

Price's Scrub Greenway

Land Management Plan



Managed by

Florida Department of Environmental Protection

Office of Greenways and Trails

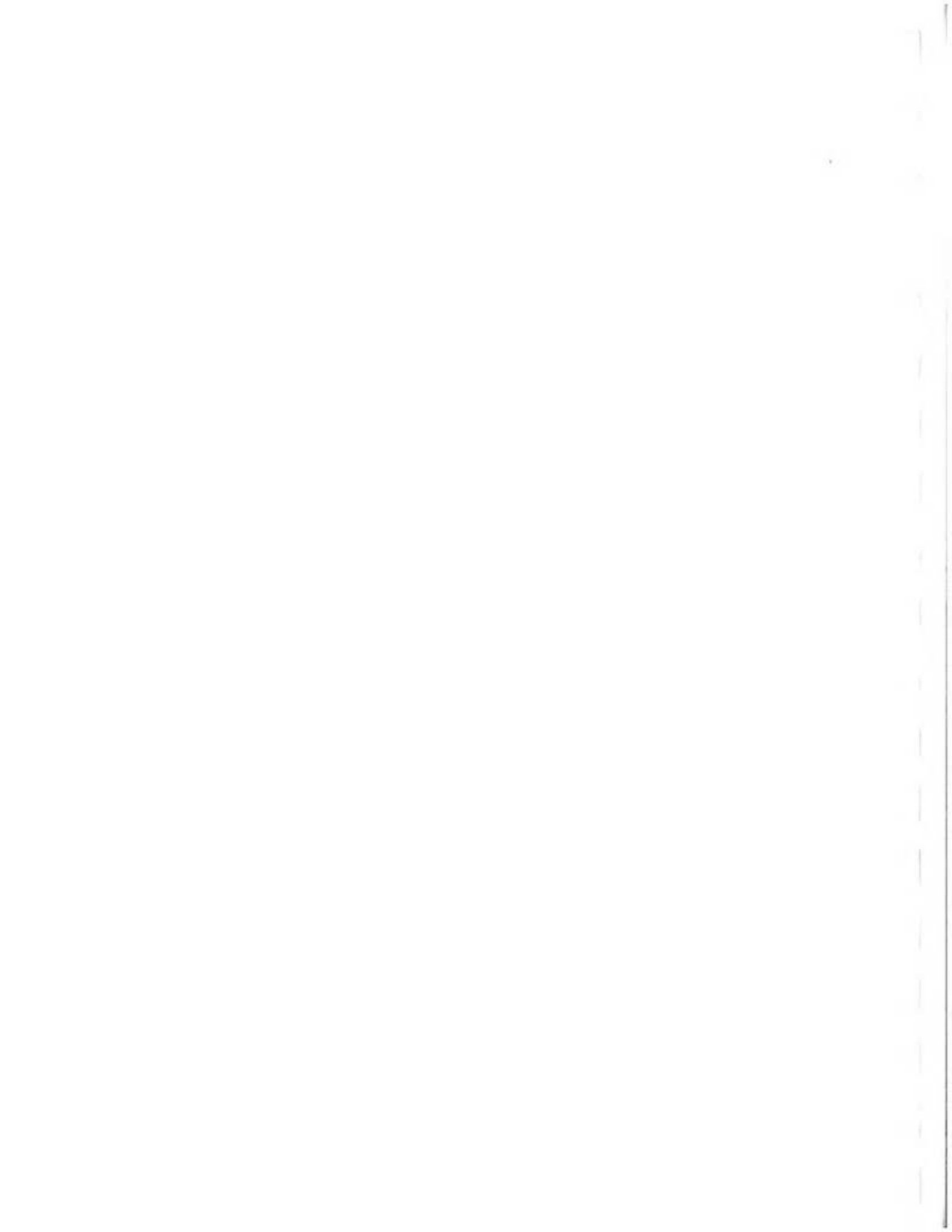
July 2004 – June 2014

**Prepared by
Muller and Associates, Inc.
with the
Office of Greenways and Trails
June 14, 2004**

Cover: Stagecoach road on Price's Scrub Greenway © 2004 Jim Muller. All rights reserved.

**The Florida Department of Environmental Protection
Office of Greenways and Trails**

*Working to establish a statewide system of
greenways and trails for
recreation and conservation purposes.*





Jeb Bush
Governor

Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Colleen M. Castille
Secretary

July 1, 2004

RECEIVED

JUL 02 2004

OFFICE OF
GREENWAYS & TRAILS

Ms. Jena Brooks
Office of Greenways and Trails
3900 Commonwealth Boulevard, M.S. 795
Tallahassee, FL 32399

RE: Price's Scrub Greenway, Lease Number: 4425

Dear Ms. Brooks:

On **June 4, 2004**, the Acquisition and Restoration Council (ARC) recommended approval of the Land Management for **Price's Scrub Greenway**. Therefore, the Office of Environmental Services, acting as agent for the Board of Trustees of the Internal Trust Improvement Fund approves this plan. Pursuant to Section 253.034 and 259.032, Florida Statutes. And Chapter 18-2, Florida Administrative Code, the plan should be updated within ten years or on June 4 2014. However, ARC suggested, and your staff agreed, that OGT would update the plan within 3 years – sufficient time to gather additional information.

Approval of this land management plan does not waive the authority of jurisdiction of any governmental entity that may have interest in this project. Implementation of any upland activities proposed by this management plan may require a permit or other authorization from federal and state agencies having regulatory jurisdiction over those particular activities.

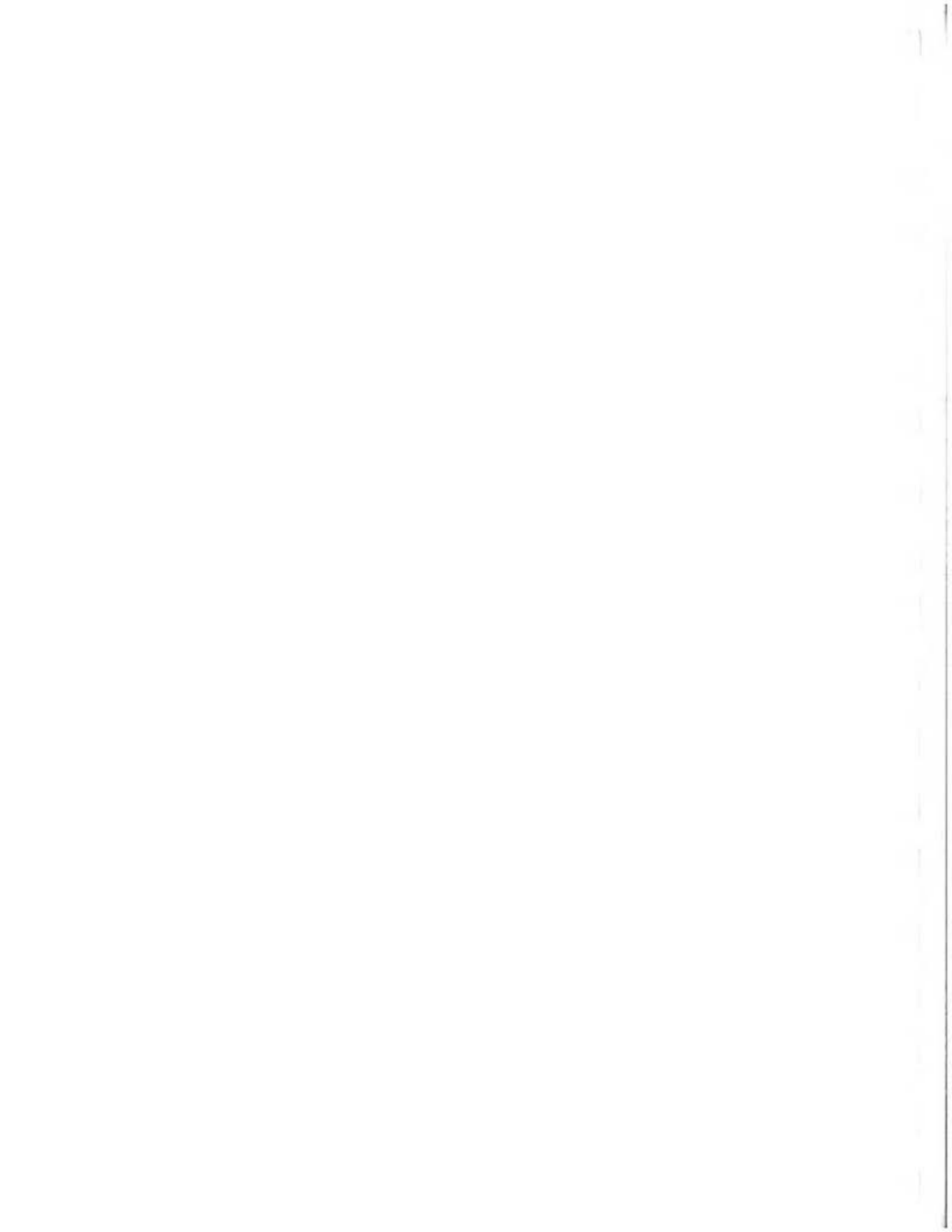
Sincerely

Paula L. Allen
Environmental Administrator
Office of Environmental Services
Division of State Lands

PLA

"More Protection, Less Process"

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Price's Scrub Greenway Land Management Plan Executive Summary

Lead Agency: Florida Department of Environmental Protection/Office of Greenways and Trails

Common Name of the Property: Price's Scrub Greenway

Location: Marion County

Acreage: 955

Acreage Breakdown:

Natural Community	Acreage
Scrub	180
Seepage Stream	[2 miles]
Sinkhole Lake	23
Scrubby Flatwoods	208
Upland Mixed Forest	259
Depression Marsh	7
Wet Flatwoods	249
Disturbed	29

Lease: #4425, dated May 29, 2003.

Use: Single use for ecosystems management while providing appropriate recreational opportunities

Management Responsibilities: Agency – FDEP, Office of Greenways and Trails

Responsibilities – Lessee, lead manager (greenways and trails)

Designated Land Use: Passive recreational open space greenway

Subleases: None

Contracts: None

Encumbrances: None

Type Acquisition: Fee simple through Florida Forever Greenways and Trails Program

Unique Features: Scrub, sinkhole lake, seepage stream, scrubby flatwoods; two State Imperiled plant species

Archaeological/Historical: 16 archeological and historical sites recorded in the DHR Florida Master Site File; also reportedly a historic stagecoach road

Management Needs: Research and survey for onsite historical and natural resources prior to detailed planning and construction; establish a Citizens Support Organization; involve the local community in planning and maintaining onsite facilities; establish prescribed fire program; establish multi-use trail system onsite with historical and natural resource interpretive materials; with local community, work to link Price's Scrub trail system with publicly-accessible trail systems on surrounding lands

Acquisition Needs: Acquire inholding; acquisition of Carr Farm/Price's Scrub Florida Forever Project; acquisition or designation of properties in Greenways and Trails Opportunity Corridor

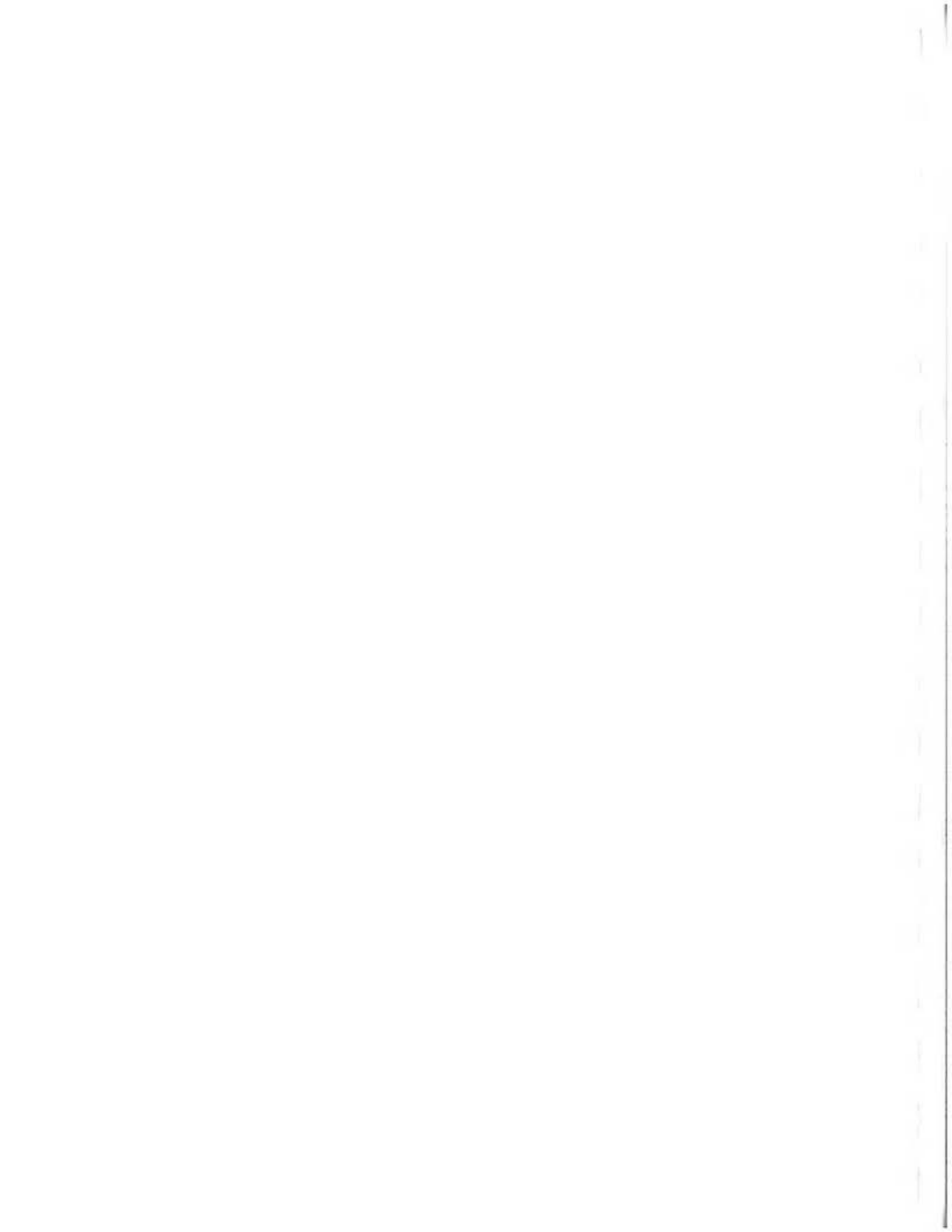
Surplus Lands: None

Public Involvement: Two advisory group meetings and two public hearings

DO NOT WRITE BELOW THIS LINE (FOR DIVISION OF STATE LANDS USE ONLY)

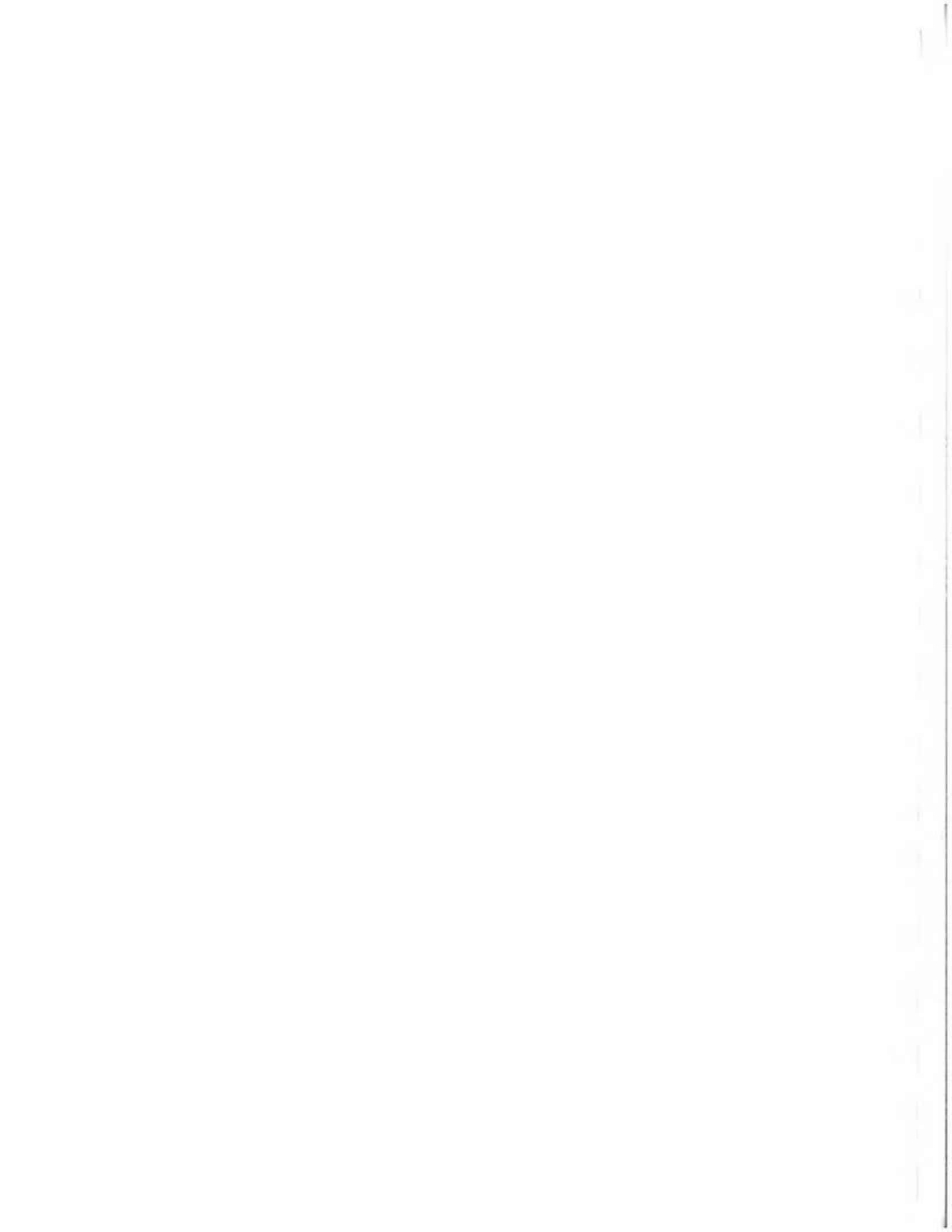
ARC Approval Date _____ BTIITF Approval Date: _____

Comments: _____



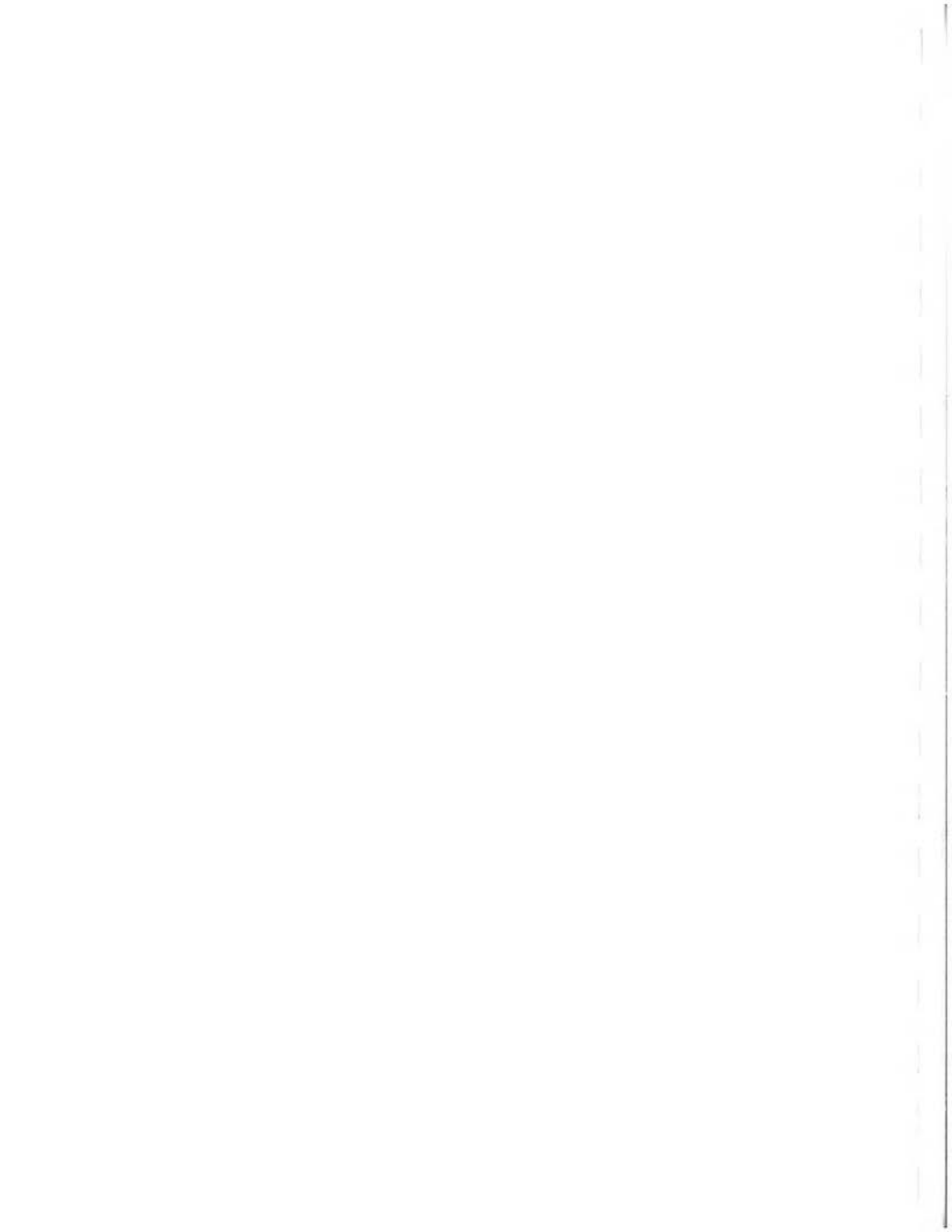
MANAGEMENT PLAN COMPLIANCE CHECKLIST

REQUIREMENTS	PAGE NUMBERS
18-2.021 Land Management Advisory Council.	
(4) Management Plans. Plans submitted to the division for council review under the requirements of Section 253.034 F.S. should contain where applicable to the management of resources the following:	
	Page
1. The common name of the property.	1
2. A map showing the location and boundaries of the property plus any structures or improvements to the property.	Map 1 p. 3 Map 7 p. 27
3. The legal description and acreage of the property.	App. 1
4. The degree of title interest held by the Board, including reservations and encumbrances such as leases.	1
5. The land acquisition program (e.g., C. A. R. L., E. E. L., Save Our Coast), if any, under which the property was acquired.	1
6. The designated single use or multiple use management for the property, including other managing agencies.	33
7. Proximity of property to other significant State, local, or federal land or water resources.	Map 1 p.3 7
8. A statement as to whether the property is within an aquatic preserve or a designated area of critical State concern or an area under study for such designation.	7
9. The location and description of known and reasonably identifiable renewable and non-renewable resources of the property including, but not limited to, the following:	
A. Brief description of soil types, using U. S. D. A. maps when available;	Table 3 p. 12 11
B. Archaeological and historical resources;	24
C. Water resources including the water quality classification for each water body and the identification of any such water body that is designated as an Outstanding Florida Waters;	15
D. Fish and wildlife and their habitat;	22
E. State and federally listed endangered or threatened species and their habitat;	22
F. Beaches and dunes;	NA
G. Swamps, marshes and other wetlands;	16
H. Mineral resources, such as oil, gas and phosphate;	24
I. Unique natural features, such as coral reefs, natural springs, caverns, large sinkholes, virgin timber stands, scenic vistas, and natural rivers and streams; and	24
J. Outstanding native landscapes containing relatively unaltered flora, fauna, and geological conditions.	16
10. A description of actions the agency plans, to locate and identify unknown resources such as surveys of unknown archaeological and historical resources.	37-40
11. The identification of resources on the property that are listed in the Natural Area Inventory.	App. 4



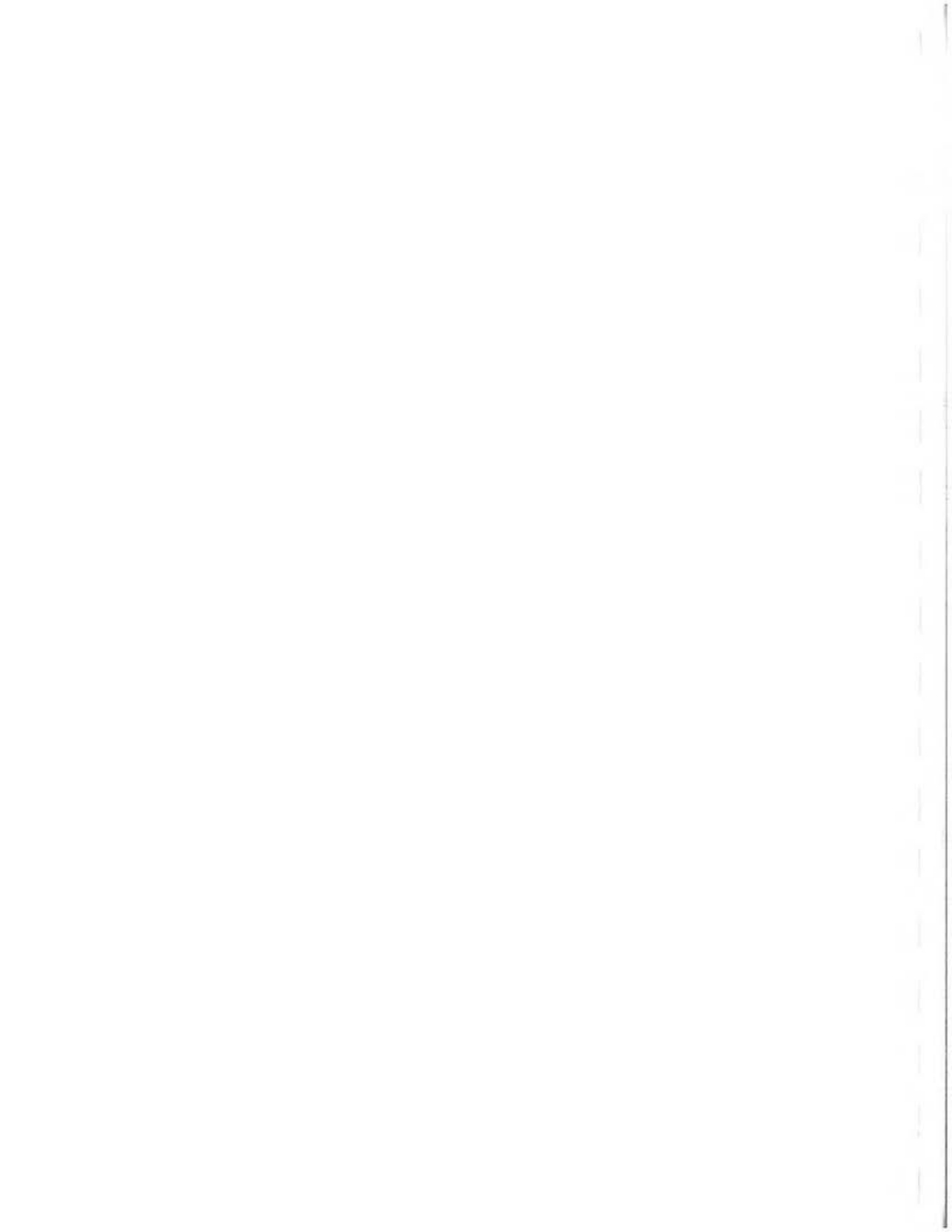
MANAGEMENT PLAN COMPLIANCE CHECKLIST

REQUIREMENTS	PAGE NUMBERS
12. A description of past uses, including any unauthorized uses of the property.	25
13. A detailed description of existing and planned use(s) of the property.	25
14. A description of alternative or multiple uses of the property considered by the managing agency and an explanation of why such uses were not adopted.	32
15. A detailed assessment of the impact of planned uses on the renewable and non-renewable resources of the property and a detailed description of the specific actions that will be taken to protect, enhance and conserve these resources and to mitigate damage caused by such uses.	25-48
16. A description of management needs and problems for the property.	35-48
17. Identification of adjacent land uses that conflict with the planned use of the property, if any.	26
18. A description of legislative or executive directives that constrain the use of such property.	7
19. A finding regarding whether each planned use complies with the State Lands Management Plan adopted by the Trustees on March 17, 1981, and incorporated herein by reference, particularly whether such uses represent "balanced public utilization", specific agency statutory authority, and other legislative or executive constraints. A copy of the plan may be obtained by writing to the Department of Environmental Protection, Division of State Lands, Bureau of Land Management Services, 3900 Commonwealth Boulevard, Mail Station 130, Tallahassee, Florida 32399-3000.	1
20. An assessment as to whether the property, or any portion, should be declared surplus.	31
21. Identification of other parcels of land within or immediately adjacent to the property that should be purchased because they are essential to management of the property.	
22. A description of the management responsibilities of each agency and how such responsibilities will be coordinated, including a provision that requires that the managing agency consult with the Division of Archives, History and Records Management before taking actions that may adversely affect archaeological or historic resources.	25, 40
23. A statement concerning the extent of public involvement and local government participation in the development of the plan, if any, including a summary of comments and concerns expressed.	8 App. 2
Additional Requirements—Per Trustees	
24. Letter of Compliance of the management plan with the Local Government Comprehensive Plan.	App. 9



MANAGEMENT PLAN COMPLIANCE CHECKLIST

REQUIREMENTS	PAGE NUMBERS
253.034 State-Owned Lands; Uses. —	
(5) Each entity managing conservation lands shall submit to the Division of State Lands a land management plan at least every 5 years in a form and manner prescribed by rule by the board.	
25. All management plans, whether for single-use or multiple-use properties, shall specifically describe how the managing entity plans to identify, locate, protect and preserve, or otherwise use fragile nonrenewable resources, such as archaeological and historic sites, as well as other fragile resources, including endangered plant and animal species.	25-48
26. Provide for the conservation of soil and water resources and for the control and prevention of soil erosion.	37
27. Land management plans submitted by an entity shall include reference to appropriate statutory authority for such use or uses and shall conform to the appropriate policies and guidelines of the state land management plan.	8 App. 7
28. All land management plans for parcels larger than 1,000 acres shall contain an analysis of the multiple-use potential of the parcel, which analysis shall include the potential of the parcel to generate revenues to enhance the management of the parcel.	32
29. Additionally, the land management plan shall contain an analysis of the potential use of private land managers to facilitate the restoration or management of these lands.	45
253.036 Forest Management. —	
30. For parcels larger than 1,000 acres the lead agency shall prepare the analysis, which shall contain a component or section prepared by a qualified professional forester which assesses the feasibility of managing timber resources on the parcel for resource conservation and revenue generation purposes through a stewardship ethic that embraces sustainable forest management practices if the lead management agency determines that the timber resource management is not in conflict with the primary management objectives of the parcel.	NA
259.032 Conservation And Recreation Lands Trust Fund; Purpose. —	
(10)(a) State, regional, or local governmental agencies or private entities designated to manage lands under this section shall develop and adopt, with the approval of the board of trustees, an individual management plan for each project designed to conserve and protect such lands and their associated natural resources. Private sector involvement in management plan development may be used to expedite the planning process. Individual management plans shall conform to the appropriate policies and guidelines of the state land management plan and shall include, but not be limited to:	



MANAGEMENT PLAN COMPLIANCE CHECKLIST

REQUIREMENTS	PAGE NUMBERS
31. Individual management plans required by s. 253.034(5), for parcels over 160 acres, shall be developed with input from an advisory group.	8 App. 2
32. The advisory group shall conduct at least one public hearing within the county in which the parcel or project is located.	8 App. 2
33. Notice of such public hearing shall be posted on the parcel or project designated for management, advertised in a paper of general circulation, and announced at a scheduled meeting of the local governing body before the actual public hearing.	App. 2
34. The management prospectus required pursuant to paragraph (9)(d) shall be available to the public for a period of 30 days prior to the public hearing.	NA
35. Individual management plans shall conform to the appropriate policies and guidelines of the state land management plan and shall include, but not be limited to:	
A. A statement of the purpose for which the lands were acquired, the projected use or uses as defined in s. 253.034, and the statutory authority for such use or uses.	7
B. Key management activities necessary to preserve and protect natural resources and restore habitat, and for controlling the spread of nonnative plants and animals, and for prescribed fire and other appropriate resource management activities.	35-48
C. A specific description of how the managing agency plans to identify, locate, protect, and preserve, or otherwise use fragile, nonrenewable natural and cultural resources.	35-48
D. A priority schedule for conducting management activities, based on the purposes for which the lands were acquired.	35-48 App. 6
E. A cost estimate for conducting priority management activities, to include recommendations for cost-effective methods of accomplishing those activities.	44 Table 8 App. 6
F. A cost estimate for conducting other management activities which would enhance the natural resource value or public recreation value for which the lands were acquired. The cost estimate shall include recommendations for cost-effective methods of accomplishing those activities.	44 Table 8 App. 6
40. A determination of the public uses and public access that would be consistent with the purposes for which the lands were acquired.	25
259.036 Management Review Teams.—	
41. The managing agency shall consider the findings and recommendations of the land management review team in finalizing the required 5-year update of its management plan.	NA

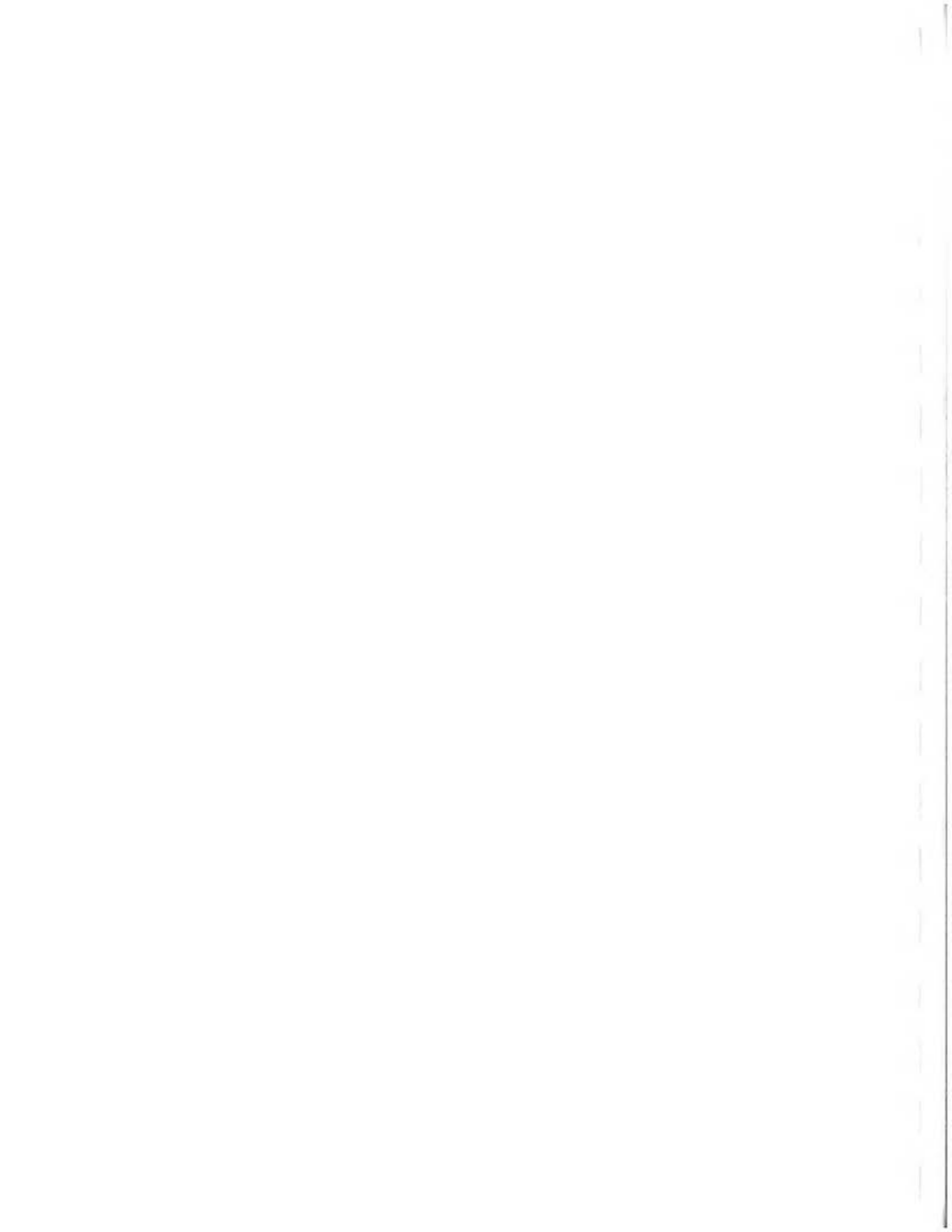
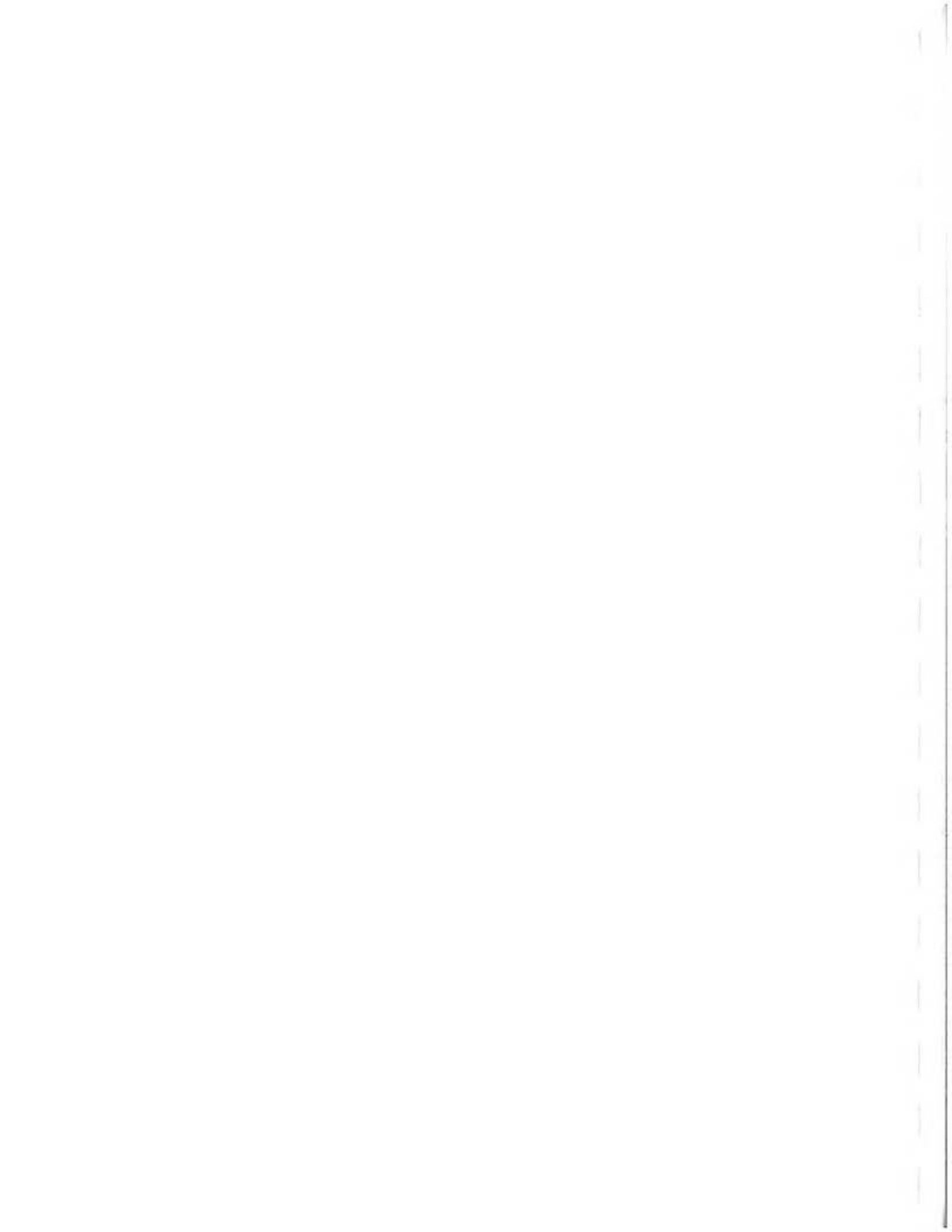
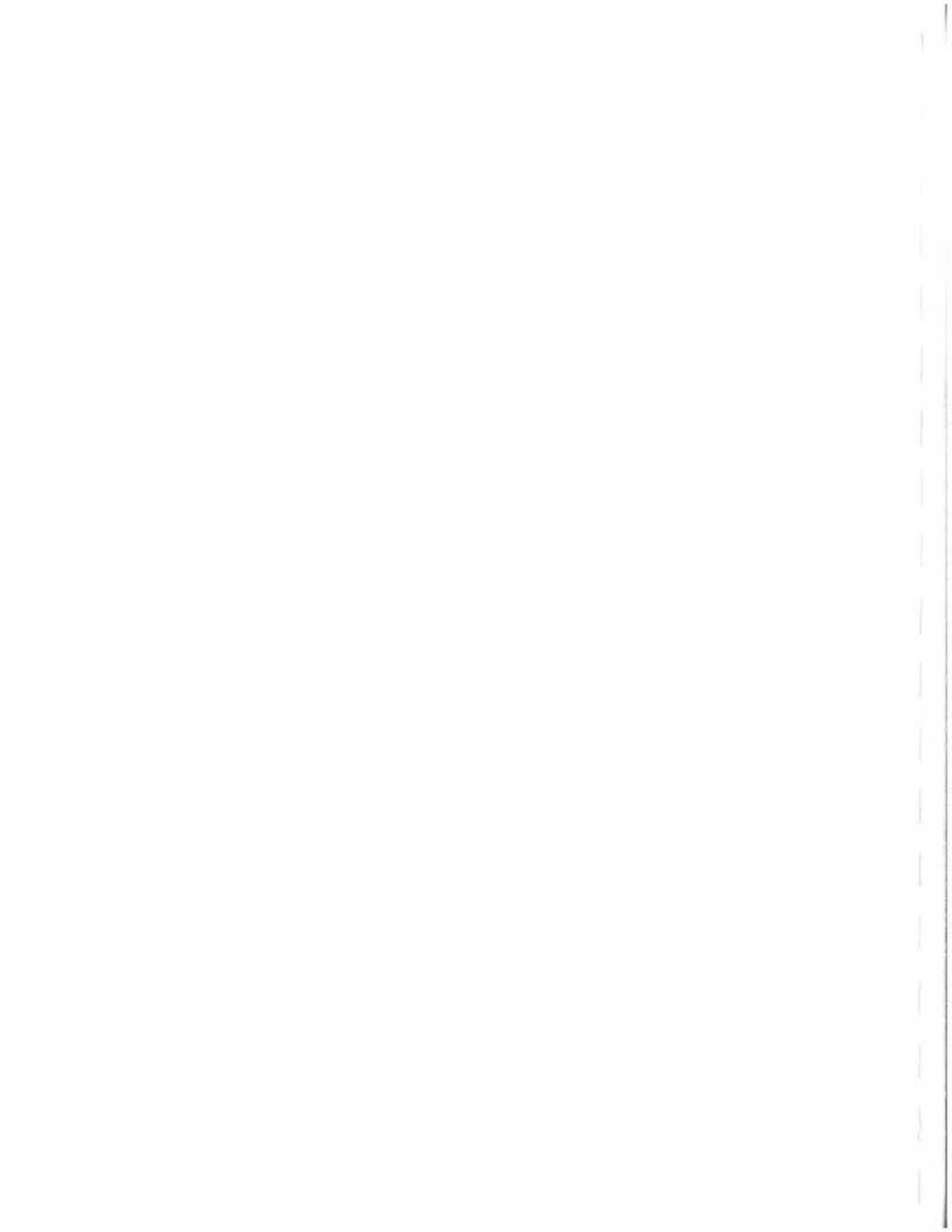


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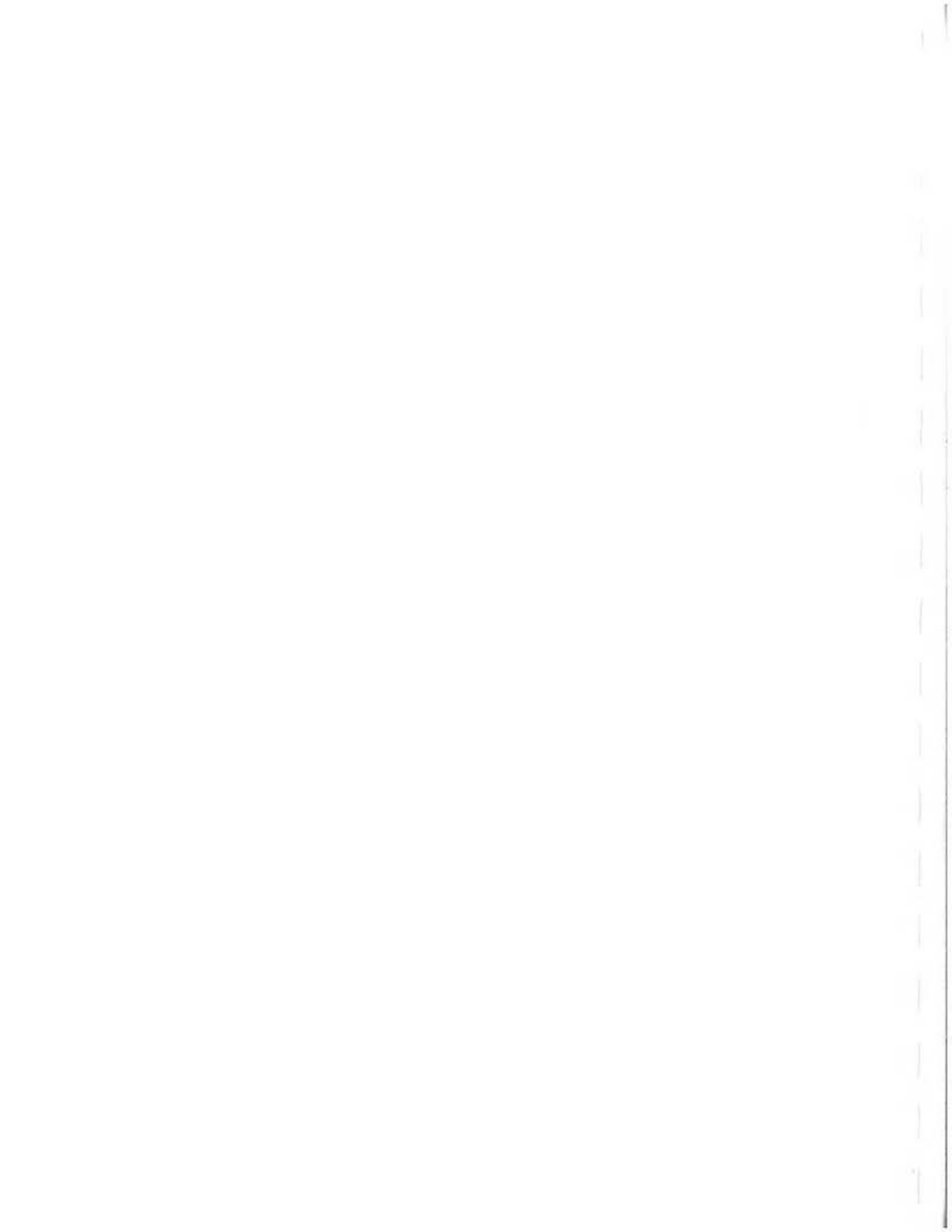


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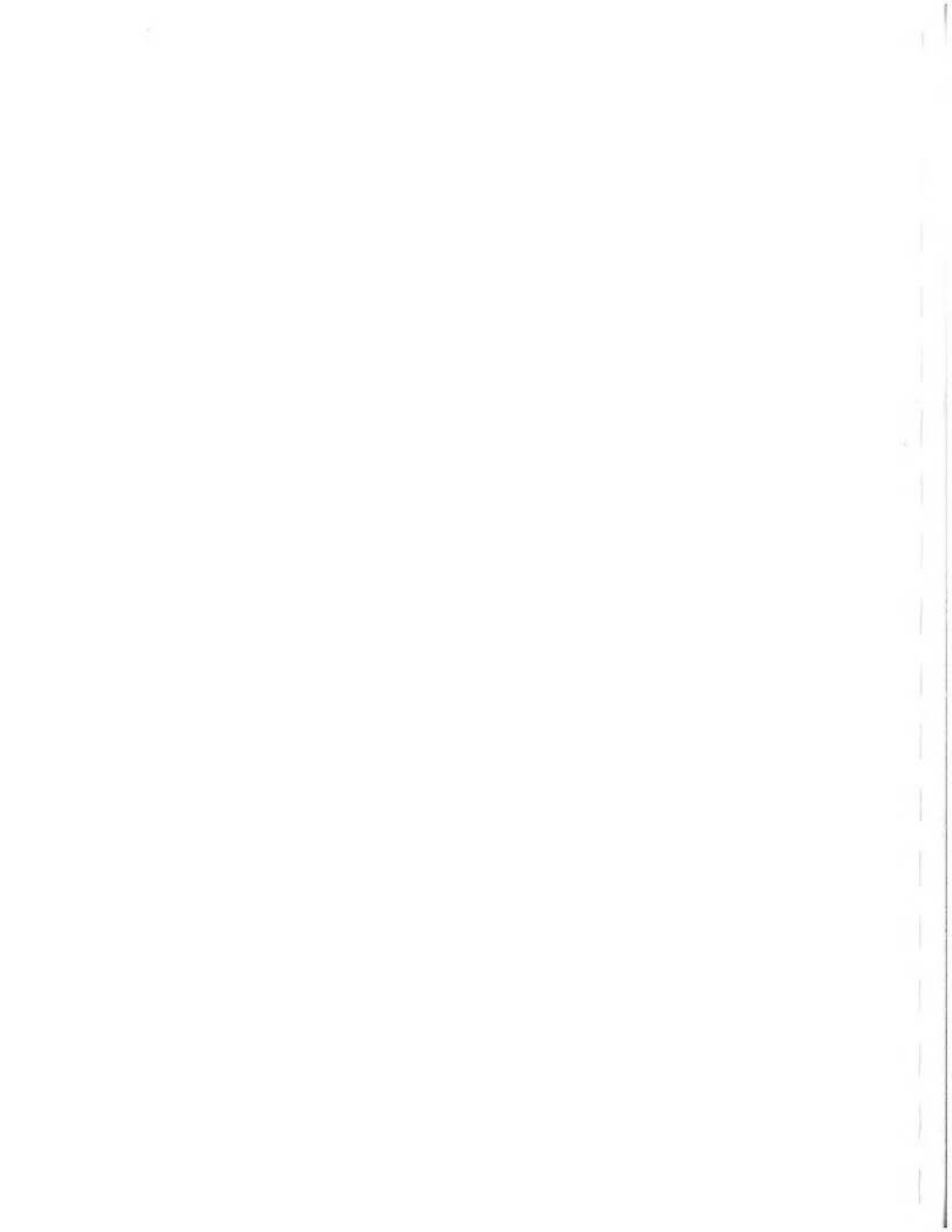
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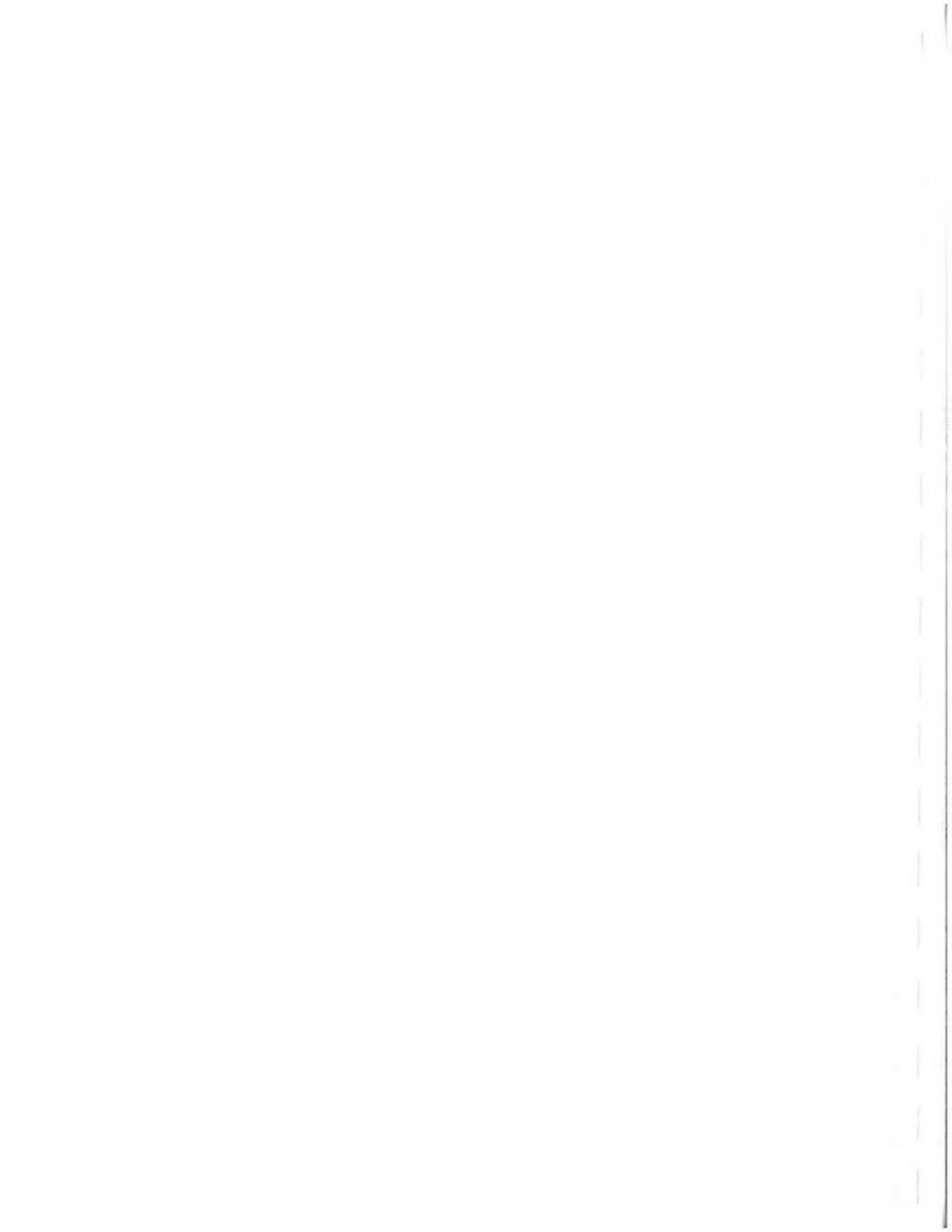
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- Appendix 3: Soils Descriptions for Price's Scrub Greenway
- Appendix 4: Florida Natural Areas Inventory Managed Area Tracking Record and Element Occurrence Summary for Price's Scrub Greenway; FNAI ranking system explanation
- Appendix 5: Florida Natural Areas Inventory Natural Communities Descriptions for Natural Communities Occurring on Price's Scrub Greenway
- Appendix 6: Goals, Objectives, Project Priorities, Timelines, Cost for Price's Scrub Greenway
- Appendix 7: Land Management Rules - Chapters 18-2, 62S-1 Florida Administrative Code
- Appendix 8: Management Procedures for Archaeological and Historical Sites and Properties On State-owned or Controlled Lands
- Appendix 9: Verification of Compliance with Local Comprehensive Plans for Price's Scrub Greenway



I. Introduction

Price's Scrub Greenway is located in northwest Marion County, contiguous with and south of the Alachua County line. Interstate 75 forms the eastern border of the property and County Road 320 touches the southwestern part of the property. Gainesville is about 12 miles north. Access to the greenway is along County Road 320.

The State of Florida acquired Price's Scrub as a project in the Florida Greenways and Trails System for recreational and conservation purposes. The property is 955 acres, with approximately 868 upland and 87 jurisdictional wetland acres. Price's Scrub Greenway has a blend of upland mixed forest, depression marsh, scrub, scrubby flatwoods, wet flatwoods and sinkhole lake.

On November 23, 2002, the Board of Trustees of the Internal Improvement Trust Fund (BOT) obtained title to the property known as Northwest Marion Greenway - Price's Scrub Tract Greenways and Trails Project, which was subsequently named Price's Scrub Greenway. The project was purchased with funds from the Greenways and Trails Florida Forever program. The BOT holds fee simple title to Price's Scrub. The Department of Environmental Protection's Office of Greenways and Trails manages these lands under Lease #4425, dated May 29, 2003. The lease is for fifty (50) years, and it expires on May 28, 2053 (Appendix 1).

Conservation and protection of natural and historical resources and resource based public outdoor recreation that is compatible with the conservation and protection of these lands are the designated uses of the property.

This is the initial management plan for Price's Scrub Greenway.

Purpose and Scope of Plan

This management plan for Price's Scrub Greenway describes its setting, natural resources, and the intended management. Acquired through the Greenways and Trails Florida Forever program, the general management and use of the land are directed by the statutes and rules of the Florida Forever and the Greenways and Trails programs. Additionally, management is guided by the purpose and intended use of the land described in the land acquisition project selection process. Other statutes and rules also control the use of the land.

The Office of Greenways and Trails' (OGT) mission is working to establish a statewide system of greenways and trails for recreation and conservation purposes. Price's Scrub Greenway is managed to conserve and protect the natural and cultural resources of the greenway while providing, where appropriate, recreational opportunities such as horseback riding, hiking, bicycling, canoeing, jogging, and historical and archaeological interpretation.

This management plan is submitted for review to the BOT through the Department of Environmental Protection, Division of State Lands (DSL). It is intended to comply with paragraph 7 of the lease agreement between the BOT and DEP/OGT (Appendix 1); Chapters 253 and 259, Florida Statutes (F.S.); and Chapters 18-2 and 62S, Florida Administrative Code (FAC). The plan is intended to be consistent with the State Land Management Plan. The format and content of this plan for Price's Scrub Greenway are in accordance with the Acquisition and Restoration Council recommendations for management plans and the model plan outline provided by the staff of DSL.

All development and resource alteration encompassed in this plan are subject to the granting of appropriate permits, easements, licenses, and other required legal instruments. Approval of the management plan does not constitute an exemption from complying with the appropriate local, state, or federal agencies.

Location

Price's Scrub Greenway is located in northwest Marion County, contiguous with and south of the Alachua County line (Map 1). Interstate 75 forms the eastern border of the property for a distance of about 2 miles and County Road 320 touches the southwestern part of the property. County Road 329 is slightly more than a mile west of the western boundary. The property is located in the Shiloh community. The town of Micanopy is about one mile north. Ocala is approximately 21 miles to the southeast and Gainesville is about 12 miles north. Access to the greenway is via one gate along County Road 320. There is also access via private roads to several locations along the northern half of the western boundary. Price's Scrub is managed out of the Marjorie Harris Carr Cross Florida Greenway office located at 8282 SE Hwy 314, Ocala, FL 34470. The phone number for the office (352-236-7143) is posted on the Price's Scrub entry gate.

Regional Significance

Price's Scrub Greenway was proposed for acquisition because of the diverse recreational and conservation opportunities present onsite, as well as the role this acquisition plays in the Northwest Marion Greenway. The site has at least seven natural communities, including scrub, upland mixed forest, scrubby flatwoods, and sinkhole lake. The scrub is one of the northernmost occurrences of this community in central peninsular Florida. The several miles of woods trails on the property will be expanded to provide an extensive trail system with the potential to connect to trails on adjacent private lands.

The property was recognized as an important site in FNAI's 1993 inventory of Marion County (FNAI and Chicardi, 1993). Part of the Shiloh Forest/Price's Scrub site, Price's Scrub was recognized for its upland mixed forest and the ridges of scrub among the wet pine flatwoods. Only three sites in Marion County received a higher biodiversity rating.

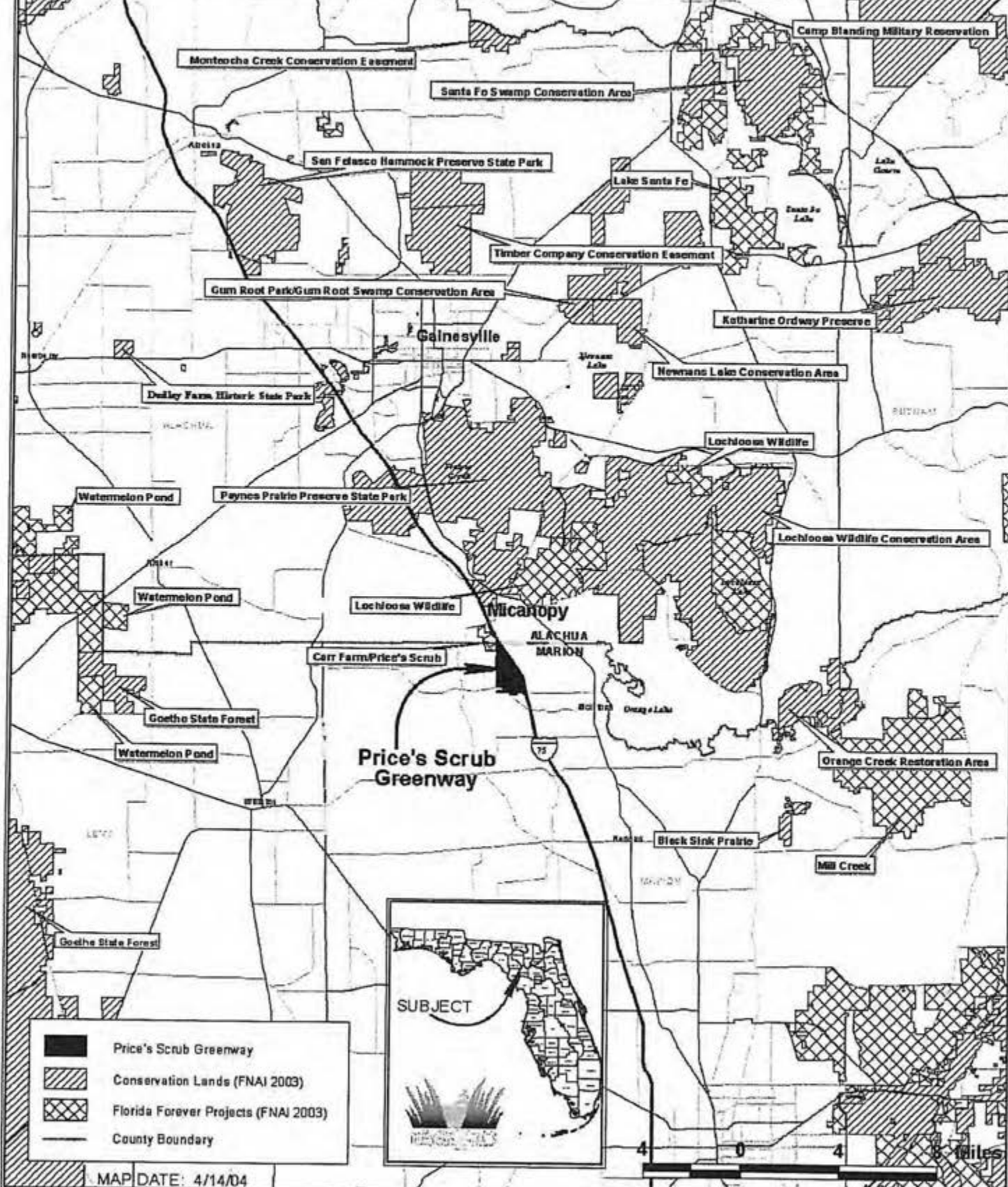
Price's Scrub Greenway plays a role in the proposed connection of Paynes Prairie Preserve State Park/Lochloosa Wildlife Conservation Area to the north and northeast in Alachua County to the Goethe State Forest to the west and southwest in Levy County, and helps the proposed connection to the Cross Florida Greenway. This planned Northwest Marion Greenway is a part of the Marion County Comprehensive Plan. More recently, Price's Scrub Greenway was included in an Opportunity Corridor that is part of the Greenways and Trails Council's statewide plan. This corridor connects the Cross Florida Greenway with Paynes Prairie Preserve State Park/Lochloosa Wildlife Conservation Area and the Goethe State Forest (Map 2).

(The following information was taken from the publication *Closing the Gaps in Florida's Wildlife Habitat Conservation System*, produced in 1994 by the Florida Game and Fresh Water Fish Commission, now known as the Florida Fish and Wildlife Conservation Commission.)

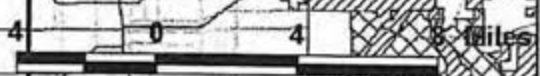
Price's Scrub Greenway is within a Strategic Habitat Conservation Area (SHCA). Detailed habitat maps have been developed for 40 taxa of wildlife based on known occurrences, habitat requirements, and accompanying information on land cover. Conservation recommendations have been made for each of the 40 species. By combining the habitat maps, a composite map has been created which shows Strategic Habitat Conservation Areas (SHCAs) for all species, species groups, and natural communities for which recommendations were developed. The SHCAs are essential to enhancing the long-term security of many plants, animals, and natural communities that constitute essential components of Florida's natural diversity.

Although the SHCAs are essential to sustaining many rare plants, animals, and natural communities, they do not include some natural areas that might warrant conservation based on their importance to local populations of rare species or other natural resources. "Hot spot" maps of biological resources were created for each region by overlaying the habitat maps and subdividing the composite map into 3 broader class categories which are based on the number of focal species that would likely find appropriate habitat conditions in the area. Class 1 lands are areas where habitat conditions for 3-4 focal species are likely to occur. Class 2 is for 5-6 focal species. Class 3 is for 7+ species. Almost all of Price's Scrub Greenway is designated as a Class 3 area.

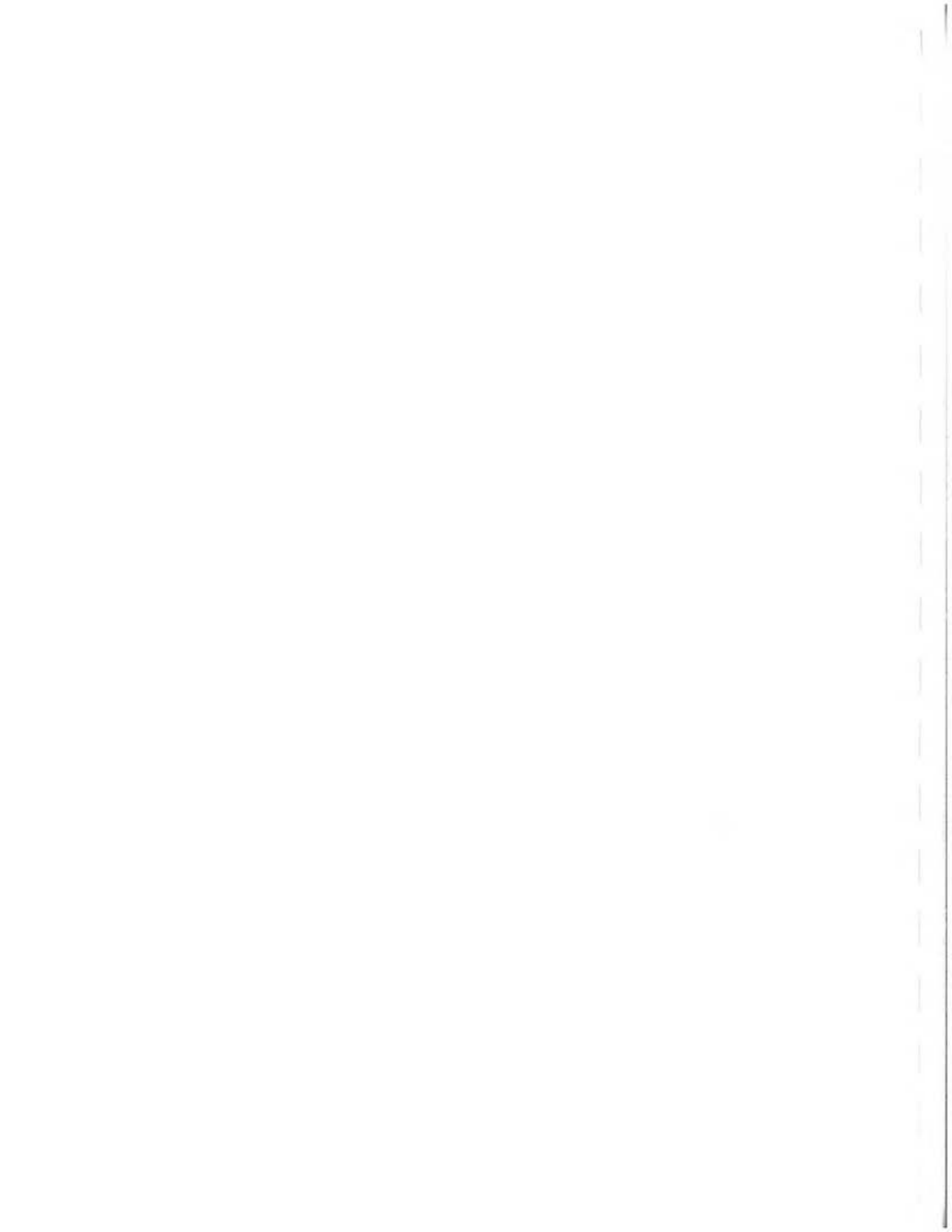
MAP 1 Location of Price's Scrub Greenway and Proximate Conservation Areas



- Price's Scrub Greenway
- Conservation Lands (FNAI 2003)
- Florida Forever Projects (FNAI 2003)
- County Boundary



MAP DATE: 4/14/04



Map 2. Greenways and Trails Opportunity Corridors in the Vicinity of Price's Scrub Greenway

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Land Acquisition

Purpose

This project was acquired as the Northwest Marion Greenway - Price's Scrub Tract by the Greenways and Trails Florida Forever program. As described in the project evaluation, the purpose for state acquisition of Price's Scrub Greenway is to provide equestrian and hiking trails and other recreational opportunities such as canoeing, birding, and nature study. Proposed facilities for environmental education include nature trails, boardwalks and a scenic overlook. The project is intended to contribute to ecosystem conservation. It was anticipated that the project would allow for planned recreational activities while minimizing impacts on the natural resources. Map 3 denotes the boundary of Price's Scrub Greenway, as well as the contiguous Carr Farm/Price's Scrub Florida Forever project.

Price's Scrub Greenway is not an aquatic preserve as designated under the Florida Aquatic Preserve Act of 1975 (section 258.35, Florida Statutes), as amended. This greenway is not within or adjacent to an aquatic preserve. Waters within the greenway have not been designated as Outstanding Florida Waters, pursuant to Chapter 62-302 Florida Administrative Code. Surface waters in this unit are also classified as Class III waters by DEP.

Price's Scrub Greenway is not within an Area Of Critical State Concern as defined in section 380.05, Florida Statutes. It is not under study for such designation.

History

Price's Scrub Greenway was first placed on the Greenways and Trails Florida Forever acquisition list in 2000 under the project name of Northwest Marion Greenway - Price's Scrub Tract Greenways and Trails Project. The project, with the addition of land to the north (Carr Farm), was added to the Florida Forever/BOT list in 2001 under the name of Carr Farm/Price's Scrub. Land was first acquired in November 2002 using Greenways and Trails Florida Forever funds. This purchase resulted in the acquisition of the entire Northwest Marion Greenway - Price's Scrub Tract Greenways and Trails Project except two small areas with billboards fronting I-75, a 7.5-acre parcel in the center of the project, and a small area in the southwest. No additional acquisition has occurred. OGT was given management authority in May 2003. Table 1 provides an outline of benchmarks in the history of Price's Scrub. The Carr Farm/Price's Scrub project remains on the Florida Forever/BOT acquisition list in Group B (Florida Forever Five Year Plan 2003). As such, the project remains eligible for acquisition if a non-Florida Forever funding source (such as local acquisition funds or a donation by the landowner) provides at least 50% of the acquisition cost. The 7.5-acre inholding in the Price's Scrub Greenway is still eligible for acquisition under the Greenways and Trails program. The Rabbit Hill parcel in the southwest is also eligible.

Table 1: Acquisition History and Status for Price's Scrub Greenway

Date	Benchmark
2000	Land acquisition project applications submitted to the Office of Greenways and Trails and to the Conservation and Recreation Lands (CARL) program
2000	Northwest Marion Greenway - Price's Scrub Tract placed on Florida Greenways and Trails Land Acquisition Program list
2001	Carr Farm/Price's Scrub placed on BOT Florida Forever acquisition list
Nov. 25, 2002	Board of Trustees acquired Durazzo & Vecchiarelli parcels (955 acres) using Greenways and Trails Florida Forever funds
May 29, 2003	Management authority for Price's Scrub given to OGT (original lease date)

Nearby Public Lands and Designated Water Resources

At least 13 conservation areas occur within 15 miles of Price's Scrub Greenway (Map 1). Table 2 lists these lands, ordered by those closest to Price's Scrub. As noted in Regional Significance, above, Price's Scrub Greenway should

be considered in the context of its position to many of these areas. It is intended to be a component of greenways and trails corridors linking conservation and recreation areas in the region. Four Outstanding Florida Waters are near Price's Scrub Greenway: Orange Lake/River Styx/Cross Creek, Lochloosa Lake, Paynes Prairie Preserve State Park, and Marjorie Kinnan Rawlings Historic State Park. Waters of state parks are generally designated as Outstanding Florida Waters.

Table 2: Partial listing of Conservation Lands Proximate to Price's Scrub Greenway

Conservation Area	Managing Agency
Paynes Prairie Preserve State Park	FL Dept. of Environmental Protection Div. of Recreation and Parks
Lochloosa Wildlife Conservation Area	St. Johns River Water Management District
Marjorie Kinnan Rawlings Historic State Park	FL Dept. of Environmental Protection Div. of Recreation and Parks
M.K. Rawlings Park	Alachua County
Prairie Creek Conservation Area	St. Johns River Water Management District and FL Dept. of Environmental Protection Div. of Recreation and Parks
Orange Lake Cypress	The Nature Conservancy
Orange Creek Restoration Area	St. Johns River Water Management District
Owens-Illinois Park	Alachua County
Lake Kanapaha	Alachua County
Kanapaha Botanical Gardens	Alachua County
Black Sink Prairie	St. Johns River Water Management District
Goethe State Forest	Florida Dept. of Agriculture and Consumer Services, Division of Forestry

Management Authority

Management authority for this property is addressed in general in Chapter 18-2, FAC, "Management of Uplands Vested in the Board of Trustees." Management of this specific property is authorized in Lease #4425 between the BOT and DEP/OGT (Appendix 1). The Governor and Cabinet sit as the Board of Trustees and are responsible for state-owned lands. The BOT is authorized under 253.03, F.S., to lease State lands to State agencies for the use and benefit of the people of the State of Florida. The lease is for 50 years. The lease states that the property is to be managed "only for the conservation and protection of natural and historical resources and resource based public outdoor recreation that is compatible with the conservation and protection of these public lands..."

Public Involvement

A management advisory group meeting and a public meeting, as required by Ch. 259.032(10), F.S., were held in northern Marion County, Florida on March 26, 2004 to obtain input from both public and private stakeholders regarding management of Price's Scrub Greenway. A second management advisory group meeting and public hearing was held in the Shiloh/Micanopy area in northern Marion County, Florida on April 29, 2004. A summary of issues and opportunities raised by the advisory group and other members of the public, as well as a list of participants, is included as Appendix 2.

Map 3. Boundaries and Topographic Map of Price's Scrub Greenway

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II. Natural and Cultural Resources

This chapter describes the natural and cultural resources of the Price's Scrub Greenway and problems affecting the resources. Chapter IV details how the resources will be managed and how the problems will be addressed.

Physiography

Topography and Geomorphology

Price's Scrub Greenway is in Florida's Central Highlands within the Mid-Peninsula Zone of the state. More specifically, it is in the Fairfield Hills physiographic province, just south of the Alachua Lake Cross Valley. The Fairfield Hills physiographic province is one of the larger areas of higher ground in the area. Fairfield Hills is a Pleistocene sand ridge that overlies the less permeable, Miocene sediments of the Hawthorn Group. It is believed to be a relict Atlantic coastal feature.

Most of the property drains into Tusawilla Lake to the northeast via a ravine-like stream system, locally known as the Brownlee Creek Ravine. Within the greenway, the southern part of the property is generally flat, sloping gradually downward to the north. The northern part of the greenway is more rolling hills and includes a sinkhole lake. Elevations of the greenway range from about 190 feet above mean sea level in the southern area to 110 feet in the extreme north (Map 3). Few alterations have been made to the topography of the greenway, the most noticeable being the borrow pit in the southeastern corner of the site.

Geology

Price's Scrub Greenway lies almost directly on the transect of a series of samples that were used in the development of a geologic map of Florida (Scott *et al.*, 2001). According to the map, the uppermost layer in the Price's Scrub Greenway area is the Miocene – Hawthorn Group, Coosawhatchie Formation. This layer is roughly 50 feet thick, and overlies the Eocene – Ocala Limestone, which is slightly more than 100 feet thick in the area. Beneath this is the Eocene – Avon Park Formation, which is less than 100 ft below mean sea level at this location.

According to Scott *et al.*,

The Coosawhatchie Formation is exposed or lies beneath a thin overburden on the eastern flank of the Ocala Platform from southern Columbia County to southern Marion County. Within the outcrop region, the Coosawhatchie Formation varies from a light gray to olive gray, poorly consolidated, variably clayey and phosphatic sand with few fossils, to an olive gray, poorly to moderately consolidated, slightly sandy, silty clay with few to no fossils. Occasionally the sands will contain a dolomitic component and, rarely, the dominant lithology will be dolostone or limestone. Silicified nodules are often present in the Coosawhatchie Formation sediments in the outcrop region. The sediment may contain 20 percent or more phosphate (Scott, 1988). Permeability of the Coosawhatchie sediments is generally low, forming part of the intermediate confining unit/aquifer system.

Soils

According to the general soil map of Marion County, Florida (Thomas *et al.*, 1979), Price's Scrub Greenway has three soil associations: Sparr-Lochloosa-Tavares, Lynne-Pomona-Pompano, and Blichton-Flemington-Kanapaha. The Sparr-Lochloosa-Tavares association consists of "nearly level to sloping, somewhat poorly drained and moderately well drained soils, some sandy to a depth of 20 to more than 40 inches and loamy below and others sandy throughout" typical of uplands and flatwoods. On Price's Scrub, this soil association occurs in the northern portion, especially along Brownlee Creek.

The Lynne-Pomona-Pompano association comprises almost the entire southern portion of Price's Scrub. This association has "nearly level, poorly drained soils, some sandy to a depth of 22 to 80 inches, weakly cemented within a depth of 30 inches, and loamy and clayey in the lower layers and others sandy throughout" and is typical of flatwoods. The soils of the extreme northern portion and the mid-eastern portion of Price's Scrub are described as the Blichton-Flemington-Kanapaha association. This association is described as "nearly level to strongly sloping, poorly drained soils, sandy to a depth of less than 20 to more than 40 inches and loamy or clayey below" and are characteristic of uplands in the area.

A more detailed soil map show 15 soils as present on Price's Scrub (Map 4). The four most common soils on Price's Scrub comprise 69% of the area (Table 3). The six most common soils make up 86% of Price's Scrub soils. Detailed soil descriptions are provided in Appendix 3. The Electra sand is strongly correlated with scrub on Price's Scrub Greenway, and the Pomona sand is correlated with scrubby flatwoods.

Table 3: Soils of Price's Scrub Greenway (sorted by acreage)

Soil	Description	Typical Vegetation	Acres	%
Pomona sand	Poorly drained soil in flatwoods and adjacent to wet depressions on sandy ridges; water table within 10 inches of surface for 1-3 months and within 10-40 inches for 6 months	Forest of longleaf and slash pines, saw palmetto, wax myrtle, gallberry, runner oak and native grasses	244	25
Wacahoota loamy sand/5 to 8 percent slopes	Sloping, poorly drained soil occurring as small sharp-breaking areas or large areas on long slopes in uplands; saturated with a water table within 10 inches of surface for 1-4 months	Slash, loblolly, longleaf pines, water oak, laurel oak, dogwood, sweetgum, hickory, wax myrtle and native grasses	143	15
Electra sand/0 to 5 percent slopes	Nearly level to gently sloping, somewhat poorly drained soil in flatwoods and sandy uplands; water table 25-40 inches for about 4 months, >40 inches in drier times	Sand live oak, longleaf pine, sand pine, myrtle, saw-palmetto, native grasses	142	15
Kanapaha fine sand/0 to 5 percent slopes	Nearly level to gently sloping, poorly drained soil; in uplands; water table within 10 inches of surface for 1-3 months	Slash pine, loblolly pine, sweetgum, oak, wax myrtle	137	14
Adamsville sand/0 to 5 percent slopes	Nearly level to gently sloping, somewhat poorly drained soil; in flatwoods and lower slope of sandy uplands; water level briefly 10-20 inches below surface, 20-40 inches 2-6 months, >40 inches in dry periods	Forest of slash pine, longleaf pine, water oak and live oak	82	9
Placid sand*	Very poorly drained soil in small depressions and along poorly defined drainageways of the flatwoods and in shallow depressions on sandy ridges; water table within 10 inches of surface for >6 months; covered with water 6 months/year	Cypress, bay and gum, or water-tolerant grasses	82	8
Astatula sand/0 to 5 percent slopes	Nearly level to gently sloping, excessively drained soil; in uplands; water table at a depth >72 inches below surface	Sandpine, bluejack & sand live oaks, rosemary, holly & palmetto	30	3
Arredondo sand/0 to 5 percent slopes	Nearly level to gently sloping, well drained soil; in uplands; water table at a depth of >72 inches below surface	Forest of slash, loblolly, & longleaf pines; live, laurel, & water oaks; hickory; sweetgum; dogwood	29	3
Pamlico-Martel association^	Very poorly drained organic and mineral soils, occurring as small ponded areas & areas in large swamps in broad flatwoods; water table within 10 inches of the surface	Cypress, gum, and water-tolerant grasses	13	1
Fellowship loamy sand/5 to 8 percent slopes	Sloping, poorly drained soil on short, sharp-breaking slopes and long hillsides of uplands; water table perched in surface layer & within 10 inches for 1-4 months	Slash & loblolly pine, sweetgum, magnolia, hickory, wax myrtle, native grasses	9	1
Blichton sand/2 to 5 percent slopes	Gently sloping, poorly drained soil; in uplands; water table within 10 inches 1-4 months, at depth of >40 inches in dry periods	Slash, loblolly, longleaf pines; water oak, dogwood, sweetgum, hickory, wax myrtle, gallberry	9	1

Map 4. Soils Map of Price's Scrub Greenway

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Tavares sand/0 to 5 percent slopes	Nearly level to gently sloping, moderately well drained sandy soil in broad sandy flatwoods and along lower slopes of deep sandy uplands; water table 40-60 inches deep for 6 months, 30-40 inches in wet periods	Slash and longleaf pines, turkey oak, post oak, bluejack oak, live oak, water oak and native grasses	8	1
Flemington fine sandy loam/2 to 5 percent slopes	Gently sloping, poorly drained soil in upland; subsurface layer & subsoil saturated with a perched water table for 1-4 months	Slash and loblolly pines, live oak, water oak, laurel oak, sweetgum, hickory, magnolia, wax myrtle & native grasses	7	1
Boardman loamy sand/5 to 8 percent slopes	Sloping, poorly drained soil on seepy hillsides in the upland; water table within 10 inches of surface for 1-4 months; surface runoff is rapid	Forest of loblolly & slash pine, sweetgum, magnolia, hickory, oak, maple, dogwood, wax myrtle	2	0.2
Borrow pit			14	1
Water			13	1

[Sum of percents is not equal to 100 due to rounding]

* Southwest Florida Water Management District (SWFWMD) SSURGO soils data layer reports this soil as Paisley fine sand/depressional

^ SWFWMD SSURGO soils data layer reports this soil as Samsula-Martel complex/depressional

Hydrology/Water Management

The property contains one natural sinkhole lake, known locally as Waterlily, in the north and a borrow pit, known locally as Bear Ass Pond, near I-75 in the southeast. The borrow pit is reportedly spring-fed. A seepage stream, known locally as Brownlee Creek, drains the property from the south in a north to northeasterly direction, under I-75 and into Tuscawilla Lake. This system has two main arms that join prior to the creek draining under I-75. At least four depression marshes/marsh lakes are scattered on the property, and wet flatwoods make up a significant portion of the southern part of Price's Scrub Greenway.

Other than the borrow pit, the hydrology of property is largely intact. The borrow pit was created during the construction of I-75, according to local residents. Two culvert systems exit the property. The larger culvert is where the seepage stream flows northeast under I-75 in the northeastern portion of the tract. A culvert reportedly extends from the borrow pit under old Hickman Road, which forms the southeastern boundary of the property. An east-west trench is located on the western side of the property, approximately at the north-south midpoint. Its overall length is unknown. The trench has been in place for quite a while, based on the size of trees growing from the sides and bottom of the trench. Some firelines were constructed during the January 2003 wildfire at the southern end of the property, but these are generally not deep.

All waters in Marion County are classified as Class III waters, designated for recreation and propagation and maintenance of a healthy, well-balanced population of fish and wildlife

According to the Florida Forever Carr Farm/Price's Scrub project assessment, "The groundwater resources within the proposed area consists of an unconfined surficial aquifer (varies from 5 to 50 feet) and the Floridan aquifer. A confining layer composed of clayey sand and sandy clay separates these two aquifers. The surficial aquifer in this part of Marion Co. does not yield significant quantity of water for any type of use. Floridan aquifer is the primary and sole source of drinking water in this project area. The Floridan aquifer receives very good to good recharge in this area, supplemented by an acute internal drainage that is prevalent in this area."

Climate

The area experiences the typical north Florida climate. From 1971 to 2000, the annual average maximum temperature in the area was 82 °F, with the highest monthly average of 92°F. The annual average minimum temperature in the area was 58°F, with the lowest monthly average of 44 °F. The average total precipitation is 51 inches, with June through September accounting for almost half the rainfall, and October through December only providing about 8 inches of rain.

Natural Communities

The natural community classification used in this plan was developed by the Florida Natural Areas Inventory (FNAI) and the Florida Department of Environmental Protection. The community types are defined by a variety of factors, such as vegetation structure and composition, hydrology, fire regime, topography and soil type. The community types are named for the most characteristic biological or physical feature (FNAI and DEP, 1990). FNAI also assigns Global (G) and State (S) ranks to each natural community and species that FNAI tracks. These ranks reflect the status of the natural community or species worldwide (G) and in Florida (S). Lower numbers reflect a higher degree of imperilment (e.g., G1 represents the most imperiled natural communities worldwide, S1 represents the most imperiled natural communities in Florida). Appendix 4 provides a full explanation of the FNAI ranking system.

Price's Scrub Greenway has a variety of natural communities, ranging from scrub to seepage stream. According to FNAI, seven types of natural communities occur within the Price's Scrub Greenway (Table 4). Two of the natural communities found within the greenway, scrub and seepage stream, are ranked by FNAI as S2, Imperiled in Florida. Although pine was logged from the scrub area in the early 1990s, the ground cover remains in good condition. The southern area of the tract also had a wildfire in January 2003, but is primarily intact. Two additional communities, scrubby flatwoods and sinkhole lake, are ranked as S3, Very Rare or Local throughout Range in Florida. The most common natural communities in the project area are upland mixed forest, wet flatwoods, and scrubby flatwoods. One occurrence each of scrub, scrubby flatwoods, sinkhole lake, and depression marsh are documented within the greenway by the FNAI data base. (Appendix 4 contains summaries of occurrences of FNAI natural communities within the greenway.) Two relatively small disturbed areas, likely a former farm according to local residents, are also present.

Map 5 provides an approximate delineation of the major natural communities on Price's Scrub Greenway. The map was derived from a map by Ed Chicardi as part of the 1993 FNAI inventory of Marion County (FNAI and Chicardi 1993). This natural community map will be refined in the future. The classification and descriptions of the natural community types found on Price's Scrub are based on FNAI's Guide to the Natural Communities of Florida. The complete FNAI descriptions of these community types can be found in Appendix 5. A list of the common and scientific names of species referenced in the natural community description is found at the beginning of each description. Map 6 is a 1999 aerial photograph of Price's Scrub with the project boundaries shown.

The following natural community descriptions are excerpted from the 2001 Florida Forever Project Assessment for Carr Farm/Price's Scrub. Some accounts were modified for this management plan, since Price's Scrub Greenway does not include the Carr Farm.

Scrub is composed of a dense understory of evergreen shrubs with a few widely scattered sand pines (*Pinus clausa*) remaining. The slash and sand pines were cut in the early 1990s; the 1989 FDOT aerial taken before the timbering shows a 30-40% pine canopy cover in both scrub and wet flatwoods portions of the price Tract. Shrub cover is made up of rusty lyonia (*Lyonia ferruginea*), sand live oak (*Quercus geminata*), saw palmetto (*Serenoa repens*), and myrtle oak (*Quercus myrtifolia*). Scattered small trees of southern magnolia and scrub bay (*Persea humilis*) are also present. This scrub is of interest because it is one of the northernmost examples of the community in peninsular Florida.

The **Sinkhole Lake**, Water Lily Pond, found between the rolling hills of the northern portion, is bordered by tall grasses with scattered clumps of small sourgums (*Nyssa sylvatica*), and has open water in the center. Wild goldenglow (*Bidens laevis*) added fall color to the edges. The pond is in natural condition and has not been affected by drainage or sedimentation.

Scrubby flatwoods and **wet flatwoods** grade into each other, as well as into scrub, with slight changes in elevation. Scrubby flatwoods is characterized by gallberry (*Ilex glabra*) and shiny lyonia (*Lyonia lucida*), along with sand live oak. Wet flatwoods consists of gallberry and shiny lyonia, along with large gallberry (*Ilex coriacea*), sweetbay (*Magnolia virginiana*) and pond pine (*Pinus serotina*). The soil (Electra sand)

Map 5. Land Cover Map of the FNAI Natural Communities of Price's Scrub Greenway

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Map 6. Aerial Photograph of Price's Scrub Greenway

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has a weakly cemented hardpan at a depth of 40 inches (Marion County Soil Survey 1974); this impedes drainage and may account for the close interweaving of upland and wetland vegetation types in this area.

Upland mixed forest consists of a canopy dominated by loblolly pine (*Pinus taeda*), sand laurel oak (*Quercus hemisphaerica*) and live oak (*Q. virginiana*), with a dense subcanopy of young sand laurel oak. Other canopy trees include southern magnolia (*Magnolia grandiflora*), water oak (*Quercus nigra*), pignut hickory (*Carya glabra*), swamp white oak (*Quercus michauxii*), slash pine (*Pinus elliotii*), sour gum (*Nyssa sylvatica*), and red mulberry (*Morus rubra*). Understory trees include sweetgum (*Liquidambar styraciflua*), spruce pine (*Pinus glabra*) and hornbeam (*Carpinus caroliniana*). Woodland grasses such as basketgrass (*Oplismenus setaria*) and spikegrass (*Chasmanthium* sp.) are present where the shade of the understory is not too dense. Mockernut hickory (*C. tomentosa*), loblolly pine, longleaf pine (*Pinus palustris*), and southern red oak (*Quercus falcata*) form the canopy on the drier crests of the rolling hills. Additional species in the understory on the slopes of the ravine occupied by Brownlee Creek include red buckeye (*Aesculus pavia*), beautyberry (*Callicarpa americana*), hawthorn (*Crataegus* sp.), switchcane (*Arundinaria gigantea*), blue palmetto (*Sabal minor*) and ebony spleenwort (*Asplenium platyneuron*).

Depression marshes among the northern hills contain lizard tail (*Saururus cernuus*) and pennywort (*Hydrocotyle umbellata*) on their edges with species of gum (*Nyssa*) in the centers. Depression marshes in the southern scrub/flatwoods portion were described by Chicardi (1992) as bordered by willow (*Salix caroliniana*) and buttonbush (*Cephalanthus occidentalis*) with maidencane (*Panicum hemitomon*) and redroot (*Lacnathes caroliniana*) in the centers.

The 2001 Florida Forever Project Assessment also notes the presence of a seepage stream that flows through the property before draining northeastward to Tuscahulla Lake, east of I-75. This stream system, known locally as Brownlee Creek, has two arms in the south of the tract that drain to the north. The water in these streams is clear and tannin-stained.

The Greenways and Trails project application also reports five additional natural communities on the site: xeric hammock, upland hardwood forest, upland pine forest (red oak woods), mesic flatwoods, and marsh lake. With the exception of the upland pine forest/red oak woods, all communities are reported to be in good condition. The red oak woods, a remnant of a once-widespread community, is in need of restoration.

Other areas of disturbance include the borrow pit in the southeastern portion of the site. The edges of the borrow pit, dug during construction of I-75 (according to local residents), have regrown into a mixed forest. Two areas south and southwest of the sinkhole lake totaling about 25 acres appear cleared in the 1970 aerial photograph included in the soil survey. The westernmost area was near the western border of the tract. Local residents suggest that the remnants of a chimney and nearby a tin roof are the remains of a tobacco barn (see Previous Use and Development). Both of these areas are now revegetated, although the understory is sparse.

Table 4: Summary of Natural Communities on Price's Scrub Greenway

FNAI Natural Community Type	# Acres	% of Area	Global Rank	State Rank	Comments
Scrub	180	19	G2	S2	
Seepage Stream			G3	S2	Approximately 2 stream miles
Sinkhole Lake	23	2	G3	S3	
Scrubby Flatwoods	208	22	G3	S3	
Upland Mixed Forest	259	27	G4	S4	
Depression Marsh	7	1	G4	S4	
Wet Flatwoods	249	26	G4	S4	
Disturbed	29	3	NA	NA	

Native Species

The native species of Price's Scrub have not been surveyed. The natural community section, above, lists some of the more common plants known from the site. Price's Scrub Greenway is expected to have the typical plant and animal species associated with those natural communities. Appendix 5 lists some native species that are characteristic of these communities. The Listed Species section, below, provides information on some of the rare native species known to be on the site.

According to the Carr Farm/Price's Scrub Florida Forever project assessment, Cox and Kautz's (2000) potential habitat models indicate that the project contains habitat for gopher frog, spotted turtle, eastern tiger salamander, striped newt, American alligator, eastern indigo snake, Florida pine snake, short-tailed snake, eastern diamondback rattlesnake, black-crowned night heron, great egret, little blue heron, snowy egret, tricolored heron, white ibis, wood stork, Cooper's hawk, northern yellow bat, Florida mouse, and round-tailed muskrat. A resident of the area reports that pileated woodpeckers and bluebirds occur on the site, and that a panther has been seen on Price's Scrub within the last five years (A. Leitner, pers. comm. to J. Muller, 29 April 2004).

Listed Species

Statutorily-recognized lists of rare and endangered species are produced at the federal level by the U.S. Fish and Wildlife Service and the National Marine Fisheries Service, and at the state level by the Florida Fish and Wildlife Conservation Commission and the Florida Department of Agriculture and Consumer Services. The Florida Natural Areas Inventory (FNAI) also produces a list of rare and endangered species, and maintains a data base of occurrences of these species in Florida.

FNAI lists 33 types of plants, 60 vertebrates, and 6 invertebrates as rare or endangered in Marion County. Within Price's Scrub Greenway, FNAI has documented occurrences of two types of plants and no animals (Appendix 4). The Carr Farm/Price's Scrub Florida Forever project assessment lists four animals from the project area, but it is unclear how many are from Price's Scrub rather than Carr Farm.

FNAI qualifies their data by stating that the data should not be used as a substitute for actual field work, as many areas FNAI covers have not been adequately surveyed. No comprehensive survey for listed species has been conducted on Price's Scrub Greenway. Numerous other species have been observed nearby and likely occur on the greenway. Based on natural community types present in the greenway and the species reported to be in this county by FNAI, an estimated 26 additional FNAI-listed plant species and 38 additional FNAI-listed animal species potentially occur within the greenway.

Listed Plant Species

Two listed plant species, pondspice (*Litsea aestivalis*) and Florida spiny-pod (*Matelea floridana*), are reported by FNAI as being on Price's Scrub Greenway. Both of these species are considered State Imperiled by FNAI. The spiny-pod, a herbaceous vine, was recorded as scattered in the understory of mixed hardwood forest in the ravine system. The 10 to 15 individuals of pondspice, a shrub, were noted near a small pond in the scrubby flatwoods. Both of these occurrences are significant, given the small number of spiny-pod occurrences on publicly owned lands in Florida, and the relatively large number of pondspice plants at this location. Additional occurrences of both of these species may occur on Price's Scrub. Green adder's-mouth (*Malaxis unifolia*, state listed as Endangered) has been reported to occur nearby, and may occur on Price's Scrub.

Listed Animal Species

Although FNAI does not have records of any listed animal species on Price's Scrub, the application states that gopher tortoise burrows and tortoises (*Gopherus polyphemus*, FNAI - State Imperiled and a State Species of Special Concern) have been observed onsite. In addition, three active tortoise burrows and one tortoise were observed during a site visit on March 19, 2004 by Jim Muller and Mickey Thomason. Also observed were a pair of bald eagles (*Haliaeetus leucocephalus*, federally and state listed as Threatened) in the vicinity of the borrow pit. Mr. Thomason reports that he regularly observes the eagles in this area. The eagles may not nest on Price's Scrub, but it is likely that they regularly fish in the borrow pit. FNAI has a record for a bald eagles nest about one mile east of the borrow pit. FNAI notes that portions of the site appear to be potential habitat for three animal species known to occur nearby: wood stork (*Mycteria americana*, FNAI - State Imperiled, federally and state listed as Endangered), bald eagle, and indigo snake (*Drymarchon corais couperi*, federally and state listed as Threatened).

According to the Price's Scrub application, species observed nearby and potentially occurring on the site include wood stork, sandhill crane, fox squirrel, kestrel, eastern indigo snake, and alligator.

Invasive Non-native Species

Price's Scrub Greenway has not been surveyed for invasive non-native plant or animal species. One invasive, non-native species, cogon grass (*Imperata cylindrica*) is reported to occur along the I-75 right-of-way and partially on the property. According to the Florida Exotic Pest Plant Council (EPPC), cogon grass is a Category I invasive non-native plant species (2003 list). Category I invasive plant exotics alter native plant communities by displacing native species, changing community structures or ecological functions, or hybridizing with natives. This definition does not rely on the economic severity or geographic range of the problem, but on the documented ecological damage caused. Cogon grass is listed as a noxious weed by the Florida Dept. of Agriculture & Consumer Services and the U.S. Department of Agriculture. OGT staff are coordinating with the Florida Department of Transportation to eliminate this occurrence. The project application reported cogon grass on the Rabbit Hill Woods tract. This property has not been acquired.

Florida does not have an official invasive non-native animal species list, but at least 270 exotic animal species are known to occur in Florida. Feral pig signs were noticed on Price's Scrub Greenway during a March 2004 field trip. A member of the Price's Scrub Greenway Management Advisory Group stated that packs of feral dogs are present on the site, and may be harassing gopher tortoises (Susan Carr, pers. comm.).

Although the natural communities of Price's Scrub Greenway are in good condition, other non-native invasive species probably occur on the site.

Problem Species

No native species are reported as being a problem on the site.

Forest Resources

Sustainable forestry is an important component of Florida's economy and can provide funds for management of lands. Chapter 253, Florida Statutes, requires that plans for 1,000+-acre parcels contain an analysis of multiple-use potential, to include a professional forester's assessment of the resource conservation and revenue-producing potentials of the tract's forests. OGT considers forest management consistent with the purposes for acquisition of this property when the activities contribute to restoration management. Although a timber management assessment is not required for this 955-acre property, OGT will conduct one shortly.

As described in the natural communities section, Price's Scrub Greenway has a variety of timber types on upland and wetland locations. The southern end of the property was timbered in the early 1990s, but seed trees and

groundcover were apparently left fairly intact. The 2002 wildfire destroyed some timber in the southern portion. Other than the former farmsite southwest of the sinkhole lake, the forest resources of the rest of the property are in fair to good shape. Much of the southern portion that did not burn has heavy undergrowth and will require prescribed burning or other means to restore the area.

Mineral Resources

No mineral extraction is taking place on the site, and none has occurred in the recent past. Material from the borrow pit in the southeastern corner reportedly was used in construction of I-75. Some of the sand on the site may be commercially valuable, but this could not be removed without significant damage to the natural communities on site.

Cultural, Archaeological, and Historical Resources

Limited archaeological and historical information is available for the property. The Florida Department of State, Division of Historical Resources (DHR) maintains a Master Site File that documents many of Florida's archaeological and historical features. A review of the Florida Master Site File on March 5, 2004 (M. Wisenbaker, pers. comm.) disclosed 16 archeological and historical sites to be within Price's Scrub Greenway. Three of the site types are unknown, and 12 are lithic scatter/quarry with DHR's notation of prehistoric: no ceramics. All the Master Site File records for Price's Scrub are derived from an archeological survey of the area conducted in the early 1970s in conjunction with the Simonton Ranch DRI (Milanich, 1974). Because of the dense woods, not much work was done on the southern half of Price's Scrub. According to Milanich, all the sites are Archaic campsite, 7000 B.C. to 500 B.C. Although Milanich did not consider any to be major archaeological sites, he considered three sites on Price's Scrub have the potential to be more significant than the others.

In addition, the Greenways and Trails project application states that about a one-mile section of the Ocala-Micanopy segment of the historic Tampa-Lake City stagecoach road is on the western part of this property. The stagecoach road on the property reportedly was a connecting route from Micanopy to Flemington (A. Leitner, pers. comm. to J. Muller, 2004). The USGS 1895 Williston quadrangle map shows a road on the western part of the property .

Scenic Resources

Price's Scrub Greenway does not have any officially recognized scenic resources. However, the rolling hills in northern part of the property do provide a scenic view of the sinkhole lake. The tree-canopied historic stagecoach road is also picturesque.

III. Use of the Property

Previous Use and Development

The Price's Scrub land does not appear to have been intensively used recently. The site appears relatively intact, other than some recent and historical logging, a small former farmsite, and the borrow pit in the southeast corner. According to the application, about 400 acres in the southern part of the property was logged for pines in the early 1990s, but the groundcover was left relatively intact. The borrow pit was dug during the construction of I-75, according to local residents. It is shown in the 1970 aerial photograph included in the 1979 soil survey of Marion County. That photograph also shows two cleared areas, now revegetated, south and southwest of the sinkhole lake. Ms. Annabelle Leitner, a local resident whose family has been in the area for generations, suggests that this area is the J.E. Thrasher farm at Waterlily (pers. comm. to J. Muller, 29 April 2004). Ms. Leitner stated that this was farm land for crops such as cotton, tobacco, and vegetables. Tobacco barns had flues for fires to cure tobacco, and the remnant chimney and tin roof are likely the remains of a tobacco barn. Much of the area did not receive electricity until the 1940s and 1950s. Ms. Leitner also said that cattle used to graze on Price's Scrub. The application reports the 1960 USGS topographic map shows a structure just north of the borrow pit, and the Williston 1895 1:62,500 USGS topographic quadrangle shows a structure, possibly a plantation house, along the old stagecoach road along the western boundary of Price' Scrub. Ms. Leitner said the old stagecoach road on the property was a connecting route from Micanopy to Flemington.

Current Public Use and Land Uses

Currently the only public use of Price's Scrub Greenway is by arrangement with OGT. Passive uses such as hiking and equestrian activities are allowed. There are no facilities onsite. There are no active lands uses. The entire area is forested or lakes/marshes. Existing woods roads, trails, and firelines and the access point are shown on Map 7.

Planned Uses and Assessment of their Impacts

Determination of Public Uses that are Consistent with Acquisition Purposes

Public uses of Price's Scrub Greenway must follow the statutory requirements of the program(s) under which they were acquired and the management policy statement. In addition, they must comply with Chapter 62S- FAC, the State Greenway rule. According to the June 25, 2002 Board of Trustees agenda item for approval of acquisition of Price's Scrub Greenway, the property was purchased to be a recreational greenway with equestrian trails and hiking, biking, canoeing, fishing, historical study, birding, and nature trails. Uses planned for Price's Scrub Greenway comply with the Conceptual State Lands Management plan and represent "balanced public utilization" and are detailed below under "Planned Public Uses and Assessment of Impacts" and "Analysis of Multiple-Use Potential". Uses other than those approved below must be reviewed and approved by OGT in advance of such use.

Planned Public Uses and Assessment of Impacts

The focus of Price's Scrub Greenway will be ecosystem management with compatible outdoor-based recreation. A system of multi-use trails will be established for a variety of users, including equestrians, hikers and bikers. Historical and natural resource interpretive materials, such as kiosks and trail markers, will provide a regional context for the resources of Price's Scrub. Nature trails and birding observation areas will be established, and canoeing and fishing areas will be available.

Prior to expansion of the existing trails or other construction, research on archaeological, historical and natural resources will be conducted. Local resources will be involved in this effort. If warranted, an archaeological and historical survey of the site will be undertaken. Biological surveys for rare and endangered species, native species, and natural communities will be conducted. The results of research and surveys will be provided to FNAI and the Division of Historical Resources. Existing woods roads, trails, and firelines will be documented using GPS. Prior to any significant ground disturbance to a site, photographs, maps and a description of planned activities will be submitted to FNAI and the Division of Historic Resources.

Current access to the property is from CR 320 on the southwest boundary of the property (Map 7). This will remain the sole access to the property for public motorized vehicles. The locations of proposed facilities on Map 7 are conceptual. The placement of these facilities will be decided after inventories of natural and cultural resources are completed. The facilities will not be placed in intact, sensitive natural communities. An entry area and trailhead will be established along the southern end of the property, including parking and a turnaround for vehicles and horse trailers. Restrooms will be located in this area, along with a watering station for horses. Informational kiosks and trail markers will be placed here. The centerline of the roadbed of Hickman Road forms the southern boundary. This road will continue to provide access to the borrow pit area. Some road widening may be necessary, since the state ownership is to the center of the road only. Limited parking will be available at the borrow pit area. No other public motorized vehicular access will be permitted on the greenway.

There are potential options for additional access to Price's Scrub. The Carr Farm/Price's Scrub Florida Forever project is to the northwest. If Carr Farm is acquired, this would provide an access to Price's Scrub that is closer to an I-75 exit, and Carr Farm has disturbed lands and facilities that would be suitable for a trailhead. It may also be possible to arrange a private/public partnership for access and trailhead facilities with the Carr Farm or other area landowners adjacent to Price's Scrub.

Placement of the trail system will be determined by the topography and habitats of Price's Scrub while considering the desired recreational uses and management needs, including fire management. Existing woods roads, trails, and firelines may become a part of the trail system; some may be closed or re-routed because of wetlands, soil erosion or sensitive habitat. Others may be reserved for service roads or fire control. A balance will be struck between creating recreational trails and establishing service roads that serve both recreational and management needs, including fire management. The potential role of the trail system in fire management will also be considered during design. Local input will be solicited during planning for the trail system. Sensitive habitats will be avoided, and some small bridges or boardwalks may be necessary to traverse wetlands. A multi-use trail system is planned, focusing on equestrians, hikers and bikers. The feasibility of a loop trail for horse-drawn vehicles will be assessed, preferably incorporating the old stagecoach road. All trails will be marked, and historical and natural resources interpretive signs will be placed along the trail system.

Linkages with off-site trail systems are highly desirable. As linkages are established with lands that provide trails for public use, additional non-motorized access points will be provided, including kiosks and maps of the Price's Scrub Greenway trail system.

Fishing will be permitted at Waterlily and the borrow pit. Non-motorized boating will be allowed at the borrow pit. A canoe launching area will be established, and the need for a boarding dock will be assessed. Boardwalks may be constructed for fishing and wildlife observation at both water bodies. Picnic pavilions will provide a scenic view of the waterbodies.

Adjacent Land Uses

Other than where I-75 forms the eastern boundary, the area around Price's Scrub Greenway is rural in nature. To the south is Town and Country Farms, a full service facility for horse racing. West of there, along the southwest boundary of Price's Scrub, are some smaller residential parcels. Along the western border are larger agricultural zoned parcels, and some approximately 10-acre residential parcels. To the northwest and west of Price's Scrub are Carr Farm and Pierce Jones farm. Both of these properties are included in the Carr Farm/Price's Scrub Florida Forever project. Map 8 illustrates the land use surrounding Price's Scrub Greenway. Other than I-75, most of it is

Map 7. Current and Proposed Public Uses and Facilities of Price's Scrub Greenway

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Map 8. Land Use Map for the Area Surrounding Price's Scrub Greenway

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classified as upland hardwood forest and specialty farms (Town and Country Farms), with some cropland and pastureland and other open lands (rural).

Potential Surplus Lands

All of the lands within the Price’s Scrub Greenway are suitable and necessary for the stated management objectives and none should be considered or declared as surplus.

Prospective Land Acquisitions

Not all lands within the Greenways and Trails Florida Forever project boundaries for Price’s Scrub have been acquired. Map 3 shows those areas within the project boundaries that remain to be acquired. The 7.5-acre inholding in the center of the Price’s Scrub is the most important remaining acquisition. Also remaining are two billboard areas along the I-75 boundary and a parcel in the southwest corner. The billboard areas are small, but may cause management headaches because heavy equipment occasionally is needed to maintain the billboards, and access is apparently through Price’s Scrub. The billboard companies reportedly use heavy equipment to widen or “improve” the access to the billboards. The billboard areas were not acquired with the main tract because of negotiation difficulties. It may be desirable to re-open negotiations if OGT managers think the billboard-related activity will be detrimental to management and use of Price’s Scrub in the long run.

The parcel in the southwest of the project, Rabbit Hill Woods according to the project application, is owned by Town and Country Farms and Hilton and Dinah Werneth. This property is intended to provide access from Price’s Scrub Greenway to an existing trail system on private lands to the southwest. There are reportedly about 10 miles of trails in this area that are open to horseback riders who request landowner permission for access. If public use of these trails can be assured through landowner agreements or otherwise, then securing access through Rabbit Hill Woods through a landowner agreement, easement, or purchase would be desirable.

The land survey of Price’s Scrub showed a 30-foot wide ingress and egress easement along the northern and western boundaries of Section 2 and the western boundary of Section 11. There is also a non-exclusive easement for both ingress and egress as well as for public utilities along the western boundaries of both Sections 2 and 11. Much of the western boundary is not currently used for ingress and egress, and one of the adjacent landowners has expressed interest in establishing an alternate, legally binding ingress and egress easement. OGT will coordinate with DSL on investigating this possibility. Table 5 lists the individual ownerships and why the properties are important.

Parcel Name	Acres	Property Description	Acquisition Reason
Parcels within Greenways & Trails Project boundaries			
Fonoroff	7.5	Intact natural communities	Inholding in the center of Price’s Scrub
Rabbit Hill Woods/Town & Country Farms - Werneth	ca 20	Forested area	Linkage to other trail systems
Billboard areas	< 5	Cleared areas for billboards	Management and environmental problems caused by heavy equipment entry
Parcels outside Greenways & Trails Project boundaries			
Unpurchased parcels in Carr Farm/Price’s Scrub Florida Forever project	293	Upland forest and ponds	Linkage to Price’s Scrub and eventual linkage to Paynes Prairie
Greenways and Trails Council priorities as established in the Opportunity Corridors		Variety of landscapes	Greenways and trails linkages to Price’s Scrub, other public lands, and trail areas with private landowner agreements

Boundaries for Greenways and Trails Florida Forever applications project are developed by the applicant. After a project is acquired, management staff are often able to assess the natural resource and management needs of a greenway in more detail. Oftentimes a change or potential change in surrounding land use or the necessity to provide additional facilities indicate the original boundaries are not sufficient to ensure the greenway's perpetual protection.

At this time, OGT staff have not identified additional parcels outside of the project boundaries that are necessary for management of Price's Scrub Greenway. OGT strongly supports acquisition of the remainder of the Carr Farm/Price's Scrub Florida Forever Project. This would secure additional wildlife habitat and would enhance the trail system planned for Price's Scrub. It would also be an important step in providing a linkage to Paynes Prairie Preserve State Park.

As mentioned in "Regional Significance", above, Price's Scrub Greenway was acquired not just for the on-site resources and recreational opportunities, but also for the role Price's Scrub is envisioned to play in the statewide network of greenways and trails. One of the Opportunity Corridors that is part of the Greenways and Trails Council's statewide plan includes Price's Scrub. This corridor connects the Cross Florida Greenway with Paynes Prairie Preserve State Park/Lochloosa Wildlife Conservation Area and the Goethe State Forest (Map 2). As progress is made in securing this corridor, additional lands may need to be added to Price's Scrub. The prospective land acquisitions discussed above are from the perspective of Price's Scrub as a separate managed area; they do not include lands necessary for the corridor.

Identification of prospective land acquisitions is solely for planning purposes and not for regulatory purposes. A property's identification as a prospective acquisition is not meant to be used by any party or other government body to reduce or restrict the lawful right of private landowners. Identification of these lands does not empower or require any government entity to impose additional or more restrictive environmental land use or zoning regulations. Identification is not meant to be used as the basis for permit denial or the imposition of permit conditions.

Analysis of Multiple-Use Potential

The following actions or activities have been considered under the multiple-use concept as possible uses to be allowed on the greenway (Table 6). "Approved" uses are deemed to be in concert with the purposes for state acquisition, with the Conceptual State Lands Management Plan, and with DEP'S agency mission, goals and objectives. "Conditional" means the use may be acceptable, but will be allowed only if approved through a process other than the land management plan development and approval process. "Rejected" means the item is not in concert with one or more of these various forms of guidance available for decision-making.

Activity	Approved	Conditional	Rejected
Protection of endangered and threatened species	✓		
Ecosystem maintenance	✓		
Soil and water conservation	✓		
Hunting			✓
Fishing	✓		
Swimming			✓
Wildlife observation	✓		
Hiking	✓		
Bicycling	✓		
Horseback riding	✓		
Timber harvest		✓	
Cattle grazing			✓
Camping		✓	
Apiaries			✓
Linear facilities			✓

Off road vehicle use			✓
Environmental education	✓		
Citriculture or other agriculture			✓
Preservation of archeological and historical sites	✓		
(Other uses as determined on an individual basis)			

Timber harvest is intended to be used only for natural community management and restoration purposes. Even if hunting were compatible with the primary intended uses of the property, the size (less than 1000 acres) and location (adjacent to I-75) of Price's Greenway make it unsuitable for hunting. Price's Scrub is intended to be a passive recreation area with few staff present. Off road vehicle use is not compatible with the sensitive natural communities and the presence of hikers and equestrians.

Proposed Single- or Multiple-Use Management

OGT intends to manage Price's Scrub Greenway as a single use property within the guidelines of the Florida Forever land acquisition program, and advocates the specific uses described above. Other activities may be permitted as long as they do not interfere with the primary purpose of acquisition.

IV. Management Issues, Goals and Objectives

Central to the management of individual state greenways are the mission of the Office of Greenways and Trails (OGT), the land acquisition program(s) through which a specific greenway was acquired, and the original intent for acquiring the project. These are described below, followed by a summary of accomplishments for this greenway since acquisition. Goals and objectives for Price's Scrub Greenway for the next 10 years are addressed in the next section. Each management subject area is addressed, starting with a brief description of pressing issues, if any. A discussion of needs for the subject area follows, and the intended management direction and activities are described. At the end of each section the pertinent goals and objectives are listed. Many of the goals and objectives apply to more than one subject area. In this case, the goals and objectives are placed in the subject area that seems most appropriate. Goals and objectives for all subject areas are also presented in one table in Appendix 6.

Program Framework and Goals

The Office of Greenways and Trails' (OGT) mission is "Working to establish a statewide system of greenways and trails for recreation and conservation purposes." OGT's efforts are guided by its statutes, rules, and a legislatively adopted plan titled "Connecting Florida's Communities". The Legislature intended that the greenways and trails "will serve to implement the concepts of ecosystems management while providing, where appropriate, recreational opportunities, including, but not limited to, horseback riding, hiking, bicycling, canoeing, jogging, and historical and archaeological interpretation, thereby improving the health and welfare of the people." (Chapter 260, FS).

Price's Scrub Greenway will be managed to provide greenway and trails recreation opportunities without damaging the natural and cultural resources of the property.

Qualifications for state designation

The Price's Scrub Greenway was acquired through the Greenways and Trails Florida Forever program. It will provide greenway and trails recreation opportunities without damaging the natural and cultural resources of the property. It is intended to serve as a component of the comprehensive statewide Greenways and Trails System. As such it qualifies as a state Greenway.

Manager

The Florida Department of Environmental Protection, Office of Greenways and Trails (OGT) is the recommended lead manager of Price's Scrub Greenway.

State Greenway Rules and Regulations

Chapter 62S-1, FAC, the Florida Greenways and Trails Program rule, supplements the policies, standards and criteria provided by Chapter 18-2, Management of Uplands Vested in the Board of Trustees. The management goals of state greenways focus on implementing the concepts of ecosystems management while providing recreational opportunities where appropriate. Appendix 7 provides the full text of the rule(s).

Desired Future Conditions

By 2008, Price's Scrub Greenway is a popular area for equestrians and hikers. After completing research and surveys for natural and historic resources, the Office of Greenways and Trails, with local citizen help, established a system of multi-use trails that showcase the varied terrain of the greenway. Folks also enjoy picnicking and fishing around Waterlily and Bear Ass Pond. Waterlily and the pond are also popular for birding, as folks enjoy watching the bald eagles, kingfishers, and wading birds. The Citizen Support Organization is essential to the carefully

planned development, use, and maintenance of the greenway. Kiosks and interpretive signs explain the natural community restoration projects underway as well as the historical significance of the region. The prescribed burn program has removed the fuel buildup and is now settling into a regular prescribed fire regime.

By 2012, Price's Scrub Greenway is an integral part of the Cross Florida Greenway-Paynes Prairie/Lochloosa-Goethe State Forest greenway system. Through a combination of land acquisition, conservation easements, and landowner agreements, a continuous greenway links all of these destinations, and provides hikers, bikers and equestrians with the opportunity to traverse central Florida horse country and enjoy its varied and scenic landscape. On Price's Scrub Greenway, the ecosystem restoration efforts are well underway and the prescribed fire program is meeting all of its objectives. Wildlife is thriving, and black bear are confirmed visitors to the property. OGT staff, the Citizen Support Organization, and local groups have been successful in their efforts for the area to retain its lifestyle and unique charm. Northwest Marion County is now a destination for a variety of outdoor enthusiasts, and the local businesses have responded to this new opportunity.

By 2052, the vitality of the natural communities, including red oak woods, on Price's Scrub Greenway reflects the now-completed restoration efforts and the prescribed burn program. The greenway provides locals and visitors with a soothing green respite from everyday life. The trail systems winding through Price's Scrub continue to attract visitors. Some ride or hike for a few hours, others wander through Price's Scrub as they enjoy their sojourn along the statewide greenways and trails system. The Price's Scrub Greenway Citizen Support Organization celebrates the 50th anniversary of the greenway's acquisition with a gathering at the Waterlily overlook.

Major Accomplishments for Price's Scrub Greenway from 2002-2004

Price's Scrub Greenway was acquired in November 2002 and the DEP Office of Greenways and Trails was given management authority in May 2003. The property has been surveyed and the boundaries are marked. An entrance gate is in place with a sign providing OGT's phone number to arrange access. In January 2003, a wildfire occurred in the heavily vegetated scrub/flatwoods in the southern area of the property. No property damage resulted, and OGT staff took advantage of the fire and favorable winds to burn additional areas to contain the wildfire and to benefit the natural communities. OGT has also initiated the spraying of cogon grass by the Florida Department of Transportation along the I-75 right-of-way to minimize its encroachment into Price's Scrub.

Goals and Objectives for Price's Scrub Greenway During Fiscal Years 2004-05 through 2013-14

Goals and objectives were developed specifically for the Price's Scrub Greenway based on the purposes for which the lands were acquired, the condition of the resources present, and management issues for the property. The goals and objectives presented here reflect programmatic goals and the ideas of OGT personnel in charge of managing and protecting the area, as well as input from cooperative managers, user groups and other stakeholders from outside DEP. The agency believes the goals and objectives to be consistent with the various forms of guidance provided to managers.

Management issues related to the resource categories described in Chapter II, as well as other important management topics, are discussed below in separate sections. Within each section, approaches for dealing with these issues are described. At the end of each section, goals and objectives related to those issues are listed, as well as other objectives essential to the section. Appendix 6 presents all the goals and objectives in a table, along with timelines and, if available, estimated costs to accomplish management actions on the greenway, as required by Florida Statutes. Objectives are listed in priority order under each goal. Although the goals and objectives are separated according to resources and issues, this does not necessarily mean that the manager will undertake separate tasks to achieve each objective. For example, trail planning for the different types of users will be done at the same time, and it is likely that surveys for exotic species will be done at the same time as surveys for native species.

The ability to implement the specific goals and objectives identified in this plan is dependent upon the availability of funding resources for these purposes.

Resource Management and Protection

Soil Management

Few soil erosion problems have been noted on the greenway, but the property has not been comprehensively assessed for erosion. If erosion problems are noted, they will be addressed by the least disruptive means possible. Erosion control will be considered as trails and the canoe launch area are planned.

Goal 1: Manage soil to reduce and prevent erosion

Objective a: Assess property to identify major erosion areas

Objective b: Implement erosion control measures such as berms and plants

Objective c: Install erosion control structures as recommended by design and engineering surveys

Objective d: Prevent shoreline erosion near canoe launches by installing boarding dock if necessary

Hydrology/Water Management

Due to the low level of activity on the property, it is assumed that the water quality in the small lakes, seepage stream, and depression marshes is good. The property needs to be surveyed for hydrological disturbances. The effect of the old east-west trench needs to be assessed; it may need to be restored. The effects of the emergency fire lines installed during the January 2003 wildfire need to be assessed; they may need to be restored if they are impacting wetlands. (See also Research and Monitoring, below)

Goal 2: Maintain/restore natural flow ways and protect water quality

Objective 2a: Inventory hydrological changes to the property (ditching, fire lines, etc.) and their impacts and formulate restoration actions

Objective 2b: Assess corrective measures needed for ditched areas on the property

Objective 2c: Restore all major hydrological alterations on the property (25%/year)

Objective 2d: Ensure that planned trails do not cause runoff and water quality problems

Natural Communities Management

OGT will manage the natural communities on site with a holistic, ecosystem based approach. Prescribed fire will be a major management tool. Although some information is available concerning the current and former status of natural communities on site, additional information is needed. The boundaries of the various communities need to be delineated. Restoration needs, including for the red oak woods, will be assessed and restoration will be undertaken. Since the scrub is one of the northernmost central Florida scrubs, particular attention will be placed on its management and restoration needs. Some reforestation may be needed on the southern end, depending on the number of seed trees left after the early 1990s timber harvest and the mortality following the wildfire. (See also Listed Species Management, Invasive Non-native Species Management, and Fire Management, below).

After inventories of Price's Scrub Greenway are complete, a comprehensive restoration plan will be developed and implemented. The plan will consider the processes as well as the components of the ecosystems. Such aspects as vegetation structure and composition, hydrology, soil condition, fire, animal species, listed species, reintroduction of native species, cultural resources, and invasive non-native species will be addressed in the plan. Specific goals and objectives, an implementation schedule and monitoring will be part of the plan.

Goal 3: Restore, maintain and protect natural communities

Objective 3a: Prepare a revised GIS map and description of FNAI natural communities and disturbed areas on the property

Objective 3b: Identify historic vegetative community types of the property in order to restore habitats to the proper natural community composition

Objective 3c: Develop quantifiable vegetative management objectives for the property to ultimately achieve desired future conditions for the area's natural communities

Objective 3d: Develop and implement a comprehensive restoration plan with specific goals and objectives, an implementation schedule and monitoring

Objective 3e: Restore disturbed areas, setting priorities based on rarity and quality

Native Species Management

Although the native species present on Price's Scrub Greenway can be predicted based on its geographic location and the natural communities present, little work has been done to determine those species actually on site and their population levels. A variety of surveys are planned to assess the various plant and animal species. Given the greenway's proximity to the University of Florida, some faculty or students may be interested in conducting some of the surveys. It is intended that the ecosystem management approach will suit the needs of native species, and no separate management efforts will be necessary for individual native species. (See also Research and Monitoring and Partnerships and Regional Coordination, below)

Goal 4: Maintain and protect the native species

Objective 4a: Inventory native plants found on the property and assess their population requirements.

Objective 4b: Inventory native animals found on the property and assess their population requirements.

Listed Species Management

In general, OGT manages natural resources at the ecosystem level, with the assumption that proper management of ecosystems will provide for the needs of the myriad species that are part of each ecosystem. However, in certain situations this may not be true. An example is a natural community in poor condition, perhaps in conjunction with extreme circumstances such as drought. In this case, some species may not fare well and the continued survival of a species in the greenway may require specific efforts. For listed species, OGT manages specifically for listed species as needed, in conjunction with ecosystem management activities.

The scrub on site may be suitable for introduction of scrub jays. OGT will consult with scrub jay experts to determine if this is advisable. If scrub jays are to be introduced, OGT will coordinate with permitting agencies and authorities to accomplish this.

Gopher tortoises are confirmed from the site, and a gopher tortoise survey will be conducted. Tortoises will be considered in the fire management plan for Price's Scrub. Fragmentation of tortoise habitat will be considered, and the fire program will be planned to provide herbaceous forage for the tortoises in suitable areas. It is likely that tortoises will become more visible and increase in number with an established fire program.

OGT will also coordinate with experts on the management of listed plant species onsite, especially *Matelea floridana* and *Litsea aestivalis*, which are confirmed from the site.

The presence of listed species will be considered when the trails system is being designed and fire management units are established.

Goal 5: Maintain and protect the listed species

Objective 5a: Survey listed plant species and assess their population requirements and provide information to FNAI.

Objective 5b: Prepare and implement a listed plant species management plan.

Objective 5c: Survey listed animal species and assess their population requirements and provide information to FNAI.

Objective 5d: Prepare and implement a listed animal species management plan

Objective 5e: If warranted, prepare a scrub jay management plan for the property; coordinate with experts and consider metapopulation needs

Objective 5f: Implement the scrub jay management plan

Invasive Non-native Species Management

The only invasive non-native plant species reported from Price's Scrub Greenway is cogon grass, along the I-75 right-of-way. OGT will continue to coordinate with FL DOT to eradicate this species from the greenway. It is likely that other invasive non-native plant species are present. OGT will conduct a survey for these species; location information on exotic species will be provided to FNAI. OGT will coordinate with DEP Bureau of Invasive Plant Management to establish an exotic species operational plan, if necessary. Assistance is also available from IFAS at the University of Florida.

Some feral hog sign has been noted on the site, and feral dogs are reported to be on the property. Efforts will be made to remove both of these species from the greenway.

Goal 6: Eradicate invasive non-native species or maintain at the lowest practical level

Objective 6a: Continue to coordinate with DOT to eradicate cogon grass

Objective 6b: Inventory invasive non-native species on the property

Objective 6c: If warranted, coordinate with DEP Bureau of Invasive Plant Management to establish an exotic species operational plan for the property

Objective 6d: Reduce/eliminate population of feral hogs by establishing a trapping program or other means as needed.

Objective 6e: Eliminate population of feral dogs by establishing a trapping program or other means as needed.

Problem Species Management

No native species are reported as being a problem on the site.

Forest Resources Management

A timber assessment of the property is planned, and the results of that will be considered when restoration and management plans are being prepared.

Goal 7: Manage forest resources consistent with the purposes of this property, when the activities contribute to restoration management

Objective 7a: Conduct a Timber Management Assessment in coordination with the FL Division of Forestry

Objective 7b: Consider tree-planting of site-specific, native species if insufficient trees were left after the 1990s timber harvest or if the recent wildfire killed a high number of trees and insufficient recruits are appearing

Fire Management

Prescribed burning is intended to mimic the conditions provided by a natural burning regime. The desire is to maintain plant community structure and biodiversity within the natural communities. Price's Scrub Greenway does not yet have defined burn units or a fire management plan. The greenway offers some challenges to a prescribed burn program. Much of the southern end has a heavy fuel load, and I-75 forms the eastern border of the greenway for about two miles. Approximately 70,000 vehicles travel this stretch of I-75 each day. Extreme care must be taken to prevent smoke problems along I-75 related to any burns. In addition, some of the neighbors have allergies and respiratory problems aggravated by smoke, and this needs to be taken into account when planning burns.

Mechanical means such as roller chopping may be necessary to reduce the fuel load initially. The burn units may also need to be smaller and fire intervals more frequent at the beginning of the prescribed fire program. Later, after fuel loads approach normal levels, burn units may be able to be merged. Table 7 presents the estimated natural fire frequency for the various natural communities on Price's Scrub after fuel loads and conditions are at more normal levels.

In developing a fire management plan, all woods roads, trails, and firelines will be documented by GPS. Fuel loads will be noted, and burn units established. All prescribed burns will be conducted with authorization from the Department of Agriculture and Consumer Services, Division of Forestry (DOF). Wildfire suppression activities will be coordinated between OGT and DOF. A notification system will be implemented to let neighbors know when prescribed burns are planned.

Also, related to fire management and emergency services, access routes for fire and rescue equipment will be delineated. This information will be included in the burn management plan and will also be on file with the Marion County Sheriff and the County emergency services.

Table 7: Natural Fire Frequency for Fire-Dependent Natural Communities on Price's Scrub Greenway after Fuel Build-up is Reduced

Natural Community Type	Acres	Natural Fire Frequency
Scrub	143	20-80
Scrubby Flatwoods	191	8-25 years
Upland Mixed Forest	296	Climax community
Depression Marsh	10	1-10 years
Wet Flatwoods	258	3-10 years

(The intended fire frequency is general and approximate; the prescribed burn plan will evaluate the on-site communities in more detail and re-assess the intended fire frequency.)

Goal 8: Conduct fire management operations to help restore and maintain natural communities and to mimic natural fire effects

Objective 8a: Document all woods roads, trails, and firelines using GPS

Objective 8b: Develop burn plan for the property

Objective 8c: Delineate fire management and rescue access routes and provide this information to the sheriff and emergency services

Objective 8d: Acquire necessary training and equipment for fire prescription and suppression

Objective 8e: Install firelines to facilitate fire management

Objective 8f: Establish a system for notifying neighboring landowners in advance of prescribed burns (via email, phone trees, etc.) and use this system before each burn

Objective 8g: Assess all pyrogenic communities in year one for the need for prescribed fire; all areas in need of fire will be burned within the first 5 years, and then re-assessed for subsequent fire application

Objective 8h: Reduce fuel loads on the property to recommended levels on 15% of the property each year

Objective 8i: Restore vegetation structure and composition of pyrogenic natural communities through an aggressive prescribed fire program

Objective 8j: Accomplish the annual burn objectives listed in the burn plan.

Objective 8k: Protect the property from wildfire.

Mineral Resources Management

No exceptional minerals are known from Price's Scrub Greenway, and no specific management activities are necessary for mineral resources.

Cultural, Archaeological, and Historic Resources Management

The management of cultural resources is often complicated because these resources are irreplaceable and extremely vulnerable to disturbances. The advice of historical and archaeological experts is required in this effort. Approval from Department of State, Division of Historical Resources (DHR) must be obtained before taking any actions, such as development or site improvements that could affect or disturb the cultural resources on state lands. A statement of DHR's policies and procedures for the management and protection of cultural resources is contained in Appendix 8.

Actions that require permits or approval from DHR include development, site excavations or surveys, disturbances of sites or structures, disturbances of the substrate, and any other actions that may affect the integrity of the cultural resources. These actions could damage cultural resources.

As stated previously, Milanich (1974) did not consider any of the archeological sites known from Price's Scrub to be major archaeological sites. He did believe three sites have the potential to be more significant than the others. Any archaeological and historical surveys done on Price's Scrub will include an evaluation of these three sites.

The stagecoach road on the western boundary of Price's Scrub is not currently recorded in the Florida Master Site File. The stagecoach road will be researched and information provided to the Master Site File. Research, and possibly surveys, will be conducted for other archaeological and historical features on Price's Scrub, in coordination with locally knowledgeable sources. After a review of the existing information, the Division of Historical Resources will be consulted to determine if further archaeological and historical surveys are warranted.

Goal 9: Survey, monitor and protect archaeological and historic sites on the property.

Objective 9a: Using available sources, including local sources, research archaeological and historical sites on the property and of the region

Objective 9b: If warranted, survey for archaeological and historic sites on the property, including the stagecoach road, in coordination with DHR and ensure resources are recorded in the Master Site File

Objective 9c: Patrol archaeological and historical sites on the property to prevent damage

Objective 9d: Conduct all ground-disturbing activities in accordance with DHR guidelines

Objective 9e: Regularly assess the condition of archaeological and historic resources. Monitor the condition of sites in poor condition using photopoints.

Scenic Resources Management

OGT will investigate and consider the designation of scenic resource sites on Price's Scrub. Potential areas include the Waterlily overlook, the stagecoach road, and the ravine creek system. The greenway may also be suitable for designation as a watchable wildlife site, or a birding trail location.

Goal 10: Protect the scenic resources of the property

Objective 10a: Identify the scenic resources of the property and potential threats to those resources

Objective 10b: Ensure that property operations do not decrease the scenic qualities of the property, unless necessary to protect the natural resources and visitor safety

Security Management

There have been some reports of poaching on the property, and only part of the property is fenced. Staff will evaluate the cost, benefits and drawbacks to fencing the entire site. OGT will coordinate with FWC, DEP law enforcement, and the Marion County Sheriff about security concerns. The local community has an active Community Crimewatch organization, and OGT will ask the members to consider OGT as a new member of the neighborhood. The Crimewatch organization will not conduct patrols of Price's Greenway. OGT will also consider establishment of a security residence on site.

Goal 11: Establish security measures sufficient to protect the property's integrity and to restrict unauthorized access and use

Objective 11a: Evaluate the current boundary posting & maintain the boundary of the property

Objective 11b: Fence the property boundary where necessary to prevent illegal use

Objective 11c: Coordinate with FWC, DEP law enforcement, and the Marion County Sheriff about security concerns

Objective 11d: Coordinate with the local Community Crimewatch organization and participate as a new neighbor

Objective 11e: Evaluate establishment of a security residence on site

Research and Monitoring

Little research and monitoring have been conducted on Price's Scrub Greenway. As restoration efforts start, it will be important to monitor the changes related to the restoration efforts. It is also important to monitor the status of listed species on the property, especially if restoration efforts are undertaken to benefit those species or may have a negative effect on the species. Research and monitoring are also important to assess the character and health of the various natural communities and species. Progress on eradication of invasive non-native species should also be monitored. Water quality information is not available for the water bodies on the property, and regular, recorded monitoring would be helpful. Some of these issues are addressed in the goal and objectives for this section; others are addressed in related sections.

Any research or other activity that involves the collection of plant or animal species on state greenway property requires coordination with the greenway manager. Permits from the Florida Fish and Wildlife Conservation Commission, the Department of Agriculture and Consumer Services, or the U.S. Fish and Wildlife Service may be required.

Given the greenway's proximity to the University of Florida, some faculty or students may be interested in conducting some of the research and monitoring. Assistance with invasive non-native species is also available from IFAS at the University of Florida.

Goal 12: Facilitate and conduct scientific research and monitoring to optimally manage and protect natural communities and native plant and animal species of the property

Objective 12a: Establish photo-plots in restoration areas

Objective 12b: Annually sample established vegetative treatment plots

Objective 12c: Establish water quality monitoring stations on the property

Objective 12d: Ensure that all research and monitoring projects have all required permits from relevant agencies

Education and Training

Some of the main natural communities on Price's Scrub Greenway are fire-dependent communities, and a prescribed fire program will be necessary to maintain them. OGT staff will interact with adjacent landowners and neighbors to educate them about prescribed fire and to notify them when planned burning will occur. Although invasive non-native plants do not appear to be a major problem now on the greenway, vigilance is necessary to prevent exotics from gaining a foothold. The actions of adjacent landowners can have a large influence on the establishment and control of exotic species on greenway. OGT staff will work with adjacent landowners to prevent exotic species problems. The Shiloh community is also interested in having the interpretive materials available on the greenway to relate the greenway natural and historical resources to the region in general.

Goal 13: Educate the public and local governments concerning resources, issues and management goals/objectives of the property

Objective 13a: Interact with adjacent landowners via phone, mail, and direct contact regarding management issues, such as exotics and burns. Develop brochures and letters explaining the prescribed burning and exotic species programs.

Objective 13b: Develop historical and natural resource educational materials and displays, including entrance kiosk(s) with regulations. Relate the greenway natural and historical resources to the region in general

Objective 13c: Encourage adjacent landowners to establish control programs for invasive exotic plants

Objective 13d: Provide public service announcements to local and state media contacts on a quarterly basis

Public Access and Visitor Use

Public Access / Parking / Handicap Facilities

The main entrance to the property, and sole entrance for motorized vehicles, will be from the southwestern portion of the property. An entry area and trailhead will be established here, including parking and restrooms. A sign-in log and comments/suggestions box will be provided. From the entry area, visitors will be able to access the non-motorized trails, or drive to the borrow pit where there will be limited parking. Picnic facilities and wildlife viewing areas will be provided at the borrow pit and at Waterlily. Additional non-motorized access points will be established at other points of the property boundary as linkages to other public-access trails are established. (See also goals and objectives related to specific recreational activities.)

Goal 14: Provide public access to encourage compatible uses where appropriate on the property that do not detract from the conservation and management goals and objectives.

Objective 14a: Establish entrance sign to identify primary property entrance

Objective 14b: Develop the main public access point in the southwestern portion of the property. Facilities will include parking, horse trailer parking, turnaround, restrooms, and a watering station

Objective 14c: Develop additional non-motorized vehicle access points as additional public-access trails are linked to Price's Scrub Greenway

Objective 14d: Provide small parking area and picnic facilities around the borrow pit

Objective 14e: Provide picnic facilities at the Waterlily overlook

Objective 14f: As facilities are developed, provide universal access in all cases except where the law allows reasonable exceptions (e.g., where handicap access is structurally impractical, or where providing such access would change the fundamental character of the facility being provided).

Education Facilities

Price's Scrub Greenway will not have extensive infrastructure or facilities. However, some education materials will be provided. A kiosk with historical and natural resource interpretive information will be at the main entrance. Discreet signage along the trails will provide information on the natural and historical resources of the site. Brochures will also be available. Additional kiosks will be put in place as other entrance points are developed.

Goal 15: Establish locations for providing educational materials and/or programs for visitors

Objective 15a: At the main entrance point, establish a kiosk that interprets natural and historic resources of Price's Scrub and the region

Objective 15b: Develop trail signage that provides natural and historical resources interpretation

Objective 15c: Develop brochures that interpret natural and historic resources of Price's Scrub and the region.

Objective 15d: Develop lists for public distribution of plants and animals known to occur on Price's Scrub

Objective 15e: As additional entrance points are developed, provide interpretive kiosks at each location

Equestrian

Price's Scrub will provide a public equestrian trail system in the Ocala region horse country. The input of local organizations will be important in planning and establishing multi-use trails and entrance points. The feasibility of implementing a horse-drawn vehicle trail loop will be investigated. Local input and assistance will also be important in establishing publicly-accessible horse trails on lands adjacent to Price's Scrub. As these trails become available to the public, additional access points that link to these trails will be established on Price's Scrub. As noted elsewhere, the main entrance to Price's Scrub will provide parking and a turnaround area suitable for horse trailers, and running water will be available for horses.

Goal 16: Establish equestrian trails and facilities where appropriate on the property that do not detract from the conservation and management goals and objectives

Objective 16a: Establish 10-20 miles of multi-use trails suitable for equestrian use on the property, encouraging local participation in the planning, construction, and maintenance of the trails

Objective 16b: Establish parking space for horse trailers and provide a vehicle turnaround and running water for horses

Objective 16c: Evaluate feasibility of establishing a horse-drawn vehicle trail loop and, if warranted, establish the trail

Objective 16d: Establish linkages to other publicly-accessible equestrian trails

Hiking / Biking

The multi-use trails to be established on Price's Scrub will be used by hikers and bikers. As noted elsewhere, natural and historical resources interpretive information will be provided along the trails. The trails will be designed to provide for nature observation, birding, and scenic overlooks. Some wildlife observation platforms may be provided as well. One or more short loop trails will be established near the parking areas so that visitors will also have the option of brief hikes that still provide information on the natural resources of the area.

Goal 17: Establish hiking/biking trails where appropriate on the property that do not detract from the conservation and management goals and objectives

Objective 17a: Establish 10-20 miles of multi-use trails suitable for hiking/biking on the property, encouraging local participation in the planning, construction, and maintenance of the trails. Consider asking biking and hiking organizations for their input for trail design

Objective 17b: Establish at least one trailhead facility for hikers/bikers on the property

Objective 17c: Establish at least one short hiking trail loop with interpretive signs near the parking area

Camping

Although camping in general is not planned, Price's Scrub may be suitable for supporting a group primitive camping area. Staff will investigate the possibility of this and establish the camping area if feasible.

Goal 18: Encourage camping where appropriate on the property that does not detract from the conservation and management goals and objectives

Objective 18a: Investigate the feasibility of a primitive group camping area on the property

Objective 18b: If warranted, establish a primitive group camping area

Fishing

Fishing will be allowed at the sinkhole lake and the borrow pit. The borrow pit may benefit from stocking with additional fish. Staff will also consider the impacts, desirability, demand for, and cost of installing multi-purpose boardwalks/docks that would allow for fishing at both water bodies. The boardwalk/docks would provide greater fishing access and should reduce impacts on the wetlands by focusing activities in certain areas.

Goal 19: Encourage fishing where appropriate on the property that does not detract from the conservation and management goals and objectives

Objective 19a: Establish two or more fishing access points at both water bodies on the property.

Objective 19b: Ask FWC to assess the fish populations at the borrow pit, and to initiate a fish stocking plan if warranted

Objective 19c: Assess the impacts, desirability, demand for, and cost of installing multi-purpose boardwalks/docks that would allow for fishing at both water bodies. Consider if the structure would prevent erosion and impacts to shore vegetation

Boating

Non-motorized boats, such as canoes and jon boats, will be allowed in the borrow pit. Staff will consider the impacts, desirability, demand for, and cost of installing multi-purpose boardwalks/docks that in the boat launching area. The boardwalk/docks would provide may prevent damage to wetlands and soil erosion.

Goal 20: Allow non-motorized boat use on the borrow pit water body, ensuring that it does not detract from the conservation and management goals and objectives

Objective 20a: Establish a small non-motorized boat launching site at the borrow pit water body

Objective 20b: Assess the impacts, desirability, demand for, and cost of installing a multi-purpose boardwalk/dock or small boarding dock at the launch point. Consider if the structure would prevent erosion and impacts to shore vegetation

Operations and Facilities

Cost Estimates and Funding Sources for Conducting Management Activities

The Estimated Annual Land Management Budget (Table 8) shows the activities planned for the next ten years and the annual cost estimate of each activity. Funds needed to protect and manage the property, and to achieve the objectives for the greenway, are derived primarily from the CARL Trust Fund. Private conservation organizations may be cooperators for funding of specific projects. Alternative funding sources, such mitigation funds, will be sought to supplement existing funding.

The following represents the actual and unmet budgetary needs for managing the lands and resources of the Price's Scrub Greenway. This budget was developed using data from OGT and other cooperating entities, and is based on actual costs for land management activities, equipment purchase and maintenance, and for development of fixed capital facilities. The budget below exceeds the funds OGT has been receiving through the state appropriations process, but is consistent with the direction necessary to achieve the goals and objectives for the Price's Scrub (Appendix 6). Budget categories are those currently recognized by DEP and the Land Management Uniform Cost Accounting Council.

Price's Scrub Greenway currently has no staff assigned to it. OGT estimates that one Greenway Ranger full-time equivalent permanent staff member (FTE) and one half-time OPS (other personnel services) position will be needed to operate Price's Scrub. Some routine tasks, such as exotic control, mowing, trash pickup and lavatory cleaning, are planned to be contracted.

Table 8: Estimated Annual Land Management Budget for the Price's Scrub Greenway. (Amount in thousands of dollars; includes staff time. "2004" is fiscal year 2004-05)

Activity	2004	'05	'06	'07	'08	'09	'10	'11	'12	'13
Resource Management										
Exotic species control	5	5	5	1	1	1	1	1	1	1
Prescribed burning (including roller chopping)	20	20	20	20	10	10	10	10	10	10
Cultural resource management	25	20	20	20	5	5	5	5	5	5
Timber management	5	5	5	5	5	5	5	5	5	5
Hydrological management	5	5	5	0	0	0	0	0	0	0
Rare species inventory	5	4			5					5
Natural community survey and maps	4				10					
Subtotal	69	59	55	46	36	21	21	21	21	26
Administration										
Units/Projects	10	5	5	5	5	5	5	5	5	5
Subtotal	10	5	5	5	5	5	5	5	5	5
Support										
Land management planning	10	5	5	0	0	0	0	0	0	0
Land management reviews										
Training/staff development	5	3	3	3	3	3	3	3	3	3
Vehicle purchase	25	0	0	0	0	0	30	0	0	0
Vehicle operation and maintenance	7	7	7	7	7	7	9	9	9	9
Other										
Subtotal	47	15	15	10	10	10	42	12	12	12
Capital Outlay										
New facility construction (incl. fencing)	10	10	205	175	50	10	10	5	5	5
Facility maintenance	5	5	30	30	30	30	20	20	20	20
Subtotal	15	15	235	205	80	40	30	25	25	25
Visitors services/Recreation										
Information/Education programs	2	10	10	10	5	5	5	5	5	5
Operations	2	10	5	5	5	5	5	5	5	5
Subtotal	4	20	15	15	10	10	10	10	10	10
Law enforcement										
Law enforcement services	5	5	5	5	5	5	5	5	5	5
Subtotal	5	5	5	5	5	5	5	5	5	5
Total	150	119	330	286	146	91	113	78	78	83

Goal 21: Conduct operations and obtain and maintain facilities and staff to soundly manage, protect and make accessible the property

Objective 21a: Obtain funding for sufficient staffing [1.0 FTE, 0.5 OPS] and outsourced assistance to provide support for property development and operations

Objective 21b: Pursue alternative funding sources, such as mitigation projects, grants and fundraising, to supplement baseline budget funds

Analysis of Potential for Contracting Restoration and Management Activities by Private Vendors

The following restoration and management activities have been considered for outsourcing to private entities. The Cross Florida Greenway currently outsources mowing, fencing, survey boundary work, restroom cleaning, trash pickup, exotic plant control, and engineering. OGT intends to outsource similar tasks involved with Price's Scrub management. Table 9 contains potentially outsourced activities with categories as follows: "approved" designates items that FDEP does not have expertise to complete and/or those that can be done at less cost with equivalent results by outside sources; "conditional" designates items that could possibly be done by FDEP or outside sources

for equivalent cost and results; “rejected” designates items that can be done with FDEP expertise and/or at less cost than outside sources. Depending on the size of the task, some things can be done more efficiently by existing OGT staff than through outsourcing.

Table 9: Potential Contracting for Activities on Price’s Scrub Greenway

Activity	Approved	Conditional	Rejected
Prescribed burning		✓	
Minor fireline installation		✓	
Fireline, fence, and trail maintenance		✓	
Fence installation		✓	
Roller chopping		✓	
Organism inventory and monitoring		✓	
Listed species mapping and needs assessment		✓	
Restore/enhance encroachment and ruderal areas		✓	
Determine extent of hydrologic needs of greenway		✓	
Restore hydrology via fill and excavation		✓	
Reduce exotic species		✓	
Education facilities, programs, and literature development and printing		✓	
Education signs development and installation		✓	
Trail and boardwalk installation		✓	
Law enforcement and patrol		✓	
Timber harvesting		✓	

Goal 22: Consider outsourcing those property operations that outside sources can conduct at less cost and with equivalent or better results than property staff

Objective 22a: On a continuing basis, analyze property operations and identify those activities for which property staff do not have the expertise or that can be completed at less cost with equivalent or better results by outside sources

Objective 22b: Consider outsourcing activities identified by Objective 22a

Partnerships and Regional Coordination

Cooperating Agencies

The greenway is managed in accordance with all applicable Florida Statutes and administrative rules. Agencies having a major or direct role in the management of the greenway are discussed in relevant portions of this plan. The Department of Agriculture and Consumer Services, Division of Forestry (DOF), assists OGT staff in the development of wildfire emergency plans and provides the authorization required for prescribed burning. DOF also works with OGT on forestry management. The Florida Fish and Wildlife Conservation Commission (FWC) assists staff in the enforcement of state laws pertaining to wildlife, freshwater fish and other aquatic life existing within greenway boundaries.

In addition, FWC aids OGT with wildlife management programs, including the development and management of Watchable Wildlife programs and fishery enhancement activities. The Department of State, Division of Historical Resources (DHR) assists staff to assure protection of archaeological and historical sites. Emphasis is placed on protection of existing resources as well as the promotion of compatible outdoor recreational uses.

Given the greenway’s proximity to the University of Florida, some faculty or students may be interested in conducting some of the surveys or research and monitoring on the site. Assistance with invasive non-native species may also be available from IFAS and other facilities at the University of Florida.

Goal 23: Establish and maintain relationships with other agencies to enhance management and protection of the property

Objective 23a: Coordinate management efforts with other agencies

- Objective 23b: Coordinate on an as-needed basis with local law enforcement and permitting agencies regarding patrol and potential violations
- Objective 23c: Establish collaborative efforts with DOF, FWC, DHR, DEP and others for the protection and management of activities on the Price's Scrub Greenway
- Objective 23d: Encourage establishment of resource monitoring stations by WMD or other entities on the property
- Objective 23e: Coordinate joint educational programs with other state agencies and the local education community

Cooperating Organizations

Cooperative relationships with other organizations can provide additional strength and expertise to both organizations. The Northwest Marion Land Trust prepared the Price's Scrub application to the Greenways and Trails program. This group and other local groups are excited by the acquisition of Price's Scrub. Their volunteer assistance can help plan, establish, and maintain the recreational opportunities on the greenway and help to manage the natural resources. OGT staff will establish relationships with these groups and help establish a Citizen Support Organization in the hopes of providing the recreational opportunities and interpretive materials on Price's Scrub Greenway in an accelerated timeframe. The Citizen Support Organization and other groups will also help maintain quality recreational experiences in a natural setting in the long run.

Goal 24: Establish and maintain relationships with other organizations to enhance management and protection of the property

- Objective 24a: Establish a Citizen Support Organization and solicit volunteers to assist property staff to accomplish goals of the property
- Objective 24b: Coordinate management efforts with other local natural areas and local environmental organizations
- Objective 24c: Coordinate management efforts with local organizations such as equestrian, hiking, biking, and nature clubs/organizations
- Objective 24d: Provide property and community recognition and support for volunteers
- Objective 24e: In the first year, generate 500 hours from volunteers to assist in property management and education, and increase volunteer hours by 10% in each succeeding year

Land Use Coordination

The long-term health and connectivity of Price's Scrub Greenway will be directly influenced by the surrounding land use. Nearby residents have expressed a desire for the Shiloh/Micanopy area to retain its current quality of life and atmosphere. OGT will work with neighboring landowners and residents to inform the public, Marion County planning staff, and elected officials about the potential impact of proposed land use changes on Price's Scrub Greenway and the surrounding area.

Goal 25: Review, define, and minimize impacts associated with planned and existing development near the property

- Objective 25a: Address impacts associated with existing and future development concerning fire management, connectivity and other issues
- Objective 25b: Continually review comprehensive plan amendments and land development regulations that govern proposed land use changes on properties adjacent to the property and coordinate with OGT headquarters on comments. Coordinate with neighbors on the review

Prospective Land Acquisitions

More detailed information on prospective land acquisitions is included in Chapter III. Goals and objectives related to land acquisition are:

Goal 26: Define optimum boundaries for the property and facilitate acquisition of lands to achieve these boundaries as well as linkages to other greenways and trails

- Objective 26a: Assist Division of State lands in the acquisition of the Fonoroff inholding
- Objective 26b: With local input, identify lands outside of the current project boundaries that are necessary for the perpetual protection of the property

Objective 26c: Investigate easements and rights-of-way on Price's Scrub and consider options for extinguishing access easements

Objective 26d: Nominate for acquisition through Florida Forever and the Greenway and Trails programs those parcels that are important for management of the property, contain important resources, or are linkages to provide additional greenways and trails opportunities

Objective 26e: With local input, ensure that Price's Scrub is connected to the surrounding community, Paynes Prairie Preserve State Park and Goethe State Forest

Objective 26f: Assist in the acquisition of all lands within the Price's Scrub Greenways and Trails project and the Carr Farm/Price's Scrub Florida Forever boundary parcels by providing DEP DSL with information on development, available parcels, ownership, and local contacts every 3 months.

Compliance with State and Local Government Requirements

This land management plan is in compliance with the Marion County Local Government Comprehensive Plan (Appendix 9), Verification of Compliance with Local Comprehensive Plans). The plan is intended to be in compliance with the State Lands Management Plan, adopted March 17, 1981 by the Board of Trustees of the Internal Improvement Trust Fund and considering balanced public utilization, specific agency statutory authority, and other legislative or executive constraints.

Goal 27: Ensure that use and management of the property complies with state and local government requirements

Objective 27a: Ensure that each planned use of the property complies with the State Lands Management Plan adopted by the Trustees

Objective 27b: Ensure that each planned use of the property complies with the Local Government Comprehensive Plan

Land Management Review

No land management review has been conducted for Price's Scrub Greenway.

Priority List of Management, Research, and Information Needs

- Using available resources, including local sources, research and survey for onsite historical and natural resources, prior to detailed planning and construction
- Acquire Fonoroff inholding
- Establish a Citizens Support Organization for Price's Scrub Greenway
- Involve the local community in planning and maintaining onsite facilities
- Establish prescribed fire program
- Develop and implement a comprehensive restoration plan
- Establish multi-use trail system onsite with historical and natural resource interpretive materials
- With local community, work to link Price's Scrub trail system with publicly-accessible trail systems on surrounding lands

V. References

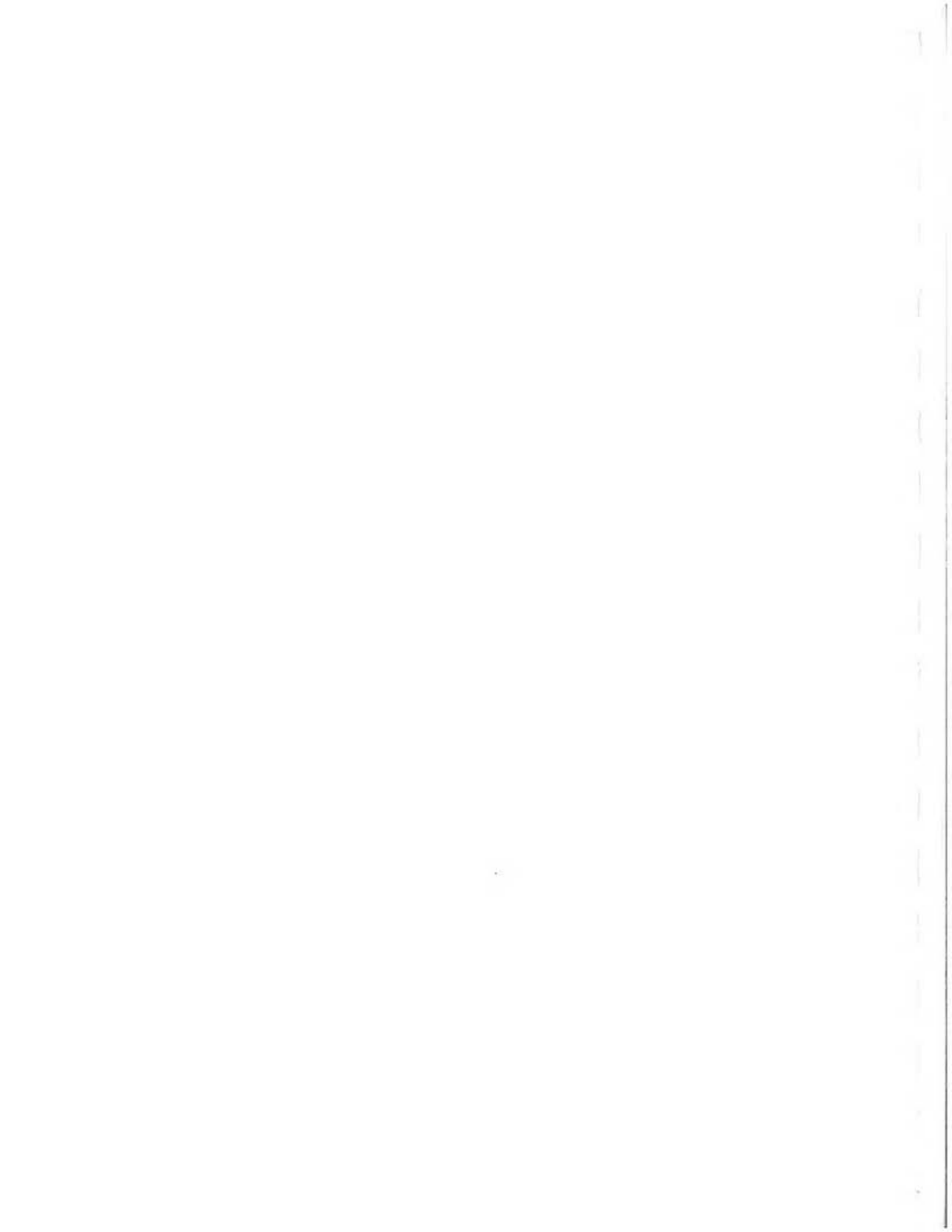
- Abbey, Edwin. Florida Natural Areas Inventory. Tallahassee, FL. 850-224-8207. Pers. comm. March 17, 2004. Data base information for the project.
- Acquisition and Restoration Council Staff and the Florida Natural Areas Inventory. 2001. Project Assessment of Carr Farm/Price's Scrub, Alachua/Marion Counties. Florida Forever – Land Acquisition Program. 13 pp. plus attachments.
- Chicardi, E.G. and the Florida Natural Areas Inventory. 1993. A Natural Areas Inventory of Marion County.
- Cox, James, and Randy Kautz. 2000. Habitat conservation needs of rare and imperiled wildlife in Florida. Florida Fish and Wildlife Conservation Commission. Tallahassee, FL.
- Cox, James, Randy Kautz, Maureen MacLaughlin, and Terry Gilbert. 1994. Closing the Gaps in Florida's Wildlife Habitat Conservation System. Florida Fish and Wildlife Conservation Commission. 239 pp.
- Florida Department of Environmental Protection, Office of Greenways and Trails. 2000. Project Evaluation: Northwest marion Greenway – Price's Scrub Tract. 5 pp.
- Florida Fish and Wildlife Conservation Commission. Download date April 2002. GIS data layers description. http://floridaconservation.org/oes/habitat_sec/GIS/landscape.htm
- Florida Natural Areas Inventory. January 2004. Marion County Summary - Rare Species and Natural Communities.
- Florida Natural Areas Inventory and Florida Department of Environmental Protection. 1994. Guide to the Natural Communities of Florida. 111 pp.
- Leitner, Annabelle. 10560 NW Hwy 320, Micanopy, FL 32667. 352-591-1563. Personal communication verbally and in writing to Jim Muller, 29 April 2004.
- Milanich, Jerald. 1974. Archaeological Survey of the Simonton Ranch Property, Alachua and Marion Counties. Ms. on file, Bureau of Archaeological Research, Florida Department of State.
- Northwest Marion Land Trust. 2000. Northwest Marion Greenway Price's Scrub Tract. Application for Acquisition of Land.
- Pittman, Erika S. Florida Fish and Wildlife Conservation Commission, Tallahassee Office of Environmental Services. 850-488-6661. Pers. comm. January 30, 2004. Wildlife information inquiry response.
- Puri, H.S., and Vernon, R.O. 1964, Summary of the geology of Florida and a guidebook to the classic exposures: Tallahassee, Fla., Florida Geological Survey, Special Publication No. 5, 312 p.
- Scott, Thomas M., Kenneth M. Campbell, Frank R. Rupert, Jonathan D. Arthur, Thomas M. Missimer, Jacqueline M. Lloyd, J. William Yon, and Joel G. Duncan. 2001. Geologic Map of the State of Florida. Florida Geological Survey, Tallahassee, Florida. Map and accompanying text. Available at http://sofia.usgs.gov/publications/maps/florida_geology/#sections.

Thomas, B.P., L.Law, Jr., and D.L. Stankey. 1979. Soil Survey of Marion County Area, Florida. USDA/SCS in cooperation with the University of Florida, Institute of Food and Agricultural Sciences, Agricultural Experimental Stations and Soil and Water Science Department; and Florida Department of Agriculture and Consumer Services.

Wisnaker, M. 2004. Florida Department of State, Division of Historical Resources. 850-245-6318.
Pers. comm. March 5, 2004. Florida Master Site File inquiry response.

WRS Infrastructure and Environment, Inc. 2002. Phase I Environmental Site Assessment Neil Durazzo and Frank Vecchiarelli Property, Greenways and Trails/NW Marion Greenway Project, Marion County, Florida. FDEP Contract Number SL794, Task No. 00694, WRS Project No. 302053.

Appendix 1:
Trustees Lease Agreement for Price's Scrub Greenway



954.78 acres

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT
TRUST FUND OF THE STATE OF FLORIDA

LEASE AGREEMENT

PRICE'S SCRUB

Lease Number 4425

This lease is made and entered into this 29th day of May, 2003, between the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA, hereinafter referred to as "LESSOR", and the STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF GREENWAYS AND TRAILS, hereinafter referred to as "LESSEE".

WITNESSETH:

WHEREAS, the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA holds title to certain lands and property being utilized by the State of Florida for public purposes, and

WHEREAS, the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA is authorized in Section 253.03, Florida Statutes, to enter into leases for the use, benefit and possession of public lands by State agencies that may properly use and possess them for the benefit of the people of the State of Florida;

NOW, THEREFORE, for and in consideration of the mutual covenants and agreements hereinafter contained, LESSOR leases the below described premises to LESSEE subject to the following terms and conditions:

1. DELEGATIONS OF AUTHORITY: LESSOR'S responsibilities and obligations herein shall be exercised by the Division of State Lands, Department of Environmental Protection.
2. DESCRIPTION OF PREMISES: The property subject to this lease is situated in Marion County, Florida, and is more particularly described in Exhibit "A" attached hereto and hereinafter called the "leased premises".
3. TERM: The term of this lease shall be for a period of fifty years, commencing on May 29, 2003, and ending on May 28, 2053, unless sooner terminated pursuant to the provisions of this lease.
4. PURPOSE: LESSEE shall manage the leased premises only for the conservation and protection of natural and historical resources and resource based public outdoor recreation that is compatible with the conservation

and protection of these public lands, along with other related uses necessary for the accomplishment of this purpose as designated in the Management Plan required by paragraph 7 of this lease.

5. QUIET ENJOYMENT AND RIGHT OF USE: LESSEE shall have the right of ingress and egress to, from and upon the leased premises for all purposes necessary to the full quiet enjoyment by said LESSEE of the rights conveyed herein.

6. UNAUTHORIZED USE: LESSEE shall, through its agents and employees, prevent the unauthorized use of the leased premises or any use thereof not in conformance with this lease.

7. MANAGEMENT PLAN: LESSEE shall prepare and submit a Management Plan for the leased premises, in accordance with Section 253.034, Florida Statutes, and subsection 18-2.021(4), Florida Administrative Code, within twelve months of the effective date of this lease. The Management Plan shall be submitted to LESSOR for approval through the Division of State Lands. The leased premises shall not be developed or physically altered in any way other than what is necessary for security and maintenance of the leased premises without the prior written approval of LESSOR until the Management Plan is approved. The Management Plan shall emphasize the original management concept as approved by LESSOR at the time of acquisition which established the primary public purpose for which the leased premises were acquired. The approved Management Plan shall provide the basic guidance for all management activities and shall be reviewed jointly by LESSEE and LESSOR at least every five years. LESSEE shall not use or alter the leased premises except as provided for in the approved Management Plan without the prior written approval of LESSOR. The Management Plan prepared under this lease shall identify management strategies for exotic species, if present. The introduction of exotic species is prohibited, except when specifically authorized by the approved Management Plan.

8. RIGHT OF INSPECTION: LESSOR or its duly authorized agents shall have the right at any and all times to inspect the leased premises and the works and operations thereon of LESSEE, in any matter pertaining to this lease.

9. INSURANCE REQUIREMENTS: LESSEE shall procure and maintain fire and extended risk insurance coverage, in accordance with Chapter 284, F.S., for any buildings and improvements located on the leased premises by preparing and delivering to the Division of Risk Management, Department of Insurance, a completed Florida Fire Insurance Trust Fund Coverage Request Form and a copy of this lease immediately upon erection of any structures as allowed by paragraph 4 of this lease. A copy of said form and immediate notification in writing of any erection or removal of structures or other improvements on the leased premises and any changes affecting the value of the improvements shall be submitted to the following: Bureau of Public Land Administration, Division of State Lands, Department of Environmental Protection, Mail Station 130, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000.
10. LIABILITY: LESSEE shall assist in the investigation of injury or damage claims either for or against LESSOR or the State of Florida pertaining to LESSEE'S respective areas of responsibility under this lease or arising out of LESSEE'S respective management programs or activities and shall contact LESSOR regarding the legal action deemed appropriate to remedy such damage or claims.
11. ARCHAEOLOGICAL AND HISTORIC SITES: Execution of this lease in no way affects any of the parties' obligations pursuant to Chapter 267, Florida Statutes. The collection of artifacts or the disturbance of archaeological and historic sites on state-owned lands is prohibited unless prior authorization has been obtained from the Department of State, Division of Historical Resources. The Management Plan prepared pursuant to Section 253.034, Florida Statutes, shall be reviewed by the Division of Historical Resources to insure that adequate measures have been planned to locate, identify, protect and preserve the archaeological and historic sites and properties on the leased premises.
12. EASEMENTS: All easements including, but not limited to, utility easements are expressly prohibited without the prior written approval of LESSOR. Any easement not approved in writing by LESSOR shall be void and without legal effect.

13. SUBLEASES: This lease is for the purposes specified herein and subleases of any nature are prohibited, without the prior written approval of LESSOR. Any sublease not approved in writing by LESSOR shall be void and without legal effect.

14. SURRENDER OF PREMISES: Upon termination or expiration of this lease LESSEE shall surrender the leased premises to LESSOR. In the event no further use of the leased premises or any part thereof is needed, written notification shall be made to the Bureau of Public Land Administration, Division of State Lands, Department of Environmental Protection, Mail Station 130, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, at least six months prior to the release of all or any part of the leased premises. Notification shall include a legal description, this lease number and an explanation of the release. The release shall only be valid if approved by LESSOR through execution of a release of lease instrument with the same formality as this lease. Upon release of all or any part of the leased premises or upon expiration or termination of this lease, all permanent improvements, including both physical structures and modifications to the leased premises, shall become the property of LESSOR, unless LESSOR gives written notice to LESSEE to remove any or all such improvements at the expense of LESSEE. The decision to retain any improvements upon termination of this lease shall be at LESSOR'S sole discretion. Prior to surrender of all or any part of the leased premises, a representative of the Division of State Lands shall perform an on-site inspection and the keys to any buildings on the leased premises shall be turned over to the Division. If the leased premises and improvements located thereon do not meet all conditions set forth in paragraphs 17 and 20 herein, LESSEE shall pay all costs necessary to meet the prescribed conditions.

15. BEST MANAGEMENT PRACTICES: LESSEE shall implement applicable Best Management Practices for all activities conducted under this lease in compliance with paragraph 18-2.018(2)(h), Florida Administrative Code, which have been selected, developed, or approved by LESSOR, LESSEE or other land managing agencies for the protection and enhancement of the leased premises.

16. PUBLIC LANDS ARTHROPOD CONTROL PLAN: LESSEE shall identify and subsequently designate to the respective arthropod control district or districts within one year of the effective date of this lease all of the environmentally sensitive and biologically highly productive lands contained within the leased premises, in accordance with Section 388.4111, Florida Statutes and Chapter 5E-13, Florida Administrative Code, for the purpose of obtaining a public lands arthropod control plan for such lands.
17. UTILITY FEES: LESSEE shall be responsible for the payment of all charges for the furnishing of gas, electricity, water and other public utilities to the leased premises and for having all utilities turned off when the leased premises are surrendered.
18. ASSIGNMENT: This lease shall not be assigned in whole or in part without the prior written consent of LESSOR. Any assignment made either in whole or in part without the prior written consent of LESSOR shall be void and without legal effect.
19. PLACEMENT AND REMOVAL OF IMPROVEMENTS: All buildings, structures, improvements, and signs shall be constructed at the expense of LESSEE in accordance with plans prepared by professional designers and shall require the prior written approval of LESSOR as to purpose location, and design. Further, no trees, other than non-native species, shall be removed or major land alterations done without the prior written approval of LESSOR. Removable equipment placed on the leased premises by LESSEE which do not become a permanent part of the leased premises will remain the property of LESSEE and may be removed by LESSEE upon termination of this lease.
20. MAINTENANCE OF IMPROVEMENTS: LESSEE shall maintain the real property contained within the leased premises and any improvements located thereon, in a state of good condition, working order and repair including, but not limited to, keeping the leased premises free of trash or litter, maintaining all planned improvements as set forth in the approved Management Plan, meeting all building and safety codes in the location situated and maintaining any and all existing roads, canals, ditches, culverts, risers and the like in as good condition as the same may be at the date of this lease; provided, however, that any removal, closure, etc., of the above

improvements shall be acceptable when the proposed activity is consistent with the goals of conservation, protection, and enhancement of the natural and historical resources within the leased premises and with the approved Management Plan.

21. ENTIRE UNDERSTANDING: This lease sets forth the entire understanding between the parties and shall only be amended with the prior written approval of LESSOR.

22. BREACH OF COVENANTS, TERMS, OR CONDITIONS: Should LESSEE breach any of the covenants, terms, or conditions of this lease, LESSOR shall give written notice to LESSEE to remedy such breach within sixty days of such notice. In the event LESSEE fails to remedy the breach to the satisfaction of LESSOR within sixty days of receipt of written notice, LESSOR may either terminate this lease and recover from LESSEE all damages LESSOR may incur by reason of the breach including, but not limited to, the cost of recovering the leased premises or maintain this lease in full force and effect and exercise all rights and remedies herein conferred upon LESSOR.

23. NO WAIVER OF BREACH: The failure of LESSOR to insist in any one or more instances upon strict performance of any one or more of the covenants, terms and conditions of this lease shall not be construed as a waiver of such covenants, terms and conditions, but the same shall continue in full force and effect, and no waiver of LESSOR of any one of the provisions hereof shall in any event be deemed to have been made unless the waiver is set forth in writing, signed by LESSOR.

24. PROHIBITIONS AGAINST LIENS OR OTHER ENCUMBRANCES: Fee title to the leased premises is held by LESSOR. LESSEE shall not do or permit anything which purports to create a lien or encumbrance of any nature against the real property contained in the leased premises including, but not limited to, mortgages or construction liens against the leased premises or against any interest of LESSOR therein.

25. CONDITIONS AND COVENANTS: All of the provisions of this lease shall be deemed covenants running with the land included in the leased premises, and construed to be "conditions" as well as "covenants" as though the words

specifically expressing or imparting covenants and conditions were used in each separate provision.

26. DAMAGE TO THE PREMISES: (a) LESSEE shall not do, or suffer to be done, in, on or upon the leased premises or as affecting said leased premises or adjacent properties, any act which may result in damage or depreciation of value to the leased premises or adjacent properties, or any part thereof. (b) LESSEE shall not generate, store, produce, place, treat, release or discharge any contaminants, pollutants or pollution, including, but not limited to, hazardous or toxic substances, chemicals or other agents on, into, or from the leased premises or any adjacent lands or waters in any manner not permitted by law. For the purposes of this lease, "hazardous substances" shall mean and include those elements or compounds defined in 42 USC Section 9601 or which are contained in the list of hazardous substances adopted by the United States Environmental Protection Agency (EPA) and the list of toxic pollutants designated by the United States Congress or the EPA or defined by any other federal, state or local statute, law, ordinance, code, rule, regulation, order or decree regulating, relating to, or imposing liability or standards of conduct concerning any hazardous, toxic or dangerous waste, substance, material, pollutant or contaminant. "Pollutants" and "pollution" shall mean those products or substances defined in Chapters 376 and 403, Florida Statutes, and the rules promulgated thereunder, all as amended or updated from time to time. In the event of LESSEE'S failure to comply with this paragraph, LESSEE shall, at its sole cost and expense, promptly commence and diligently pursue any legally required closure, investigation, assessment, cleanup, decontamination, remediation, restoration and monitoring of (1) the leased premises, and (2) all off-site ground and surface waters and lands affected by LESSEE'S such failure to comply, as may be necessary to bring the leased premises and affected off-site waters and lands into full compliance with all applicable federal, state or local statutes, laws, ordinances, codes, rules, regulations, orders and decrees, and to restore the damaged property to the condition existing immediately prior to the occurrence which caused the damage. LESSEE'S

obligations set forth in this paragraph shall survive the termination or expiration of this lease. Nothing herein shall relieve LESSEE of any responsibility or liability prescribed by law for fines, penalties and damages levied by governmental agencies, and the cost of cleaning up any contamination caused directly or indirectly by LESSOR'S activities or facilities. Upon discovery of a release of a hazardous substance or pollutant, or any other violation of local, state or federal law, ordinance, code, rule, regulation, order or decree relating to the generation, storage, production, placement, treatment, release or discharge of any contaminant, LESSEE shall report such violation to all applicable governmental agencies having jurisdiction, and to LESSOR, all within the reporting periods of the applicable governmental agencies.

27. PAYMENT OF TAXES AND ASSESSMENTS: LESSEE shall assume full responsibility for and shall pay all liabilities that accrue to the leased premises or to the improvements thereon, including any and all drainage and special assessments or taxes of every kind and all mechanic's or materialman's liens which may be hereafter lawfully assessed and levied against the leased premises.

28. RIGHT OF AUDIT: LESSEE shall make available to LESSOR all financial and other records relating to this lease and LESSOR shall have the right to audit such records at any reasonable time. This right shall be continuous until this lease expires or is terminated. This lease may be terminated by LESSOR should LESSEE fail to allow public access to all documents, papers, letters or other materials made or received in conjunction with this lease, pursuant to Chapter 119, Florida Statutes.

29. NON-DISCRIMINATION: LESSEE shall not discriminate against any individual because of that individual's race, color, religion, sex, national origin, age, handicap, or marital status with respect to any activity occurring within the leased premises or upon lands adjacent to and used as an adjunct of the leased premises.

30. COMPLIANCE WITH LAWS: LESSEE agrees that this lease is contingent upon and subject to LESSEE obtaining all applicable permits and complying with all applicable permits, regulations, ordinances, rules, and laws of the

State of Florida or the United States or of any political subdivision or agency of either.

31. TIME: Time is expressly declared to be of the essence of this lease.

32. GOVERNING LAW: This lease shall be governed by and interpreted according to the laws of the State of Florida.

33. SECTION CAPTIONS: Articles, subsections and other captions contained in this lease are for reference purposes only and are in no way intended to describe, interpret, define or limit the scope, extent or intent of this lease or any provisions thereof.

34. ADMINISTRATIVE FEE: LESSEE shall pay LESSOR an annual administrative fee of \$300. The initial annual administrative fee shall be payable within thirty days from the date of execution of this lease agreement and shall be prorated based on the number of months or fraction thereof remaining in the fiscal year of execution. For purposes of this lease agreement, the fiscal year shall be the period extending from July 1 to June 30. Each annual payment thereafter shall be due and payable on July 1 of each subsequent year.

IN WITNESS WHEREOF, the parties have caused this lease to be executed on the day and year first above written.

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA

Tyram Peters
Witness of
TYRAM PETERS
Print/Type Witness Name

Judy Woodard
Witness
Judy Woodard
Print/Type Witness Name

STATE OF FLORIDA
COUNTY OF LEON

By: Gloria C. Nelson (SEAL)
GLORIA C. NELSON, OPERATIONS AND MANAGEMENT CONSULTANT MANAGER, BUREAU OF PUBLIC LAND ADMINISTRATION, DIVISION OF STATE LANDS, DEPARTMENT OF ENVIRONMENTAL PROTECTION

"LESSOR"

The foregoing instrument was acknowledged before me this 29 day of March 2003, by Gloria C. Nelson, as Operations and Management Consultant Manager, Bureau of Public Land Administration, Division of State Lands, Florida Department of Environmental Protection, acting as agent on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida.

Theresa M. Brady
Notary Public, State of Florida

Theresa M. Brady
Commission # BD061200
Print/Type Notary Name
Notary Expires Jan. 2, 2006
Bonded Thru
Atlantic Bonding Co., Inc.
Commission Number:

Commission Expires:

Approved as to Form and Legality

By: Paul H. Hiller
DEP Attorney

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF GREENWAYS AND TRAILS

Destiny Bryant
Witness
Destiny L. Bryant
Print/Type Witness Name
Kimberly Gibson
Witness
Kimberly Gibson
Print/Type Witness Name

By: James M. Wood (SEAL)
James M. Wood
Print/Type Name
Title: Assistant Director

"LESSEE"

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 29th day of May, 2003, by James M. Wood, as Assistant Director, State of Florida, Department of Environmental Protection, Office of Greenways and Trails. He is personally known to me, ~~or produced~~ as identification.

Shannon Franklin
Notary Public, State of Florida
Shannon Franklin
Print/Type Notary Name



Shannon Franklin
MY COMMISSION # DD119914 EXPIRES
May 23, 2006
BONDED THROUGH FAN INSURANCE, INC.

Commission Number: DD119914
Commission Expires: May 23, 2006

Please Return To:
Elaine Vergara
American Government Services Corporation
2901 W. Busch Blvd., Ste. 910
Tampa, Florida 33618
AGS # 11183

EXHIBIT "A"

*Plz date deed 19th
day of November before
recording it.*

**WARRANTY DEED
(STATUTORY FORM - SECTION 689.02, F.S.)**

THIS INDENTURE, made this _____ day of _____ A.D. 2002, between Neil Durazzo and Frank Vecchiarelli, whose address is 84 Sunrise Terrace, Staten Island, NY 10304-2176 (ND) and 16 Flagg Court, Staten Island, NY 10304-1156 (FV), respectively, grantor, and the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA, whose post office address is c/o Florida Department of Environmental Protection, Division of State Lands, 3900 Commonwealth Boulevard, Mail Station 115, Tallahassee, FL 32399-3000, grantee,

(Wherever used herein the terms "grantor" and "grantee" include all the parties to this instrument and their heirs, legal representatives, successors and assigns.

"Grantor" and "grantee" are used for singular and plural, as the context requires and the use of any gender shall include all genders.)

WITNESSETH: That the said grantor, for and in consideration of the sum of Ten Dollars and other good and valuable considerations, to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said grantee, and grantee's successors and assigns forever, the following described land situate, lying and being in Marion County, Florida, to-wit:

See Exhibit "A" attached hereto and by reference made a part hereof.

Property Appraiser's Parcel Identification Number: R01505-001-00; R01507-000-00; R01509-001-00; R01527-000-00; R01613-000-00; R01626-000-01; R01634-001-00; R01645-000-00; R01652-000-00

This conveyance is subject to easements, restrictions, limitations, and conditions of record if any now exist, but any such interests that may have been terminated are not hereby re-imposed.

This property is not the homestead property of the grantor, nor contiguous to homestead property, as such homestead is defined under Florida law.

AND the said grantor does hereby fully warrant the title to said land, and will defend the same against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF the grantor has hereunto set grantor's hand and seal, the day and year first above written.

Signed, sealed and delivered in the presence of:

Justin Durazzo
(Signature of First Witness)

JUSTIN DURAZZO
(Printed, Typed or Stamped Name of First Witness)

James Durazzo
(Signature of Second Witness)

James Durazzo
(Printed, Typed or Stamped Name of Second Witness)

Neil Durazzo
Neil Durazzo

Approved for closing subject to the revisions as noted.

NOV 22 2002

WCR

By: William C. Robinson, Jr.
(DEP Attorney)

(Signature of First Witness)

JOAN CAVALCANTE
(Printed, Typed or Stamped Name
of First Witness)

Vincigualli 11/19/02
(Signature of Second Witness)

CHRIS VECCHIARELLI
(Printed, Typed or Stamped Name
of Second Witness)

STATE OF New York
COUNTY OF Richmond

The foregoing instrument was acknowledged before me this 19th day of November
2002, by Neil Durazzo. Such person (Notary Public must check applicable box):

- is personally known to me.
- produced a driver license.
- produced _____ as identification.

(NOTARY PUBLIC SEAL)



PETER MARTIN
Notary Public, State of New York
No. 01MA6008744, Qual. Subscribed Oct.
Commission Expires June 15, 2003

Peter Martin
Notary Public
Peter Martin
(Printed, Typed or Stamped Name of Notary Public)
Commission No.: 01MA6008744
My Commission Expires: June 15, 2003

STATE OF NY
COUNTY OF Richmond

The foregoing instrument was acknowledged before me this 19th day of November
2002, by Frank Vecchiarelli. Such person (Notary Public must check applicable box):

- is personally known to me.
- produced a driver license.
- produced _____ as identification.

(NOTARY PUBLIC SEAL)

Kiran Sheth
Notary Public
(Printed, Typed or Stamped Name of Notary Public)
KIRANCHANDRA SHETH
Notary Public, State of New York
Commission No.: 01SH5013953
Qualified in Richmond County
My Commission Expires: Term Expires July 15, 03

EXHIBIT "A"

Parcel 1

Commence at the NW corner of Section 2, Township 12 South, Range 20 East, Marion County, Florida, thence East 60 chains, thence South 20 chains, thence West 51.84 chains, thence South 19 chains, thence West 8.15 chains, thence North 39 chains, and including all that area lying in and West of Water Lilly Lake and extending to the line of the property herein described, the same being an irregular tract of approximately 3 acres, more or less, lying between the property herein described and the West side of said lake, EXCEPT the right of way of Interstate 75 and that part lying East of the right of way of I-75

EXCEPT

A parcel of land lying within Section 2, Township 12 South, Range 20 East, Marion County, Florida. Being more particularly described as follows:

Beginning at the intersection of the north line of said Section 2 and the westerly right of way line of Interstate 75, thence S35°21'12"E, along said westerly right of way line, 35.66 feet; thence S87°45'22"W, 78.27 feet; thence N02°14'38"W, 32.36 feet, to a point on the north line of said Section 2; thence S89°49'19"E, along said north line, 58.84 feet, to the point of beginning.

AND

Parcel 2

Beginning at the NW corner of Section 11, Township 12 South, Range 20 East, Marion County, Florida, thence along the West boundary of said Section 11, S.0°10'50"W, 3957.37 feet to a point on a curve in the Northeasterly right of way line of State Road 320, thence along said Northeasterly right of way line concave Southwesterly having a radius of 1489.39 feet and a central angle of 16°33'37" and an arc of 430.48 feet, thence S.89°46'08"E, 846.50 feet, thence S.0°08'22"W, 473.01 feet to Northeast right of way line of State Road 320; thence S51°23'50"E, along said northeast right-of-way line, 1557.26 feet, to the intersection with the centerline of Hickman Road; thence S74°36'51"E, along said centerline, 1016.40 feet; thence continue, along said centerline, S75°49'27"E, 258.07 feet, to a non-tangent intersection with a circular curve concave northerly and having a radius of 706.02 feet; thence continue along said curve and centerline, Easterly, 547.50 feet, through a central angle of 44°25'54" and a chord bearing and distance of N81°57'06"E, 533.89 feet; thence continue along said centerline, N59°43'25"E, 682.22 feet, to a non-tangent intersection with a circular curve concave southerly and having a radius of 525.49 feet; thence continue along said curve and centerline, Easterly, 275.02 feet, through a central angle of 29°59'10" and a chord bearing and distance of N74°43'52"E, 271.89 feet, to a non-tangent intersection with a circular curve concave southerly and having a radius of 750.00 feet; thence continue along said curve and centerline, Easterly, 262.46 feet, through a central angle of 20°03'01" and a chord bearing and distance of S80°15'33"E, 261.12 feet; thence continue along said centerline, S70°14'02"E, 78.26 feet, to a non-tangent intersection with a circular curve concave northerly and having a radius of 2082.77 feet; thence continue along said curve and centerline, Easterly, 343.97 feet, through a central angle of 09°27'45" and a chord bearing and distance of S74°47'03"E, 343.58 feet; thence continue along said centerline,

0077NW Marion Greenway / Price's Strub
Dutazza and Vecchiarelli
Page 1 of 3

BSM APPROVED
By JA Date 1/18/02
REVISED

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NO. 4425
EXHIBIT A
PAGE 3 OF 5

S79°17'49"E, 583.09 feet, to a point on the westerly right-of-way line of Interstate 75; thence continue in a Northwesterly direction along the Western right of way of I-75 to the North line of Section 11, Township 12 South, Range 20 East, thence N.35°20'45"W, along the Southwestern right of way of I-75, a distance of 1253.59 feet, thence S.0°08'36"W. 1020.71 feet to the North line of Section 11, Township 12 South, Range 20 East, thence N.89°51'24"W. 3640.16 feet along the North line of said Section 11 to the NW corner of Section 11 and the Point of Beginning.

EXCEPT commencing at the NE corner of Section 11, Township 12 South, Range 20 East, thence along the North boundary of said Section 11, N.89°51'24"W. 1983.81 feet, thence S.0°04'39"W. 330.92 feet to the Point of Beginning, thence continue along the East boundary of South 1/2 of NW 1/4 of NW 1/4 of NE 1/4 of said Section 11, S.0°04'39"W. 330.91 feet to the SE corner of said South 1/2 of NW 1/4 of NW 1/4 of NE 1/4, thence along the South boundary of said South 1/2 of NW 1/4 of NW 1/4 of NE 1/4 N.89°50'31"W. 330.75 feet to the NE corner of the NW 1/4 of SW 1/4 of NW 1/4 of NE 1/4 of said Section 11, thence along the East boundary of said NW 1/4 of SW 1/4 of NW 1/4 of NE 1/4, S.0°05'16"W. 330.31 feet to the SE corner of said NW 1/4 of SW 1/4 of NW 1/4 of NE 1/4, thence along the South boundary of said NW 1/4 of SW 1/4 of NW 1/4 of NE 1/4 N.89°50'44"W. 330.81 feet to the SW corner of said NW 1/4 of SW 1/4 of NW 1/4 of NE 1/4, thence along the West boundary of said NW 1/4 of SW 1/4 of NW 1/4 of NE 1/4, N.0°05'53"E. 661.16 feet to the NW corner of said South 1/2 of NW 1/4 of NW 1/4 of NE 1/4, thence along the North boundary of said South 1/2 of NW 1/4 of NW 1/4 of NE 1/4, S.89°50'58"E. 661.39 feet to the Point of Beginning.

ALSO EXCEPT

A parcel lying within Section 12, Township 12 South, Range 20 East, Marion County, Florida, and being more particularly described as follows:

Commence at the intersection of the north line of Section 11, Township 12 South, Range 20 East, Marion County, Florida and the westerly right-of-way line of Interstate Number 75 (State Road Number 93) (300 feet wide), thence S35°20'45"E, along said westerly right-of-way line, 770.02 feet, to the point of curvature of a circular curve, concave southwesterly and having a radius of 5579.58 feet; thence continue along said westerly right-of-way and curve, southeasterly, 2212.47 feet, through a central angle of 22°43'10" and a chord bearing and distance of S23°59'10"E, 2198.00 feet, to the point of tangency thereof; thence continue along said westerly right-of-way line, S12°37'35"E, 1942.44 feet, to the Point of Beginning; thence continue S12°37'35"E, along said westerly right-of-way line, 21.49 feet; thence S89°35'39"W, 69.07 feet; thence N00°24'21"W, 21.00 feet; thence N89°35'39"E, 64.52 feet, to the Point of Beginning.

AND

Parcel 3

That part of Section 3, Township 12 South, Range 20 East, in Marion County, Florida, as described as follows:

Commence at the SE corner of said Section 3, thence run N.89°54'35"W 227.00 feet, thence run

OGT/NW Marion Greenway / Price's Scrub
Durano and Vacchiarrelli
Page 2 of 3.

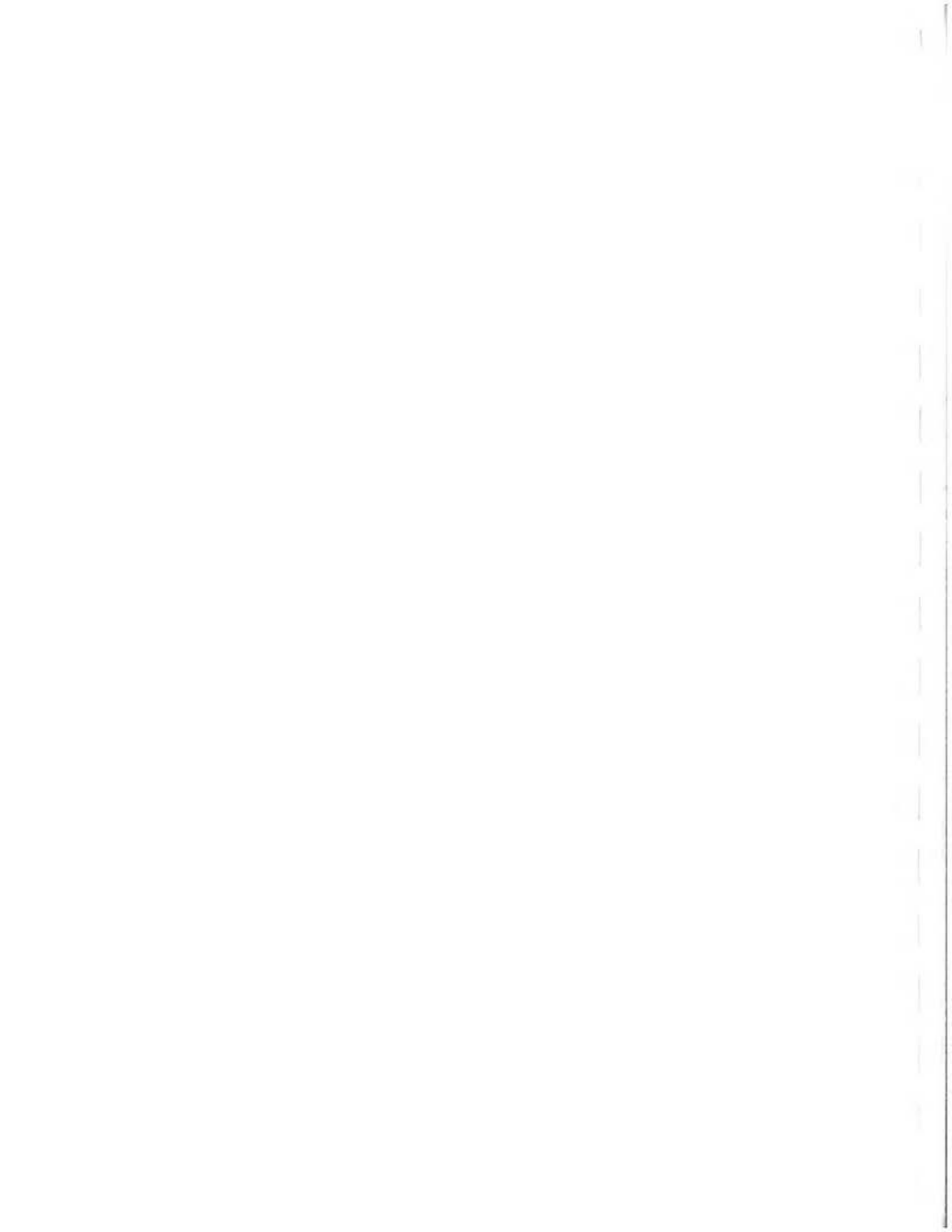
N.00°03'59"E. 2573.91 feet, thence run S.89°41'35"E. 227.33 feet, thence run S.00°04'29"W. 2573.05 feet, along the East Line of said Section 3 to the Point of Commencement.

ALSO

That portion of the following described property lying West of Interstate No. 75, All of Section 2, Township 12 South, Range 20 East, Marion County, Florida. LESS AND EXCEPT the following described property:

- (a) The NE 1/4 of the NE 1/4 of the NE 1/4 of said Section 2.
- (b) Commence at the NW corner of said Section 2, thence run East along Section line 60 chains, thence run South 20 chains, thence run West 51.84 chains, thence run South 19 chains, thence run West 8:16 chains, thence run North 39 chains, along the West line of said Section 2 to the Point of Commencement.
- (c) Commence at the SE corner of said Section 2, thence run West along Section line 1650 feet, thence run North 1419 feet, thence run S.82°E. 1660 feet, thence run South 1187 feet, along the East line of said Section 2, to the Point of Commencement.
- (d) The right of way of State Road No. 93 (Interstate Highway No. I-75).

Appendix 2:
Public Involvement in the Land Management Plan Preparation
for Price's Scrub Greenway



**Florida Department of Environmental Protection
Office of Greenways and Trails**

**Price's Scrub Greenway
Management Advisory Group**

Results of March 26, 2004 Meeting

(Marion County Sheriff's North District Office, Marion County, Florida)

Prepared by Muller and Associates, Inc.

[All issues identified by the Management Advisory Group were incorporated into the Land Management Plan. Many of the objectives of the plan were derived from Advisory Group suggestions.]

Members of the Price's Scrub Greenway Management Advisory Group met on the morning of March 26, 2004 in north Marion County to provide input on the management of Price's Scrub Greenway, Marion County, managed by the Office of Greenways and Trails (OGT). The group is made up of a diverse assemblage of interests.

At the meeting, all present were asked to identify the most important issues to consider in formulating the 10-year management plan for Price's Scrub Greenway. Each person was given an equal opportunity to identify important issues. After all issues were listed, each member was asked to list their top five priorities in order from one (highest) to five (lowest). Three advisory group members left after identification of issues but prior to voting.

In determining the ranking, each member's highest priority was assigned five points, with the score of each lower priority assigned one less point, and the fifth (lowest) priority was assigned one point. The points for each item were then summed, and the results are presented below, from highest to lowest total points. Items receiving equal points were assigned equal ranks, with the number of members voting on an item serving as a tiebreaker. Ideas receiving no points are also listed below. If needed, text in italics provides a clarification of that item.

Total votes	Total points	Rank	Idea/concern
5	21	1	<i>Research historic areas on Price's Scrub Greenway, using Marion and Alachua counties' resources and other available resources, and provide kiosks and interpretive trails that relate to onsite and regional features</i>
5	19	2	Study and identify wildlife, plant species and ecosystems and provide interpretive kiosks
4	10	3	With community involvement, make sure Price's Scrub is connected to Paynes Prairie State Park and Goethe State Forest, future additions and the community
2	10	4	Do natural and historic surveys before any construction work
3	9	5	Set up Friends of Price's Scrub (<i>Citizens Support Organization</i>) for community involvement, volunteer work
2	9	6	Use Price's Scrub Greenways and Trails application as a starting point for developing the management plan
4	8	7	Plan and develop a trail system and trailheads with Management Advisory Group and local folks participation
2	7	8	Design access to minimize/restrict motorized vehicles
3	6	9	Recreation for a broad variety of groups

2	4	10	Purchase inholding
			Figure out restoration needs - old homesite, red oak woods (in north) - and do restoration
2	4	10	do restoration
1	4	12	Secure property with boundary fencing, signage and fire lanes
2	3	13	Work with neighboring landowners to influence development <i>in the area</i>
1	3	14	Appropriate burning
1	2	15	Resolve easements and rights-of-way that may exist
1	1	16	Establish security residence on site
0	0		Prevent/get rid of Cogon grass
0	0		No hunting
0	0		Have as emphasis passive use of land and part of land kept totally wild
0	0		Establish interpretive trails
0	0		Plan access for fire and rescue (service roads)
0	0		Important to keep borrow pit for recreation needs
0	0		Security
0	0		Work out security cooperatively with the community
0	0		Provide running water (for horses, people)

Meeting attendees:

Management Advisory Group members

David Carr	Local private property owner
Linda Duever	Local private property owner
Lee Niblock (for Comm. Steve Henning)	Marion County Board of County Commissioners
Busy Shires	Conservation Trust for Florida
Pierce Jones	Local private property owner
Annabelle Leitner	Local private property owner
Bob Stenstream	Marion County Soil & Water Conservation District
Buddy Kinsey	Office of Greenways and Trails
Mickey Thomason	Office of Greenways and Trails
Kiki Courtelis	Local private property owner
Eddie Leedy	Marion County Sheriff Dept.

Other agency-related attendees:

Jim Muller, Muller and Associates, Inc., facilitator

Management Advisory Group members invited but unable to attend:

David Jowers, Paynes Prairie Preserve State Park

April 1, 2004

**Florida Department of Environmental Protection
Office of Greenways and Trails**

**Summary of the
March 26, 2004 Public Hearing
On Price's Scrub Greenway Land Management Plan
Held by the
Price's Scrub Greenway Management Advisory Group**

(Marion County Sheriff's North District Office, Marion County, Florida)

Prepared by Muller and Associates, Inc.

This hearing was advertised in one or more local newspapers, announced at the Marion County Commission meeting, and advertised in the Florida Administrative Weekly, in compliance with Chapter 259.032 (10), Florida Statutes. A sign announcing the public hearing was also posted on the entry to the property. Eight persons were in attendance; five of these signed attendance sheets. One person completed a speaker sheet. Assistance with advertising and conducting the hearing was provided by the staff of the Office of Greenways and Trails (OGT) and Muller and Associates, Inc.

Mr. Mickey Thomason, member of the Management Advisory Group and manager of the Cross Florida Greenway, opened the meeting at 6:05 p.m. Mr. Thomason acknowledged that those present had been notified of the meeting by email by Linda Duever and that Mr. Thomason would be happy to add them to the Management Advisory Group. Mr. Thomason thanked those present for attending. He stated that the Price's Scrub Greenway land management plan is being drafted, that this hearing is part of the process for getting public input, and that we are here to learn what the public does and does not want to happen at Price's Scrub.

Mr. Thomason introduced Jim Muller, Muller and Associates, Inc., who is preparing the management plan under a contract with OGT. Mr. Thomason said Mr. Muller will provide a short presentation on the property and then we will get everyone's comments concerning the property.

Mr. Muller explained that the public hearing was part of the land management preparation process set in statute. He said he would ask for comments and information the public has on Price's Scrub Greenway and that OGT would consider these as they prepare the land management plan, which is a 10-year plan. Mr. Muller then showed a Powerpoint presentation giving an overview of the Price's Scrub Greenway project and the planning process. He also explained how Price's Scrub relates to the Opportunity Corridors now under consideration by the Greenways and Trails Council.

Mr. Muller answered questions about the presentation.

Ms. Linda Duever questioned why the Northwest Marion County Greenway was not included in the Opportunity Corridors. Mr. Muller briefly explained the Greenways and Trails Council Opportunity Corridors effort. **Ms. Helen Koehler**, a member of the Greenways and Trails Council, indicated that there was probably time to add the Northwest Marion County Greenway to the Opportunity Corridors and that she would do this prior to the May Council meeting. Ms. Duever indicated it would be good to get the Opportunity Corridor in the area to match the Northwest Marion County Greenway in the Marion County Comprehensive Plan.

Ms. Judy Greenberg and **Ms. Duever** asked how to get a copy of the slides of the presentation. **Mr. Muller** indicated he would send a disk with the presentation to each of them. **Ms. Greenberg** also asked questions about the conceptual land use planning process. **Mr. Muller** and **Mr. Thomason** briefly explained the process.

Mr. Thomason and **Mr. Muller** reported on the Management Advisory Group meeting held in the morning and the general discussions and consensus at that meeting.

Ms. Susan Carr asked if fire management was discussed, and if the presence of gopher tortoises was mentioned. **Ms. Carr** said she knew of at least five active gopher tortoises on the property. **Mr. Muller** and **Mr. Thomason** said that both topics were discussed at the advisory group meeting.

Ms. Koehler asked about roads and access to the property. A discussion of private and public roads and access ensued. It was acknowledged that although other legal access easements exist, the public access would take place at the southern end of the property.

Additional discussion on the placement of the Northwest Marion County Greenway, the Opportunity Corridor, and access to Goethe State Forest took place. **Ms. Duever** said the Northwest Marion version forms a backbone of trail systems through horse country, while the Opportunity Corridor does not. In response to a question from **Mr. Muller**, **Ms. Duever** said there are no public access trails through this area right now. **Ms. Koehler** said that the trail was envisioned to use county roads and streets as do the bike tours. Those present discussed the Opportunity Corridors in the region and how they relate to the Northwest Marion County Greenway.

Ms. Duever said much work was put into the application for the Price's Scrub Greenway and that she would like the management plan modeled on that. The conceptual vision is in the application.

Ms. Koehler said she wanted to make sure that equestrian trails were included in the conceptual vision.

Ms. Carr said she would like to see a regular fire regime and management for gopher tortoises and rare plants.

Ms. Greenberg wanted to know if information provided for the April 22 meeting would show all access points. **Mr. Muller** said the plan was conceptual and not all access points would be shown. Additional surveys on natural resources and other information is needed. **Ms. Greenberg** wanted to know if timelines for when the property was available to the public would be provided. **Mr. Muller** said some timelines would be provided, and **Mr. Thomason** said that the some of those timelines would be dependent on available funding.

Ms. Duever asked how a budget for capital improvements could be prepared when the resource inventory work hasn't been done. **Mr. Muller** said that general costs can be approximated, and then will be refined later to reflect conditions on the property.

Ms. Carr asked about the stagecoach road, if it was discussed at the advisory group meeting. **Mr. Muller** said one of the main recommendations of the advisory group was to survey for historical and ecological resources and then integrate interpretation of those resources into the use of the property and to make sure not to damage those resources. A discussion of the property boundaries and location of the stagecoach road followed. Future use of the road was discussed, as well as archaeological study of the road. **Ms. Duever** said a buffer for both sides of the stagecoach road was desirable, as well as establishment of a loop trail for horse drawn vehicles for recreation with interpretative information.

Ms. Carr indicated that she would like the feral dogs that are on the tract removed. She was concerned that they are harassing the gopher tortoises. **Mr. Thomason** said feral dogs are considered an exotic species and will be removed.

Ms. Duever wants any document that comes out of the process to reflect that all the resource inventory work has to be done before any real plans can be set in concrete.

Ms. Carr asked about the hut or lean-to and boat around the borrow pit. **Mr. Thomason** said that the boat and hut were not there a week ago.

Mr. Muller thanked those in attendance for coming this evening, and said if those present provided an email address, that he would send them a notice when the next meeting would be. Mr. Thomason asked Mr. Muller to add Ms. Koehler, Ms. Greenberg, and Ms. Carr to the Management Advisory Group. The public hearing adjourned at approximately 7:00 p.m.

Meeting attendees:

Management Advisory Group members:

Susan Carr	Local private property owner
Linda Duever	Local private property owner; Management Advisory Group member
Helen & Wayne Koehler	Sunshine State Horse Council; Greenways and Trails Council member
Judy Greenberg	Conservation Trust for Florida; Garden Club
Buddy Kinsey	Management Advisory Group member; Office of Greenways and Trails
Mickey Thomason	Management Advisory Group member; Office of Greenways and Trails

Other agency-related attendees:

Jim Muller, Muller and Associates, Inc., facilitator

April 1, 2004

**Florida Department of Environmental Protection
Office of Greenways and Trails**

**Price's Scrub Greenway
Management Advisory Group**

Results of April 29, 2004 Meeting

(Shiloh United Methodist Church, Micanopy, Marion County, Florida)

Prepared by Muller and Associates, Inc.

Text in brackets "[]" refers to areas within the management plan that were changed in response to MAG comments.

This hearing was advertised in one or more local newspapers, announced at the Marion County Commission meeting, and advertised in the Florida Administrative Weekly, in compliance with Chapter 259.032 (10), Florida Statutes. Assistance with advertising and conducting the hearing was provided by the staff of the Office of Greenways and Trails (OGT) and Muller and Associates, Inc.

Members of the Price's Scrub Greenway Management Advisory Group met on the morning of April 29, 2004 in north Marion County. The purpose of the meeting was to provide input on the draft management plan for Price's Scrub Greenway, Marion County, managed by the Office of Greenways and Trails (OGT). The Advisory Group is made up of a diverse assemblage of interests.

The meeting started at approximately 10:10 a.m. **Mr. Mickey Thomason, OGT**, opened the meeting and thanked Management Advisory Group members for coming. **Jim Muller, Muller and Associates, Inc.**, then made a brief PowerPoint presentation on the management plan process, planned management and uses for the area, and Price's Scrub Greenway goals and objectives for the next 10 years.

All present were then requested to introduce themselves. Each advisory group member was in turn asked for their comments and questions on the management plan and especially the goals and objectives.

Ms. Annabelle Leitner provided additional details and clarifications regarding construction of the borrow pit (during I-75 construction)[Hydrology], the "former home site" (possibly a tobacco barn instead)[Previous Use and Development], and species observed on the property (add pileated woodpecker, bluebird, panther observed within the last 5 years)[Native Species Ch 2]. Ms. Leitner also said the only stagecoach route in the area used during the 2nd Seminole War by the military was the Ft. Wacahoota/Ft. Micanopy route, locally known as Slough Road, west of the property. The stagecoach route on the property was a connecting route from Micanopy to Flemington.[Cultural, Archaeo Ch 2] Ms. Leitner also commented that Hickman Road is the curvy southern boundary of Price's Scrub, and that this was never known as old CR320.[corrections made] She also asked if anyone had checked to see if Hickman Road was legally closed. The gate was put there by a previous owner who was tired of people going to the borrow pit, but she is not aware of any road closure procedures concerning Hickman Road. [Survey said that Marion County did not have a record of right-of-way for Hickman Road deeded to Marion County west of I-75]

Ms. Leitner also clarified that the Crime Watch for the area is not a patrolling Crime Watch, and that they are not set up to patrol Price's Scrub. Mr. Muller responded that the intent was for Price's Scrub staff to cooperate with the local Crime Watch, and to act as a new neighbor in the area. No patrolling of Price's Scrub by the Crime Watch participants is expected. [Security management]

Ms. Linda Duever stated that one nearby resident, Darlene Geyser, specializes in training mounted police units. Ms. Duever stated she had discussed with the trainer the possibility of developing a training program for mounted

patrols for natural areas. These patrols would be for observation purposes, and would not have arrest powers. Price's Scrub may be a good place to have a pilot program.

Mr. Jim Weimer suggested checking the color coding on the community map for errors, and also typographical errors [corrections made]. He also suggested that in the rush to open a property for public use, there is a tendency to take the existing woods roads and turn them into trails. The trail system needs to be designed for recreational uses. The woods roads may not be the best places for trails. Also look at the trail system in terms of fire management. This should be more explicit in the plan. State that there is a balance between trails and service roads that serve both recreational and fire management needs.[Planned public uses]

Ms. Duever said that she had already submitted her major comments, and that her other concern ensuring that these are supposed to be multi-use trails had already been addressed. Ms. Duever said that we need to take an integrated look at things before proceeding to the next step, and that we need to look at trails for fire break potential and resources. [Planned public uses] Ms. Duever said that **Susan Carr** asked her to mention Ms. Carr's concern about fragmentation of the gopher tortoise population on the property, and that this needs to be looked at in the fire management planning. Grassy areas connecting the patches of gopher tortoise habitat are needed as soon as possible.[Goal 5/listed species]

Mr. Bob Stenstream had no comment on the plan.

Mr. David Carr asked if all of the objectives suggested at the previous Advisory Group meeting were included. Mr. Muller stated that they were. Mr. Carr asked if any internal inconsistencies were found. Mr. Muller said that he found none, and that the objectives addressed ecosystem management and low impact passive use of the property.

Ms. Judy Greenberg stated that she was concerned about connecting Price's Scrub to other publicly owned lands and the Greenways and Trails Opportunity Corridors. Ms. Greenberg stated that they [Conservation Trust for Florida] were cooperating with Alachua Conservation Trust to submit an application to Florida Communities Trust to acquire uplands between Price's Scrub and Payne's Prairie. Ms. Duever said that as that project is going on, there is also concern that bears using the box culvert under I-75 can continue to make it from Price's Scrub to Lochloosa. On the east side of I-75, the property is being developed as ranchettes.

Mr. Buddy Kinsey said he was ready to build or do whatever was decided.

Mr. Thomason said that he had already provided comments on the draft. During his review, Mr. Thomason went through the goals and objectives, looked at timeframes and what could be realistically achieved and the budgets. Mr. Thomason said there were no conflicts in comments from the March 26 advisory group meeting or public hearing. Everyone's goals and objectives seemed harmonious.

In response to a question on the budget, Mr. Muller stated that state budgets are year to year, so the 10-year budget in the plan is fluid. There is no commitment that those dollars will be provided. These are ballpark estimates, they will be refined, and the budget request that goes in each year reflects those refinements. The budget and timelines are estimates, and you can be more certain the timing of those tasks earlier in the process – e.g., inventories and planning for facilities.

Ms. Duever said it will be important to carefully site the trails without having volunteers do it. Mr. Muller said the trail planning process will be up to OGT; this detail is beyond the Advisory Group process. Mr. Muller also stated that OGT probably outsources more than most other agencies, and that the land management plan considers the potential for contracting out some restoration and management activities. The table in the plan shows that OGT considers almost all the activities as potentially being outsourced, depending on conditions and timing. Mr. Muller said most of the facilities will probably be provided in the first 3-5 years. It is not intended to be a high utilization area.

Ms. Greenberg wanted to know how the historical resources on the property would be protected as the trails and historical resources kiosk are being developed. Ms. Duever said a detailed survey on historical and archaeological resources was conducted in relation to the proposed Janis Ranch development on Price's Scrub, and that not many resources were present. Mr. Muller said the report stated that three or four sites were worth looking at in more

detail, but the report did not mention anything as highly significant. A discussion ensued on known and likely past use of the property. Ms. Leitner said that most of the property was farmed post-Civil War. If there were any historical resources, they were probably destroyed or may be buried.

Mr. Carr said he did not remember the Advisory Group rejecting swimming in the last meeting, and the management plan indicates no swimming. Mr. Muller stated that the plan does not just reflect the Advisory Group comments, that OGT was also involved. Mr. Thomason indicated that OGT was concerned about liability, and the staffing intensity that would be required for a designated swimming area was more than OGT wished to do. Mr. Thomason said that water quality tests would be required, and that the borrow pit's proximity to I-75 may mean that highway runoff could be a problem.

Mr. Carr asked why apiaries were not being allowed. Mr. Muller said that honeybees are not native animals, and that they compete with native bees. Apiaries can also cause management issues, especially in areas with bears. A discussion ensued about the role of native and honey bees in pollinating. Mr. Stenstream asked if camping would cause more impact than the bees. Mr. Muller said that camping would be in a defined area.

Ms. Greenberg asked if the timing for establishing group camping was right when considering when access and other uses of the property would be taking place. Mr. Thomason said camping would be a low impact activity in a confined area and primarily used in spring and fall. He said he would be willing to move the establishment of camping area to 2005-06. [obj 18(b)] Mr. Thomason the most important activities after approval of the plan by the Acquisition and Restoration Council is resource inventory and exotic control.

Ms. Duever expressed concern about some of the separate objectives, such as inventories for exotic species and inventories rare species, and that some of these efforts need to be combined. She did not think much effort would be needed for exotic species inventory. Mr. Muller said that the fact that there were different goals and objectives doesn't mean these won't be done at the same time. It was presented this way to be able to talk about different resources and issues, but this doesn't mean the manager addresses them separately. Mr. Muller said that he will clarify that separate objectives doesn't mean separate tasks – they will be integrated as appropriate. [goals and objectives intro]

Ms. Duever said she would like to see what the potential for access through the Carr Farm is. If it is acquired a few years down the road, it would be the ideal access point, near I-75. Ms. Duever suggested holding open that option, and do a more minor and temporary trailhead at the south end, hoping that we can get access at the north end. Mr. Thomason said that with the low level of development intended, he didn't think there would be a great increase in traffic in Shiloh. Mr. Muller said he would add language about keeping options open for access through the north. Mr. Thomason said one to two acres would be needed to accommodate parking and horse trailers. Also included is the potential for development of a resident security site. The southwest corner at the existing gate has some disturbance from firefighting activities. Mr. Thomason said there is no guarantee that Carr Farm would be purchased by Florida Forever, and that the public had an expectation of acquired lands being open to public use. [Planned public uses]

Mr. Carr said that it is possible that Carr Farm could provide boarding for horses and access to Price's Scrub, perhaps under contract. Mr. Thomason said it might be possible to do some sort of public-private partnership. Mr. Thomason said other horse properties might also be interested in this, and that a competitive bid process might be needed. Ms. Duever said that no other properties had the same access to Price's Scrub as Carr Farm. [Planned public uses]

Members also discussed security options. A retired Gainesville police officer lives very near the property. Several state-certified law enforcement officers live in the area. Mr. Thomason said we need to make sure that all people have the same access and utilization of state lands. Ms. Leitner said that Eddie Lee, Marion County Sheriff's Office, thinks that an on-site residence is the most viable option. Regarding the concern that nearby residents who provide security would expect additional privileges, Ms. Duever said if a certification program for a natural resource patrol unit was established, people completing this program could legitimately be given additional privileges. They would undergo training and provide patrolling for resources and illegal use. Mr. Thomason is not aware of any DEP program like this. Mr. Weimer asked why there was so much emphasis on security. Ms. Leitner said that some of

the largest marijuana fields in this part of Florida were on Price's Scrub. There are problems with trespassing and dumping stolen items. The wildfire was caused by a trespassing person. It was stated that many illegal uses of the property will disappear when you have more members of the public using the property.

Ms. Greenberg asked if the money listed in the budget table will actually be provided to do all the tasks listed in the plan. Mr. Muller said right now Price's Scrub has no regular baseline budget. Some of the tasks will eventually be funded by the regular budget. Other funding sources will probably be needed for some other tasks. The new facility construction budget says "including fencing", and some members said fencing is not needed. Mr. Thomason said he will want to assess the need for fencing; it will be done on an as-needed basis. Mr. Muller said the new facility construction budget includes parking facilities, restrooms, water facilities, canoe launches, and wildlife observation decks. Fencing, if needed, would be in that category.

Mr. Muller thanked the Advisory Group for coming, and for taking the time to look through the plan. Revisions to the plan will be done in the next week, working with OGT on finalizing language. It will then go to the Division of State Lands and before the Acquisition and Restoration Council in June. Citizen support in the future will make the difference in how high a quality the trails will be.

The meeting adjourned at approximately 11:30 a.m.

Meeting attendees:

Management Advisory Group members:

David Carr	Local private property owner
Linda Duever	Local private property owner
Jim Weimer (for David Jowers)	Paynes Prairie Preserve State Park
Busy Shires	Conservation Trust for Florida
Judy Greenberg	Conservation Trust for Florida, Garden Club
Annabelle Leitner	Local private property owner
Bob Stenstream	Marion County Soil & Water Conservation District
Buddy Kinsey	Office of Greenways and Trails
Mickey Thomason	Office of Greenways and Trails

Other agency-related attendees:

Jim Muller, Muller and Associates, Inc., facilitator
Lindsey Lege, OGT

Management Advisory Group members invited but unable to attend:

Lee Niblock (for Comm. Steve Henning), Marion County Board of County Commissioners
Pierce Jones, local private property owner
Kiki Courteles, local private property owner
Eddie Leedy, Marion County Sheriff Dept.
Susan Carr, local private property owner
Helen Koehler, Sunshine State Horse Council; Greenways and Trails Council

May 1, 2004

**Florida Department of Environmental Protection
Office of Greenways and Trails**

**Summary of the
April 29, 2004 Public Hearing
On Price's Scrub Greenway Land Management Plan
Held by the
Price's Scrub Greenway Management Advisory Group**

(Shiloh United Methodist Church, Micanopy, Marion County, Florida)

Prepared by Muller and Associates, Inc.

This hearing was advertised in one or more local newspapers, announced at the Marion County Commission meeting, and advertised in the Florida Administrative Weekly, in compliance with Chapter 259.032 (10), Florida Statutes. Assistance with advertising and conducting the hearing was provided by the staff of the Office of Greenways and Trails (OGT) and Muller and Associates, Inc.

Approximately 30 people were in attendance; 24 of these signed attendance sheets. One person completed a speaker form. **Mr. Mickey Thomason**, member of the Management Advisory Group and manager of the Cross Florida Greenway, opened the meeting at approximately 6:10 p.m. Mr. Thomason thanked those present for attending. He stated that the Price's Scrub Greenway land management plan has been drafted, and that this hearing is part of the process for getting public input on the draft plan. Mr. Thomason mentioned the role and membership of the Management Advisory Group, and asked everyone present to introduce themselves.

Mr. Thomason then introduced **Jim Muller, Muller and Associates, Inc.**, who prepared the management plan under a contract with OGT. Mr. Thomason said Mr. Muller will provide a short presentation on the property and then we will get everyone's comments concerning the property.

Mr. Muller explained that the public hearing was part of the land management preparation process set in statute. He said he would ask for comments and information the public has on Price's Scrub Greenway and that OGT would consider these in the final revisions to the draft land management plan, which is a 10-year plan. Mr. Muller then showed a PowerPoint presentation giving an overview of the Price's Scrub Greenway project, the planning process, and OGT's intended management and use of the property.

Mr. Muller asked **Ms. Mary McElroy**, who had submitted a speaker form, for her comments and questions. Ms. McElroy, a nearby resident, asked if it had already been decided not to allow 4-wheelers in the park, since they're riding on the highway right now and it's very dangerous. Mr. Muller said that 4-wheelers would not be allowed on Price's Scrub – it is non-motorized use only. Ms. McElroy asked who decided this. Mr. Muller said 4-wheeler use did not come up in the process, that it was not a passive use, and that it would not be allowed there. Four-wheeler use was not included in the proposal, and was not considered in the evaluation process. Ms. McElroy asked if bicyclists were considered passive. Mr. Muller said generally they were – non-motorized vs. motorized, and they have less impact. Mr. Muller recognized the need for OHV areas, and mentioned OGT's efforts to allow OHV use on the Columbia County property. The idea is to site OHV use in areas that are not environmentally sensitive, where their use will not impact natural resources. These lands were acquired to protect the resources. Ms. McElroy said she believes bicycles are just as damaging as 4-wheelers.

Ms. McElroy asked what problems nearby property owners would have in trying to do improvements on their property. Mr. Muller said improvements allowed by zoning or the comp plan would not be a problem. Mr. Thomason agreed. Ms. McElroy wanted to know how to control vagrants' use of the land. Mr. Muller said this issue was discussed in the Advisory Group meeting, and the feeling was that large tracts of land that didn't have anyone on them would have more problems than tracts where the public is allowed to go in. This will be a day use area; transient camping will not be allowed.

Ms. McElroy asked where the proposed parking would be. Mr. Muller said the parking would be sited depending on the resources.

A participant asked about the timetable. Mr. Thomason said that there is no current budget for the next fiscal year, but that some funds could come from the Cross Florida Greenway to do inventories of plants and animals and cultural and historical resources, so that OGT could decide where to place facilities. OGT is starting to make the budget for 2005-06, so some of the tasks will be programmed in to get money for the facilities in a prioritized fashion. OGT will be working with members of the community to establish a Citizens Support Organization for the property to help with trails and other things.

An explanation was provided on the timeframe and process for changes to the plan once it is approved. Uses not included in the approved land management plan have to go through a land management plan amendment process. Any proposed changes have to consider the reasons the property was originally purchased.

One participant said the smoke from the wildfire a year ago caused problems with the health of the community. Not all houses in the area are air conditioned. How does OGT propose to protect citizens with health problems and protect their lands? Can the land be burned in wintertime when the windows are closed? Mr. Muller explained that winter and summer burns have different effects on the vegetation. In Florida, spring-early summer fires are more natural. A burn plan will be prepared that evaluates the situation, including fuel loads and areas that need to be burned. The approach will depend on the burn plan. One of the first objectives is to set up a burn plan. Being next to I-75 means that OGT will have to be even more careful. Prescribed burning is needed to keep Florida natural. It is a matter of coordinating with the community, having the right conditions. Without a prescribed burn program, fires will happen under inopportune conditions.

Mr. Thomason said Price's Scrub will be broken up into manageable burn units, looking at smoke management issues. The Interstate is a major factor. After doing an inventory, OGT will look at the optimum ways to divide the property into manageable blocks. OGT wants to burn the blocks relatively quickly, and get the smoke up and out away from people. Mr. Muller said that each burn requires a burn plan approved by the Division of Forestry.

A participant asked how much notice would be given to neighbors before a fire. Mr. Thomason said it depends on the time of year. OGT would tell neighbors OGT is planning on burning some in the next week. OGT could use email to inform neighbors and will also talk with the local media. A participant said that she didn't think anyone objected to prescribed burns, they just wanted to be informed to protect themselves to minimize the situation.

.[Prescribed fire section; new obj 8f]

Mr. Gary Greenberg suggested working with a Gainesville cycling club about where to place trails and the style of trails to avoid impacts. Different types of cyclists have different types of impacts. **Ms. Linda Duever** mentioned the possibility of a road bike trail (vs. just mountain bike trails) to link certain areas. Mr. Greenberg doesn't want the trails designed in such a way that competitive off-road riders will use Price's Scrub for training.

A participant asked if there was generally a problem with equestrians and cyclists using the same trail. Mr. Thomason said there are sometimes problems because horses can be spooked by cyclists. On a property this size, less than 1000 acres, there is not enough area to place dedicated trails for each user group. Hikers usually get along with the other two user groups. Depending on soil conditions, horses can make a trail have a washboard texture, which is unpleasant for cyclists. A lot of this depends on the amount of use in an area. Ms. Duever suggested including the International Mountain Biking Association; they are good about teaching folks to cooperate with other users, and will help with trail design and construction.

A participant said that she was concerned that security could not prevent looting of cultural artifacts, that there were areas with large holes where looters had been digging. Mr. Thomason said that the cultural inventory done in 1974 did not indicate many archaeological sites. OGT will work with the Sheriff's Department, the Fish and Wildlife Conservation Commission, and DEP law enforcement. The plan also includes an objective to evaluate establishing a security residence on site, either OGT staff or a law enforcement officer. OGT will also depend on members of the community to report suspicious events. The property will be posted and boundaries will be marked. Ms. McElroy, a nearby resident, asked if a security phone would be located on Price's Scrub so that people wouldn't be coming up asking to use their phone. Mr. Thomason said a security phone was not included in the plan, especially since so many people have cell phones these days. If it proves to be a problem, then a security phone could be considered.

A participant asked about billboards on Price's Scrub. Mr. Muller said there had been two areas of billboards on Price's Scrub, but they were cut out of the acquisition because of negotiation difficulties. Some people had mentioned that the billboard people come in with heavy equipment and disturb the lands to access the billboards. There are objectives related to this in the plan.

Mr. Muller thanked everyone for coming, and encouraged people to get involved in the management and use of the property. Much planning remains to be done. The more the community can keep involved, the more it benefits the process. Mr. Muller also mentioned the information on Greenways and Trails on the display table.

The public hearing adjourned at approximately 7:00 p.m.

Meeting attendees:

Management Advisory Group members:

Judy Greenberg	Conservation Trust for Florida; Garden Club
Linda Duever	Local private property owner; Management Advisory Group member
Helen & Buck Koehler	Sunshine State Horse Council; Greenways and Trails Council member
Buddy Kinsey	Management Advisory Group member; Office of Greenways and Trails
Mickey Thomason	Management Advisory Group member; Office of Greenways and Trails

Other agency-related attendees:

Jim Muller, Muller and Associates, Inc., facilitator
Lindsay Lege, OGT

The public sign-in sheet is on file.

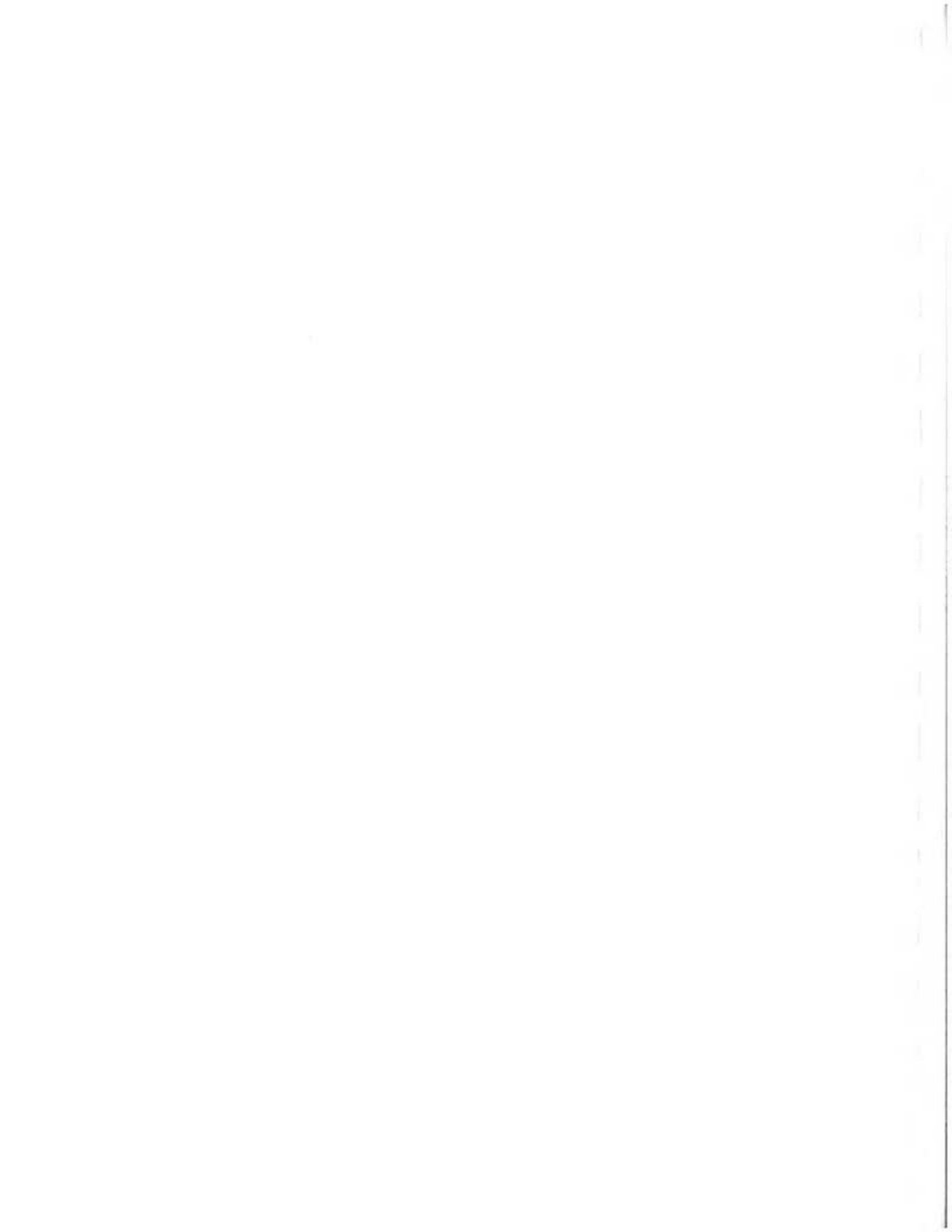
May 1, 2004

*Florida Department of Environmental Protection
Office of Greenways and Trails*

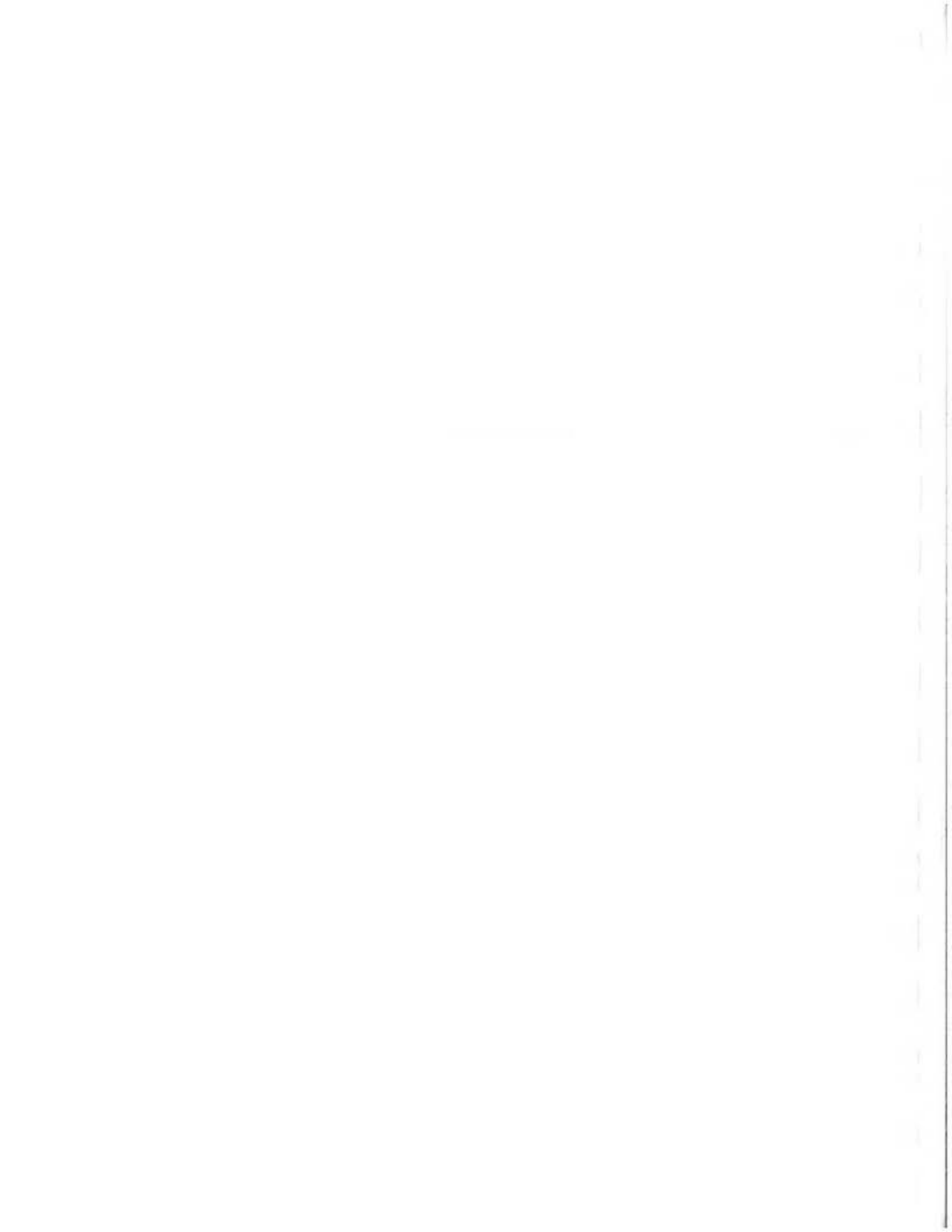
*Price's Scrub Greenway
Management Advisory Group*

April 2, 2004

Name	Representing	Phone number & email	Address
David Jowers	Paynes Prairie Preserve State Park	352-466-3397 o david.jowers@dep.state.fl.us	Paynes Prairie Preserve State Park 100 Savannah Blvd. Micanopy, Florida 32667
David Carr	Local private property owner	352-378-7482 h dcarr1@mindspring.com	1721 NW 10 th Ave Gainesville, FL 32605
Linda Duever	Local private property owner	352-466-4136 ConwayConservation@conway.com	Conway Conservation, Inc. 10952 NW Hwy 320 Micanopy, FL 32667
Lee Niblock (for Comm. Steve Henning)	Marion County Board of County Commissioners	352-236-7111 o Lee.Niblock@marioncountyfl.org	
Busy Shires Alt.: Terry Zinn	Conservation Trust for Florida	352-466-1178 o busy@conserveflorida.org Zinn 386-462-7827 h floridawildflower@att.net	
Pierce Jones	Local private property owner	352-466-3392 h; 352-392-8074 o ez@energy.ufl.edu	
Annabelle Leitner	Local private property owner	352-591-1563 weavingator@msn.com	10560 NW Hwy 320 Micanopy, FL 32667
Bob Stenstream	Marion County Soil & Water Conservation District	352-861-8559o rasart19@cs.com	4200 SW 7 th Ave. Road Ocala FL 34474
Buddy Kinsey	Office of Greenways and Trails	352-236-7143 o buddy.kinsey@dep.state.fl.us	DEP Office of Greenways & Trails 8282 SE Hwy 314 Ocala, FL 34470
Mickey Thomason	Office of Greenways and Trails	352-236-7143 o Mickey.Thomason@dep.state.fl.us	DEP Office of Greenways & Trails 8282 SE Hwy 314 Ocala, FL 34470
Kiki Courtelis Alt: Sonny Werneth, CEO	Local private property owner Werneth – local private property owner, CEO Town & Country Farms	352-591-2887 kicourt@aol.com Werneth 352-591-2600 tncfarms@atlantic.net	Werneth - Town & Country Farms 8894 CR 320 Micanopy, FL 32667
Eddie Leedy	Marion County Sheriff Dept.	352-620-7820 eddie1220@aol.com eleedy@sheriff.marioncountyfl.org	P.O. Box 1987 Ocala, FL 34478
Susan Carr	Local private property owner	352-466-4514 sus carr@earthlink.net	P.O. Box 823 Micanopy, FL 32667
Helen Koehler	Sunshine State Horse Council; Greenways and Trails Council	352-486-7040 blackprong@aol.com	1950 SE 111 th Ct. Morrison, FL 32668
Judy Greenberg	Conservation Trust for Florida; Garden Club	judyg@gator.net	7285 NW CR 320 McIntosh, FL 32664



Appendix 3:
Soils Descriptions for Price's Scrub Greenway



Soil Series on Prices Scrub Greenway, Marion County, Florida

(Descriptions are from USDA Natural Resources Conservation Service website
<http://soils.usda.gov/technical/classification/osd/index.html>, April 14, 2004.
Series ordered by most frequent to least frequent occurrence on site)

LOCATION POMONA FL
Established Series
Rev. BPT; AGH; GRB
10/2003

POMONA SERIES

The Pomona series consists of very deep, poorly and very poorly drained, moderate to moderately slowly permeable soils on broad low ridges on the Lower Coastal Plain. They formed in sandy and loamy marine sediments. Near the type location, the mean annual temperature is about 72 degrees F., and the mean annual precipitation is about 55 inches. Slopes are 0 to 2 percent

TAXONOMIC CLASS: Sandy, siliceous, hyperthermic Ultic Alaquods

TYPICAL PEDON: Pomona sand--forested. (Colors are for moist soil.)

A--0 to 5 inches; very dark gray (10YR 3/1) sand; weak fine crumb structure; very friable; common fine roots; very strongly acid; clear wavy boundary. (4 to 8 inches thick)

E1--5 to 12 inches; gray (10YR 6/1) sand; single grained; loose; common fine roots; clean sand grains; common medium faint dark gray (10YR 4/1) areas of organic matter accumulations; very strongly acid; clear wavy boundary.

E2--12 to 26 inches; light gray (10YR 7/1) sand; single grained; loose; common fine roots; clean sand grains; few fine and medium faint light brownish gray (10YR 6/2) splotches; very strongly acid; abrupt wavy boundary. (Combined thickness of the E horizons range from 6 to 24 inches)

Bh1--26 to 29 inches; 50 percent very dark gray (5YR 3/1) and 50 percent dark reddish brown (5YR 3/3) sand; moderate medium granular structure; friable; few fine roots; sand grains are coated with organic matter; very strongly acid; clear wavy boundary.

Bh2--29 to 36 inches; very dark gray (5YR 3/1) sand; moderate medium granular structure; friable; few fine roots; sand grains coated with organic matter; few fine faint dark reddish brown (5YR 3/3) areas of organic matter depletions; very strongly acid; clear wavy boundary. (Combined thickness of the Bh horizons range from 4 to 18 inches)

BE--36 to 39 inches; 50 percent dark brown (7.5YR 3/2) and 50 percent dark grayish brown (10YR 4/2) sand; weak medium crumb structure; very friable; few fine roots; few fine distinct dark reddish brown (5YR 3/2) organic matter accumulations; very strongly acid; clear wavy boundary. (3 to 5 inches thick)

E'--39 to 51 inches; brown (10YR 5/3) sand; single grained; loose; few fine roots; very strongly acid; clear wavy boundary. (0 to 24 inches thick)

Btg1--51 to 58 inches; gray (10YR 6/1) sandy clay loam; weak medium subangular blocky structure; friable; few faint clay films on faces of peds; few fine and medium faint yellow (10YR 7/6) and few medium prominent yellowish red (5YR 5/8) masses of iron accumulation; very strongly acid; clear wavy boundary.

Btg2--58 to 72 inches; gray (10YR 5/1) sandy clay; moderate medium subangular blocky structure; firm; few faint clay films on faces of peds; few fine distinct light yellowish brown (10YR 6/4) and few fine prominent yellowish red (5YR 5/6) masses of iron accumulation; strongly acid.

TYPE LOCATION: Marion County, Florida; approximately 6.0 miles north of Fort McCoy, about 1.6 miles west of State Highway 315, and north of graded road (Sugar Road). NW 1/4, NW 1/4, Sec. 21, T. 12 S., R. 23 E.

RANGE IN CHARACTERISTICS: Solum thickness is 45 or more inches. Depth to argillic horizon ranges from 37 to 80 inches beneath the soil surface. Reaction soil ranges from extremely acid to moderately acid throughout except where the surface has been limed.

The A or Ap horizon has hue of 10YR, value of 2 to 4, and chroma of 1; or is neutral with value of 2 to 4. Texture is sand or fine sand.

The E horizon has hue of 10YR, value of 5 to 8, and chroma of 1 or 2; or is neutral with value of 5 to 8. Redoximorphic accumulations in shades of yellow and brown range from none to few. Vertical streaks in shades of gray range from none to common. Texture is sand or fine sand.

The Bh horizon has hue of 5YR to 10YR, value of 2 or 3, and chroma of 1 to 4; or is neutral with value of 2. Texture is sand or fine sand.

The EB or BE horizon, where present, has hue of 10YR, value of 3 to 7, and chroma of 3 to 6; or it is neutral with value of 2. Texture is sand or fine sand.

The Bw horizon, where present, has hue of 7.5YR or 10YR, value of 3 or 4, and chroma of 2 to 4. Fragments and bodies of Bh material range from none to common. Texture is sand or fine sand.

The E' horizon has hue of 10YR, value of 5 to 7, and chroma of 1 to 3. Texture is sand or fine sand.

The B'h horizon, where present, is above the Btg horizon. It has the same range of colors and textures as the Bh horizon.

The Btg horizon has hue of 10YR or 5Y, value of 5 to 7, and chroma of 1 or 2; or it is neutral with value of 5 to 7. Masses of iron accumulation in shades of yellow, brown, or red range from none to common. Texture ranges from sandy loam to sandy clay.

The BCg or Cg horizon, where present, has hue of 10YR, value of 5 to 7, and chroma of 1 or 2; or it is neutral with value of 5 to 7. Masses of iron accumulation in shades of yellow, brown, or red range from none to common. Lenses or masses of coarser or finer textured material range from few to common. Texture ranges from sand to sandy clay.

COMPETING SERIES: These are the Monteocha and Tocoi series in the same family. Monteocha and Tocol soils have an umbric epipedon. In addition, the very poorly drained Monteocha soils are on lower positions and the poorly drained Tocol soils are on similar positions.

GEOGRAPHIC SETTING: Pomona soils are on low, broad ridges within the flatwoods areas of the Lower Coastal Plain. Slopes range from 0 to 2 percent. They formed in thick beds of sandy and loamy marine sediments. The climate is humid subtropical. The average annual precipitation ranges from 50 to 60 inches and the average annual air temperature ranges from 70 to 74 degrees F.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the Adamsville, Cassia, Immokalee, Myakka, Placid, Pomello, Pompano, and Wauchula series. Adamsville, Placid, and Pompano soils lack spodic horizons and are sandy throughout. In addition, the somewhat poorly drained Adamsville soils are on higher positions, the very poorly drained Placid and Pompano are on lower positions, and Placid soils have an Umbric epipedon. Cassia, Immokalee,

Myakka, and Pomello soils do not have argillic horizons. In addition, the somewhat poorly drained Cassia and Pomello soils are on slightly higher positions while Immokalee and Pomello soils have spodic horizons below a depth of 30 inches, and Immokalee and Myakka soils are on similar positions. Wauchula soils are on slightly lower positions and have an argillic horizon within a depth of 36 inches of the surface.

DRAINAGE AND PERMEABILITY: Poorly or very poorly drained; rapid to moderate permeability in the A and E horizons and moderately slow to moderate permeability in the Bt and Btg horizons.

USE AND VEGETATION: Most areas remain in native vegetation and are used for wildlife habitat. A few small areas have been cleared and used for watermelons, truck crops, and tame pasture. The native vegetation consists of slash pine (*Pinus Elliottii*), longleaf pine (*Pinus Palustris*), and south Florida slash pine (*Pinus Elliottii Densa*) with an understory of sawpalmetto, waxmyrtle, gallberry, creeping bluestem, chalky bluestem, indiangrass, and pineland threawn.

DISTRIBUTION AND EXTENT: Peninsular Florida. The series is of moderate extent.

MLRA OFFICE RESPONSIBLE: Auburn, Alabama.

SERIES ESTABLISHED: Marion County, Florida; 1974.

REMARKS: Diagnostic horizons and features in this pedon:

Ochric epipedon - the zone from 0 to 26 inches (A, E1, and E2 horizons).

Albic horizon - the zone from 5 to 26 inches (E1 and E2 horizons).

Spodic horizon - the zone from 26 to 36 inches (Bh1 and Bh2 horizons).

Argillic horizon - the zone from 51 to 72 inches (Btg1 and Btg2 horizons).

Under natural conditions, the water table is within a depth of 6 to 18 inches for 1 to 3 months and is at a depth of 10 to 40 inches for 6 months or more during most years. Depressional areas are ponded for 6 to 9 months or more in most years.

LOCATION WACAHOTA
Established Series
Rev. JFB; GRB
10/2003

FL

WACAHOTA SERIES

The Wacahota series consists of very deep, poorly drained, moderately permeable soils on side slopes of uplands on the Coastal Plain. They formed in sandy and loamy marine sediments. Near the type location, the mean annual temperature is about 72 degrees F., and the mean annual precipitation is about 59 inches. Slopes range from 5 to 20 percent.

TAXONOMIC CLASS: Loamy, siliceous, active, hyperthermic Arenic Paleaquults

TYPICAL PEDON: Wacahota loamy sand - pasture. (Colors are for moist soil unless otherwise stated.)

Ap--0 to 5 inches; dark gray (10YR 4/1) loamy sand; moderate medium granular structure; very friable; common fine roots; about 5 percent, by volume, pebbles; slightly acid; clear wavy boundary. (4 to 8 inches thick)

E--5 to 29 inches; gray (10YR 6/1) gravelly loamy sand; weak fine granular structure; friable; few fine roots; about 18 percent, by volume, weathered phosphatic limestone pebbles; moderately acid; clear, wavy boundary. (16 to 32 inches thick)

Btg1--29 to 38 inches; gray (N 5/) gravelly sandy clay loam; moderate medium subangular blocky structure; friable; few fine roots; common faint clay films on faces of peds; about 23 percent, by volume, pebbles; strongly acid; gradual wavy boundary.

Btg2--38 to 61 inches; gray (N 5/) sandy clay loam; moderate medium subangular blocky structure; firm; few fine roots; few faint clay films on faces of peds; about 14 percent, by volume, pebbles; few fine distinct very pale brown (10YR 7/3) masses of iron accumulations and light gray (10YR 7/1) areas of iron depletions; strongly acid; gradual wavy boundary. (Combined thickness of the Btg horizons range from 22 to 37 inches thick)

BCg--61 to 80 inches; gray (10YR 6/1) sandy clay loam; weak fine subangular blocky structure; firm; about 11 percent, by volume, rock fragments ranging from 2 to 76 mm in size; few fine distinct brownish yellow (10YR 6/6) masses of iron accumulations and greenish gray (5GY 5/1) areas of iron depletions; very strongly acid.

TYPE LOCATION: Marion County, Florida. Approximately 0.75 mile west of intersection of Interstate Highway 75 and State Highway 320, and about 300 feet south of State Highway 320. NW 1/4, NW 1/4, Sec. 14, T. 125 S., R. 20 E.

RANGE IN CHARACTERISTICS: Solum thickness ranges from 60 to more than 80 inches. In the solum, the content of weathered pebbles ranges from 5 to 25 percent, by volume. There are a few cobbles in some pedons. The content of ironstone pebbles, 2 to 20 mm in size, ranges from 0 to 5 percent. Reaction ranges from very strongly acid to moderately acid throughout except where the surface has been limed.

The A or Ap horizon has hue of 10YR, value 3 to 5, chroma 2 or less; or it is neutral with value of 3 to 5. Texture is sand, fine sand, loamy sand, loamy fine sand, or their gravelly analogs.

The E horizon has hue of 10YR or 2.5Y, value 5 to 7, chroma 2 or less; or it is neutral with value of 5 to 7. Texture is sand, fine sand, loamy sand, loamy fine sand, or their gravelly analogs.

The Btg horizon has hue of 10YR or 2.5Y, value 4 to 7, and chroma of 2 or less; or it is neutral with value of 5 to 7. Iron accumulations in shades of yellow, brown, or red range from none to many. Content of plinthite ranges from 0

to 5 percent, by volume. Texture is sandy clay loam or gravelly sandy clay loam. In some pedons, some parts of the Btg horizon may contain as much as 37 percent clay, but the weighted average clay content of the upper 20 inches of the B2tg horizon falls within the range for a loamy family.

The BCg horizon has the same range of colors as the Btg horizon. Texture is sandy clay loam or gravelly sandy clay loam.

COMPETING SERIES: There are no known series in the same family.

GEOGRAPHIC SETTING: Wahacoota soils are on upland side slopes in the Coastal Plain. Slopes range from 5 to 20 percent. They formed in thick beds of sandy and loamy marine sediments. The climate is humid subtropical. The average annual precipitation ranges from 54 to 64 inches and the average annual air temperature ranges from about 71 to 73 degrees F.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the Blichton, Boardman, Fellowship, Flemington, Kanapaha, Lochloosa, and Sparr series. All of these soils are on similar to slightly lower positions. The very poorly drained Blichton soils have more than 5 percent plinthite in the subsoil, and contain less than 5 percent gravel throughout. Boardman soils have sandy surface and subsurface layers less than 20 inches in thickness. Fellowship and Flemington soils have sandy surface and subsurface layers less than 20 inches in thickness and have clayey smectitic control sections. Kanapaha soils have sandy surface and subsurface layers 40 to 80 inches in thickness. The somewhat poorly drained Lochloosa and Sparr have less than 5 percent, by volume, pebbles throughout the profile.

DRAINAGE AND PERMEABILITY: Poorly drained; moderate permeability.

USE AND VEGETATION: Most areas of Wahacoota soils are in forest. A small acreage is used for improved pasture. Where water control is established, a few small areas are used for growing oranges, grapefruit, watermelons, and tomatoes. Native vegetation consists of slash pine, loblolly pine, longleaf pine, water oak, hickory, and sweetgum, with an understory of wax myrtle, briars, and other native grasses and shrubs.

DISTRIBUTION AND EXTENT: Peninsular Florida, primarily on the Ocala uplift. The series is of moderate extent.

MLRA OFFICE RESPONSIBLE: Auburn, Alabama.

SERIES ESTABLISHED: Marion County, Florida; 1974.

REMARKS: Diagnostic horizons and features recognized in this pedon:

Ochric epipedon the zone from 0 to 29 inches (Ap and E horizons).

Argillic horizon the zone from 29 to 80 inches (Btg1, Btg1, BCg horizons).

Arenic feature - beginning at a depth of 29 inches.

These soils are saturated at depths of less than 10 inches for periods ranging from 1 to 4 months due to hillside seepage.

These soils were formerly classified in the Low-Humic Gley great soil group. Formerly, they were a part of the Blichton series.

National Cooperative Soil Survey
U.S.A.

LOCATION ELECTRA
Established Series
Rev. AGH
6/93

FL

ELECTRA SERIES

The Electra series consists of somewhat poorly drained soils that formed in thick beds of sandy and loamy marine sediments on slight ridges in the flatwoods areas of central and southern Florida. Slopes range from 0 to 5 percent.

TAXONOMIC CLASS: Sandy, siliceous, hyperthermic Oxyaquic
Alorthods

TYPICAL PEDON: Electra fine sand--forested. (Colors are for moist soil.)

A--0 to 7 inches; gray (10YR 5/1) fine sand; weak medium granular structure; very friable; many fine and medium roots, few coarse roots; extremely acid; clear smooth boundary. (2 to 8 inches thick)

E--7 to 47 inches; white (10YR 8/1) fine sand; few fine distinct grayish brown (10YR 5/2) streaks along root channels; single grained; loose; common fine and medium roots and few coarse roots decreasing to common medium roots below about 24 inches; sand grains are uncoated; strongly acid; abrupt wavy boundary. (28 to 46 inches thick)

Bh--47 to 60 inches; dark reddish brown (5YR 3/2) fine sand; few coarse distinct dark brown (10YR 4/3) mottles near base of horizon; massive; friable; few fine roots; sand grains well coated with colloidal organic matter; very strongly acid; clear wavy boundary. (4 to 18 inches thick)

Btg--60 to 80 inches; light brownish gray (2.5Y 6/2) fine sandy loam; many coarse distinct dark grayish brown (10YR 4/2) streaks; weak medium subangular blocky structure; friable; common medium dead and few fine live roots; sand grains bridged and coated with clay; very strongly acid.

TYPE LOCATION: St. Lucie County, Florida; about 8.5 miles south of Fort Pierce; 0.1 mile west of U.S. Highway 1; 0.15 mile south of Banyan Road; and 400 feet east of cable line trail; NE1/4NE1/4 Sec. 27, T. 36 S., R. 40 E.

RANGE IN CHARACTERISTICS: Solum thickness is 60 or more inches. It ranges from extremely acid to strongly acid in all horizons.

The A horizon has hue of 10YR, value of 4 to 6, and chroma of 1 or less or is neutral, value of 2. It is sand or fine sand.

The E horizon has hue of 10YR, value of 5 to 8, and chroma of 1 or 2. It is sand or fine sand.

The Bh horizon has hue of 5YR, value of 2 or 3, and chroma of 1 or 3; hue of 10YR, value of 2 or 3, and chroma of 1 or 2; hue of 7.5YR, value of 3, and chroma of 2; or is neutral, value of 2. It is sand, fine sand, loamy fine sand, or loamy sand.

Some pedons have a thin soft transitional EB horizon that has hue of 10YR, value of 3 or 4, and chroma of 1, or value of 5, and chroma of 2. It is sand or fine sand with many clean grains. Some pedons also have a BE horizon that has hue of 7.5YR or 10YR, value of 4 or 5, and chroma of 2 to 6. It is sand or fine sand, and 0 to 9 inches thick.

Some pedons have an E' horizon in hue of 10YR or 5Y, value of 5 to 7, and chroma of 1 to 4. It is sand or fine sand.

The Btg horizon has hue of 10YR, value of 5 to 7, and chroma of 1 to 3, or value of 4 or 5, and chroma of 3 or 4; or hue of 2.5Y or 5Y, value of 6 or 7, and chroma of 2 to 4 with mottles in shades of gray, yellow, red, or brown. It is fine sandy loam, sandy loam, sandy clay loam, or sandy clay.

Some pedons have a BC horizon that has hue of 10YR or is neutral, value of 5 or 6, and chroma of 2 or less with mottles of higher chroma. It is sandy clay.

COMPETING SERIES: These are the Cassia, Narcoossee, Newnan, Pomello, and Zolfo soils. Cassia, Narcoossee, Pomello, and Zolfo soils do not have argillic horizons beneath the spodic horizon. Newnan soils have a spodic horizon between depths of 50 and 80 inches. In addition, Cassia soils have a spodic horizon at depths of less than 30 inches, and Zolfo soils have a spodic horizons at depths greater than 50 inches.

GEOGRAPHIC SETTING: Electra soils are on slight ridges in central and southern Florida. Slopes are dominantly 0 to 2 percent but range to 5 percent. Annual precipitation ranges from 50 to 60 inches and is heaviest in the summer. Average annual temperature is about 70 to 74 degrees F.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the competing Cassia and Pomello series and Adamsville, Candler, Myakka, Pompano, and Tavares series. Adamsville, Candler, and Tavares soils are on higher ridges and lack spodic and argillic horizons. Myakka soils are poorly drained, lack argillic horizons, and the spodic horizon is within depths of 30 inches. Pompano soils are on lower elevations, and lack a spodic horizon.

DRAINAGE AND PERMEABILITY: Somewhat poorly drained; slow runoff. Permeability is rapid in the A and E horizons and moderate in the Bh horizon and slow to very slow in the Bt horizon. The water table is at depths of 25 to 40 inches for cumulative periods of 2 to 4 months during most years and recedes to depths of more than 40 inches during drier periods.

USE AND VEGETATION: These soils are not used for cultivated crops. A few small areas are cleared and used for tame pasture. Most areas remain in native vegetation consisting of dwarf live oak, a few longleaf and sand pine, running oak, sawpalmetto, and blueberry. Creeping bluestem, chalky bluestem, lopsided indiagrass, low panicum, pineland threeawn, paspalum, and numerous forbs dominate the understory.

DISTRIBUTION AND EXTENT: Peninsular Florida. The series is moderately extensive.

MLRA OFFICE RESPONSIBLE: Auburn, Alabama

SERIES ESTABLISHED: Marion County, Florida; 1974.

REMARKS: These soils were included with Pomello series.

Diagnostic horizons and features recognized in these pedon are:

Ochric epipedon: from the surface to a depth of 47 inches (A and E horizons)

Albic horizon: from a depth of 7 inches to a depth of 47 inches (E horizon)

Spodic horizon: from a depth of 47 inches to a depth of 60 inches (Bh horizon)

Argillic horizon: from a depth of 60 inches to a depth of 80 inches (Btg horizon)

LOCATION KANAPAHA
Established Series
Rev. BPT:AGH
08/2001

FL

KANAPAHA SERIES

The Kanapaha series consists of poorly drained soils with a slowly or moderately slowly permeable subsoil. The soils formed in thick beds of sandy and loamy marine sediments. They are on nearly level to gently sloping landscapes of upland position in the lower Coastal Plain. Slopes range from 0 to 5 percent.

TAXONOMIC CLASS: Loamy, siliceous, semiactive, hyperthermic Grossarenic Paleaquults

TYPICAL PEDON: Kanapaha fine sand--cultivated.
(Colors are for moist soils.)

Ap--0 to 7 inches; gray (10YR 5/1) fine sand; weak medium crumb structure; very friable; common fine roots; common uncoated sand grains; few fine phosphatic pebbles and iron concretions; strongly acid; clear wavy boundary. (4 to 8 inches thick)

E1--7 to 40 inches; light gray (10YR 7/1) fine sand; few medium faint white (10YR 8/1) splotches and few medium and large krotovinas of gray (10YR 5/1) in upper part of horizon; few medium distinct light yellowish brown (10YR 6/4) mottles in lower part of horizon; single grained; few fine roots; sand grains are uncoated; few fine phosphatic pebbles and iron concretions; very strongly acid; clear wavy boundary.

E2--40 to 48 inches; gray (10YR 6/1) fine sand; single grained; loose; few fine roots; few fine phosphatic pebbles; common medium, slightly firm strong brown concretions; some uncoated sand grains; very strongly acid; clear wavy boundary. (Combined thickness of the E horizon is 34 to 70 inches.)

Btg1--48 to 55 inches; gray (10YR 6/1) fine sandy loam; few fine and medium distinct yellowish brown (10YR 5/8) mottles; weak medium subangular blocky structure; very friable; clay bridging between sand grains; fine weathered phosphatic pebbles and iron concretions; few fine roots; very strongly acid; clear wavy boundary.

Btg2--55 to 70 inches; gray (N 5/0) sandy clay; few fine and medium prominent red (10R 4/8) and few fine distinct yellowish brown mottles; moderate medium subangular blocky structure; friable; very few fine roots; discontinuous patches of clay films along root channels and faces of peds; 3 percent plinthite; very strongly acid; clear wavy boundary. (Combined thickness of the B horizon is 14 to 30 inches.)

BCg--70 to 82 inches; gray (10YR 5/1) sandy clay loam; few medium distinct brownish yellow (10YR 6/8) and few medium prominent yellowish red (5YR 5/6) mottles; weak medium subangular blocky structure; friable; 4 percent plinthite; very strongly acid; gradual wavy boundary. (6 to 20 inches thick)

Cg--82 to 88 inches; gray (10YR 6/1) sandy clay loam, mixed with medium and large strata and bodies of sandy loam and loamy

sand; few medium distinct yellowish brown (10YR 5/6) and few fine prominent yellowish red (5YR 5/6) mottles; massive; friable; 3 percent plinthite; very strongly acid.

TYPE LOCATION: Marion County, Florida, about 3 miles southwest of Ocala; 1/2 mile south of intersection of State Highway 475 and Buffington Road; about 600 feet west of southwest Seventh Avenue. NW1/4NE1/4 sec. 6, T. 15 S., R. 22 E.

RANGE IN CHARACTERISTICS: Solum thickness is 60 or more inches.

The soil is very strongly acid to medium acid in all horizons. Content of plinthite, weathered phosphatic pebbles and iron concretions ranges from 0 to 5 percent in the solum.

The A or Ap horizon has hue of 10YR, value of 3 to 6, and chroma of 1 or 2. Texture is sand or fine sand.

The E horizon has hue of 10YR, value of 5 to 8, and chroma of 1 or 2, with or without mottles or streaks in shades of gray, yellow, and brown. Texture is sand or fine sand.

The Btg horizon has hue of 10YR, value of 5 to 7, and chroma of 1 or 2; or is neutral with value of 4 to 6. It has few to many mottles in shades of red, yellow, and brown. Texture is sandy loam to light sandy clay. The weighted average clay content in the upper 20 inches of the Btg horizon is 16 to 35 percent. The BCg horizon has about the same range as the Btg horizon.

The Cg horizon, where present, has hue of 10YR, value of 4 to 7, and chroma of 1 or 2; or is neutral with value of 4 to 6. It is massive and has texture of sandy loam or sandy clay loam with medium or large masses of coarser or finer textured material.

COMPETING SERIES: These are the Palmetto series in the same family, and the Holopaw series which is closely similar. Palmetto and Holopaw soils are in the lowlands. Palmetto soils have a Bh horizon and Holopaw soils have more than 35 percent base saturation in the argillic horizon.

GEOGRAPHIC SETTING: Kanapaha soils are on low, nearly level or gently sloping landscapes of upland position in the lower Coastal Plain. Slopes range from 0 to 5 percent. The soils formed in thick beds of sandy and loamy marine sediments. Near the type location, average annual rainfall is about 59 inches and mean annual air temperature is about 72 degrees F.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the Arredondo, Bivans, Blichton, Boardman, Kendrick, Lochloosa, Millhopper, Sparr, and Wacahoota series. Arredondo and Kendrick soils are well drained. Bivans and Boardman soils have an argillic horizon within 20 inches of the soil surface. Lochloosa and Sparr soils are somewhat poorly drained. Millhopper soils are moderately well drained. Wacahoota soils have an argillic horizon between a depth of 20 to 40 inches below the soil surface.

DRAINAGE AND PERMEABILITY: Poorly drained; moderately slow or slow permeability; slow runoff. The water table in these soils is at depths of less than 10 inches for 1 to 3 months and it recedes to depths of 10 to 40 inches for 3 to 4 months during most years. It is at depths greater than 40 inches during drier periods.

USE AND VEGETATION: Most of these soils are in forest. Small areas where adequate water control is established are used for growing corn, watermelons, citrus, and tomatoes. Most of the cleared areas are used for improved pasture. Native vegetation consists of sweetgum, maple, live and water oaks; magnolia, hickory, slash, longleaf and loblolly pine; and an understory of several bluestem species, longleaf uniola, hairy panicum, several threeawn species and numerous forbs.

DISTRIBUTION AND EXTENT: Peninsular Florida, primarily the Central Florida Ridge. The series is moderately extensive.

MLRA OFFICE RESPONSIBLE: Auburn, Alabama

SERIES ESTABLISHED: Alachua County, Florida; 1942.

National Cooperative Soil Survey
U. S. A.

LOCATION ADAMSVILLE FL
Established Series
Rev. GRB
01/2002

ADAMSVILLE SERIES

The Adamsville series consists of very deep, somewhat poorly drained, rapidly permeable soils on broad flats, low knolls, and lower side slopes. They formed in thick sandy marine sediments in central and southern Florida. Near the type location, the mean annual temperature is about 74 degrees F., and the mean annual precipitation is about 52 inches. Slopes range from 0 to 5 percent.

TAXONOMIC CLASS: Hyperthermic, uncoated Aquic Quartzipsamments

TYPICAL PEDON: Adamsville fine sand--range. (Colors are for moist soil unless otherwise stated.)

Ap--0 to 5 inches; gray (10YR 5/1) fine sand; weak fine granular structure; very friable; many fine roots; moderately acid; clear wavy boundary.

C1--5 to 9 inches; brown (10YR 5/3) fine sand; single grained; loose; common fine roots; many uncoated sand grains; few fine faint brownish yellow (10YR 6/6) masses of iron accumulation; moderately acid; gradual wavy boundary.

C2--9 to 17 inches; light yellowish brown (10YR 6/4) fine sand; single grained; loose; common fine roots; common medium white (10YR 8/1) areas of uncoated sand grains; few faint strong brown (7.5YR 5/6) masses of iron accumulation; moderately acid; gradual wavy boundary.

C3--17 to 29 inches; very pale brown (10YR 7/4) fine sand; few fine faint brownish yellow (10YR 6/6) masses of iron accumulation; single grained; loose; common fine roots; moderately acid; gradual wavy boundary.

C4--29 to 80 inches; white (10YR 8/1) fine sand; few fine faint light brownish gray (10YR 6/2) in lower part, fine sand; single grained; loose; slightly alkaline.

TYPE LOCATION: Sumter County, Florida; approximately 0.6 miles west of U.S. Interstate Highway 75, about 1.7 miles north on Sumter County Road 48; SE 1/4, NE 1/4, sec. 6, T. 21 S., R. 22 E.

RANGE IN CHARACTERISTICS: The depth of sand or fine sand extends to 80 inches, or more. Soil reaction ranges from very strongly acid to moderately acid in the A or Ap horizons, and strongly acid to slightly acid in the C horizons. Silt plus clay content is less than 5 percent in the 10 to 40-inch control section.

The A or Ap horizon has hue of 10YR, value of 3 to 5, and chroma 1 or 2; or it is neutral with value of 2 to 5. Texture is fine sand or sand.

The C horizon has hue of 10YR, value of 5 to 8, and chroma of 1 to 4. Some pedons have no dominant color and are multicolored in shades of gray, yellow, and brown. Chroma of 2 or less usually dominate the lower part. Matrix colors are due to uncoated sand grains or thin coatings of organic matter.

COMPETING SERIES: These include the Broward, Canaveral, Redlevel, and Satellite series. Broward soils are moderately deep and Redlevel soils are deep to limestone bedrock. Canaveral soils have shell fragments throughout the profile. Satellite soils have less than 5 percent material that is less than 0.08 mm in diameter and have very low available water capacity.

GEOGRAPHIC SETTING: Adamsville soils are on broad flats, low knolls, and lower slopes of the sandy uplands in lower Coastal Plains. They formed in thick beds of sandy marine sediments. Slopes range from 0 to 5 percent. The average annual soil temperature at depths of 20 inches below the surface ranges from 73 to 75 degrees F., The average annual precipitation ranges from 50 to 54 inches.

GEOGRAPHICALLY ASSOCIATED SOILS: These include Basinger, Bradenton, Delray, Elred, Felda, Ft. Drum, Immokalee, Manatee, Myakka, Placid, Pompano, Tavares, and St. Lucie series. Basinger, Bradenton, Elred, Felda, and Ft. Drum Immokalee, Myakka, and Pompano soils are poorly drained. In addition, Basinger soils have a Bh horizon, Bradenton soils have Bt horizons, Felda soils are arenic, and Ft. Drum soils have Bk horizons, and Elred, Immokalee, and Myakka soils are Spodosols. Delray, Manatee, and Placid soils are very poorly drained. In addition, Delray soils are grossarenic, Manatee soils have Bt horizons, and Placid soils have umbric epipedons. St. Lucie soils are excessively drained. Tavares soils are moderately well drained.

DRAINAGE AND PERMEABILITY: Somewhat poorly drained; rapid permeability.

USE AND VEGETATION: With adequate water control, many areas are used for citrus. Some areas are in improved pasture. Natural vegetation consists of pines, laurel, and water oaks with a ground cover of saw palmetto, pineland threawn, indiagrass, bluestem grasses, and several low panicums.

DISTRIBUTION AND EXTENT: Peninsular Florida. The series is of moderate extent.

MLRA OFFICE RESPONSIBLE: Auburn, Alabama.

SERIES ESTABLISHED: Hillsborough County, Florida; 1951.

REMARKS: The water table is at 20 to 40 inches for 2 to 6 months during most years. It is at 10 to 20 inches for periods of up to two weeks in some years. It is within depths of 60 inches for more than 9 months in most years.

ADDITIONAL DATA: Characterization data S83FL-119-012 (1-5). Sample by University of Florida, Gainesville.

LOCATION PLACID
Established Series
Rev. GRB
12/2003

FL

PLACID SERIES

The Placid series consists of very deep, very poorly drained, rapidly permeable soils on low flats, depressions, poorly defined drainageways on uplands, and flood plains on the Lower Coastal Plain. They formed in sandy marine sediments. Near the type location, the mean annual temperature is about 72 degrees F., and the mean annual precipitation is about 55 inches. Slopes range from 0 to 2 percent.

TAXONOMIC CLASS: Sandy, siliceous, hyperthermic Typic Humaquepts

TYPICAL PEDON: Placid fine sand - range. (Colors are for moist soil.)

A1—0 to 10 inches; black (10YR 2/1) fine sand; moderate medium granular structure; friable; many fine and medium roots; few root channels; few small pockets of dark gray (10YR 4/1) and gray (10YR 5/1) fine sand; very strongly acid; gradual smooth boundary.

A2—10 to 20 inches; very dark gray (10YR 3/1) fine sand; weak fine granular structure; very friable; many fine and medium roots; few root channels; common black (10YR 2/1), dark gray (10YR 4/1), and very dark grayish brown (10YR 3/2) narrow tongues and pockets in the lower portion of the horizon; very strongly acid; clear wavy boundary. (Combined thickness of the A horizon is 10 to 24 inches)

Cg1—20 to 30 inches; gray (10YR 5/1) fine sand; single grained; loose; few fine roots; few fine faint dark gray (10YR 4/1) and very dark gray (10YR 3/1) masses with more organic carbon than matrix; strongly acid; gradual wavy boundary. (6 to 12 inches thick)

Cg2—30 to 48 inches; grayish brown (10YR 5/2) fine sand; single grained; loose; common medium faint very dark gray (10YR 3/1) and very dark grayish brown (10YR 3/2) masses with more organic carbon than matrix; strongly acid; gradual wavy boundary. (12 to 24 inches thick)

Cg3—48 to 80 inches; dark grayish brown (10YR 4/2) fine sand; single grained; loose; few fine faint very dark gray (10YR 3/1) masses with more organic carbon than matrix; strongly acid.

TYPE LOCATION: Okeechobee County, Florida. Approximately 1.50 miles north of the Okeechobee city limits, about 2.25 miles west of U.S. Highway 441, and about 0.5 mile south of Highway 68. NW 1/4 of Sec. 32, T. 35 S., R. 35 E.

RANGE IN CHARACTERISTICS: Thickness of the soil is more than 80 inches. Reaction ranges from extremely acid to strongly acid in the A or Ap horizon and from extremely acid to slightly acid in the underlying horizons.

The A or Ap horizon has hue of 7.5YR or 10YR, value of 2 to 4, and chroma of 3 or less. Texture is sand, fine sand, loamy sand, loamy fine sand, or their mucky analogs. Some pedons have up to 3 inches of muck on the surface.

The C or Cg C horizon has hue of 10YR to 5Y, value of 4 to 8, and chroma of 3 or less. Redoximorphic features in shades of gray or brown range from none to many. Texture is sand, fine sand, loamy sand, or loamy fine sand.

COMPETING SERIES: There is no other known series in the same family.

GEOGRAPHIC SETTING: Placid soils are in depressions, low flats, poorly defined drainageways, and in flood plains on the lower Coastal Plain. They formed under conditions of fluctuating but very shallow ground water table

in thick beds of marine sand. The climate is warm and humid. Slopes range from 0 to 2 percent. The average annual temperature ranges from 70 to 74 degrees F., and the average annual rainfall ranges from 50 to 60 inches.

GEOGRAPHICALLY ASSOCIATED SOILS: These include the Basinger, Immokalee, Myakka, Pomello, Pompano, Sellers, and St. Lucie series. Basinger and Pompano soils are on similar positions but lack thick dark A horizons. Immokalee, Myakka, and Pomello soils are on higher positions and have spodic horizons. In addition, Immokalee soils are arenic, Myakka soils lack thick dark A horizons and Pomello soils are somewhat poorly drained to moderately well drained. Sellers soils are on similar positions and have umbric epipedons more than 24 inches thick. The excessively well drained St. Lucie soils are on adjacent higher ridges and lack thick dark A horizons.

DRAINAGE AND PERMEABILITY: Very poorly drained; rapid permeability but internal drainage is impeded by a very shallow water table.

USE AND VEGETATION: Placid soils are used mainly for range and forest. A small acreage has been drained and is used for truck crops, citrus, and pasture. Natural vegetation consists of pond pine, bay, cypress, gum, pickerel weed, and coarse grasses.

DISTRIBUTION AND EXTENT: Peninsular Florida. The series is of moderate extent.

MLRA OFFICE RESPONSIBLE: Auburn, Alabama.

SERIES ESTABLISHED: Lake County, Florida; 1970.

REMARKS: Depth to the water table ranges from 0 to 6 inches for more than 2 months in most years. In depressed areas, the water table is above the soil surface for more than 6 months annually.

Diagnostic horizons and features in this pedon:

Umbric epipedon - 0 to 20 inches (A1 and A2 horizons)

LOCATION ASTATULA
Established Series
Rev. GRB
10/2002

FL

ASTATULA SERIES

The Astatula series consists of very deep, excessively drained, rapidly permeable soils that formed in eolian and marine sands. Near the type location, the mean annual temperature is about 73 degrees F., and the mean annual precipitation is about 52 inches. Slopes range from 0 to 30 percent.

TAXONOMIC CLASS: Hyperthermic, uncoated Typic Quartzipsamments

TYPICAL PEDON: Astatula sand--forested. (Colors are moist sand.)

A--0 to 3 inches; grayish brown (2.5Y 5/2) sand rubbed; single grained; loose; many fine and medium roots; many uncoated sand grains; upper 1 inch is a mixture of gray sand and organic matter; strongly acid; clear wavy boundary. (2 to 7 inches thick)

AC--3 to 6 inches; pale brown (10YR 6/3) rubbed, or mixed gray (10YR 6/1), very pale brown (10YR 7/4) and light yellowish brown (10YR 6/4) sand unrubbed; single grained; loose; many fine roots; many uncoated sand grains; strongly acid; clear wavy boundary. (0 to 4 inches thick)

CI--6 to 66 inches; brownish yellow (10YR 6/6) sand; single grained; loose; few fine roots; few fine streaks of light gray (10YR 7/1) sand grains; many sand grains are uncoated; strongly acid; gradual wavy boundary.

C2--66 to 86 inches; brownish yellow (10YR 6/8) sand; single grained; loose; many uncoated sand grains; few, less than 1 percent, grains of heavy minerals; strongly acid.

TYPE LOCATION: Highlands County, Florida. Approximately 0.5 mile south of intersection of U.S. Highway 27 and S-17, about 0.15 mile west on paved road and about 400 feet south, southeast. NE 1/4, NW 1/4, Sec. 25, T. 36 S., R. 29 E.

RANGE IN CHARACTERISTICS: Astatula soils have less than 5 percent silt plus clay between 10 and 40 inches. Coarse, medium, or fine sand extends to depths of 80 inches or more. Reaction ranges from very strongly acid through slightly acid throughout, except where the surface has been limed.

The A horizon has hue of 10YR or 2.5Y, value of 3 through 7, and chroma of 1 or 2; or it is neutral with value of 5 or 6. Texture is sand or fine sand.

The AC horizon, where present, has hue 10YR, value of 5 to 8, chroma of 1 to 4. Texture is sand or fine sand.

The C horizons have hue of 5YR to 10YR, value of 5 through 8, chroma of 3 or 8. Streaks or splotches of sand in shades from white to gray range from none to common and are not indicative of wetness, but are colors of the sand grains. Texture is sand or fine sand.

COMPETING SERIES: These include the Archbold, Candler, Neilhurst, Palm Beach, St. Lucie, and Tavares in the same family. The well drained Archbold soils have a seasonal high water table 42 to 60 inches below the surface. Candler soils have lamellae within depths of 80 inches. Neilhurst soils formed in homogenous sandy spoil from mining operations and have low value colors in the C horizons. The well drained to excessively drained Palm Beach soils have chroma of 4 or less throughout and contain shell fragments in the control section. St. Lucie soils have value of 7 and 8 with chroma of 2 or less in the C horizon. The moderately well drained Tavares soils have zones of saturation between depths of 40 to 80 inches.

GEOGRAPHIC SETTING: Astatula soils are on uplands in the lower Coastal Plain. They formed in sandy marine, eolian or fluvial material more than 7 feet thick. Slopes range from 0 to 30 percent. The climate is humid semitropical. The average annual temperature ranges from 72 to 74 degrees F., and the average annual precipitation ranges from 50 to 54 inches.

GEOGRAPHICALLY ASSOCIATED SOILS: These include the competing Candler, St. Lucie, and Tavares soils and the Apopka, Lake, and Paola soils. The well drained Apopka soils have Bt horizons at depths of 40 to 80 inches. Lake soils have 5 to 10 percent silt plus clay between depths of 10 to 40 inches. Paola soils have an albic horizon underlain by another horizon having some spodic characteristics and has a color value at least one unit darker.

DRAINAGE AND PERMEABILITY: Excessively drained; rapid permeability. The zones of saturation are more than 60 inches below the surface.

USE AND VEGETATION: Used mainly for citrus, truck crops, and improved pasture. Natural vegetation consists of bluejack, blackjack, turkey oaks, longleaf pine, sand pine, and an understory of rosemary, pineland threeawn, bluestem, paspalum, lopsided indiagrass, and panicum.

DISTRIBUTION AND EXTENT: Peninsular Florida. The series is of large extent.

MLRA OFFICE RESPONSIBLE: Auburn, Alabama.

SERIES ESTABLISHED: Lake County, Florida; 1970.

LOCATION ARREDONDO
Established Series
Rev. AGH
09/1999

FL

ARREDONDO SERIES

The Arredondo series consists of well drained soils that are rapidly permeable in the thick sandy surface and subsurface layers and moderate to very slow in the subsoil. They formed from sandy and loamy marine sediments in central Florida on slopes ranging from 0 to 12 percent.

TAXONOMIC CLASS: Loamy, siliceous, semiactive, hyperthermic Grossarenic Paleudults

TYPICAL PEDON: Arredondo sand in improved pasture.
(Colors are for moist soil.)

Ap--0 to 7 inches; dark grayish brown (10YR 4/2) sand, weak fine granular structure; very friable; many fine and medium roots; strongly acid; abrupt smooth boundary. (3 to 10 inches thick)

E1--7 to 18 inches; mixed yellowish brown (10YR 5/4) and dark yellowish brown (10YR 4/4) sand; weak fine granular structure; very friable; common fine and medium roots; sand grains are coated; few fine carbon and rounded black particles; medium acid; clear wavy boundary.

E2--18 to 46 inches; yellowish brown (10YR 5/6) sand with few medium strong brown (7.5YR 5/6) mottles; and few fine white mottles and streaks of uncoated sand grains; weak fine granular structure; very friable; few fine and medium roots; sand grains are coated; few fine carbon and black rounded particles; strongly acid; gradual wavy boundary. (Combined thickness of the E horizon is 36 to 72 inches.)

EB--46 to 65 inches; strong brown (7.5YR 5/6) sand with few fine white mottles and streaks of uncoated sand grains, streaks 1/4 inch to 3 inches long; weak medium granular structure; friable; few fine and medium roots; sand grains are well coated; few fine carbon and rounded black particles; strongly acid; gradual wavy boundary. (0 to 20 inches thick)

Bt1--65 to 70 inches; strong brown (7.5YR 5/8) loamy sand with few fine white mottles and streaks of uncoated sand grains; moderate medium granular structure; friable; few fine and medium roots; sand grains are coated and bridged with clay; few fine rounded black particles; medium acid; gradual wavy boundary. (3 to 10 inches thick)

Bt2--70 to 90 inches; strong brown (7.5YR 5/6) fine sandy loam; moderate medium granular structure and weak medium subangular blocky structure; friable; few fine roots; sand grains are coated and bridged with clay; few fine rounded black particles; strongly acid.

TYPE LOCATION: Marion County, Florida; 1/2 mile west of junction of Interstate 75 and U. S. 27; 3/4 mile north on paved road; 1/4 mile east on graded road and 1/2 mile north in a pasture about 150 feet west Interstate 75. NE1/4SE1/4, sec. 34, T. 14 S., R. 21 E.

RANGE IN CHARACTERISTICS: Solum thickness exceeds 80 inches. Soil reaction is very strongly acid to medium acid throughout. Few small weathered nodules and fragments of limestone 2 to 20 mm in size and less than 5 percent of volume are in many pedons.

The A or Ap horizon has hue of 10YR, value of 3 to 5, and chroma of 1 or 2. Texture is sand, fine sand, loamy fine sand, or loamy sand.

The E horizon has hue of 10YR, value of 4 to 7, and chroma of 3 to 8; or hue of 7.5YR, value of 5 or 6, and chroma of 8. Texture is fine sand, sand, loamy sand, and loamy fine sand. This horizon contains 5 to 15 percent silt plus clay within a depth of 10 to 40 inches below the soil surface.

The EB horizon, where present, has hue of 10YR or 7.5YR, value of 5 or 6, and chroma of 4 to 8. Texture ranges from sand to loamy fine sand. There is a texture pickup or color from the overlying horizon.

The Bt1 horizon has hue of 10YR or 7.5YR, value of 4 or 6, and chroma of 4 to 8. Texture is loamy sand, loamy fine sand, fine sandy loam, or sandy loam. The Bt2 horizon has the same matrix colors as the Bt1 horizon. Texture ranges from sandy loam to sandy clay.

COMPETING SERIES: These are the Apopka, Millhopper, and Sparr series in the same family. Apopka soils have less than 5 percent silt plus clay between depths of 10 to 40 inches below the soil surface. Millhopper soils are moderately well drained, and Sparr soils are somewhat poorly drained.

GEOGRAPHIC SETTING: Arredondo soils are on nearly level to strongly sloping uplands in the Lower Coastal Plain. They formed in sandy and loamy marine deposits on the Ocala uplift. Near the type location, precipitation averages about 59 inches annually and mean annual temperature is about 72 degrees F.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the competing Apopka, Millhopper, and Sparr series and Blichton, Candler, Fort Meade, Gainesville, Kanapaha, Kendrick, Lake, and Micanopy series. Blichton and Kanapaha soils are poorly drained. Candler, Fort Meade, Gainesville, and Lake soils lack Bt horizons. Kendrick soils have Bt horizons above a depth of 40 inches. Micanopy soils are finer textured and somewhat poorly drained.

DRAINAGE AND PERMEABILITY: Well drained, slow runoff. Permeability is rapid in the sandy layer and moderate to very slow in the subsoil.

USE AND VEGETATION: Large areas are cleared. Citrus, peanuts, watermelons, corn, and improved pasture are the principal crops. Natural vegetation consists of slash, longleaf, and loblolly pines, magnolia; red, live, laurel and water oaks; hickory, sweetgum and dogwood.

DISTRIBUTION AND EXTENT: Along the Central Florida Ridge from Pasco County through Alachua County. The series is of moderate extent.

MLRA OFFICE RESPONSIBLE: Auburn, Alabama

SERIES ESTABLISHED: Alachua County, Florida; 1942.

LOCATION PAMLICO
Established Series
WLB-REH-RAG
07/1999

NC+AL FL MS SC VA

PAMLICO SERIES

The Pamlico series consists of very poorly drained soils that formed in decomposed organic material underlain by dominantly sandy sediment. The soils are on nearly level flood plains, bays, and depressions of the Coastal Plain. Slopes are less than 1 percent.

TAXONOMIC CLASS: Sandy or sandy-skeletal, siliceous, dysic, thermic Terric Haplosaprists

TYPICAL PEDON: Pamlico muck, undrained--forested. (Colors are for moist soil unless otherwise stated.)

Oi--0 to 3 inches; very dark brown (10YR 2/2) fibric material; 75 percent fiber content after rubbing; friable; fibers are of moss, leaves, twigs, and roots; extremely acid; gradual wavy boundary. (0 to 4 inches thick)

Oa1--3 to 14 inches; black (10YR 2/1) sapric material; 10 percent fiber; weak coarse granular structure; friable; slightly sticky; common roots; sodium pyrophosphate extract is yellowish brown (10YR 5/4); extremely acid; gradual wavy boundary.

Oa2--14 to 30 inches; very dark grayish brown (10YR 3/2) sapric material; 20 percent fiber; less than 10 percent rubbed; massive; friable; slightly sticky; few roots; sodium pyrophosphate extract is light yellowish brown (10YR 6/4); extremely acid; gradual wavy boundary. (combined thickness of Oa horizon is 16 to 51 inches)

Cg--30 to 60 inches; very dark grayish brown (10YR 3/2) loamy sand; single grained; loose; extremely acid.

TYPE LOCATION: Wayne County, North Carolina; 8 miles east of Mt. Olive on North Carolina Highway 55; 0.6 mile south of intersection with county road 1948; 100 feet northeast of bridge crossing northeast Cape Fear River.

RANGE IN CHARACTERISTICS: Pamlico soils have 16 to 51 inches of organic material over dominantly sandy sediments. Reaction is extremely acid (less than 4.5 in 0.01 M calcium chloride) in the organic layers, and ranges from extremely acid to strongly acid in the underlying mineral layers.

The Oi or Oe horizon has hue of 10YR, 7.5YR, or it is neutral, value of 2 or 3, chroma of 0 to 2.

The Oa horizon has hue of 10YR, 7.5YR, or it is neutral, value of 2 or 3, chroma of 0 to 2. Fiber content is 10 to 33 percent unrubbed and less than 10 percent after rubbing. Structure is coarse granular or massive.

The Cg horizon has hue of 7.5YR or 10YR or it is neutral, value of 2 to 6, chroma of 0 to 2. The weighted average of the upper 12 inches of the Cg horizon, or of the part of the Cg horizon that is within a depth of 51 inches, whichever is thicker, is sandy. Textures are typically sand, fine sand, loamy sand, or loamy fine sand, but may also be mucky analogs of the same fine earth textures in some pedons. In some pedons, thin subhorizons of the Cg within a depth of 51 inches are loamy. Textures are typically sandy loam, fine sandy loam, or sandy clay loam. Below a depth of 51 inches, texture is variable, typically ranging from sand to sandy clay loam.

COMPETING SERIES: There is no other known series in this family. Belhaven, Croatan, Currituck, Dare, Dorovan, Ponzer, and Scuppernong series are in closely related families. Belhaven, Ponzer, and Scuppernong soils have mixed mineralogy and are underlain by dominantly loamy mineral soil material. Croatan soils are underlain by dominantly loamy mineral material. Currituck soils are less acid and have mixed mineralogy. Dare and Dorovan soils have organic layers more than 51 inches thick.

GEOGRAPHIC SETTING: Pamlico soils occur in the flood plains of tributaries of major streams and on level to depressional surfaces of the coastal plain. These soils are formed in decomposed organic matter overlying dominantly sandy mineral sediments. The mean annual temperature is 63 degrees F. and the annual precipitation is 48 inches near the type location.

GEOGRAPHICALLY ASSOCIATED SOILS: These include the Dare and Dorovan of the competing series, and Bibb, Johnston, Portsmouth, Rutlege, and Torhunta series. Bibb, Johnston, Portsmouth, Rutlege, and Torhunta soils are mineral soils with loamy surface layers high in organic matter.

DRAINAGE AND PERMEABILITY: Very poorly drained; ponded or very slow runoff; flooding is rare to frequent; permeability is moderate to moderately rapid in the organic layers and slow to very rapid in the mineral layers.

USE AND VEGETATION: In the natural stage, practically all of these soils are used for woodland and wildlife. The native vegetation consists of pond pine, tupelo gum, sweetbay, gumtrees, cypress, greenbrier, wax myrtle bushes, with undergrowth of gallberry and cut bamboo briars. These soils are used for improved pasture, corn, soybeans, oats, truck crops, and other cultivated crops when drained.

DISTRIBUTION AND EXTENT: Lower Coastal Plain areas of Alabama, Florida, Mississippi, North Carolina, South Carolina, and Virginia. The series is moderately extensive.

MLRA OFFICE RESPONSIBLE: Raleigh, North Carolina

SERIES ESTABLISHED: Pamlico County, North Carolina; 1935.

REMARKS: Pamlico muck, as mapped in the past, included a very wide range of conditions. The concept expressed in this description is restricted in thickness, degree of decomposition and nature of underlying materials.

Diagnostic horizons and features recognized in the typical pedon are:

Organic materials (terric) - the zone from the surface to a depth of 30 inches (the Oi, Oa1, and Oa2 horizons)

Sandy particle-size class - mineral material within a depth of 51 inches that has weighted average of the sandy particle-size class in the upper 12 inches of the mineral material or within the control section (51 inches), whichever is thicker (the Cg horizon)

MLRA(S): 152A, 153A, 153B, 133A

SIR(S): NC0050, NC0154 (LOAMY SUBSTRATUM), NC0155 (PONDED),
NC0159 (FLOODED), NC0270 (PONDED, LOAMY SUBSTRATUM)
REVISED=6/10/96, MHC

LOCATION MARTEL
Established Series
Rev. BPT; GWH; GRB
10/2003

FL

MARTEL SERIES

The Martel series consists of very deep, very poorly drained, very slowly permeable soils in depressions and sloughs of central Florida. They formed in clayey marine sediments. Near the type location the mean annual temperature is about 72 degrees F., and the mean annual precipitation is about 59 inches. Slopes range from 0 to 1 percent.

TAXONOMIC CLASS: Fine, smectitic, hyperthermic Umbric Endoaqualfs

TYPICAL PEDON: Martel sandy clay loam--forested.

A1--0 to 14 inches; black (10YR 2/1) sandy clay loam; moderate medium granular structure; friable; common fine and medium roots; very strongly acid; clear wavy boundary.

A2--14 to 19 inches; very dark gray (10YR 3/1) sandy clay loam; moderate medium granular structure; friable; few fine roots, few medium faint dark gray (10YR 4/1) and few fine distinct light yellowish brown (10YR 6/4) organic matter depletions; very strongly acid; clear wavy boundary. (Combined thickness of the A horizons range from 10 to 20 inches)

Btg1--19 to 36 inches; dark gray (10YR 4/1); sandy clay; moderate medium subangular blocky structure; firm; sticky, plastic; few fine and medium roots; few faint clay films on faces of peds; few fine prominent yellowish red (5YR 5/6) and strong brown (7.5YR 5/6) masses of iron accumulation; very strongly acid; gradual wavy boundary.

Btg2--36 to 57 inches; dark gray (10YR 4/1) clay; moderate medium subangular and angular blocky structure; very firm; sticky, plastic; few faint clay films on faces of peds; few fine prominent yellowish red (5YR 5/6) and strong brown (7.5YR 5/6) masses of iron accumulation; very strongly acid; clear wavy boundary. (Combined thickness of the Btg horizons range from 30 to 76 inches).

Cg--57 to 72 inches; gray (10YR 5/1) sandy clay; massive; very firm, sticky, plastic; few medium prominent yellowish red (5YR 5/6) and few fine distinct brownish yellow (10YR 6/6) masses of iron accumulation; very strongly acid.

TYPE LOCATION: Marion County, Florida; approximately 0.5 mile north of S.R. 316; NW 1/4, NW 1/4, Sec. 16, T. 13 S., R. 23 E.

RANGE IN CHARACTERISTICS: Solum thickness ranges from 40 to 72 inches. Clay content of the control section ranges from 35 to 55 percent. Reaction is very strongly acid or strongly acid throughout.

The A horizon has hue of 10YR or 2.5Y, value of 2 or 3, and chroma of 2 or less. Texture is sandy loam, fine sandy loam, or sandy clay loam.

The Btg horizon has hue of 10YR or 2.5Y, value of 4 to 6, and chroma of 2 or less. Texture is sandy clay or clay.

The BCg horizon, where present, has the same range of colors and textures as the Btg horizon.

The Cg horizon has hue of 10YR or 2.5Y, value of 5 to 7, and chroma of 2 or less. Texture is sandy clay loam, sandy clay, or clay.

COMPETING SERIES: The Fellowship series is the only known series in the same family. The very poorly and poorly drained Fellowship soils are on similar to higher positions and have more than 5 percent, by volume, coarse fragments in the profile.

GEOGRAPHIC SETTING: Martel soils are in depressions and sloughs of central Peninsular Florida. Slopes are 1 percent or less. They formed in clayey marine sediments. The climate is humid semitropical. The average annual precipitation ranges from 54 to 64 inches and the average annual temperature ranges from 71 to 73 degrees F.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the Bluff, Eaton, Emeralda, Eureka, and Paisley soils. Bluff soils are on similar positions, have less clay in the control section, have Calcic horizons, and are Mollisols. The very poorly and poorly drained Eaton soils are on similar to higher positions, have sandy surface and subsurface layers 20 to 40 inches in thickness, do not have an umbric epipedon, and have an albic horizon. The poorly drained Emeraldal, Eureka, and Paisley soils are on slightly higher positions and do not have umbric epipedons. In addition, Emeraldal soils have Mollic epipedons, while Eureka and Paisley soils have albic horizons and mixed mineralogy in the control section.

DRAINAGE AND PERMEABILITY: Very poorly drained; very slow permeability.

USE AND VEGETATION: Most areas remain in native vegetation and are used for wildlife habitat. The native vegetation is dominated by cypress, sweetgum, pond pine, and water tupelo.

DISTRIBUTION AND EXTENT: Central Peninsular Florida. The series is of moderate extent.

MLRA OFFICE RESPONSIBLE: Auburn, Alabama.

SERIES ESTABLISHED: Marion County, Florida, 1974.

REMARKS: Diagnostic horizons and features recognized in this pedon:

Umbric epipedon - the zone from 0 to 19 inches (A1 and A2 horizons).

Argillic horizon - the zone from 19 to 57 inches (Btg1 and Btg2 horizons).

The water table is at or above the surface for much of the year.

LOCATION FELLOWSHIP
Established Series
Rev.BPT/GWH
03/2000

FL

FELLOWSHIP SERIES

The Fellowship series consists of poorly drained and very poorly drained soils that are more than 80 inches thick. Fellowship soils formed in clayey marine sediments. They are on uplands of Peninsular Florida.

TAXONOMIC CLASS: Fine, smectitic, hyperthermic Umbric Endoaqualfs

TYPICAL PEDON: Fellowship gravelly loamy fine sand - forested.

A1--0 to 11 inches; black (N 2/0) gravelly loamy fine sand; moderate medium and coarse granular structure; very friable; common fine and medium roots; about 15 percent by volume of quartz gravel; strongly acid; clear wavy boundary.

A2--11 to 18 inches; dark gray (10YR 4/1) sandy loam; weak medium granular and subangular blocky structure; very friable; few fine and medium roots; about 6 percent by volume of quartz gravel; very strongly acid; clear wavy boundary. (The A horizon is 10 to 20 inches thick)

Btg1--18 to 25 inches; gray (N 5/0) gravelly sandy clay loam, common fine distinct yellowish brown (10YR 5/8) mottles; moderate medium subangular blocky structure; hard, firm, slightly sticky, plastic; few fine roots; patchy clay films on ped faces; about 15 percent by volume of ironstone pebbles; very strongly acid; gradual wavy boundary.

Btg2--25 to 32 inches; gray (N 5/0) sandy clay, common fine distinct yellowish brown mottles; moderate medium angular and subangular blocky structure; hard, firm, plastic, sticky; few fine roots; clay films on ped faces; about 11 percent by volume of ironstone pebbles; strongly acid; clear wavy boundary.

Btg3--32 to 42 inches; gray (N 6/0) clay, common medium prominent strong brown (7.5YR 5/8) and yellowish red (5YR 4/6) mottles; moderate medium angular and subangular blocky structure; hard, firm, very sticky, very plastic; very few fine and medium roots; clay films or pressure faces on peds; few slickensides; few fine pebbles; strongly acid; clear irregular boundary. (Combined thickness of the Btg horizon is 30 to 50 inches)

Cg1--42 to 62 inches; light gray (10YR 7/1) clay, common fine faint pale yellow mottles; massive; hard, very firm, very sticky, very plastic; few partially decayed roots; common slickensides; strongly acid; gradual wavy boundary.

Cg2--62 to 83 inches; light greenish gray (5GY 7/1) clay, common fine distinct yellowish brown mottles; massive; firm, very sticky, very plastic; strongly acid. (The C horizon extends to a depth of 80 inches or more)

TYPE LOCATION: Marion County, Florida; 1.7 miles north of Flemington on State Road 321 and 0.1 mile east of Cross Roads on graded road and 200 feet south; NW1/4NW1/4 sec. 22, R. 20 E., T. 12 S.

RANGE IN CHARACTERISTICS: Solum thickness is 40 to 70 inches. Reaction ranges from very strongly acid to slightly acid. Coarse fragments are quartz, ironstone, or phosphatic pebbles.

The A horizon has hue of 10YR to 5Y, value of 2 or 3, and chroma of 2 or less; below a depth of about 10 inches the range includes a value of 4. Texture is loamy sand, loamy fine sand, sandy loam, gravelly loamy sand, gravelly loamy fine sand, or gravelly sandy loam with 5 to 25 percent fragments 2 to 75 mm in size and less than 10 percent fragments greater than 75 mm in size.

The Btg horizon has hue of 10YR to 5Y, value of 4 to 7, and chroma of 2 or less. The upper part of the Btg has a texture of sandy clay loam, sandy clay, gravelly sandy clay loam, or gravelly sandy clay with 5 to 20 percent fragment 2 to 75 mm in size and less than 10 percent fragments greater than 75 mm in size. The lower part of the Btg horizon has a texture of sandy clay or clay with less than 15 percent coarse fragments. The control section has 35 to 45 percent clay and less than 20 percent silt.

The Cg horizon has hue of 10YR to 5GY, value of 5 to 7, and chroma of 2 or less. Texture is clay with more than 50 percent clay. COLE is more than 0.09.

COMPETING SERIES: These include the Martel series in the same family. Martel soils have less than 5 percent fragments. Competing series in similar families include the Bluff, Flemington, Paisley, and Popash series. Bluff soils have a mollic epipedon. Flemington and Paisley soils do not have an umbric epipedon. Popash soils have a loamy Bt.

GEOGRAPHIC SETTING: Fellowship soils are on uplands and depressions of the Central Florida Ridge of Peninsular Florida. Average annual precipitation is 59 inches; average annual temperature is about 72 degrees F.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the Blichton, Gainesville, Hague, Kanapaha, Micanopy, and Zuber soils. Blichton, Kanapaha and Micanopy soils are on slightly higher landforms and lack an umbric epipedon. Gainesville, Hague, and Zuber soils are on significantly higher landforms and are well drained.

DRAINAGE AND PERMEABILITY: Poorly drained on uplands with a seasonally high water table of 0.5 to 1.5 for 1 to 4 months in most years and very poorly drained in depressions with a water table at or above the surface for much of the year. Permeability is very slow.

USE AND VEGETATION: Most areas are in native vegetation of sweetgum, slash pine, hickory, magnolia, water oak, red maple, and Carolina ash. Depressional areas also have cypress. Some areas are utilized for pasture.

DISTRIBUTION AND EXTENT: Central Florida Ridge of Peninsular Florida. The series is of moderate extent.

MLRA OFFICE RESPONSIBLE: Auburn, Alabama

SERIES ESTABLISHED: Ocala area, Marion County, Florida; 1912.

LOCATION BLICHTON
Established Series
Rev. AGH; GRB
08/2003

FL

BLICHTON SERIES

The Blichton series consists of very deep, very poorly drained, moderately slow or slowly permeable soils on uplands in central Florida. They formed in thick beds of loamy and sandy marine sediments. Near the type location, the mean annual temperature is about 72 degrees F., and the mean annual precipitation is about 55 inches. Slopes range from 0 to 8 percent.

TAXONOMIC CLASS: Loamy, siliceous, semiactive, hyperthermic Arenic Plinthic Paleaquults

TYPICAL PEDON: Blichton sand--pasture. (Colors are for moist soil.)

Ap--0 to 5 inches; very dark gray (N 3/0) sand; weak medium granular structure; very friable; common fine and medium roots; few pebbles of ironstone and weathered phosphatic nodules; moderately acid; abrupt wavy boundary. (4 to 10 inches thick)

E--5 to 26 inches; gray (10YR 6/1) sand; single grained; loose; common fine and medium roots; common ironstone pebbles and weathered phosphatic nodules; few fine distinct very pale brown (10YR 7/3) streaks and few coarse faint light gray (10YR 7/1) areas of iron depletions along root channels; moderately acid; clear wavy boundary. (16 to 30 inches thick)

BEg--26 to 30 inches; gray (10YR 5/1) sandy loam; moderate medium and coarse granular structure; friable; common fine and medium roots; few fine sand bodies; common ironstone pebbles and weathered phosphatic nodules; strongly acid; clear wavy boundary. (0 to 6 inches thick)

Btvg1--30 to 45 inches; dark gray (N 4/0) sandy clay loam; moderate medium angular and subangular blocky structure; friable; few fine and medium roots; common faint discontinuous clay films on faces of peds; about 12 percent, by volume, plinthite nodules; few ironstone pebbles and weathered phosphatic nodules; few rod-shaped siliceous bodies about 0.25 inch in diameter and 1 to 2 inches in length; common coarse prominent red (2.5YR 4/8) and yellowish red (5YR 5/8) masses of iron accumulation; very strongly acid; gradual wavy boundary.

Btvg2--45 to 65 inches; dark gray (N 4/0) sandy clay loam; gray (N 5/0) crushed; moderate medium angular blocky structure; friable; few fine and medium roots; common distinct clay films on faces of peds; about 10 percent, by volume, plinthite nodules; common medium ironstone pebbles; common medium distinct yellowish red (5YR 4/6) masses of iron accumulation and few fine distinct light gray (10YR 7/1) areas of iron depletions; very strongly acid; gradual wavy boundary. (Combined thickness of the Btvg horizon ranges from 28 to 44 inches)

BCg--65 to 77 inches; gray (5Y 5/1) sandy clay loam; weak subangular blocky structure; friable; very strongly acid; few medium light gray (10YR 7/1) lenses of sandy loam; common fine distinct very pale brown (10YR 7/3) and common fine prominent yellowish red (5YR 4/6) masses of iron accumulation; gradual wavy boundary. (10 to 14 inches thick)

Cg--77 to 81 inches; gray (N 5/0) stratified sandy loam, loamy sand, and sandy clay loam; massive; friable; common medium to coarse yellowish brown (10YR 5/6) and common medium prominent yellowish red (5YR 5/6) masses of iron accumulation; very strongly acid.

TYPE LOCATION: Marion County, Florida; approximately 2.5 miles southwest of Ocala, about 0.9 miles west northwest of the intersection of Buffington Road and SR 475. SW 1/4, NE 1/4, Sec. 38; R. 22 E., T. 15 S. Cataline De Jesus Hijuelos Grant.

RANGE IN CHARACTERISTICS: Solum thickness is more than 60 inches. Reaction ranges from extremely acid to moderately acid in the A and E horizons and from extremely acid to strongly acid in the Bt, Btv, BC, and C horizons.

The A or Ap horizon has hue of 10YR or 2.5Y, value of 3 or 4, and chroma of 1 or 2; or it is neutral with value of 3 or 4. Pebbles of ironstone range from few to common. Texture is sand, fine sand, loamy sand, or loamy fine sand.

The E horizon has hue of 10YR, value of 5 to 7, and chroma of 1 or 2; or it is neutral with value of 5 or 6. Redoximorphic features in shades of yellow, brown, or gray range from none to common. Pebbles of ironstone range from few to common. Texture is sand, fine sand, loamy sand, or loamy fine sand.

The BE horizon, where present, has hue of 10YR, value of 4 to 7, and chroma of 1 or 2; or is neutral with value of 4 to 6. Masses of iron accumulation in shades of yellow, brown, and red range from none to common. Pebbles of ironstone range from none to common. Texture is sandy loam or fine sandy loam.

The Bt horizon, where present, has hue of 10YR, value of 4 to 7, and chroma of 1 or 2; or is neutral with value of 4 to 6. Redoximorphic features in shades of yellow, brown, red, or gray range from none to common. Content of plinthite ranges from 0 to 4 percent, by volume. Pebbles of ironstone range from none to common. Texture is sandy loam or sandy clay loam.

The Btv horizon has hue of 10YR, value of 4 to 7, and chroma of 1 or 2; or is neutral with value of 4 to 6. Redoximorphic features in shades of yellow, brown, red, or gray range from none to common. Content of plinthite ranges from 5 to 25 percent, by volume, at depths of 30 to 48 inches below the soil surface. Texture is sandy loam, sandy clay loam, or sandy clay.

The BC horizon has hue of 10YR to 5Y, value of 5 to 7, and chroma of 2 or less. Redoximorphic features in shades of yellow, brown, red, or gray range from none to common. Texture is sandy loam or sandy clay loam with lenses of coarser textured material.

The C horizon, where present, has the same range of colors and redoximorphic features as the BC horizon. Fragments of siliceous rock or leached phosphatic rock 2 to 76 mm in size is in some pedons, but comprise less than 5 percent by volume. Texture is stratified loamy sand, sandy loam, and sandy clay loam. Some pedons have textures of a sandy clay or clay.

COMPETING SERIES: There is no known series in the same family.

GEOGRAPHIC SETTING: Blichton soils are on uplands of the Coastal Plain. Slopes range from 0 to 8 percent. They formed in thick beds of loamy marine sediments. The climate is humid subtropical. The mean annual precipitation range from 50 to 60 inches and the average annual temperature ranges from 70 to 74 degrees F.

GEOGRAPHICALLY ASSOCIATED SOILS: These include the Bivans, Boardman, Flemington, Kanapaha, Kendrick, Lochloosa, Martel, Micanopy, Nobleton, and Wacahoota series. Bivans, Boardman, and Flemington have less than 20 inches of sandy surface and subsurface layers. In addition, Bivans and Flemington soils are on similar positions and have smectitic control sections, and Boardman soils are on similar to lower positions. Kanapaha soils are on similar positions and have sandy surface and subsurface layers 40 to 80 inches in thickness. The well drained Kendrick soils are on similar to higher positions and have less than 5 percent, by volume, plinthite in the subsoil. The somewhat poorly drained Lochloosa and Nobleton soils are on similar to higher positions and contain less than 5 percent, by volume, plinthite in the subsoil. The very poorly drained Martel soils are on lower positions, have smectitic subsoils, and have less than 20 inches of sandy surface and subsurface horizons. The somewhat poorly drained Micanopy soils are on similar to higher positions, have mixed mineralogy clayey subsoils, and have less than 20 inches of sandy surface and subsurface horizons. In addition, Nobleton soils have clayey mixed control sections. Wacahoota soils are on similar to lower positions and have less than 5 percent, by volume, plinthite in the subsoil and have 15 to 35 percent gravel, by volume in the control section.

DRAINAGE AND PERMEABILITY: Poorly drained; moderately slow to slow permeability.

USE AND VEGETATION: Most of this soil is in forest. Many areas have been cleared and are used for improved pasture with small areas being used for growing watermelons, peanuts, corn, tomatoes, oranges, and grapefruit. The native vegetation consists of sweetgum, magnolia, hickory, live oak, laurel oak, red maple, dogwood, pineland threeawn, slash pine, longleaf pine, and loblolly pine.

DISTRIBUTION AND EXTENT: Peninsular Florida. The series is of moderate extent.

MLRA OFFICE RESPONSIBLE: Auburn, Alabama.

SERIES ESTABLISHED: Hillsborough County, Florida; 1961.

REMARKS: Diagnostic horizons and features recognized in this pedon:

Ochric epipedon - the zone from 0 to 26 inches (Ap and E horizons).

Argillic horizon - the zone from 26 to 77 inches (Beg, Btvg1, Btvg2, BCg horizons).

Plinthic feature - the zone from 30 inches to 65 inches (Btvg1 and Btvg2 horizons).

The water table is perched in and above the loamy subsoil during wet periods.

In undrained areas, these soils have a water table at depths of less than 10 inches for cumulative periods of 1 to 4 months during most years. In the drier season it recedes to depths of more than 40 inches. Soils that have more than 2 percent slopes are saturated during wet seasons due primarily to seepage.

LOCATION TAVARES
Established Series
Rev. ALF; AGH; GRB
01/2004

FL

TAVARES SERIES

The Tavares series consists of very deep, moderately well drained, rapidly or very rapidly permeable soils on lower slopes of hills and knolls of the lower Coastal Plain. They formed in sandy marine or eolian deposits. Near the type location, the mean annual temperature is about 72 degrees F., and the mean annual precipitation is about 55 inches. Slopes range from 0 to 8 percent.

TAXONOMIC CLASS: Hyperthermic, uncoated Typic Quartzipsamments

TYPICAL PEDON: Tavares sand--cultivated. (Colors are for moist soil.)

Ap--0 to 7 inches; very dark grayish brown (10YR 3/2) sand; weak fine granular structure; very friable; many fine and medium roots; common uncoated light gray (10YR 7/1) sand grains; strongly acid; abrupt wavy boundary. (3 to 9 inches thick)

C1--7 to 25 inches; very pale brown (10YR 7/3) sand; single grained; loose; common fine roots; common very fine carbon particles; many uncoated sand grains; few fine faint yellowish brown (10YR 5/6) splotches; strongly acid; gradual wavy boundary.

C2--25 to 34 inches; light yellowish brown (10YR 6/4) sand; single grained; loose; few fine roots; many uncoated sand grains; strongly acid; gradual wavy boundary.

C3--34 to 61 inches; very pale brown (10YR 7/3) sand; single grained; loose; many uncoated sand grains; few medium faint yellow (10YR 7/6) masses of accumulation; strongly acid; clear wavy boundary.

C4--61 to 99 inches; very pale brown (10YR 8/2) sand; single grained; loose; many uncoated sand grains; common medium faint very pale brown (10YR 7/3) masses of accumulation; strongly acid.

TYPE LOCATION: Lake County, Florida; on State Highway 448, Lake Jem Road, about 1.0 mile west of Apopka Canal and just south of the highway in the NW 1/4, NE 1/4, Sec. 15, T. 20 S., R. 26 E.

RANGE IN CHARACTERISTICS: Soil reaction ranges from extremely acid to moderately acid in the A horizon and extremely acid to slightly acid in the C horizon. The amount of silt plus clay totals 5 percent or less between depths of 10 and 40 inches. Bouldery and cemented phases are recognized.

The A or Ap horizon has hue of 10YR or 2.5Y, value of 2 to 5, and chroma of 1 or 2. Where value is three or less, it is less than 8 inches in thickness. Texture is sand or fine sand.

The upper part of the C horizon has hue of 10YR, value of 5 to 8, and chroma of 3 to 8. Texture is sand or fine sand.

The lower part of the C horizon has hue of 10YR, value of 6 to 8, and chroma of 1 to 4. Redoximorphic accumulations in shades of brown, yellow, or red range from few to many. In some pedons, large splotches or areas with chromas 2 or less are within depths of 40 inches, but these are colors of the sand grains and are not interpreted as evidence of wetness. Texture is sand or fine sand.

COMPETING SERIES: These include the Archbold, Astatula, Neilhurst, Palm Beach, and St. Lucie soils in the same family. The well drained Archbold soils are on higher positions. The excessively drained Astatula and St. Lucie soils are on higher positions. The well drained to excessively drained Neilhurst soils are on similar to higher

positions and formed in spoil from mining operations. The well drained to excessively drained Palm Beach soils are on dunes parallel to the coast.

GEOGRAPHIC SETTING: Tavares soils are on the lower slopes of hills and knolls. Slopes range from 0 to 8 percent. They formed in thick beds of sandy marine or eolian deposits. The climate is humid subtropical. The average annual precipitation ranges from 50 to 60 inches and the average annual temperature ranges from 70 to 74 degrees F.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the competing Astatula and St. Lucie series and the Adamsville, Apopka, Immokalee, Lake, Myakka, Orlando, Placid, Pompano, Satellite, and Sellers series. The somewhat poorly drained Adamsville and Satellite soils are on lower positions. The well drained Apopka soils are on higher positions, have sandy surface and subsurface horizons 40 to 80 inches in thickness, and are underlain by argillic horizons. The poorly and very poorly drained Immokalee and Myakka soils are on lower positions and are Spodosols. The excessively drained Lake soils are on higher positions and have more than 5 percent silt plus clay between 10 and 40 inches. The well drained Orlando soils are on higher positions and have umbric epipedons. The very poorly drained Placid and Sellers soils are on lower positions and have umbric epipedons. The very poorly drained Pompano soils are on lower positions.

DRAINAGE AND PERMEABILITY: Moderately well drained; rapid or very rapid permeability. Cemented substratum phases have slow permeability in the lower substratum.

USE AND VEGETATION: Most areas of Tavares soils are used for citrus. A few areas are used for corn, vegetable crops, watermelons, and improved pasture. In most places the natural vegetation consists of slash pine, longleaf pine, a few scattered blackjack oak, turkey oak, and post oak with an undercover of pineland threeawn. In some places natural vegetation consists of turkey oak, blackjack oak, and post oak with scattered slash pine and longleaf pine.

DISTRIBUTION AND EXTENT: Peninsular Florida. The series is of large extent.

MLRA OFFICE RESPONSIBLE: Auburn, Alabama.

SERIES ESTABLISHED: Lake County, Florida; 1970.

REMARKS: Diagnostic horizons and features recognized in this pedon:

Ochric epipedon - the zone from the surface to a depth of 7 inches (Ap horizon)

Tavares soils were formerly mapped as a low phase of the Blanton series.

A water table is between depths of 40 and 80 inches for more than 6 months during most years but recedes to depths greater than 80 inches during periods of drought.

LOCATION FLEMINGTON

FL

Established Series

Rev. JFB

02/97

FLEMINGTON SERIES

The Flemington series consists of poorly drained, very slowly permeable soils formed in thick beds of clayey marine sediments on nearly level to strongly sloping areas in the Coastal Plain. The soil is saturated in summer and early in the fall. Water runs off the surface moderately to rapidly. Slope ranges from 0 to 12 percent.

TAXONOMIC CLASS: Very-fine, smectitic, hyperthermic Typic Albaqualfs

TYPICAL PEDON: Flemington loamy sand--forested.

(Colors are for moist soil unless otherwise stated.)

A1--0 to 5 inches; very dark gray (N 3/) loamy sand; moderate medium granular structure; friable; many fine and medium roots; strongly acid; gradual and wavy boundary. (4 to 6 inches thick)

A2--5 to 9 inches; gray (N 5/) loamy sand; weak medium granular structure; very friable; many fine and medium roots; strongly acid; abrupt wavy boundary. (0 to 10 inches thick)

B21tg--9 to 27 inches; dark gray (N 4/) clay; common fine distinct strong brown (7.5YR 5/6) mottles; moderate medium subangular blocky structure; firm, sticky and plastic; hard; thin distinct clay films on faces of peds; few slickensides along structure breaks; few fine and medium roots; few root channels; strongly acid; gradual wavy boundary. (17 to 24 inches thick)

B22tg--27 to 41 inches; gray (N 5/) clay; common fine distinct strong brown (7.5YR 5/6) mottles; moderate medium angular and subangular blocky structure; firm, sticky and plastic; thin, distinct clay films on faces of peds; few slickensides; few roots in upper part and very few in lower part; strongly acid; gradual irregular boundary. (14 to 30 inches thick)

B23tg--41 to 53 inches; gray (N 5/) clay; common fine and medium faint light gray (10YR 7/1) and few medium prominent strong brown (7.5YR 5/8) mottles; massive; some moderate subangular blocky structure; firm, sticky and plastic; hard; few discontinuous distinct clay films along structure breaks; few small quartz pebbles; very few fine roots; very strongly acid; gradual irregular boundary. (12 to 16 inches thick)

Cg--53 to 75 inches; light gray (5YR 7/1) clay; common medium prominent strong brown (7.5YR 5/6) and dark brown (7.5YR 4/4) mottles; few coarse mottles and firm concretions of red (2.5YR 4/8); massive; firm, sticky and plastic; occasional fine roots; extremely acid.

TYPE LOCATION: Marion County, Florida; about 2.25 miles northwest of intersection of U. S. Highway 27 and State Highway 326 on U. S. Highway 27 and 400 feet north. SW1/4NE1/4 sec. 36, T. 13 S., R. 19 E.

RANGE IN CHARACTERISTICS: Solum thickness is 50 or more inches.

It ranges from medium acid to extremely acid in the A horizon and from strongly acid to extremely acid in the Bt

horizon and the C horizon. Rock fragments and pebbles, 2 to 76 mm in size, range from about 0 to 5 percent in the solum.

The A1 or Ap horizon has hue of 10YR or N, value 2 to 4, chroma 1 or less. Where present the A2 horizon has hue of 10YR or N, value 5 to 7, chroma 2 or less. The A horizon is loamy sand, loamy fine sand, fine sandy loam, or sandy loam.

A B1 horizon occurs in some pedons. It has hue of 10YR, value 4 to 6, chroma 1 or less. It is sandy loam or sandy clay loam and 0 to 3 inches thick.

The Btg horizon has hue of 10YR or N, value 4 to 7, chroma 2 or less. It is sandy clay or clay. It contains few to common brown, yellow, or red mottles. Weighted average clay content in the upper 20 inches of the Bt horizon ranges from about 60 to 80 percent; silt content is less than 20 percent. Content of plinthite ranges from 0 to 5 percent in the subhorizon.

The C horizon has hue of 10YR or 5Y, value 6 or 7, chroma 1 or 2; or hue of 5GY, value 6 or 7, chroma 1. It is sandy clay or clay.

COMPETING SERIES: There are no competing series in the same family. Other closely related competing series are the Emeralda, Eureka, Fellowship, Paisley, and Telferner series. Emeraldal and Eureka soils have mixed mineralogy and are in a fine family. In addition, Emeraldal soils have an A1 or Ap horizon 6 to 10 inches thick with color values less than 4. Fellowship soils have an umbric epipedon and are in a fine family. Paisley and Telferner soils are in a fine family and are less acid in the argillic horizon.

GEOGRAPHIC SETTING: Flemington soils occur on nearly level to strongly sloping areas in the Coastal Plain. Slope gradients range from 0 to 12 percent. These soils formed in thick beds of fine textured marine sediments. The climate is humid and warm with average annual precipitation about 59 inches and mean annual air temperature about 72 degrees F., near the type location.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the competing Fellowship series and Blichton, Boardman, Kanapaha, Micanopy, and Zuber series. Blichton and Kanapaha soils have an A horizon more than 20 inches thick and sandy clay loam argillic horizons. Boardman soils are in a fine loamy family and have 5 to 25 percent coarse fragments. Micanopy and Zuber soils have chroma of 4 or more in the argillic horizon and are better drained.

DRAINAGE AND PERMEABILITY: Poorly drained; medium to rapid runoff; very slow permeability. The water table is perched in the A horizons and the upper Bt horizons are saturated for 1 to 4 months during wet seasons. On the slopes, the soils are affected by seepage water. These soils are not flooded.

USE AND VEGETATION: A few areas of these soils are cleared and used for special crops such as tomatoes, cabbage, and watermelons and improved pasture. Most of the acreage of this soil remains in woodland. Natural vegetation consists of loblolly, longleaf, and slash pine, hickory, magnolia, laurel, and water oak, sweetgum, maple, dogwood, and redbud.

DISTRIBUTION AND EXTENT: Peninsular Florida, primarily on the Ocala Uplift. The series is moderately extensive.

MLRA OFFICE RESPONSIBLE: Auburn, Alabama

SERIES ESTABLISHED: Marion County, Florida; 1974.

REMARKS: Flemington soils were formerly included in the Blichton series and classified in the Low-Humic Gley great soil group. Mineralogy is estimated.

National Cooperative Soil Survey
U. S. A.

LOCATION BOARDMAN
Established Series
Rev. BPT; AGH; GRB
10/2003

FL

BOARDMAN SERIES

The Boardman series consists of very deep, poorly drained, slowly permeable soils on upland side slopes in central Florida. They formed in sandy and clayey deposits. Near the type location, the mean annual temperature is about 72 degrees F., and the mean annual precipitation is about 59 inches. Slopes range from 5 to 20 percent.

TAXONOMIC CLASS: Fine-loamy, siliceous, active, hyperthermic Typic Endoaqualfs

TYPICAL PEDON: Boardman loamy sand--improved pasture.

Ap--0 to 5 inches; very dark gray (N 3/0) loamy sand; moderate medium granular structure; very friable; common fine roots; about 11 percent, by volume, weathered phosphatic limestone pebbles; moderately acid; clear wavy boundary. (4 to 6 inches thick)

E--5 to 16 inches; gray (10YR 5/1) gravelly loamy sand; moderate medium granular structure; very friable; few fine roots; about 25 percent, by volume, weathered phosphatic limestone pebbles; moderately acid; gradual wavy boundary. (8 to 14 inches thick)

Btg1--16 to 22 inches; gray (10YR 5/1) gravelly sandy loam; weak fine subangular blocky structure; friable; few fine roots; few faint clay films on faces of peds; about 17 percent, by volume, weathered phosphatic limestone pebbles; strongly acid; clear wavy boundary.

Btg2--22 to 34 inches; gray (10YR 5/1) sandy clay loam; moderate medium subangular blocky structure; firm; few fine roots; few faint clay films on faces of peds; about 6 percent, by volume, weathered phosphatic limestone pebbles; few fine distinct very pale brown (10YR 7/3) masses of iron accumulation; very strongly acid; clear wavy boundary.

Btg3--34 to 45 inches; gray (10YR 5/1) sandy clay; moderate medium subangular blocky structure; firm; few fine roots; common faint clay films on faces of peds; about 5 percent, by volume, weathered phosphatic limestone pebbles; few fine and medium distinct white (10YR 8/1) calcareous nodules; few fine distinct very pale brown (10YR 7/3) masses of iron accumulation; very strongly acid; clear wavy boundary. (Combined thickness of the Btg horizons range from 26 to 40 inches)

BCg--45 to 56 inches; gray (N 6/0) sandy clay; weak fine subangular blocky structure; firm; few fine soft white (10YR 8/1) calcareous nodules about 2 mm in size; few medium distinct very pale brown (10YR 7/3) masses of iron accumulation and common medium faint light gray (10YR 7/1) areas of iron depletions; very strongly acid; clear wavy boundary. (10 to 16 inches thick)

2Cg--56 to 68 inches plus; gray (10YR 6/1) clay; massive; very firm; few fine white (10YR 8/1) soft and hard limestone nodules 2 to 8 mm in size; few fine weathered phosphatic pebbles; few fine and medium distinct pale olive (5Y 6/3) masses of iron accumulation and few medium distinct greenish gray (5GY 6/1) areas of iron depletions; very strongly acid.

TYPE LOCATION: Marion County, Florida. Approximately 0.75 mile west of the intersection of Interstate Highway 75 and Dungarvin Road, and about 500 feet south of Dungarvin Road. NE 1/4, SE 1/4, Sec. 23, T. 12 S., R. 20 E.

RANGE IN CHARACTERISTICS: Solum thickness ranges from 50 to 74 inches in depth. The content of weathered rock fragments or pebbles, 2 to 76 mm in size, range from 5 to 25 percent, by volume, in the A, E, and Btg horizons. Below these horizons, the content of rock fragments or pebbles range from 0 to 15 percent, by volume. Reaction is very strongly acid or strongly acid throughout except where the surface has been limed.

The A or Ap horizon has hue of 10YR, value of 3 or 4, and chroma of 1 or 2; or it is neutral with value of 3 or 4. Texture is sand, fine sand, loamy sand, loamy fine sand, or their gravelly analogs.

The E horizon has hue of 10YR, value of 5 to 7, and chroma of 1 or 2; or it is neutral with value of 5 or 6. Texture is sand, fine sand, loamy sand, loamy fine sand, or their gravelly analogs.

The upper part of the Btg horizon has hue of 10YR, value of 4 to 6, and chroma of 1; or is neutral with value of 4 to 6. Texture is loamy sand, loamy fine sand, sandy loam, or their gravelly analogs.

The lower part of the Btg horizon has the same range of colors as the upper part. Redoximorphic features in shades of gray, yellow, white, or brown range from few to many. Texture is sandy clay loam, sandy clay, or their gravelly analogs.

The BC horizon has hue of 10YR, value of 4 to 7, and chroma of 1 or 2; or is neutral with value of 5 to 7. Redoximorphic features in shades of yellow, brown, or gray range from few to many. Texture is sandy clay or clay.

The 2Cg horizon has hue of 10YR to 5GY, value of 5 to 7, and chroma of 1 or less; or there is no dominant color and it is mixed in shades of gray, brown, or yellow. Texture is sandy clay or clay.

COMPETING SERIES: There are no known series in the same family. The Tusawilla series is in a closely related family. The very poorly drained and poorly drained Tusawilla soils are superactive and have Calcic horizons.

GEOGRAPHIC SETTING: Boardman soils are on upland side slopes of the Coastal Plain. Slopes range from 5 to 20 percent. They formed in sandy and clayey marine sediments. The climate is humid subtropical. The average annual precipitation ranges from 54 to 64 inches and average annual temperature ranges from 70 to 74 degrees F.

GEOGRAPHICALLY ASSOCIATED SOILS: These are the Blichton, Fellowship, Flemington, Kanapaha, Lochloosa, Micanopy, and Wacahoota soils. All of these but the Wacahoota soils have less than 5 percent, by volume, rock fragments 2 mm to 76 mm in size in the soil. Blichton and Wacahoota soils are on lower positions and have sandy surface and subsurface horizons 20 to 40 inches in thickness. In addition, Blichton soils are very poorly drained and have more than 5 percent plinthite in the lower argillic horizon and low base status. The very poorly drained and poorly drained Fellowship soils are on similar to lower positions have umbric epipedons and have clayey control sections. Flemington soils are on similar positions and have more clay in the control section. Kanapaha soils are on similar to lower positions and have sandy surface and subsurface horizons 40 to 80 inches in thickness. The somewhat poorly drained Lochloosa and Micanopy soils are on higher positions. In addition, Lochloosa soils have sandy surface and subsurface horizons 20 to 40 inches in thickness and Micanopy soils have more clay in the control section.

DRAINAGE AND PERMEABILITY: Poorly drained; slow permeability.

USE AND VEGETATION: Most of this soil is in woodlands. Some small areas have been cleared and used primarily for improved pasture or for special crops such as tomatoes, cabbage, and watermelons. Natural vegetation consists of loblolly pine, slash pine, longleaf pine, hickory, magnolia, laurel oak, water oak, sweetgum, maple, dogwood, and redbud.

DISTRIBUTION AND EXTENT: Peninsular Florida, primarily on the Ocala Uplift. The series is of small extent.

MLRA OFFICE RESPONSIBLE: Auburn, Alabama.

SERIES ESTABLISHED: Marion County, Florida; 1974.

REMARKS: Diagnostic horizons and features recognized in this pedon:

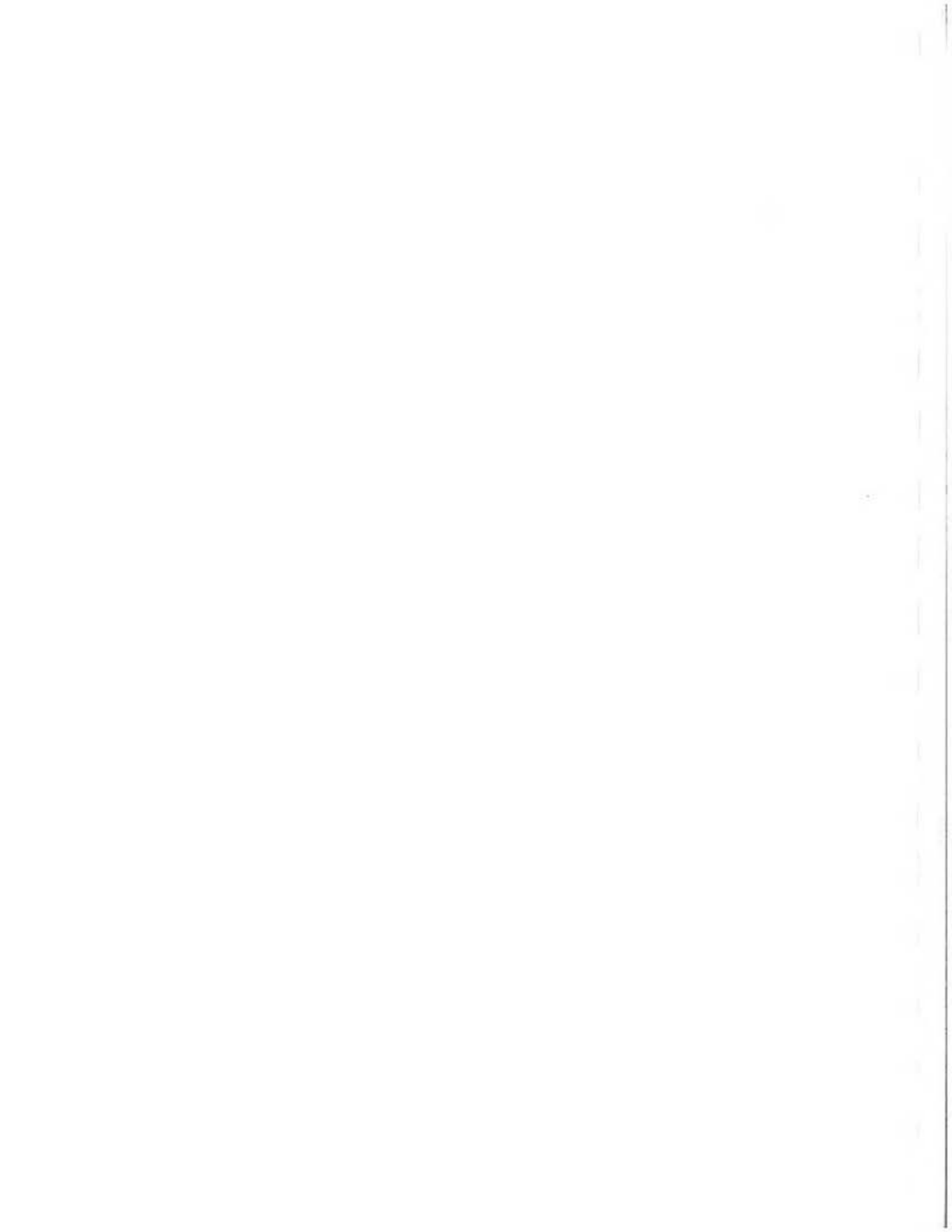
Ochric epipedon - the zone from 0 to 16 inches (Ap and E horizons).

Argillic horizon - the zone from 16 to 56 inches (Btg1, Btg2, Btg3, and BCg).

These soils are saturated to depths of less than 10 inches for periods ranging from 1 to 4 months.

National Cooperative Soil Survey
U.S.A.

**Appendix 4:
Florida Natural Areas Inventory Managed Area Tracking Record and
Element Occurrence Summary
for Price's Scrub Greenway
and
FNAI ranking system explanation**





1010 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
850-224-8207
fax 850-681-9364
www.fnai.org

March 17, 2004

Rick Halvorsen
FL Dept of Environmental Protection
Office of Greenways & Trails

Dear Mr. Halvorsen,

Thank you for your request for information from the Florida Natural Areas Inventory (FNAI). We have compiled the following information for your project area.

Project: Land Management Plan – Price's Scrub
Date Received: March 2, 2004
Location: Marion County

Based on the information available, this site appears to be located within a significant region of natural areas and habitat for several rare species in the far SE corner of the property. Extra consideration should be taken to avoid and/or mitigate impacts to these natural resources, and to design land uses that are compatible with these resources.

Based on the information available, this site appears to be located on or very near a significant region of scrub habitat, a natural community in decline that provides important habitat for several rare species within a small area. Additional consideration should be given to avoid and/or mitigate impacts to these natural resources, and to design land uses that are compatible with these resources.

Element Occurrences

A search of our maps and database indicates that currently we have several Element Occurrences mapped within the vicinity of the study area (see enclosed map and table). Please be advised that a lack of element occurrences in the FNAI database is not a sufficient indication of the absence of rare or endangered species on a site.

The Element Occurrences data layer includes occurrences of rare species and natural communities. The map legend indicates the precision of the element occurrence location, defined as second (within about 300 feet of the point), minute (within about one mile), or general (within about 5 miles). For animals and plants, Element Occurrences generally refer to more than a casual sighting; they usually indicate a viable population of the species. Note that some element occurrences represent historically documented observations that may no longer be extant.



Florida Resources
and Environmental
Analysis Center

Institute of Science
and Public Affairs

The Florida State University

Tracking Florida's Biodiversity

Several of the species and natural communities tracked by the Inventory are considered **data sensitive**. Occurrence records for these elements contain information that we consider sensitive due to collection pressures, extreme rarity, or at the request of the source of the information. The Element Occurrence Record has been labeled "Data Sensitive." We request that you not publish or release specific locational data about these species or communities without consent from the Inventory. If you have any questions concerning this please do not hesitate to call.

Potential Natural Areas

Portions of the site appear to be located on Potential Natural Areas (PNA). These PNA are priority 4 and may include the following community types: upland mixed forest, scrub, scrubby flatwoods, wet flatwoods, depression marsh, sinkhole lake or sinkhole. In addition, the site also appears to be near mesic hammock and basin marsh

Potential Natural Areas are lands that appear to be relatively intact areas of natural vegetation based on aerial photography, as determined by FNAI scientists. Please see the enclosed explanation sheet for more information. PNAs are not a regulatory designation; they are intended for conservation planning purposes. The maps show a revised version of the PNAs, based on 1995 land use land cover data from the water management districts.

Potential Habitat for Rare Species

Portions of the site appear to be located on Potential Habitat for Rare Species. This potential habitat is associated with a known occurrence in the vicinity of: wood stork (*Mycteria americana*), bald eagle (*Haliaeetus leucocephalus*), pondspice (*Litsea aestivalis*) and eastern indigo snake (*Drymarchon couperi*). In addition, the site also appears to be near Potential Habitat for Florida sandhill crane (*Grus canadensis pratensis*), Godfrey's privet (*Forestiera godfreyi*) and southern hognose snake (*Heterodon simus*).

FNAI Potential Habitat for Rare Species indicates areas, which based on landcover type, offer suitable habitat for one or more rare species that is known to occur in the vicinity. Potential habitat layers have been developed for approximately 250 of the most rare species tracked by the Inventory, including all federally listed species.

Potential Habitat is not a regulatory designation, and should not be confused with "critical habitat", which is an official designation made by the U.S. Fish and Wildlife Service. Information on critical habitats can be found in the Code of Federal Regulations, 50 CFR 17.95, which lists all critical habitats that have been designated. The Code of Federal Regulations can be accessed through the following website: "www.access.gpo.gov/nara/cfr/cfr-table-search.html".

The Inventory always recommends that a site-specific survey be conducted to determine the current presence or absence of rare, threatened, or endangered species. Surveys should be conducted by persons familiar with Florida's flora and fauna. For your convenience, a summary of the elements recorded for Marion County is enclosed.

The database maintained by the Florida Natural Areas Inventory is the single most comprehensive source of information available on the locations of rare species and other significant ecological resources. However, the data are not always based on comprehensive or site-specific field surveys. Therefore, this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. Inventory data are designed for the purposes of conservation planning and scientific research, and are not intended for use as the primary criteria for regulatory decisions.

Rick Halvorsen
3/17/2004
Page 3 of 3

Information provided by this database may not be published without prior written notification to the Florida Natural Areas Inventory, and the Inventory must be credited as an information source in these publications. FNAI data may not be resold for profit.

Thank you for your use of FNAI services. If I can be of further assistance, please call me at (850) 224-8207.

Sincerely,

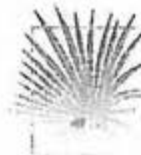
Edwin A. Abbey

Edwin A. Abbey
Environmental Reviewer

encl

Price's Scrub

Marion County



1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
850-224-8207
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www.fnai.org

FLORIDA Natural Areas INVENTORY

Element Occurrences

Precision:

second minute general

- ▲ □ Animals
- ▲ □ Plants
- ▲ □ Communities
- ▲ □ Other

Conservation Lands

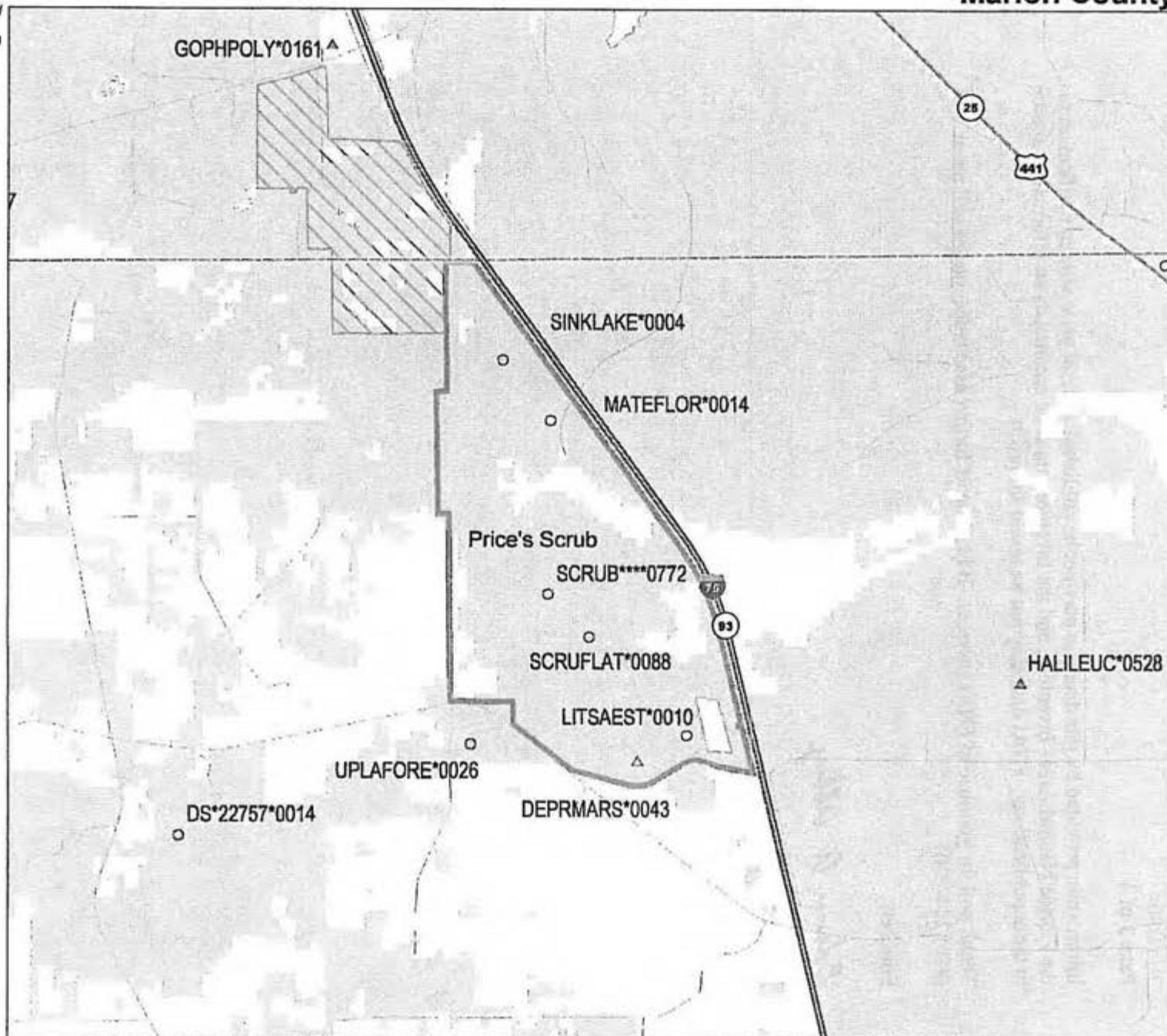
- Price's Scrub

Land Acquisition Projects

- ▨ Florida Forever
- ▨ Board of Trustees Projects

Non-Managed Natural Areas

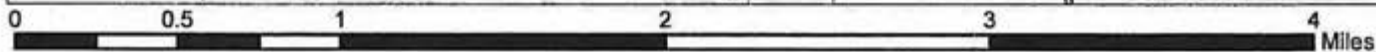
- FNAI Potential Habitat for Rare Species



Map produced
by EAA
Data Source: 11/03

NOTE:

Map should not be interpreted without
accompanying documents.





FLORIDA NATURAL AREAS INVENTORY
1018 Thomasville Road, Suite 200-C
Tallahassee, FL 32303
(850) 224-8207, FAX (850) 681-9364



3/12/2004

Price's Scrub

Page 1

Summary of occurrence records currently in the FNAI database

SCIENTIFIC NAME	COMMON NAME	FNAI GLOBAL RANK	FNAI STATE RANK	FEDERAL STATUS	STATE STATUS	Number of FNAI recorded locations
PLANTS						
<i>Litsea aestivalis</i>	Pondspice	G3	S2	N	LE	1
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE	1
NATURAL COMMUNITIES						
Depression marsh		G4	S4	N	N	1
Scrub		G2	S2	N	N	1
Scrubby flatwoods		G3	S3	N	N	1
Sinkhole lake		G3	S3	N	N	1

Total count:

Number of tracked elements: 6

Number of distinct occurrences: 6

Florida Natural Areas Inventory



ELEMENT OCCURRENCES MAPPED ON PRICE'S SCRUB MANAGED AREA

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
DEPRMARS*0043	Depression marsh	ZZ	G4	S4	N	N	1993-04-19	SMALL DEPRESSIONAL AREA THAT IS PERSISTENTLY INUNDATED. SURROUNDED BY SCRUBBY AND WET FLATWOODS. FRINGE OF WILLOW, PONDSPICE, AND BUTTONBUSH. POND DOMINATED BY MAIDENCANE, LACHNANTHES, AND CEPHALANTHUS IN SHALLOWS AND NYMPHAEA ODORATA IN BASIN.	No EO data given
LITSAEST*0010	<i>Litsea aestivalis</i>	Pondspice	G3	S2	N	LE	1993-04-19	SHRUBS ALONG MARGIN OF SMALL POND IN SCRUBBY FLATWOODS AREA. GROWING JUST ABOVE ORDINARY HIGH WATER LINE IN ZONE ALSO CONTAINING CAROLINA WILLOW AND NYSSA SYLVATICA. PLANTS 2-3 METERS IN HEIGHT. POND BASIN DOMINATED BY MAIDENCANE, LACHNANTHES, AND CEPHAL	10-15 FAIRLY LARGE SHRUBS IN BLOOM LATE FEB. LEAVES NOT EMERGED YET. UPDATE: 17 APRIL; LEAVES FULLY EMERGED, NO EVIDENCE OF FRUIT.
MATEFLOR*0014	<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE	1999-10	1999-10: Shady hardwood forest of <i>Quercus hemisphaerica</i> , <i>Q. michauxii</i> , <i>Magnolia grandiflora</i> , <i>Pinus taeda</i> .	1999-10: plants uncommon and scattered in understory of mixed hardwood forest (PNDDUE01FLUS).
SCRUFLAT*0088	Scrubby flatwoods	ZZ	G3	S3	N	N	1993-02-24	SEVERAL SMALL AREAS OF SCRUBBY FLATWOODS BETWEEN RIDGES OF OAK SCRUB AND WET FLATWOODS. DOMINATED BY SLASH PINE, SAW PALMETTO, LYONIA LUCIDA, Q. MYRTIFOLIA, LYONIA FERUGINEA, AND VACCINIUM MYRSINITES. SOILS ARE MOSTLY POMONA.	No EO data given
SCRUB****0772	Scrub	ZZ	G2	S2	N	N	1993-02-24	THREE SMALL RIDGES OF OAK SCRUB DOMINATED BY SAND LIVE OAK (<i>QUERCUS GEMINATA</i>), Q. MYRTIFOLIA, LYONIA FERUGINEA, SAW PALMETTO, AND Q. CHAPMANNI. SEVERAL SCATTERED SAND PINES THROUGHOUT. SEVERAL LARGE STUMPS. SCRUB SURROUNDED BY SCUBBY FLATWOODS THEN POND	No EO data given



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FLORIDA
Natural Areas
INVENTORY

Florida Natural Areas Inventory

ELEMENT OCCURRENCES MAPPED ON
PRICE'S SCRUB MANAGED AREA



Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
SINKLAKE*0004	Sinkhole lake	ZZ	G3	S3	N	N	1993-04-19	FAIRLY PRISTINE LAKE WITH GOOD WATER QUALITY AND OF UNKNOWN DEPTH. EDGES BORDERED BY SPATTERDOCK, ANDROPOGON SP. BUTTONBUSH, WILLOW, AND CHAIN FERN.	No EO data given

FNAI GLOBAL RANK DEFINITIONS

G1 = Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.

G2 = Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.

G3 = Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.

G4 = Apparently secure globally (may be rare in parts of range)

G5 = Demonstrably secure globally

GH = Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker)

GX = Believed to be extinct throughout range

GXC = Extirpated from the wild but still known from captivity or cultivation

G#? = Tentative rank (e.g., G2?)

G#G# = Range of rank; insufficient data to assign specific global rank (e.g., G2G3)

G#T# = Rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1)

G#Q = Rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q)

G#T#Q = Same as above, but validity as subspecies or variety is questioned.

GU = Due to lack of information, no rank or range can be assigned (e.g., GUT2).

G? = Not yet ranked (temporary)

FNAI STATE RANK DEFINITIONS

S1 = Critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.

S2 = Imperiled in Florida because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.

S3 = Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.

S4 = Apparently secure in Florida (may be rare in parts of range)

S5 = Demonstrably secure in Florida

SH = Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker)

SX = Believed to be extinct throughout range

SA = Accidental in Florida, i.e., not part of the established biota

SE = An exotic species established in Florida may be native elsewhere in North America

SN = Regularly occurring, but widely and unreliably distributed; sites for conservation hard to determine

FEDERAL LEGAL STATUS

Provided by FNAI for information only.

For official definitions and lists of protected species, consult the relevant federal agency.

Definitions derived from U.S. Endangered Species Act of 1973, Sec. 3. Note that the federal status given by FNAI refers only to Florida populations and that federal status may differ elsewhere.

LE Endangered: species in danger of extinction throughout all or a significant portion of its range.

LT Threatened: species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range.

E(S/A) Endangered due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.

T(S/A) Threatened due to similarity of appearance (see above).

PE Proposed for listing as Endangered species.

PT Proposed for listing as Threatened species.

C Candidate species for which federal listing agencies have sufficient information on biological vulnerability

and threats to support proposing to list the species as Endangered or Threatened.

XN Non-essential experimental population.

MC Not currently listed, but of management concern to USFWS.

N Not currently listed, nor currently being considered for listing as Endangered or Threatened.

STATE LEGAL STATUS

Provided by FNAI for information only.

For official definitions and lists of protected species, consult the relevant federal agency.

Animals: Definitions derived from "Florida's Endangered Species and Species of Special Concern, Official Lists" published by Florida Fish and Wildlife Conservation Commission, 1 August 1997, and subsequent updates.

LE Endangered: species, subspecies, or isolated population so few or depleted in number or so restricted in range that it is in imminent danger of extinction.

LT Threatened: species, subspecies, or isolated population facing a very high risk of extinction in the future.

LS Species of Special Concern is a species, subspecies, or isolated population which is facing a moderate risk of extinction in the future.

PE Proposed for listing as Endangered.

PT Proposed for listing as Threatened.

PS Proposed for listing as Species of Special Concern.

N Not currently listed, nor currently being considered for listing.

Plants: Definitions derived from Sections 581.011 and 581.185(2), Florida Statutes, and the Preservation of Native Flora of Florida Act, 5B-40.001. FNAI does not track all state-regulated plant species; for a complete list of state-regulated plant species, call Florida Division of Plant Industry, 352-372-3505 or see:

<http://doacs.state.fl.us/~pi/5b-40.htm#.0055>.

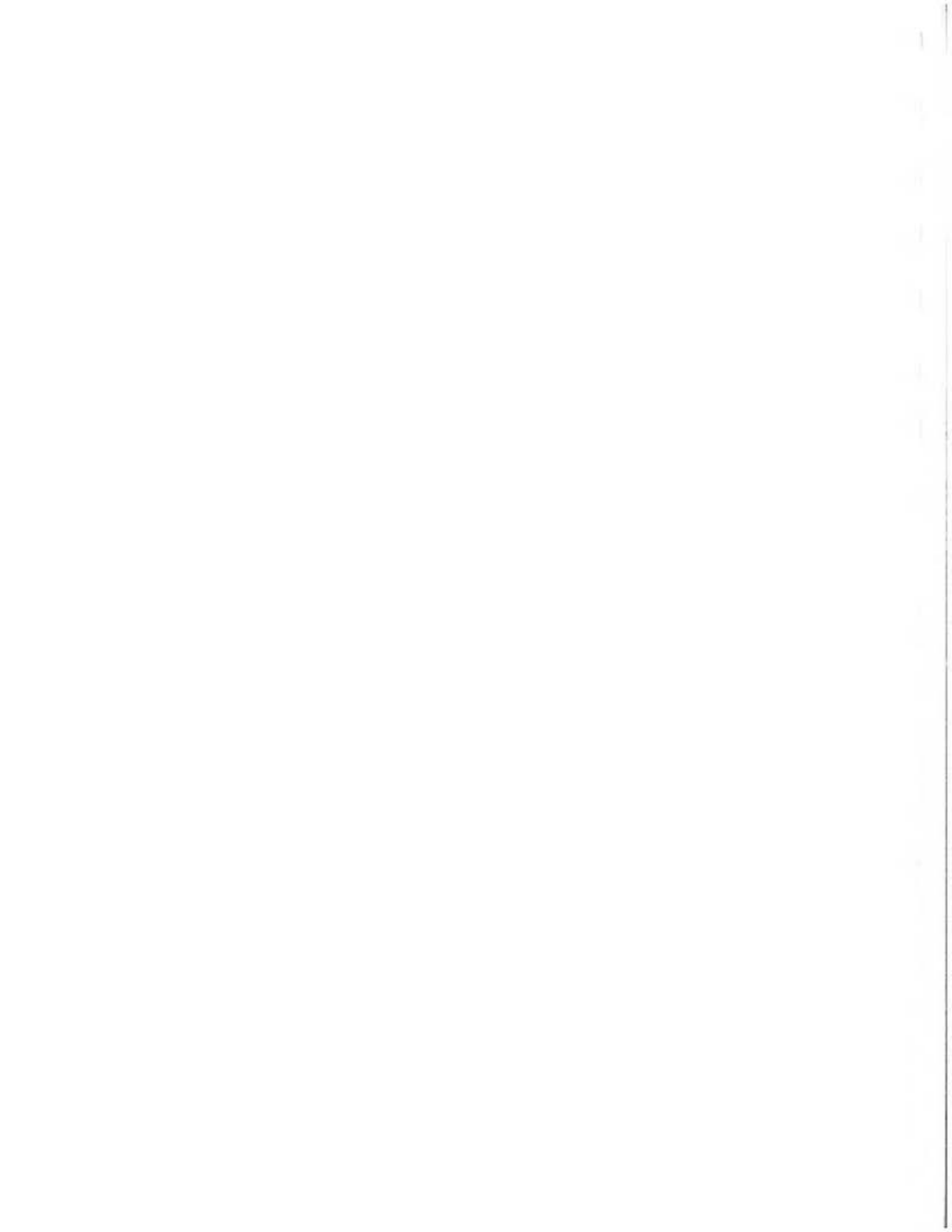
LE Endangered: species of plants native to Florida that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue; includes all species determined to be endangered or threatened pursuant to the U.S. Endangered Species Act.

LT Threatened: species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in number as to cause them to be Endangered.

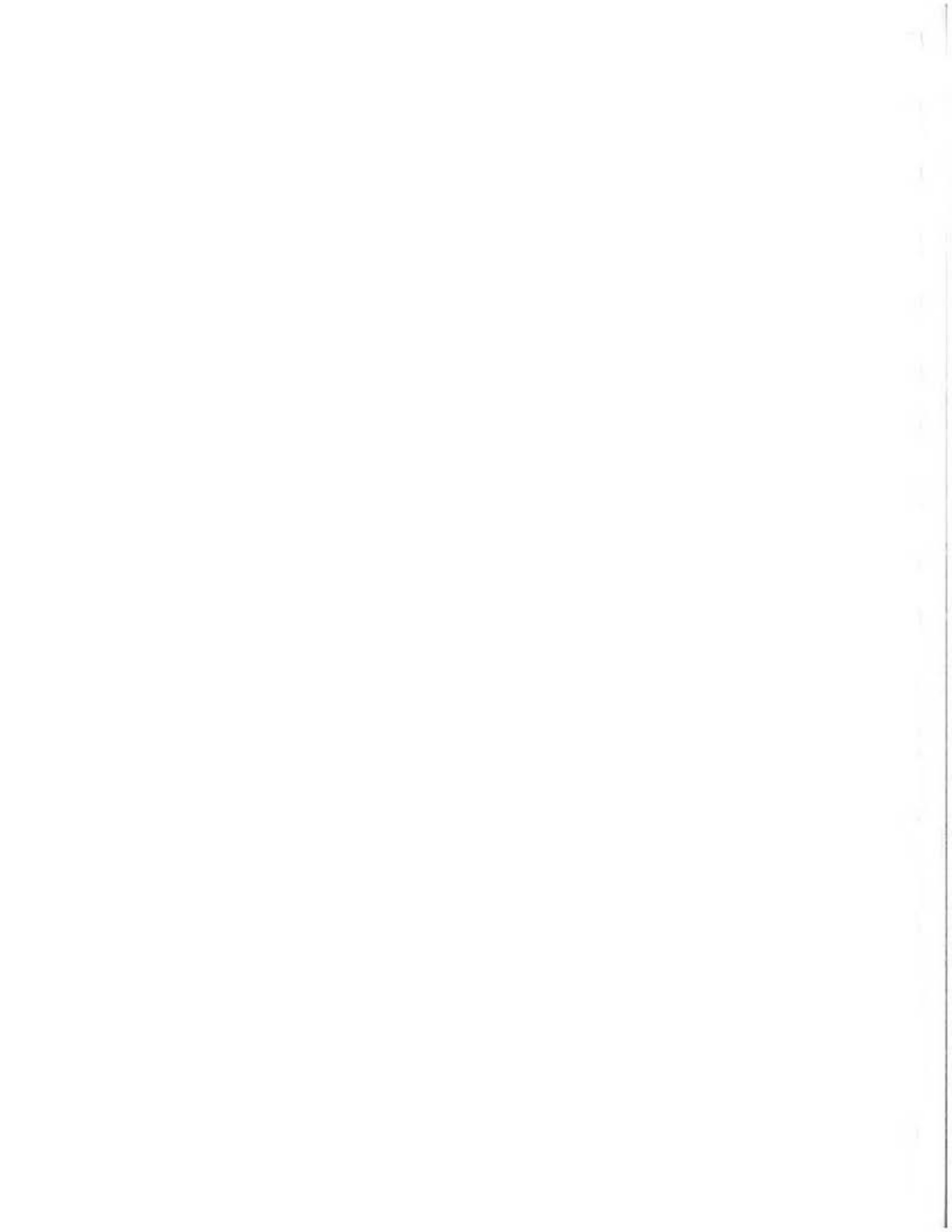
PE Proposed for listing as Endangered.

PT Proposed for listing as Threatened.

N Not currently listed, nor currently being considered for listing.



Appendix 5:
Florida Natural Areas Inventory Natural Communities Descriptions
for Natural Communities
Occurring on Price's Scrub Greenway



Excerpts of natural community descriptions from *Guide to the Natural Communities of Florida Descriptions* (Florida Natural Areas Inventory and Department of Natural Resources, 1990) for those Natural Communities that are known to occur on Price's Scrub Greenway, Marion County, Florida

Scrub - (synonyms: sand pine scrub, Florida scrub, sand scrub, rosemary scrub, oak scrub). Scrub occurs in many forms, but is often characterized as a closed to open canopy forest of sand pines with dense clumps or vast thickets of scrub oaks and other shrubs dominating the understory. The ground cover is generally very sparse, being dominated by ground lichens or, rarely, herbs. Open patches of barren sand are common. Where the overstory of sand pines is widely scattered or absent altogether, the understory and barren sands are exposed to more intense sunlight. Typical plants include sand pine, sand live oak, myrtle oak, Chapman's oak, scrub oak, saw palmetto, rosemary, rusty lyonia, ground lichens, scrub hickory, scrub palmetto, hog plum, silk bay, beak rush, milk peas, and stagger bush. Typical animals include red widow spider, scrub wolf spider, oak toad, Florida scrub lizard, blue-tailed mole skink, sand skink, six-lined racerunner, coachwhip, ground dove, scrub jay, loggerhead shrike, yellow-rumped warbler, rufous-sided towhee, Florida mouse, and spotted skunk. Scrubs of the Lake Wales Ridge are notable for the large number of narrowly endemic plants and animals that occur in them.

Scrub occurs on sand ridges along former shorelines. Some of the sand ridges originated as wind-deposited dunes, others as wave-washed sand bars. Some Scrub soils are composed of well-washed, deep sands that are brilliant white at the surface; some Scrubs occur on yellow sands. The loose sands drain rapidly, creating very xeric conditions for which the plants appear to have evolved several water conservation strategies.

Scrub is essentially a fire maintained community. Ground vegetation is extremely sparse and leaf fall is minimal, thus reducing the chance of frequent ground fires. As the sand pines mature, however, they retain most of their branches and build up large fuel supplies in their crowns. When a fire does occur, this fuel supply, in combination with the resinous needles and high stand density, ensures a hot, fast burning fire. Such fires allow for the regeneration of the Scrub community which might otherwise succeed to Xeric Hammock. The minerals in the vegetation are deposited on the bare sand as ashes, and the heat of the fire generally facilitates the release of pine seeds. As discerned from the life histories of the dominant plants, scrub probably burns catastrophically once every 20 to 80 years or longer.

Scrub is associated with and often grades into Sandhill, Scrubby Flatwoods, Coastal Strand, and Xeric Hammock. Some Xeric Hammocks are advanced successional stages of Scrub, making intermediate stages difficult to classify. Scrub occurs almost exclusively in Florida, although coastal scrubs extend into adjacent Alabama and Georgia.

Because Scrub occurs on high dry ground and is not an aesthetically pleasing habitat, at least to the uninitiated, this ecosystem and its many endangered and threatened species are rapidly being lost to development. Scrub is also readily damaged by off-road vehicle traffic or even foot traffic, which destroys the delicate ground cover and allows the loose sand to erode. Ground lichens may require 50 years or more to recover.

Scrubby Flatwoods - (synonyms: xeric flatwoods, dry flatwoods). Scrubby Flatwoods are characterized as an open canopy forest of widely scattered pine trees with a sparse shrubby understory and numerous areas of barren white sand. The vegetation is a combination of Scrub and Mesic Flatwoods species; Scrubby Flatwoods often occupy broad transitions or ecotones between these communities. Typical plants include longleaf pine, slash pine, sand live oak, Chapman's oak, myrtle oak, scrub oak, saw palmetto, staggerbush, wiregrass, dwarf blueberry, gopher apple, rusty lyonia, tarflower, golden-aster, lichens, silkbay, garberia, huckleberry, goldenrod, runner oak, pinweeds, and frostweed.

Scrubby Flatwoods generally occur intermingled with Mesic Flatwoods along slightly elevated relictual sandbars and dunes. The white sandy soil is several feet deep and drains rapidly. However, the water table is unlikely to be very deep. Scrubby Flatwoods normally do not flood even under extremely wet conditions. Temperatures and humidities of air and soil in Scrubby Flatwoods fluctuate substantially more than in most other communities because

the scattered overstory, sparse understory, and barren sands of Scrubby Flatwoods do not ameliorate daily and seasonal changes very well.

Although the elevated, deeper sandy soils of scrubby flatwoods engender a drier environment than the surrounding mesic flatwoods, the general sparsity of ground vegetation and the greater proportion of relatively incombustible scrub-oak leaf litter reduces the frequency of naturally occurring fires. Only after a long absence of fire and during periods of drought does the leaf litter become sufficiently combustible and concentrated enough to support an ecological burn. Several species of plants in Scrubby Flatwoods are typical scrub plants which endure only when long intervals between fires occur. Thus, a periodicity of approximately 8 to 25 years between fires appears to be natural for this community.

Scrubby Flatwoods are associated with and often grade into Mesic Flatwoods, Scrub, Dry Prairie or Sandhills. This community is essentially a Mesic Flatwoods with a Scrub understory.

Upland Hardwood Forest And Upland Mixed Forest - (synonyms: mesic hammock, climax hardwoods, upland hardwoods, beech-magnolia climax, oakmagnolia climax, pine-oak-hickory association, southern mixed hardwoods, clay hills hammocks, Piedmont forest). Upland Hardwood Forests and Upland Mixed Forests are characterized as well-developed, closed-canopy forests of upland hardwoods on rolling hills. These communities have quite similar physical environments and share many species, including southern magnolia, pignut hickory, sweetgum, Florida maple, devil's walking stick, American hornbeam, redbud, flowering dogwood, Carolina holly, American holly, eastern hophornbeam, spruce pine, loblolly pine, live oak, and swamp chestnut oak, among others. The primary difference between these communities is that Upland Mixed Forests generally lack shortleaf pine, American beech and other more northern species that typically occur in Upland Hardwood Forests. This is predominantly a result of minor climatic differences, Upland Hardwood Forests being most common in Northern panhandle Florida, and Upland Mixed Forests being most common in northern and central peninsula Florida. Other typical plants include gum bumelia, hackberry, persimmon, red cedar, red mulberry, wild olive, redbay, laurel cherry, black cherry, bluff oak, water oak, cabbage palm, basswood, winged elm, Florida elm, sparkleberry, Hercules' club, slippery elm, beautyberry, partridgeberry, sarsaparilla vine, greenbrier, trilliums, beech drops, passion flower, bedstraw, strawberry bush, silverbell, caric sedges, fringe tree, horse sugar, white oak, and blackgum. Typical animals include slimy salamander, Cope's gray treefrog, bronze frog, box turtle, eastern glass lizard, green anole, broadhead skink, ground skink, red-bellied snake, gray rat snake, rough green snake, coral snake, woodcock, barred owl, pileated woodpecker, shrews, eastern mole, gray squirrel, wood rat, cotton mouse, gray fox, and white-tailed deer.

Upland Hardwood and Mixed Forests occur on rolling hills that often have limestone or phosphatic rock near the surface and occasionally as outcrops. Soils are generally sandy-clays or clayey sands with substantial organic and often calcareous components. The topography and clayey soils increase surface water runoff, although this is counterbalanced by the moisture retention properties of clays and by the often thick layer of leaf mulch which helps conserve soil moisture and create decidedly mesic conditions. Furthermore, the canopy is densely closed, except during winter in areas where deciduous trees predominate. Thus, air movement and light penetration are generally low, making the humidity high and relatively constant. Because of these conditions Upland Hardwood and Mixed Forests rarely burn.

Upland Hardwood Forests and Upland Mixed Forests are climax communities for their respective geographic locations. They are often associated with and grade into Upland Pine Forest, Slope Forest or Xeric Hammock. Occasionally, Upland Mixed Forests may also grade into Maritime Hammock or Prairie Hammock. During early stages of succession, Upland Hardwood and Mixed Forest may be difficult to distinguish from Upland Pine Forests that have not been burned for several years. Disturbed sites may require hundreds of years to reach full development with species compositions representative of climax conditions.

Silvicultural, agricultural, industrial, and residential developments have already eliminated the vast bulk of these communities. These activities are continuing at an accelerated pace in many areas, such that the few remnant mature examples are in urgent need of protection and proper management.

Depression Marsh - (synonyms: isolated wetland, flatwoods pond, St. John's wort pond, pineland depression, ephemeral pond, seasonal marsh). Depression Marsh is characterized as a shallow, usually rounded depression in

sand substrate with herbaceous vegetation often in concentric bands. Depression Marshes are similar in vegetation and physical features to, but are generally smaller than, Basin Marshes. Typical plants include St. John's wort, spikerush, yellow-eyed grass, chain fern, willows, maidencane, wax myrtle, swamp primrose, bloodroot, buttonbush, fire flag, pickerelweed, arrowheads, and bladderwort.

Larger and more permanent Depression Marshes may have many of the same plants and animals listed as typical of Basin Marshes. However, because of their isolation and small size, many Depression Marshes support a very different assemblage of species than that found in larger, more permanent wetlands. Depression Marshes are considered extremely important in providing breeding or foraging habitat for such species as the flatwoods salamander, mole salamander, tiger salamander, dwarf salamander, striped newt, oak toad, cricket frog, pinewoods treefrog, barking treefrog, squirrel treefrog, little grass frog, southern chorus frog, ornate chorus frog, narrowmouth toad, eastern spadefoot toad, gopher frog, white ibis, wood stork and sandhill crane. Depression Marshes occurring as isolated wetlands within larger upland ecosystems are of critical importance to many additional wetland and upland animals.

Depression Marshes are typical of karst regions where sand has slumped around or over a sinkhole and thereby created a conical depression subsequently filled by direct rain fall, runoff, or seepage from surrounding uplands. The substrate is usually acid sand with deepening peat toward the center. Some depressions may have developed or be maintained by a subsurface hardpan. Hydrological conditions vary, with most Depression Marshes drying in most years. Hydroperiods range widely from as few as 50 days or less to more than 200 days per year.

Fire is important to maintaining this community type by restricting invasion of shrubs and trees and the formation of peat. Fire frequency is often greatest around the periphery of the marsh and least toward the center. A severe peat fire can lower the ground surface and create a pond at the center of the marsh.

Depression Marshes are often associated with and grade into Wet Prairie, Seepage Slope, Wet Flatwoods, Mesic Flatwoods, Dome Swamp or Bog. They also may occur in association with various types of lakes, such as Sandhill Lake or Flatwoods Lake.

Depression Marshes are threatened by drainage, agriculture, pollution, fire suppression, and invasion of exotic species. Depression Marshes may be filled and converted to other uses. A regional lowering of the water table as a result of overuse may eliminate many Depression Marshes. Depression Marshes on some public lands have been deepened by explosives to allow for stocking with game fish. By preying upon the eggs and larvae of frogs and salamanders, these fish may eliminate the amphibians that depend on such seasonal wetlands for successful reproduction. Likewise, many species of invertebrates not adapted to predation by fishes may be eliminated.

Wet Flatwoods - (synonyms: low flatwoods, moist pine barren, hydric flatwoods, pond-pine flatwoods, pocosin, cabbage palm/pine savannah or flatwoods). Wet Flatwoods are characterized as relatively open-canopy forests of scattered pine trees or cabbage palms with either thick shrubby understory and very sparse ground cover, or a sparse understory and a dense ground cover of hydrophytic herbs and shrubs. Several variations exist between these extremes. Typical plants include pond pine, slash pine, sweetbay, spikerush, beakrush, sedges, dwarf wax myrtle, gallberry, titi, saw palmetto, creeping beggarweed, deer tongue, gay feather, greenbrier, bluestem, and pitcher plants. Typical animals include oak toad, cricket frog, chorus frog, black racer, yellow rat snake, diamondback rattlesnake, pygmy rattlesnake, red-shouldered hawk, bobwhite, opossum, cottontail rabbit, cotton rat, cotton mouse, raccoon, striped skunk, bobcat, and white-tailed deer.

Wet Flatwoods occur on relatively flat, poorly drained terrain. The soils typically consist of 1 to 3 feet of acidic sands generally overlying an organic hardpan or clay layer. Cabbage palm flatwoods tend to occur on more circumneutral sands (pH 6.0 - 7.5) underlain by marl or shell beds. The hardpan substantially reduces the percolation of water below and above its surface. During the rainy season, water frequently stands on the surface, inundating the flatwoods for 1 or more months per year. During the drier seasons, ground water is less accessible for many plants whose roots fail to penetrate the hardpan. Thus, many plants are under the stress of water saturation during the wet seasons, and under the stress of dehydration during the dry seasons.

Another important physical factor in Wet Flatwoods is fire. Natural fires probably occurred every 3 to 10 years during pre-Columbian times. Nearly all plants and animals inhabiting this community are adapted to periodic fires, and several species depend on fires for their continued existence. Without relatively frequent fires, Wet Flatwoods succeed into hardwood dominated forests whose closed canopy would essentially eliminate the ground cover herbs and shrubs. In fact, much of the variation in community structure is probably associated with fire frequency. Thus, the longer the period of time since the last fire, the more developed will be the understory shrubs. If the understory is allowed to grow for too long, the accumulation of needle drape and the height of flammable understory shrubs will increase the probability of a catastrophic canopy fire.

Wet Flatwoods are closely associated with and often grade into Hydric Hammock, Mesic Flatwoods, Wet Prairie, or Basin Swamp. Wet Flatwoods may also grade into Dome Swamp or Strand Swamp, but the absence of a Wet Prairie ecotone suggests that the hydrology has been disturbed.

Although Wet Flatwoods may have been an abundant biological community of the Coastal Plain at one time, examples with an intact overstory and understory, without exotics, and with the potential for future maintenance by fire are rare. They are relatively resilient to overstory damage but recover poorly when the ground cover or hydrology has been disturbed. Wet Flatwoods are vulnerable to disruptions of fire and hydrological regimes. Exotic plants readily invade Wet Flatwoods in south Florida and must be controlled promptly.

Sinkhole Lakes - occur typically in deep, funnel-shaped depressions in a limestone base. Although the depression is relatively permanent, water levels may fluctuate dramatically. These lakes are characterized by clear, alkaline, hard water with high mineral content, including calcium, bicarbonate, and magnesium. Although they occur in most physiographic regions, the major occurrences of this NC in the U.S. are in Florida, where they are moderately widespread in the karst regions. They provide habitat for many species also found in accompanying subterranean NCs. The vegetation in some Sinkhole Lakes may be conspicuously absent or limited to a narrow fringe of emergents at the edge of the water. Other Sinkhole Lakes are completely covered by floating plants. When they occur, typical plants include American cupscale, bog moss, smartweed, rushes, cattails, bladderwort, duckweed, watermeal, azolla, and salvinia. Typical animals include crayfish, isopods, amphipods, pirate perch, redeye chub, yellow bullhead, and mud turtles.

Sinkhole Lakes are considered endangered in Florida. They are threatened by erosion which causes destruction of surrounding vegetation and to pollution and other threats to the aquifers with which they are connected.

Seepage Stream - (synonyms: steephead stream, clear brook, swift brook, hammock stream). Seepage Streams are characterized as perennial or intermittent seasonal water courses originating from shallow ground waters that have percolated through deep, sandy, upland soils. Seepage Streams typically have clear to lightly colored water maintained at fairly constant temperatures of around 70F, and are relatively short, shallow, and narrow. Although a stream may be classified as a Seepage Stream along its entire length, they also form the headwaters of many Alluvial and Blackwater Streams. After large sediment loads are picked up or after drainage through extensive swamps, water clarity is diminished and the stream is then classified as Alluvial or Blackwater.

Because they are generally sheltered by a dense overstory of broad-leaved hardwoods which block out most sunlight, Seepage Streams most often have depauperate aquatic floras. Filamentous green algae occur sporadically within the stream, while mosses, ferns and liverworts may grow in clumps at the water's edge. In the lower, broader reaches where insolation levels are sometimes greater, narrow bands of spatterdocks, golden club, spikerush and pondweeds may occur along the shorelines, and tape grass and pondweed may grow in the streambed. Typical animals include sailfin shiner, creek chub, speckled madtom, brown darter, blackbanded darter, amphiuma, Alabama waterdog, southern dusky salamander, two-lined salamander, mud salamander, southern red salamander, bronze frog, snapping turtle, loggerhead musk turtle, rainbow snake, redbelly watersnake, and brown watersnake.

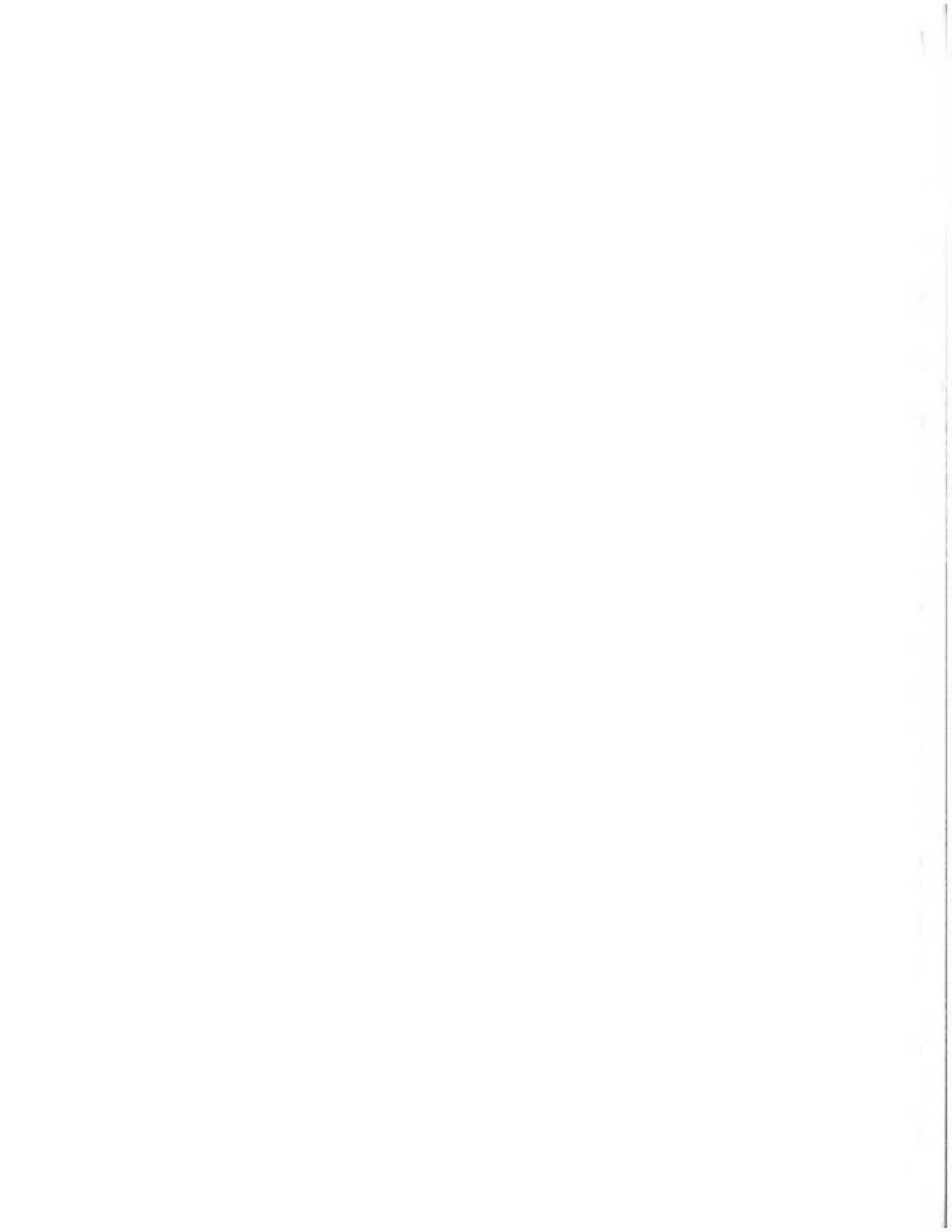
Percolation through deep soils slows the release of rainwater, filters the water, and buffers temperature extremes. Thus, Seepage Streams often exhibit perennial, slow flow rates of clear, cool, unpolluted water. Seepage Streams generally have sandy bottoms, although clays, gravel and limestone may be prevalent along stretches where

formations composed of these sediments are exposed. Additionally, deep organic deposits may accumulate near stream bends and in other low areas where the leaf litter is not washed away by currents.

Seepage Streams are generally confined to portions of the state where topographic relief is pronounced, especially in northern Florida. They are often associated with Seepage Slope and Slope Forest near their head waters, and Bottomland Forest, Floodplain Forest and Swamp Forest near their mouths. Seepage Streams are readily distinguished from other Florida stream communities by their small magnitude, lack of deep aquifer water source, and the absence of extensive swamp lowlands surrounding their head waters.

A unique type of Seepage Stream, the steephead stream, develops by a rather unusual geologic process. Rainfall percolates through the deep sandy soils capping the surrounding uplands until it encounters impermeable clays or other non-porous sediments. Water then travels laterally until reaching the surface and producing a seepage area along a slope or a spring. The seepage waters begin to erode the hill's base and cause the overburden to slump. Thus, the steephead stream valley is largely a product of seepage erosion which begins primarily at the bottom of valleys instead of at their tops. Consequently, the gradient of steephead streams is generally much lower than that of other upland streams in similar topography, because the head of a steephead stream is already near the bottom of a valley.

Seepage Streams may be threatened by various activities. Applications of fertilizers or biocides on the surrounding uplands, or dumping of hazardous wastes and other refuse within the drainage basin could pollute the shallow ground waters that feed the Seepage Streams. Deforestation of the surrounding slopes could increase surface erosion and cause excessive sedimentation of the stream valley, as well as increase insolation levels and cause the stream to become overgrown with shrubs or emergent herbaceous species. Impounding the stream would destroy much of the lotic habitat and restrict the upstream movements of aquatic animals. Because they are unique natural features of limited distribution within the state, Seepage Streams should be diligently protected from significant disturbances.



**Appendix 6:
Goals, Objectives, Project Priorities, Timelines, Cost
for Price's Scrub Greenway**



Goals and Objectives for Price's Scrub Greenway
During Fiscal Years 2004-05 through 2013-14

The following goals and objectives were developed specifically for Price's Scrub Greenway. They reflect programmatic goals and the ideas of DEP Office of Greenways and Trails personnel in charge of managing and protecting the area, as well as input from cooperative managers, user groups and other stakeholders from outside DEP. The agency believes the goals and objectives to be consistent with the various forms of guidance provided to managers.

The table portrays all management goals and objectives for the next ten years. This is the first Land Management Plan for Price's Scrub Greenway, so the listed goals and objectives were not included in previous plans. Each objective is marked with an X as to which of the next ten years it will be addressed by preserve staff ("Proposed Timeline"). The cost of each objective, if known, is also provided ("Estimated Cost"). In many cases the estimated cost is a rough estimate.

Each year identified under Proposed Timeline represents the fiscal year during which an objective will be addressed, (e.g., "04" means July 2004 through June 2005). These objectives and timelines provide the priority schedule for accomplishing management actions on the preserve, as required by Florida Statutes. Objectives are listed in priority order, from highest to lowest, under each goal. Although the goals and objectives are separated according to resources and issues, this does not necessarily mean that the manager will undertake separate tasks to achieve each objective. For example, trail planning for the different types of users will be done at the same time, and it is likely that surveys for exotic species will be done at the same time as surveys for native species.

The ability to implement the specific goals and objectives identified in this plan will be dependent upon the availability of funding resources for these purposes. Objectives that require funds above the normal baseline appropriation to be completed are indicated by "*" in the estimated cost column.

The objectives are discussed in more detail in the Chapter IV of the plan (and Chapter III for potential land acquisition and surplus).

Appendix 6: Goals and Objectives for Price's Scrub Greenway for 2004-2013				
Goal/Objective	Previous Plan	Percent Complete	Proposed Timeline (fiscal year) '04 05 06 07 08 09 10 11 12 13	Estimated Cost (\$)
Resource Management and Protection				
<i>Soil Management</i>				
Goal 1: Manage soil to reduce and prevent erosion				
Objective 1a: Assess property to identify major erosion areas			X	1,000
Objective 1b: Implement erosion control measures such as berms and plants			X	5,000
Objective 1c: Install erosion control structures as recommended by design & engineering surveys			X	2,000
Objective 1d: Prevent shoreline erosion near canoe launches by installing boarding dock if necessary			X	5,000
<i>Hydrology/Water Management</i>				
Goal 2: Maintain/restore natural flow ways and protect water quality				

Appendix 6: Goals and Objectives for Price's Scrub Greenway for 2004-2013

Goal/Objective	Previous Plan	Percent Complete	Proposed Timeline (fiscal year)											Estimated Cost (\$)	
			'04	05	06	07	08	09	10	11	12	13			
Objective 2a: Inventory hydrological changes to the property (ditching, fire lines, etc.) and their impacts and formulate restoration actions			X												1,000
Objective 2b: Assess corrective measures needed for ditched areas on the property			X												1,000
Objective 2c: Restore all major hydrological alterations in the property (25%/year)					X	X	X	X							1,000PER ANNUM
Objective 2d: Ensure that planned trails do not cause runoff and water quality problems			X	X	X	X	X	X	X	X	X	X	X		
<i>Natural Communities Management</i>															
Goal 3: Restore, maintain and protect natural communities															
Objective 3a: Prepare a revised GIS map and description of FNAI natural communities and disturbed areas on the property			X	X											3,000
Objective 3b: Identify historic vegetative community types of the property in order to restore habitats to the proper natural community composition.			X	X											1,000
Objective 3c: Develop quantifiable vegetative management objectives for the property to ultimately achieve desired future conditions for the area's natural communities					X	X									0
Objective 3d: Develop and implement a comprehensive restoration plan with specific goals and objectives, an implementation schedule and monitoring						X	X	X	X	X	X	X	X		
Objective 3e: Restore disturbed areas, setting priorities based on rarity and quality						X	X	X	X	X	X				20,000
<i>Native Species Management</i>															
Goal 4: Maintain and protect the native species															
Objective 4a: Inventory native plants found on the property and assess their population requirements.			X	X											3,000
Objective 4b: Inventory native animals found on the property and assess their population requirements.			X	X											3,000
<i>Listed Species Management</i>															
Goal 5: Maintain and protect the listed species															
Objective 5a: Survey listed plant species and assess their population requirements and provide information to FNAI.			X	X											3,000
Objective 5b: Prepare and implement a listed plant species management plan.					X										1,500
Objective 5c: Survey listed animal species and assess their population requirements and provide information to FNAI.			X	X											3,000
Objective 5d: Prepare and implement a listed animal species management plan.					X										1,500
Objective 5e: Prepare a scrub jay management			X	X											1,500

Appendix 6: Goals and Objectives for Price's Scrub Greenway for 2004-2013

Goal/Objective	Previous Plan	Percent Complete	Proposed Timeline (fiscal year)											Estimated Cost (\$)		
			'04	05	06	07	08	09	10	11	12	13				
plan for the property; coordinate with experts and consider metapopulation needs																
Objective 5f: Implement the scrub jay management plan						X										10,000
<i>Invasive Non- native Species Management</i>																
Goal 6: Eradicate invasive non-native species or maintain at the lowest practical level																
Objective 6a: Continue to coordinate with DOT to eradicate cogon grass			X	X	X	X	X	X	X	X	X	X	X	X	X	5,000 PER ANNUM
Objective 6b: Inventory invasive non-native species on the property			X	X	X											3,000
Objective 6c: If warranted, coordinate with DEP Bureau of Invasive Plant Management to establish an exotic species operational plan for the property			X	X	X	X	X	X								1,500
Objective 6d: Reduce/eliminate population of feral hogs by establishing a trapping program or other means as needed.			X	X	X	X	X	X	X	X	X	X	X	X	X	0
Objective 6e: Eliminate population of feral dogs by establishing a trapping program or other means as needed.			X	X	X	X	X	X	X	X	X	X	X	X	X	0
<i>Problem Species Management</i>																
NA																
<i>Forest Resources Management</i>																
Goal 7: Manage forest resources consistent with the purposes of this property, when the activities contribute to restoration management																
Objective 7a: Conduct a Timber Management Assessment in coordination with the FL Division of Forestry			X													1,000
Objective 7b: Consider tree-planting of site-specific, native species if insufficient trees were left after the 1990s timber harvest or if the recent wildfire killed a high number of trees and insufficient recruits are appearing						X	X	X	X	X	X	X	X	X	X	10,000
<i>Fire Management</i>																
Goal 8: Conduct fire management operations to help restore and maintain natural communities and to mimic natural fire effects																
Objective 8a: Document all woods roads, trails, and firelines using GPS			X													1,000
Objective 8b: Develop burn plan for the property			X													1,000
Objective 8c: Delineate fire management and rescue access routes and provide this information to the sheriff and emergency services			X													500
Objective 8d: Acquire necessary training and equipment for fire prescription and suppression			X	X												12,000
Objective 8e: Install firelines to facilitate fire management.			X	X												5,000
Objective 8f: Establish a system for notifying			X	X	X	X	X	X	X	X	X	X	X	X	X	

Appendix 6: Goals and Objectives for Price's Scrub Greenway for 2004-2013

Goal/Objective	Previous Plan	Percent Complete	Proposed Timeline (fiscal year)											Estimated Cost (\$)	
			'04	05	06	07	08	09	10	11	12	13			
neighboring landowners in advance of prescribed burns (via email, phone trees, etc.) and use this system before each burn															
Objective 8g: Assess all pyrogenic communities in year one for the need for prescribed fire; all areas in need of fire will be burned within the first 5 years, and then re-assessed for subsequent fire application			X	X	X	X	X	X							
Objective 8h: Reduce fuel loads on the property to recommended levels on 15% of the property each year				X	X	X	X	X	X	X					5,000
Objective 8i: Restore vegetation structure and composition of pyrogenic natural communities through an aggressive prescribed fire program			X	X	X	X	X	X	X	X	X	X			
Objective 8j: Accomplish the annual burn objectives listed in the burn plan.			X	X	X	X	X	X	X	X	X	X			5,000
Objective 8k: Protect the property from wildfire.			X	X	X	X	X	X	X	X	X	X			?
Mineral Resources Management															
NA															
Archaeological, Historical, & Cultural Mgmt															
Goal 9: Survey, monitor and protect archaeological and historic sites on the property.															
Objective 9a: Using available sources, including local sources, research archaeological and historical sites on the property and of the region			X	X	X										1,000
Objective 9b: If warranted, survey for archaeological and historic sites on the property, including the stagecoach road, in coordination with DHR and ensure resources are recorded in the Master Site File			X	X	X										*25,000
Objective 9c: Patrol archaeological and historic sites on the property to prevent damage.			X	X	X	X	X	X	X	X	X	X			?
Objective 9d: Conduct all ground-disturbing activities in accordance with DHR guidelines.			X	X	X	X	X	X	X	X	X	X			?
Objective 9e: Regularly assess the condition of archaeological and historic resources. Monitor the condition of sites in poor condition using photopoints.			X	X	X	X	X	X	X	X	X	X			?
Scenic Resources Management															
Goal 10: Protect the scenic resources of the property															
Objective 10a: Identify the scenic resources of the property and potential threats to those resources			X	X	X	X	X	X	X	X	X	X			?
Objective 10b: Ensure that property operations do not decrease the scenic qualities of the property, unless necessary to protect the natural resources and visitor safety			X	X	X	X	X	X	X	X	X	X			?
Security Management															
Goal 11: Establish security measures															

Appendix 6: Goals and Objectives for Price's Scrub Greenway for 2004-2013

Goal/Objective	Previous Plan	Percent Complete	Proposed Timeline (fiscal year)											Estimated Cost (\$)		
			'04	05	06	07	08	09	10	11	12	13				
sufficient to protect the property's integrity and to restrict unauthorized access and use																
Objective 11a: Evaluate the current boundary posting & maintain the boundary of the property			X	X	X	X	X	X	X	X	X	X	X	X	X	
Objective 11b: Fence the property boundary where necessary to prevent illegal use			X	X												30,000?
Objective 11c: Coordinate with FWC, DEP law enforcement, and the Marion County Sheriff about security concerns			X	X	X	X	X	X	X	X	X	X	X	X	X	?
Objective 11d: Coordinate with the local Community Crimewatch organization and participate as a new neighbor			X	X	X	X	X	X	X	X	X	X	X	X	X	0
Objective 11e: Evaluate establishment of a security residence on site			X	X												100,000
Research and Monitoring																
Goal 12: Facilitate and conduct scientific research and monitoring to optimally manage and protect natural communities and native plant and animal species of the property																
Objective 12a: Establish photo-plots in restoration areas			X													0
Objective 12b: Annually sample established vegetative treatment plots			X	X	X	X	X	X	X	X	X	X	X	X	X	3,000
Objective 12c: Establish water quality monitoring stations on the property			X	X	X	X	X	X	X	X	X	X	X	X	X	0
Objective 12d: Ensure that all research and monitoring projects have all required permits from relevant agencies			X	X	X	X	X	X	X	X	X	X	X	X	X	0
Education and Training																
Goal 13: Educate the public and local governments concerning resources, issues and management goals/objectives of the property																
Objective 13a: Interact with adjacent landowners via phone, mail, and direct contact regarding management issues, such as exotics and burns. Develop brochures and letters explaining the prescribed burning and exotic species programs			X	X	X	X	X	X	X	X	X	X	X	X	X	?
Objective 13b: Develop historical and natural resource educational materials and displays, including entrance kiosk(s) with regulations. Relate the greenway natural and historical resources to the region in general			X	X												50,000*
Objective 13c: Encourage adjacent landowners to establish control programs for invasive exotic plants			X	X	X	X	X	X	X	X	X	X	X	X	X	3,000
Objective 13d: Provide public service announcements to local and state media contacts on an as-needed basis			X	X	X	X	X	X	X	X	X	X	X	X	X	?
Public Access and Visitor Use																
<i>Public Access/Parking/Handicap Facilities</i>																
Goal 14: Provide public access to encourage secondary compatible uses where appropriate																

Appendix 6: Goals and Objectives for Price's Scrub Greenway for 2004-2013

Goal/Objective	Previous Plan	Percent Complete	Proposed Timeline (fiscal year)											Estimated Cost (\$)		
			'04	05	06	07	08	09	10	11	12	13				
on the property that do not detract from the conservation and management goals and objectives																
Objective 14a: Establish entrance sign to identify primary property entrance			X													5,000
Objective 14b: Develop the main public access point in the southwestern portion of the property. Facilities will include parking, horse trailer parking, turnaround, restrooms, and a watering station			X													100,000
Objective 14c: Develop additional non-motorized vehicle access points as additional public-access trails are linked to Price's Scrub Greenway			X	X	X	X	X	X	X	X	X	X	X			?
Objective 14d: Provide small parking area and picnic facilities around the borrow pit			X	X												50,000
Objective 14e: Provide picnic facilities at the Waterlily overlook			X													1,000
Objective 14f: As facilities are developed, provide universal access in all cases except where the law allows reasonable exceptions (e.g., where handicap access is structurally impractical, or where providing such access would change the fundamental character of the facility being provided).			X	X	X	X	X	X	X	X	X	X	X			?
Education Facilities																
Goal 15: Establish locations for providing educational materials and/or programs for visitors																
Objective 15a: At the main entrance point, establish a kiosk that interprets natural and historic resources of Price's Scrub and the region			X													5,000
Objective 15b: Develop trail signage that provides natural and historical resources interpretation			X													10,000-50,000
Objective 15c: Develop brochures that interpret natural and historic resources of Price's Scrub and the region			X													10,000-50,000
Objective 15d: Develop lists for public distribution of plants and animals known to occur on Price's Scrub			X													?
Objective 15e: As additional entrance points are developed, provide interpretive kiosks at each location					X	X	X	X	X	X	X	X	X			2,000 to 20,000 each
Equestrian																
Goal 16: Establish equestrian trails and facilities where appropriate on the property that do not detract from the conservation and management goals and objectives																
Objective 16a: Establish 10-20 miles of multi-use trails suitable for equestrian use on the property, encouraging local participation in the planning, construction, and maintenance of the trails			X	X												10,000

Appendix 6: Goals and Objectives for Price's Scrub Greenway for 2004-2013

Goal/Objective	Previous Plan	Percent Complete	Proposed Timeline (fiscal year)											Estimated Cost (\$)	
			'04	05	06	07	08	09	10	11	12	13			
Objective 16b: Establish parking space for horse trailers and provide a vehicle turnaround and running water for horses					X										
Objective 16c: Evaluate feasibility of establishing a horse-drawn vehicle trail loop and, if warranted, establish the trail				X	X										5,000
Objective 16d: Establish linkages to other publicly-accessible equestrian trails			X	X	X	X	X	X	X	X	X	X	X		?
Hiking/Biking															
Goal 17: Encourage hiking/biking where appropriate on the property that does not detract from the conservation and management goals and objectives															
Objective 17a: Establish 10-20 miles of multi-use trails suitable for hiking/biking on the property, encouraging local participation in the planning, construction, and maintenance of the trails. Consider asking biking and hiking organizations for their input for trail design					X										5,000
Objective 17b: Establish at least one trailhead facility for hikers/bikers on the property				X											5,000
Objective 17c: Establish at least one short hiking trail loop with interpretive signs near the parking area					X										5,000
Camping															
Goal 18: Encourage camping where appropriate on the property that does not detract from the conservation and management goals and objectives															
Objective 18a: Investigate the feasibility of a primitive group camping area on the property				X											500
Objective 18b: If warranted, establish a primitive group camping area					X										2,000
Fishing															
Goal 19: Encourage fishing where appropriate on the property that does not detract from the conservation and management goals and objectives															
Objective 19a: Establish two or more fishing access points at both water bodies on the property				X	X										5,000 each
Objective 19b: Ask FWC to assess the fish populations at the borrow pit, and to initiate a fish stocking plan if warranted				X											?
Objective 19c: Assess the impacts, desirability, demand for, and cost of installing multi-purpose boardwalks/docks that would allow for fishing at both water bodies. Consider if the structure would prevent erosion and impacts to shore vegetation				X	X										?
Boating															

Appendix 6: Goals and Objectives for Price's Scrub Greenway for 2004-2013

Goal/Objective	Previous Plan	Percent Complete	Proposed Timeline (fiscal year)											Estimated Cost (\$)	
			'04	05	06	07	08	09	10	11	12	13			
Goal 20: Allow non-motorized boat use on the borrow pit water body, ensuring that it does not detract from the conservation and management goals and objectives															
Objective 20a: Establish a small non-motorized boat launching site at the borrow pit water body				X											5,000
Objective 20b: Assess the impacts, desirability, demand for, and cost of installing a multi-purpose boardwalk/dock or small boarding dock at the launch point. Consider if the structure would prevent erosion and impacts to shore vegetation			X												15,000
Operations and Facilities															
<i>Cost Est. & Funding Sources for Mgmt</i>															
Goal 21: Conduct operations and obtain and maintain facilities and staff to soundly manage, protect and make accessible the property															
Objective 21a: Obtain funding for sufficient staffing [1.0 FTE, 0.5 OPS] and outsourced assistance to provide support for property development and operations			X	X	X	X	X	X	X	X	X	X	X	X	75,000 initially 50,000 recurring
Objective 21b: Pursue alternative funding sources, such as mitigation projects, grants and fundraising, to supplement baseline budget funds			X	X	X	X	X	X	X	X	X	X	X	X	?
<i>Analysis of Contracting Mgmt Activities</i>															
Goal 22: Consider outsourcing those property operations that outside sources can conduct at less cost and with equivalent or better results than property staff															
Objective 22a: On a continuing basis, analyze property operations and identify those activities for which property staff do not have the expertise or that can be completed at less cost with equivalent or better results by outside sources			X	X	X	X	X	X	X	X	X	X	X	X	?
Objective 22b: Consider outsourcing activities identified by Objective 22a			X	X	X	X	X	X	X	X	X	X	X	X	?
Partnerships and Regional Coordination															
<i>Cooperating Agencies</i>															
Goal 23: Establish and maintain relationships with other agencies to enhance management and protection of the property															
Objective 23a: Coordinate management efforts with other agencies			X	X	X	X	X	X	X	X	X	X	X	X	0
Objective 23b: Coordinate on an as-needed basis with local law enforcement and permitting agencies regarding patrol and potential violations			X	X	X	X	X	X	X	X	X	X	X	X	0
Objective 23c: Establish collaborative efforts with DOF, FWC, DHR, DEP and others for the protection and management of activities on the property			X	X	X	X	X	X	X	X	X	X	X	X	0
Objective 23d: Encourage establishment of			X												0

Appendix 6: Goals and Objectives for Price's Scrub Greenway for 2004-2013

Goal/Objective	Previous Plan	Percent Complete	Proposed Timeline (fiscal year)											Estimated Cost (\$)		
			'04	05	06	07	08	09	10	11	12	13				
resource monitoring stations by WMD or other entities on the property																
Objective 23e: Coordinate joint educational programs with other state agencies and the local education community			X	X	X	X	X	X	X	X	X	X	X	X		0
Cooperating Organizations																
Goal 24: Establish and maintain relationships with other organizations to enhance management and protection of the property																
Objective 24a: Establish a Citizen Support Organization and solicit volunteers to assist property staff to accomplish goals of the property.			X													10,000
Objective 24b: Coordinate management efforts with other local natural areas and local environmental organizations			X	X	X	X	X	X	X	X	X	X	X	X		0
Objective 24c: Coordinate management efforts with local organizations such as equestrian, hiking, biking, and nature clubs/organizations			X	X	X	X	X	X	X	X	X	X	X	X		0
Objective 24d: Provide property and community recognition and support for volunteers			X	X	X	X	X	X	X	X	X	X	X	X		2,000
Objective 24e: In the first year, generate 500 hours from volunteers to assist in property management and education, and increase volunteer hours by 10% in each succeeding year			X	X	X	X	X	X	X	X	X	X	X	X		2,000
Land Use Coordination																
Goal 25: Review, define, and minimize impacts associated with planned and existing development along or within the property																
Objective 25a: Address impacts associated with existing and future development concerning fire management, connectivity and other issues			X	X	X	X	X	X	X	X	X	X	X	X		0
Objective 25b: Continually review comprehensive plan amendments and land development regulations that govern proposed land use changes on properties adjacent to the property and coordinate with OGT headquarters on comments. Coordinate with neighbors on the review			X	X	X	X	X	X	X	X	X	X	X	X		0
Prospective Land Acquisitions and Potential Surplus Lands																
Goal 26: Define optimum boundaries for the property and facilitate acquisition and/or surplusing of lands to achieve these boundaries																
Objective 26a: Assist Division of State lands in the acquisition of the Fonoroff inholding			X	X	X											0
Objective 26b: With local input, identify lands outside of the current project boundaries that are necessary for the perpetual protection of the property			X	X	X	X	X	X	X	X	X	X	X	X		0
Objective 26c: Investigate easements and rights-of-way on Price's Scrub and consider options for			X	X	X											5,000

Appendix 6: Goals and Objectives for Price's Scrub Greenway for 2004-2013				
Goal/Objective	Previous Plan	Percent Complete	Proposed Timeline (fiscal year) '04 '05 '06 '07 '08 '09 '10 '11 '12 '13	Estimated Cost (\$)
extinguishing access easements				
Objective 26d: Nominate for acquisition through Florida Forever and the Greenway and Trails programs those parcels that are important for management of the property, contain important resources, or are linkages to provide additional greenways and trails opportunities			X X X X X	0
Objective 26e: With local input, ensure that Price's Scrub is connected to the surrounding community, Paynes Prairie Preserve State Park and Goethe State Forest			X X X X X X X X X X X	?
Objective 26f: Assist in the acquisition of all lands within the Price's Scrub Greenways and Trails project and the Carr Farm/Price's Scrub Florida Forever boundary parcels by providing DEP DSL with information on development, available parcels, ownership, and local contacts every 3 months			X X X X X X X X X X X	?
Compliance with Govt. Requirements				
Goal 27: Ensure that use and management of the property complies with state and local government requirements				
Objective 27a: Ensure that each planned use of the property complies with the State Lands Management Plan adopted by the Trustees			X X X X X X X X X X X	?
Objective 27b: Ensure that each planned use of the property complies with the Local Government Comprehensive Plan			X X X X X X X X X X X	0

* = additional money above baseline funds needed to complete this objective

Appendix 7:
Land Management Rules
Chapters 18-2, 62S-1 Florida Administrative Code



CHAPTER 18-2 MANAGEMENT OF UPLANDS VESTED IN THE BOARD OF TRUSTEES

18-2.017 Definitions.

When used in this rule chapter, the following shall have the indicated meaning unless the context clearly indicates otherwise:

- (1) "Activity" means any use of uplands which requires Trustees' approval for consent of use, lease, management and use agreements, easement, disposal, exchange or transfer of any interest, including sub-surface, in uplands.
 - (2) "Agency" means an official, officer, commission, authority, council, committee, department, division, bureau, board, section, or another unit or entity of government.
 - (3) "Applicant" means any person making application for any activity involving uplands.
 - (4) "Appraisal" means a formal narrative statement or report setting forth and documenting an opinion of value of real property as of a specific date.
 - (5) "Assignment" means a transfer of one's use, right or interest from one person to another person.
 - (6) "Authorization" means the permission granted by the Board of Trustees for a person to construct a facility or to carry out an activity on uplands.
 - (7) "Beach" means the zone of unconsolidated material that extends landward from the mean low water line to the place where there is marked change in material or physiographic form, or to the line of permanent vegetation (usually the effective limit of storm waves). Unless otherwise specified, the seaward limit of a beach is the mean low water line. "Beach" is alternatively termed the shore.
 - (8) "Best management practices" means methods, measures or practices that are developed, selected, or approved by agencies to protect, enhance and preserve natural resources. They include, but are not limited to, engineering, conservation, and management practices for mining, agriculture, silviculture, and other land uses, that are designed to conserve the soil and associated nutrients while simultaneously controlling nonpoint pollution to provide good overall upland management.
 - (9) "Board" means the Board of Trustees of the Internal Improvement Trust Fund.
 - (10) "Bonus" means a one time payment offered by competitive bid on which the award of an oil or gas lease is based.
 - (11) "C.A.R.L." means Conservation and Recreation Lands, as specified in Section 259.032, F.S.
 - (12) "Consideration" means something of value given in exchange as part of a legal agreement.
 - (13) "Convey" means to transfer title or interest in land from one party to another for consideration.
 - (14) "Conveyance" means an instrument or transfer of title of land from one party to another.
 - (15) "Cooperating agency" means a lessee which, as party to a multiple state agency lease, has designated management responsibilities to be carried out under the guidance of the lead agency so that each party utilizes its particular expertise in order to achieve the management goal.
 - (16) "Cooperative management" means single or multiple use management by more than one agency so that each utilizes its particular expertise in order to achieve a particular management goal.
 - (17) "Council" means the Land Management Advisory Council pursuant to Section 253.022, F.S.
 - (18) "Department" means the State of Florida Department of Environmental Protection.
- 18-2.001 Intent. (Repealed)
- 18-2.002 Scope and Effective Date. (Repealed)
- 18-2.003 Definitions. (Repealed)
- 18-2.004 Policies, Standards, and Criteria. (Repealed)
- 18-2.005 Leases, Other than Agricultural, Oil, Gas, and Mineral. (Repealed)
- 18-2.006 Subleases. (Repealed)
- 18-2.007 Agricultural Leases. (Repealed)
- 18-2.008 Leases of Oil, Gas, and Other Mineral Interests. (Repealed)
- 18-2.009 Management and Use Agreements. (Repealed)
- 18-2.010 Easements. (Repealed)
- 18-2.011 Disposal of Trustees-owned Uplands. (Repealed)
- 18-2.012 Exchanges. (Repealed)
- 18-2.013 Solid Mineral Interest Sales. (Repealed)
- 18-2.014 Release of Reservations. (Repealed)
- 18-2.015 Geophysical Testing. (Repealed)
- 18-2.016 Agency Administrative Fee. (Repealed)
- 18-2.017 Definitions.
- 18-2.018 Policies, Standards, and Criteria for Evaluating, Approving or Denying Requests to Use Uplands.
- 18-2.019 Procedures to Obtain Authorization.
- 18-2.020 Payments and Consideration.
- 18-2.021 Land Management Advisory Council.
- (19) "Development of Regional Impact (DRI)" means any development which, because of its character, magnitude, or location, would have a substantial effect upon the health, safety, or welfare of citizens of more than one county.
 - (20) "Division" means the Division of State Lands.
 - (21) "Dry hole" means a dry well which has been plugged and abandoned without ever having produced hydrocarbons in

commercial quantities.

(22) "Easement" means a nonpossessory interest in uplands created by a grant or agreement, which confers upon the applicant the limited right, liberty and privilege to use uplands for a specific purpose, term and fee.

(23) "E.E.L." means Environmentally Endangered Lands, as specified in Chapter 259, F.S.

(24) "Everglades Agricultural Area" means that area which is described on the map entitled "Everglades Agricultural Area", filed in the office of the Secretary of State as Exhibit A to this rule and made an integral part hereof.

(25) "Factual or physical exploration results" means all data and information gathered as the result of any and all operations conducted under a geophysical testing use agreement.

(26) "Fine" means a monetary assessment imposed, pursuant to Section 253.04, F.S., on a person or the agent of a person who willingly damages state lands, willfully damages or removes products of state lands in violation of state or federal law, or knowingly refuses to comply with or willfully violates Chapter 253, F.S., or the rules of the Division.

(27) "Geophysical testing" means the use of gravity, seismic and similar geophysical techniques to obtain information and data on oil, gas or other resources.

(28) "Historic resources" means any prehistoric or historic district, site, building, object, or other real or personal property of historical, architectural, or archaeological value, or any part thereof, relating to the history, government, or culture of the state.

(29) "L.A.T.F." means the Land Acquisition Trust Fund as specified in Chapter 375, F.S.

(30) "Lead agency" means that agency designated by the Board as being responsible for coordinating the development of a management plan for a cooperative management area with input from cooperating agencies pursuant to the terms of the management agreement/multiple agency lease.

(31) "Lease" means an interest in lands designated by a contract creating a landlord-tenant relationship between the Board as landlord and the applicant as tenant whereby the Board grants and transfers to the agency the exclusive use, possession, and control

of certain specified lands, for a determinate number of years, with conditions attached. On those properties which considerable capital improvements are to be made, the term of a lease shall be limited to the expected amortization or life cycle of the improvements.

(32) "Letter of Consent" means a nonpossessory form of authorization that allows the applicant the right to erect specific structures or conduct specific activities on uplands.

(33) "L. W. C. F." means the Land and Water Conservation Fund established under the federal Land and Water Conservation Act of 1965.

(34) "Management agreement/multiple agency lease" means the legal instrument by which the management purpose(s) of a property and the responsibilities of each managing party are delineated in a cooperative management situation. It is a contractual agreement between the Board and one or more agencies which does not create an interest in real property but merely authorizes conduct of certain management activities on lands owned by the Board.

(35) "Market Value" means the most probable price for which an appraised property will sell in a competitive market under all conditions requisite to fair sale, with the buyer and seller each acting prudently and knowledgeably, and assuming that neither is under undue duress.

(36) "Mean high water line" means the intersection of the tidal plane of mean high water with the shore. This is the boundary between sovereignty submerged land and the adjacent upland along tidal waterbodies.

(37) "Mitigation" means an action or series of actions which would offset adverse impacts of a proposed activity involving uplands.

(38) "Multiple use" means management for two or more primary purposes in order to insure that the greatest possible combination of public benefits are derived from the use of State lands. These uses may include, but are not limited to management

for: timber, wildlife habitat, forage, open space, recreation, public facilities, archaeological and historic sites, or water resources. Individual resources in multiple use management areas may be managed at less than full potential in order to provide the most beneficial combination of uses.

(39) "Net positive benefit" means any effective action or transaction which promotes the overall purposes for which the land was acquired. It is compensation over and above the required payment of market value for or replacement of the affected parcel to

offset any requested use or activity which would preclude or affect, in whole or in part, current or future uses of natural resource lands that are managed primarily for the conservation and protection of natural, historical or recreational resources. Net positive benefit shall not be solely monetary compensation, but shall include mitigation and other consideration related to environmental, historical or recreational benefits, as applicable, to the affected management unit.

(40) "Ordinary high water line" means the boundary between uplands and submerged lands beneath non-tidal navigable natural water bodies.

(41) "Person" means any individual, corporation, partnership, firm, association, joint venture, estate, trust, business trust, syndicate, fiduciary, commission, county, municipality or political subdivision of a state, any interstate body, the federal government, or any subdivision thereof and all other groups or combinations, whether public or private.

(42) "Plan" means a management plan as required by Section 253.034, F.S.

(43) "Policies" means guidelines for the decision-making process whereby programs, services and actions of the State are implemented, consistent with existing law.

(44) "Preliminary Development Agreement (PDA)" means a written agreement between the developer and the Department of

Community Affairs to allow the developer to proceed with a limited amount of the total proposed development, subject to all other

governmental approvals and solely at the developer's own risk. This written agreement is entered into prior to issuance of a final development order which grants, denies or denies with conditions an application for a development permit.

(45) "Private" means affecting or belonging to private individuals, as distinguished from the public in general and not belonging to the public sector or a unit of government.

(46) "Processed records" means data collected under the term of a use agreement for geophysical testing. Processing involves changing the form of data so as to facilitate interpretation. Processing operations may include, but are not limited to, applying corrections for known perturbing causes, rearranging or filtering data, and combining or transforming data elements. Processing shall not include the interpretation of any data collection.

(47) "Producing" means the yielding of product including oil, gas, minerals, crops and livestock from Trustees owned uplands.

(48) "Property" means land and permanent improvements that are located there on and affixed thereto.

(49) "Public interest" means demonstrable environmental, social, historical and economic benefits which would accrue to the public in general as a result of a proposed activity and which would clearly exceed all demonstrable environmental, social, historical and economic costs of the proposed activity.

(50) "Release" means the relinquishment, concession or giving up of a right, claim or privilege by the party for whom it exists or to whom it accrues.

(51) "Royalty" means the percentage of the value of a natural resource paid to the owner of the resource by those extracting and selling it.

(52) "Rule" means a rule adopted pursuant to Chapter 120, F.S.

(53) "Satisfactory evidence of title" means a current title insurance policy or current title insurance binder or commitment, not more than 6 months old, issued by a title insurance company authorized to do business in the State of Florida or an opinion of title

prepared by a member of the Florida Bar, covering title to the lands involved and indicating any mineral or other interest.

(54) "Single use" means management for one primary purpose. Single use properties may be managed for compatible secondary uses as long as those uses do not interfere or detract from the designated primary purpose. Single use properties will most often be managed by a single agency but may be placed under cooperative management if the expertise of two or more agencies is required to carry out the primary purpose.

(55) "S.O.C." means Save Our Coast, as specified in Chapter 375, F.S.

(56) "Sole management" means management by one agency on a single or multiple use management tract.

(57) "State agency" means each department created pursuant to Chapter 20, F.S.

(58) "State land" as used in this rule means land to which the title is vested in the Board.

(59) "State Lands Management Plan" means the Conceptual State Lands Management Plan and any subsequent revisions which shall be approved by the Trustees.

(60) "Sublease" means a lesser than leasehold interest in lands executed by the lessee to a third party for a definite time period with specific conditions attached.

(61) "Surplus lands" means lands which are not needed by any State agency, and are recommended for disposal, pursuant to Rule 18-2.021, F.A.C.

(62) "Trustees" means the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida or its designated agents.

(63) "Uplands" means those lands above the mean high water line or ordinary high water line title to which is vested in the Trustees.

(64) "Use agreement" means a grant or agreement which confers upon the applicant a nonexclusive and limited right, liberty and privilege to use uplands for a specific purpose and for a specific time and does not create a title interest in real property.

(65) "Water conservation areas" means those areas which are described on the map entitled "Conservation Areas", attached as Exhibit C to this rule and made an integral part thereof.

Specific Authority 253.03 FS. Law Implemented 253.03, 253.034, 259.035 FS. History--New 6-4-96.

18-2.018 Policies, Standards, and Criteria for Evaluating, Approving or Denying Requests to Use Uplands.

Applications to use Trustees-owned uplands and decisions to approve or reject such applications will be based on all of the following:

(1) Public Interest Evaluation

(a) The decision to authorize the use of Trustees-owned uplands requires a determination that such use is not contrary to the public interest. The public interest determination requires an evaluation of the probable impacts of the proposed activity on the uplands. All direct and indirect impacts related to the proposed activity as well as the cumulative effects of those impacts shall be taken into consideration. Relevant factors to be considered include: conservation, general environmental and natural resource concerns, wetlands values, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, recreation, aesthetics, economics, public health and safety, relative extent of the public need for the proposed use or activity, reasonable alternative locations and methods to accomplish the objective of the proposed use or activity, potential detrimental effects on the public uses to which the area is otherwise suited, the effect on cultural, scenic and recreational values, and the needs and welfare of the people.

(2) General Policies

- (a) Uplands may be leased or subleased, managed by use agreement, encumbered by easements or licenses, disposed of to either the public or private sector, or may be retained and managed by the division.
- (b) All uplands shall be administered, managed, or disposed of in a manner that will provide the greatest combination of benefits to the general public.
- (c) Any use of uplands must comply with specific statutory or legislative mandates or other legal restrictions governing the property.
- (d) Any approval granted for any activity on uplands shall contain such terms, conditions, and restrictions as deemed necessary to provide for responsible management that will protect and enhance uplands.
- (e) The Board will not grant any form of authorization for a period greater than is necessary to provide for reasonable use of the land for the existing or planned life cycle or amortization of the improvements.
- (f) Any authorization to use uplands shall be subject to cancellation if the applicant converts the facility to a use that was not authorized or if the land ceases to be used for the purpose which was approved. In addition, the Trustees may require removal of the structure and restoration of parcel to its natural state, and administrative fines and damages as stipulated by rule.
- (g) Unless otherwise provided herein, no activity may commence until the authorizing document is executed by the Department.
- (h) All activities on uplands shall implement applicable best management practices that have been selected, developed, or approved by the Trustees or other land managing agencies.
- (i) Equitable compensation shall be required when the use of uplands will generate income or revenue for a private user or will limit or preempt use by the general public. The Trustees shall award authorization for such uses on the basis of competitive bidding rather than negotiation unless otherwise provided herein or determined by the Trustees to be in the public interest pursuant to the results of an evaluation of the impacts, both direct and indirect, which may occur as a result of the proposed use. Relevant factors to be considered in the evaluation shall include those specified in subsection 18-2.018(1), F.A.C. The Trustees shall make its final determination at a regularly scheduled meeting of the Governor and Cabinet. The Trustees reserve the right to reject any and all bids.
- (j) The successful bidder shall pay all costs of legal advertisement, appraisal, title work, taxes or assessments for any activity requiring such items.
- (k) Appraisals shall be utilized to establish market value and said appraisals shall be reviewed and accepted by the division as being a reasonable approximation of market value.
- (l) Single use properties may be managed for compatible secondary uses as long as those uses do not interfere with or detract from the designated primary purpose.
- (m) Individual resources on multiple use properties may be managed at less than full potential in order to provide the most beneficial combination of uses.
- (n) It shall be the Trustees policy to provide for public access upon uplands to the greatest extent practicable unless the Trustees determine that public access is not in the public interest or conflicts with the parcel's management criteria or plan.
- (o) Requests by local governmental agencies for any activity on uplands shall be by formal action by the appropriate governing board.
- (p) All authorizations must contain a provision allowing for access for inspection by department staff.

(3) Standards and Criteria

(a) Leases and Subleases

1. Unless determined by the Trustees to be in the public interest, the term of any lease or sublease shall not exceed a maximum term of fifty years. Specific terms are as follows:
 - a. Sublease terms shall not exceed 50 years or a period conterminous with the principal lease if the remaining lease term is less than 50 years.
 - b. The standard lease term for agricultural or grazing leases shall be six years.
 - c. Oil, gas, and other mineral interest leases shall be limited to a primary term of ten years.
2. Leases and subleases shall be noticed pursuant to Chapter 18-2, F.A.C., and applicable law.
3. Lessees and sublessees shall be responsible for acquiring all permits and paying any and all ad valorem taxes, drainage, special assessments or other taxes.
4. Lessees and sublessees shall be required to provide level one environmental reports and information regarding uses of land which may involve hazardous or toxic waste.
5. Lessees and sublessees shall be responsible for preparing either a management plan or an operational report as follows:
 - a. All state agency lessees and sublessees, through the sublessor, shall prepare and submit to the division parcel-specific management plans in accordance with Rule 18-2.021. No physical alteration of the leased premises shall occur unless such activity has been authorized via an approved management plan.
 - b. All other lessees except agriculture, grazing and oil and gas lessees shall prepare a site-specific operational report which shall be prepared and submitted to the division by lessee within a year of lease execution or other dates as designated in the lease. The operational report shall include the following:
 1. The common name of the property, if any;

- II. A map showing the approximate location and boundaries of the property, the location of any structures or improvements to the property, and a statement as to whether the property is adjacent to an aquatic preserve or a designated area of critical state concern or an area under study for such designation;
 - III. The legal description and acreage of the property;
 - IV. The land acquisition program (e.g., C.A.R.L., E.E.L., L.A.T.F.), if any, under which the property was acquired;
 - V. The designated single or multiple use management for the property, including use by other managing entities;
 - VI. The approximate location and description of known renewable and non-renewable resources of the property including archaeological and historical resources; fish and wildlife resources, both game and non-game; mineral resources (such as oil, gas, phosphate, etc.); and natural resources (such as virgin timber stands, scenic vistas, rivers, streams, etc.);
 - VII. A description of past and existing uses, including unauthorized uses of the property;
 - VIII. A description of alternative or multiple uses of the property considered by the lessee and a statement detailing why such uses were not adopted;
 - IX. An assessment of the impact of planned uses on the renewable and non-renewable resources of the property and a description of the specific actions that will be taken to protect, enhance and conserve those resources and to compensate/mitigate the damage that is caused by such use;
 - X. A description of management needs and problems on the property;
 - XI. A description of the management responsibilities of each entity and how such responsibilities will be coordinated;
 - XII. A statement concerning the extent of public involvement and local government participation, if any, in the development of the plan; and
 - XIII. A statement of gross income generated, net income and expenses.
- c. For agricultural and grazing leases, a certified agricultural operational report, documenting the status of operations on the leases area, shall be submitted to the division annually, one month prior to the end of the lease year. Such report shall include, at a minimum, the following:
- I. The kind and location of the crop or livestock grown;
 - II. The stewardship practices utilized;
 - III. The capital improvements completed;
 - IV. A schedule for installing future improvements;
 - V. Types and amounts of pesticides, herbicides, and fertilizers used; and
 - VI. A detailed description of how the implementation of best management practices were carried out during the lease year including, but not limited to, muck soil measurement and plans for best management practices for the following year.
- d. Oil, gas, or mineral lessees shall provide a notarized annual report to the Trustees in accordance with Section 253.511, F.S., documenting the status of operations on the leased area. Failure to submit this report within 90 days following the anniversary of the respective lease shall be grounds for termination in accordance with the terms and conditions of the lease.
6. Additional specific criteria for subleases are as follows:
- a. Subleases shall be in compliance with the lease and management plan or operational report for the master lease.
 - b. Subleases which are 160 acres or greater in size shall be reviewed by the Council.
7. Additional specific criteria for agricultural and grazing leases are as follows:
- a. New agricultural lessees shall totally compensate the vacating lessees for ratoon, stubble or other residual crops.
 - b. Site-specific minimum stewardship measures shall be required.
 - c. The lessee will not cause or allow damage to the leased premises or remove soil, sod, muck, or other materials from the leases premises.
8. Additional specific criteria for oil and gas leases are as follows:
- a. After the cessation of any oil, gas, or mineral lease, the site shall be restored by the lessee to the original condition to the greatest extent practicable.
 - b. An oil and gas lease within the corporate limits of any municipality; or, in the tidal waters abutting or immediately adjacent to the corporate limits of a municipality; or, within 3 miles of the corporate limits of a municipality may be approved only if a resolution of approval has been received from the municipality. In addition, a public hearing, in the vicinity of the lease, must be held if the lease is within 3 miles of an incorporated city, town or beach.
 - c. An oil and gas lease on an improved beach, as defined in Section 253.61, F.S., located outside of an incorporated town or municipality; or, abutting or immediately adjacent to an improved beach within the tidal waters of the state; or, within 3 miles of an improved beach into such tidal waters of the state, may be approved only if a resolution of approval has been received from the county within which the beach is situated.
 - d. Applicants for mineral leases, other than oil and gas, shall obtain written consent from the owners of the surface overlying the mineral interest.
 - e. Commencement of the required mitigation or other action necessary to satisfy net positive benefit will be required only if and when the lessee conducts any physical activity on the surface of the leased property or if the grant of rights under the oil and gas lease precludes or affects the use of the surface of the leased property for any use other than oil and gas exploration.
 - f. Drilling, exploration, or production of oil and gas is prohibited within the boundaries of the South Florida Water Management District's water conservation areas on lands where title is vested in the Trustees.
 - g. Oil, gas or mineral leases shall clearly specify the particular mineral to be drilled or mined and the manner in which it may

be extracted.

h. Prior to extracting any oil, gas, or minerals, lessees may be required to provide financial security against damages caused by its activities on uplands. Examples of acceptable forms of security include a surety or property bond, an irrevocable letter of credit,

or payment into the Department of Environmental Protection's Petroleum Exploration and Production Bond Trust Fund.

Examples

of factors to be considered by the Trustees in determining whether to require such security include: the potential for air, water, or ground pollution; destruction of wildlife or marine productivity; and damage which impairs the health and general welfare of the citizens of the state. Such security as provided in Section 253.571, F.S., shall be forfeited to the Trustees to pay for any damages caused by such mining or drilling activities. The department shall notify the lessee and give lessee time to take corrective action before applying the security to correct the violation. Should the lessee not respond in the time provided, or if an emergency situation exists, the department shall take immediate remedial or corrective action without further notice.

i. Lessees shall complete the drilling of at least one test well on the leased area within the first 2 1/2 years of the lease term and complete drilling of at least one additional well every 2 1/2 years thereafter until the total number of wells drilled equals one half the number of sections encompassed in the lease. The lessee shall provide a written designation describing the two sections of land

to which such well shall apply. For purposes of this provision a well drilled on lands validly pooled with state leasehold acreages shall be considered to have been drilled on the respective Trustees' lease.

j. If no test well for an oil or gas lease is completed within the first 2 1/2 years of the lease term or each succeeding 2 1/2 year period, the lease shall become void at the end of the applicable 2 1/2 year period as to all of the land covered by the lease, except for

that upon which wells have been drilled in accordance with the provisions of Section 253.55, F.S.

k. Wells required in the several periods of said lease shall be drilled in accordance with the provisions of Chapter 253, F.S., in an efficient, diligent and workmanlike manner, and in accordance with the best practice, to a depth of 6000 feet before the abandonment thereof, unless oil or gas has been found in paying quantities at a lesser depth.

l. Drilling operations shall be conducted in accordance with the provisions of Section 253.55, F.S.

m. The 2 1/2 year drilling periods described in j. and k. above shall be extended upon documentation by the applicant prior to expiration that additional time is necessary to obtain all permits. Such additional time may not exceed one year.

(b) Disposal of Trustees-owned Uplands

1. Examples of conditions under which the Trustees may convey an upland parcel include:

a. The parcel was vested in the state pursuant to Chapter 18296, Laws of Florida, 1937 (Murphy Act), and is 5 acres or less in size and has a market value of \$100,000 or less; or

b. The parcel has been designated surplus pursuant to Chapter 253.034, F.S.; or

c. The Trustees determine that conveyance of the parcel by sale, gift or exchange provides a greater benefit to the public than its retention in state ownership.

2. Parcels to be conveyed pursuant to this subsection shall be noticed in accordance with Chapter 18-2, F.A.C., and applicable law.

3. Conveyance of property pursuant to this section shall be in accordance with the following requirements:

a. Property and improvements shall be sold "as is", with no warranties nor representations whatsoever.

b. The cost of title insurance, documentary stamp tax, recording fees, any property taxes due, abstract, title certificate, survey, appraisal, legal advertisement and purchaser's legal fees shall be the responsibility of the purchaser.

c. Property shall be conveyed by quitclaim deed without warranties and shall reserve or contain a reservation prescribed in Section 270.11, F.S., unless waived by the Trustees pursuant to Section 270.11(2)(a), F.S., or exempt from the requirement for reservation pursuant to subsection 253.03(3) or Section 253.62, F.S.

d. Closings shall be in accordance with a sales contract executed by the Trustees.

4. A state agency or the Division may apply for an exchange of state-owned uplands for a parcel of privately-owned uplands by certifying:

a. That it needs a parcel of private land for a particular use; and

b. That it manages uplands vested in the Trustees which it wishes to use for a state agency exchange. If no uplands managed by the state agency can be identified as excess to its management needs, then uplands which have been selected through the land disposal process may be used instead.

5. Other governmental agencies may apply for an exchange by:

a. Certifying that they need a parcel of Trustees-owned uplands for a specific project; and

b. Certifying that they own or can acquire exchange property suitable to the Trustees.

6. Exchanges may be applied for by private landowners only if they own or can acquire land on an approved state acquisition list and the parcel sought by the private landowner has been selected for conveyance through the land disposal process.

(c) Use Agreements

1. Use agreements may be executed when it is determined that the use or management of uplands does not require a lease, sublease, easement, or other similar form of approval.

2. Use agreements shall be limited to a term of five years.

3. Geophysical testing agreements shall be limited to a term of one year.

4. Geophysical testing on uplands shall require a use agreement from the Trustees and a permit for geophysical testing acquired

from the Bureau of Geology, Department of Environmental Protection pursuant to Chapter 62C-26, F.A.C.

5. A separate approval for geophysical testing shall not be required when geophysical operations are conducted by the current leaseholder upon land subject to a valid oil, gas or mineral lease granted by the Trustees.

6. The protection of uplands from unnecessary environmental damage shall be achieved by requiring all parties who conduct geophysical testing to strictly follow the Bureau of Geology's guidelines, procedures, and operational requirements for geophysical

testing as specified in Chapters 62C-25 and 62C-26, F.A.C.

7. After completion of any geophysical testing upon uplands, the parcel shall be returned to the original condition prior to the conducting of geophysical testing.

8. Geophysical testing for oil and gas within the boundaries of the South Florida Water Management District's water conservation areas on lands where title is vested in the Trustees is prohibited.

9. The applicant for a geophysical use agreement shall submit a field operations report to the Department of Environmental Protection, Bureau of Geology, within thirty days after the completion of any survey activities conducted under a geophysical testing use agreement. The report shall contain the following:

a. A narrative description of the work performed, including the type of data obtained and the types of logs produced from the operations;

b. Maps, plats or charts indicating the area in which any exploration was conducted, specifically identifying the lines of geophysical traverses and/or locations where geophysical exploration was conducted, accompanied by a reference sufficient to identify the data produced from each activity;

c. The dates and times during which the actual exploration was performed;

d. The nature and location of any environmental hazards created by the activity;

e. A description of any damage to or loss of state property which resulted from the reported activities; and

10. Upon written request, the applicant shall provide to the Bureau of Geology, at no cost, one copy of the information described in paragraphs a. through c. below, if available. Where possible, the information may be furnished in the form of paper copies as opposed to mylar, film or tape. Duplicates shall be furnished upon request at cost of reproduction. The Bureau of Geology

shall also have the right to inspect and/or copy at cost, factual and physical exploration results, logs, records and any other processed records excluding interpreted data, including but not limited to the following:

a. Blackline or blue-line paper copies of final stacked sections and migrated sections. Paper copies of section chosen for State use shall be made at one-half scale, (2 1/2 inches per second);

b. Post-plot maps at a scale of 1:48,000 (1 inch equals 4,000 feet) whenever possible or a readable and legible scale for the dimensions of the survey; and

c. Gravity data reduced or compiled in profile form and magnetometer data corrected for International Geomagnetic Reference Field in profile form whenever available. Data shall include how reductions and corrections were made.

(d) Easements

1. If a requested easement is located on lands under lease, sublease, management or other use, the applicant shall obtain permission from the authorized managing entity for the easement prior to application to the Trustees.

2. Applications for easements shall be noticed pursuant to Chapter 18-2, F.A.C., and applicable law.

3. If the requested easement is for the benefit of the authorized managing entity and the lease, sublease, etc. provides for the granting of an easement related to the functional use of the property, the authorized managing entity for the property may process and grant the easement. In such case, a copy of any easement granted shall be provided to the Division by the managing entity.

(e) Release of Reservation, Deed and Dedication Restrictions and Reverters

1. The right of entry for the purpose of exploration and for phosphate, minerals, metals and petroleum or any interest as reserved pursuant to Section 270.11, F.S., in any contract or deed for sale of land executed by the Trustees is hereby released, provided that the property is, or ever has been, a contiguous tract of less than 20 acres in the aggregate and under the same ownership. This provision does not release the Trustees' oil, gas, or other mineral interest.

2. The right of entry for the purpose of exploration for phosphate, minerals, metals and petroleum or any interest as reserved pursuant to Section 270.11, F.S., in any contract or deed for sale of land executed by the Trustees for parcels 20 acres or greater shall be released, in whole or in part, to the record surface owners, provided the owners certify that the parcel will be a permanent building site and the land use will not involve phosphate, mineral, metal or petroleum extraction. This provision does not release the Trustees' oil, gas, or other mineral interest.

3. Canal and drainage reservations as reserved by the Trustees shall be released to the record owner(s), provided recommendation from the water management district with jurisdiction has been obtained, and the Trustees determine there is no further need for the reservation.

4. Road right-of-way reservations as reserved by the Trustees shall be released to the record owner(s), provided recommendation from the transportation authority with jurisdiction has been obtained, and the Trustees determine there is no further need for the reservation.

5. Deed or dedication restrictions or reverters shall be released to the record owner(s) if the Trustees determine that there is no longer any present or future public purpose for retaining them and that the affected parcel contains no fragile environmental, historical, archaeological or recreational resources which would require protection through continued enforcement of the restrictions or reverters.

(f) Letters of Consent

1. Letters of consent are issued, pursuant to Chapter 18-2, F.A.C., upon receipt by the Division of a request for an incidental, one-time use which will result in no permanent alteration of Trustees-owned uplands.

2. Letters of consent shall contain a condition that the grantee accept all liability associated with the proposed use and shall be countersigned by the grantee.

Specific Authority 253.03(7)(a) FS. Law Implemented 253.001, 253.02, 253.03, 253.04, 253.034, 253.111, 253.115, 253.42-.44, 253.47,

253.51-.61, 253.62, 253.77, 253.82, 259.035, 270.07, 270.08, 270.11 FS. History--New 6-4-96, Amended 4-17-02.

18-2.019 Procedures to Obtain Authorization.

(1) Written authorization from the Trustees is required to conduct activities on Trustee-owned uplands.

(2) Applications to use uplands which are subject to the DRI or PDA review process shall be processed only after the DRI or PDA application review process is complete and the DRI or PDA has been authorized.

(3) An applicant shall have 90 days to respond to a request for additional information. If the additional information is not received by the division within the 90 day period, the application shall be considered deactivated.

(4) Public notice

(a) After receiving an application in compliance with such forms as may be required by this rule requesting the Trustees to sell, exchange, lease, or grant an easement on, over, under, above, or across any land to which it holds title, the Trustees must provide notice of the application. The notice must include the name and address of the applicant; a brief description of the proposed activity

and any mitigation; the location of the proposed activity, including whether it is located adjacent to an Outstanding Florida Water or an aquatic preserve; a map identifying the location of the proposed activity subject to the application; a diagram of the limits of the proposed activity; and a name or number identifying the application and the office where the application can be inspected. A copy of this notice must be sent to those persons who have requested to be on a mailing list and to each owner of land lying within

500 feet of the land proposed to be leased, sold, exchanged, or granted for an easement, addressed to such owner as his name and address appears on the latest county tax assessment roll.

(b) The department shall consider comments and objections received in response to the public notice in reaching its decision to approve or deny use of Trustees-owned lands for a proposed activity. If objections are raised which show that the activity does not

conform to the requirements of this rule, and the local public would be affected by the activity, the department shall hold an informal public hearing in the county in which the subject property lies.

(c) The department shall provide notice of intended agency action to the applicant and to those who have requested a copy of the intended agency action for that application.

(d) In addition to the notice and publication requirements of subsection (a) above, before any lease for oil and gas activities within a radius of 3 miles of the boundaries of any incorporated city, or town, or within such radius of any bathing beach, or beaches, outside thereof is offered, the department shall hold a public hearing. Such public hearing shall be noticed by publication

once in a newspaper of general circulation, published at least one week prior to said hearing, in the vicinity of the land, or lands, offered to be leased. After such hearing, the board may withdraw said land, or any part thereof, from the market, and refuse to execute such lease or leases if it considers such execution contrary to the public welfare.

(e) Failure to provide the notice as set out in subsections (a) and (c) will not invalidate the sale, exchange, lease, or easement.

(f) The notice and publication requirements of this paragraph do not apply to:

1. The release of any reservations contained in Murphy Act deeds or other deeds of the Trustees;

2. Any conveyance of uplands which do not exceed 5 acres in area;

3. The lease or easement for any land when the land is being leased to a state agency;

4. The conveyance of lands pursuant to the provisions of Section 373.4592, F.S.; or

5. Renewals, modifications or assignments.

6. Leases where management of a property has been determined through the selection process for a state acquisition list.

(5) State agency notice

(a) Before a parcel of land is offered for lease, sublease or sale to a local or federal unit of government or a private party, it shall first be offered to state agencies.

(b) This provision shall be waived in instances where:

1. A managing entity proposes subleasing property and that sublease is directly related to the purpose of the primary lease, as certified by the sublessor;

2. Management of a property has been determined through the selection process for a state acquisition list;

3. The proposed lease or sale is for subsurface rights or interests;

4. The Trustees determine that conveyance of the parcel by sale, gift or exchange provides a greater benefit to the public than retention in state ownership; or

5. The land is being exchanged pursuant to Chapter 18-2, F.A.C.

(6) Applications for authorization to use uplands shall be accompanied by a non-refundable application fee. This fee does not apply to applications filed by agencies. Fees shall be made payable to the Florida Department of Environmental Protection. The application fees are as follows:

Specific Authority 253.03 FS. Law Implemented 253.03, 253.034, 253.115, 253.42, 253.52, 253.77 FS. History--New 6-4-96.

18-2.020 Payments and Consideration.

(1) Leases.

(a) Consideration for private leases shall be based upon an appraisal, except for oil and gas leases, and shall be competitively bid.

(b) For leases, other than oil and gas, staff will recommend awarding of the lease to the bidder offering the highest annual rental.

(c) For oil and gas leases, staff will recommend awarding of the lease to the bidder offering the highest bonus.

(d) Annual payments for oil and gas leases shall be determined by whether the leased parcel is producing or non-producing, as follows:

1. If the leased parcel is non-producing, the annual rental fee shall be \$3.50 per net mineral acre.

2. If the leased parcel is producing, the royalties shall be as follows:

a. The royalty shall be 1/4 when the lease area is located within a section that is contiguous to any section with hydrocarbon production or a shut in well capable of producing hydrocarbons. However, if there is an intervening dry hole, the royalty shall be 1/

5;

b. The royalty shall be 1/5 when the lease area is located at least one mile but no more than 3 miles from any section with hydrocarbon production or a shut in well capable of producing hydrocarbons. However, if there is an intervening dry hole in the 1/

5 royalty area, the royalty shall be 1/6;

c. The royalty shall be 1/6 when the lease area is more than 3 miles from any section with hydrocarbon production or a shut in well capable of producing hydrocarbons.

d. An intervening dry hole must be located between a producing well and the proposed lease area and must be at least to the depth of or the stratigraphic equivalent of the well proposed to be drilled on the lease area.

e. Where multiple wells are drilled and the geographic location raises doubt as to whether the royalty for a potential new location is 1/4, 1/5, or 1/6, the higher royalty shall prevail.

f. As used in reference to oil and gas leases, a chart entitled "Royalty Areas Defined", is shown as Exhibit "B".

(e) The annual payment for mineral leases, other than oil and gas leases, shall be a predetermined percentage of revenues received from the extraction of mineral based on current fair market practices.

(2) Disposal.

(a) The consideration for the disposal of uplands shall be based upon an appraisal.

(a) Lease: \$300

(b) Sublease: \$300

(c) Renewal, Modification, or Assignment: \$300

(d) Easement: \$300

(e) Use Agreement:

1. Geophysical Testing involving uplands only \$800

2. Geophysical Testing involving submerged lands and uplands \$1,000

3. Others \$300

(f) Disposal of Lands: N/A

(g) Exchange of Lands: \$300

(h) Mineral Interest Sale: \$1,000

(i) Release of Reservation \$300

(j) Reactivation of an Application and transfer or assignment of a previous authorization: Same as the original fee.

(b) Disposal of surplus land shall be competitively bid except that parcels 5 acres or less in size or with a market value of \$100,000 or less may be sold by any reasonable means, including open or exclusive listing with real estate sales services, competitive bid, auction, and negotiated direct sales. In no case shall a real estate brokerage fee or auction fee exceed 10% of the purchase price.

(c) Sales of mineral interests shall be competitively bid unless the Trustees do not own the surface, in which case the consideration shall be negotiated with the surface owner.

(d) The value of the private land for exchange purposes shall be no more than 100% of an appraisal of market value or average if two appraisals are used or the average of the two closest appraisals if more than two are used. A new appraisal shall not be required if the private parcel is already under a Trustees option or purchase contract. In such cases, the exchange price of such land

shall be no more than the contracted purchase price.

(e) If successful in the bid process, private landowners may apply their land as full or partial payment for the state parcel but in no case shall the credit given be more than the market value.

(3) Use Agreements.

(a) Appraisals and competitive bidding are not required for use agreements.

(b) Except for geophysical crossings, the consideration for use agreements shall be negotiated based on the type of activity.

(c) The consideration for use agreements for geophysical crossings shall be set at \$600 per mile. The mileage fee shall be based upon the number of miles of uplands permitted and is non-refundable.

(4) Easements.

(a) A one-time fee for private easements of greater than one-quarter acre in size shall be assessed and based upon an appraisal.
(b) A one-time fee for private easements of one-quarter acre or less in size shall be negotiated by the Division if value information other than an appraisal is available.

(c) Competitive bidding shall not be required for this activity.

(5) Release of Restrictions or Reverters.

(a) There shall be no consideration for the release of reserved interest for road right of way, canal right of way and right of entry for oil and gas exploration activities.

(b) The consideration for release of all other deed or dedication restrictions or reverters shall be based upon negotiation and shall be sold only to the current property owner.

(6) Letters of consent.

(a) Appraisals and competitive bidding are not required for letters of consent.

(b) Consideration for letters of consent shall be negotiated based on the type of activity.

(7) Competitive Bidding Procedures.

(a) When competitive bidding is required, notice to bidders shall be given by publication in a newspaper published in the county in which the lands are located not less than once a week for three consecutive weeks. The notice shall provide the following:

1. A complete legal description and location of the parcel by Section, Township and Range;

2. The total acreage of the parcel for lease or sale;

3. The term of lease and any renewal options, if applicable;

4. Any restrictions as to the use of the lands;

5. A statement of obligations of the grantee for taxes and drainage assessments;

6. The minimum value of improvements to be made, if any;

7. Any conditions deemed necessary by the Trustees;

8. The deadline, date and time, for the receipt of sealed bids in the office of the division; and

9. The address to which the bid shall be directed and posted; or

10. In lieu of all the foregoing, the publication may be limited to items 1., 2. and 9. and notice that a complete statement concerning terms of the lease or sale will be forwarded to interested bidders upon request.

(b) When the requested lease is for oil and gas activities or a mineral sale, the notice to bidders shall be given by publication in a newspaper of general circulation in Leon County and in the area vicinity not less than once a week for four (4) consecutive weeks.

The last publication in both newspapers shall not be less than 5 days in advance of the award date.

(c) Upon request, applicants will be sent a bid specification packet which shall include the following information:

1. Materials, instructions and deadline for submitting bids;

2. A copy of the proposed lease or sales contract; and

3. A statement of the appraised value.

(d) Sealed bids shall be accompanied by a certified check or letter of credit from a financial institution as defined by Section 655.005, F.S., for 10% of the amount bid for the annual rental fee or 10% of the purchase price as payment for the earnest money.

The deposits will be non-refundable to the successful bidder and will be credited toward the lease fee or purchase price.

(e) Deposits for unsuccessful or rejected bids shall be returned within 5 working days after the awarding of the bid by the Trustees.

(8) Administrative Fee.

Each government lessee shall pay to the division an annual administrative fee of \$300.00 for each lease, sublease or management agreement authorizing the lessee to occupy uplands.

(a) The annual administrative fee shall be payable in advance beginning on July 1, 1993, and continuing on July 1 of each year thereafter.

(b) For leases and for subleases executed after July 1, 1993, the initial annual administrative fee shall be prorated based on the number of months or fraction thereof remaining in the fiscal year of execution.

(c) Each annual payment thereafter shall be due and payable on July 1 of each subsequent year in the amount of \$300.00.

Specific Authority 253.03 FS. Law Implemented 253.03, 253.034, 253.42, 253.51-.54, 253.571, 270.11 FS. History--New 6-4-96.

18-2.021 Land Management Advisory Council.

(1) Land Management Advisory Council Composition and Procedures.

(a) The council shall be composed of the following persons or their designees:

1. The Commissioner of the Department of Agriculture and Consumer Services;

2. The Secretary of State;

3. The Executive Director of the Game and Fresh Water Fish Commission;

4. The Secretary of the Department of Environmental Regulation;

5. The Secretary of the Department of Corrections;

6. The Commissioner of the Department of Education;

7. The Secretary of the Department of Community Affairs;

8. One individual chosen by the Secretary of the Department of Environmental Protection.

(b) The Chairmanship of the council shall rotate annually on October 1 of each year in the order listed above as set forth in Section 253.034, F.S.

(c) The committee shall hold periodic meetings at the request of the chairman. The meetings shall be recorded electronically and such records shall be preserved pursuant to Chapters 119 and 267, F.S.

(2) Land Management Advisory Council Responsibilities and Procedures.

(a) The responsibilities of the council shall include:

1. Reviewing each plan or sublease over 160 acres, and each surplus land determination within 60 days after receipt from the division.
2. Considering the propriety of the agency's recommendations regarding the future use of the land, protection of fragile and non-renewable resources, maintenance and use of renewable resources.
3. Identifying the potential for alternative or multiple uses not recognized by the managing agency.
4. Identifying lands surplus to the agency's need which could be used by or reserved for other agency use or disposed of as surplus.
5. Considering whether lands would be more appropriately owned or managed by a county or other local government and whether a sale, lease, or other conveyance would be in the interests of the State and local government.

(b) The procedures of the council shall include:

1. All management plans and subleases for areas over 160 acres in size, and all surplus land determinations shall be reviewed by the council prior to submittal to the Board. Utilizing the policies, standards, and criteria of this rule, the council shall specifically recommend to the Board whether to approve, approve with modifications, or reject a management plan, sublease, or surplus lands determination.
2. Management plans and subleases for areas less than 160 acres in size, may at the request of three (3) or more council members, be submitted to the council for review and recommendations.
3. A recommendation to the Board on management plans, subleases and surplus land designations by the council shall be by the concurrence of at least four (4) members.
4. The use of State-owned land in a manner which is inconsistent with the existing lease or the approved land management plan, shall cause the lease to be subject to termination by the Board. The council shall recommend to the Board when such uses are not in accordance with the approved management plan or lease/agreement.

(3) Agency Duties.

(a) Primary staff support for the council shall be provided by the division, including the recording functions.

(b) The managing agency should be prepared to respond to any inquiries or issues.

(c) The managing agency shall prepare executive summaries which highlight important management facts, issues, or problems, and any public input which went into developing the plan or sublease.

(4) Management Plans. Plans submitted to the division for council review under the requirements of Section 253.034, F.S., should contain, where applicable to the management of resources, the following:

(a) The common name of the property.

(b) A map showing the location and boundaries of the property plus any structures or improvements to the property.

(c) The legal description and acreage of the property.

(d) The degree of title interest held by the Board, including reservations and encumbrances such as leases.

(e) The land acquisition program (e.g., C. A. R. L., E. E. L., Save Our Coast), if any, under which the property was acquired.

(f) The designated single use or multiple use management for the property, including other managing agencies.

(g) Proximity of property to other significant State, local, or federal land or water resources.

(h) A statement as to whether the property is within an aquatic preserve or a designated area of critical State concern or an area under study for such designation.

(i) The location and description of known and reasonably identifiable renewable and non-renewable resources of the property including, but not limited to, the following:

1. Brief description of soil types, using U. S. D. A. maps when available;

2. Archaeological and historical resources;

3. Water resources including the water quality classification for each water body and the identification of any such water body that is designated as an Outstanding Florida Waters;

4. Fish and wildlife and their habitat;

5. State and federally listed endangered or threatened species and their habitat;

6. Beaches and dunes;

7. Swamps, marshes and other wetlands;

8. Mineral resources, such as oil, gas and phosphate;

9. Unique natural features, such as coral reefs, natural springs, caverns, large sinkholes, virgin timber stands, scenic vistas, and natural rivers and streams; and

10. Outstanding native landscapes containing relatively unaltered flora, fauna, and geological conditions.

(j) A description of actions the agency plans, to locate and identify unknown resources such as surveys of unknown archaeological and historical resources.

(k) The identification of resources on the property that are listed in the Natural Area Inventory.

(l) A description of past uses, including any unauthorized uses of the property.

(m) A detailed description of existing and planned use(s) of the property.

- (n) A description of alternative or multiple uses of the property considered by the managing agency and an explanation of why such uses were not adopted.
- (o) A detailed assessment of the impact of planned uses on the renewable and non-renewable resources of the property and a detailed description of the specific actions that will be taken to protect, enhance and conserve these resources and to mitigate damage caused by such uses.
- (p) A description of management needs and problems for the property.
- (q) Identification of adjacent land uses that conflict with the planned use of the property, if any.
- (r) A description of legislative or executive directives that constrain the use of such property.
- (s) A finding regarding whether each planned use complies with the State Lands Management Plan adopted by the Trustees on March 17, 1981, and incorporated herein by reference, particularly whether such uses represent "balanced public utilization", specific agency statutory authority, and other legislative or executive constraints. A copy of the plan may be obtained by writing to the Department of Environmental Protection, Division of State Lands, Bureau of Land Management Services, 3900 Commonwealth Boulevard, Mail Station 130, Tallahassee, Florida 32399-3000.
- (t) An assessment as to whether the property, or any portion, should be declared surplus.
- (u) Identification of other parcels of land within or immediately adjacent to the property that should be purchased because they are essential to management of the property.
- (v) A description of the management responsibilities of each agency and how such responsibilities will be coordinated, including a provision that requires that the managing agency consult with the Division of Archives, History and Records Management before taking actions that may adversely affect archaeological or historic resources.
- (w) A statement concerning the extent of public involvement and local government participation in the development of the plan, if any, including a summary of comments and concerns expressed.
- (5) Policies, Standards, and Criteria. The following management policies, standards, and criteria will be used by the council to determine whether to recommend approval, approval with conditions or modifications, or to reject any agency management plan, sublease or surplus land determination.
- (a) The policies, standards, and criteria that are enumerated in Chapter 18-2, F.A.C., "Management of Uplands Vested in the Board of Trustees".
- (b) The policies, standards, and criteria that are enumerated in Chapter 18-21, F.A.C., "Sovereignty Submerged Lands Management".
- (c) The policies, standards, and criteria that are enumerated in the "State Lands Management Plan", adopted March 17, 1981, by the Board. A copy of the plan may be obtained by writing to the Department of Environmental Protection, Division of State Lands, Bureau of Land Management Services, 3900 Commonwealth Boulevard, Mail Station 130, Tallahassee, Florida 32399-3000.
- (6) Sublease Reviews.
- (a) Pursuant to Section 253.034, F.S., an agency managing or leasing State-owned lands from the Board shall not sublease lands without prior review by the division and the council and subsequent approval by the Board. Subleases for areas greater than 160 acres in size shall be reviewed by the council prior to submittal to the Board.
- (b) All sublease requests shall be made pursuant to Chapter 18-2, F.A.C., and applicable laws governing the leasing and subleasing of State-owned lands.
- (c) Subleases submitted to the division for review shall include the following:
1. Eight copies of all material submitted.
 2. A copy of the proposed sublease.
 3. A statement regarding how the sublease complements and conforms with the agency's management plans for the subject property.
 4. A statement specifically identifying how the sublease conforms to the agency's statutory authority.
 5. Identification of the sublease fees, rentals, or other charges and how these fees were established; i.e., appraised market value, negotiated, or competitive bid.
 6. Identification of where the sublease revenues will be deposited and how they will be utilized by the agency.
- (7) Surplus Land Determination.
- (a) The council shall review all State-owned lands which are not actively managed by any State agency, for which a land management plan has not been completed, or are recommended for disposal by any State agency, and recommend to the Board if such lands should be disposed of.
- (b) In developing a recommendation the council shall consider the following factors:
1. Environmental value including flora and fauna, geology, hydrology, and general importance to the regional ecological systems;
 2. Recreational value, including potential as a State managed recreational area;
 3. Cultural value;
 4. Size and location, including management feasibility and relationship to other State managed areas; and
 5. History and potential of revenue production.
- (c) If a determination is made that a parcel of State land should be disposed of by the Board, the council shall consider and make recommendations of the following:
1. Whether such lands would be more appropriately owned or managed by the county or other unit of local government in

which the land is located, and whether any unit of local government has expressed an interest in the subject parcel.
2. Whether the property should be leased, exchanged, transferred in fee simple, or transferred with a restriction as to use, right of reversion, or other special deed provisions.

Specific Authority 253.03 FS. Law Implemented 253.022, 253.034 FS. History--New 6-4-96.

**SEE FLORIDA ADMINISTRATIVE CODE FOR "EXHIBIT A - EVERGLADES
AGRICULTURAL AREA,
EXHIBIT B - ROYALTY AREAS DEFINED AND EXHIBIT C - CONSERVATION AREAS"**

CHAPTER 62S-1 FLORIDA GREENWAYS AND TRAILS PROGRAM

62S-1.100 Definitions.

62S-1.300 Solicitation, Evaluation and Selection Process for Department Acquisition of Greenways and Trails.

62S-1.350 Modification of Approved Acquisition Projects.

62S-1.400 Designation of Public Conservation or Recreation Lands and Waterways.

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62S-1.100 Definitions.

Whenever used in this chapter or in the forms prescribed for use with this chapter, the words defined in Section 260.013, F.S., shall

have the same meaning and the following terms (whether or not capitalized) shall have the meanings stated below unless the context clearly indicates otherwise:

(1) "Act" means the Florida Greenways and Trails Act, Chapter 260, Florida Statutes.

(2) "Council" means the Florida Greenways and Trails Council described in Section 260.0142, Florida Statutes.

(3) "Cross Florida Greenways State Recreation and Conservation Area" means the network of greenways and trails created by Section 253.781, Florida Statutes, including those portions of the Oklawaha River Valley and other lands and interests previously acquired by the state or federal government for construction and operation of the Cross Florida Barge Canal, the original corridor of

which is specified in the Greenway Management Plan prepared by the University Planning Team of the University of Florida.

(4) "Department" means the Department of Environmental Protection.

(5) "Designation Agreement" means a binding written contract between the Office of Greenways and Trails, on behalf of the Department, and the owner of lands upon or over which a designated greenway or trail is located (or will be located), providing the

terms and conditions upon which the owner agrees to have his, her or its lands or waterways designated as part of the Florida Greenways and Trails System. At a minimum, the Designation Agreement shall address the items described in subsection 62S-1.400(5) or 62S-1.450(6), F.A.C.

(6) "Florida Forever Funds" means moneys from the Florida Forever Trust Fund created by Section 259.1051, Florida Statutes (1999), and distributed to the Department pursuant to Section 259.105(3)(g), Florida Statutes (1999), for the acquisition of lands under the Florida Greenways and Trails Program.

(7) "Greenways and trails support organization" means a formal or informal group, whether incorporated or unincorporated, tax-exempt or non-tax-exempt, that conducts programs or activities that directly support the establishment, development, maintenance or management of a greenway or trail.

(8) "Implementation Plan" means the five-year implementation plan entitled "Connecting Florida's Communities with Greenways and Trails," prepared by the Florida Department of Environmental Protection and the Florida Greenways Coordinating

Council and dated September 1998.

(9) "Landowner" or "owner" means the legal and equitable owner(s) of fee simple title in and to real property.

(10) "Less-than-fee acquisition" means the purchase of an interest in property that is less than the entire fee simple estate (which is one in which the owner is entitled to the entire property with the unconditional power of disposition during the owner's life and which will descend to his or her heirs and legal representatives upon the owner's death intestate). The most common less-than-fee acquisition alternatives are purchase of development rights, conservation easements, land protection agreements, life

estates, and purchase of specific rights or interests.

(11) "Management plan" means a written document that describes the management goals for a project; conditions that will affect the intensity of management; an estimate of the revenue-generating potential of the project, if applicable; a description of potential multiple-use activities as described in Sections 259.032 and 253.034, Florida Statutes; a timetable for implementing the various stages of management and for providing access to the public, if applicable; provisions for protecting existing infrastructure

and for ensuring the security of the project upon acquisition; the anticipated costs of management and projected sources of revenue

to fund management needs (including legislative appropriations); recommendations on the number of employees necessary to manage the project; and recommendations for management involvement by local governments, greenways and trails citizen support

organizations, prior landowners or other interested parties.

(12) "Managing entity" means the agency, governmental entity, corporation, organization or other authority that has undertaken and is responsible for the day-to-day operation, protection, maintenance and stewardship of a specified greenway or trail, or network of greenways or trails, under a management plan or designation agreement with the holder of the ownership, proprietorship, or other beneficial interest in the property upon or over which the greenway or trail segment is located.

(13) "OGT" means the Office of Greenways and Trails of the Department.

(14) "Person" means any individual, corporation, partnership, firm, association, joint venture, estate, trust, business trust, syndicate, fiduciary, commission, county, municipality or political subdivision of a state, any interstate body, the federal government or any subdivision thereof and all other groups or combinations, whether public or private.

(15) "Planned project corridor" means the proposed path of a greenway or trail described in an Application for Acquisition of

Land and comprised exclusively of those parcels of real property for which Willing Owner Certificates have been executed for 80 percent of the parcels and submitted with the Application.

(16) "Project" means a discrete and identifiable plan or undertaking which describes in detail the acquisition, development, designation, use or management of certain lands or waterways within the Florida Greenways and Trails System.

(17) "Project boundary" means a conceptual outline or drawing that depicts the maximum physical boundaries for a proposed greenway or trail. The project boundary will incorporate not only the planned project corridor, but also any adjacent lands or waterways that could be included within the greenway or trail if one or more parcels within the planned project corridor cannot be

acquired in the precise configuration delineated in its legal description.

(18) "Proposal" means the application and supporting documentation submitted to OGT for consideration in one or more of the procedures established by this chapter for the evaluation, selection, acquisition, designation, use or management of lands or waterways within the Florida Greenways and Trails System.

(19) "Public Conservation or Recreation Lands or Waterways" means lands or waterways owned by a national, state, regional or local governmental entity. The following categories of public lands and waterways would typically qualify for designation as part of the Florida Greenways and Trails System:

(a) National parks, forests and trails, preserves, seashores, wildlife refuges, wild and scenic rivers, military reservations and Native American lands;

(b) State park units, forests, recreation areas, submerged lands, wildlife management areas, historic and archaeological sites, ornamental and botanical gardens, university system properties, museums and other special feature sites, public game areas, preserves and reserves;

(c) Lands owned by any port authority, flood control district, water management district, navigation district or other agency created by general or special act; and

(d) Local government conservation and recreation lands and urban open space areas.

(20) "Quorum" means the minimum number of members legally necessary to conduct official business of an elected or appointed body when duly assembled.

(21) "Recreational Prioritization Maps" means the opportunity maps contained in the document titled Prioritization of Recreational Trail Opportunities for the State of Florida developed by OGT in coordination with the University of Florida, and approved by the Council on May 18, 2002, that rank the opportunity segments shown on the Implementation Plan maps as high, medium, or low priority, based upon criteria approved by the Council. These maps can be obtained by writing to the Office of Greenways and Trails, Department of Environmental Protection, 3900 Commonwealth Blvd., Mail Station 795, Tallahassee, FL 32399-3000, or through OGT's website address, www.floridagreenwaysandtrails.com.

(22) "Sponsor" means the person, organization, coalition or government agency (or any combination thereof) that submits to OGT an application for OGT's acquisition or designation of lands or waterways as components of the Florida Greenways and Trails System, with the intent of being responsible for the planning, establishment, development, maintenance and/or management

of the proposed project. The Sponsor of a project can be the landowner or managing entity of the lands or waterways proposed for acquisition or designation.

Specific Authority 260.016(1)(c) FS. Law Implemented 253.781, 260.0142, 260.015, 260.016 FS. History--New 7-11-00, Amended 7-10-03.

62S-1.300 Solicitation, Evaluation and Selection Process for Department Acquisition of Greenways and Trails.

The Department will follow the guidelines established by this rule to solicit, evaluate and select lands to be acquired for the Florida Greenways and Trails System.

(1) Eligibility. Prior to submittal of an application, a sponsor must apply for and receive a "Certificate of Eligibility," DEP Form #OGT-1, effective July 10, 2003. The Certificate of Eligibility is prescribed for use with these rules and is hereby incorporated by reference. The Certificate of Eligibility form may be obtained by writing to the Office of Greenways and Trails, Department of Environmental Protection, 3900 Commonwealth Blvd., Mail Station 795, Tallahassee, FL 32399-3000, or through OGT's website address, www.floridagreenwaysandtrails.com. A Certificate of Eligibility will be provided to the sponsor if the sponsor's proposed project meets all of the following criteria:

(a) The project meets the definition of a "greenway" or "trail" in Section 260.013, Florida Statutes;

(b) The planned project corridor is located within or adjacent to at least one opportunity segment on one or more of the Recreational Prioritization Maps;

(c) At least 80 percent of the planned project corridor has a landowner or landowners willing to negotiate OGT's acquisition of their property; and

(d) The project has a willing managing entity.

A Certificate of Eligibility form may be submitted to OGT at any time during the year, and will be valid for a period of twelve (12)

months from the date of issuance by OGT.

(2) Solicitation and Submission of Project Applications. OGT will solicit and accept applications for acquisition funding in the following manner:

(a) To initiate each acquisition funding cycle, OGT will publish a "Notice of Project Solicitation" in the Florida Administrative

Weekly and on the Department's website address, www.dep.state.fl.us, under the link entitled "Official Notices," to announce a period of not less than sixty (60) consecutive days during which it will accept applications for acquisition funding under the Florida

Greenways and Trails program. The notice shall state the commencement and deadline dates for application acceptance and the approximate amount of funds available for acquisition projects. The amount of available funds stated in the notice shall be based on

the anticipated allocation from the Florida Forever Trust Fund to the Florida Greenways and Trails program reflected in the most recent Trust Fund Status and Activity Reports of the Department's Bureau of Finance and Accounting.

(b) All requests for land acquisition funding under the Florida Greenways and Trails program must be submitted on OGT's "Application for Acquisition of Land," DEP Form #OGT-2, effective July 10, 2003 (the "Application"), which is prescribed for use

with these rules and is hereby incorporated by reference. The Application may be obtained by writing to the Office of Greenways and Trails, Department of Environmental Protection, 3900 Commonwealth Blvd., Mail Station 795, Tallahassee, FL 32399-3000, or through OGT's website address, www.floridagreenwaysandtrails.com.

(3) Review for Completeness. Each timely submitted acquisition application shall, within thirty (30) days after the Application submission deadline, be reviewed by OGT to verify completeness of information in accordance with this section. Incomplete Applications, along with a letter citing each deficiency, shall be returned to the sponsor for completion and resubmission within a period of not less than twenty-one (21) days from the date of the letter. The submission deadline shall be stated in the deficiency letter. A sponsor's failure to provide the requested information shall be deemed a withdrawal of the Application from further consideration for the advertised acquisition funding cycle. No additional information will be accepted after the deadline stated in the deficiency letter, unless specifically requested by OGT for purposes of clarification.

(4) Evaluation and Selection Criteria. Following the Application submission deadline, OGT will evaluate all timely submitted Applications for conformity with the criteria set forth in this subsection and determine the individual and relative merits of the proposed acquisition projects. During the evaluation period, OGT may conduct site visits or request technical advisory comments from other state agencies, regional planning councils, water management districts, not-for-profit conservation or recreation organizations, or other public or private groups generally recognized as authorities on certain aspects of the acquisition, development and management of greenways and trails. Projects will be grouped as described in subsection 62S-1.300(5), F.A.C. OGT will utilize the information contained within the Application and its attachments, unless such information is contradicted or superceded by data obtained during a site visit or documentary evidence received from one of the technical advisory bodies mentioned above.

(5) Project Grouping.

(a) Upon completion of the project evaluations, OGT shall group each project based on the following criteria:

1. The rank (high, medium, or low) assigned to the project based on the Recreational Prioritization Maps.
2. The percentage of any matching funds available or committed to the project based on the estimated project cost.
3. The percentage of acreage within the planned project corridor that is proposed for less-than-fee acquisition.
4. The project's ecological values, including forest and wildlife resources.
5. The project's recreational attributes.
6. The project's historical and cultural resources.

(b) The projects shall be grouped as follows:

1. Group A: Those projects proposed for approval that will receive the highest priority for acquisition, based on the criteria in this subsection.
2. Group B: Those acquisition projects proposed for approval that are considered by OGT to be important, but not of the highest priority, based on the criteria in this subsection.

(6) Evaluation Report. Upon completion of the project grouping, OGT shall prepare a written evaluation report for consideration by the Council. Upon completion, a copy of the evaluation report shall be provided to members of the Council and the sponsor of each evaluated project. The report shall state the total amount of funds available for acquisition in the current Application cycle and any restrictions (time or otherwise) on the expenditure of said funds. In addition, the report shall provide the

following information for each evaluated project, plus any supplementary data relevant to the particular acquisition application:

- (a) A general description of the project (including proposed uses) and an area map depicting its location, size, configuration, and connections with other greenways, trails, parks or corridors (if any).
- (b) Any condition(s) that should be imposed on the project to protect or sustain the purposes for which the project would be acquired or managed.
- (c) A current estimate of the amount of funding necessary to acquire the project.
- (d) Any recommended modifications to the project boundary needed for resource protection, acquisition planning, or management.

(e) The project's recommended grouping.

(7) Council Review and Recommendation of Projects. Within sixty (60) days after its receipt of the evaluation report and recommended project grouping from OGT, the Council shall submit its recommendation to the Secretary in accordance with the following provisions:

- (a) The Council shall hold at least one public meeting to discuss the evaluated acquisition projects, during which the public

may submit written or verbal comments in support of or in opposition to any project. Notice of each meeting shall be mailed to the

sponsors of all evaluated projects, published in the Florida Administrative Weekly, and published on the Department's website, www.dep.state.fl.us, under the link entitled "Official Notices," at least seven (7) days in advance of the meeting date.

(b) At the noticed meeting(s), OGT will present to the Council a verbal summary of the relevant information submitted for each evaluated project and respond to the Council's questions. Thereafter, the Council shall permit oral or written comments by project sponsors, supporters, and members of the general public. These comments shall be limited in duration if necessary to ensure

equal time for all interested parties and projects.

(c) Following the close of the comment period at the final public meeting held for purposes of project review, the Council shall consider the information submitted and either:

1. Approve the project grouping recommended by OGT; or
2. Recommend modification of the project grouping based on the Council's review of all project applications submitted and evaluated during the current funding cycle, oral presentations by OGT, and written or verbal comments by project sponsors, supporters, or the general public. In addition, taking into account the amount of funding available and types and sizes of projects proposed, the Council may recommend a higher or lower funding level than requested by the sponsor of a project and may also determine that a large project should be acquired or developed in phases to permit a broader allocation of available acquisition funds among projects.

(d) The Council's recommendations must be ratified by a majority of Council members present and voting at the Council's final public meeting held for purposes of project review; a quorum must be present when the ratification vote is taken.

(8) Secretarial Approval of Acquisition Projects. Following receipt of the Council's recommendation, the Secretary shall either approve the Council's recommendations or modify them based on the Department's acquisition priorities and thereafter approve

a grouped list of acquisition projects. OGT shall provide a copy of the final list of acquisition projects to the sponsors of all evaluated

projects and to the Division of State Lands. Upon approval of the project grouping list by the Secretary, the Division of State Lands

shall proceed with the acquisition of the projects contained thereon in accordance with the acquisition procedures of Chapter 259, Florida Statutes.

Specific Authority 260.016(1)(c) FS. Law Implemented 260.0142, 260.015, 260.016 FS. History--New 7-11-00, Amended 7-10-03.

62S-1.350 Modification of Approved Acquisition Projects.

Modification of approved greenways and trails projects shall be considered by the Department in accordance with the criteria and procedures established by this rule.

(1) Changes Requiring Notice to OGT. Written notice of the following types of changes to approved Group A or Group B projects shall be provided to OGT within ten (10) days after the event:

- (a) Substitution, addition, or deletion of a managing entity or project sponsor;
- (b) Acquisition of adjacent, additional, or alternative lands located outside the original planned project corridor but within the original project boundary submitted for the project;
- (c) Any change in ownership of parcels lying within the planned project corridor;
- (d) Change from fee-simple acquisition to less-than-fee acquisition alternatives for one or more parcels within the planned project corridor, or vice versa;
- (e) Addition or relocation of trailhead(s) or any other project "capital improvement," as that term is defined in Section 259.03(3), F.S.; or
- (f) An increase or reduction in the amount of matching funds or other acquisition and development monies previously committed to the project.

The written notice shall be mailed or delivered to the Office of Greenways and Trails, Department of Environmental Protection, 3900 Commonwealth Blvd., Mail Station 795, Tallahassee, FL 32399-3000, and shall include a description of each change being made to the project, the reason(s) for each change and the effective date thereof (if any). If the change includes substitution of the project's managing entity, a "Willing Manager Certificate," DEP Form #OGT-3, effective July 10, 2003, shall be completed and signed by the new managing entity and submitted with the written notice. If the change involves the proposed acquisition of lands located outside the original planned project corridor but within the original project boundary, a "Willing Owner Certificate," DEP Form #OGT-4, effective July 10, 2003, shall be completed and signed by the owner of each new or additional parcel, except for parcels to be acquired under Sections 253.781-.782, F.S., and submitted with the written notice.

(2) Modifications Requiring Council Approval. All requests for modifications under this subsection must be submitted on OGT's "Request for Modification," DEP Form #OGT-5, effective July 10, 2003, which is prescribed for use with this rule and is hereby incorporated by reference. The Request for Modification form may be obtained by writing to the Office of Greenways and Trails, Department of Environmental Protection, 3900 Commonwealth Blvd., Mail Station 795, Tallahassee, FL 32399-3000, or through OGT's website address, www.floridagreenwaysandtrails.com. The following types of changes to approved Group A or Group B projects shall be submitted to and must be approved by the Council:

- (a) Any substantial change to the intended use(s) of the project, such as deletion of an entire category of use, changing an unpaved equestrian trail to a paved multiple-use trail, or addition of camping sites to an area initially designated for archaeological

study; or

(b) A modification of the planned project corridor that extends outside of the project boundary as described in the original Application.

(3) Submission of Modification Proposal. For any modification requiring Council approval, a completed Request for Modification must be received at least sixty (60) days prior to the public hearing during which it will be considered by the Council.

The party seeking modification must mail or deliver an original and twenty-four (24) first-generation copies of the Request for Modification, together with required attachments and other supporting documentation to the address stated in subsection 62S-1.350(2), F.A.C. Faxed copies of required documents will not be accepted or returned.

(4) Contents of Request for Modification. To receive consideration, a Request for Modification must include the following information:

(a) A general narrative description of the project modification requested; a statement indicating why the change is necessary; and an explanation of the effect on the project if the modification is not approved;

(b) A detailed itemization of changes to the original project Application that would result if the modification is approved; for example, if the Request for Modification proposed the substitution of certain adjacent lands, items such as the Application's list of

project parcels and the attached project site sketch, property appraiser assessment statements, and county property appraiser maps would require revision to accurately reflect the project as modified; and

(c) If the Request for Modification involves the proposed acquisition of lands located outside of the original project boundary, the Request for Modification package submitted must include a "Willing Owner Certificate," DEP Form #OGT-4, effective July 10, 2003, completed and signed by the owner of each new or additional parcel, except for parcels to be acquired under Sections 253.781-.782, F.S.

(5) Review for Completeness. Within ten (10) days after receipt of a Request for Modification, OGT will provide the submitting party with written notice regarding the completeness and clarity of the documentation submitted. If the Request for Modification is incomplete or otherwise inadequate, the notice will describe the additional information or clarification required and

indicate the date by which it must be received by OGT at the address stated in subsection 62S-1.350(2), F.A.C. Failure of the submitting party to timely provide the information requested in the notice shall be deemed a withdrawal of the Request for Modification from further consideration.

(6) Evaluation of Request for Modification. Within forty-five (45) days after receipt of a sufficiently completed Request for Modification, OGT will evaluate the proposal and provide to the submitting party and members of the Council a written evaluation

report that includes the following information:

(a) A general description of the modification sought by the Request for Modification, including a statement indicating whether the change is consistent with the purposes for which the project is being acquired and whether the modification would facilitate OGT's acquisition of the project;

(b) If the modification proposal involves the acquisition of additional lands or waterways located outside the original project boundary, a statement indicating whether the owners of the additional parcels are willing to negotiate with Department representatives regarding the potential conveyance of their lands to the state;

(c) Whether the proposed modification would have changed the recommended grouping of the project if it had been part of the original Application;

(d) Whether the OGT has funds available to cover additional project costs associated with the modification (if any); and

(e) Any other information OGT needs for clarification of the Request for Modification to the modification proposal.

Prior to consideration of the Request for Modification by the Council, OGT may conduct a site visit to verify representations made

in the Request for Modification.

(7) Review and Approval of Requests for Modification. To become effective, a Request for Modification must be endorsed by a majority vote of the Council and approved by the Secretary of the Department under the following procedures:

(a) Within ninety (90) days after OGT's receipt of a Request for Modification, the Council will consider the modification proposal during a public meeting. Notice of the meeting will be mailed to the party that submitted the Request for Modification and

shall be published in the Florida Administrative Weekly and on the Department's website address, www.dep.state.fl.us, under the link entitled "Official Notices," at least seven (7) days in advance of the meeting date.

(b) At the noticed meeting, OGT will present to the Council a verbal summary of the relevant information submitted for each Request for Modification and respond to members' questions. Thereafter, the Council shall permit oral or written comments by project sponsors, supporters, and members of the general public.

(c) Following the close of the comment period, the Council shall consider the information submitted and either endorse the Request for Modification as presented, or modify and then endorse the Request for Modification. Any modification made to the Request for Modification by the Council shall be based on its review of documentation submitted in support of the Request for Modification, oral presentations by OGT, and written or verbal comments by project sponsors, supporters, or the general public.

(d) A Request for Modification must be endorsed by a majority of Council members present and voting at the public meeting during which the modification was considered; a quorum must be present when the vote occurs. A modification to a Group A or

Group B project that does not obtain Council endorsement cannot be implemented within the original project, but it can be incorporated in a new Application package and submitted as a separate acquisition proposal for OGT evaluation and ranking during

a regularly advertised funding cycle.

(c) OGT shall forward each endorsed Request for Modification to the Secretary of the Department for approval. Within ten (10) days after receipt of an endorsed Request for Modification, the Secretary shall consider the Council's endorsement and either

approve the modification proposal or amend it based upon the Department's acquisition priorities and thereafter approve the modification proposal, stating the specific reason(s) for any such amendment. OGT shall provide a copy of each approved Request

for Modification to the submitting party and to the Division of State Lands.

Specific Authority 260.016(1)(c) FS. Law Implemented 260.012, 260.0142, 260.015, 260.016 FS. History—New 7-11-00, Amended 7-10-03.

62S-1.400 Designation of Public Conservation or Recreation Lands and Waterways.

(1) Eligible Projects. Public Conservation or Recreation Lands and Waterways within the state may be designated by the Department as components of the Florida Greenways and Trails System upon compliance with the requirements of this rule.

(2) Initiation of Process. The designation process for Public Conservation or Recreation Lands and Waterways can be initiated in one of two ways:

(a) The Department can contact the owner or managing entity of Public Conservation or Recreation Lands or Waterways to formally request that the property be designated as part of the Florida Greenways and Trails System; or

(b) The owner or managing entity of Public Conservation or Recreation Lands or Waterways can contact the Department's Office of Greenways and Trails at the address stated in paragraph 62S-1.350(2)(b), F.A.C., to request designation of the property as

part of the statewide system of greenways and trails.

In either case, the owner of the Public Conservation or Recreation Lands or Waterways proposed for designation must provide the

Department with written consent to designation of the property as part of the Florida Greenways and Trails System.

(3) Submission of Project Proposals. To confirm its desire to pursue designation of the Public Conservation or Recreation Lands or Waterways as part of the Florida Greenways and Trails System, the owner or managing entity of the property must complete and file with OGT an "Application for Designation of Public Lands or Waterways," DEP Form #OGT-6, effective July 10, 2003, which is prescribed for use with these rules and is hereby incorporated by reference. The following documents must be attached to the Application for Designation of Public Lands or Waterways at the time of submittal:

(a) An "Owner Consent," DEP Form #OGT-7, effective July 10, 2003, which is prescribed for use with these rules and is hereby incorporated by reference, signed by the record title owner(s) of the property; and

(b) A "Management Certificate," DEP Form #OGT-8, effective July 10, 2003, which is prescribed for use with these rules and is hereby incorporated by reference, signed by the managing entity of the property. The forms can be obtained by writing to the Office of Greenways and Trails, Department of Environmental Protection, 3900 Commonwealth Blvd., Mail Station 795, Tallahassee, FL 32399-3000, by telephoning (850) 245-2052 (SunCom 205-2052), or through OGT's website address, www.floridagreenwaysandtrails.com. All required documentation must be submitted to OGT at the above postal address.

(4) Evaluation of Designation Proposals. Upon receipt of a completed and signed Application for Designation of Public Lands or Waterways, Owner Consent form and Management Certificate for the Public Conservation or Recreation Lands or Waterways being proposed for designation, OGT staff will evaluate the designation proposal to verify its compliance with the requirements of

this rule. If OGT's evaluation indicates that the project does not satisfy the designation criteria, it shall so notify the submitting party or parties in writing. If OGT's evaluation indicates that the requirements of this rule have been met, OGT will coordinate the

preparation of a proposed designation agreement for the property.

(5) Preparation of Designation Agreement. At a minimum, a proposed designation agreement shall include or address the following:

(a) The owner's statutory right to have the property removed from designation;

(b) The term of the designation and the criteria for and manner in which the designation and the agreement can be modified, expanded (to encompass additional adjacent lands or waterways, for example), withdrawn from designation by the owner, or removed from the Florida Greenways and Trails System by the Department;

(c) Management, operation and maintenance of the designated property, including the responsibility of the owner or manager to notify the Department of any change in the following: property ownership or management; the condition or extent of natural, recreational, cultural or historic resources described in the Application for Designation of Public Lands or Waterways or its attachments; or the expansion or improvement of the project or its amenities and facilities. Alternatively, a copy of an existing lease, sublease or other management agreement or plan can be appended to the designation agreement and incorporated therein by reference;

(d) Disposition of all temporary and permanent structures or other improvements made to the property by the owner, the Department or others, whether existing at the time of designation or constructed or erected later;

(e) The issue of public access to all or part of the designated lands or waterways, including written authorization from the owner(s) in the form of a lease or other instrument if public access is granted;

(f) If necessary, development or modification of a greenway or trail use plan for the property which, at a minimum, describes the types and intensities of uses permitted and addresses public safety regulation and enforcement, and the components of which must be compatible with connecting segments of the Florida Greenways and Trails System; alternatively, a copy of an existing lease, sublease or other management agreement or plan can be appended to the designation agreement and incorporated therein by reference;

(g) If applicable, identification of the methods and personnel responsible for enforcement of state law within the designated lands or waterways. If the owner wishes to enforce additional restrictions on the property, the designation agreement must detail the restrictions and identify the methods and personnel responsible for their enforcement, or a copy of an existing lease, sublease or other management agreement or plan can be appended to the designation agreement and incorporated therein by reference.

(6) Public Hearing and Notice. Upon completion of a proposed designation agreement for the Public Conservation or Recreation Lands or Waterways proposed for designation, OGT shall:

(a) Notify the Florida Greenways and Trails Council that the proposed designation will be presented to the Council at its next public meeting;

(b) Provide the Council with a copy of the Application for Designation of Public Lands or Waterways, Owner Consent, Management Certificate and proposed designation agreement for the project;

(c) Publish notice of the Council's next public meeting in the Florida Administrative Weekly not less than fourteen (14) days before the meeting; in addition to a statement of the general subject matter to be considered at the meeting, the notice shall include

an announcement of the Department's intent to designate the Public Conservation or Recreation Lands or Waterways as part of the Florida Greenways and Trails System; and

(7) Council Review and Recommendation. The Florida Greenways and Trails Council shall review each proposal for designation of Public Conservation or Recreation Lands or Waterways as part of the Florida Greenways and Trails System. At the

meeting noticed under paragraph 62S-1.400(6)(c), F.A.C., OGT staff will present to the Council a verbal summary of the relevant information submitted for each proposed designation project and respond to members' questions. Thereafter, the Council shall permit oral or written comments by project sponsors, supporters and members of the general public. These comments shall be limited in duration if necessary to ensure equal time for all interested parties and projects. Following the close of the comment period, the Council shall consider the information submitted and either recommend approval or disapproval of the designation proposal to the Secretary of the Department. The Council's recommendation shall be ratified by a majority of members present and

voting at the public meeting; a quorum shall be present when the ratification vote is taken. OGT staff shall forward the Council's recommendation to the Secretary of the Department.

(8) Secretary Approval and Effective Date of Designation. The Secretary of the Department shall consider the recommendation of the Florida Greenways and Trails Council and public comment prior to approving or rejecting a proposed designation of Public

Conservation or Recreation Lands or Waterways. Official designation of the property into the Florida Greenways and Trails System shall become effective upon execution of a binding designation agreement by the Secretary of the Department, the owner(s)

and managing entity of the Public Conservation or Recreation Lands or Waterways and any other indispensable parties.

(9) Record of Designation. OGT shall maintain an indexed record of all designation agreements executed in connection with the designation of Public Conservation or Recreation Lands and Waterways as portions of the Florida Greenways and Trails System. Designation agreements shall be available for public inspection and copying at reasonable times and upon prior written notice to the Department. The owner of the Public Conservation or Recreation Lands or Waterways may (but is not required to) record the designation agreement, or a memorandum thereof, in the public records of the county or counties in which the designated

lands or waterways are located, at the owner's expense.

Specific Authority 260.016(1)(c)1. FS. Law Implemented 260.012, 260.013, 260.014, 260.0142, 260.016 FS. History--New 7-11-00, Amended 7-10-03.

62S-1.450 Designation Process for Private Lands and Waterways.

(1) Eligible Projects. Private lands and waterways within the state can be designated by the Department as components of the Florida Greenways and Trails System upon compliance with the requirements of this rule. To be eligible for designation as part of

the statewide system, private lands or waterways must protect or enhance natural, recreational, cultural or historic resources and must either:

(a) Provide linear open space or a hub or a site; or

(b) Promote connectivity between or among conservation lands, communities, parks, other recreational facilities, cultural sites,

or historic sites.

(2) Initiation of Process. The sponsor of a greenways or trails project located or to be located on private lands or waterways may initiate the designation process for the subject property by filing with OGT an "Application for Designation of Private Lands or Waterways," DEP Form #OGT-9, effective July 10, 2003, which is prescribed for use with these rules and is hereby incorporated

by reference. OGT will accept Applications for Designation of Private Lands or Waterways at any time throughout the year. All forms described in this rule can be obtained by writing to the Office of Greenways and Trails, Department of Environmental Protection, 3900 Commonwealth Blvd., Mail Station 795, Tallahassee, Florida 32399-3000 or through OGT's website address, www.floridagreenwaysandtrails.com.

(3) Landowner Consent Required. Although the sponsor of the proposed project need not be the owner of the private lands or waterways proposed for designation, the owner(s) must provide OGT with written consent to designation of the subject property as

part of the Florida Greenways and Trails System prior to completion of the designation process. Furthermore, if public access is contemplated for any portion of the project, both the owner(s) and the proposed managing entity must provide OGT with written authorization detailing the public access permitted on the project. Accordingly, the project sponsor is strongly encouraged to communicate and collaborate with all potentially affected landowners and land managers throughout the initial and subsequent stages of the designation process.

(4) Submission of Designation Proposal. The Application for Designation of Private Lands or Waterways, which must be submitted to OGT at the address stated in subsection 62S-1.450(2), F.A.C., shall contain the following information:

(a) Identification of the owner(s) of the private lands and waterways proposed for designation and an "Owner Consent," DEP Form #OGT-7, effective July 10, 2003, and hereby incorporated by reference, signed by each record title owner of the property;

(b) Identification of the proposed managing entity for the private lands and waterways proposed for designation, together with a "Management Certificate," DEP Form #OGT-8, effective July 10, 2003, and hereby incorporated by reference, signed by the proposed managing entity;

(c) A general narrative description of the physical, biological, archaeological, cultural and historical characteristics of the lands and waterways within the project;

(d) A summary of the documentary, photographic or other information available to confirm descriptions provided in paragraph (c) above and a statement indicating whether field verification has been conducted to document any or all of the characteristics described;

(e) An explanation of the manner in which the project will protect and/or enhance natural, recreational, cultural or historic resources;

(f) A description of how the project either:

1. Provides linear open space or a hub or a site; or

2. Promotes connectivity between or among conservation lands, communities, parks, other recreational facilities, cultural sites, or historic site;

(g) Photographs of various sites and features within the project site that show typical landscape characteristics, labeled with location and orientation and cross-referenced to the location map described in the following paragraph; and

(h) An accurate location map of sufficient scale and detail to clearly delineate all property boundaries in relation to other area greenways or trails, county roadways, major topographic features (such as rivers, lakes and power lines) and local government boundaries (if any). The location map must state the length of trails and total project acreage, and should indicate points of interest

or special features. When the project provides for public access to existing or proposed trails, the location map must identify the trail alignment, public access points, trailheads and facilities to accommodate the proposed types of public uses over the extent of the trails.

(5) Evaluation of Designation Proposal. Upon receipt of a completed and signed Application for Designation with all required attachments and documentation, OGT staff will evaluate the designation proposal to verify its compliance with the requirements of

this rule. If the Department's evaluation indicates that the project does not satisfy the designation criteria, it shall so notify the submitting party or parties in writing. If OGT's evaluation indicates that the requirements of this rule have been met, OGT will coordinate the preparation of a proposed designation agreement for the property.

(6) Preparation of Designation Agreement. At a minimum, a proposed designation agreement shall include or address the following items:

(a) The owner's statutory right to have the property removed from designation;

(b) Statutory limitations on the owner's liability and duty of care owed to others with regard to the designated property, the Department's responsibility to post public notices and information, and indemnification of the owner as described in Section 260.0125, Florida Statutes;

(c) The term of the designation and the criteria for and manner in which the designation and the agreement can be modified, expanded (to encompass additional adjacent lands or waterways, for example), withdrawn from designation by the owner, or removed from the Florida Greenways and Trails System by the Department;

(d) If applicable incentives or other terms agreed to between OGT, any other unit of government and the owner of the lands and/or waterways to be designated;

(e) Identification of the person(s), agency, governmental entity, corporation, organization or other authority (which may

include volunteer-based organizations) that will be responsible for the management, operation and maintenance of the designated property, together with a description of its duties and obligations with respect to the property and a provision that names the party responsible for notifying OGT of any change in the following: property ownership or management; the condition or extent of natural, recreational, cultural or historic resources described in the Application for Designation of Public Lands or Waterways or its

attachments; or the expansion or improvement of the project or its amenities and facilities;

(f) Identification of the existing and intended use(s) of the lands or waterways to be designated, the management practices that will be employed on various areas within the project, and how the uses of the area and the management practices are compatible with the natural, recreational, cultural and historic resources of the project. Alternatively, a copy of an existing lease, sublease or other management agreement or plan shall be appended to the designation agreement and incorporated therein by reference;

(g) Provision for the disposition of all temporary and permanent structures or other improvements made to the property by the owner, the Department or others, whether existing at the time of designation or to be constructed or erected later;

(h) The issue of public access to all or part of the lands or waterways to be designated and the regulation thereof, including a description of how impacts will be avoided or minimized in sensitive ecological, archaeological and historic areas; written authorization from the owner(s) and managing entity in the form of a lease or other instrument is required for any designation or grant of public access to any portion of the property;

(i) Development or modification of a greenway or trail use plan for the property which, at a minimum, describes the types and intensities of uses permitted and addresses public safety regulation and enforcement, and the components of which must be compatible with connecting segments of the Florida Greenways and Trails System. Alternatively, a copy of an existing lease, sublease or other management agreement or plan can be appended to the designation agreement and incorporated therein by reference;

(j) Identification of the methods and personnel responsible for enforcement of state law within the lands or waterways to be designated. If the owner wishes to enforce additional restrictions on the property, the designation agreement must detail the restrictions and identify the methods and personnel responsible for their enforcement; and

(k) A legally sufficient statement that the designation agreement will be subordinate to any existing leases, subleases, management plans, licenses, easements or other agreements or encumbrances previously executed and currently in effect for any portion of the lands or waterways proposed for designation.

(7) Public Hearing and Notice. Upon completion of a proposed designation agreement for the private lands or waterways proposed for designation, OGT shall:

(a) Notify the Florida Greenways and Trails Council that the proposed designation will be presented to the Council at its next public meeting;

(b) Provide Council members with a copy of the Application for Designation, Owner Consent, Management Certificate and proposed designation agreement for the project; and

(c) Publish notice of the Council's next public meeting in the Florida Administrative Weekly not less than fourteen (14) days before the meeting; in addition to a statement of the general subject matter to be considered at the meeting, the notice shall include

an announcement of the Department's intent to designate the private lands or waterways as part of the Florida Greenways and Trails System and invite public comment on the Application for Designation.

(8) Council Review and Recommendation. The Florida Greenways and Trails Council shall review each Application for Designation of private lands or waterways as part of the Florida Greenways and Trails System. At the meeting noticed under paragraph 62S-1.450(7)(c), F.A.C., OGT staff will present to the Council a verbal summary of the relevant information submitted for each proposed designation project and respond to members' questions. Thereafter, the Council shall permit oral or written comments by project sponsors, supporters and members of the general public. These comments shall be limited in duration if necessary to ensure equal time for all interested parties. Following the close of the comment period, the Council shall consider the

information submitted and either recommend approval or disapproval of the designation proposal to the Secretary of the Department. The Council's recommendation must be ratified by a majority of members present and voting at the public meeting;

a quorum must be present when the ratification vote is taken. OGT staff shall forward the Council's recommendation to the Secretary of the Department.

(9) Secretary Approval and Effective Date of Designation. The Secretary of the Department shall consider the recommendation of the Florida Greenways and Trails Council and public comment prior to approving or rejecting an Application for Designation of

private lands or waterways as components of the statewide system of greenways and trails. Official designation of the subject property into the Florida Greenways and Trails System shall become effective upon execution of a binding designation agreement

by the Secretary of the Department, the owner(s) and managing entity of the private lands or waterways and any other indispensable parties.

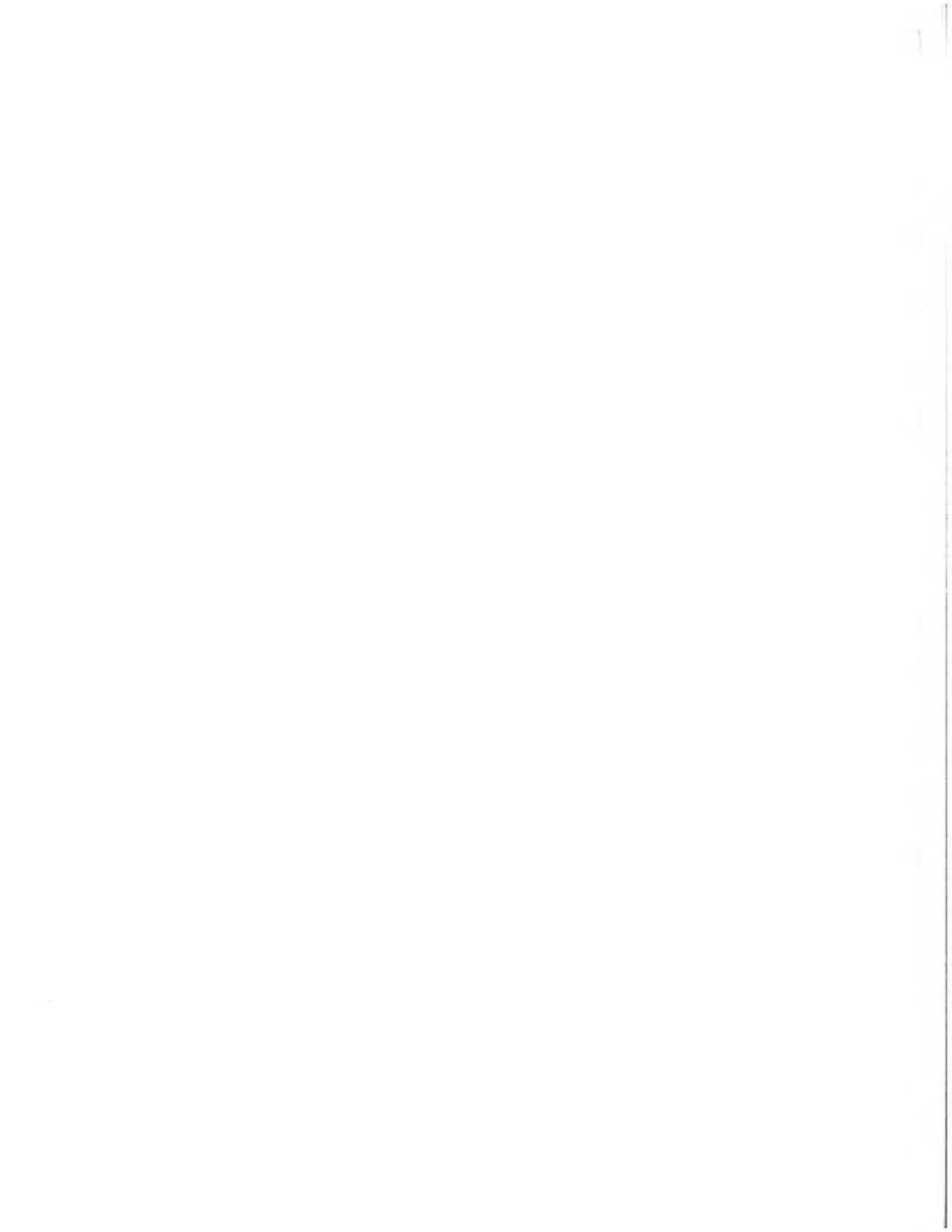
(10) Record of Designation. OGT shall maintain an indexed record of all designation agreements executed in connection with the designation of private lands and waterways as portions of the Florida Greenways and Trails System. Designation agreements shall be available for public inspection and copying at reasonable times and upon prior written notice to the Department. The

owner(s) of the private lands or waterways thus designated by the Department may record the designation agreement, or a memorandum thereof, in the public records of the county or counties in which the designated lands or waterways are located, at the

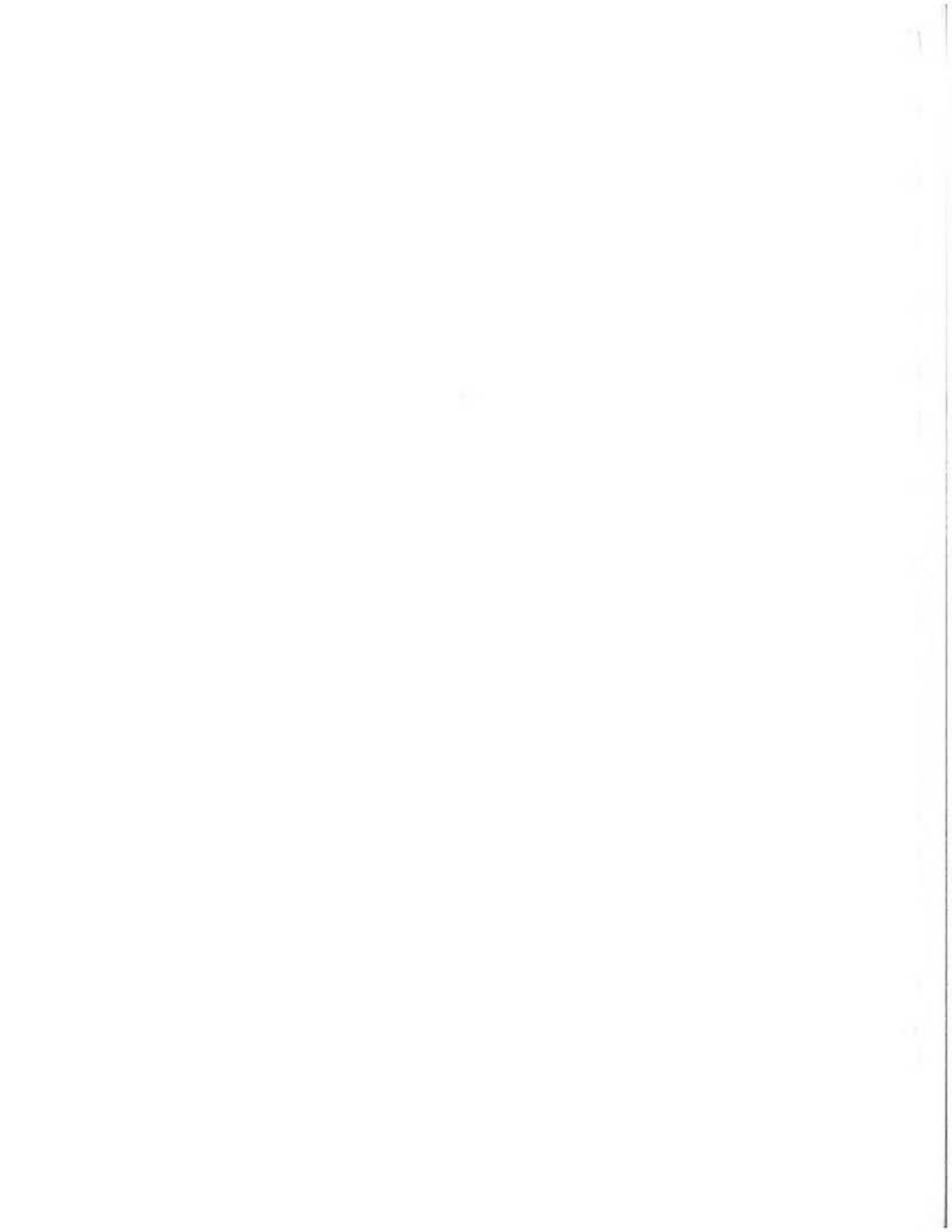
owner's expense.

Specific Authority 260.016(1)(c)1. FS. Law Implemented 260.012, 260.013, 260.014, 260.0142, 260.016 FS. History--New 7-11-00, Amended

7-10-03.



Appendix 8:
**Management Procedures for Archaeological and Historical Sites and
Properties On State-owned or Controlled Lands**



**MANAGEMENT PROCEDURES FOR
ARCHAEOLOGICAL AND HISTORICAL SITES AND PROPERTIES
ON STATE - OWNED OR CONTROLLED LANDS**
(revised August, 1995)

A. GENERAL DISCUSSION

Archaeological and historic sites are defined collectively in 267.021(3), F.S., as "historic properties" or "historic resources". They have several essential characteristics which must be recognized in a management program.

- First of all, they are a finite and non-renewable resource. Once destroyed, presently existing resources, including buildings, other structures, shipwreck remains, archaeological sites and other objects of antiquity, cannot be renewed or revived. Today, sites in the State of Florida are being destroyed by all kinds of land development, inappropriate land management practices, erosion, looting, and to a minor extent even by well-intentioned professional scientific research (e.g., archaeological excavation). Measures must be taken to ensure that some of these resources will be preserved for future study and appreciation.
- Secondly, sites are unique because individually they represent the tangible remains of events which occurred at a specific time and place.
- Thirdly, while sites uniquely reflect localized events, these events and the origin of particular sites are related to conditions and events in other times and places. Sites can be understood properly only in relation to their natural surroundings and the activities of inhabitants of other sites. Managers must be aware of this "systemic" character of historic and archaeological sites. Also, it should be recognized that archaeological sites are time capsules for more than cultural history; they preserve traces of past biotic communities, climate, and other elements of the environment that may be of interest to other scientific disciplines.
- Finally, the significance of sites, particularly archaeological ones, derives not only from the individual artifacts within them, but also equally from the spatial arrangement of those artifacts in both horizontal and vertical planes. When archaeologists excavate, they recover, not merely objects, but also a record of the positions of these objects in relation to one another and their containing matrix (e.g., soil strata). Much information is sacrificed if the so-called "context" of archaeological objects is destroyed or not recovered, and this is what archaeologists are most concerned about when a site is threatened with destruction or damage. The artifacts themselves can be recovered even after a site is heavily disturbed, but the context - the vertical and horizontal relationships - cannot. Historic structures also contain a wealth of cultural (socio-economic) data which can be lost if historically sensitive maintenance, restoration or rehabilitation procedures are not implemented, or if they are demolished or extensively altered without appropriate documentation. Lastly, it should not be forgotten that historic structures often have associated potentially significant historic archaeological features which must be considered in land management decisions.

B. STATUTORY AUTHORITY

Chapter 253, Florida Statutes ("State Lands") directs the preparation of "single-use" or "multiple-use" land management plans for all state-owned lands and state-owned sovereignty submerged lands. In this document, 253.034(5), F.S., specifically requires that "all management plans, whether for single-use or multiple-use properties, shall specifically describe how the managing agency plans to identify, locate, protect and preserve, or otherwise use fragile non-renewable resources, such as archaeological and historic sites, as well as other fragile resources..."

Chapter 267, Florida Statutes is the primary historic preservation authority of the state. The importance of protecting and interpreting archaeological and historic sites is recognized in 267.061(1)(a), F.S.:

The rich and unique heritage of historic properties in this state, representing more than 10,000 years of human presence, is an important legacy to be valued and conserved for present and future generations. The destruction of these nonrenewable historic resources will engender a significant loss to the state's quality of life, economy, and cultural environment. It is therefore declared to be state policy to:

1. Provide leadership in the preservation of the state's historic resources; [and]
2. Administer state-owned or state-controlled historic resources in a spirit of stewardship and trusteeship;...

Responsibilities of the Division of Historical Resources in the Department of State pursuant to 267.061(3), F.S., include the following:

1. Cooperate with federal and state agencies, local governments, and private organizations and individuals to direct and conduct a comprehensive statewide survey of historic resources and to maintain an inventory of such responses.
2. Develop a comprehensive statewide historic preservation plan.
3. Identify and nominate eligible properties to the *National Register of Historic Places* and otherwise administer applications for listing properties in the National Register of Historic Places.
4. Cooperate with federal and state agencies, local governments, and organizations and individuals to ensure that historic resources are taken into consideration at all levels of planning and development.
5. Advise and assist, as appropriate, federal and state agencies and local governments in carrying out their historic preservation responsibilities and programs.
6. Carry out on behalf of the state the programs of the National Historic Preservation Act of 1966, as amended, and to establish, maintain, and administer a state historic preservation program meeting the requirements of an approved program and fulfilling the responsibilities of state historic preservation programs as provided in subsection 101(b) of that act.
7. Take such other actions necessary or appropriate to locate, acquire, protect, preserve, operate, interpret, and promote the location, acquisition, protection, preservation, operation, and interpretation of historic resources to foster an appreciation of Florida history and culture. Prior to the acquisition, preservation, interpretation, or operation of a historic property by a state agency, the Division shall be provided a reasonable opportunity to review and comment on the proposed undertaking and shall determine that there exists historic authenticity and a feasible means of providing for the preservation, interpretation and operation of such property.
8. Establish professional standards for the preservation, exclusive of acquisition, of historic resources in state ownership or control.
9. Establish guidelines for state agency responsibilities under subsection (2).

Responsibilities of other state agencies of the executive branch, pursuant to 267.061(2), F.S., include:

1. Each state agency of the executive branch having direct or indirect jurisdiction over a proposed state or state-assisted undertaking shall, in accordance with state policy and prior to the approval of expenditure of any state funds on the undertaking, consider the effect of the undertaking on any historic property that is included in, or eligible for inclusion in, the *National Register of Historic Places*. Each such agency shall afford the division a reasonable opportunity to comment with regard to such an undertaking.
2. Each state agency of the executive branch shall initiate measures in consultation with the division to assure that where, as a result of state action or assistance carried out by such agency, a historic property is to be demolished or substantially altered in a way which adversely affects the character, form, integrity, or other qualities which contribute to [the] historical, architectural, or archaeological value of the property, timely steps are taken to determine that no feasible and prudent alternative to the proposed demolition or alteration exists, and, where no such alternative is determined to exist, to assure that timely steps are taken either to avoid or mitigate the adverse effects, or to undertake an appropriate archaeological salvage excavation or other recovery action to document the property as it existed prior to demolition or alteration.

3. In consultation with the division [of Historical Resources], each state agency of the executive branch shall establish a program to locate, inventory, and evaluate all historic properties under the agency's ownership or control that appear to qualify for the National Register. Each such agency shall exercise caution to assure that any such historic property is not inadvertently transferred, sold, demolished, substantially altered, or allowed to deteriorate significantly.
4. Each state agency of the executive branch shall assume responsibility for the preservation of historic resources which are owned or controlled by such agency. Prior to acquiring, constructing, or leasing buildings for the purpose of carrying out agency responsibilities, the agency shall use, to the maximum extent feasible, historic properties available to the agency. Each agency shall undertake, consistent with preservation of such properties, the mission of the agency, and the professional standards established pursuant to paragraph (3)(k), any preservation actions necessary to carry out the intent of this paragraph.
5. Each state agency of the executive branch, in seeking to acquire additional space through new construction or lease, shall give preference to the acquisition or use of historic properties when such acquisition or use is determined to be feasible and prudent compared with available alternatives. The acquisition or use of historic properties is considered feasible and prudent if the cost of purchase or lease, the cost of rehabilitation, remodeling, or altering the building to meet compliance standards and the agency's needs, and the projected costs of maintaining the building and providing utilities and other services is less than or equal to the same costs for available alternatives. The agency shall request the division to assist in determining if the acquisition or use of a historic property is feasible and prudent. Within 60 days after making a determination that additional space is needed, the agency shall request the division to assist in identifying buildings within the appropriate geographic area that are historic properties suitable for acquisition or lease by the agency, whether or not such properties are in need of repair, alteration, or addition.
6. Consistent with the agency's mission and authority, all state agencies of the executive branch shall carry out agency programs and projects, including those under which any state assistance is provided, in a manner which is generally sensitive to the preservation of historic properties and shall give consideration to programs and projects which will further the purposes of this section.

Section 267.12 authorizes the Division to establish procedures for the granting of research permits for archaeological and historic site survey or excavation on state-owned or controlled lands, while Section 267.13 establishes penalties for the conduct of such work without first obtaining written permission from the Division of Historical Resources. The Rules of the Department of State, Division of Historical Resources, for research permits for archaeological sites of significance are contained in Chapter 1A-32,F.A.C.

Another Florida Statute affecting land management decisions is **Chapter 872, F.S.** Section 872.02, F.S., pertains to marked grave sites, regardless of age. Many state-owned properties contain old family and other cemeteries with tombstones, crypts, etc. Section 872.05, F.S., pertains to unmarked human burial sites, including prehistoric and historic Indian burial sites. Unauthorized disturbance of both marked and unmarked human burial sites is a felony.

C. MANAGEMENT POLICY

The choice of a management policy for archaeological and historic sites within state-owned or controlled lands obviously depends upon a detailed evaluation of the characteristics and conditions of the individual sites and groups of sites within those tracts. This includes an interpretation of the significance (or potential significance) of these sites, in terms of social and political factors, as well as environmental factors. Furthermore, for historic structures architectural significance must be considered, as well as any associated historic landscapes.

Sites on privately owned lands are especially vulnerable to destruction, since often times the economic incentives for preservation are low compared to other uses of the land areas involved. Hence, sites in public ownership have a magnified importance, since they are the ones with the best chance of survival over the long run. This is particularly true of sites which are

state-owned or controlled, where the basis of management is to provide for land uses that are minimally destructive of resource values.

It should be noted that while many archaeological and historical sites are already recorded within state-owned or controlled-lands, the majority of the uplands areas and nearly all of the inundated areas have not been surveyed to locate and assess the significance of such resources. The known sites are, thus, only an incomplete sample of the actual resources - i.e., the number, density, distribution, age, character and condition of archaeological and historic sites - on these tracts. Unfortunately, the lack of specific knowledge of the actual resources prevents formulation of any sort of detailed management or use plan involving decisions about the relative historic value of individual sites. For this reason, a generalized policy of conservation is recommended until the resources have been better addressed.

The generalized management policy recommended by the Division of Historical Resources includes the following:

1. State land managers shall coordinate all planned activities involving known archaeological or historic sites or potential site areas closely with the Division of Historical Resources in order to prevent any kind of disturbance to significant archaeological or historic sites that may exist on the tract. Under 267.061(1)(b), F.S., the Division of Historical Resources is vested with title to archaeological and historic resources abandoned on state lands and is responsible for administration and protection of such resources. The Division will cooperate with the land manager in the management of these resources. Furthermore, provisions of 267.061(2) and 267.13, F.S., combined with those in 267.061(3) and 253.034(4), F.S., require that other managing (or permitting) agencies coordinate their plans with the Division of Historical Resources at a sufficiently early stage to preclude inadvertent damage or destruction to known or potentially occurring, presently unknown archaeological and historic sites. The provisions pertaining to human burial sites must also be followed by state land managers when such remains are known or suspected to be present (see 872.02 and 872.05, F.S., and 1A-44, F.A.C.)
2. Since the actual resources are so poorly known, the potential impact of the managing agency's activities on historic archaeological sites may not be immediately apparent. Special field survey for such sites may be required to identify the potential endangerment as a result of particular management or permitting activities. The Division may perform surveys, as its resources permit, to aid the planning of other state agencies in their management activities, but outside archaeological consultants may have to be retained by the managing agency. This would be especially necessary in the cases of activities contemplating ground disturbance over large areas and unexpected occurrences. It should be noted, however, that in most instances Division staff's knowledge of known and expected site distribution is such that actual field surveys may not be necessary, and the project may be reviewed by submitting a project location map (preferably a 7.5 minute U.S.G.S. Quadrangle map or portion thereof) and project descriptive data, including detailed construction plans. To avoid delays, Division staff should be contacted to discuss specific project documentation review needs.
3. In the case of known significant sites, which may be affected by proposed project activities, the managing agency will generally be expected to alter proposed management or development plans, as necessary, or else make special provisions to minimize or mitigate damage to such sites.
4. If in the course of management activities, or as a result of development or the permitting of dredge activities (see 403.918(2)(6)a, F.S.), it is determined that valuable historic or archaeological sites will be damaged or destroyed, the Division reserves the right, pursuant to 267.061(1)(b), F.S., to require salvage measures to mitigate the destructive impact of such activities to such sites. Such salvage measures would be accomplished before the Division would grant permission for destruction of the affected site areas. The funding needed to implement salvage measures would be the responsibility of the managing agency planning the site destructive activity. Mitigation of historic structures at a minimum involves the preparation of measured drawings and documentary photographs. Mitigation of archaeological resources involves the excavation, analysis and reporting of the project findings and must be planned to occur sufficiently in advance to avoid project construction delays. If these services are to be contracted by the state agency, the selected consultant will need

to obtain an Archaeological Research Permit from the Division of Historical Resources, Bureau of Archaeological Research (see 267.12, F.S. and Rules 1A-32 and 1A-46 F.A.C.).

5. For the near future, excavation of non-endangered (i.e., sites not being lost to erosion or development) archaeological sites is discouraged. There are many endangered sites in Florida (on both private and public lands) in need of excavation because of the threat of development or other factors. Those within state-owned or controlled lands should be left undisturbed for the present - with particular attention devoted to preventing site looting by "treasure hunters". On the other hand, the archaeological and historic survey of these tracts is encouraged in order to build an inventory of the resources present, and to assess their scientific research potential and historic or architectural significance.
6. The cooperation of land managers in reporting sites to the Division that their field personnel may discover is encouraged. The Division will help inform field personnel from other resource managing agencies about the characteristics and appearance of sites. The Division has initiated a cultural resource management training program to help accomplish this. Upon request the Division will also provide to other agencies archaeological and historical summaries of the known and potentially occurring resources so that information may be incorporated into management plans and public awareness programs (See Management Implementation).
7. Any discovery of instances of looting or unauthorized destruction of sites must be reported to the agent for the Board of Trustees of the Internal Improvement Trust Fund and the Division so that appropriate action may be initiated. When human burial sites are involved, the provisions of 872.02 and 872.05, F. S. and Rule 1A-44, F.A.C., as applicable, must also be followed. Any state agent with law enforcement authority observing individuals or groups clearly and incontrovertibly vandalizing, looting or destroying archaeological or historic sites within state-owned or controlled lands without demonstrable permission from the Division will make arrests and detain those individuals or groups under the provisions of 267.13, 901.15, and 901.21, F.S., and related statutory authority pertaining to such illegal activities on state-owned or controlled lands. County Sheriffs' officers are urged to assist in efforts to stop and/or prevent site looting and destruction.

In addition to the above management policy for archaeological and historic sites on state-owned land, special attention shall be given to those properties listed in the *National Register of Historic Places* and other significant buildings. The Division recommends that the *Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* (Revised 1990) be followed for such sites.

The following general standards apply to all treatments undertaken on historically significant properties.

1. A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.
2. The historic character of a property shall be retained and preserved. The removal of historic materials or alterations of features and spaces that characterize a property shall be avoided.
3. Each property shall be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.
4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.
5. Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.
6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual

qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.
8. Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.
9. New additions, exterior alterations, or related new construction shall not destroy materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.
10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired. (see *Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings* [Revised 1990]).

Division of Historical Resources staff are available for technical assistance for any of the above listed topics. It is encouraged that such assistance be sought as early as possible in the project planning.

D. MANAGEMENT IMPLEMENTATION

As noted earlier, 253.034(4), F.S., states that "all management plans, whether for single-use or multiple-use properties, shall specifically describe how the managing agency plans to identify, locate, protect and preserve, or otherwise use fragile non-renewable resources, such as archaeological and historic sites..." The following guidelines should help to fulfill that requirement.

1. All land managing agencies should contact the Division and send U.S.G.S. 7.5 minute quadrangle maps outlining the boundaries of their various properties.
2. The Division will in turn identify site locations on those maps and provide descriptions for known archaeological and historical sites to the managing agency.
3. Further, the Division may also identify on the maps areas of high archaeological and historic site location probability within the subject tract. These are only probability zones, and sites may be found outside of these areas. Therefore, actual ground inspections of project areas may still be necessary.
4. The Division will send archaeological field recording forms and historic structure field recording forms to representatives of the agency to facilitate the recording of information on such resources.
5. Land managers will update information on recorded sites and properties.
6. Land managers will supply the Division with new information as it becomes available on previously unrecorded sites that their staff locate. The following details the kind of information the Division wishes to obtain for any new sites or structures which the land managers may report:

A. Historic Sites

- (1) Type of structure (dwelling, church, factory, etc.).
- (2) Known or estimated age or construction date for each structure and addition.
- (3) Location of building (identify location on a map of the property, and building

placement, i.e., detached, row, etc.).

(4) General Characteristics: (include photographs if possible) overall shape of plan (rectangle, "L" "T" "H" "U", etc.); number of stories; number of vertical divisions of bays; construction materials (brick, frame, stone, etc.); wall finish (kind of bond, coursing, shingle, etc.); roof shape.

(5) Specific features including location, number and appearance of:

- (a) Important decorative elements;
- (b) Interior features contributing to the character of the building;
- (c) Number, type, and location of outbuildings, as well as date(s) of construction;
- (d) Notation if property has been moved;
- (e) Notation of known alterations to building.

B. Archaeological Sites

- (1) Site location (written narrative and mapped location).
 - (2) Cultural affiliation and period.
 - (3) Site type (midden, burial mound, artifact scatter, building rubble, etc.)
 - (4) Threats to site (deterioration, vandalism, etc.).
 - (5) Site size (acreage, square meters, etc.).
 - (6) Artifacts observed on ground surface (pottery, bone, glass, etc.).
 - (7) Description of surrounding environment.
7. No land disturbing activities should be undertaken in areas of known archaeological or historic sites or areas of high site probability without prior review by the Division early in the project planning.
8. Ground disturbing activities may proceed elsewhere but land managers should stop disturbance in the immediate vicinity of artifact finds and notify the Division if previously unknown archaeological or historic remains are uncovered. The provisions of Chapter 872, F.S., must be followed when human remains are encountered.
9. Excavation and collection of archaeological and historic sites on state lands without a permit from the Division is a violation of state law and shall be reported to a law enforcement officer. The use of metal detectors to search for historic artifacts shall be prohibited on state lands except when authorized in a 1A-32, F.A.C., research permit from the Division.
10. Interpretation and visitation which will increase public understanding and enjoyment of archaeological and historic sites without site destruction or vandalism is strongly encouraged.
11. Development of interpretive programs including trails, signage, kiosks, and exhibits is encouraged and should be coordinated with the Division.
12. Artifacts found or collected on state lands are by law the property of the Division. Land managers shall contact the Division whenever such material is found so that arrangements may be made for recording and conservation. This material, if taken to Tallahassee, can be returned for public display on a long term loan.

E. ADMINISTERING AGENCY

Questions relating to the treatment of archaeological and historic resources on state lands may be directed to:

Susan M. Harp
Historic Preservation Planner

Compliance Review Section
Bureau of Historic Preservation

Telephone (850) 245-6333
Suncom 205-6333
FAX (850) 245-6437

Division of Historical Resources
R.A. Gray Building
500 South Bronough Street
Tallahassee, Florida 32399-0250

Appendix 9:
Verification of Compliance with Local Comprehensive Plans
for Price's Scrub Greenway



Marion County
Board of County Commissioners
Planning Department

2631 S.E. 3rd Street, Ocala, Florida 34471-9101
(352) 620-3394 -- Sanscom 667-3394 -- Fax (352) 620-7682

04 May 2004

Mickey Thomason
DEP Office of Greenways and Trails
8282 SE HWY 314
Ocala, Florida 34470

RE: Price's Scrub Greenway Land Management Plan

Dear Mr. Thomason,

Objective 3.0 of the Conservation Element of Marion County's Comprehensive Plan states that Marion County shall utilize the best available and pertinent ecological data to develop and implement monitoring mechanisms for the environmentally sensitive lands and selected locally significant natural resources found within Marion County.

Policy 3.2 of the Conservation Element requires Marion County to consider data located in A Natural Areas Inventory of Marion County, Florida to determine the likelihood of the presence of listed species of native plant communities. This information is to be used to ensure that land use decisions implement the objectives of protecting, conserving, and enhancing such resources. Price's Scrub (Site No. MARI050) is listed as having viable native plant communities with B and C rankings.

As such, the Price's Scrub Greenway Land Management Plan is consistent with the Marion County Comprehensive Plan. Should you have any questions, please contact me at (352) 620-3394.

Sincerely,

Jason L. Claxton, AICP
Planner II

Cc: Jim Muller, Muller and Associates, Inc
Dwight Gano, Marion County Planning Director
Jimmy Massey, Marion County Principal Planner

