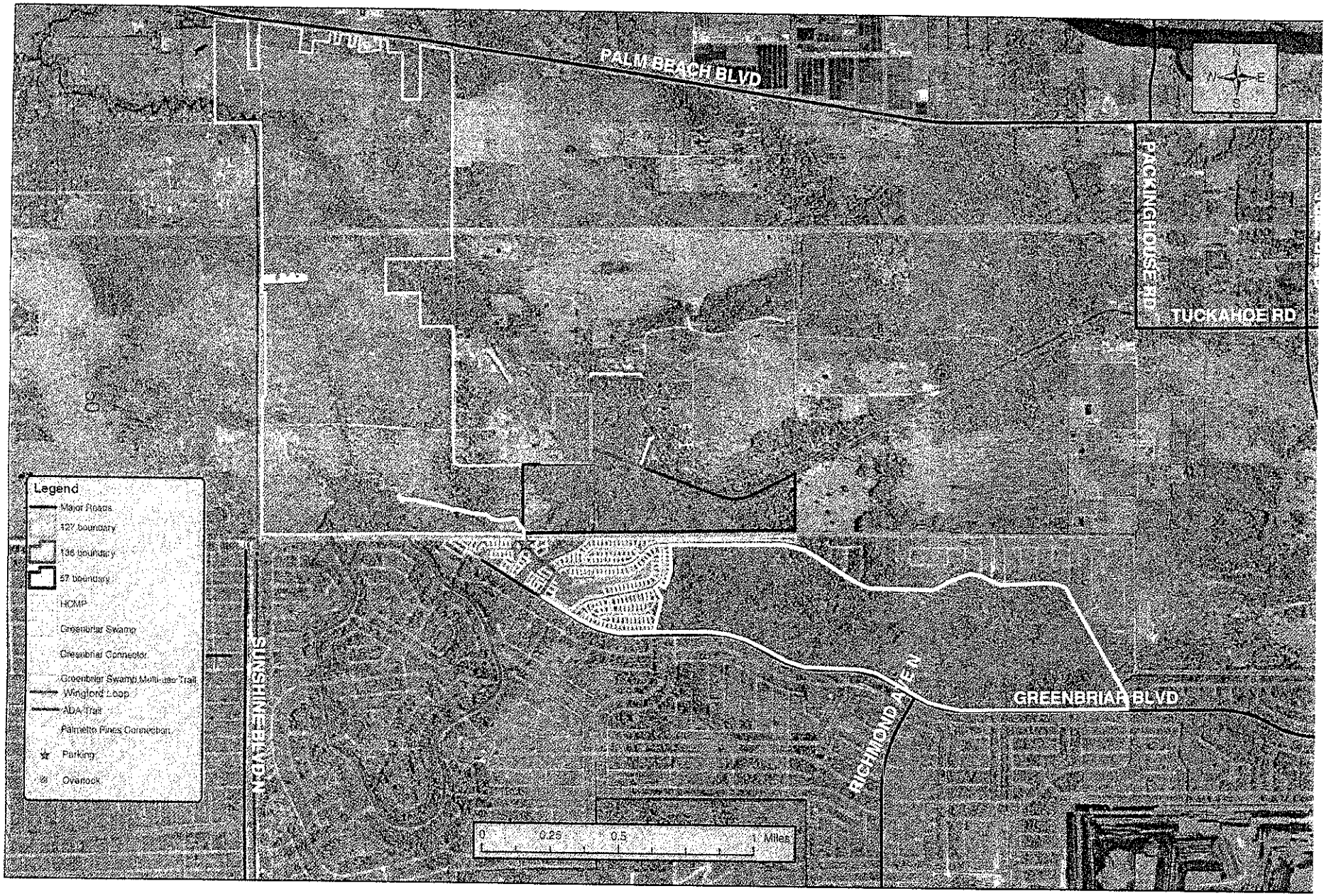
On June 14, 2000 a request was submitted to Florida Power and Light Company (FPL) seeking permission to route a trail across the right-of-way (ROW). A fully executed "Right-Of Way Consent Agreement" was signed on July 18, 2000 (Appendix K). With some minor restriction, Lee County now has permission to construct and maintain a trail across the ROW. This agreement provides public access to areas south of the FPL powerline and allowed routing of the Palmetto Pines Trail.

G. Multiuse Trail

The Caloosa Saddle Club, in cooperation with Lee County Parks and Recreation staff, applied for and received a grant from the Office of Greenways and Trails (Florida Department of Environmental Protection) in February of 2001. This grant will provide funding for a multiuse trail to be located within the Greenbriar area of Lehigh Acres, Greenbriar Swamp Preserve, Greenbriar Swamp Hickey's Creek Connector and Conservation 20/20 parcel #57. Since the routing of this trail within #57 has the potential of impacting the upper watershed of Hickey's Creek, concerns have been raised by neighbors and some user groups. After numerous meetings and discussions between Lee County Parks and Recreation staff and potential users, it was decided to meet with all concerned and receive public input regarding the extension of the trail into #57. On September 6, 2003, the Friends of HCMP Advisory Committee, a representative of the Caloosa Saddle Club, Alligator Amblers Hiking Club, and members of the community met to discuss the routing of the multiuse trail into #57.

The consensus was that the multiuse trail should not be located within #57. However, it was decided that the upper watershed of Hickey's Creek could be utilized as a primitive hiking area with no improvements that may negatively impact the hydrology or water quality of Hickey's Creek. Existing trails will be used and GPS (Global Positioning System) and orienteering methods of hiking the site will be encouraged. The current multiuse trail route (Figure 7, page 50) will begin at Jackie Court with a handicapped accessible, ADA (Americans for Disabilities Act) compliant, trail to a wetland overlook. There will be an equestrian, hiking, and biking multiuse trail located around the perimeter of Greenbriar Swamp Preserve, Wingford loop and a hiking only connection to the five miles of trail at HCMP. Due to land ownership issues, it is unclear, at this time, when the ADA section of the trail will be constructed.

Figure 7: Hickey's Creek / Greenbriar Multiuse Trail System



Hickey's Creek Mitigation Park
TRAIL GUIDE

Figure 8

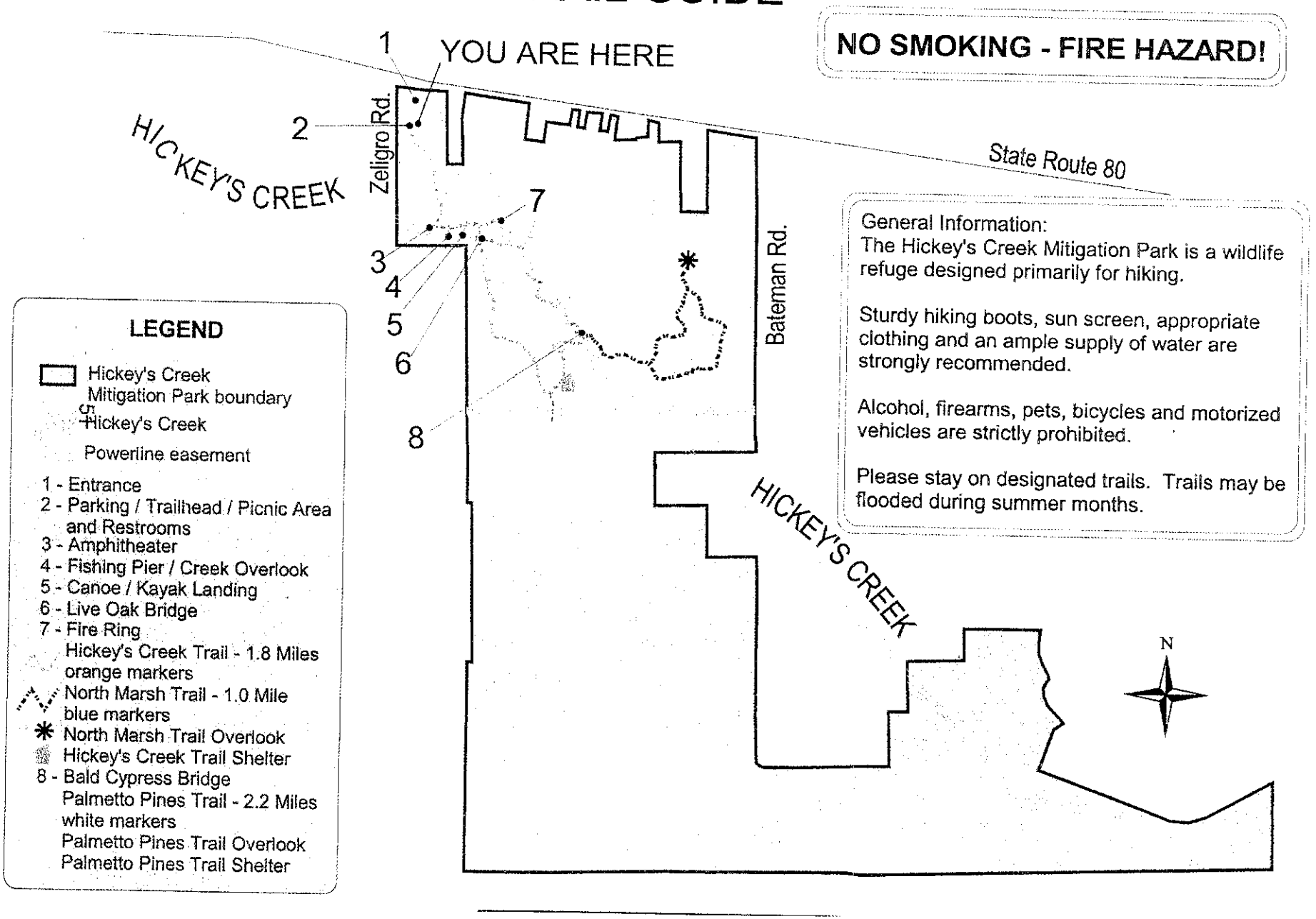


TABLE 5

STAFF REQUIREMENTS

FOR MINIMUM MAINTENANCE OF EXISTING FACILITIES

Facility	Activity	Time Commitment	Total Time/Week
Parking/Interpretive Area	Trash removal and vegetation trimming	4 hrs./week	4.0
Restroom	Cleaning	0.5 MWF	1.5
Trails, Structures	Trim, clear debris	6 hrs./week	6.0
Hickey's Creek and Canoe Landing	Trim vegetation, remove trash and debris	2 hrs. every 2 weeks	1.0
Total Maintenance Time Commitment per week..... 12.5 hrs.			
Total Interpretive (Presentation) Time Commitment per week ..... 8.0 hrs.			
Total Estimated Staff Time per week..... 20.5 hrs.			

H. Land Acquisitions (Conservation 20/20 - See Table 1 on page 2)

All possible efforts will be made in future land acquisitions and development permitting to consider the importance of HCMP with respect to establishment, enhancement, and maintenance of the regional greenway. This will occur through seeking to protect the greenway and corridor areas which have been identified by the RPC and the FWC through outright acquisition when possible or through conservation easements, open space protection, or other means where areas adjacent to or within the greenway are proposed for development.

Purchases of additional lands adjacent to HCMP through the Lee County Conservation 20/20 program, have expanded the boundaries of HCMP. Acquisition of parcels #4, #57, #101, #127, and #136 has proven to be valuable additions to HCMP (Figure 3). These lands are included in the HCMP and are managed as one unit. The acquisition of #127 and #136 provide significant protection to the upper watershed of Hickey's Creek. In addition, lands between the Greenbriar Swamp and HCMP have been donated by the Lehigh Corporation or purchased through the Florida Greenways and Trails program. The addition of these areas has created a connection between HCMP and the Greenbriar Swamp, which is owned by the East County Water Control District (ECWCD). The current total acreage of HCMP including both the Conservation 20/20 acquisitions and the Greenbriar Swamp connector is approximately 1,115 acres.

ACQUIRED CONSERVATION 20/20 PROPERTIES ADJACENT TO HICKEY'S CREEK MITIGATION PARK

Parcel #4

Name of Preserve: Hickey's Creek Mitigation Park (Conservation 20/20 Site 004)

Size: 39 Acres

STRAP#: 30-43-27-00-00001.0200

Date of County Purchase: December 3, 1998 (This was the first site purchased by Conservation 20/20.)

Location: Parcel #4 is located adjacent to and south of State Route 80, approximately ¾ mile west of Bateman Road and north of the HCMP in Section 30, Township 43 South, Range 27 East.

Significance for Plants and Animals: The property was historically a slash pine flatwoods/scrub oak community. After being logged, the site was used as improved pasture for cattle grazing. Scrub jays, a listed species, have been documented using the native habitat on this site. After native habitats have regenerated or been restored in the pasture area, this site will provide additional upland species habitat for the HCMP ecosystem.

Significance for Water Resources: Left undisturbed, this parcel provides flood plain protection for the nearby Hickey's Creek.

Potential for Public Use: This site is adjacent to the HCMP Public Use Facility but there are no plans to include this parcel for public use.

Environmental Management: The management of this site has been incorporated into the HCMP Stewardship Plan. Short-term management activities will include a continued cattle lease to control unwanted infestation by invasive exotic plant species. Long-term management activities include restoration of the site with plantings of slash pines and native scrub species and prescribed burns to improve the habitat for the federally threatened Scrub jay.

Management Status: The north fence line has been replaced. The Florida Department of Corrections work crew has completed Brazilian pepper control throughout Parcel #4. Brazilian pepper was cut, chemically treated and mulched using a hydroax on September 25, 2000.

Parcel # 57

Name of Preserve: Hickey's Creek Mitigation Park – Greenbriar Connector (Conservation 20/20 Site 057)

Size: 132.29 Acres

STRAP #: 32-43-27-00-00001.0060

Date of County Purchase: May 13, 1998

Location: Parcel #57 is located east of the HCMP in Section 32, Township 43 South, Range 27 East.

Significance for Plants and Animals: This property consists primarily of impacted forested wetlands, temperate hammock, and pine flatwoods located at the northeast corner of the site. This habitat type is important for many wildlife species, including neotropical migrants and several listed species.

Significance for Water Resources: The acquisition of this site preserves an important hydrological link between the Greenbriar Swamp and Hickey's Creek and the wetlands provide a water quality benefit through filtration. Preservation of this site protects an important portion of the Hickey's Creek flood plain from encroachment. The channelized part of Hickey's Creek forms the northern boundary of Parcel # 57.

Potential for Public Use: There are plans currently underway to include this parcel in a multiuse trail system which is located in the Greenbriar area. The property will expand upon the recreational opportunities of the HCMP.

Environmental Management: The management of this site has been incorporated into the HCMP Stewardship Plan. Long term management activities include removal of exotics and possible prescribed burning on the extreme eastern and western ends of the property.

Management Status: Cattle grazing continues and the lease will be renewed. The Florida Department of Corrections work crew has cut and stump treated 4 acres of monoculture melaleuca. Control of Brazilian pepper and other exotic vegetation will continue.

Parcel #101

Name of Preserve: Hickey's Creek Mitigation Park (Conservation 20/20 Site 101)

Size: 31.66 Acres

STRAP #: 30-43-27-00-00001.0010; 30-43-27-01-00009.0000 through 01-00014.0000 inclusive; 30-43-27-00-00029.0000, 30-43-27-01-00033.0000, 30-43-27-01-00035.0000, 30-43-27-01-00039.0000, 30-43-27-02-00002.0000 through 000025.0000 inclusive; 30-43-27-02-00029.0000

Date of County Purchase: November 27, 2000

Location: Parcel #101 consists of various parcels located adjacent to the south side of State Road 80 between Gideon Road and Bateman Road in Section 30, Township 43 South, Range 27 East. This property is contiguous with the northern boundary of the recently acquired Conservation 20/20 Parcel #4. Acquisition of this property provides additional buffering, expansion of the HCMP, and additional road frontage on Route 80.

Significance for Plants and Animals: Several parcels of this acquisition contain mature slash pines and indigenous plants. The remaining parcels have been cleared of most of the native plants.

Significance for Water Resources: A small, natural creek system drains northerly from this property under State Route 80. The property provides an outfall for a limited area. There are water quality benefits from overland and creek flow over a small area.

Potential for Public Use: This site is near the public use facility at HCMP, however, there are no current plans for public use of Parcel #101.

Environmental Management: The management of this site has been incorporated into the HCMP Stewardship Plan. Long-term management activities include removal of exotic vegetation and possible prescribed burning. Burning at this site may be limited due to the proximity of single family homes.

Management Status: Field work has been conducted to locate and classify exotic vegetation infestation.

Parcel #127

Name of Preserve: Hickey's Creek Mitigation Park (Conservation 20/20 Site 127)

Size: 24.718 Acres

STRAP #: 32-43-27-00-00004.003A; 32-43-27-00-0004.0020

Date of County Purchase: December 7, 2000

Location: Parcel #127 is located north of Conservation 20/20 acquisition, #57. Hickey's Creek bisects this site from the southeast to the northwest.

Significance for Plants and Animals: Ninety-five percent of this site is hydric and temperate hammock associated with the riverine floodplain of Hickey's Creek. This habitat is significant to the following state endangered listed flora: hand fern (*Ophioglossum palmatum*) and common wild pine (*Tillandsia fasciculata*). The forested wetlands associated with Hickey's Creek consist of mature bald cypress, laurel oak, water hickory, and sabal palms.

Significance for Water Resources: This property contains an extensive network of riverine systems which are part of the headwaters of Hickey's Creek.

Potential for Public Use: Because of deed restrictions, this site can be used only for pedestrian traffic.

Environmental Management: This site has been incorporated into the HCMP Stewardship Plan. A pole barn, improved pasture, and excavations are located at the northeast corner of this site. Long term objectives include the restoration of pastures and excavations and removal of the pole barn.

Management Status: This site is currently being grazed and has minimal exotic vegetation. This area is not appropriate for prescribed burning due to the forested wetland system which encompasses most of the site.

VI. FWC MANAGEMENT ACTION PLAN

(written and to be implemented by FWC)

A. Strategies and Actions for Goals (FWC Land Stewardship Operation Activities)

With the exception of the conservation 20/20 parcels adjacent to HCMP, FWC is responsible for all resource management activities. These activities include mowing, roller chopping, hydroaxing, restoration, and prescribed burning. These methods will increase the amount of herbaceous ground cover preferred by gopher tortoises and possibly improve scrub jay habitat. It is anticipated that prescribed burning will gradually replace mechanical methods in reversing the process of succession and establish a preference for a higher percentage of herbaceous ground cover.

Specific goal and objective statements which will guide FWC management activities within HCMP are as follows:

Goal 1: To maintain, increase, and ensure the abundance and distribution of state listed upland wildlife within HCMP.

Objective 1: Implement appropriate habitat management and restoration activities in order to satisfy the life history requirements of listed species populations.

Objective 2: Primary consideration will be directed to the needs of listed wildlife populations, even to the exclusion of user considerations.

Objective 3: Implement census and monitoring techniques for listed species populations in order to evaluate and refine management activities.

Goal 2: Manage for the quality and productivity of the site's native plant communities including the scrubby flatwoods, pine flatwoods, xeric oak, freshwater marsh, and cypress swamp communities.

Objective 1: Promote management activities such as prescribed burning which are necessary to maintain these plant communities.

Objective 2: Provide protection to sensitive plant communities and individual plant species by controlling use of motorized vehicles, and by directing pedestrian traffic along established hiking trails.

Objective 3: Implement an exotic vegetation removal program to prevent further degradation of native plant communities.

Goal 3: Increase public awareness of the importance of protecting and managing listed species populations.

Objective 1: Provide information regarding the effectiveness of mitigation parks and other habitat protection programs.

Objective 2: Demonstrate the interrelationships between listed wildlife populations and fire-adapted plant communities.

Objective 3: Provide self-guiding hiking trails to listed species habitats and unique environmental features.

Goal 4: Provide recreational uses which are compatible with the protection and maintenance of listed wildlife populations, the retention of naturally occurring vegetative associations, and protection of sensitive natural area resources.

Objective 1: Provide recreational uses that feature the area's uniqueness as a diverse assemblage of high quality natural plant communities.

Objective 2: Reduce wildlife disturbances and enhance wildlife visibility by limiting unsupervised access to daylight hours only.

B. Action Plan

The HCMP action plan provides guidelines for future activities including those on Conservation 20/20 acquisitions and proposes a time frame to conduct management, monitoring, and public use activities. Table 6 lists those activities, the agency responsible, the completion date, and the performance standards.

PROGRESS AT HICKEY'S CREEK MITIGATION PARK SINCE IMPLEMENTATION OF ORIGINAL PLAN

1. Cleaned up trash and removed most interior fence lines.
2. Implementation of a prescribed burn program by FWC (approximately 200 acres/year)
3. Began gopher tortoise monitoring by FWC on a three year cycle.
4. Began Florida scrub jay monitoring annually by FWC.
5. Lee County purchased 5 Conservation 20/20 parcels adjacent to HCMP to bring the total acreage to 1,115.
6. Constructed public use facility and opened to the public on April 20th, 2002.
7. Hired Park manager in 1999
8. Hired Senior Program Specialist in 2002 to implement environmental education programs.
9. Worked on the control of exotic vegetation in both HCMP and Conservation 20/20 parcels. As a result, melaleuca control is at a maintenance level.
10. FWC hired an OPS position to assist with management.
11. Implemented Friends of HCMP volunteer program.
12. Created HCMP advisory board that will meet quarterly.
13. FWC planted longleaf and slash pines in abandoned orange grove area on approximately 60 acres.
14. Installed perimeter fence.
15. Florida Gulf Coast University is compiling a plant inventory.
16. Purchased vehicles and equipment.
17. Implemented feral hog trapping and to date have removed 105 hogs

VII. PROJECTED TIMETABLE FOR IMPLEMENTATION

TABLE 6

HICKEY'S CREEK MITIGATION PARK ACTION PLAN

Activity	Responsible Agency	Completion Date	Performance Standards	Cost Estimate
Renew Cattle leases on #4, #57, #127, #136	C. 20/20	March 31, annually	Leases executed annually	
Fence Conservation 20/20 acquisitions	C. 20/20	June 2004	Boundary secured No trespass	$20,000
Burn slash piles at #57	C. 20/20	August 2003	Burned piles	
Control exotic vegetation at Conservation 20/ 20 parcels	C. 20/20	Ongoing	Exotic vegetation brought to a maintenance level (semiannual maintenance)	$10,000
Continue exotic vegetation control at HCMP	LCPR	Ongoing	Exotic vegetation brought to a maintenance level	$10,000
Continue maintenance of fencing and posting of HCMP	LCPR	Ongoing	Fences maintained and Signs posted	
Implement environmental education programs	LCPR	Ongoing	Annual listing of programs conducted	
Maintain and repair the public use facilities	LCPR	Ongoing	Properly maintained facilities (physically and aesthetically)	$5,000
Conduct annual scrub jay surveys	FWC	Ongoing, annually	*	
Conduct gopher tortoise surveys	FWC	Every three years	*	
Fill agriculture ditches north of Hickey's creek	LCPR	December 2004	Hydrology of Hickey's Creek restored to historic levels	$10,000
Continue prescribed burn regime on a 3 to 7 year cycle for each unit	FWC	Ongoing	*	$1,000 (FWC)
Assist FWC with prescribed burning	LCPR	Ongoing	Burn success as revealed by post burn evaluation	
Repair fencing on #57	C. 20/20	May 2004	Boundary secured	$10,000
Continue monitoring water quality data from ECWCD and Lee County	LCPR	Semi-annually	Water quality maintained in current condition	
Continue fire lane and road maintenance	FWC	Ongoing	*	$5,000
Submit reports to FL Communities Trust	LCPR	Annually , 5/5	Annual FCT reports	
Remove feral hogs from HCMP and Conservation 20/20 parcels	LCPR	Ongoing	Reduced impact from feral hogs, monitor results	$5,000
Conduct quarterly inspections of HCMP and adjacent Conservation 20/20 parcels.	LCPR	Quarterly	Corrective actions taken to solve discovered problems	
Continue working with ECWCD on tax Assessment issue	LCPR	Ongoing	Progress toward resolution	
Restore the Hickey's Creek/Greenbriar Swamp Connector	LCPR	January 2005	Monitor to assure natural systems are restored and functioning	

*** Site specific performance standards directed toward the resource management aspects of this plan will be developed in cooperation with FWC prior to December 1, 2004 and incorporated into this plan.**

VIII. FINANCIAL CONSIDERATIONS

Initial funding for the purchase of the first 770 acres came from funds generated from the gopher tortoise mitigation program conducted by the FWC, from the Lee County Environmentally Sensitive Land Funds Program, and the Florida Communities Trust. Funds from Conservation 20/20 were used to purchase the five parcels adjacent to HCMP. The DEP Office of Greenways and Trails funded the purchase of some of the Hickey's Creek/Greenbriar Connector. The Lee County Tourist Development Council funded much of the costs related to the construction of creek front public use facilities.

Current daily operational costs are the responsibility of Lee County with the expenses for some management activities being paid for by the FWC and DEP. Table 7 shows FWC's estimated costs for habitat management, and enhancement activities.

TABLE 7

FWC ESTIMATED HABITAT MANAGEMENT COSTS

DEVELOPMENT		
Fire Security Lane	2-3 miles	$6,000
MANAGEMENT (annual estimate)		
Fire Lanes (FWC)	26 hrs. tractor	$-0-
Burning (FWC)	200 acres/year	$-0-
Fencing	1,000 feet/year	$2,000
Feral Animals		$1,500

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X. APPENDICES

APPENDIX A

Memorandum of Agreement

LEE CO. CONTRACT NO. C940431

MEMORANDUM OF AGREEMENT

MITIGATION PARK PROGRAM

This Memorandum of Agreement between the Florida Game and Fresh Water Fish Commission (GFC), and Lee County, dated May 12, 1994, is intended as a framework for the acquisition and implementation of a Mitigation Park program.

This Memorandum of Agreement is entered into with reference to the following facts:

Whereas, GFC has an interest in the establishment of a Mitigation Park program to accommodate upland wildlife mitigation efforts within the Southwest Florida Regional Planning Council (SWFRPC) boundary, and

Whereas, GFC is authorized under Section 372.074 (Florida Statutes), as amended by CS/HB 161, to assist other agencies and local governments in acquiring or managing lands important to the conservation of fish and wildlife, and

Whereas, Lee County has a concurrent interest in acquiring and protecting lands that could be used for mitigation of environmental damage caused by existing and proposed development, and

Whereas, a site, which is located in Lee County and which is referred to as Hickey Creek Mitigation Park (hereinafter referred to as "HCMP") is the preferred site for the establishment of a mitigation park facility. HCMP is described in Exhibit "A" and graphically depicted in Figure "A" herein attached and made a part of this agreement, and

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Whereas, the HCMP site contains environmentally sensitive lands including rare and unique uplands, wetlands, and important habitat for several listed species, and

Whereas, the interest of both parties are best served by obtaining funding from the Florida Communities Trust (hereinafter referred to as the "FCT") for the acquisition of the Project site, and

Whereas, on November 20, 1992, GFC approved a staff recommendation to proceed with the establishment of a regional mitigation park for the SWFRPC region at HCMP in Lee County, and

Whereas, on December 16, 1992, the Lee County Board of County Commissioners approved $1,687,000 in the Capital Improvement Fund for the acquisition of HCMP (see Area "A" on Exhibit A) and approved the submittal of an application to the FCT P-2000 Program for a matching grant to acquire additional land within HCMP (see Area "B" on Exhibit A), and

NOW, THEREFORE, in consideration of the foregoing, and of the terms and conditions stated below, Lee and GFC agree to be legally bound as follows:

1. FISCAL RESPONSIBILITIES. All monies that are collected by GFC for wildlife mitigation satisfied by using HCMP shall comply with the following subsections.

(A) Each party agrees to establish the fees charged for participation in HCMP as follows:

i. Total Project Acquisition Cost shall mean the total purchase price of HCMP including costs of any property appraisals, boundary surveys, environmental audits, title insurance, closing costs and other direct and incidental costs

required for purchase of HCMP, minus the $1,113,000 matching grant from Florida Communities Trust.

ii. The Upland Acquisition Cost shall equal the Total Project Acquisition Cost divided by the total number of non-FCT upland acres in Area "A". Area "A" is hereafter referred to as the "Mitigation Area" and is depicted in Exhibit A.

iii. The Management Fee shall be a sum equal to fifteen percent (15%) of the Upland Acquisition Cost. GFC reserves the right to modify this fee according to management needs.

iv. The Service Charge shall equal seven percent (7%) of the sum of the Upland Acquisition Cost and Management Fee and shall be assessed in accordance with Section 215.20, Florida Statutes.

v. The cost of an upland mitigation credit shall be the sum of the Upland Acquisition Cost, Management Fee, and Service Charge.

(B) In accordance with Section 372.074, F.S., GFC agrees to assist Lee County with acquisition of the Project. GFC will pay Lee County for its share of the Project acquisition cost by forwarding to Lee County the land acquisition portion of all mitigation fees it receives from the sale of the upland mitigation credits identified in Section 2(A). In exchange for these payments, GFC will acquire a Conservation Easement over HCMP.

(C) Subject to legislative appropriation approval and laws governing state trust funds, GFC shall make a payment of $395,000 from the land acquisition principal account of the GFC Southwest Florida account to Lee County within six months of acquisition of HCMP. The number of upland mitigation credits encumbered by this

payment shall equal the payment amount divided by the upland acquisition cost. Additional payments equaling the amount on deposit within the land acquisition principal account of the GFC Southwest Florida account shall be made by GFC to Lee County each successive year on or before September 30. Any interest that accrues within the land acquisition principal account shall be added to the management fund principal account and used by GFC to supplement management activities within HCMP.

(D) GFC reserves the right not to direct gopher tortoise mitigation that results from transportation projects sponsored by the Florida Department of Transportation, to HCMP. GFC agrees that all other funds received by that agency for gopher tortoise mitigation within the boundaries of the Southwest Florida Regional Planning Council shall be administered solely in accordance with Section 1 of this agreement.

(E) Only the non-FCT portion of HCMP located in Section 31, Township 43 South, Range 27 East, shall be made available for sale as mitigation credits.

2. MITIGATION ADMINISTRATION.

(A) HCMP shall contain 435 (estimate pending verification) non-FCT upland mitigation credits. One upland mitigation credit shall equal one acre of habitat suitable for gopher tortoise mitigation. GFC shall administer the sale of upland wildlife mitigation credits. Under no circumstance shall the number of mitigation credits sold exceed the number of credits established above for the Project. Records regarding the sale and status of mitigation credits within the mitigation area shall be maintained by GFC.

(B) With each annual payment from the land acquisition principal account to Lee County, GFC will include a map depicting the portion of the mitigation area encumbered by the sale of upland

mitigation credits during that payment period.

(C) Upland mitigation within HCMP shall be deemed complete when all upland mitigation credits are sold and, when the total amount of mitigation funds received by Lee County, after adjusting for the management fee and service charge pursuant to Section 1(A)(iii) and (iv) above, equals the total project acquisition cost as defined in Section 1(A)i above.

(D) Pursuant to Section 1(B) above, a Deed of Conservation Easement to last in perpetuity over HCMP, presented as Exhibit "B", shall be granted by Lee County to GFC. Said easement shall be conveyed to GFC prior to any payment from GFC to Lee County, shall be consistent with Section 704.06, Florida Statutes, and shall protect the ability of GFC to access, manage and control use within HCMP.

3. MANAGEMENT RESPONSIBILITIES

(A) GFC will assume full responsibility for resource management of all lands within HCMP. All uses, improvements, structures, and management practices within HCMP must be approved by GFC. Public access and passive, resource-based recreation within the mitigation area will be controlled by GFC in order to minimize disturbance and other adverse impacts to habitat quality or wildlife populations. The principal management goal for the mitigation area will be the protection and enhancement of listed wildlife populations, even to the exclusion of other uses and activities.

(B) Lee County shall assume full responsibility for the funding, development, and management of public access and passive, resource-based recreational activities of HCMP. Lee County shall secure funding and assume management responsibility for fencing and exotic plant removal within HCMP.

(C) GFC will establish HCMP as a Wildlife and Environmental Area pursuant to Rule 39-17.002, F.A.C. GFC will post HCMP with signage stating the designation of the project along with applicable regulations. Contingent upon formal approval by the Florida Game and Fresh Water Fish Commission, the following rules will be adopted for HCMP pursuant to Rule 39-17.005 F.A.C.:

1. Hunting or possession of firearms is prohibited;
2. Fires are prohibited;
3. Disturbance or removal of any plants or trees is prohibited;
4. Possession of dogs or trapping devices is prohibited;
5. Access shall be at designated entrance areas, and is restricted to foot traffic only.
6. No motorized vehicles, bicycles, or horseback riding is allowed.
7. Camping is prohibited.

(D) Within 18 months of Project acquisition, GFC may adopt a strategic management plan for HCMP. This plan will be consistent with the Conceptual Management Plan (Exhibit "C") dated April 20, 1994. The strategic management plan shall identify actions necessary to implement listed species management activities and will include plans for habitat restoration and monitoring.

(E) Management fees collected pursuant to subsection 1(A)(iii) of this agreement will be administered by GFC. GFC agrees to deposit all management fees into a management fund principal account, and to fund management activities, pursuant to Section 7 of this agreement, with the interest that accrues on behalf of the management fund principal account.

(F) In the event GFC determines that it can no longer perform its management function over HCMP, due to limited funding or some other constraining circumstance, it shall delegate management responsibility for the mitigation area to another agency or

private conservation foundation, after review and approval by FCT. Lee County may at its discretion elect to either manage the FCT portion of the project, or delegate this responsibility to another agency or private conservation foundation, consistent with the FCT Conceptual Approval Agreement 92-015-P2A.

(G) The assignment of management responsibility to GFC shall not preclude Lee County from funding recreational or habitat related improvements within the mitigation area provided said activities are approved by GFC, do not conflict with specific regulations promulgated by GFC pursuant to 39-17.005, F.A.C., are consistent with the Conceptual Management Plan and GFC's Strategic Management Plan, and do not unreasonably interfere with the protection of wildlife and vegetation.

(H) GFC may terminate its management responsibility for specific areas outside the Mitigation Area where natural resources may be adversely affected by clearing, mining, excavating, or any other activity or use not identified in the Conceptual Management Plan dated April 20, 1994. Upon mutual agreement between GFC and Lee County, the Conservation Easement referenced in 2(D) above may be amended to remove areas from the easement where GFC management responsibility has been terminated.

4. REPORTS. In the event Lee County receives an FCT matching grant for the acquisition of HCMP, Lee County agrees to prepare the annual report required by FCT. GFC agrees to prepare and submit to Lee County an annual report of GFC management activities two months prior to the FCT annual report deadline. The GFC annual report shall detail GFC management activities and shall report on the status of mitigation credits sold within the previous twelve-month period. In the event that Lee County acquires the site without a FCT grant, GFC shall submit the annual report to Lee County for the twelve-month period which coincides with the Lee County fiscal year.

5. TERMINATION OF AGREEMENT. This agreement shall terminate upon either (1) the inability of Lee County to acquire HCMP for use as a Mitigation Park, (2) the inability of GFC to obtain spending approval from the Florida Legislature to effect the transfer of funds from the Southwest Florida Gopher Tortoise account of the Fish and Wildlife Habitat Trust Fund to Lee County, or (3) failure of Lee County to execute or comply with Addendum #1 to the Option Agreement for Sale and Purchase, shown as Exhibit "D", with respect to the termination or deannexation of drainage rights held by East County Water Control District. Sections 1,2, and 4 of this agreement shall terminate upon completion of HCMP pursuant to Section 2(C) of this agreement. The management of lands encumbered under Section 2 shall continue to be the responsibility of GFC in accordance with Section 3 of this agreement.

6. SEVERABILITY. If any provisions of this agreement or the application thereof to any person or circumstance is held by a court of competent jurisdiction to be partially or wholly invalid or unenforceable for any reason whatsoever, any such invalidity, illegality, or unenforceability shall not affect other provisions or applications of this agreement which can be given effect without the invalid provision or application and to this end the provisions of this agreement are declared severable.

7. COMMITMENT OF FUNDS. GFC's performance and obligation to pay under this agreement is contingent upon an annual appropriation by the Legislature, and conformance with State laws regarding use of trust funds.

11. PUBLIC RECORDS. GFC reserves the right to unilaterally cancel this agreement for refusal by Lee County to allow public access to all documents, papers, letters, or other material subject to the provisions of Chapter 119 (F.S.) and made or received by Lee County in conjunction with this contract.

12. EFFECTIVE DATE. This agreement shall take effect on the later of the dates stated below.

This Memorandum of Agreement is made and entered on the date executed by the last signatory hereto:

By: _____
Lee County

By: _____
Florida Game and Fresh Water Fish Commission

_____
Approved as to Legal Sufficiency on behalf of Florida Game and Fresh Water Fish Commission

_____
Approved as to Legal Sufficiency for Lee County

APPROVED AS FISCALLY AND BUSINESSLIKE SOUND
DIVISION SERV.
GRANTS

Appendix A-1

Grant Award Agreement

C940436

EXHIBIT "B"

This instrument prepared by:
Ann J. Wild
Florida Communities Trust
Department of Community Affairs
2740 Centerview Drive
Tallahassee, FL 32399-2100

COPY

CONTRACT # [illegible] FLORIDA COMMUNITIES TRUST
P2A AWARD# 92-015-P2A

GRANT AWARD AGREEMENT

THIS AGREEMENT is entered into this 29 day of June, 1994, by and between the FLORIDA COMMUNITIES TRUST ("FCT"), a nonregulatory agency within the State of Florida Department of Community Affairs, and LEE COUNTY, a political subdivision of the State of Florida ("FCT Recipient"), in order to impose terms, conditions, and restrictions on the use of the proceeds of certain bonds, hereinafter described, and the lands acquired with such proceeds and as described in Exhibit "A" attached hereto and made a part hereof ("Project Site"), as shall be necessary to ensure compliance with applicable Florida Law and federal income tax law and to otherwise implement provisions of Chapters 253, 259, and 380, Florida Statutes.

WHEREAS, Part III Chapter 380, Florida Statutes, the Florida Communities Trust Act, creates a nonregulatory agency within the Department of Community Affairs, which will assist local governments in bringing into compliance and implementing the conservation, recreation and open space, and coastal elements of their comprehensive plans and in otherwise conserving natural resources and resolving land use conflicts by providing financial assistance to local governments to carry out projects and activities authorized by the Florida Communities Trust Act;

WHEREAS, Section 259.101(3)(c), Florida Statutes, provides for the distribution of ten percent (10%) of the net Preservation 2000 Revenue Bond proceeds to the Department of Community Affairs to provide land acquisition grants and loans to local governments through the FCT;

WHEREAS, the Governor and Cabinet authorized the sale and issuance of State of Florida Department of Natural Resources Preservation 2000 Revenue Bonds (Bonds);

WHEREAS, the Bonds were issued as tax-exempt bonds, meaning that the interest on the Bonds is excluded from the gross income of Bondholders for federal income tax purposes;

WHEREAS, Rule 9K-4.010(2)(e), F.A.C., authorizes FCT to impose conditions for funding on those FCT applicants whose projects have been selected for funding in accordance with Rule Chapter 9K-4, F.A.C.;

WHEREAS, the FCT has approved the terms under which the Project Site is acquired and the deed whereby the FCT Recipient acquires title to the Project Site shall contain such covenants and restrictions as are sufficient to ensure that the use of the Project Site at all times complies with Section 375.051, Florida Statutes and Section 9, Article XII of the State Constitution and shall contain clauses providing for the conveyance of title to the Project Site to the Board of Trustees of the Internal Improvement Trust Fund upon the failure of the FCT Recipient to use the Project Site acquired thereby for such purposes; and

WHEREAS, such covenants and restrictions shall be imposed by an agreement which shall describe with particularity the real property which is subject to the agreement and shall be recorded in the county in which the real property is located; and

WHEREAS, the purpose of this Agreement is to set forth the covenants and restrictions that are imposed on the Project Site subsequent to its acquisition with the FCT Preservation 2000 Bond Proceeds.

NOW THEREFORE, in consideration of the mutual covenants and undertakings set forth herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, FCT and FCT Recipient do hereby contract and agree as follows:

I. GENERAL CONDITIONS.

1. Upon execution and delivery by the parties hereto, the FCT Recipient shall cause this Agreement to be recorded and filed in the official public records of Lee County, Florida, as Exhibit "B" of the warranty deed vesting fee simple title to the Project Site in the FCT Recipient, and in such manner and in such other places as FCT may reasonably request, and shall pay all fees and charges incurred in connection therewith.

2. The FCT Recipient and FCT agree that the State of Florida Department of Environmental Protection will forward this Agreement to Department of Environmental Protection Bond Counsel for review. In the event Bond Counsel opines that an amendment is required to this Agreement so that the tax exempt status of the Preservation 2000 Revenue Bonds is not jeopardized, FCT and FCT Recipient shall amend the Agreement accordingly.

3. This Agreement may be amended at any time. Any amendment must be set forth in a written instrument and agreed to by both the FCT Recipient and FCT.

4. This Agreement and the covenants and restrictions contained herein shall run with the Property herein described and shall bind, and the benefits shall inure to, respectively, the FCT and the FCT Recipient and their respective successors and assigns.

5. This Agreement shall be governed by and construed in accordance with the laws of the State of Florida, with respect to both substantive rights and with respect to procedures and remedies.

6. Any notice required to be given hereunder shall be given by personal delivery, by registered mail or by registered expedited service at the addresses specified below or at such other addresses as may be specified in writing by the parties hereto, and any such notice shall be deemed received on the date of delivery if by personal delivery or expedited delivery service, or upon actual receipt if sent by registered mail.

FCT:	Florida Communities Trust Department of Community Affairs 2740 Centerview Drive Tallahassee, FL 32399-2100 ATTN: Executive Director
FCT Recipient:	Lee County, a political subdivision of the State of Florida Post Office Box 398 Ft. Myers, FL 33902 ATTN: Board of County Commissioners

7. If any provision of the Agreement shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired.

II. PROJECT SITE REQUIREMENTS IMPOSED BY CHAPTER 259, CHAPTER 375, AND CHAPTER 380, PART III, FLORIDA STATUTES.

1. If any essential term or condition of this grant agreement is violated by the FCT Recipient or by some third party with the knowledge of the FCT Recipient and the FCT Recipient does not correct the violation within 30 days of notice of the violation, fee simple title to all interest in the Project Site

shall be conveyed to the Board of Trustees of the Internal Improvement Trust Fund. The FCT shall treat such property in accordance with Section 380.508(4)(e), Florida Statutes.

FCT shall investigate any violation of terms and conditions to determine if both FCT Recipients have knowledge of or are a party to the violation. If it is determined that one of the FCT Recipients has no knowledge of, has notified FCT of, or is not a party to the violation, the FCT Recipient not in violation shall not be required to convey fee simple title to its interest in the Project Site to the Board of Trustees of the Internal Improvement Trust Fund.

2. Any transfer of the Project Site shall be subject to the approval of FCT and FCT shall enter into a new agreement with the transferee, containing such covenants, clauses, or other restrictions as are sufficient to protect the interest of the people of Florida.

3. The interest, if any, acquired by the FCT Recipient in the Project Site will not serve as security for any debt of the FCT Recipient unless FCT approves the transaction.

4. If the existence of the FCT Recipient terminates for any reason, title to all interest in real property it has acquired with the FCT award shall be conveyed to the Board of Trustees of the Internal Improvement Trust Fund, unless FCT negotiates an agreement with another local government or nonprofit organization which agrees to accept title to all interest in and to manage the Project Site.

5. In the event that the Project Site is damaged or destroyed or title to the Project Site, or any part thereof, is taken by any governmental body through the exercise or the threat of the exercise of the power of eminent domain, the FCT Recipient shall deposit with the FCT any insurance proceeds or any condemnation award, and shall promptly commence to rebuild, replace, repair or restore the Project Site in such manner as is consistent with the Agreement. The FCT shall make any such insurance proceeds or condemnation award moneys available to provide funds for such restoration work. In the event that the FCT Recipient fails to commence or to complete the rebuilding, repair, replacement or restoration of the Project Site after notice from the FCT, the FCT shall have the right, in addition to any other remedies at law or in equity, to repair, restore, rebuild or replace the Project Site so as to prevent the occurrence of a default hereunder.

Notwithstanding any of the foregoing, FCT will have the right to seek specific performance of any of the covenants and

restrictions of this Agreement concerning the construction and operation of the Project Site.

XII. PROJECT SITE OBLIGATIONS IMPOSED BY FCT ON THE FCT RECIPIENT.

1. The Project Site shall be managed only for the conservation, protection and enhancement of natural and historical resources and for passive, natural resource-based public outdoor recreation which is compatible with the conservation, protection and enhancement of the Project Site, along with other related uses necessary for the accomplishment of this purpose. The proposed uses for the Project Site are specifically designated in the Project Plan as approved by FCT.

2. The FCT Recipient shall prepare and submit to FCT an annual report as required by Rule 9K-4.013, F.A.C.

3. The FCT Recipient shall ensure that the future land use designation assigned to the Project Site is for a category dedicated to open space, conservation, or outdoor recreation uses as appropriate. If an amendment to the FCT Recipient's comprehensive plan is required to comply with this paragraph, the amendment shall be proposed at the next comprehensive plan amendment cycle available to the FCT Recipient.

4. FCT Recipient shall ensure, and provide evidence thereof to FCT, that all activities under this Agreement comply with all applicable local, state, regional and federal laws and regulations, including zoning ordinances and the adopted and approved comprehensive plan for the jurisdiction as applicable. Evidence shall be provided to FCT that all required licenses and permits have been obtained prior to the commencement of any construction.

5. The FCT Recipient shall, through its agents and employees, prevent the unauthorized use of the Project Site or any use thereof not in conformity with the FCT approved project plan.

6. FCT staff or its duly authorized representatives shall have the right at any time to inspect the Project Site and the operations of the FCT Recipient at the Project Site.

7. All buildings, structures, improvements, and signs shall require the prior written approval of FCT as to purpose. Further, tree removal, other than non-native species, and/or major land alterations shall require the written approval of FCT. The approvals required from FCT shall not be unreasonably withheld by FCT upon sufficient demonstration that the proposed structures, buildings, improvements, signs, vegetation removal or

land alterations will not adversely impact the natural resources of the Project Site. The approval by FCT of the FCT Recipient's management plan addressing the items mentioned herein shall be considered written approval from FCT.

8. If archaeological and historic sites are located on the Project Site, the FCT Recipient shall comply with Chapter 267, Florida Statutes. The collection of artifacts from the Project Site or the disturbance of archaeological and historic sites on the Project Site will be prohibited unless prior written authorization has been obtained from the Department of State, Division of Historical Resources.

9. The FCT Recipient shall ensure that the Project Site is identified as being publicly owned and operated as a natural resource-based public outdoor recreational site in all signs, literature and advertising regarding the Project Site. The FCT Recipient shall erect a sign(s) identifying the Project Site as being open to the public and as having been purchased with funds from FCT and FCT Recipient.

IV. OBLIGATIONS INCURRED BY FCT RECIPIENT AS A RESULT OF BOND PROCEEDS BEING UTILIZED TO PURCHASE THE PROJECT SITE.

1. If the Project Site is to remain subject, after its acquisition by the State and the FCT Recipient, to any of the below listed activities or interests, the FCT Recipient shall provide at least 60 days written notice of any such activity or interest to FCT prior to the activity taking place, and shall provide to FCT such information with respect thereto as FCT reasonably requests in order to evaluate the legal and tax consequences of such activity or interest:

a. any lease of any interest in the Project Site to a non-governmental person or organization;

b. the operation of any concession on the Project Site to a non-governmental person or organization;

c. any sales contract or option to buy things attached to the Project Site to be severed from the Project Site, with a non-governmental person or organization;

d. any use of the Project Site by non-governmental persons other than in such person's capacity as a member of the general public;

e. a management contract of the Project Site with a non-governmental person or organization; and

f. such other activity or interest as may be specified from time to time in writing by FCT to the FCT Recipient.

2. FCT Recipient agrees and acknowledges that the following transaction, events, and circumstances may not be permitted on the Project Site as they may have negative legal and tax consequences under Florida law and federal income tax law:

a. a sale of the Project Site or a lease of the Project Site to a non-governmental person or organization;

b. the operation of a concession on the Project Site by a non-governmental person or organization;

c. a sale of things attached to the Project Site to be severed from the Project Site to a non-governmental person or organization;

d. any change in the character or use of the Project Site from that use expected at the date of the issuance of any series of bonds from which the disbursement is to be made;

e. any use of the Project Site by non-governmental persons other than in such person's capacity as a member of the general public;

f. a management contract of the Project Site with a non-governmental person or organization; and

g. such other activity or interest as may be specified from time to time in writing by FCT to the FCT Recipient.

DELEGATIONS AND CONTRACTUAL ARRANGEMENTS BETWEEN THE FCT RECIPIENT AND OTHER GOVERNMENTAL BODIES, NOT FOR PROFIT ENTITIES, OR NON GOVERNMENTAL PERSONS FOR USE OR MANAGEMENT OF THE PROJECT SITE WILL IN NO WAY RELIEVE THE FCT RECIPIENT OF THE RESPONSIBILITY TO ENSURE THAT THE CONDITIONS IMPOSED HEREIN ON THE PROJECT SITE AS A RESULT OF UTILIZING BOND PROCEEDS TO ACQUIRE THE PROJECT SITE ARE FULLY COMPLIED WITH BY THE CONTRACTING PARTY.

V. CONDITIONS THAT ARE PARTICULAR TO THE PROJECT SITE AS A RESULT OF THE FCT APPROVED MANAGEMENT PLAN.

1. Outdoor recreational facilities including nature trails, observation areas, interpretive displays, and canoe trails on the Project Site. The facilities shall be developed in a manner that allows the public reasonable access for observation

and appreciation of the natural resources on the Project Site without causing harm to those resources.

2. The FCT Recipient shall provide educational programs at the Project Site. The programs shall include guided walks, special programs such as night walks and seasonal celebrations, and programs for school groups.

3. The timing and extent of a vegetative survey of vegetative communities and plant species on the Project Site shall be as specified in the management plan. The FCT Recipient shall detail how the survey shall be used during development of the site to insure the protection, restoration, and preservation of the natural resources on the Project Site.

4. The palmetto prairie, pine flatwood, scrub oak, freshwater marsh, and cypress swamp communities that occur on the Project Site shall be preserved and appropriately managed to ensure the long-term viability of these vegetative communities.

5. The Project Site shall be managed in a manner that will optimize habitat conditions for the listed wildlife species that utilize or could potentially utilize the Project Site, particularly gopher tortoises and scrub jays. The FCT Recipient shall coordinate with the Game and Freeh Water Fish Commission on the management of the Project Site for the protection of listed species and listed species habitat. The FCT Recipient shall conduct periodic surveys of listed species using the Project Site.

6. The water quality of Hickey Creek shall be protected and the natural hydrology of the Project Site shall be preserved and restored to a more natural function and shall include the restoration of areas impacted by roads and drainage ditches. The FCT Recipient shall coordinate with the South Florida Water Management District on the restoration of the hydrology and management of the Project Site. The Recipient shall also coordinate with the East County Water Control District to minimize any potential negative impacts to the site of the proposed drainage project.

7. A vegetation analysis of the Project Site shall be performed to determine which areas of the Project Site need a prescribed burning regime implemented to maintain natural fire-dependent vegetative communities. The FCT Recipient shall coordinate with Division of Forestry and Game and Fresh Water Fish Commission on the development of a prescribed burn plan for the Project Site.

8. Invasive exotic vegetation that occurs on the Project Site shall be eradicated and shall be replaced with native species.

9. The FCT Recipient shall develop and implement a feral animal removal program for the Project Site.

10. The FCT Recipient shall restore approximately 57 acres of upland to scrub and pine flatwood communities in terms of biological composition and ecological function.

11. The FCT Recipient shall coordinate security, access, and resource management issues with the with power line easement or right-of-way holder. The FCT Recipient in cooperation with the easement or right-of-way holder shall pursue the restoration of a more natural vegetative community within the utility corridor.

12. The FCT Recipient shall coordinate with the Caloosahatchee State Park on the management of the Project Site.

13. The FCT Recipient shall perform an archaeological survey of any area within the Project Site proposed for development prior to the commencement of proposed development activities in that area. All planned activities involving known archaeological sites or identified site areas shall be closely coordinated with the Department of State, Division of Historic Resources in order to prevent the disturbance of significant sites. The FCT Recipient shall develop and implement a protection plan in conjunction with the Division of Historic Resources for the protection of the known historic site located on the project site.

14. The Project Site shall be incorporated into the county greenway system.

15. On 14 That portion of the Project Site located in Section 31, Township 43 South, Range 27 East, Lee County, Florida, shall ~~not~~ be subject to collection of environmental mitigation fees under the terms of the Memorandum of Agreement, Mitigation Park Program, between Lee County and the Florida Game and Fresh Water Fish Commission.

THIS GRANT AWARD AGREEMENT embodies the entire Agreement between the parties.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement.

Witness:

Witness Name:

Witness Name:

Lee County, a political subdivision of the State of Florida, BY ITS BOARD OF COUNTY COMMISSIONERS

BY: _____
Its: Chairman

Date: 6/23/94

COPY

Attest: _____, Deputy Clerk
Clerk

Accepted as to Legal Form and Sufficiency:

_____

Date: 6-23-94

Witness Name:

Witness Name:

HOWARD DOUGLAS

FLORIDA COMMUNITIES TRUST

_____
Linda Loomis Shelley, Chair

Date: June 29, 1994

Accepted as to Legal Form and Sufficiency:

_____
Ann J. Wild, Trust Counsel

6/29/94

GAA/015/P1A
FIN/05-04-94

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 29 day of June, 1994, by LINDA LOOMIS SHELLEY, as Chair of the Florida Communities Trust. She is personally known to me.

Mark Stengel for

Notary Public
Print Name:
Commission No.
My Commission Expires:

ANN J. WILD
MY COMMISSION # CC 224224 EXPIRES
August 30, 1998
BONDED THRU TROY FAIN INSURANCE, INC

STATE OF FLORIDA
COUNTY OF LEE

The foregoing instrument was acknowledged before me this 23 day of June, 1994, by Ray Judah as Chairman. He\She is personally known to me.

Notary Public
Print Name:
Commission No.
My Commission Expires:

OFFICIAL NOTARY SEAL
ROBERT G CLEMENS
NOTARY PUBLIC STATE OF FLORIDA
COMMISSION NO. CC3[illegible]659
MY COMMISSION EXP. MAR. 14,1998

94 JUN 30 PM 4:30

CHARLIE [illegible]

GAA/015/P1A
FIN/05-04-94

APPENDIX B

Conceptual Approval Agreement

CONTRACT # 93051S
94-CT-3C-92-2A-A1-015

FLORI.)MMUNITIES TRUST
P2A AWARD # 92-015-P2A

ADDENDUM I TO CONCEPTUAL APPROVAL AGREEMENT

THIS ADDENDUM I to the Conceptual Approval Agreement is entered into by and between the FLORIDA COMMUNITIES TRUST ("FCT"), a nonregulatory agency within the State of Florida Department of Community Affairs, and LEE COUNTY ("FCT Recipient"), this 25th day of April, 1994.

WHEREAS, the parties hereto entered into a Conceptual Approval Agreement which sets forth the conditions of conceptual approval that must be satisfied by FCT Recipient prior to the receipt of the FCT Preservation 2000 Series 1992A award and the restrictions that are imposed on the Project Site subsequent to its acquisition with the FCT Preservation 2000 Series 1992A award;

I. WHEREAS, the initial term of the Conceptual Approval Agreement expires April 8, 1994;

WHEREAS, the FCT Recipient in accordance with GENERAL CONDITIONS paragraph 2 of the Conceptual Approval Agreement and in compliance with Rule 9K-4.010(2)(h), F.A.C. (1992), has timely submitted to FCT a written request for extension of the April 8, 1994, deadline;

WHEREAS, the parties hereto desire to extend the term of the Conceptual Approval Agreement as provided by Rule 9K-4.010(2)(k), F.A.C. (1992); and

II. WHEREAS, Section IV. of the Conceptual Approval Agreement requires that title to the Project Site be first transferred to the Board of Trustees of the Internal Improvement Trust Fund prior to conveyance to the FCT Recipient;

WHEREAS, Section 259.101(3), Florida Statutes was amended, effective October 1, 1993, to delete the requirement that title to lands purchased pursuant to that statute shall be vested in the Board of Trustees of the Internal Improvement Trust Fund;

WHEREAS, Sections 380.510(3) and (4), Florida Statutes enumerate certain requirements for a grant agreement;

WHEREAS, the parties hereto desire to amend the Conceptual Approval Agreement to comply with these statutory requirements; and

WHEREAS, GENERAL CONDITIONS paragraph 10 of the Conceptual Approval Agreement states that the agreement may be amended at any time prior to FCT giving final project plan approval to the FCT Recipient. Any agreement must be set forth in a written instrument and agreed to by both the FCT Recipient and FCT;

NOW THEREFORE, the FCT and FCT RECIPIENT mutually agree as follows:

1. Notwithstanding the language of Section I. GENERAL CONDITIONS, paragraph 2. and paragraph 10., the parties hereby

agree to revive i· ·ıc pro tunc as though i ‾ d not lapsed in accordance with paragraph 2.

2. In every respect, this amendment is to be construed and applied as though the parties had both signed it before April 8, 1994.

3. The Conceptual Approval Agreement by and between FCT and FCT Recipient is hereby extended until October 7, 1994.

4. Section IV. is hereby replaced, revised and superseded by the following:

IV. PROJECT SITE ACQUISITION REQUIREMENTS IMPOSED BY CHAPTER 259, CHAPTER 375, AND CHAPTER 380, PART III, FLORIDA STATUTES.

FCT RECIPIENT AGREES AS FOLLOWS:

1. FCT shall approve the terms under which the interest in land is acquired.

2. Title to the Project Site shall be titled in the FCT Recipient.

3. Any deed whereby the FCT Recipient acquires title to the Project Site shall contain such covenants and restrictions as are sufficient to ensure that the use of the Project Site at all times complies with Section 375.051, Florida Statutes and Section 9, Article XII of the State Constitution and shall contain clauses providing for the conveyance of title to the Project Site in the Board of Trustees of the Internal Improvement Trust Fund upon failure to use the Project Site conveyed thereby for such purposes.

4. A Grant Award Agreement containing such covenants and restrictions as are sufficient to ensure that the use of the Project Site at all times complies with Section 375.051, Florida Statutes and Section 9, Article XII of the State Constitution, containing clauses providing for the conveyance of title to the Project Site in the Board of Trustees of the Internal Improvement Trust Fund upon failure to use the Project Site for such purposes and describing the real property subject to the Agreement shall be executed by the FCT and FCT Recipient at the time of the conveyance of the Project Site and shall be recorded in the county in which the Project Site is located.

5. If any essential term or condition of the grant is violated, and the FCT Recipient does not correct the violation within 30 days of written notice of violation, title to all interest in the Project Site shall be conveyed to the Board of Trustees of the Internal Improvement Trust Fund. The deed transferring title to the Project Site to the FCT Recipient shall set forth the executory interest of the Board of Trustees of the Internal Improvement Trust Fund.

6. The interest, if any, acquired by the Recipient in the Project Site will not serve as security for any debt of the FCT Recipient.

7. If the existence of the FCT Recipient terminates for any reason, title to all interest in real property it has acquired with the FCT award shall be conveyed to the Board of Trustees of the Internal Improvement Trust Fund, unless FCT negotiates an agreement with another local government or nonprofit organization.

The date of execution of this addendum shall be the date that the last party signs this addendum.

THIS ADDENDUM I to the CONCEPTUAL APPROVAL AGREEMENT and the CONCEPTUAL APPROVAL AGREEMENT and its Exhibit "A" embody the entire Agreement between the parties.

IN WITNESS WHEREOF, the parties hereto have duly executed this ADDENDUM I TO CONCEPTUAL APPROVAL AGREEMENT.

LEE COUNTY

BY: Donald D. Stilwell
Name: Donald D. Stilwell
Its: County Administrator
Date: 4-7-94

FLORIDA COMMUNITIES TRUST

Linda Loomis Shelley, Chair
Date: April 26, 1994

Accepted as to Form and Legality:

Date: 4/7/94

Accepted as to Form and Legality:

Date: 4-21-94

CAA/015-P2A
ADDI/3-4-94

The following notice will appear in the July 23, 1993, edition of the *Florida Administrative Weekly*.

NOTICE OF CONCEPTUAL APPROVAL

The Florida Communities Trust ("Trust") has conceptually approved for funding applications submitted under the Florida Communities Trust Preservation 2000 Program, Series 2A funding cycle. Applications were scored, ranked and selected for funding according to the criteria and procedures set forth in Rule Chapter 9K-4, F.A.C. The governing body of the Trust, at its July 8, 1993, meeting, imposed conditions on the project awards. In accordance with Rule 9K-4.010, F.A.C., the projects selected for funding are considered to have received conceptual approval for funding.

Those applications conceptually approved for funding and the amount of funding conceptually approved are listed below. The conceptual approval is subject to appeal and may change following the appeals process. For this reason, final conceptual approval of awards cannot be made until any appeals have been resolved.

PROJECT NUMBER	APPLICANT/PROJECT	FCT AWARD GRANTED	LOCAL MATCH	TOTAL EST. PROJECT COSTS
92-015-P2A	LEE COUNTY HICKEY CREEK MITIGATION PARK	1,113,000	1,680,000	2,793,000
92-036-P2A	MARTIN COUNTY BEACH/PASLEY PARCELS	1,311,325	1,311,325	2,622,650
92-008-P2A	SEMINOLE COUNTY SPRING HAMMOCK PRESERVE	1,039,400	1,559,100	2,598,500
92-012-P2A	CHARLOTTE COUNTY TIPPECANOE SCRUB	600,000	600,000	1,200,000
92-007-P2A	PINELLAS COUNTY BROOKER CREEK PRESERVE	2,678,360	2,678,360	5,356,720
92-045-P2A	MARION COUNTY SILVER RIVER PROPERTY	880,000	1,320,000	2,200,000
92-022-P2A	CITY OF BOCA RATON OLYMPIA YORK	847,840	1,271,760	2,119,600
92-001-P2A	CITY OF ALTAMONTE SPRINGS LAKE LOTUS NATURE PARK	492,000	492,000	984,000
92-023-P2A	CITY OF NEW SMYRNA BEACH INDIAN RIVER LAGOON NAT'L ESTU	1,017,500	1,017,500	2,035,000
92-034-P2A	NASSAU COUNTY NASSAU RVR ECOLOGICAL RES. PK	909,000	0	909,000
92-041-P2A	HILLSBOROUGH COUNTY/TAMPA CYPRESS STREET RESTORATION PK	2,730,000	4,476,000	7,206,000
92-035-P2A	MARTIN COUNTY OTTER CREEK/SOUTH FORK	660,075	660,075	1,320,150

92-024-P2A	CITY OF WEST PALM BEACH SEC 16 ADDITION WPB PRESERVE	1,975,000	1,975,000	3,950,000
92-018-P2A	INDIAN RIVER COUNTY WABASSO SCRUB	480,500	480,000	961,000
92-010-P2A	ORANGE COUNTY KELLY PARK EXPANSION	468,500	468,500	937,000
92-006-P2A	CITY OF WINTER HAVEN LAKE HOWARD HABITAT/WTR IMP PK	194,250	194,250	388,500
92-009-P2A	CITY OF NORTH PORT MYAKKAHATCHEE CREEK ENVI. PK	141,150	141,150	282,300
92-040-P2A	HILLSBOROUGH COUNTY/TAMPA CYPRESS CREEK PRES - PHASE II	2,730,000	4,371,00	7,101,000
92-031-P2A	CITY OF JACKSONVILLE ORTEGA STREAM VALLEY PARK	1,433,000	1,433,000	2,866,000
92-002-P2A	CITY OF LAKELAND LAKE BONNY COMMUNITY PARK	648,310	972,465	1,620,775
92-032-P2A	CITY OF JACKSONVILLE BLUE CYPRESS	1,330,834	1,704,166	3,035,000
92-030-P2A	SUWANNEE COUNTY LITTLE RIVER SPRINGS PROPERTY	607,500	0	607,500
92-029-P2A	CITY OF CRYSTAL RIVER KINGS BAY PARK	523,000	0	523,000
92-039-P2A	CITY OF TEMPLE TERRACE TEMPLE TERRACE RIVERFRONT PK	676,000	677,500	1,353,500
92-042-P2A	CITY OF MEXICO BEACH PARKER TRACT	186,544	0	186,544
92-003-P2A	TOWN OF YANKEETOWN YANKEETOWN WATER RESOURCE PARK	97,000	0	97,000
92-020-P2A	CITY OF BOCA RATON OSBORNE SITE	1,264,000	1,264,000	2,528,000
92-011-P2A	CITY OF FERNANDINA BEACH NORTH BEACH PARK	218,200	65,500	283,700
	TOTALS	27,252,288	30,813,151	58,065,439
	SELECTED FOR CONTINGENT FUNDING			
92-038-P2A	CITY OF TEMPLE TERRACE RIVERHILLS PARK ADDITION	544,000	544,000	1,088,000
92-021-P2A	BAY COUNTY THOMAS DRIVE BEACH ACCESS	678,875	678,875	1,357,750
92-033-P2A	CITY OF OCALA ONEAL SITE	150,100	150,100	300,200
	TOTALS	1,372,975	1,372,975	2,745,950

NOTIFICATION OF ADMINISTRATIVE HEARING RIGHTS

Any person with substantial interests that are or may be determined by the conceptual approval of funds for projects by the Trust has a right to an informal administrative proceeding pursuant to Section 120.57(2), Florida Statutes, if the person does not dispute issues of material fact raised by this decision. If an informal proceeding is held, the petitioner will have the opportunity to be represented by counsel, to present to the agency written or oral evidence in opposition to the Trust action, or to present a written statement challenging the legal grounds upon which the Trust is justifying its actions.

Alternatively, any person with substantial interests that are or may be determined by the conceptual approval of funds for projects by the Trust has a right to a formal administrative hearing pursuant to Section 120.57(1), Florida Statutes, if the person disputes any issues of material fact stated in this decision. At a formal hearing the petitioner may be represented by counsel of its choosing, and will have the opportunity to present evidence and argument on all the issues involved, to conduct cross-examination and submit rebuttal evidence, to submit proposed findings of fact and orders, and to file exceptions to any order or hearing officer's recommended order.

If a person with a substantial interest desires either an informal proceeding or a formal hearing, the person must file with the Trust Clerk a written response or pleading entitled "Petition for Administrative Proceedings" within 21 calendar days of the publication date of this notice of final agency action. The petition must be in the form required by Rule 9K-1.008, F.A.C. A petition is filed when it is <u>received</u> by the Trust Clerk at 2740 Centerview Drive, Tallahassee, FL 32399-2100. A petition must specifically request an informal proceeding or a formal hearing, it must admit or deny each material fact contained in this decision, and it must state any defenses upon which the petitioner relies. If the petitioner lacks knowledge of a particular allegation of fact, it must so state and that statement will operate as a denial.

Any person with substantial interests that are or may be determined by the conceptual approval of funds for projects by the Trust waives the right to an informal proceeding or a formal hearing if a Petition for Administrative Proceeding is not filed with the Trust Clerk within 21 days of the date of publication of this notice of final agency action.

APPENDIX C

Characteristic Plants and Animals of FLUCCS Areas

At Hickey's Creek Mitigation Park

Habitat Level	Dominant Plants	Characteristic Animals	Comments
Improved Pasture (FLUCFCS #211)			
Over-Story		Northern Harrier /^	
Mid-Story			
Epiphytes			
Ground Cover	Bahia Grass # Dog Fennel %		
Citrus Grove (FLUCFCS #221)			
Over-Story	Orange Tree +		
Mid-Story			
Epiphytes	Spanish Moss		
Ground Cover	Soda Apple % Bahia Grass # Caesar Weed *	Wild Hog / Mourning Dove /	
Palmetto Prairie (FLUCFCS #321)			
Over-Story	Chapman Oak + Live Oak + Cabbage Palm + Slash Pine + Salt Bush *	Gray Squirrel / Red-shouldered Hawk / Northern Harrier /^ Red-tailed Hawk/ Blue Jay/	
Mid-Story	Runner Oak + Brazilian Pepper * Myrtle Oak * Lyonia * Sumac* Wax Myrtle*	Scrub Jay/ Yellow-rumped Warbler /^ Blue-gray Gnatcatcher /	
Epiphytes	Golden Polypody		
Ground Cover	Dwarf Live Oak * Shiny Blueberry * Dwarf Wax Myrtle * Beautyberry * Ironweed % Muhly Grass # Cogon Grass # St. John's Wort % Pennyroyal %	Wild Pig / Catbird / Rufous-sided Towhee / Gopher Tortoise / Carolina Wren / Palm Warbler / Yellow Throat / Indigo Snake /	

Pine Flatwoods (FLUCFCS #411)			
Over-Story	Slash Pine + Cabbage Palm +	Red-tailed Hawk / Bluejay / Ground Dove /	
Mid-Story	Wax Myrtle * Winged Sumac * Gallberry *	Blue-gray Gnatcatcher / White-eyed Vireo / Yellow-rumped Warbler / Downy Woodpecker /	
Epiphytes			
Ground Cover	Saw Palmetto * Wire Grass #	Eastern Indigo Snake!$ Northern Bobwhite /	
Inland Pond (FLUCFCS #616)			
Over-Story	Carolina Willow +		
Mid-Story	Wax Myrtle *	Palm Warbler /	
Epiphytes	Wild Pine		
Ground Cover	Knotgrass % Pickerelweed %	Wood Stork / Wild Hog / Great Egret /	
Temperate Hardwood Oak Hammock (FLUCFCS #630)			
Over-Story	Cypress + Live Oak + Laurel Oak + Slash Pine +		
Mid-Story	Cabbage Palm + Brazilian Pepper * Hog Plum *	Yellow-rumped Warbler / Blue-gray Gnatcatcher /	
Epiphytes	Wild Pine		
Ground Cover	Wild Coffee *		
Freshwater Marsh (FLUCFCS #641)			
Over-Story			
Mid-Story	Wax Myrtle *		
Floating Aquatics	Water Heart Bladderwort		
Ground Cover	Geradia % Maidencane # Sand Cordgrass # Beak Rush # Pickerelweed %	Wilson's Snipe /	

Wet Prairie (FLUCFCS #643)			
Over-Story			
Mid-Story	Wax Myrtle * Cabbage Palm + Buckthorn *	Phoebe /^	Occurs along edge
Epiphytes			
Ground Cover	Muhly Grass # Broom Sedge # Chocolate Weed % Sand Cordgrass #		
Xeric Oak (FLUCFCS #421)			
Over-Story	Slash Pine + Live Oak +		
Mid-Story	Myrtle Oak + Chapman Oak + Saw Palmetto *	Blue-gray Gnatcatcher /	
Epiphytes	Spanish Moss Ball Moss		
Ground Cover	Dwarf Live Oak * Wire Grass # Rusty Lyona *	Gopher Tortoise /	

Temperate Hardwood Oak Hammock (FLUCFCS #425A)			
Over-Story	Live Oak + Cabbage Palm + Laurel Oak + Slash Pine +	Gray Squirrel /	Location of this area is west of borrow pit area
Mid-Story	Saw Palmetto *		
Epiphytes	Golden Polypody Shoestring Fern		
Ground Cover	Rein Orchid % Poison Ivy ~ Greenbriar ~	Southern Toad /	
Temperate Hardwood Oak Hammock (FLUCFCS #425B)			
Over-Story	Live Oak + Laurel Oak + Slash Pine +		Location of this area is along Hickey's Creek
Mid-Story	Tallowwood + Sim Coral Bean % Wild Lime + Marlberry * Wax Myrtle * Saw Palmetto*		
Epiphytes			
Ground Cover			

Stream Swamp Bottomlands (FLUCFCS #615)			
Over-Story	Bald Cypress + Water Hickory + Cabbage Palm + Wax Myrtle *		
Mid-Story	Coral Bean * Hog Plum * Myrsine * Wild Lime * Marlberry * Pond Apple *		
Epiphytes			
Ground Cover	Leather Fern		
Stream		American Alligator /$ Largemouth Bass /$ Bluegill / Peninsula Cooter Limpkin /$ Raccoon /$ Wood Duck /	
Borrow Areas (FLUCFCS #742)			
Over-Story	Live Oak +	Gray Squirrel /	
Mid-Story	Cabbage Palm + Brazilian Pepper * Wax Myrtle *		
Epiphytes			
Ground Cover			
Pond		Largemouth Bass / Bluegill /	
Logging Tram (FLUCFCS #630)			
Over-Story	Live Oak + Laurel Oak + Cabbage Palm +		Mature oaks
Mid-Story	Brazilian Pepper * Saw Palmetto * Myrtle Oak *		
Epiphytes	Resurrection Fern Wild Pine		

Ground Cover	Wild Coffee * American Beautyberry*	Wild Hog / Leopard Frog /	swale at base of tram
Canal Easement (FLUCFCS #746)			
Over-Story	Slash Pine +		
Mid-Story	Wax Myrtle * Brazilian Pepper *		
Epiphytes			
Ground Cover	Boston Fern		
Powerline Easement (FLUCFCS #832)			
Over-Story			
Mid-Story	Brazilian Pepper *		
Epiphytes			
Ground Cover	Bahia Grass #	Bobcat /	

APPENDIX D

Plant Inventory

Plant Species Documented On The
Hickey's Creek Mitigation Park and Conservation 20/20 Parcels

Common Name	Scientific Name	Habitat by Community Description and FLUCFCS Code
FERNS		
	Vittariaceae	
Shoestring Fern	*Vittaria lineate*	Stream Swamp (615), Mixed Wetland Forested (630)
	Polypodiaceae	
Golden Polypody	*Phlebodium aureum*	Oak/Cabbage Palm Hammock (425), Pine Flatwoods (411), Stream Swamp (615)
Resurrection Fern	*Polypodium polypodioides*	Stream Swamp (615)
	Pteridaceae	
Giant Leather Fern	*Acrostichum danaeifolium*	Stream Swamp (615)
Bracken Fern	*Pteridium aquilinum*	
	Blechnaceae	
Swamp Fern	*Blechnum serrulatum*	Stream Swamp (615), Mixed Wetland Forested (630)
	Aspideaceae	
Thelypteris	*Thelypteris sp.*	Stream Swamp (615)
Thelypteris	*Thelypteris kunthii*	Stream Swamp (615)
	Salviniaceae	
Water Spangles	*Salvinia minima*	Stream Swamp (615)
	Ophioglossaceae	
Hand fern	*Ophioglossum palmatum*	Temperate Hardwood Hammock (425)
	Osmundaceae	
Cinnamon fern	*Osmunda cinnamomea*	Temperate Hardwood Hammock (425) Streams and Waterways (510) Cypress-impacted (6211)

Common Name	Scientific Name	Habitat by Community Description and FLUCFCS Code
GYMNOSPERMS		
	Pinaceae	
Slash Pine	*Pinus elliotii*	Pine Flatwoods (411), Temperate Hardwood Hammock (425), Stream Swamp (615)
	Taxodiaceae	
Bald Cypress	*Taxodium distichum*	Mixed Wetland Hardwoods (630)
MONOCOTS		
	Typhaceae	
Cattail	*Typha augustifolia*	Stream Swamp (615)
	Alismataceae	
Arrowhead	*Sagittaria sp.*	Freshwater Marsh (64), Inland Pond (616)
	Hydrocharitaceae	
Hydrilla	*Hydrilla verticillata*	Borrow Pit (743)
	Gramineae (Poaceae)	
Blue Maidencane	*Amphicarpum muhlenbergianum*	Wet Prairie (643)
Wiregrass	*Aristida stricta*	Pine Flatwoods (411), Wet Prairie (643), Palmetto Prairie (321)
Three-Awn Grass	*Aristida speciformis*	Pine Flatwoods (411)
Broomsedge	*Andropogon virginicus* var. *glaucus*	Pine Flatwoods (411), Palmetto Prairie (321)
Broomsedge	*Andropogon glomeratus*	Stream Swamp (615)
Carpetgrass	*Axonopus sp.*	Wetland Forested Mixed (630), Wet Prairie (643)
Crabgrass	*Digitaria serotina*	Wetland Forested Mixed (630), Wet Prairie (643)
Muhly Grass	*Muhlenbergia capillaris*	Wet Prairie (643)
Basketgrass	*Oplismenus setarius*	Wetland Forested Mixed (630)
Panicum	*Panicum sp.*	Wet Prairie (643)
Torpedo Grass	*Panicum repens*	Wetland Forested Mixed (630)
Paspalum	*Paspalum* sp.	Wet Prairie (643)
Natal Grass	*Rhynchylytrum natans*	Wet Prairie (643)
Cordgrass	*Spartina bakeri*	Wet Prairie (643)
Smutgrass	*Sporobolus indicus*	Wet Prairie (643)
St. Augustine Grass	*Stenotaphrum secundatum*	Stream Swamp (615)

Common Name	Scientific Name	Habitat by Community Description and FLUCFCS Code
	Cyperaceae	
Spikerush	*Eleocharis* sp.	Wet Prairie (641)
Beakrush	*Rhynochospora megalocarpa*	Palmetto Prairie (321)
Bulrush	*Scirpus* sp.	Stream Swamp (615)
	Arecaceae	
Cabbage Palm	*Sabal palmetto*	Stream Swamp (615), Pine Flatwoods (411), Temperate Hardwood Hammock (425), Wetland Forested Mixed (630)
Saw Palmetto	*Serenoa repens*	Palmetto Prairie (321), Pine Flatwoods (411), Temperate Hardwood Hammock (425)
	Araceae	
Water Lettuce	*Pistia stratiodes*	Stream Swamp (615)
	Xyridaceae	
Yellow-Eyed Grass	*Xyris* sp.	Pine Flatwoods (411), Palmetto (321), Wet Prairie (643), Freshwater Marsh (641)
	Ericaulaceae	
Pipewort	*Ericaulon* sp.	Freshwater Marsh (641)
Bantum Buttons	*Syngonanthus flavidulus*	Pine Flatwoods (411), Wet Prairie (643)
	Bromeliaceae	
Air Plant	*Tillandsia recurvata*	Pine Flatwoods (411), Temperate Hardwood Hammock (425), Cypress- impacted (6211), Live Oak (427), Mixed Wetland Hardwoods (617)
Wild Pine	*Tillandsia setacea*	Pine Flatwoods (411), Temperate Hardwood Hammock (425), Cypress - impacted (6211), Live Oak (427), Mixed Wetland Hardwoods (617)
Quill-leaf	*Tillandsia fasciculate*	Temperate Hardwood Hammock (425), Cypress - impacted (6211), Live Oak (427), Mixed Wetland Hardwoods (617)

Common Name	Scientific Name	Habitat by Community Description and FLUCFCS Code
	Commelinaceae	
Day-Flower	*Commelina diffusa*	Stream Swamp (615)
	Pontederiaceae	
Pickerelweed	*Pontederia cordata*	Stream Swamp (615), Freshwater Marsh (641), Inland Pond (616)
	Smilacaceae	
Catbriar	*Smilax bona-nox*	Pine Flatwoods (411)
	Amaryllidaceae	
Atamasco-lily	*Zephyranthes simpsonii*	Pine Flatwoods (411) Palmetto Prairie (321)
String Lily	*Crinum americanum*	Stream Swamp (615)
Spider Lily	*Hymenocallis latifolia*	Stream Swamp (615)
	Orchidaceae	
Wild Coco	*Eulophia alta*	Wetland Forested Mixed (630)
Rein Orchid	*Habenaria longilabris*	Temperate Hardwood Hammock (425)
Lawn Orchid	*Zeuxine strateumatica*	Stream Swamp (615)
Ladies Tresses	*Spiranthes* sp.	Pine Flatwoods (411)
DICOTS		
	Salicaceae	
Carolina Willow	*Salix caroliniana*	Inland Pond (616)
	Myricaceae	
Wax Myrtle	*Myrica cerifera*	Pine Flatwoods (411), Stream Swamp (615), Mixed Wetland Hardwoods (630), Temperate Hardwood Hammock (425)
	Juglandaceae	
Water Hickory	*Carya aquatica*	Stream Swamp (615)
	Fagaceae	
Chapman's Oak	*Quercus chapmanii*	Xeric Scrub (421), Pine Flatwoods (411)
Bluejack Oak	*Quercus incana*	Pine Flatwoods (411)

Common Name	Scientific Name	Habitat by Community Description and FLUCFCS Code
Dwarf Live Oak	*Quercus minima*	Xeric Scrub (421), Pine Flatwoods (411)
Laurel Oak	*Quercus laurifolia*	Wetland Forested Mixed (630), Stream Swamp (615)
Myrtle Oak	*Quercus myrtifolia*	Xeric Scrub (421), Pine Flatwoods (411)
Running Oak	*Quercus pumila*	Pine Flatwoods (411), Palmetto Prairie (321), Xeric Scrub (421)
Live Oak	*Quercus virginiana*	Pine Flatwoods (411), Temperate Hardwood Hammock (425)
	Olacaeae	
Hog Plum	*Ximenia americana*	Pine Flatwoods (411), Stream Swamp (615)
	Urticaceae	
Boghemp	*Boehmeria cylindrica*	Stream Swamp (615)
	Polygonaceae	
Jointweed	*Polygonella polygama* var. *brachystachya*	Pine Flatwoods (411)
Smartweed	*Polygonum* sp.	Stream Swamp (615)
	Amaranthaceae	
Iresine	*Iresine diffusa*	Mixed Wetland Hardwoods (630)
	Nymphaeaceae	
Spatter-Dock	*Nuphar lutea*	Stream Swamp (615)
	Phytolacceae	
Pokeberry	*Phytolacca americana*	Pine Flatwoods (411), Stream Swamp (615)
	Annonaceae	
Pond Apple	*Annona glabra*	Stream Swamp (615)
Pawpaw	*Asimina reticulate*	Palmetto Prairie (321), Pasture (211)
	Droseraceae	
Sundew	*Drosera capillaris*	Pine Flatwoods (411)
	Chrysobalanaceae	
Gopher Apple	*Licania michauxii*	Pine Flatwoods (411), Xeric Scrub (421), Palmetto Prairie (321)

Common Name	Scientific Name	Habitat by Community Description and FLUCFCS Code
	Fabaceae	
Crab's Eye	*Abrus precatorius*	Pine Flatwoods (411)
Coral Bean	*Erythrina herbacea*	Steam Swamp (615)
	Polygalaceae	
Milkwort	*Polygala grandiflora*	Wet Prairie (643)
	Rutaceae	
Grapefruit	*Citrus paradise*	Citrus Grove (221)
Orange	*Citrus* sp.	Citrus Grove (221), Wetland Forested Mixed (630)
Wild Lime	*Zanthoxylum fagara*	Stream Swamp (615)
	Znacardiaceae	
Winged Sumac	*Rhus copallima*	Pine Flatwoods (411), Palmetto Prairie (321)
Brazilian Pepper	*Schinus terebinthifolius*	Pine Flatwoods (411), Wetland Hardwoods Mixed (630), Temperate Hardwood Hammock (425), Stream Swamp (615)
Poison Ivy	*Toxicodendron radicans*	Pine Flatwoods (411), Wetland Hardwoods Mixed (630), Temperate Hardwood Hammock (425), Stream Swamp (615)
	Aquifoliaceae	
Dahoon Holly	*Ilex cassine*	Pine Flatwoods (411), Stream Swamp (615)
Gallberry	*Ilex glaba*	Pine Flatwoods (411)
	Aceraceae	
Red Maple	*Acer rubrum*	Steam Swamp (615)
	Vitaceae	
Virginia Creeper	*Parthenocissus quinquefolia*	Pine Flatwoods (411), Stream Swamp (615), Wetland Forested Mixed (630), Temperate Hardwood Hammock (425)
Muscadine Grape	*Vitis munsoniana*	Wetland Forested Mixed (630)
	Sterculiaceae	
Chocolate Weed	*Melochia corchorifolia*	Pine Flatwoods (411), Wet Prairie (643)

Common Name	Scientific Name	Habitat by Community Description and FLUCFCS Code
	Hypericaceae	
St. John's Wort	*Hypericum myrtifolium*	Pine Flatwoods (411), Wet Prairie (643)
St. John's Wort	*Hypericum reductum*	Pine Flatwoods (411), Wet Prairie (643)
	Cistaceae	
Prickly Pear	*Opuntia humifusa*	Pine Flatwoods (411), Xeric Scrub (421)
	Myrtaceae	
White Stopper	*Eugenia axillaries*	Stream Swamp (615)
Twinberry	*Myrcianthes fragrans*	Temperate Hardwood Hammock(425) Stream Swamp (615)
Simpson's Stopper	*Eugenia simpsonii*	Stream Swamp (615)
Melaleuca	*Melaleuca quinquenervia*	Pine Flatwoods (411), Inland Pond (616)
Guava	*Psidium guajava*	Pasture (211), Powerline Easement (832)
	Melastomataceae	
Meadow Berry	*Rhexia* sp.	Wet Prairie (643), Pine Flatwoods (411)
	Onagraceae	
Ludwigia	*Ludwigia microcarpa*	Stream Swamp (615)
Ludwigia	*Ludwigia palustris*	Stream Swamp (615)
Ludwigia	*Ludwigia repens*	Stream Swamp (615)
Prinrose Willow	*Ludwigia peruviana*	Stream Swamp (615)
	Apiaceae	
Coinwort	*Centella asiatica*	Stream Swamp (615)
Water Hemlock	*Cicuta mexicana*	Stream Swamp (615)
Fragrant Eryngium	*Eryngium aromaticum*	Pine Flatwoods (411)
Marsh Pennywort	*Hydrocotyle umbellata*	Stream Swamp (615)

Common Name	Scientific Name	Habitat by Community Description and FLUCFCS Code
	Ericaceae	
Tar Flower	*Befaria racemosa*	Palmetto Prairie (321), Pine Flatwoods (411)
Staggerbush	*Lyonia fruticosa*	Palmetto Prairie (321)
Fetterbush	*Lyonia lucida*	Pine Flatwoods (411), Palmetto Prairie (321)
Maleberry	*Lyonia ligustrina*	Stream Swamp (615)
Blueberry	*Vaccinium darrowii*	Pine Flatwoods (411)
Sparkleberry	*Vaccinium arboretum*	Pine Flatwoods (411), Stream Swamp (615)
Shiny Blueberry	*Vaccinium myrsinites*	Pine Flatwoods (411)
	Myrsineaceae	
Myrsine	*Myrsine guianensis*	Stream Swamp (615), Pine Flatwoods (411), Temperate Hardwood Hammock (425)
	Sapoltaceae	
Buckthorn	*Bumelia reclinata*	Stream Swamp (615), Wet Prairie (643), Pine Flatwoods (411)
	Oleaceae	
Popash	*Fraxinus caroliniana*	Stream Swamp (615)
	Verbanaceae	
American Beautyberry	*Callicarpa americana*	Pine Flatwoods (411), Palmetto Prairie (321), Temperate Hardwood Hammock (425)
	Lamiaceae	
Pennyroyal	*Piloblephis rigida*	Palmetto Prairie (321), Pine Flatwoods (411)
	Scrophulariaceae	
Bacopa	*Bacopa* sp.	Stream Swamp (615), Wet Prairie (641)
Primrose	*Lindernia grandiflora*	Wetland Forested Mixed (630)
Beard Tongue	*Penstemon multiflorus*	Pine Flatwoods (411)
	Lentibulariaceae	
Bladderwort	*Utricularia* sp.	Inland Pond (616), Freshwater Marsh (641)
	Acanthaceae	
Dyschoriste	*Dyschoriste oblongifolia*	Pine Flatwoods (411), Wet Prairie (643)

Common Name	Scientific Name	Habitat by Community Description and FLUCFCS Code
	Rubiaceae	
Buttonwood	*Diodia virginiana*	Wet Prairie (643)
Snowberry	*Chiococca alba*	Pine Flatwoods (411)
Buttonbush	*Cephalanthus occidentalis*	Inland Pond (616), Stream Swamp (615)
Hedyotis	*Hedyotis procumbens*	Pine Flatwoods (411)
Wild Coffee	*Psychotria nervosa*	Stream Swamp (615)
Wild Coffee	*Psychotria sulzneri*	Stream Swamp (615)
	Caprifoliaceae	
Walter's Viburnum	*Viburnum obovatum*	Stream Swamp (615), Wetland Hardwoods Mixed (630)
	Campanulaceae	
Lobelia	*Lobelia* sp.	Stream Swamp (615)
	Asteraceae	
Common Ragweed	*Ambrosia artemisifolia*	Wet Prairie (643)
Climbing Aster	*Aster carolinianus*	Stream Swamp (615)
Grounsel Tree	*Baccharis halimifolia*	Pine Flatwoods (411), Stream Swamp (615)
Carphephorus	*Carphephorus corymbosus*	Pine Flatwoods (411)
	Eclipta alba	Stream Swamp (615)
Southern Fleabane	*Erigeron quercifolius*	Stream Swamp (615)
Flat-Topped Goldenrod	*Euthamia minor*	Pine Flatwoods (411)
Dog Fennel	*Eupaturium capillifolium*	Pine Flatwoods (411)
Climbing Hempvine	*Mikania scandens*	Stream Swamp (615)
Golden Aster	*Pityopsis graminifolia*	Stream Swamp (615)
Marsh Fleabane	*Pluchea* sp.	Wet Prairie (643), Freshwater Marsh (641), Inland Pond (616)
Rabbit Tobacco	*Pterocaulon virgatum*	Palmetto Prairie (321), Pasture (211)
Goldenrod	*Solidago* sp.	Pine Flatwoods (411)
Goldenrod	*Solidago odora*	Pine Flatwoods (411)
	Spilanthes americana	Stream Swamp (615)

Source: Field site inspections conducted from 1991-1993 by federal, state, and county biologists

APPENDIX E

WILDLIFE INVENTORY
Wildlife Species Documented On The
Hickey's Creek Mitigation Park

Common Name	Scientific Name	Occurrence By FLUCFCS Code	Site Status
REPTILES			
Gopher Tortoise	*Gopherus polyphemus*	321, 421, 411, 211, 446, 746	*+
Peninsula Cooter	*Pseudemys floridana peninsularis*	615, 641, 616	*
Brown Anole	*Anolis sagrei sagrei*	321, 421, 411, 425, 221, 746, 743, 832, 744	*
Carolina Anole	*Anolis carolinensis*	411, 630, 421, 321, 744, 425	*
Ground Skink	*Scincella lateralis*	411, 321, 425, 630, 744, 615	*
Five - Lined Skink	*Eumeces fasciatus*	411, 425, 427	*
Six-Lined Racerunner	*Cnemidophorus sexlineatus*	411, 321, 421, 744, 425	*
Florida Banded Water Snake	*Nerodia fasciata*	615, 616	*
Southern Black Racer	*Coluber coluber priapus*	411, 321, 421, 630, 615, 211, 425, 744, 641, 643, 743	*
Eastern Garter Snake	*Thamnophis sirtalis sirtalis*	411, 321, 425, 630, 616, 615, 744, 743, 211, 643, 641	*
Eastern Indigo Snake	*Drymarchon corais couperi*	411, 321, 421, 630, 425, 643, 641, 743, 744	*
Diamondback Rattlesnake	*Crotalus atrox*	4111, 425, 427, 617	*
AMPHIBIANS			
Oak Toad	*Bufo quercicus*	411, 320, 421, 425, 641, 643, 743, 746, 832, 425	*
Southern Toad	*Bufo terrestris*	411, 320, 421, 630, 425, 641, 643, 616, 211, 221, 746, 743, 832, 744, 615	*
Green Treefrog	*Hyla cinerea*	411, 630, 615, 643, 641, 616, 425	*
Southern Leopard Frog	*Rana sphenocephala*	411, 615, 630, 616, 643, 641	*
Largemouth Bass	*Micropterus salmoides*	615, 743	*
Mosquitofish	*Gambusia affinis*	630, 615, 616, 643, 641	*

Common Name	Scientific Name	Occurrence By FLUCFCS Code	Site Status
BIRDS			
Little Blue Heron	*Egretta caerulea*	630, 615, 616, 643, 641	*
Tri-Colored Heron	*Egretta tricolor*	630, 615, 616, 643, 641	*
Great Egret	*Casmerodius albus*	630, 615, 616, 643, 641	*
Wood Stork	*Mycteria americana*	630, 615, 616	*
Limpkin	*Aramus guarauna*	615, 616	*
Black Vulture	*Coragyps atratus*	411, 630, 615, 425, 221, 211, 743, 744, 832	*
Turkey Vulture	*Cathartes aura*	411, 630, 615, 425, 221, 211, 743, 744, 832	*
Wild Turkey	*Meleagris gallopavo*	411, 321, 421, 630, 425; 832, 744	*
Red-Shouldered Hawk	*Buteo lineatus*	411, 630, 321, 421, 221, 832, 744, 743	*
Red-Tailed Hawk	*Buteo jamaicensis*	411, 630, 615, 425, 744	*
Cooper's Hawk	*Accipiter cooperii*	411, 321, 630, 425, 421, 746	*
Northern Harrier	*Circus cyaneus*	321, 421, 211, 643, 832, 746	*
Bald Eagle	*Haliaeetus leucocephalus*	411, 630, 615, 744	*
Snail Kite	*Rostrhamus sociabilis*	615, 630, 616	*
Eastern Kestrel	*Falco sparverius*	411, 211, 321, 421, 832, 744	*
Northern Bobwhite	*Colinus virginianus*	411, 421, 321, 211	*
Eastern Meadowlark	*Sturnella magna*	421, 321, 211, 411, 643, 221	*
Common Ground Dove	*Columbina passerina*	411, 421, 321, 211, 630, 425, 221	*
Mourning Dove	*Zenaida macroura*	411, 320, 421, 211, 630, 425	*
Red-Bellied Woodpecker	*Melanerpes carolinus*	411, 321, 630, 615, 425, 221, 832, 744	*
Downy Woodpecker	*Picoides pubescens*	411, 421, 630, 615, 425	*
Red-Headed Woodpecker	*Melanerpes erythrocephalus*	411, 630	*
Northern Flicker	*Colaptes auratus*	411, 321, 630, 615, 425, 744	*
Pileated Woodpecker	*Dryocopus pileatus*	411, 630, 615, 425	*
Eastern Phoebe	*Sayornis phoebe*	411, 321, 421, 211	*
Tree Swallow	*Tachycineta bicolor*	321, 421, 211, 641, 643	*
Blue Jay	*Cyanocitta cristata*	411, 321, 421, 630, 615, 425, 832, 221, 744	*
Scrub Jay	*Aphelocoma coerulescens*	411, 321, 421, 211, 643, 832	*+

Common Name	Scientific Name	Occurrence By FLUCFCS Code	Site Status
BIRDS (continued)			
Carolina Wren	*Thryothorus ludovicianus*	411, 321, 421, 630, 615, 425, 744	*
Blue-Gray Gnatcatcher	*Polioptila caerulea*	411, 321, 421, 630, 615, 425	*
American Robin	*Turdus migratorius*	411, 321, 421, 211, 630, 425, 221, 832, 744	*
Gray Catbird	*Dumetella carolinensis*	411, 321, 421, 630, 615, 425, 744	*
Northern Mockingbird	*Mimus polyglottos*	411, 321, 421, 630, 211, 425, 221, 832, 744	*
Loggerhead Shrike	*Lanius ludovicianus*	411, 321, 421, 211	*
White-Eyed Vireo	*Vireo griseus*	411, 321, 421, 630, 425, 615, 744	*

MAMMALS			
Sherman's Short-Tailed Shrew	*Blarina brevicauda shermani*	411, 615, 630, 425	*
Pine Island Ice Rat	*Oryzymys palustris*	615, 630, 643, 641, 616	*
Cotton Mouse	*Peromyscus gossypinus*	411, 321, 421, 630, 425, 744	*
Cotton Rat	*Sigmodon hispidus*	411, 321, 421, 630, 425, 744	*
Eastern Mole	*Scalopus aquaticus*	411, 321, 421, 425, 744, 832	*
Armadillo	*Dasypus novemcintus*	411, 321, 421, 425, 615, 630, 643, 641, 221, 832, 211, 743, 744	*
Raccoon	*Procyon lotor*	411, 321, 421, 630, 615, 211, 425, 643, 641, 616, 832, 744, 221	*
Oppossum	*Didelphis marsupialis*	411, 321, 421, 630, 615, 211, 832, 221, 744	*
Gray Squirrel	*Sciurus carolinenis*	411, 630, 425, 421, 615, 744	*
Eastern Cottontail	*Sylvilagus floridanus*	411, 421, 321, 630, 211, 221, 744, 832, 643	*
Wild pig	*Sus scrofa*	411, 321, 421, 630, 615, 211, 425, 832, 744, 746	*
Bobcat	*Lynx rufus*	411, 321, 421, 630, 615, 211, 221, 832, 744, 425, 746	*
Gray Fox	*Urocyon cinereoargenteus*	411, 321, 421, 630, 615, 425, 832, 744	*
Florida Panther	*Felis concolor coryi*	411, 321, 421, 630, 211, 425, 221, 615, 641, 643, 832, 744, 746	
Marsh Rabbit	*Sylvilagus palustris*	641, 616, 6211, 617, 427	
Florida Black Bear	*Ursus americanus floridus*	425,411,427, 617, 4111	

Source: Field site inspections conducted from 1991-1993 by federal, state, and county biologists.

APPENDIX F

Scrub Jay Survey

MITIGATION PARK PROGRAM

ACTIVITY REPORT

****

Scrub Jay Survey at the

Hickey Creek Mitigation Park

****

August 2002

Date: August 2002

Prepared By: Steve Shattler

Mit. Park: Hickey Creek

Subject: Scrub Jay Survey

Project Summary

In July and August of 2002 the Hickey Creek Mitigation Park was surveyed for scrub jays by staff from FWC. Four scrub jay families were located at the site made up of 10 birds total. Total family numbers are consistent with last year and over all numbers are up slightly.

Introduction

The Florida scrub-jay Amphelocoma coerulescens is a state and federally threatened species that is endemic to Florida. This bird is restricted to habitat composed primarily of patches of oak scrub. Its habitat requirements further demand that this oak scrub be in an early successional stage with a low vertical profile, few trees, and open bare ground where birds can cache acorns. Scrub jays live in discreet family groups and have well defined territories that are defended and maintained for generations.

Several areas at Hickey Creek Mitigation Park are suitable as habitat for scrub jays. Previous surveys at the site have found that family group numbers vary from four to seven. Prescribed burns have been conducted in over 65% of the site and have improved significant areas as habitat. Annual surveying allows managers to track jay population trends and refine scrub habitat management at the site.

Methods

Taped scrub jay calls are used to attract scrub jays for surveying purposes. During July and August of 2002, locations that were previously known to be used by jays were checked with tape players playing these calls. In addition, areas that appear to be suitable as habitat were surveyed to see if they had recently become occupied.

When scrub jays were seen, care was taken to note the direction of flight to and away from the call. All jays present in a group were counted. Interaction between jays were observed, and territorial defense displays were noted. Groups of jays were visited on more than one occasion to determine the total number of birds in the group.

Locations of the scrub jay families were mapped and compared to previous surveys.

Results

Four scrub jay families were located in the summer of 2002. This is the same as the 2002 survey and a decrease from the 2000 survey which found 7 groups and the 1999 survey which found 6 groups. The 1998 survey found only five scrub-jay groups. The total number of scrub jays using the site was up slightly to 10 birds from 8 scrub jays in 2001. It was however, down from some previous surveys having of 14 jays in 2001 and the highest survey numbers which were in 1999 when 23 birds were located using the site. All families had at least 2 birds with 2 families having three birds for an average of 2.5 birds per family, up from the 2000 average of 2.0 birds per family group. Two families had juvenile scrub jays in August which means that they survived the fledgling stage to be recruited into the population. No juvenile scrub jays were found in the previous years survey.

Scrub jay families were formerly found in units 4, 6, and 18 during the 1999 and 2000 surveys and have not been located in these areas in either 2001 or 2002.

Discussion

The scrub jay population at Hickey Creek has varied over time. A decreasing trend seems to be apparent from the peak in 1999. Scrub jay numbers were similarly down in 1997 when only 4 families were located at the site. The 2000 survey indicated only one juvenile recruited into the population while none were recruited in 2001. Having two family groups raise a juvenile birds in 2002 is a positive sign.

Overall population numbers in scrub jays typically fluctuate from year to year. Therefore what we are seeing at Hickey Creek may be normal. Two factors may be influencing the downward trend: isolation from other scrub jay colonies reduces immigration potential, and changing habitat conditions may cause families to fail. Much of the available and suitable habitat is being utilized. Previous surveys have found families located in marginal and poor habitat such as the southwestern portion of the site which is no longer occupied. Habitat conditions in units 6 has become over grown so this unit was burned in 2001 to make it suitable habitat again. Units 13 and 16 were occupied in 1993 surveys and not since a 1995 burn. This habitat now appears recovered to the conditions preferred by scrub jays. Previous surveys also had families that only partially used Hickey Creek and spend much of their time on adjacent lands. Changes in these adjacent sites might a reason for their decline.

It is likely that we have a lot of turnover in families. Immigration from outside sources or intrapopulation formation of new families may be occurring to offset the failed persistence of other jay families at the site. Habitat conditions throughout the site will always be dynamic. The current burn program has focused on restoring areas of potential habitat and allowing them to recover prior to burning in occupied areas. Unit 21 and 14 have been the most consistently used habitats at the site and should be considered for habitat management through fire and/or mechanical treatment to secure its continued use. If the current families at the site persist, and the areas formerly used by the jays were reoccupied, then HCMP could support 8 to 9 total families.

APPENDIX G
Deed of Conservation Easement and Map

Office of County Lands
Post Office Box 398
Fort Myers, Florida 33902-0398

DEED OF CONSERVATION EASEMENT

THIS DEED OF CONSERVATION EASEMENT is given this 14 day of July, 1994, by Lee County a political subdivision of the State of Florida, whose mailing address is P.O. Box 398, Fort Myers, Florida 33902-0398 ("Grantor"), to the Florida Game and Fresh Water Fish Commission (GFC), an agency of the State of Florida, with its principal office at 620 S. Meridian Street, Tallahassee, Florida 32399-1600, an agency of the State of Florida, ("Grantee").

W I T N E S S E T H:

WHEREAS, the above named parties submitted an application to the Florida Communities Trust program for acquisition of certain lands situated in Lee County, hereinafter referred to as the "Property", more specifically described in Exhibit "A" attached hereto and incorporated herein by this reference; and

WHEREAS, the FCT Governing Board pursuant to Sections 259.101 and 380.502, Florida Statutes, and Rule 9K-4, Florida Administrative Code awarded Conceptual Approval to the Project partnership application on 9-22-93; and

WHEREAS, as part and condition of the FCT Project Approval, all parties have approved the Hickey Creek Mitigation Park Management Plan and the Memorandum of Understanding, and together with the Conceptual Approval Agreement and Grant Award Agreement are collectively referred to as "Governing Documents", attached hereto, the terms of which are hereby incorporated herein by reference; and

WHEREAS, on May 5, 1994, the Board of the Florida Communities Trust approved the Hickey Creek Mitigation Park Management Plan which provides for the conveyance of a conservation easement to GFC for lands it uses as mitigation for impacts to listed wildlife populations; and

WHEREAS, the Grantor owns the Property described in Exhibit "A"; and

NOW THEREFORE, Grantor hereby grants, creates, and establishes a perpetual conservation easement upon the Property described in Exhibit "A", which shall run with the land and be binding upon the Grantor, its successors and assigns, and remain in full force and effect forever.

C7b
4-20-94

1. The scope, nature, and character of this conservation easement is to ensure that the area described in Exhibit "A" shall be used and managed as a GFC Mitigation Park. Except as otherwise provided for herein, or in the Governing Documents, the Property will be retained forever in its natural condition pursuant to Section 704.06, Florida Statutes. To carry out this purpose the following rights are conveyed to Grantee by this easement:

(a) To enter upon the Property to control and regulate use, to perform habitat management activities and to enforce the rights herein granted by Grantor, its heirs, successors or assigns;

(b) To enjoin any activity on or use of the Property that is inconsistent with the purpose of this conservation easement and to enforce the restoration of such areas or features of the Property that may be damaged by any inconsistent activity or use; and

(c) To preserve and protect and, consistent with the Governing Documents, enhance the natural and ecological features of the Property including, without limitation, topography, soil, hydrology, vegetation and wildlife.

2. Except for specific activities authorized by the Governing Documents, or as may be amended by mutual agreement in writing by Grantee and Grantor, and as more specifically referenced herein, including, without limitation, creation, restoration, enhancement and preservation of wetlands and upland habitat areas, this Deed of Conservation Easement prohibits the following activities in, on or under the Property:

(a) Construction or placing of buildings, roads, billboards, surface water management facilities, utilities, or other structures on or above the ground not specified in the Governing Documents;

(b) Dumping or placing of soil or other substance or material as landfill or dumping or placing of trash, waste, or unsightly or offensive materials;

(c) Removal or destruction of trees, shrubs, or other vegetation, except for the removal of nuisance or exotic plant species or other vegetation where necessary for management and restoration;

(d) Excavation, dredging, or removal of loam, peat, gravel, soil, rock, or other material substance in such manner as to affect the surface;

(e) Surface use, except for purposes that permit the land or water area to remain predominantly in its natural condition;

(f) Activities detrimental to water conservation, erosion control, soil conservation, or fish and wildlife habitat preservation;

(g) Acts or uses detrimental to such retention of land or water areas;

(h) Acts or uses detrimental to the preservation of the structural integrity or physical appearance of sites or properties of historical, architectural, archaeological, or cultural significance;

(i) Acts or uses inconsistent with the purpose of this conservation easement as set forth in Section 704.061, Florida Statutes, as it may be amended from time to time, and any successor law, rule or statute.

3. Grantor intends that enforcement of the terms and provisions of the conservation easement and the Governing Documents shall be at the discretion of Grantee and that any forbearance on behalf of Grantee to exercise their rights hereunder in the event of any breach hereof by Grantor, their successors, personal representatives or assigns shall not be deemed or construed to be a waiver of Grantees' rights hereunder in the event of a subsequent breach.

4. Notwithstanding the prohibitions specified in Subparagraphs a. through i. of Paragraph 2 above, Grantor expressly reserves the right to construct, operate and maintain recreational facilities and necessary ancillary facilities on the property in a manner consistent with the Governing Documents.

5. Grantee agrees it will hold this conservation easement exclusively for conservation purposes and that they will not assign their rights and obligations under this conservation easement except to another organization qualified to hold such interests under the applicable state and federal laws and committed to holding this conservation easement exclusively for conservation purposes. Grantee may also amend this conservation easement to remove from the easement areas where the Grantees management responsibility has been terminated pursuant to Section 3(H) of the Memorandum of Agreement.

6. If any provision of this conservation easement or the application thereof to any person or circumstance is found to be invalid, the remainder of the provisions of this conservation easement, and the applications of such provision to persons or circumstances other than those as to which it is found to be invalid, shall not be affected thereby.

7. All notices, consents, approvals or other communications hereunder

shall be in writing and shall be deemed properly given if sent by United States certified mail, return receipt requested, addressed to the appropriate party or successor-in-interest, at the addresses above set forth or such new addresses as either party may in writing deliver to the other.

TO HAVE AND TO HOLD unto Grantee, their respective successors and assigns forever. The covenants, terms, conditions, restrictions and purposes imposed with this easement shall not only be binding upon Grantor but also its agents, personal representatives, heirs, assigns and all other successors to it in interest, and shall continue as a servitude running in perpetuity with the Property.

IN WITNESS WHEREOF Grantor has set their hand on the day and year first above written.

ATTEST: [illegible] Green, Ex - Officio Clerk
Board of County Commissioners

By: Ruth Traynier
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS, LEE COUNTY, FLORIDA

By: Ray Judah
Chairman

APPROVED AS TO FORM

Jack N Peterson
OFFICE OF COUNTY ATTORNEY

GRANTEES ACCEPTANCE

The Florida Game and Fresh Water Fish Commission hereby approves the foregoing Conservation Easement and agrees to all the terms and provisions.

Signed, sealed and Delivered
in our presence and witnesses:

Jimmie C. Bevis
WITNESS

Jimmie C. Bevis
(Print Name of Witness)

Dale F. Cook
WITNESS

GALE F COOK
(Print Name of Witness)

FLORIDA GAME AND FRESH WATER
FISH COMMISSION

By: Allan L. Egbert
Allan L. Egbert
Executive Director
(Print Name and Title)

Address: 620 South Meridian Street
Tallahassee, Florida 32399-1600

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY
Commission Attorney

STATE OF FLORIDA
COUNTY OF Leon

The foregoing instrument was acknowledged before me this 17 day of May, 1994 by Allan L. Egbert the Executive Director of the Florida game and Fresh Water Fish Commission, a Department of the State of Florida, on behalf of the department. He/she is personally known to me. _____

(Affix Notary Seal)

ROSEMARY MARA
MY COMMISSION # CC 153102 EXPIRES
October 20, 1995
BONDED THRU TROY FAIN INSURANCE, INC.

Rosemary Mara
(Signature of Notary Public)

(Print Name of Notary Public)
NOTARY PUBLIC
Serial/Commission No. _____
My Commission expires: _____

hcconeas
3-1-94

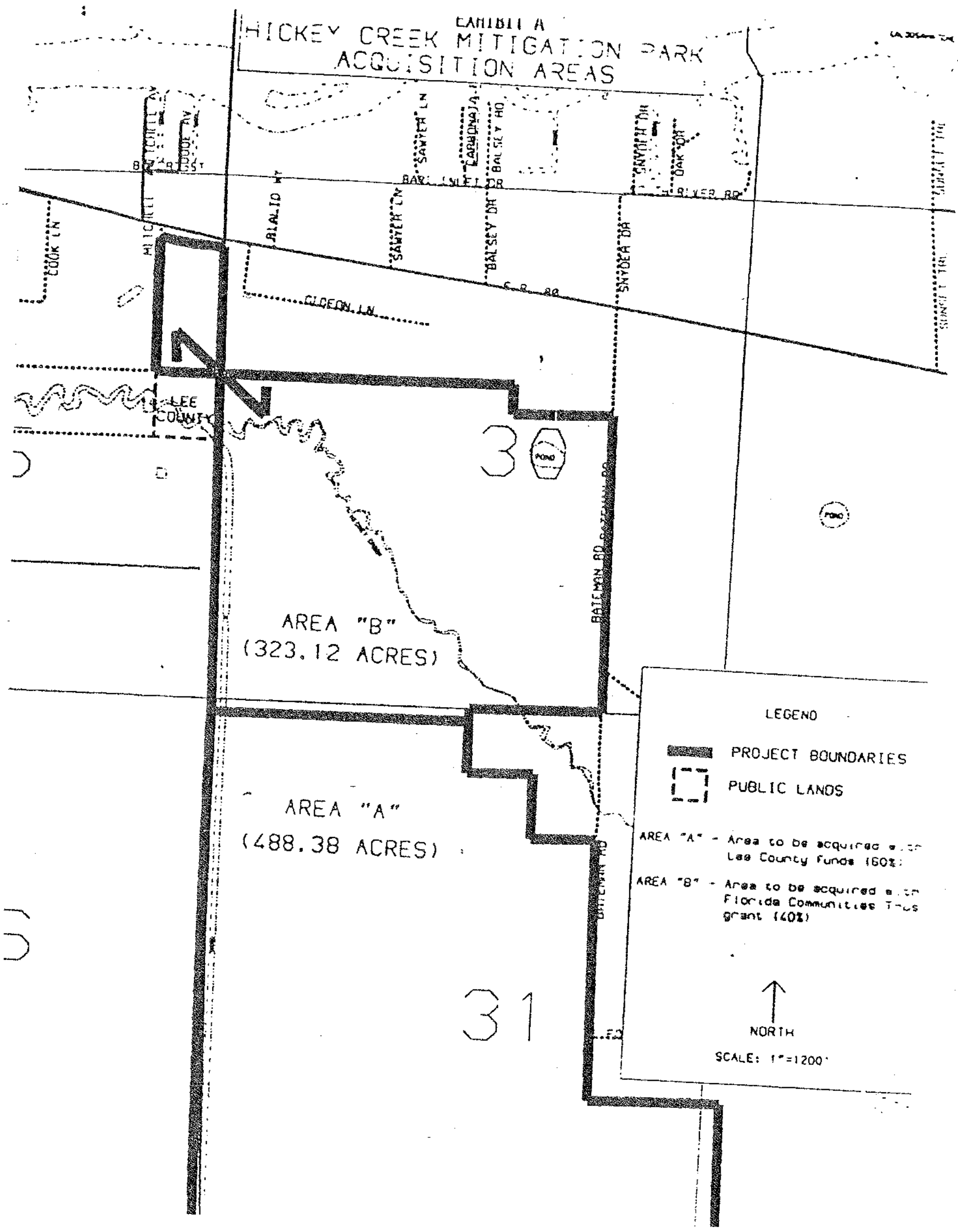
EXHIBIT A
HICKEY CREEK MITIGATION PARK
ACQUISITION AREAS
LEE COUNTY
30
31
POND
AREA "B"
(323.12 ACRES)
AREA "A"
(488.38 ACRES)
BATEMAN RD
SNYDER DR
BALSEY DR
SAWYER LN
GIDEON LN
COOK LN
S.R. 80
LEGEND
PROJECT BOUNDARIES
PUBLIC LANDS
NORTH
SCALE: 1"=1200'

EXHIBIT A

LEGAL DESCRIPTION

PARCEL A

COMMENCING AT THE SOUTHWEST CORNER OF SECTION 30, TOWNSHIP 43 SOUTH, RANGE 27 EAST, LEE COUNTY, FLORIDA; THENCE NORTH 89°-32'-13" EAST, ALONG THE SOUTH SECTION LINE OF SAID SECTION 30, A DISTANCE OF 200.01 FEET TO THE EASTERLY RIGHT-OF-WAY LINE OF A 200 FOOT DRAINAGE CANAL, AND THE POINT OF BEGINNING OF A TRACT OF LAND HEREIN DESCRIBED; THENCE NORTH 00°-53'-00" WEST, ALONG SAID DRAINAGE CANAL, A DISTANCE OF 2,654.32 FEET; THENCE NORTH 89°-50'-34" WEST A DISTANCE OF 200.00 FEET TO THE WEST QUARTER SECTION CORNER; THENCE NORTH 00°-56'-00" WEST, ALONG THE WEST SECTION LINE OF SAID SECTION 30, A DISTANCE OF 557.13 FEET; THENCE NORTH 89°-35'-20" EAST, A DISTANCE OF 2,924.63 FEET; THENCE SOUTH 00°-24'-40" EAST, A DISTANCE OF 254.78 FEET; THENCE NORTH 89°-35'-20" EAST, A DISTANCE OF 1,056.52 FEET, TO THE CENTERLINE OF BATEMAN ROAD; THENCE SOUTH 00°-24'-40" EAST, ALONG THE CENTERLINE OF BATEMAN ROAD, A DISTANCE OF 3,089.79 FEET, TO THE INTERSECTION OF THE SOUTH SECTION LINE OF SAID SECTION 30; THENCE SOUTH 89°-58'-04" WEST, ALONG THE SOUTH SECTION LINE, A DISTANCE OF 1,309.66 FEET, TO THE SOUTH QUARTER CORNER; THENCE SOUTH 89°-32'-13" WEST, ALONG THE SOUTH SECTION LINE, A DISTANCE OF 2,443.03 FEET, TO THE EASTERLY RIGHT-OF-WAY LINE OF AFORESAID DRAINAGE CANAL, AND THE POINT OF BEGINNING.

03/03/94 10:58am
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COMMENCING AT THE SOUTHWEST CORNER OF SECTION 31, TOWNSHIP 43 SOUTH, RANGE 27 EAST, LEE COUNTY, FLORIDA; THENCE NORTH 88°-58'-59" EAST, ALONG THE SOUTH SECTION LINE OF SAID SECTION 31, A DISTANCE OF 200.01 FEET, TO THE EASTERLY RIGHT-OF-WAY LINE OF A 200 FOOT DRAINAGE CANAL, AND THE POINT OF BEGINNING OF A TRACT OF LAND HEREIN DESCRIBED; THENCE NORTH 00°-20'-17" WEST, ALONG SAID DRAINAGE CANAL, A DISTANCE OF 2,646.17 FEET; THENCE NORTH 89°-39'-43" EAST, A DISTANCE OF 50.00 FEET; THENCE NORTH 00°-20'-17" WEST, A DISTANCE OF 2,646.18 FEET, TO THE INTERSECTION OF THE NORTH SECTION LINE OF SAID SECTION 31; THENCE NORTH 89°-32'-13" EAST, ALONG THE NORTH SECTION LINE, A DISTANCE OF 2,393.03 FEET, TO THE NORTH QUARTER CORNER OF SAID SECTION 31; THENCE SOUTH 00°-22'-10" EAST, A DISTANCE OF660.16 FEET; THENCE NORTH 89°-23'-05" EAST, A DISTANCE OF 659.63 FEET; THENCE SOUTH 00°-23'-29" EAST, A DISTANCE OF 660.12 FEET; THENCE NORTH 89°-22'-55" EAST, A DISTANCE OF 659.88 FEET, TO THE CENTERLINE OF BATEMAN ROAD; THENCE SOUTH 00°-24'-47" EAST, ALONG THE CENTERLINE OF BATEMAN ROAD, A DISTANCE OF 2,637.21 FEET; THENCE NORTH 89°-30'-31" EAST, A DISTANCE OF 1,321.76 FEET, TO THE

03/03/94 3:21pm
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INTERSECTION WITH THE EAST SECTION LINE OF SAID SECTION 31; THENCE SOUTH 00°-27'-24" EAST, ALONG THE EAST SECTION LINE A DISTANCE OF 1,320.06 FEET, TO THE SOUTHEAST SECTION CORNER; THENCE SOUTH 89°-38'-25" WEST, ALONG THE SOUTH SECTION LINE, A DISTANCE OF 2,645.54 FEET, TO THE SOUTH QUARTER CORNER; THENCE SOUTH 88°-58'-59" WEST, A DISTANCE OF 2,446.09 FEET, TO THE EASTERLY RIGHT-OF-WAY LINE OF AFORESAID DRAINAGE CANAL, AND THE POINT OF BEGINNING.

AND

PARCEL B

THE EAST ONE HALF (E1/2) OF THE NORTHEAST QUARTER (NE1/4) OF THE NORTHEAST QUARTER (NE1/4), LYING SOUTH OF STATE ROAD 80, AND THE NORTHEAST QUARTER (NE1/4) OF THE SOUTHEAST QUARTER (SE1/4) OF THE NORTHEAST QUARTER (NE1/4) OF SECTION 25, TOWNSHIP 43 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA.

APPENDIX H
Exotic Plant Control Plan

EXOTIC PLANT CONTROL PLAN

The following plan includes the specific methods to be used for control of the exotic woody pest plants occurring on the site including melaleuca (Melaleuca guinquenervia), guava (Psidium guajava), Brazilian pepper (Schinus terebinthifolius), and Java plum Syzyqim cumini). These methods will be used by Lee County staff, or by a contractor hired to do control work on the site. Initial control work will be done by contractor due to the extent of the invasion and the need to gain control of the site in a timely manner.

Contract requirements will include a complete treatment with one follow-up treatment three to six months afterwards. The contract will be bid as a job, which is possible due to the size of the site.

The use of fire will be evaluated as a tool and provide better access for control, particularly where Brazilian pepper occurs within saw palmettos in the pine flatwoods and palmetto prairie.
Mature Brazilian pepper is not normally killed by fire. Fire can control reinvasion by pepper if adequate fuel loads exist to provide a continuous fire that can kill seedlings.

Careful evaluation of the use of fire in areas where mature melaleuca occurs will be made to avoid encouraging conditions favorable to germination. Most of the mature melaleuca occurs in areas with limited fuel loads. fire can be sued to limit melaleuca seedling establishment after the mature seedbearing trees have been killed and the serotinous seed capsules have opened and spilled their seeds onto the ground. Seedlings less '0 than 18" can be killed by fire provided there is sufficient fuel to provide a fire that is hot enough to scorch the cambium and the roots.

An exotic control plan map will be prepared on an aerial photograph. It will include areas of infestation, by species, general density, size and diameter, understory density, fuel loads and any specific concerns.

The use of prescribed fire after mature melaleuca trees have died and released their seed crop would be advantageous in control of seedlings that may occur. This approach would be reviewed by and authorized by GFC before it is used.

Control Methods

Melaleuca

All melaleuca will be girdled to the cambium and 25:75 mixture of arsenal: water will be applied at a rate of 2 milliters per inch diameter of the tree. One gallon would treat over 4008" dbh trees. Arsenal is the trademark name of the chemical Imazapyr as manufactured by American Cyanamid Company. It is a broad-spectrum-nonselective herbicide that has been found by the National Park Service and private organizations as the most effective control for melaleuca.

It interferes with biosynthesis of amino acids by the plant and inhibits plant growth. It does exhibit soil residual activity, providing preemergence control of newly germinating vegetation for several months after application. it is not stored or accumulated in animal tissue. Arsenal has a half-life of 2-3 months depending upon solid moisture and other environmental factors.

Brazilian pepper

All Brazilian pepper, guava, and Java plum will be treated in place with a basal application of Garlon 4 applied in a 16:83:1, herbicide: JLB oil plus: bas oil dye mixture. Herbicide will be applied to a band 18!1 wide around the entire stem or stems forming the plant. Care will be taken to not allow the mixture to contact the soil.

Garlon herbicide formulations, all of which contain tricholopyr cannon be used over standing water under any circumstances. Garlon is not soil active.

Procedures & Records

A. All workers shall work under the supervision of a licensed pesticide applicator. Rubber (nitrile) gloves and a respirator shall be worn when applying the herbicide.

B. Dyes are added to ensure treatment of all trees; to aid the applicator in avoiding non-target vegetation; and as a safety aid. Different dyes must be used, for instance because "Garlon #A" is water soluble, while "Garlon 4" is oil-soluble.

C. Daily records shall be kept in a log-type format to record all relevant data, water conditions, site conditions, number of trees cut, treated, confirmed dead, etc. Aerial photos shall be marked in the field to identify exactly where control work has occurred.

D. Herbicide mix remaining after a day's work can be used the next day. It should be stored in a dark place until it is to be used. Rinsate from spray bottles, funnels, pumps or containers shall be used in the next day's mixture of the same herbicide. It shall not be disposed of by dumping on the ground or in water bodies.

Further Technical Information

Further technical information on the control of exotic vegetation is available in Circular 868 of the Florida Cooperative Extension Service. This publication is entitled "Exotic Woody Plant Control" and was edited by Ken Langeland for the Exotic Pest Plant Council Publication Committee.

APPENDIX I
Prescribed Burn Procedures and Map

LEE COUNTY
PARKS AND RECREATION DEPARTMENT LAND STEWARDSHIP
PRESCRIBED BURN PROCEDURES

Introduction

The Lee County Parks and Recreation Land Stewardship staff recognizes the importance of fire as an essential component in maintaining natural ecological systems. It is the purpose of this document to provide the Land Stewardship staff with detailed procedures and guidelines to conduct prescribed burns on Lee County lands. The Florida Prescribed Burning Act (Florida Statute 590.026) contains requirements for prescribed burning in Florida (see attached). The Land Stewardship staff will consistently comply with these requirements and conduct prescribed burns in a safe and responsible manner.

TRAINING

It is the goal of Lee County Land Stewardship staff, if applicable, to participate in the Florida Division of Forestry prescribed fire training to become certified by attending the Interagency Basic Prescribed Fire Course. In addition, prescribed burn workshops and training burns will be conducted by a Land Stewardship staff certified burner.

PROCEDURES

After the burn boss has been designated the following checklist will be utilized to conduct and evaluate the burn.

PRESCRIBED BURN CHECKLIST

I. Preparation prior to burn Burn Unit_____ Date_ _____

___ Units to be burned

____ Inspect and maintain all equipment including chain saws, hand tools, vehicles, drip torches, back pack sprayers etc.

____ Fire extinguisher and first aid kit in each vehicle

___ Disk fire lanes and inspect prior to ignition

____ Notification of appropriate personnel and agencies

- ___ Florida Division of Forestry (to assist, if necessary)
- ____ Florida Highway Patrol
- ___ Lee County Sheriffs Office
- ____ Local fire departments (to assist, if necessary)
- ____ Florida Game and Fresh Water Fish Commission
- ___ Adjacent property owners (create and maintain list)
- ____ Parks and Recreation Administration staff

____ Prepare prescription burn plan, maps, and prescription

II. Crew briefing

____ Distribute copies of prescription, burn plan, and maps to crew

____ Discuss burn plan purpose

____ Firing technique

___ Review crew organizations and assignments

____ Discuss potential hazardous zones

____ Discuss stationing of vehicles (always leave keys in vehicles with windows up

____ Discuss fire and smoke behavior

___ Estimate time of ignition and burn duration

____ Identify emergency escape routes
____ Location of drinking water and food
____ Mop-up procedures
____ Answer questions

III. Prior to ignition
____ Obtain burn authorization from the Florida Division of Forestry
____ Monitor five day weather forecast
____ Check on-site weather
____ Confirm crew assignments

IV. Post burn
____ Conduct mop-up
____ Confirm fire is dead out
____ Conduct next day inspection
____ Conduct post burn evaluation within one month of burn
____ Conduct post burn meeting with crew to discuss both the positive and negative aspects of the burn
____ Create file for each burn with burn plan, map, and prescription

LEE COUNTY DEPARTMENT OF PARKS AND RECREATION
PRESCRIBED BURN FORM

LANDOWNER: _____

BURN UNIT NO: _____ S _____ T _____ R _____

ACRES TO BURN: _____ BURN DATES (LAST THREE BURNS): _____

UNIT DESCRIPTION: _____

BURN OBJECTIVES: _____

PERSONNEL REQUIRED: _____

EQUIPMENT REQUIRED: _____

PASSES SMOKE SCREENING SYSTEM: _____ YES _____ NO

POSSIBLE SMOKE SENSITIVE AREAS: _____

SPECIAL PRECAUTIONS: _____

NOTIFY THE FOLLOWING: _____

WEATHER/FIRE BEHAVIOR FACTORS:	PREFERRED		ACTUAL	
SURFACE WINDS (SPEED/DIRECTION):	_____ MAX	_____ MIN	_____ MAX	_____ MIN
TRANSPORT WINDS:	_____ MPH		_____ MPH	
MINIMUM MIXING HEIGHT:	_____ FT.		_____ FT.	
DISPERSION INDEX:	_____		_____	
TEMPERATURE:	_____ MAX	_____ MIN	_____ MAX	_____ MIN
RELATIVE HUMIDITY:	_____ %MAX	_____ %MIN	_____ %MAX	_____ %MIN
FINE FUEL MOISTURE:	_____ to	_____	_____ to	_____
RATE OF SPREAD (CHNS/HR):	_____ to	_____	_____ to	_____
STARTING TIME:	_____		_____	
BURN TECHNIQUE(S) flank/head/strip:	_____		_____	
FLAME LENGTH:	_____ FT.		_____ FT.	
DAYS SINCE 1/2" RAIN:	_____		NA	

PRESCRIPTION APPROVED BY: _____ DATE: _____

TITLE: _____ CERTIFICATION NUMBER: _____

CERTIFIED BURN MANAGER SIGNATURE: _____

DATE OF BURN: _____ DOF AUTHORIZATION NUMBER: _____

POST BURN EVALUATION

EVALUATION BY: _____ DATE: _____

ACRES BURNED: _____

SPOTTING: _____ DISTANCE: _____

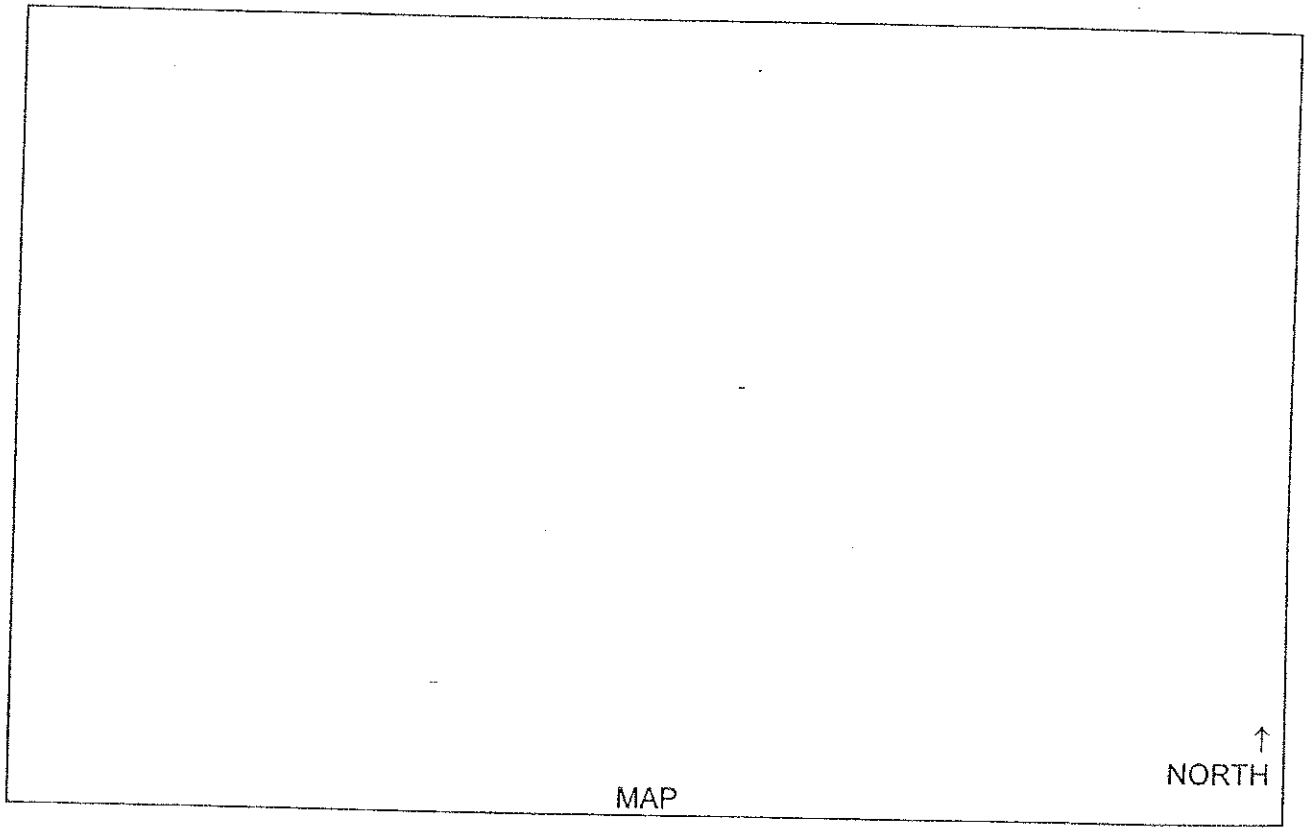
ANY ESCAPES: _____

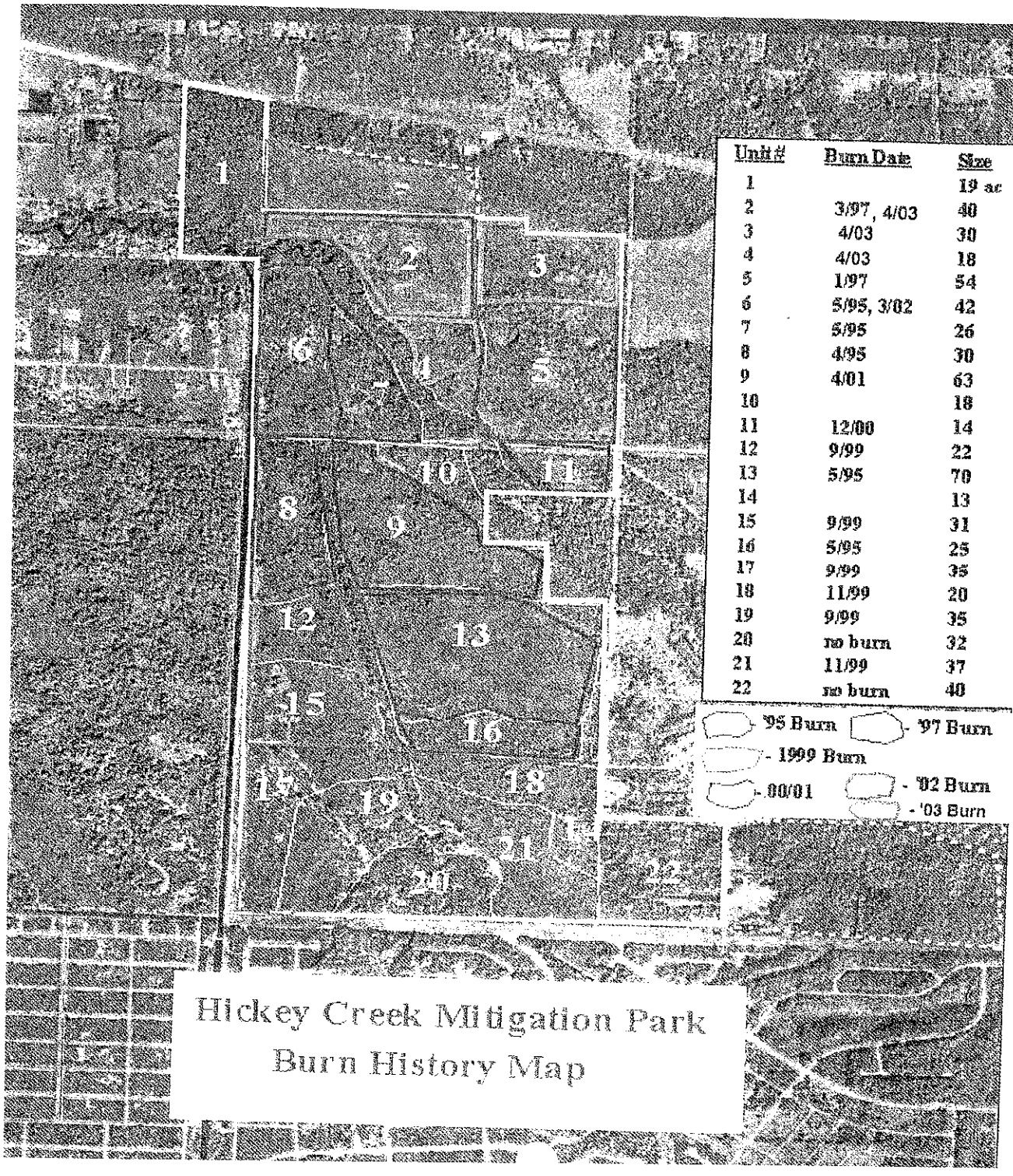
OBJECTIVES MET: _____

SMOKE PROBLEMS: _____

LIVE CROWN CONSUMPTION: _____ TREE MORTALITY: _____

REMARKS: _____





Unit #	Burn Date	Size
1		19 ac
2	3/97, 4/03	40
3	4/03	30
4	4/03	18
5	1/97	54
6	5/95, 3/02	42
7	5/95	26
8	4/95	30
9	4/01	63
10		18
11	12/00	14
12	9/99	22
13	5/95	70
14		13
15	9/99	31
16	5/95	25
17	9/99	35
18	11/99	20
19	9/99	35
20	no burn	32
21	11/99	37
22	no burn	40

Hickey Creek Mitigation Park
Burn History Map

APPENDIX J
Restoration Plan for
The Hickey's Creek/Greenbriar Connector

RESTORATION PLAN
FOR THE HICKEY'S CREEK/GREENBRIAR CONNECTOR
JULY 1, 2002

Introduction:

The purpose of establishing the Hickey's Creek/Greenbriar Connector (see attached) was to create and maintain a wildlife corridor between Hickey's Creek Mitigation Park and Greenbriar Swamp. This site will also provide opportunities for hydrological restoration and resource based recreation facilities. The Greenbriar Swamp is owned and maintained by the East County Water Control District. These parcels were acquired through donations from the Lehigh Corporation and purchased through the Florida Department of Environmental Protection, Office of Greenways and Trails.

Site Location and Description:

The Connector is located within the Greenbriar Subdivision of Lehigh Acres (Sections 5&6, Township 44, Range 27) and consists of proposed building lots , paved roads, ditches, water control structures, and water retention ponds (see attached). Plant communities consist, primarily, of impacted forested and herbaceous wetlands, pine flatwoods, hydric hammock, and oak palm hammock. This site has been impacted by the construction of roads, manipulation of the hydrology by water control structures, ditches, and significant invasion of exotic species. These factors have resulted in an interruption of sheet flow through the site and caused the invasion of Brazilian pepper. Brazilian pepper is dominant in some areas. As a result of construction activities, species composition of plant communities has been altered. In the most severely impacted areas, upland and transitional species have invaded wetland systems. Forested wetlands areas are the most severely stressed resulting from a decreased hydroperiod, and a reduced maximum water depth.

Restoration Strategy:

It is the intention of this plan to restore, as much as is feasible, both the hydrology and native plant communities within the Connector. Restoration will include and be prioritized as follows:

1. Mechanically remove Brazilian pepper (*Schinus terebinthifolius*) and stump treat with herbicides (40 to 50 % Garlon 4). Brazilian pepper occupies approximately 60 acres of the site and occurs within an estimated 60 to 100 percent coverage range.

2. Remove roads (colored in blue on attached map) and associated fill to natural grade. The total length of roads is 1.2 miles. The average road width is 48.20 ft. (maximum 57.0 ft., minimum 43.0 ft.). Road elevations range between 2 ft. and 4 ft. from natural grade and the total amount of roads to be removed is approximately 7.0 acres.

3. Plant restored road areas with native forested and herbaceous native vegetation strategically located to match hydrological conditions. A more detailed planting plan will be prepared prior to restoration activities.

4. A monitoring plan will consist of setting approximately three photographic points and creating at least two vegetation monitoring transects. Semi-annual monitoring will commence after restoration is completed.

Recreation Activities:

A grant has been applied for and approved by the Office of Greenways and Trails to construct a multi use trail within the Connector. This proposed trail will begin at the Connector and extend into Conservation 2020 acquisition # 57 (see attached). The exact route of the trail has yet to be determined. A consultant will be hired by Lee County to determine possible routes of this trail and to minimize impacts to the watershed of Hickey's Creek.

RESTORATION PLAN
FOR THE HICKEY'S CREEK/GREENBRIAR CONNECTOR
JULY 1, 2002

Introduction:

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Recreation Activities:

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Conclusion:

The restoration of the Hickey's Creek/Greenbriar Connector is an important component of the management of the entire site and will be considered essential to further restoration activities associated with other Conservation 2020 areas adjacent to and near the Connector. Conservation 2020 is a Lee county program with the purpose of acquiring environmentally sensitive and endangered lands. Efforts will be directed toward road removal, exotic vegetation control and planting of native vegetation. A more detailed planting plan will be developed prior to restoration activities.

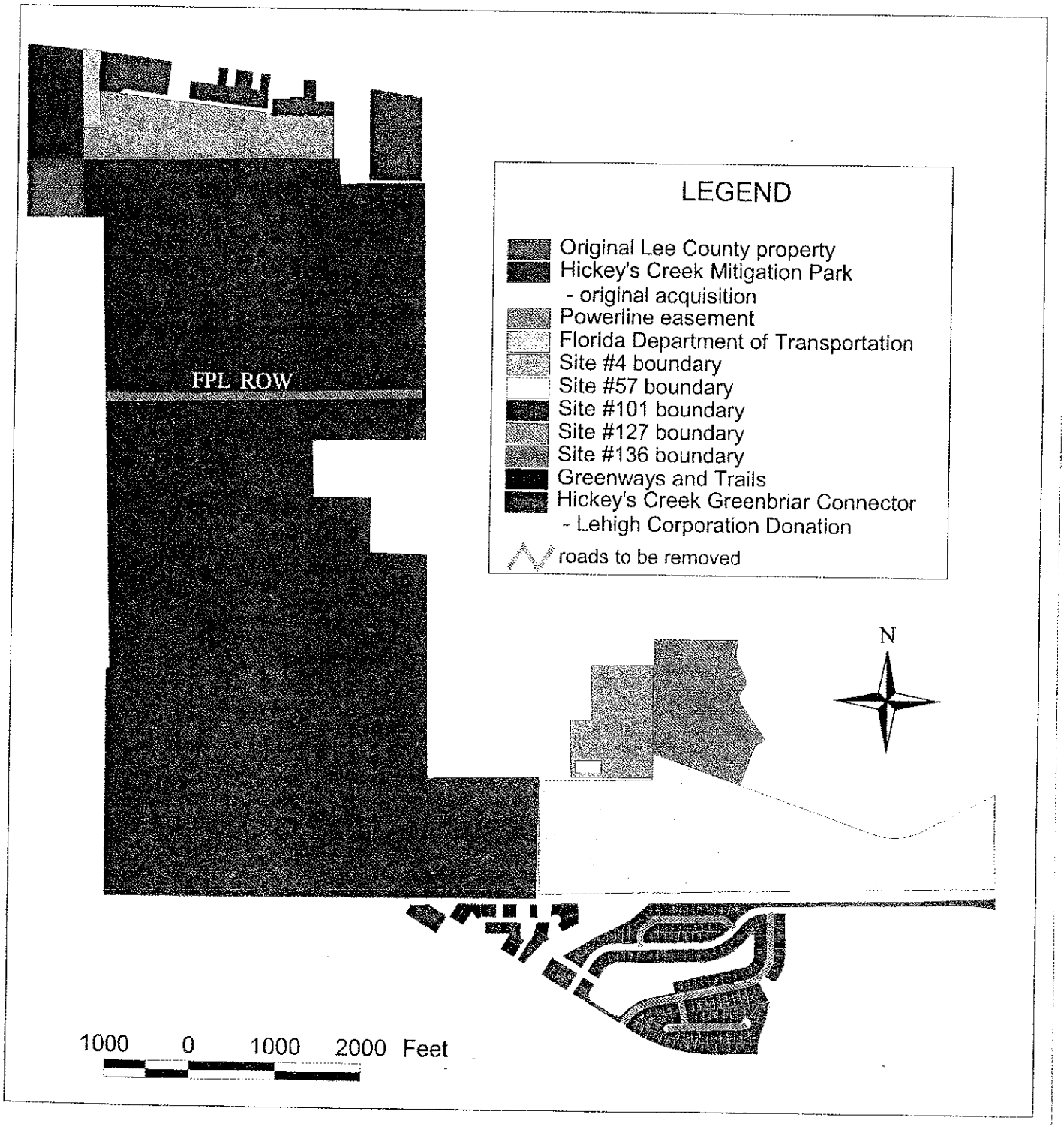
Attachment

Hickey's Creek Mitigation Park Acquisitions

Conservation 2020

&

Hickey's Creek Greenbriar Connector



APPENDIX K
Right-of-Way Consent Agreement

LEE COUNTY
PARKS AND RECREATION

Writer's Direct Dial Number: _____

July 24, 2000

Mr. Mark Byers, Senior ROW Representative
Florida Power & Light Co.
P.O. Box 1119
Sarasota, Florida 34230-1119

Dear Mr.Byers:

Please find attached the two signed originals of the Right-Of-Way Consent Agreement to allow a hiking trail to cross the ROW at Hickey Creek Mitigation Park. If you have any question, please give me a call at (941) 338-3291.
Thank you very much for your cooperation in this matter.

Sincerely

Jerry Cutlip, Manager/ Biologist

3410 Palm Beach Boulevard, Fort Myers, Florida 33916 (941)338-3300
Lee On Line Access (LOLA) Internet Address http://lola.co.lee.fl.us
AN EQUAL OPPORTUNITY AFFIRMATIVE ACTION EMPLOYER

RIGHT-OF-WAY CONSENT AGREEMENT

FLORIDA POWER & LIGHT COMPANY, a Florida corporation, whose mailing address is P.O. Box 14000, Juno Beach, Florida 33408-0420, Attn: Corporate Real Estate Department, hereinafter referred to as "Company", hereby consents to the **Board of Lee County Commissioners**, whose mailing address is **3410 Palm Beach Blvd., Fort Myers, FL 33916**, hereinafter referred to as "Licensee", using an area within Company's right-of-way granted by that certain agreement recorded in Deed Book 230, at Page 106, and in Deed Book 233, at Page 26, Public Records of Lee County, Florida. The said area within Company's right-of-way, is hereinafter referred to as the "Lands". The use of the Lands by Licensee, shall be solely for the purpose of **construction, maintenance and use of a walking trail within the Hickey Creek Mitigation Park**, as shown on the plans and specifications submitted by Licensee, attached hereto as Exhibit "B".

In consideration for Company's consent and for the other mutual covenants set forth below, and for Ten Dollars and No Cents ($10.00) and other good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, the parties hereto agree as follows:

1. Licensee agrees to obtain all necessary rights from the owners of the Lands in the event Licensee does not own said Lands; to obtain any and all applicable federal, state, and local permits required in connection with Licensee's use of the Lands; and at all times, to comply with all requirements of all federal, state, and local laws, ordinances, rules and regulations applicable or pertaining to the use of the Lands by Licensee pursuant to this Agreement.

2. Licensee understands and agrees that the use of the Lands pursuant to this Agreement is subordinate to the rights and interest of Company in and to the Lands and agrees to notify its employees, agents, and contractors accordingly. Company specifically reserves the right to maintain its facilities located on the Lands; to make improvements; add additional facilities; maintain, construct or alter roads; maintain any facilities, devices, or improvements on the Lands which aid in or are necessary to Company's business or operations; and the right to enter upon the Lands at all times for such purposes. Licensee understands that in the exercise of such rights and interest, Company from time-to-time may require Licensee, to relocate, alter, or remove its facilities and equipment, including parking spaces and areas, and other improvements made by Licensee pursuant to this Agreement which interfere with or prevent Company, in its opinion, from properly and safely constructing, improving, and maintaining its facilities. Licensee agrees to relocate, alter, or remove said facilities, equipment, parking spaces and areas, and other improvements within thirty (30) days of receiving notice from Company to do so. Such relocation, alteration, or removal will be made at the sole cost and expense of Licensee and at no cost and expense to Company; provided however, should Licensee, for any reason, fail to make such relocation, alteration, or removal, Company retains the right to enter upon the Lands and make said relocation, alteration, or removal of Licensee's facilities, equipment, parking spaces and areas, and other improvements and Licensee hereby agrees to reimburse Company for all of its costs and expense incurred in connection therewith upon demand.

Form 3740 Rev. 10/9/95
C7a
7-18-00

3. Licensee agrees that it will not use the Lands in any manner which, in the opinion of Company, may tend to interfere with Company's use of the Lands or may tend to cause a hazardous condition to exist. Licensee agrees that no hazardous substance, as the term is defined in Section 101 (14) of the Comprehensive Environmental Response Compensation and Liability Act ("CERCLA") (42 USC Section 9601 [14]), petroleum products, liquids or flammables shall be placed on, under, transported across, or stored on the Lands, which restricts, impairs, interferes with, or hinders the use of the Lands by Company or the exercise by Company of any of its rights thereto. Licensee agrees further that in the event it should create a hazardous condition, then upon notification by Company, Licensee shall, within seventy-two (72) hours, at its sole cost and expense, correct such condition or situation; provided however that the Company retains the right to enter upon the Lands and correct any such condition or situation at any time and, by its execution hereof, Licensee hereby agrees to indemnify and hold harmless Company from all loss, damage or injury resulting from Licensee's failure to comply with the provisions of this Agreement.

4. Licensee hereby agrees and covenants to prohibit its agents, employees, and contractors from using any tools, equipment, or machinery on the Lands capable of extending greater than fourteen (14) feet above existing grade and further agrees that no dynamite or other explosives shall be used within the Lands and that no alteration of the existing terrain, including the use of the Lands by Licensee as provided herein, shall be made which will result in preventing Company access to its facilities located within said Lands. Unless otherwise provided herein, Licensee agrees to maintain a forty (40) foot wide setback, twenty (20) feet on each side, from Company's facilities.

5. Trees, shrubs, and other foliage planted or to be planted upon the Lands by Licensee are not to exceed a height of fourteen (14) feet above existing grade.

6. Outdoor lighting installed or to be installed upon the Lands by Licensee are not to exceed a height of fourteen (14) feet above existing grade and all poles or standards supporting light fixtures are to be of a non-metallic material.

7. Sprinkler systems installed or to be installed by Licensee upon the Lands are to be constructed of a non-metallic material and sprinkler heads are to be set so the spray height does not exceed fourteen (14) feet above existing grade and does not make contact with any Company's facilities. Aboveground systems shall not be installed within or across Company patrol or finger roads and underground systems crossing said patrol and finger roads are to be buried at a minimum depth of one (1) foot below existing road grade.

8. Licensee agrees to warn its employees, agents, contractors and invitees of the fact that the electrical facilities and appurtenances installed or to be installed by Company within the Lands are of high voltage electricity and agrees to use all safety and precautionary measures when working under or near Company's facilities.

9. Licensee agrees, at all times, to maintain and keep the Lands clean and free of debris. Except as provided herein, Licensee further understands and agrees that certain uses of the Lands are specifically prohibited; such uses include but are not limited to recreational purposes,

hunting and camping, and Licensee agrees to notify its employees, agents, contractors, and invitees accordingly.

10. The use of the Lands by Licensee shall be at the sole risk and expense of Licensee, and Company is specifically relieved of any responsibility for damage or loss to Licensee or other persons resulting from Company's use of the Lands for its purposes.

11. Notwithstanding any provision contained herein, Licensee agrees to reimburse Company for all cost and expense for any damage to Company's facilities resulting from Licensee's use of the Lands and agrees that if, in the opinion of Company, it becomes necessary as a result of Licensee's use of the Lands for Company to relocate, rearrange or change any of its facilities, to promptly reimburse Company for all cost and expense involved with such relocation, rearrangement or change.

12. Each party hereto agrees that it shall be responsible for its own negligent acts or omissions. Nothing contained in the Section shall be construed to be a waiver or any protections under sovereign immunity, Section 768.28, Florida Statutes, or any other similar provision of law. Nothing contained herein shall be construed to be a consent by either party to be sued by third parties in any matter arising out of this Agreement.

13. The Board of Lee County Commissioners is self insured for all liability claims and related expenses pursuant to the provisions of Florida Statute 768.28.

14. This Agreement will become effective upon execution by Company and Licensee and will remain in full force and effect until completion of Licensee's use of the Lands pursuant to this Agreement, unless earlier terminated upon ninety (90) days written notice by Company to Licensee, or at the option of Company, immediately upon Licensee failing to comply with or to abide by any or all of the provisions contained herein.

15. The use granted herein as shown on Exhibit "B" shall be under construction by Licensee within one (1) year of the effective date of this Agreement and the construction shall be diligently pursued to completion. Licensee shall give Company ten (10) days prior written notice of its commencement of construction. "Under construction" is the continuous physical activity of placing the foundation or continuation of construction above the foundation of any structure or improvement permitted hereunder. Under construction does not include application for or obtaining a building permit, a site plan approval or zoning approval from the appropriate local government agency having jurisdiction over the activity, purchasing construction materials, placing such construction materials on the site, clearing or grading the site (if permitted) in anticipation of construction, site surveying, landscaping work or reactivating construction after substantially all construction activity has remained stopped for a period of two (2) months or more. Licensee acknowledges that failure to have the use under construction within the one (1) year time period will result in immediate termination of this Agreement in accordance with Paragraph 14 herein for failing to comply with the provisions contained herein unless Licensor grants a written extension for a mutually agreed upon time. Any request for an extension of time shall be submitted in writing by Licensee no later than thirty (30) days prior to the expiration of the one (1) year period for the project to be under construction.

16. The term "Licensee" shall be construed as embracing such number and gender as the character of the party or parties require(s) and the obligations contained herein shall be absolute and primary and shall be complete and binding as to each, including its successors and assigns, upon this Agreement being executed by Licensee and subject to no conditions precedent or otherwise.

17. Should any provision of this Agreement be determined by a court of competent jurisdiction to be illegal or in conflict with any applicable law, the validity of the remaining provisions shall not be impaired. In the event of any litigation arising out of enforcement of this Consent Agreement, the prevailing party in such litigation shall be entitled to recovery of all costs, including reasonable attorneys' fees.

18. Licensee may assign its rights and obligations under this Agreement to a solvent party upon prior written consent of the company, which consent shall not be unreasonably withheld.

The parties have executed this Agreement this 18th day of July, 2000.

Witnesses:

Signature:
Print Name: MARK L. BYERS

Signature:
Print Name: KELLY LOPEZ

FLORIDA POWER & LIGHT COMPANY

By:
Its: West Area Real Estate Manager
Print Name: C. W. Mathys

Witnesses:

Signature:
Print Name: Michele G. Leismer

Signature:
Print Name: Wilma C. Pope
CCC/DGE

LICENSEE:
Board of Lee County Commissioners

By:
Its: Chairman
Print Name: John E. Albion

APPROVED AS TO FORM
OFFICE OF COUNTY ATTORNEY

Form 3740 Rev. 10/9/95