

THREE RIVERS STATE PARK

UNIT MANAGEMENT PLAN

APPROVED

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Division of Recreation and Parks

DECEMBER 15, 2005

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INTRODUCTION

Three Rivers State Park is a distinctive and unique assemblage of natural communities that truly adds diversity to the Florida State Park system. Located on rolling, red clay hills overlooking Lake Seminole and the confluence of the Chattahoochee and Flint River systems, spectacular vistas and natural features await visitors to this far north Florida park. The park contains excellent examples of upland pine forests, one of Florida's most limited natural communities. Additionally, dense slope forests include oaks, hickories, poplars and a variety of rare plants, many reaching the southern extent of their habitat in extreme north Florida.

The park is located just north of the Sneads town line, on County Road 271. From Interstate 10, the park is accessed via Jackson County Road 286 north to U.S. Highway 90 west to Jackson County Road 271 (see Vicinity Map). The vicinity map also reflects significant land and water resources existing near the park.

The Department of the Army of the United States holds title to Three Rivers State Park. The Division of Recreation and Parks (Division) manages the park under a 25-year lease, which expires on February 28, 2005. At Three Rivers State Park, public outdoor recreation and conservation is the designated single use of the property (see Addendum 1). There are no legislative or executive directives that constrain the use of this property.

PURPOSE AND SCOPE OF THE PLAN

This plan serves as the basic statement of policy and direction for the management of Three Rivers State Park as a unit of Florida's state park system. It identifies the objectives, criteria and standards that guide each aspect of park administration, and sets forth the specific measures that will be implemented to meet management objectives. The plan is intended to meet the requirements of Sections 253.034 and 259.032, Florida Statutes, Chapter 18-2, Florida Administrative Code, and intended to be consistent with the State Lands Management Plan. All development and resource alteration encompassed in this plan is 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. This plan is also intended to meet the requirements for beach and shore preservation, as defined in Chapter 161, Florida Statutes, and Chapters 62B-33, 62B-36 and 62R-49, Florida Administrative Code.

The plan consists of two interrelated components. Each component corresponds to a particular aspect of the administration of the park. The resource management component provides a detailed inventory and assessment of the natural and cultural resources of the park. Resource management problems and needs are identified, and specific management objectives are established for each resource type. This component provides guidance on the application of such measures as prescribed burning, exotic species removal, and restoration of natural conditions.

The land use component is the recreational resource allocation plan for the unit. Based on considerations such as access, population, and adjacent land uses, an optimum allocation of the physical space of the park is made, locating use areas and proposing types of facilities and volume of use to be provided.

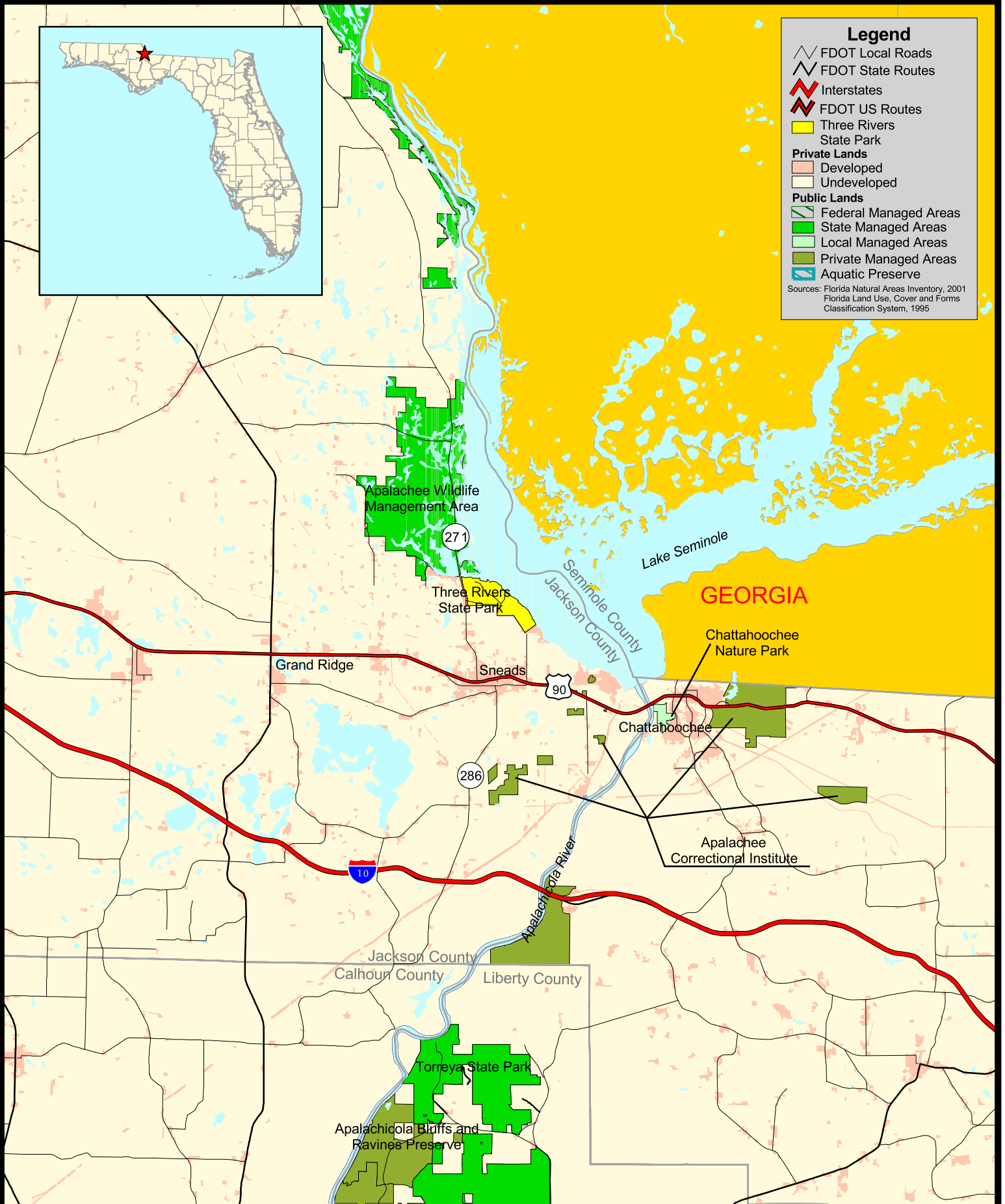
In the development of this plan, the potential of the park to accommodate secondary management purposes ("multiple uses") was analyzed. These secondary purposes were considered within the context of the Division's statutory responsibilities and an analysis of the resource needs and values of the park. This analysis considered the park natural and



Legend

- FDOT Local Roads
- FDOT State Routes
- Interstates
- FDOT US Routes
- Three Rivers State Park
- Private Lands**
 - Developed
 - Undeveloped
- Public Lands**
 - Federal Managed Areas
 - State Managed Areas
 - Local Managed Areas
 - Private Managed Areas
 - Aquatic Preserve

Sources: Florida Natural Areas Inventory, 2001
Florida Land Use, Cover and Forms Classification System, 1995



Three Rivers State Park



Florida Department Of Environmental Protection
Division Of Recreation And Parks
Office Of Park Planning

Vicinity Map

cultural resources, management needs, aesthetic values, visitation, and visitor experiences. For this park, it was determined that timber management (the limited selective removal of off-site pines) could be accommodated in a manner that would be compatible and not interfere with the primary purpose of resource-based outdoor recreation and conservation. This compatible, conceptual secondary management activity is addressed in the Resource Management Component of the plan. Uses such as, water resource development projects, water supply projects, stormwater management projects, linear facilities and sustainable agriculture and forestry (other than those forest management activities specifically identified in this plan) are not consistent with this plan or the management purposes of the park and should be discouraged.

The potential for generating revenue to enhance management was also analyzed. Visitor fees and charges are the principal source of revenue generated by the park. It was determined that selective removal of off-site pines, for the sole purpose of habitat restoration, would be appropriate at this park as an additional source of revenue for land management since it is compatible with the park's primary purpose of resource-based outdoor recreation and conservation.

The use of private land managers to facilitate restoration and management of this unit was also analyzed. Decisions regarding this type of management (such as outsourcing, contracting with the private sector, use of volunteers, etc.) will be made on a case-by-case basis as necessity dictates.

MANAGEMENT PROGRAM OVERVIEW

Management Authority and Responsibility

In accordance with Chapter 258, Florida Statutes, and Chapter 62D-2, Florida Administrative Code, the Division of Recreation and Parks (Division) is charged with the responsibility of developing and operating Florida's recreation and parks system. These are administered in accordance with the following policy:

It shall be the policy of the Division of Recreation and Parks to promote the state park system for the use, enjoyment, and benefit of the people of Florida and visitors; to acquire typical portions of the original domain of the state which will be accessible to all of the people, and of such character as to emblemize the state's natural values; conserve these natural values for all time; administer the development, use and maintenance of these lands and render such public service in so doing, in such a manner as to enable the people of Florida and visitors to enjoy these values without depleting them; to contribute materially to the development of a strong mental, moral, and physical fiber in the people; to provide for perpetual preservation of historic sites and memorials of statewide significance and interpretation of their history to the people; to contribute to the tourist appeal of Florida.

The Trustees have also granted management authority of certain sovereign submerged lands to the Division under Management Agreement MA 68-086 (as amended January 19, 1988). The management area includes a 400-foot zone from the edge of mean high water where a park boundary borders sovereign submerged lands fronting beaches, bays, estuarine areas, rivers or streams. Where emergent wetland vegetation exists, the zone extends waterward 400 feet beyond the vegetation. The agreement is intended to provide additional protection to resources of the park and nearshore areas and to provide authority to manage activities that could adversely impact public recreational uses.

Many operating procedures are standard system wide and are set by policy. These

procedures are outlined in the Division **Operations Procedures Manual** (OPM) and cover such areas as personnel management, uniforms and personal appearance, training, signs, communications, fiscal procedures, interpretation, concessions, camping regulations, resource management, law enforcement, protection, safety and maintenance.

In the management of Three Rivers State Park, a balance is sought between the goals of maintaining and enhancing natural conditions and providing various recreational opportunities. Natural resource management activities are aimed at management of natural systems. Development in the park is directed toward providing public access to and within the park, and to providing recreational facilities, in a reasonable balance, that are both convenient and safe. Program emphasis is on interpretation on the park's natural, aesthetic, and educational attributes.

Park Goals and Objectives

The following park goals and objectives express the Division's long-term intent in managing the state park. At the beginning of the process to update this management plan, the Division reviewed the goals and objectives of the previous plan to determine if they remain meaningful and practical and should be included in the updated plan. This process ensures that the goals and objectives for the park remain relevant over time.

Estimates are developed for the funding and staff resources needed to implement the management plan based on these goals, objectives and priority management activities. Funding priorities for all state park management and development activities are reviewed each year as part of the Division's legislative budget process. The Division prepares an annual legislative budget request based on the priorities established for the entire state park system. The Division also aggressively pursues a wide range of other funds and staffing resources, such as grants, volunteers, and partnerships with agencies, local governments and the private sector, for supplementing normal legislative appropriations to address unmet needs. The ability of the Division to implement the specific goals, objectives and priority actions identified in this plan will be determined by the availability of funding resources for these purposes.

Natural and Cultural Resources

1. Continue natural systems management, whereby natural ecological conditions and process are restored and maintained to the extent feasible.
 - A. Continue the application of prescribed fire as the primary management tool in maintaining forest health, promoting species diversity, improving wildlife habitat, and reducing the risk of catastrophic wildfire.
 - B. Routinely survey, monitor, and protect sites where rare plants occur, in order to maintain an accurate inventory and identify any trends that may threaten these species.
 - C. Request funding for contractual exotic plant removal efforts, with particular emphasis on Kudzu and Japanese climbing fern. Efforts to remove invasive, emergent, exotic, aquatic plants shall continue along the park's shoreline as well.
 - D. Accomplish a thorough mapping inventory of gopher tortoise burrows throughout the park.
 - E. Request funding in order to contract a thorough survey and inventory of the park's flora.
 - F. Manage ravine areas and slope forests as protected areas.
2. Provide high quality management and protection of cultural resources.
 - A. Periodically monitor archaeological sites that occur on the park property, and protect these sites from accelerated erosion and/or vandalism.
 - B. Ensure that all ground disturbance activities are coordinated through the Department

of State, Division of Historical Resources.

Recreational Goals

3. Continue to provide quality resource based outdoor recreational and interpretive programs and facilities at the state park.
 - A. Maintain overnight accommodations, including tent and RV camping.
 - B. Maintain opportunities for fishing, boat launching, picnicking, hiking and nature observation.
4. Seek funding to expand recreational and interpretive opportunities through the improvement of programs and the development of new use areas and facilities, as outlined in this management plan.
 - A. Construct cabins to provide an alternative to camping for overnight visitors.
 - B. Stabilize edge of lake and provide more boat moorings near campsites.
 - C. Improve and expand trails for hiking and biking.
 - D. Continue to collaborate with Jackson County in developing special events to be held at the park.
5. Improve interpretive programs featuring the history and natural communities of the lake area.
 - A. Pursue funding to renovate and construct facilities for wildlife observation and interpretive programs.
 - B. Provide static signage along trails.

Park Administration/Operations

6. Seek funding to obtain park attendant position.
7. Upgrade picnic area restroom to ADA compliance.
8. Pursue funding construct additional ranger residence.
9. Continue to work cooperatively with the U.S. Army Corps of Engineers

Management Coordination

The park is managed in accordance with all applicable Florida Statutes and administrative rules. Agencies having a major or direct role in the management of the park are discussed in this plan.

The Department of Agriculture and Consumer Services, Division of Forestry (DOF), assists DRP staff in the development of wildfire emergency plans and provides the authorization required for prescribed burning. The Florida Fish and Wildlife Conservation Commission (FFWCC), assists staff in the enforcement of state laws pertaining to wildlife, freshwater fish and other aquatic life existing within park boundaries. In addition, the FFWCC aids the Division with wildlife management programs, including the development and management of Watchable Wildlife programs. The Department of State, Division of Historical Resources (DHR) assists staff to assure protection of archaeological and historical sites. The Department of Environmental Protection (DEP), Office of Coastal and Aquatic Managed Areas (CAMA) aids staff in aquatic preserves management programs. The DEP, Bureau of Beaches and Wetland Resources aids staff in planning and construction activities seaward of the Coastal Construction Line. In addition, the Bureau of Beaches and Wetland Resources aid the staff in the development of erosion control projects. Emphasis is placed on protection of existing resources as well as the promotion of compatible outdoor recreational uses.

Public Participation

The Division provided an opportunity for public input by conducting a public workshop and an advisory group meeting. A public workshop was held on October 2, 2003. The purpose of this meeting was to present this draft management plan to the public.

Other Designations

Three Rivers State Park is not within an Area of Critical State Concern as defined in section 380.05, Florida Statutes. Currently it is not under study for such designation. The park is a component of the Florida Greenways and Trails System.

All waters within the unit have 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. This unit is not adjacent to an aquatic preserve as designated under the Florida Aquatic Preserve Act of 1975 (section 258.35, Florida Statutes).

RESOURCE MANAGEMENT COMPONENT

INTRODUCTION

The Division of Recreation and Parks has implemented resource management programs for preserving for all time the representative examples of natural and cultural resources of statewide significance under its administration. This component of the unit plan describes the natural and cultural resources of the park and identifies the methods that will be used to manage them. The stated management measures in this plan are consistent with the Department's overall mission in ecosystem management. Cited references are contained in Addendum 2.

The Division's philosophy of resource management is natural systems management. Primary emphasis is on restoring and maintaining, to the degree practicable, the natural processes that shape the structure, function and species composition of Florida's diverse natural communities as they occurred in the original domain. Single species management may be implemented when the recovery or persistence of a species is problematic provided it is compatible with natural systems management.

The management goal of cultural resources is to preserve sites and objects that represent all of Florida's cultural periods as well as significant historic events or persons. This goal may entail active measures to stabilize, reconstruct or restore resources, or to rehabilitate them for appropriate public use.

Because park units are often components of larger ecosystems, their proper management is often affected by conditions and occurrences beyond park boundaries. Ecosystem management is implemented through a resource management evaluation program (to assess resource conditions, evaluate management activities, and refine management actions), review of local comprehensive plans, and review of permit applications for park/ecosystem impacts.

RESOURCE DESCRIPTION AND ASSESSMENT

Natural Resources

Topography

Three Rivers State Park is found within the Tallahassee Highlands (Hendry and Yon 1958). This physiographic unit is characterized by erosional remnant hills, which present a generally rolling topography in the landscape. The park's topography is characterized by rolling hills, deep ravines, and high slope forests that overlook the former floodplain of the Chattahoochee/Apalachicola River. Elevations range from 200 feet in the upland pine forests, to 80 feet at the ravine bottoms and shoreline of Lake Seminole.

Geology

Surface formations range in age from Upper Eocene through Recent. Bedrock in the Tallahassee Tertiary Highlands is composed of the Chattahoochee facies of the Tampa Stage, Miocene series. The clastic Hawthorn formation of the Alum Bluff Stage overlies the bedrock of the Tallahassee Tertiary Highlands and is of Middle Miocene age.

Soils

Fourteen soil types are found at this park. The majorities by far are highly eroded soils, with only a few limestone outcrop derived soils. Addendum 3 contains detailed soil descriptions.

Minerals

There are no known minerals of commercial value at the park.

Hydrology

Three Rivers State Park fronts on Seminole Lake, an artificial lake created by the Jim

Woodruff Lock and Dam. The dam was dedicated in 1957 and is located northwest of Chattahoochee where the Chattahoochee and Flint Rivers unite to form the Apalachicola River. Normal levels of the reservoir are 77 feet in elevation (Hendry and Yon 1958). The Chattahoochee and Flint Rivers originate in Georgia. 243 miles of shoreline are included in this navigation project, and many recreational activities such as boating, camping and fishing have been created.

Surface water sheet flow is directed down slope into the park's ravines and ultimately drains into Lake Seminole. Some of the larger ravines channel large volumes of water during periods of heavy rainfall, but these ephemeral streams do not appear to be fed by steephead seepage. The relatively impermeable upland, clay soils tend to shunt water. Some downward percolation and subsurface seepage does take place, however, this is minimal when compared to sandhill soils more typical of longleaf pine uplands in the majority of Florida.

Natural Communities

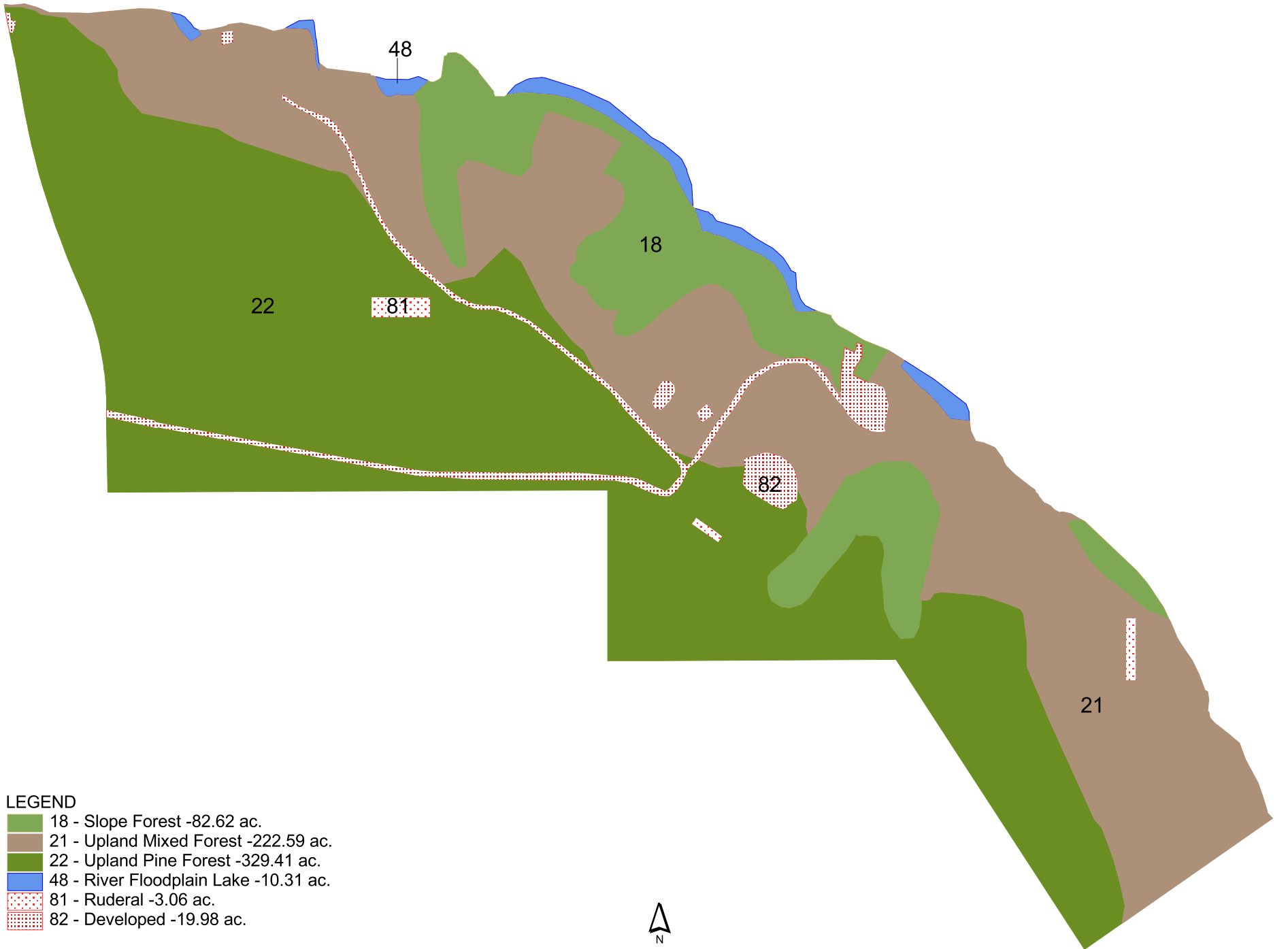
The system of classifying natural communities employed in this plan was developed by the Florida Natural Areas Inventory (FNAI) [FNAI Descriptions](#). The premise of this system is that physical factors, such as climate, geology, soil, hydrology and fire frequency generally determine the species composition of an area, and that areas which are similar with respect to these factors will tend to have natural communities with similar species compositions. Obvious differences in species composition can occur, despite similar physical conditions. In other instances, physical factors are substantially different, yet the species compositions are quite similar. For example, coastal strand and scrub--two communities with similar species compositions--generally have quite different climatic environments, and these necessitate different management programs.

The park contains four distinct natural communities (see Natural Communities Map) in addition to ruderal and developed areas. Park specific assessments of the existing natural communities are provided in the narrative below. A list of plants and animals occurring in the unit is contained in Addendum 4.

Slope forest. A dense slope forest of bluff oak, white oak, American hornbeam, mockernut hickory, yellow poplar & sweet gum occurs within the steep ravines and the high slopes above the shoreline of Lake Seminole. These overstory hardwoods combine to form a dense canopy that provides shade for much of the growing season. A lush understory of low plants and shrubs includes oak leaf hydrangea, citronella, panic grass, sedges, helianthus, wild petunia, pepper vine, poison ivy, Christmas fern, Virginia creeper, eastern redbud, green dragon, red buckeye, witch hazel, smilax, and sassafras. In the spring, the shady slopes are mottled with the bright red flowers of Indian Pinks. The park's well-defined slope forests are also home to Appalachian spring ephemerals. In the early springtime, the slopes are covered with the small white flowers of May apple, and the dark crimson of thousands of trilliums in bloom. Other rare plants observed in the park's slope forests, by local botanists, include pink root, yellow lady's slipper, rue anemone, bloodroot, trout lily, and wild ginger.

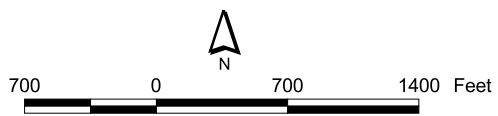
Upland hardwood forest and upland mixed forest. A large portion of the park's uplands is best described as a forest of well-established hardwoods, with a mix of shortleaf and loblolly pines. Many large hardwoods combine to form a nearly continuous canopy. White oaks, red oaks, and mockernut hickory are predominant, with many trees in excess of 24 inches dbh. Other common trees include American beech, bitternut hickory, southern magnolia, pignut hickory, American holly, swamp chestnut oak, and devil's walking stick.

Portions of the upland mixed forest in the eastern side of the park are dominated by loblolly pines that were planted on former "old fields" in the 1950s. Loblolly pines in this



LEGEND

- 18 - Slope Forest -82.62 ac.
- 21 - Upland Mixed Forest -222.59 ac.
- 22 - Upland Pine Forest -329.41 ac.
- 48 - River Floodplain Lake -10.31 ac.
- 81 - Ruderal -3.06 ac.
- 82 - Developed -19.98 ac.



**THREE RIVERS
STATE PARK**

Prepared by:
Florida Department of Environmental Protection
Division of Recreation and Parks
Office of Park Planning

**NATURAL COMMUNITIES
MAP**

area of the park were thinned, decades ago, in order to provide a more natural stand density. Many hardwoods occur here as well, and over time, will become a more dominant component.

The mixed hardwood-pine community occurs on well-drained sandy loams or loamy sands. This community is sometimes considered the southernmost extension of the southern mixed hardwood found in the Piedmont (Ward, 1978), although the floristic composition of the two communities is somewhat different.

Upland pine forest. Classic FNAI upland pine natural community covers much of the southern portion of the park (see natural community map). Here, the high rolling, red clay hills are covered by an open canopy forest of longleaf pines with multi-aged, old growth characteristics. Old post oaks and red oaks are numerous. The understory is full of flowering plants throughout the spring, summer, and early fall. These include pencil flower, rabbit bells, beggars lice, bush clovers, elephant foot, boneset, green eyes, rattlesnake master, Croton, Coreopsis, pineland baptisia, variegated milkweed, pineland daisies, blazing star, paw paw, and beard tongue. Additionally, bracken ferns and wiregrass are common throughout this community.

Many of the larger pines provide habitat and/or home to woodpeckers, including red headed, red bellied sapsucker, and pileated. Other animals observed within the park's upland pinelands include gopher tortoise, eastern diamondback rattlesnake, black racer, opossum, raccoon, white tailed deer, bobcat, fox squirrel, cotton rat, and bobwhite quail.

Included in this natural community are several acres of loblolly pines, in burn zone G that were planted and thinned many years ago. No longleaf pines are found within this portion of the park, however, clearing small pockets of loblolly and reintroducing longleaf seedlings in these pockets should be considered as a restorative measure.

River floodplain lake. This habitat, dominated by red maple and cypress, is found in the sheltered coves along the shoreline of Lake Seminole. Pondweed, hydrilla, fanwort, parrot feather and water hyacinth exist and have built up in the lake since the damming of Lake Seminole.

Ruderal. Ruderal areas consists of three borrow pits and other disturbed areas on the property.

Developed. Developed areas include the campground, ranger station, park shop area, picnic areas and rest room facilities.

Designated Species

Designated species are those that are listed by the Florida Natural Areas Inventory (FNAI), U.S. Fish and Wildlife Service (USFWS), Florida Fish and Wildlife Conservation Commission (FFWCC), and the Florida Department of Agriculture and Consumer Services (FDA) as endangered, threatened or of special concern. Addendum 5 contains a list of the designated species and their designated status for this park. Management measures will be addressed later in this plan.

Some of the designated species encountered by park visitors at Three Rivers include American alligator, little blue heron, reddish egret, gopher tortoise, fox squirrel, May apple, and bloodroot. In total, there are 28 state and/or federal listed, or FNAI tracked species that occur at or frequent the park. Management measures regarding the park's designated species are listed under Management Measures for Natural Resources.

Special Natural Features

The park's steep ravines and slopes overlooking Lake Seminole are unique geological features within the State of Florida. These areas provide a distinct microclimate that

supports flora more typical of southern Appalachia. For these reasons, the park's ravine systems and high slope forests, situated above Lake Seminole, should be considered special natural features.

Cultural Resources

Evaluating the condition of cultural resources is accomplished using a three part evaluative scale, expressed as good, fair, and poor. These terms describe the present state of affairs, rather than comparing what exists against the ideal, a newly constructed component. Good describes a condition of structural stability and physical wholeness, where no obvious deterioration other than normal occurs. Fair describes a condition in which there is a discernible decline in condition between inspections, and the wholeness or physical integrity is and continues to be threatened by factors other than normal wear. A fair judgment is cause for concern. Poor describe an unstable condition where there is palpable, accelerating decline, and physical integrity is being compromised quickly. A resource in poor condition suffers obvious declines in physical integrity from year to year. A poor condition suggests immediate action to reestablish physical stability.

Three Rivers has six known cultural sites within the park boundaries. These include JA13 (Open Field Site). This site is considered to be in fair condition. Erosion and human disturbance have degraded this site. JA21 (Rock Hill Site). This site is in poor condition due to erosion and inundation. JA22 (Saw Mill Site) this site is considered in fair condition, suffering some erosion. JA39 (Harrell Site). This site is listed in fair condition. JA282 (Boat Ramp Site). This site is deteriorated and in poor condition. This site is threatened by erosion, inundation, recreational use and collecting. JA285 (SW Park Boundary Site). Again, this site is deteriorating and in poor condition. It is threatened with traffic and erosion. All of these sites are listed on the Florida Master Site File.

RESOURCE MANAGEMENT PROGRAM

Special Management Considerations

Timber Management Analysis

Chapters 253 and 259, Florida Statutes, require an assessment of the feasibility of managing timber in land management plans for parcels greater than 1,000 acres if the lead agency determines that timber management is not in conflict with the primary management objectives of the land. The feasibility of harvesting timber at this park during the period covered by this plan was considered in context of the Division's statutory responsibilities, and an analysis of the park's resource needs and values. The long-term management goal for forest communities in the state park system is to maintain or re-establish old-growth characteristics to the degree practicable, with the exception of early successional communities such as sand pine scrub and coastal strand.

Some limited, selective removal/harvest of mature loblolly pine may be considered as a management measure for accelerating the restoration of upland pine community in portions of burn zones E and G. This mature stand has already been thinned to achieve a more natural stand density, distribution, and overall appearance. Additionally, this area has benefited greatly from the regular application of prescribed fire. Some Upland Pine understory plants are present, however, fuel continuity is patchy. Loblolly pines provide the majority of fine, one-hour fuels present in the understory, and should not be removed in mass. It is therefore recommended that any removal of loblolly pines, for the purpose of longleaf pine reintroduction, be limited to relatively small pockets no larger than ¼ acre in size. This would allow for a gradual succession to a more natural longleaf pine dominated stand, in which the role of fire would be uninterrupted. For a more detailed description, and management recommendations for this site, please see Addendum 6.

Additional Considerations

As is the case in many of Florida's panhandle state parks, gopher tortoise populations appear to have significantly declined over the past decade. Inactive burrows are commonly encountered in the upland pine forest and upland mixed forest. Only a relatively small number of active burrows have been observed in recent years, and these all appear to be mature individuals. There are no obvious signs of reproduction or recruitment from adjacent lands.

Possibilities for this decline at Three Rivers may include Upper Respiratory Tortoise Disease (URTD), destruction of adjacent habitat, and poaching. Park and district environmental staff should consider requesting resource management funding that would provide for a population survey and assessment for gopher tortoises at the park. The ultimate goal of this study would be to more precisely establish population size/status, delineate reasons for population decline, and identify any recovery measures that may be feasible at this time.

Management Needs and Problems

1. There is a need to continue the application of prescribed fire as the primary management tool in maintaining forest health, promoting species diversity, improving wildlife habitat, and reducing the risk of catastrophic wildfire.
2. Given the park's unique assemblage of rare plants, there is a need to survey and monitor sites where these species occur, in order to maintain an accurate inventory and identify any trends which may be harmful.
3. Yearly funding is needed at this park to contract exotic plant removal efforts, with particular emphasis on kudzu and Japanese climbing fern. Left unchecked, these invasive exotics severely degrade habitats where native plants, including many listed species, currently flourish.
4. There is a need to monitor archaeological sites that occur on the park property, and protect these sites from accelerated erosion and/or vandalism.
5. Funding needs to be requested in order to contract a thorough survey and inventory of the park's flora.
6. Given the park's topography, there is a need to review any land management or park development measures that may facilitate and/or accelerate erosion, particularly adjacent to ravine habitats.

Management Objectives

The resources administered by the Division are divided into two principal categories: natural resources and cultural resources. The Division's primary objective in natural resource management is to maintain and restore, to the extent possible, to the conditions that existed before the ecological disruptions caused by man. The objective for managing cultural resources is to protect these resources from human-related and natural threats. This will arrest deterioration and help preserve the cultural resources for future generations to enjoy.

1. Continue the application of prescribed fire as the primary management tool in maintaining forest health, promoting species diversity, improving wildlife habitat, and reducing the risk of catastrophic wildfire.
2. Routinely survey, monitor, and protect sites where rare plants occur, in order to maintain an accurate inventory and identify any trends that may threaten these species.
3. Request funding for contractual exotic plant removal efforts, with particular emphasis on kudzu and Japanese climbing fern. Efforts to remove invasive, emergent, exotic, aquatic plants shall continue along the park's shoreline as well.
4. Periodically monitor archaeological sites that occur on the park property, and protect

- these sites from accelerated erosion and/or vandalism.
5. Accomplish a thorough inventory of gopher tortoise burrows in each burn zone, in order to derive an accurate population assessment/estimate.
 6. Request funding in order to contract a thorough survey and inventory of the park's flora.
 7. Manage ravine areas and slope forests as protected areas.

Management Measures for Natural Resources

Hydrology

There are no significant hydrological restoration issues within the uplands of this park. Park and district staff should review any land management measures or proposed park development for potential, unacceptable impacts to surface hydrology, or groundwater resources. Park staff should continue efforts to restore and maintain natural plant communities as the most effective and proactive measure of conserving both soil and water resources.

Prescribed Burning

The objectives of prescribed burning are to create those conditions that are most natural for a particular community, and to maintain ecological diversity within the unit's natural communities. To meet these objectives, the park is partitioned into burn zones, and burn prescriptions are implemented for each zone. The park burn plan is updated annually to meet current conditions. All prescribed burns are conducted with authorization from the Department of Agriculture and Consumer Services, Division of Forestry (DOF). Wildfire suppression activities will be coordinated between the Division and the DOF.

Much of the park is designated as a forest of mixed hardwoods and pines. These areas are best described as a multi-aged hardwood forest with a scattering of shortleaf and loblolly pines. These areas are characterized by mature oaks and hickories. Prescribed fire should remain an important management tool in these areas in order to reduce the buildup of hazardous fuel.

The primary focus of the park's burn program should focus on portions of the park dominated by longleaf pine. These areas are delineated as north Florida upland pine natural community that requires frequent low-moderate intensity fires to maintain a relatively open, herbaceous understory that in turn provides suitable conditions for natural longleaf pine regeneration.

Evaluation of the existing fire type communities is a continual process updated annually in the district burn plan. Specific burn zone information regarding species composition, current fuel loads, management objectives, management recommendations, burn zone history, burn prescriptions, and GIS generated maps can be referenced in the district plan. As prescribed burning continues at the park, community proportions may be adjusted.

Designated Species Protection

The welfare of designated species is an important concern of the Division. In many cases, these species will benefit most from proper management of their natural communities. At times, however, additional management measures are needed because of the poor condition of some communities, or because of unusual circumstances that aggravate the particular problems of a species.

Relatively frequent, low to moderate intensity prescribed fire, with emphasis on growing season burning, will ensure that suitable habitat is provided for gopher tortoises and fox squirrels. Management measures that maintain and restore relatively open, upland pine ecosystems, dominated by a low herbaceous understory, are vital to the survival of a healthy gopher tortoise population. The extensive burrows of this keystone species provide

essential habitat for an entire suite of pineland fauna including various amphibians, reptiles, mammals, and insects. Surveys and studies to assess the status of this important species should be a high priority at this park.

Three Rivers State Park is well known as a botanically significant site in the Florida Panhandle. The majority of listed plant species occur within the cool microclimate of closed canopy slope forests that occur within ravines and along the higher elevations above Lake Seminole. These unique sites should be designated as protected areas within the park, and managed accordingly. These protected areas should be periodically monitored to check for unauthorized visitor impacts. Any proposed expansion of the park's trail system into these areas, should be carefully reviewed by park and district environmental staff.

An important management measure regarding rare plants will be a detailed survey and inventory of the park's flora. Funding for this project should be pursued by park and district staff.

Big brown bats, southeastern bats, and free-tailed bats have been observed at various sites in eastern Jackson County, and are periodically observed in flight at the park. Although many bats tend to prefer structures for roosting habitat, large hollow snags should be preserved as natural habitat for these species and the more common eastern pipistrelle.

Exotic Species Control

Exotic species are those plants or animals that are not native to Florida, but were introduced because of human-related activities. Exotics have fewer natural enemies and may have a higher survival rate than do native species, as well. They may also harbor diseases or parasites that significantly affect non-resistant native species. Therefore, the policy of the Division is to remove exotic species from native natural communities.

For several years, the largest threat to the park's upland plant communities has been kudzu, a broadleaved deciduous vine that can spread nearly 12 inches a day under optimum growing conditions. Park staff has done a commendable job of keeping kudzu in check along the southeastern park boundary, and has even had success in eradicating the nuisance vine from upland mixed forest adjacent to Sneads Park at the far eastern edge of the property. In May of 2002, NaturChem Corporation was contracted through the DEP, Bureau of Invasive Plant Management to begin treatment of all remaining kudzu infestations at the park. This was a significant step in the control of this pest plant. However, future funding must be committed to this project if eradication of kudzu is to be achieved.

Japanese climbing fern has begun to spread throughout areas of closed canopy forest. Non-target, collateral damage to native herbaceous plants is a major concern, related to the control of this invasive exotic fern. The DEP Bureau of Invasive Plant Management is conducting herbicide trials to determine acceptable herbicides and application rates for climbing fern. Park and district staff should coordinate climbing fern removal efforts through the BIPM.

Emergent, invasive, exotic, aquatic plants such as taro and parrots-feather remain a problem in shoreline areas of the park. Effort should be made to treat heavily infested areas with approved aquatic safe herbicides, ideally during periods of lower water.

Problem Species

Problem species are defined as native species whose habits create specific management problems or concerns. Occasionally, problem species are also a designated species, such as alligators. The Division will consult and coordinate with appropriate federal, state and local agencies for management of designated species that are considered a threat or problem.

Without appropriate education and interpretation, encounters between park visitors and wildlife can be problematic. Species such as the American alligator and the eastern diamondback rattlesnake require special interpretation in order for all park visitors to respect both the dangers associated with these animals, and their important natural place in their respective ecosystems. Interpretive signage should be used where encounters are likely to occur. Additionally, a wide assortment of wildlife and natural history fact sheets, geared towards visitor education, are available through the Bureau of Natural & Cultural Resources.

Other species that may occasionally pose problems/inconveniences include mosquitoes, biting flies, yellow jackets, and poison ivy. The latter two are of particular concern to park personnel during prescribed fire operations, and should be discussed during pre-burn briefings.

Management Measures for Cultural Resources

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 (see [DHR Cultural Management Statement](#)).

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 evidence that would someday be useful to researchers attempting to interpret the past.

Management measures for any recorded site within the park should include periodic site visits to assess site condition, and monitor for any vandalism or looting.

All ground-disturbing activities shall be pre-assessed for potential impacts to cultural resources, utilizing the standardized DHR impact assessment matrix. Projects that may potentially cause significant impact shall be coordinated through the Department of State, Division of Historical Resources (DHR).

Research Needs

Natural Resources

Any research or other activity that involves the collection of plant or animal species on park property requires a collecting permit from the Department of Environmental Protection. Additional 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 also be required.

1. Funding is needed in order to accomplish a complete survey for gopher tortoises at the park, and determine appropriate measures for population recovery.
2. Funding is needed to accomplish a complete survey and inventory of park flora.

Cultural Resources

1. Funding is needed in order to accomplish a phase I archaeological survey of the park.

Resource Management Schedule

A priority schedule for conducting all management activities that is based on the purposes for which these lands were acquired, and to enhance the resource values, is contained in Addendum 7. Cost estimates for conducting priority management activities are based on the most cost effective methods and recommendations currently available (see Addendum 7).

Land Management Review

Section 259.036, Florida Statutes, established land management review teams to determine whether conservation, preservation, and recreation lands titled in the name of the Board of Trustees of the Internal Improvement Trust Fund (board) are being managed for the purposes for which they were acquired and in accordance with a land management plan adopted pursuant to s. 259.032, the board of trustees, acting through the Department of Environmental Protection (department). 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.

Three Rivers State Park has not been subject to a land management review.

LAND USE COMPONENT

INTRODUCTION

Land use planning and park development decisions for the state park system are based on the dual responsibilities of the Division of Recreation and Parks. These responsibilities are to preserve representative examples of original natural Florida and its cultural resources, and to provide outdoor recreation opportunities for Florida's citizens and visitors.

The general planning and design process begins with an analysis of the natural and cultural resources of the unit, and then proceeds through the creation of a conceptual land use plan that culminates in the actual design and construction of park facilities. Input to the plan is provided by experts in environmental sciences, cultural resources, park operation and management, through public workshops, and environmental groups. With this approach, the Division objective is to provide quality development for resource-based recreation throughout the state with a high level of sensitivity to the natural and cultural resources at each park.

This component of the unit plan includes a brief inventory of the external conditions and the recreational potential of the unit. Existing uses, facilities, special conditions on use, and specific areas within the park that will be given special protection, are identified. The land use component then summarizes the current conceptual land use plan for the park, identifying the existing or proposed activities suited to the resource base of the park. Any new facilities needed to support the proposed activities are described and located in general terms.

EXTERNAL CONDITIONS

An assessment of the conditions that exist beyond the boundaries of the unit can identify any special development problems or opportunities that exist because of the unit's unique setting or environment. This also provides an opportunity to deal systematically with various planning issues such as location, regional demographics, adjacent land uses, and the park's interaction with other facilities.

Three Rivers State Park is located within Jackson County about 50 miles northwest of Tallahassee in the western part of the state. The populations of Jackson County and the adjacent Calhoun, Gadsden and Liberty Counties have grown 13.4 percent since 1990, and are projected to grow an additional 7 percent by 2010 (BEBR, University of Florida, 2000). As of 2000, 19.5 percent of residents in these counties were in the 0-14 age group, 44.1 percent in the 15-44 age group, 23.2 percent in the 45-64 age group, and 13.2 percent were aged 65 and over (BEBR, University of Florida, 2000). This roughly reflects the state percentages with a slightly higher number of people in the 15-44 age groups and lower number in the 65+. Approximately 404,100 Floridians reside within 50 miles of the park of the park, which includes all of Tallahassee.

Three Rivers State Park recorded 19,058 visitors in 2001-2002FY. This represents a net 7.6 percent decrease over the last five years. This decrease is partially attributable to the increased hydrilla growth impeding water access. By Division estimates, these visitors contributed \$699,405 in direct economic impact and the equivalent of 14 jobs to the local economy (Florida Department of Environmental Protection, 2002).

Existing Use of Adjacent Lands

Three Rivers State Park is located on the eastern edge of Jackson County, about two miles north of Sneads. The surrounding area is mostly rural, undisturbed by large-scale developments or tourist boom. The north boundary of the recreation area fronts about four miles of shoreline along Lake Seminole. The western boundary fronts State Road 271. The

eastern boundary of the unit is adjacent to Sneads Park, owned and operated by the Army Corps of Engineers. The southern boundary is adjacent to private farmlands and the outer edges of Sneads. Just north of the park, also along Lake Seminole is the Apalachee Wildlife Management Area. The title for the parklands, held by the U.S. Dept of the Army, expires in February of 2005. The lake is owned and managed by the U.S. Army Corps of Engineers.

The Chattahoochee and Flint Rivers flow into Lake Seminole and due to the sensitivity of the lake waters these rivers are an area of concern. Potential pollutants in run-off waters bring about concern for adjacent land uses.

Planned Use of Adjacent Lands

The expected growth in this area will come from the south as the Sneads population moves northward. The Future Land Use Map designates the area as Agriculture 2 allowing a maximum density of one dwelling unit per acre (*Jackson County Comprehensive Plan*, Jackson County). The adjacent lands to the west and north are classified as conservation on the Land Use Map. This growth of the residential usage may impact the park by affecting water resources, and increasing vehicular traffic on adjacent roads.

PROPERTY ANALYSIS

Effective planning requires a thorough understanding of the unit's natural and cultural resources. This section describes the resource characteristics and existing uses of the property. The unit's recreation resource elements are examined to identify the opportunities and constraints they present for recreational development. Past and present uses are assessed for their effects on the property, compatibility with the site, and relation to the unit's classification.

Recreation Resource Elements

This section assesses the unit's recreation resource elements those physical qualities that, either singly or in certain combinations, supports the various resource-based recreation activities. Breaking down the property into such elements provides a means for measuring the property's capability to support individual recreation activities. This process also analyzes the existing spatial factors that either favor or limit the provision of each activity.

Land Area

While most people come to Three Rivers State Park to fish, camp, picnic, and boat, there is still a large area of the park left in woodlands--high pinelands, hardwoods, and some dense, vivid, steep ravines. These woodlands offer hiking, solitude, and nature study to visitors who choose them over the lakes large open expansiveness. The park is an excellent place to see the southern mixed hardwood forest that resembles the woods of the Appalachian Mountains. These woods, in a setting of rolling hills and steep ravines, are quite different from the natural communities found in south and central Florida parks.

Water Area

The recreation area gets its name from the three rivers that flow into each other to form a scenic series of waterways. First, the Chattahoochee and Flint Rivers meet, creating Lake Seminole from the reservoir formed by the Jim Woodruff Dam. After the water spills over the dam, it forms the Apalachicola River. Boating and fishing are very popular in the lake and rivers. The lake and dam are owned and operated by the Army Corps of Engineers.

Shoreline

With four miles of shoreline along the 37,500-acre Lake Seminole, this is a water-oriented park. The western shore of the lake is the original bank of the Chattahoochee River. The banks are gently rolling up to 150 ft above sea level on the northern sections and the steeper Southern cliffs climb to 180 ft above sea level.

Significant Wildlife Habitat

An active bald eagle's nest has been recorded along the banks of the lake on the southern portion of the park.

Archaeological and Historical Features

There are several known prehistoric sites on the property. The unit is within a cluster of archaeological sites including a former village, but few remains are visible. The Flint-Chattahoochee-Apalachee region is quite significant to Florida archaeology.

Steamboats along the Chattahoochee landed here and there is still evidence of the stagecoach line that traveled to meet it.

Additional information regarding the site's cultural resources is contained in the resource management component.

Assessment of Use

All legal boundaries, significant natural features, structures, facilities, roads, trails and easements existing in the unit are delineated on the base map (see Base Map). Specific uses made of the unit are briefly described in the following sections.

Past Uses

Construction of the Jim Woodruff Lock and Dam began in 1947 and finished in 1957. After Lake Seminole filled to the desired depth, Congress passed a special bill allowing retention of some of the U.S. Army Corps of Engineers property for use as a recreation area. The State of Florida leases a portion of this property.

Before the construction of the dam, the recreation area lands were farmed, timbered, and turpentine.

Recreational Uses

The park offers opportunities for camping, fishing, boating, picnicking, hiking, nature study, and wildlife observation. Rental canoes are available within the park.

Other Uses

Jackson County operates a boat ramp on the northwest side of the park through a special use permit from the Division of Recreation and Parks.

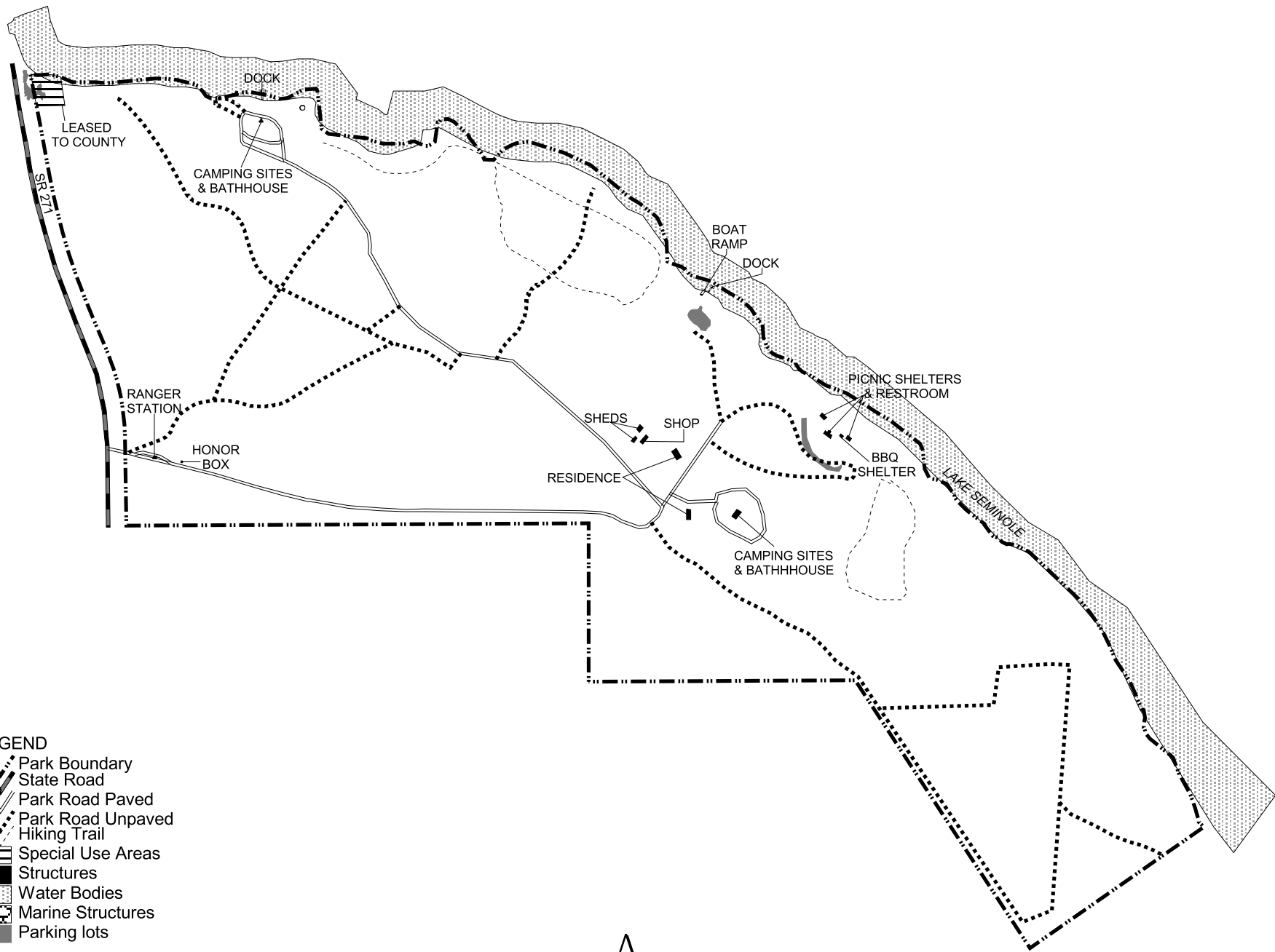
Protected Zones

A protected zone is an area of high sensitivity or outstanding character from which most types of development are excluded as a protective measure. Generally, facilities requiring extensive land alteration or resulting in intensive resource use, such as parking lots, camping areas, shops or maintenance areas, are not permitted in protected zones. Facilities with minimal resource impacts, such as trails, interpretive signs, and boardwalks are generally allowed. All decisions involving the use of protected zones are made on a case-by-case basis after careful site planning and analysis.

At Three Rivers State Park the slope forest, upland pine forest, river floodplain lake, and a 1500ft. buffer around the active bald eagle nest have been designated as protected zones as delineated on the Conceptual Land Use Plan.

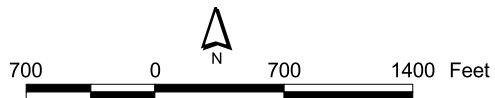
Existing Facilities

The park includes a standard campground adjacent to the lake with 31 sites amid the shade of mixed pines and oaks. Some sites are directly on the lakefront and all the sites have electricity and water. A new bathhouse facility meets ADA compliance. A large group camp, a short walk from the lake, is located on a gentle slope just south of the



LEGEND

- Park Boundary
- State Road
- Park Road Paved
- Park Road Unpaved
- Hiking Trail
- Special Use Areas
- Structures
- Water Bodies
- Marine Structures
- Parking lots



**THREE RIVERS
STATE PARK**

Prepared by:
Florida Department of Environmental Protection
Division of Recreation and Parks
Office of Park Planning

BASE MAP

picnic area. This campground has a recently upgraded bathhouse facility that complies with ADA guidelines.

A large picnic area on a grassy, shaded slope overlooks the lake. The picnic shelter contains a large combination picnic shelter/restroom, two large picnic shelters, a barbecue shelter, and a newly replaced playground.

Two nature trails provide opportunities to hike over this varied and beautiful terrain passing through a rich diversity of plant life. Water access is provided by a boat ramp into Lake Seminole located just northwest of the picnic area and a fishing dock available in the campground area.

Recreation Facilities

Standard Campground
Group Campground
Boat Ramp
Fishing Dock
Nature Trails (2)

Picnic Area
Picnic Shelters (3)
Barbecue Shelter
Playground

Support Facilities

Small Ranger Station
Ranger Residences (2)
Shop Building
Equipment Shelter
Paved Park Drive

Paved Parking in Picnic Area (47 vehicles)
Campground Restroom
Group Campground Restroom
Picnic Area Restroom

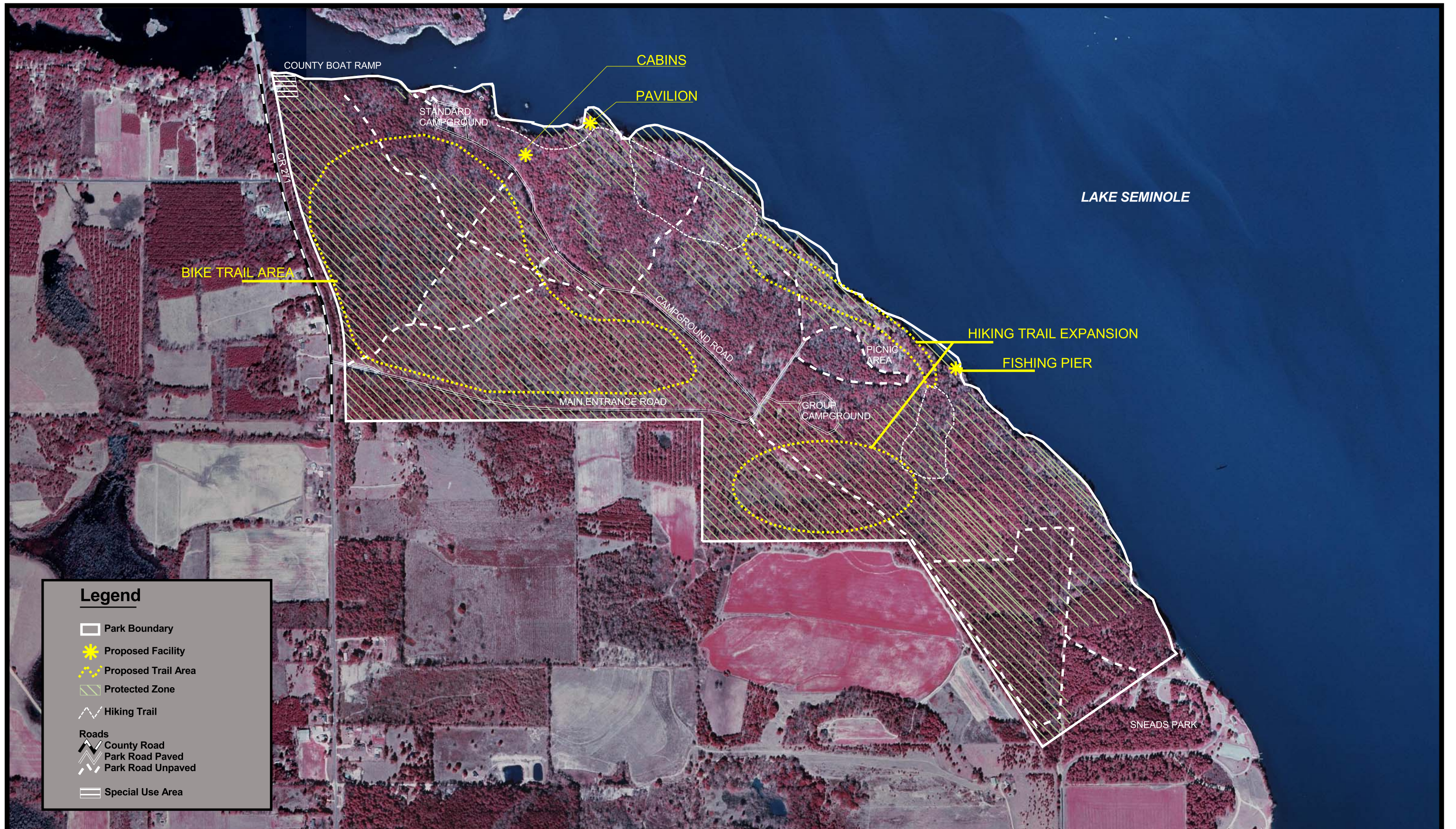
CONCEPTUAL LAND USE PLAN

The following narrative represents the current conceptual land use proposal for this park. As new information is provided regarding the environment of the park, cultural resources, recreational use, and as new land is acquired, the conceptual land use plan may be amended to address the new conditions (see Conceptual Land Use Plan). A detailed development plan for the park and a site plan for specific facilities will be developed based on this conceptual land use plan, as funding becomes available.

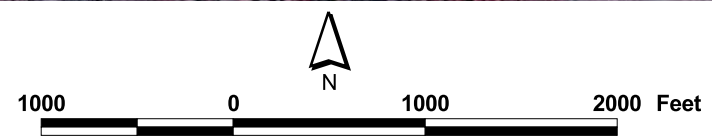
During the development of the unit management plan, the Division assesses potential impacts of proposed uses on the resources of the property. Uses that could result in unacceptable impacts are not included in the conceptual land use plan. Potential impacts are more thoroughly identified and assessed through the site planning process once funding is available for the development project. At that stage, design elements, such as sewage disposal and stormwater management, and design constraints, such as designated species or cultural site locations, are more thoroughly investigated. Advanced wastewater treatment or best available technology systems are applied for on-site sewage disposal. Stormwater management systems are designed to minimize impervious surfaces to the greatest extent feasible, and all facilities are designed and constructed using best management practices to avoid impacts and to mitigate those that cannot be avoided. Federal, state and local permit and regulatory requirements are met by the final design of the projects. This includes the design of all new park facilities consistent with the universal access requirements of the Americans with Disabilities Act (ADA). After new facilities are constructed, the park staff monitors conditions to ensure that impacts remain within acceptable levels.

Potential Uses and Proposed Facilities

Three Rivers State Park has been a popular destination for fishing and family camping for years. However, the increased hydrilla on Lake Seminole has hindered water access and



THREE RIVERS STATE PARK
CONCEPTUAL LAND USE PLAN



Prepared By:
 Florida Department of Environmental Protection
 Division of Recreation and Parks
 Office of Park Planning

fishing opportunities, affecting park attendance. This park could offer many, more varied experiences and efforts should be made to develop them. Once a long-term lease agreement between the Federal Government and the Florida Park Service is signed, the Division recommends capital improvements to expand these recreational opportunities.

The two existing hiking trails should be connected with a trail near the water. An expansion to the trail could loop south and west of the group campground. Bridges need to be constructed or repaired in areas where the trails cross the ravines. Such trails will pass through slope forests, upland mixed forest, and archaeological sites with many spectacular views out to Lake Seminole. Interpretive opportunities on the pre-history, history and natural processes should be maximized with static signage and guided walks.

The area of upland pine forest south of the campground has a number of existing, unpaved park roads and firebreaks that could be used for bike trails. This approximately 200-acre portion of the park, bordered by the main entrance road, the campground road and County Road 271 has topography changes of 60 ft. and could support loops of varying length and difficulty. A shorter loop starting at the campground will provide recreation for children in the campground.

The present hydrilla problem on Lake Seminole has impeded access to the lake and changed use patterns. An effort should be made to remove the hydrilla, especially from the boat launch areas. Once the boat launch is again used on a regular basis, park staff should survey users to determine facility needs. There will also be a need for designated tie-up or pull-up spaces in the campground for camper's boats. This will help control the human caused erosion along the banks. After the hydrilla is under control, day use should be monitored to determine if additional water based activities are needed. A fishing pier, similar to the one in the camping area, could be located at the southern end of the picnic area.

Camping registration takes place in the campground. The building used for this purpose should be renovated to serve multiple purposes. With the addition of screening on the outdoor shelter and renovations inside, a small gathering space for interpretive programs and recreation/gathering space for campers could be added to the office space.

Alternative overnight accommodations are proposed to adjust to the needs of a varied and aging population. Up to twelve cabins are recommended located south and uphill of the existing campsite. The two to three acre upland mixed forest site is close to existing utilities. The existing nature trail runs along the water edge, below the site.

A point of land jutting into the lake along the trail just east of the campground would be an ideal location for an observation/gathering area. A small pavilion is recommended for this point.

The combination pavilion/restroom building in the picnic area needs re-placement to meet ADA compliance and increase functionality. An enclosed, air-conditioned pavilion would provide space for expanded interpretive programs and for event rentals. This location is a central point for interpretive features and trails. The day use area has adequate parking to support the uses.

There are two existing park ranger residences. One is an employee owned trailer and needs to be replaced with a permanent residence.

Facilities Development

Preliminary cost estimates for the following list of proposed facilities are provided in Addendum 7. These cost estimates are based on the most cost-effective construction standards available at this time. The preliminary estimates are provided to assist the Division in budgeting future park improvements, and may be revised as more information is collected through the planning and design processes.

Recreation Facilities

Cabins (12)

Campground

Renovate campground registration building

Boat tie-ups along shore

Trails

Bridges along hiking trail (8)

Interpretive signs

Small Observation Platform

Day Use Area

Medium enclosed pavilion with restrooms

Fishing Pier

Support Facilities

Ranger residence

Existing Use and Optimum Carrying Capacity

Carrying capacity is an estimate of the number of users a recreation resource or facility can accommodate and still provide a high quality recreational experience and preserve the natural values of the site. The carrying capacity of a unit is determined by identifying the land and water requirements for each recreation activity at the unit, and then applying these requirements to the unit's land and water base. Next, guidelines are applied which estimate the physical capacity of the unit's natural communities to withstand recreational uses without significant degradation. This analysis identifies a range within which the carrying capacity most appropriate to the specific activity, the activity site, and the unit's classification is selected (see Table 1).

The optimum carrying capacity for this park is a preliminary estimate of the number of users the unit could accommodate after the current conceptual development program has been implemented. When developed, the proposed new facilities would approximately increase the unit's carrying capacity as shown in Table 1.

Optimum Boundary

As additional needs are identified through park use, development, research, and as adjacent land uses change on private properties, modification of the unit's optimum boundary may occur for the enhancement of natural and cultural resources, recreational values and management efficiency.

At this time, no additional lands have been identified for management by the Division and no lands are considered surplus to the needs of the park. The Division is seeking a longer-term agreement or transfer of title for the property.

Table 1
Existing Use And Optimum Carrying Capacity

Activity/Facility	Existing Capacity		Proposed Additional		Estimated Optimum	
	One Time	Daily	One Time	Daily	One Time	Daily
Trails						
Hiking	36	144	30	120	66	264
Biking			60	240	60	240
Picnicking	160	320			160	320
Camping						
Standard	124	124			124	124
Group	200	200			200	200
Cabins			72	72	72	72
Fishing						
Dock	10	20			10	20
Shoreline	20	40			20	40
Boating	100	200			100	200
TOTAL	650	1,048	162	432	812	1,480

Note: The canoe / kayak and fishing facilities are assumed to serve the same recreational user base as the picnic area, therefore, no carrying capacity is determined for them.

Addendum 1—Acquisition History

Three Rivers State Park Acquisition History

Sequence of Management Authority

On March 1, 1955, the Florida Board of Parks and Historic Memorials (FBPHM), predecessor in interest to the State of Florida Department of Environmental Protection, Division of Recreation and Parks (Division), assumed management of a 686-acre property constituting the initial area of Three Rivers State Park. FBPHM obtained this property from the Secretary of the Army under a 25-year license (from March 1, 1955 to February 29, 1980) for the purpose of using the property for Public Park and recreation.

At one point in the past, Three Rivers State Park was referred to as Jim Woodruff State Park.

When the 25-year license expired in February of 1980, the State of Florida Department of Natural Resources (DNR), predecessor in interest to the State of Florida Department of Environmental Protection, leased Three Rivers State Park from Department of the Army. This 25-year-term lease, Lease No. DACW01-1-80-111 became effective on March 1, 1980 and expired on February 28, 2005.

On August 23, 1983, DNR granted a use permit to the Board of County Commissioners of Jackson County to allow the county to use a certain portion of Three Rivers State Park for public boat landing purposes. The term of this use permit was coterminous with the term of Lease No. DACW01-1-80-111 and the use permit expired when the term of the lease expired on February 28, 2005. At present, the county is managing the public boat landing area under a direct lease from Department of the Army.

On August 7, 2006, the Division entered into another lease agreement with Department of the Army to continue managing Three Rivers State Park. This new lease, Lease No. DACW01-1-06-0004 is a 50-year-term lease. The term of this lease began on March 1, 2005, and it will end on February 28, 2055, unless sooner terminated as provided in the lease agreement.

According to Lease No. DACW01-1-06-0004, Department of the Army or its agents can terminate the lease agreement in the event the Division violates any of the terms and conditions of the lease agreement and continues and persists in such non-compliance. The Division can terminate the lease by giving one-year prior written notice to the U.S. Army Engineer District in Mobile, Alabama.

The terms and conditions of the lease agreement, Lease No. DACW01-1-06-0004, that the Division has agreed to comply with during the term of the lease include, but not limited to, not transferring or assigning or subletting the subject property; complying with all applicable federal, state, county and municipal laws, regulations and ordinances; and not permitting or allowing gambling or use of gambling devices on the leased property.

Title Interest

Department of the Army holds fee simple title in Three Rivers State Park.

Special Conditions on Use

Three Rivers State Park is designated single-use to provide resource-based public outdoor recreation and other park related uses. Uses such as water resource development projects, water supply projects, storm-water management projects, linear facilities and sustainable agriculture and forestry (other than those forest management activities specifically identified in this plan) are not consistent with this plan.

Outstanding Reservations

Following is a listing of outstanding rights, reservations and encumbrances that apply to Three Rivers State Park.

Instrument: Resolution

Instrument Holder: State Road Department of Florida

Three Rivers State Park Acquisition History

Beginning Date: July 31, 1956
Ending Date: No specific ending date given
Outstanding Rights, Uses, Etc.: This resolution by FBPHM allows the State Road Department of Florida to construct and maintain a certain portion of State Road S-271.

Addendum 2—References Cited

Three Rivers State Park
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Addendum 3—Soils Descriptions

Three Rivers State Park Soils Descriptions

10 - Chipola loamy sand, 0 to 5 percent slopes. This well drained, nearly level to gently sloping soil occurs throughout the county on broad uplands and stream terraces. Slopes are smooth to convex. The available water capacity is low in the surface and subsurface layers, medium in the subsoil, and low in the substratum. Permeability is rapid in the surface and subsurface layers, moderately rapid in the subsoil, and rapid to very rapid in the substratum. Natural fertility is low, and the organic content is moderately low. The water table is below 72 inches.

11 - Chipola loamy sand, 5 to 6 percent slopes. This well drained, sloping soil occurs throughout the county, dominantly along drainage ways. Slopes are smooth to convex. The available water capacity is low in the surface and subsurface layers, medium in the subsoil and low in the substratum. Permeability is rapid in the surface and subsurface layers, moderately rapid in the subsoil and rapid to very rapid in the substratum. The natural fertility is low, and the organic content is moderately low.

17 - Dothan loamy sand, 2 to 5 percent slopes. This is a well drained, gently sloping upland soil. Areas occur in all but the extreme southwestern part of the county. Slopes are smooth to concave. The water table is usually below 6 feet, but after heavy rainfall it is commonly perched above the lower part of the subsoil for 1 to 6 days. The available water capacity is medium. Permeability is moderately slow in the lower part of the subsoil. Runoff is moderate. Natural fertility and the organic matter content are moderately low.

18 - Dothan loamy sand, 5 to 8 percent slopes. This well drained, sloping upland soil is on hillsides along drainage ways and around depressions or sinks. Slopes are commonly long and smooth. Some are convex. The water table is usually below 6 feet, but after heavy rainfall it is commonly perched above the lower subsoil for 1 to 4 days. The available water capacity is medium. Permeability is moderately slow in the lower part of the subsoil. Surface runoff is moderately rapid. Natural fertility and the organic matter content are moderately low.

21 - Duplin fine sandy loam, 2 to 5 percent slopes. This moderately well drained, gently sloping soil occurs as broad areas adjacent to the flood plains along large streams. Slopes are smooth to convex. The water table is between 30 and 40 inches for 1 to 3 months during most years. The available water capacity is medium. Permeability is moderately rapid in the surface layer and moderately slow in the subsoil. Internal drainage is slow. Natural fertility and the organic matter content are moderate in the surface area.

24 - Faceville loamy fine sand, 2 to 5 percent slopes. This well drained gently sloping soil occurs on upland ridges. Slopes are smooth to convex. Permeability is moderate. Surface runoff is high. The available water capacity is medium. Natural fertility and the organic matter are moderately low. Depth to the seasonal high water table is more than 10 feet.

25 - Faceville loamy fine sand, 5 to 8 percent slopes. This well drained sloping soil occurs on the uplands. Slopes are smooth to convex. Permeability is moderate. Surface runoff is high, which causes a high risk of erosion. The available water capacity is medium. Natural fertility and the organic matter content are moderately low. The seasonal high water table is usually at a depth of more than 10 feet.

26 - Faceville loamy fine sand 8 to 12 percent slopes. This well drained strongly sloping soil occurs on hillsides of the uplands. Slopes are generally smooth, but in some areas they are steep or abrupt. The soil has moderate permeability. Surface runoff is very rapid. The hazard of erosion is very high. The available water capacity is medium, inherent fertility and the organic matter content are low.

30 - Fuquay coarse sand, 0 to 5 percent slopes. This well drained nearly level and gently sloping soil occurs as broad, smooth areas on the uplands. Permeability is rapid in the surface and subsurface layers, moderate in the upper part of the subsoil, and slow in the lower part. Surface

Three Rivers State Park
Soils Descriptions

runoff is moderately slow, inherent fertility and the organic matter content are moderately low. The water table is perched above the low part of the subsoil for a short time during wet periods.

43 - Okibbeha Variant Rock outcrop complex, 2 to 5 percent slopes. This map unit consists of small areas of gently sloping, moderately well drained Okibbeha variant soils and limestone outcrops. Generally, it occurs on ridges in dissected uplands. The Okibbeha variant soil has very slow permeability. Surface runoff is medium. The available water capacity is medium to high. The water table is below a depth of 72 inches. The organic matter content and inherent fertility are low.

44 - Oktibbeha Variant-Rock outcrop complex, 5 to 12 percent slopes. This map unit consists of small areas of sloping to strongly sloping, moderately well drained soils and limestone outcrops. Oktibbeha variant soils have very slow permeability. Surface runoff is high. The available water capacity is medium to high. The water table is below a depth of 72 inches. The organic matter content and inherent fertility are low.

46 - Orangeburg loamy sand, 2 to 5 percent slopes. This well drained gently sloping, moderately permeable soil is on uplands. Slopes are smooth and convex. The available water capacity is medium. Permeability moderate, and runoff is moderate. Natural fertility and the organic matter content are moderately low. The water table is below a depth of 72 inches.

47 - Orangeburg loamy sand, 5 to 8 percent slopes. This is a well-drained sloping, moderately permeable soil of the uplands. Slopes are generally smooth and convex. The available water capacity is medium. Permeability is moderate. Runoff is moderately high to high. Natural fertility and organic matter content are moderately low. The water table is below a depth of 72 inches.

59 - Troup sand, 0 to 5 percent slopes. This well-drained, nearly level to gently sloping soil occurs in broad upland areas. Slopes are smooth to convex. Areas are moderate to large in size. The available water capacity is low in the surface and subsurface layers and medium in the subsoil. Natural fertility and the organic content are low throughout the profile. The water table is at a depth of more than 6 feet. Permeability is rapid in the surface and subsurface layers and moderate in the subsoil.

Addendum 4—Plant And Animal List

**Three Rivers State Park
Plants**

Common Name	<i>Scientific Name</i>	Primary Habitat Codes (for designated species)
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FERNS AND FERN ALLIES

Boston fern	<i>Nephrolepis exaltata</i>	
Horsetail	<i>Equisetum hyemale</i>	
Foxtail clubmoss	<i>Lycopodium alpecurioides</i>	
Common grapefern	<i>Botrychium dissectum</i>	
Cinnamon fern	<i>Osmunda cinnamomea</i>	
Royal fern	<i>Osmunda regalis</i>	
Ebony spleenwort	<i>Asplenium platyneuron</i>	
Resurrection fern	<i>Polypodium polypodioides</i>	
Christmas fern	<i>Polystichum acrostichoides</i>	
Bracken fern	<i>Pteridium aquilinum</i>	
Shield fern	<i>Thelypteris ovata</i>	
Virginia chain fern	<i>Woodwardia virginica</i>	
Azolla	<i>Azolla caroliniana</i>	
Mosquito fern	<i>Salvinia rotundifolia</i>	

GYMNOSPERMS AND CYCADS

coontie	<i>Zamia pumila</i>	
Red cedar	<i>Juniperus virginiana</i>	
Shortleaf pine	<i>Pinus echinata</i>	
Spruce pine	<i>Pinus glabra</i>	
Longleaf pine	<i>Pinus palustris</i>	
Loblolly pine	<i>Pinus taeda</i>	
Slash pine	<i>Pinus elliotii</i>	

ANGIOSPERMS

Three seeded mercury	<i>Acalypha gracilens</i>	
Florida sugar maple	<i>Acer saccharum ssp. floridanum</i>	
Red maple	<i>Acer rubrum</i>	
Red Buckeye	<i>Aesculus pavia</i>	
Wild hoarhound	<i>Ageratina aromatica</i>	
Harvest lice	<i>Agrimonia microcarpa</i>	
Spring bentgrass	<i>Agrostis hiemalis</i>	
Silktree	<i>Albizia julibrissin *</i>	
Wild onion	<i>Allium canadense</i>	
Hazel alder	<i>Alnus serrulata</i>	
Alligator weed	<i>Alternanthera philoxeroides</i>	
Ragweed	<i>Ambrosia artemisiifolia</i>	
Service berry	<i>Amelanchier arborea</i>	
False indigo	<i>Amorpha fruticosa</i>	
Blue stem	<i>Andropogon floridanus</i>	
Rue anemone	<i>Anemonella thalictroides</i>	20
Hairy angelica	<i>Angelica venenosa</i>	
Purple silky scale	<i>Anthaenantia villosa</i>	
Marsh parsley	<i>Apium leptophyllum</i>	
Devils walking stick	<i>Aralia spinosa</i>	
Green dragon	<i>Arisaema dracontium</i>	
Wiregrass	<i>Aristida stricta</i>	
	<i>Aristida lanosa</i>	
	<i>Aristida purpurascens</i>	

*Non-native Species

**Three Rivers State Park
Plants**

Common Name	Scientific Name	Primary Habitat Codes (for designated species)
	<i>Aristida oligantha</i>	
Snake root	<i>Aristolochia serpentaria</i>	
Cane	<i>Arundinaria gigantea</i>	
Milkweed	<i>Asclepias verticillata</i>	
	<i>Asclepias variegata</i>	
	<i>Asclepias tuberosa</i>	
Pawpaw	<i>Asimina longifolia</i>	
	<i>Asimina parviflora</i>	
Aster	<i>Aster undulatus</i>	
	<i>Aster dumosus</i>	
	<i>Aster pilosus</i>	
	<i>Aster linariifolius</i>	
Groundsel-tree	<i>Baccharis halimifolia</i>	
Rattan vine	<i>Berchemia scandens</i>	
Green eyes	<i>Berlandiera pumila</i>	
Trumpet vine	<i>Bignonia capreolata</i>	
Doll's daisy	<i>Boltonia diffusa</i>	
Mustard	<i>Brassica campestris</i>	
Little quaking grass	<i>Briza minor</i>	
Buckwheat vine	<i>Brunnichia ovata</i>	
Bulbostylis	<i>Bulbostylis barbata</i>	
Buckthorn	<i>Bumelia reclinata</i>	
Burmannia	<i>Burmannia capitata</i>	
Sweet shrub	<i>Calycanthus floridus</i>	
Hedge bindweed	<i>Calystegia sepium</i>	
Trumpet vine	<i>Campsis radicans</i>	
Butter cress	<i>Cardamine hirsuta</i>	
Carex	<i>Carex lupulina</i>	
	<i>Carex glaucescens</i>	
	<i>Carex lurida</i>	
	<i>Carex floridana</i>	
	<i>Carex cherokeensis</i>	
	<i>Carex digitalis</i>	
	<i>Carex abcondita</i>	
	<i>Carex oxylepis</i>	
	<i>Carex physorhyncha</i>	
	<i>Carex verrucosa</i>	
	<i>Carex vulpinoides</i>	
	<i>Carex struatyka</i>	
Blue beech	<i>Carpinus caroliniana</i>	
Mockernut hickory	<i>Carya tomentosa</i>	
Pignut hickory	<i>Carya glabra</i>	
New Jersey Tea	<i>Ceanothus americanus</i>	
Sandspur	<i>Cenchrus gracillimus</i>	
Coinweed	<i>Centella asiatica</i>	
Buttonbush	<i>Cephalanthus occidentalis</i>	
Mouseear chickweed	<i>Cerastium glomeratum</i>	
Redbud	<i>Cercis canadensis</i>	
Fairy wand	<i>Chaerophyllum tainturieri</i>	
Partridge pea	<i>Chamaecrista nictitans</i>	
Spurge	<i>Chamaesyce maculata</i>	

*Non-native Species

**Three Rivers State Park
Plants**

Common Name	Scientific Name	Primary Habitat Codes (for designated species)
Sun bonnets	<i>Chaptalia tomentosa</i>	
Spikegrass	<i>Chasmanthium sessiliflorum</i>	
Fringe tree	<i>Chionanthus virginicus</i>	
Golden aster	<i>Chrysopsis gossypina</i>	
	<i>Chrysopsis mariana</i>	
Horrible thistle	<i>Cirsium horridulum</i>	
Clematis	<i>Clematis terniflora</i>	
Virgin's bower	<i>Clematis catesbyana</i>	
Leatherleaf	<i>Clematis crispa</i>	
Butterfly pea	<i>Clitoria mariana</i>	
Stinging hair	<i>Cnidocolus stimulosus</i>	
Horsebalm	<i>Collinsonia serotina</i>	
Elephant ear	<i>Colocasia esculenta*</i>	
Mist flower	<i>Conoclinium coelestinum</i>	
Horseweed	<i>Conyza canadensis</i>	
Spring coralroot	<i>Corallorhiza wisteriana</i>	
Coreopsis	<i>Coreopsis lanceolata</i>	
	<i>Coreopsis tripteris</i>	
Silky cornel	<i>Cornus amomum</i>	
Dogwood	<i>Cornus florida</i>	
Stiff cornel	<i>Cornus foemina</i>	
Cornopus	<i>Coronopus didymus</i>	
Haw	<i>Crataegus pulcherrima</i>	
	<i>Crataegus spathulata</i>	
Croton	<i>Croton argyranthemus</i>	
Bermuda grass	<i>Cynodon dactylon*</i>	
Cyperus	<i>Cyperus haspan</i>	
	<i>Cyperus odoratus</i>	
	<i>Cyperus virens</i>	
	<i>Cyperus filiculmis</i>	
	<i>Cyperus tenuifolius</i>	
	<i>Cyperus retrorsus</i>	
Wild carrot	<i>Daucus pusillus</i>	
Beggar's lice	<i>Desmodium tortuosum</i>	
	<i>Desmodium canescens</i>	
	<i>Desmodium nudiflorum</i>	
	<i>Desmodium paniculatum</i>	
	<i>Desmodium lineatum</i>	
Dicerandra	<i>Dicerandra linearifolia</i> var <i>robustior</i>	
Dichantherium	<i>Dichantherium boscii</i>	
	<i>Dichantherium ravenelii</i>	
	<i>Dichantherium scoparium</i>	
Buttonweed	<i>Diodia virginiana</i>	
Wild yam	<i>Dioscorea quaternata</i>	
Persimmon	<i>Diospyros virginiana</i>	
West Indian chickweed	<i>Drymaria cordata*</i>	
Mock strawberry	<i>Duchesnea indica*</i>	
Purple Coneflower	<i>Echinacea purpurea</i>	
Brazilian waterweed	<i>Egeria densa*</i>	
Water hyacinth	<i>Eichhornia crassipes*</i>	
Buckwheat	<i>Eriogonum tomentosum</i>	

*Non-native Species

**Three Rivers State Park
Plants**

Common Name	Scientific Name	Primary Habitat Codes (for designated species)
Silverbush	<i>Eleagnus umbellata</i>	
Elephant's foot	<i>Elephantopus elatus</i>	
Love grass	<i>Eragrostis spectabilis</i>	
Daisy fleabane	<i>Erigeron vernus</i>	
Rattlesnake master	<i>Eryngium yuccifolium</i>	
Coral bean	<i>Erythrina herbacea</i>	
Dog fennel	<i>Eupatorium compositifolium</i>	
Euphorbia	<i>Euphorbia curtissii</i>	
	<i>Euphorbia discoidalis</i>	
	<i>Euphorbia pubentissima</i>	
Euthamia	<i>Euthamia minor</i>	
Facelis	<i>Facelis retusa</i>	
American Beech	<i>Fagus grandifolia</i>	
Nodding Fescue	<i>Festuca obtusa</i>	
Fleischmannia	<i>Fleischmannia incarnata</i>	
White ash	<i>Fraxinus americana</i>	
Blanket flower	<i>Gaillardia aestivalis</i>	
Milkpea	<i>Galactia volubilis</i>	
Galium	<i>Galium uniflorum</i>	
	<i>Galium tinctorium</i>	
	<i>Galium hispidulum</i>	
Gaura	<i>Gaura filipes</i>	
Yellow Jessamine	<i>Gelsemium sempervirens</i>	
Gentian	<i>Gentiana catesbaei</i>	
Cranesbill	<i>Geranium carolinianum</i>	
Pearly everlasting	<i>Gnaphalium purpureum</i>	
	<i>Gnaphalium obtusifolium</i>	
Witch hazel	<i>Hammamelis virginiana</i>	
Haplopappus	<i>Haplopappus divaricatus</i>	
Poor joe	<i>Hedyotis procumbens</i>	
	<i>Hedyotis crassifolia</i>	
Sneezeweed	<i>Helenium amarum</i>	
Sunflower	<i>Helianthus angustifolius</i>	
	<i>Helianthus hirsutus</i>	
	<i>Helianthus atrorubens</i>	
Oxeye	<i>Heliopsis gracilis</i>	
Heliotropium	<i>Heliotropium indicum</i>	
Wild ginger, Heartleaf	<i>Hexastylis arifolia</i>	18, 20
Mouse ears	<i>Hieracium gronovii</i>	
Hydrilla*	<i>Hydrilla verticillata*</i>	
Hypericum	<i>Hypericum hypericoides</i>	
St Andrews Cross	<i>Hypericum crux-andreae</i>	
Hypericum	<i>Hypericum apocynifolium</i>	
Stargrass	<i>Hypoxis micrantha</i>	
Hyptis	<i>Hyptis mutabilis*</i>	
Wild potato vine	<i>Ipomoea pandurata</i>	
Jacquemontia	<i>Jacquemontia tamnifolia</i>	
Juncus	<i>Juncus validus</i>	
	<i>Juncus dichotomous</i>	
Shore rush	<i>Juncus marginatus</i>	
Path rush	<i>Juncus tenuis</i>	

*Non-native Species

**Three Rivers State Park
Plants**

Common Name	Scientific Name	Primary Habitat Codes (for designated species)
Justicia	<i>Justicia ovata</i>	
Water willow	<i>Justicia americana</i>	
Krigia	<i>Krigia cespitosa</i>	
False boneset	<i>Kuhnia eupatorioides</i>	
Wild lettuce	<i>Lactuca floridana</i>	
Henbit	<i>Lamium amplexicaule</i>	
Peppergrass	<i>Lepidium virginicum</i>	
Fall witchgrass	<i>Leptoloma cognatum</i>	
Bush clover	<i>Lespedeza striata</i>	
	<i>Lespedeza hirta</i>	
Blazing star	<i>Liatris graminifolia</i>	
	<i>Liatris elegans</i>	
	<i>Liatris gracilis</i>	
	<i>Liatris laevigata</i>	
	<i>Liatris tenuifolia</i>	
Michaux's lily	<i>Lilium michauxii</i>	
Yellow flax	<i>Linum medium</i>	
Sweetgum	<i>Liquidambar styraciflua</i>	
Tulip tree	<i>Liriodendron tulipifera</i>	
Pucoons	<i>Lithospermum tuberosum</i>	
Downy lobelia	<i>Lobelia puberula</i>	
Lolium	<i>Lolium multiflorum</i>	
Trumpet honeysuckle	<i>Lonicera sempervirens</i>	
Japanese honeysuckle	<i>Lonicera japonica</i> *	
Ludwigia	<i>Ludwigia leptocarpa</i>	
	<i>Ludwigia microcarpa</i>	
Bugleweed	<i>Lycopus virginicus</i>	
Fringed loosestrife	<i>Lysimachia ciliata</i>	
	<i>Lysimachia lanceolata</i>	
Southern magnolia	<i>Magnolia grandiflora</i>	
Green adder's mouth	<i>Malaxis unifolia</i>	18
Crab apple	<i>Malus angustifolia</i>	
Lattice jointtail	<i>Manisurus cylindrica</i>	
Barbara's button	<i>Marshallia obovata</i>	22
Matelea	<i>Matelea floridana</i>	
	<i>Matelea baldwiniana</i>	
Melanthera	<i>Melanthera nivea</i>	
Two flower melic	<i>Melica mutica</i>	
Creeping cucumber	<i>Melothria pendula</i>	
Mikania	<i>Mikania scandens</i>	
Partridge berry	<i>Mitchella repens</i>	
Mitreola	<i>Mitreola petiolata</i>	
Red mulberry	<i>Morus rubra</i>	
Muhlenbergia	<i>Muhlenbergia capillaris</i>	
Forget-me-not	<i>Myosotis macrosperma</i>	
Wax myrtle	<i>Myrica cerifera</i>	
Myriophyllum	<i>Myriophyllum laxum</i>	
Southern naiad	<i>Najas guadalupensis</i>	
Naiad	<i>Najas minor</i>	
False garlic	<i>Nothoscordum bivalve</i>	
Black gum	<i>Nyssa sylvatica</i>	

*Non-native Species

**Three Rivers State Park
Plants**

Common Name	Scientific Name	Primary Habitat Codes (for designated species)
Water tupelo	<i>Nyssa aquatica</i>	
Black gum	<i>Nyssa biflora</i>	
Sundrops	<i>Oenothera fruticosa</i>	
Wood grass	<i>Oplismenus setarius</i>	
Hop hornbean	<i>Ostrya virginiana</i>	
Wood sorrel	<i>Oxalis priceae</i>	
Violet wood sorrel	<i>Oxalis corymbosa</i>	
Redtop panicum	<i>Panicum rigidulum</i>	
Whitlow-wort	<i>Paronychia baldwinii</i>	
Paronychia	<i>Paronychia patula</i>	
Florida paspalum	<i>Paspalum floridanum</i>	
Vaseygrass	<i>Paspalum urvillei</i>	
Pitchfork paspalum	<i>Paspalum bifidum</i>	
Bahiagrass	<i>Paspalum notatum</i>	
Field paspalum	<i>Paspalum laeve</i>	
Brownseed paspalum	<i>Paspalum plicatulum</i>	
Yellow passion flower	<i>Passiflora lutea</i>	
Maypops	<i>Passiflora incarnata</i>	
Green arum	<i>Peltandra virginica</i>	
Florida phlox	<i>Phlox floridana</i>	
Downy phlox	<i>Phlox pilosa</i>	
Mistletoe	<i>Phoradendron serotinum</i>	
Lopseed	<i>Phryma leptostachya</i>	
Pokeweed	<i>Phytolacca americana</i>	
Golden aster	<i>Pityopsis graminifolia</i>	
	<i>Pityopsis adenolepis</i>	
Hoary plantain	<i>Plantago virginica</i>	
Plantain	<i>Plantago aristata</i>	
Sycamore	<i>Platanus occidentalis</i>	
Kentucky bluegrass	<i>Poa pratensis</i>	
Annual bluegrass	<i>Poa annua</i>	
Mayapple	<i>Podophyllum peltatum</i>	18
Rattlesnake master	<i>Polianthus virginica</i>	
Milkwort	<i>Polygala grandiflora</i>	
Polygala	<i>Polygala boykinii</i>	
Polygala	<i>Polygala polygama</i>	
Wild bachelor's button	<i>Polygala nana</i>	
Jumpseed	<i>Polygonum virginianum</i>	
Polypremum	<i>Polypremum procumbens</i>	
Pondweed	<i>Potamogeton nodosus</i>	
Illinois pondweed	<i>Potamogeton illinoensis</i>	
Proserpinaca	<i>Proserpinaca pectinata</i>	
Carpenter weed	<i>Prunella vulgaris</i>	
Chickasaw plum	<i>Prunus angustifolia</i>	
Black cherry	<i>Prunus serotina</i>	
Hog plum	<i>Prunus umbellata</i>	
Blackroot	<i>Pterocaulon pycnostachyum</i>	
Pueraria	<i>Pueraria lobata</i>	
Mountain mint	<i>Pycnanthemum albescens</i>	
False dandelion	<i>Pyrrhopappus carolinianus</i>	
Sand-post oak	<i>Quercus margaretta</i>	

*Non-native Species

**Three Rivers State Park
Plants**

Common Name	Scientific Name	Primary Habitat Codes (for designated species)
Cherry bark oak	<i>Quercus falcata</i> var. <i>pagodaefolia</i>	
Southern red oak	<i>Quercus falcata</i> var. <i>falcata</i>	
White oak	<i>Quercus alba</i>	
Blackjack oak	<i>Quercus marilandica</i>	
Swamp chestnut oak	<i>Quercus michauxii</i>	
Black oak	<i>Quercus velutina</i>	
Post oak	<i>Quercus stellata</i>	
Shumard oak	<i>Quercus shumardii</i>	
Live oak	<i>Quercus virginiana</i>	
Water oak	<i>Quercus nigra</i>	
Winged sumac	<i>Rhus copallina</i>	
Horned rush	<i>Rhychospora corniculata</i>	
Rhynchosia	<i>Rhynchosia michauxii</i>	
	<i>Rhynchosia reniformis</i>	
Richardia	<i>Richardia scabra</i> *	
Carolina rose	<i>Rosa carolina</i>	
Sand blackberry	<i>Rubus cuneifolius</i>	
Black-eyed susan	<i>Rudbeckia hirta</i>	
Coneflower	<i>Rudbeckia fulgida</i>	
Sourdock	<i>Rumex hastatulus</i>	
Bluestem	<i>Sabal minor</i>	
American cupscale	<i>Sacciolepis striata</i>	
Black willow	<i>Salix nigra</i>	
Blue sage	<i>Salvia azurea</i>	
Lyre-leaved sage	<i>Salvia lyrata</i>	
Elderberry	<i>Sambucus canadensis</i>	
Bloodroot	<i>Sanguinaria canadensis</i>	
Black snakeroot	<i>Sanicula marilandica</i>	
Sassafras	<i>Sassafras albidum</i>	
Lizard's tail	<i>Saururus cernuus</i>	
Little bluestem	<i>Schizachyrium scoparium</i>	
Bay Star Vine	<i>Schizandra coccinea</i>	
Sensitive briar	<i>Schrankia microphylla</i>	
Woolgrass	<i>Scirpus cyperinus</i>	
Nutrush	<i>Scleria ciliata</i>	
	<i>Scleria oligantha</i>	
Skullcap	<i>Scutellaria integrifolia</i>	
	<i>Scutellaria incana</i>	
Cloth-of-gold	<i>Senecio glabellus</i>	
Squaw weed	<i>Senecio obovatus</i>	
White topped aster	<i>Sericocarpus tortifolium</i>	
Silphium	<i>Silphium brachyphylla</i>	
	<i>Silphium flaccidifolia</i>	
	<i>Silphium odora</i>	
	<i>Silphium compositum</i>	
	<i>Silphium leavenworthii</i>	
	<i>Silphium canadensis</i>	
Blue-eyed grass	<i>Sisyrinchium atlanticum</i>	
	<i>Sisyrinchium nashii</i>	
Annual blue-eyed grass	<i>Sisyrinchium rosulatum</i>	
Smilax	<i>Smilax ecirrhata</i>	

*Non-native Species

**Three Rivers State Park
Plants**

Common Name	Scientific Name	Primary Habitat Codes (for designated species)
	<i>Smilax lasioeuron</i>	
Wild sarsaparilla	<i>Smilax glauca</i>	
Jackson brier	<i>Smilax smallii</i>	
Hogbrier	<i>Smilax tamnoides</i>	
Lopsided indian grass	<i>Sorghastrum secundum</i>	
Wood grass	<i>Sorghastrum nutans</i>	
Longleaf wedgescale	<i>Sphenopholis filiformis</i>	
Pinkroot	<i>Spigelia gentianoides</i>	20
Indian pink	<i>Spigelia marilandica</i>	
Grass-leaved ladies' tresses	<i>Spiranthes praecox</i>	
Smutgrass	<i>Sporobolus indicus</i>	
Hidden dropseed	<i>Sporobolus clandestinus</i>	
Pineywoods dropseed	<i>Sporobolus junceus</i>	
Hedge nettle	<i>Stachys floridana</i>	
Blackseed Needlegrass	<i>Stipa avenacea</i>	
Pencil flower	<i>Strophostyles helvola</i>	
Stylisma	<i>Stylisma humistrata</i>	
Sand beans	<i>Stylosanthes biflora</i>	
Pineland ginseng	<i>Tetragonotheca helianthoides</i>	
Thalictrum	<i>Thalictrum pubescens</i>	
Purple meadow parsnip	<i>Thaspium trifoliatum</i>	
Spanish moss	<i>Tillandsia usneoides</i>	
Poison ivy	<i>Toxicodendron radicans</i>	
Poison oak	<i>Toxicodendron toxicarium</i>	
Blue curls	<i>Trichostema setaceum</i>	
Pine barren tridens	<i>Tridens ambiguus</i>	
Tall redtop	<i>Tridens flavus</i>	
Tridens	<i>Tridens strictus</i>	
Low hop clover	<i>Trifolium campestre</i>	
Trillium	<i>Trillium decipiens</i>	
	<i>Trillium lancifolium</i>	18
Venus' Looking glass	<i>Triodanis biflora</i>	
Eastern gama grass	<i>Tripsacum dactyloides</i>	
Bladderwort	<i>Utricularia biflora</i>	
Highbush blueberry	<i>Vaccinium corymbosum</i>	
Sparkleberry	<i>Vaccinium arboreum</i>	
Frostweed	<i>Verbesina virginica</i>	
Ironweed	<i>Vernonia gigantea</i>	
Southern arrowwood	<i>Viburnum dentatum</i>	
Rusty haw	<i>Viburnum rufidulum</i>	
Vetch	<i>Vicia hugeri</i>	
Sparrow vetch	<i>Vicia hirsuta</i>	
Common sixweeks grass	<i>Vulpia octoflora</i>	
Wahlenbergia	<i>Wahlenbergia marginata</i>	
Atamasco lily	<i>Zephyranthes atamasco</i>	
Water millet	<i>Zizaniopsis miliacea</i>	

**Three Rivers State Park
Animals**

Common Name	Scientific Name	Primary Habitat Codes (for all species)
AMPHIBIANS		
Southern cricket frog	<i>Acris gryllus</i>	48
Eastern tiger salamander	<i>Ambystoma tigrinum</i>	18,20
Southern toad	<i>Bufo terrestris</i>	all
Southern dusky salamander	<i>Desmognathus auriculatus</i>	18,20
Southern two-lined salamander	<i>Eurycea bislineata cirrigera</i>	18,20
Southern spring peeper	<i>Hyla crucifer bartramiana</i>	18, 48
Pine woods treefrog	<i>Hyla femoralis</i>	22
Squirrel treefrog	<i>Hyla squirella</i>	22
Slimy salamander	<i>Plethodon glutinosus</i>	all
Southern chorus frog	<i>Pseudacris nigrita</i>	22
Bronze frog	<i>Rana climitans</i>	22
Southern leopard frog	<i>Rana spenocephala</i>	48
Green Tree Frog	<i>Hyla cinerea</i>	all
REPTILES		
Copperhead	<i>Agkistrodon contortrix</i>	18,20
Florida cottonmouth	<i>Agkistrodon piscivorus conanti</i>	18,20,48
American Alligator	<i>Alligator mississippiensis</i>	48
Green anole	<i>Anolis carolinensis</i>	all
Common snapping turtle	<i>Chelydra serpentina</i>	48
Six-lined racerunner	<i>Cnemidophorus sexlineatus</i>	22
Southern black racer	<i>Coluber constrictor priapus</i>	all
Eastern diamondback rattlesnake	<i>Crotalus adamanteus</i>	22
Southern ringneck snake	<i>Diadophis punctatus</i>	20,22
Gray rat snake	<i>Elaphe obsoleta spiloides</i>	20,22
Southeastern five-lined skink	<i>Eumeces inexpectatus</i>	22
Broadhead skink	<i>Eumeces laticeps</i>	22
Gopher tortoise	<i>Gopherus polyphemus</i>	22
Eastern hognose snake	<i>Heterodon platyrhinos</i>	22
Eastern mud turtle	<i>Kinosternon subrubrum</i>	48
Eastern kingsnake	<i>Lampropeltis getulus</i>	22
Eastern coral snake	<i>Micrurus fulvius</i>	22
Banded water snake	<i>Nerodia fasciata</i>	48
Southern fence lizard	<i>Sceloporus undulatus</i>	22
Ground skink	<i>Scinella laterale</i>	all
Dusky pigmy rattlesnake	<i>Sistrurus miliarius barbouri</i>	48
Eastern box turtle	<i>Terrapene carolina</i>	all
BIRDS		
Cooper's hawk	<i>Accipiter cooperii</i>	fly over
Sharp-shinned hawk	<i>Accipiter striatus</i>	fly over
Red-winged blackbird	<i>Agelaius phoeniceus</i>	fly over
Wood duck	<i>Aix sponsa</i>	48
Anhinga	<i>Anhinga anhinga</i>	48
Mottled Duck	<i>Anas fulvigula</i>	48
Pintail	<i>Anas acuta</i>	48
Blue-winged Teal	<i>Anas discors</i>	48
Mallard	<i>Anas platyrhynchos</i>	48
Black Duck	<i>Anas rubripes</i>	48

*Non-native Species

Three Rivers State Park

Animals

Common Name	Scientific Name	Primary Habitat Codes (for all species)
American Wigeon	<i>Anas americana</i>	48
Gadwall	<i>Anas strepera</i>	48
Ruby-throated hummingbird	<i>Archilochus colubris</i>	22
Great Egret	<i>Ardea alba</i>	48
Great blue heron	<i>Ardea herodias</i>	48
Lesser Scaup	<i>Aythya affinis</i>	48
Cedar waxwing	<i>Bombycilla cedrorum</i>	22
Screech Owl	<i>Bubo virginianus</i>	20,22
Cattle egret	<i>Bubulcus ibis</i>	fly over
Red-tailed hawk	<i>Buteo jamaicensis</i>	fly over
Red-shouldered hawk	<i>Buteo lineatus</i>	22
Broad-winged hawk	<i>Buteo platypterus</i>	22
Green-backed heron	<i>Butorides striatus</i>	48
Whip-poor-will	<i>Caprimulgus vociferus</i>	48
Chuck-wills-widow	<i>Caprimulgus carolinensis</i>	22
Northern cardinal	<i>Cardinalis cardinalis</i>	22
American goldfinch	<i>Carduelis tristis</i>	22
Pine siskin	<i>Carduelis pinus</i>	22
Purple finch	<i>Carpodacus purpureus</i>	22
Great egret	<i>Casmerodius albus</i>	48
Turkey vulture	<i>Cathartes aura</i>	fly over
Gray-cheeked thrush	<i>Catharus minimus</i>	22
Hermit thrush	<i>Catharus guttatus</i>	22
Red-bellied Woodpecker	<i>Centurus carolinus</i>	22
Belted kingfisher	<i>Ceryle alcyon</i>	48
Chimney swift	<i>Chaetura pelagica</i>	22
Killdeer	<i>Charadrius vociferus</i>	48, 81, 82
Common nighthawk	<i>Chordeiles minor</i>	22
Yellow-billed cuckoo	<i>Coccyzus americanus</i>	22
Northern flicker	<i>Colaptes auratus</i>	22
Northern bobwhite	<i>Colinus virginianus</i>	22
Rock dove	<i>Columba livia</i>	fly over
Common ground-dove	<i>Columbina passerina</i>	22
Eastern wood-pewee	<i>Contopus virens</i>	22
Turkey Vulture	<i>Cathartes aura</i>	fly over
Black vulture	<i>Coragyps atratus</i>	fly over
American crow	<i>Corvus brachyrhynchos</i>	22
Blue jay	<i>Cyanocitta cristata</i>	22
Downy Woodpecker	<i>Dendrocopus pubescens</i>	22
Yellow-rumped warbler	<i>Dendroica coronata</i>	22
Palm warbler	<i>Dendroica palmarum</i>	22
Pine warbler	<i>Dendroica pinus</i>	22
Yellow warbler	<i>Dendroica petechia</i>	22
Yellow-throated warbler	<i>Dendroica dominica</i>	22
Pileated woodpecker	<i>Dryocopus pileatus</i>	22
Gray catbird	<i>Dumetella carolinensis</i>	22
Little Blue Heron	<i>Egretta caerulea</i>	48
Reddish Egret	<i>Egretta rufescens</i>	48
Snowy Egret	<i>Egretta thula</i>	48
Tricolored Heron	<i>Egretta tricolor</i>	48
Acadian flycatcher	<i>Empidonax vireescens</i>	22

*Non-native Species

**Three Rivers State Park
Animals**

Common Name	Scientific Name	Primary Habitat Codes (for all species)
White Ibis	<i>Eudocimus albus</i>	48
Merlin	<i>Falco columbarius</i>	fly over
Southeastern American kestrel	<i>Falco sparverius paulus</i>	fly over
American Coot	<i>Fulica americana</i>	48
Common yellowthroat	<i>Geothlypis trichas</i>	22
Blue grosbeak	<i>Guiraca caerulea</i>	22
Wood thrush	<i>Hylocichla mustelina</i>	22
Yellow-breasted chat	<i>Icteria virens</i>	22
Orchard oriole	<i>Icterus spurius</i>	22
Mississippi kite	<i>Ictinia mississippiensis</i>	fly over
Belted Kingfisher	<i>Megaceryle alcyon</i>	fly over
Red bellied woodpecker	<i>Melanerpes carolinus</i>	22
Red-headed woodpecker	<i>Melanerpes erythrocephalus</i>	22
Song sparrow	<i>Melospiza melodia</i>	22
Red-breasted Merganser	<i>Mergus serrator</i>	48
Northern mockingbird	<i>Mimus polyglottos</i>	22
Black-and-white warbler	<i>Mniotilta varia</i>	22
Great Crested Flycatcher	<i>Myiarchus crinitus</i>	20
Brown-headed cowbird	<i>Molothrus ater</i>	22
Yellow-crowned Night Heron	<i>Nyctanassa violacea</i>	48
Wood Stork	<i>Mycteria americana</i>	48
Black-crowned Night Heron	<i>Nycticorax nycticorax</i>	48
Eastern screech-owl	<i>Otus asio</i>	22
Osprey	<i>Pandion haliaetus</i>	fly over
Northern parula	<i>Parula americana</i>	22
Carolina chickadee	<i>Parus carolinensis</i>	22
Tufted titmouse	<i>Parus bicolor</i>	22
House sparrow *	<i>Passer domesticus</i>	82
Indigo bunting	<i>Passerina cyanea</i>	22
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	48
Hairy woodpecker	<i>Picoides villosus</i>	22
Downy woodpecker	<i>Picoides pubescens</i>	22
Rufous-sided towhee	<i>Pipilo erythrophthalmus</i>	22
Summer tanager	<i>Piranga rubra</i>	22
Pied-billed grebe	<i>Podilymbus podiceps</i>	48
Blue-gray gnatcatcher	<i>Polioptila caerulea</i>	22
Purple martin	<i>Progne subis</i>	22
Common grackle	<i>Quiscalus quiscula</i>	22
Ruby-crowned kinglet	<i>Regulus calendula</i>	22
Eastern phoebe	<i>Sayornis phoebe</i>	22
Eastern bluebird	<i>Sialia sialis</i>	22
Brown-headed nuthatch	<i>Sitta pusilla</i>	22
Yellow-bellied sapsucker	<i>Sphyrapicus varius</i>	22
Barred Owl	<i>Strix varia</i>	20,22
European starling *	<i>Sturnus vulgaris</i>	81, 82
Carolina wren	<i>Thryothorus ludovicianus</i>	22
Brown thrasher	<i>Toxostoma rufum</i>	22
American robin	<i>Turdus migratorius</i>	22
Eastern kingbird	<i>Tyrannus tyrannus</i>	48
Orange-crowned warbler	<i>Vermivora celata</i>	22
Red-eyed vireo	<i>Vireo olivaceus</i>	22

*Non-native Species

Three Rivers State Park

Animals

Common Name	<i>Scientific Name</i>	Primary Habitat Codes (for all species)
White-eyed vireo	<i>Vireo griseus</i>	22
Solitary vireo	<i>Vireo solitarius</i>	22
Hooded warbler	<i>Wilsonia citrina</i>	flyover
White-throated sparrow	<i>Zonotrichia albicollis</i>	22
MAMMALS		
Armadillo	<i>Dasypus novemcinctus</i>	all
Big brown bat	<i>Eptesicus fuscus</i>	fly over
Southern flying squirrel	<i>Glaucomys volans</i>	22
Striped skunk	<i>Mephitis mephitis</i>	22
Southeastern bat	<i>Myotis austroriparius</i>	fly over
Eastern woodrat	<i>Neotoma floridana</i>	22
Whitetail deer	<i>Odocoileus virginianus</i>	20,22
Eastern pipistrelle	<i>Pipistrellus subflavus</i>	fly over
Eastern Cottontail	<i>Sylvilagus floridanus</i>	all
Free-tailed bat	<i>Tadarida brasiliensis</i>	fly over
Raccoon	<i>Procyon lotor</i>	all
Opossum	<i>Didelphis marsupialis</i>	all
Eastern Mole	<i>Scalopus aquaticus</i>	20,22
Cotton Mouse	<i>Peromyscus gossypinus</i>	22
Cotton Rat	<i>Sigmodon hispidus</i>	22
Gray Squirrel	<i>Sciurus carolinensis</i>	all
Fox squirrel	<i>Sciurus niger</i>	22
Gray Fox	<i>Urocyon cinereoargenteus</i>	all
Bobcat	<i>Lynx rufus</i>	20,22
Eastern chipmunk	<i>Tamias striatus</i>	20

Habitat Codes

TERRESTRIAL

1. Beach Dune
2. Bluff
3. Coastal Berm
4. Coastal Rock Barren
5. Coastal Strand
6. Dry Prairie
7. Maritime Hammock
8. Mesic Flatwoods
9. Coastal Grasslands
10. Pine Rockland
11. Prairie Hammock
12. Rockland Hammock
13. Sandhill
14. Scrub
15. Scrubby Flatwoods
16. Shell Mound
17. Sinkhole
18. Slope Forest
19. Upland Glade
20. Upland Hardwood Forest
21. Upland Mixed Forest
22. Upland Pine Forest
23. Xeric Hammock

PALUSTRINE

24. Basin Marsh
25. Basin Swamp
26. Baygall
27. Bog
28. Bottomland Forest
29. Depression Marsh
30. Dome
31. Floodplain Forest
32. Floodplain Marsh
33. Floodplain Swamp
34. Freshwater Tidal Swamp
35. Hydric Hammock
36. Marl Prairie
37. Seepage Slope
38. Slough
39. Strand Swamp
40. Swale
41. Wet Flatwoods
42. Wet Prairie

LACUSTRINE

43. Clastic Upland Lake
44. Coastal Dune Lake
45. Coastal Rockland Lake
46. Flatwood/Prairie Lake
47. Marsh Lake

LACUSTRINE—Continued

48. River Floodplain Lake
49. Sandhill Upland Lake
50. Sinkhole Lake
51. Swamp Lake

RIVERINE

52. Alluvial Stream
53. Blackwater Stream
54. Seepage Stream
55. Spring-Run Stream

ESTUARINE

56. Estuarine Composite Substrate
57. Estuarine Consolidated Substrate
58. Estuarine Coral Reef
59. Estuarine Grass Bed
60. Estuarine Mollusk Reef
61. Estuarine Octocoral Bed
62. Estuarine Sponge Bed
63. Estuarine Tidal Marsh
64. Estuarine Tidal Swamp
65. Estuarine Unconsolidated Substrate
66. Estuarine Worm Reef

MARINE

67. Marine Algal Bed
68. Marine Composite Substrate
69. Marine Consolidated Substrate
70. Marine Coral Reef
71. Marine Grass Bed
72. Marine Mollusk Reef
73. Marine Octocoral Bed
74. Marine Sponge Bed
75. Marine Tidal Marsh
76. Marine Tidal Swamp
77. Marine Unconsolidated Substrate
78. Marine Worm Reef

SUBTERRANEAN

79. Aquatic Cave
80. Terrestrial Cave

MISCELLANEOUS

81. Ruderal
82. Developed

MTC Many Types Of Communities

OF Overflying

Addendum 5—Designated Species List

**Rank Explanations
For FNAI Global Rank, FNAI State Rank,
Federal Status And State Status**

The Nature Conservancy and the Natural Heritage Program Network (of which FNAI is a part) define an element as any exemplary or rare component of the natural environment, such as a species, natural community, bird rookery, spring, sinkhole, cave, or other ecological feature. An element occurrence (EO) is a single extant habitat that sustains or otherwise contributes to the survival of a population or a distinct, self-sustaining example of a particular element.

Using a ranking system developed by The Nature Conservancy and the Natural Heritage Program Network, the Florida Natural Areas Inventory assigns two ranks to each element. The global rank is based on an element's worldwide status; the state rank is based on the status of the element in Florida. Element ranks are based on many factors, the most important ones being estimated number of Element occurrences, estimated abundance (number of individuals for species; area for natural communities), range, estimated adequately protected EOs, relative threat of destruction, and ecological fragility.

Federal and State status information is from the U.S. Fish and Wildlife Service; and the Florida Game and Freshwater Fish Commission (animals), and the Florida Department of Agriculture and Consumer Services (plants), respectively.

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 of 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)
- 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 of 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
- SU = due to lack of information, no rank or range can be assigned (e.g., SUT2).
- S? = not yet ranked (temporary)

**Rank Explanations
For FNAI Global Rank, FNAI State Rank,
Federal Status And State Status**

LEGAL STATUS

- N = Not currently listed, nor currently being considered for listing, by state or federal agencies.
FEDERAL (Listed by the U. S. Fish and Wildlife Service - USFWS)
- LE = Listed as Endangered Species in the List of Endangered and Threatened Wildlife and Plants under the provisions of the Endangered Species Act. Defined as any species that is in danger of extinction throughout all or a significant portion of its range.
- PE = Proposed for addition to the List of Endangered and Threatened Wildlife and Plants as Endangered Species.
- LT = Listed as Threatened Species. Defined as any species that is likely to become an endangered species within the near future throughout all or a significant portion of its range.
- PT = Proposed for listing as Threatened Species.
- C = Candidate Species for addition to the list of Endangered and Threatened Wildlife and Plants. Defined as those species for which the USFWS currently has on file sufficient information on biological vulnerability and threats to support proposing to list the species as endangered or threatened.
- E(S/A) = Endangered due to similarity of appearance.
T(S/A) = Threatened due to similarity of appearance.

STATE

Animals

(Listed by the Florida Fish and Wildlife Conservation Commission - FFWCC)

- LE = Listed as Endangered Species by the FFWCC. Defined as a species, subspecies, or isolated population which is so rare or depleted in number or so restricted in range of habitat due to any man-made or natural factors that it is in immediate danger of extinction or extirpation from the state, or which may attain such a status within the immediate future.
- LT = Listed as Threatened Species by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.
- LS = Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species.

Plants

(Listed by the Florida Department of Agriculture and Consumer Services - FDACS)

- LE = Listed as Endangered Plants in the Preservation of Native Flora of Florida Act. Defined as species of plants native to the state 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, and includes all species determined to be endangered or threatened pursuant to the Federal Endangered Species Act of 1973, as amended.
- LT = Listed as Threatened Plants in the Preservation of Native Flora of Florida Act. Defined as 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 such number as to cause them to be endangered.

Three Rivers State Park

Designated Species

Plants

Common Name/ <i>Scientific Name</i>	FDA	Designated Species Status	
		USFWS	FNAI
Purple cone flower <i>Echinacea purpurea</i>	LE		G4,S1
Wild ginger, heartleaf <i>Hexastylis arifolia</i>	LT		G5,S3
Green adder's-mouth <i>Malaxis unifolia</i>	LE		G5,S3
Barbara's buttons <i>Marshallia obovata</i>	LE		G4G5,S1
Florida spiny-pod <i>Matelea floridana</i>	LE		G2,S2
Baldwyn's spiny-pod <i>Matelea baldwyniana</i>	LE		G2G3,S1
Mayapple <i>Podophyllum peltatum</i>	LE		G5,S1
Bay star vine <i>Schisandra coccinea</i>	LE		G4,S2
Pinkroot <i>Spigelia gentianoides</i>	LE	LE	G1,S1
Narrow-leaved trillium <i>Trillium lancifolium</i>	LE		G3,S2

Three Rivers State Park

Designated Species

Animals

Common Name/ <i>Scientific Name</i>	Designated Species Status		
	FFWCC	USFWS	FNAI
REPTILES			
Copperhead <i>Agkistrodon contortrix</i>			G5,S2
American alligator <i>Alligator mississippiensis</i>	LS	T(S/A)	G5,S4
Eastern diamondback rattlesnake <i>Crotalus adamanteus</i>		G5,S3	
Gopher tortoise <i>Gopherus polyphemus</i>	LS		G3, S3
BIRDS			
Great Egret <i>Ardea alba</i>			G5, S4
Little Blue Heron <i>Egretta caerulea</i>	LS		G5, S4
Reddish Egret <i>Egretta rufescens</i>	LS		G4, S2
Snowy Egret <i>Egretta thula</i>	LS		G5, S4
Tricolored Heron <i>Egretta tricolor</i>	LS		G5, S4
White Ibis <i>Eudocimus albus</i>	LS		G5, S4
Merlin <i>Falco columbarius</i>			G4, SU
Southeastern American kestrel <i>Falco sparverius paulus</i>	LT		G5T3T4,S3?
Bald eagle <i>Haliaeetus leucocephalus</i>	LT	LT	G4,S3
Wood Stork <i>Mycteria americana</i>	LE	LE	G4, S2
MAMMALS			
Big brown bat <i>Eptesicus fuscus</i>			G5,S3
Southeastern bat <i>Myotis austroriparius</i>			G4,S3
Sherman's fox squirrel <i>Sciurus niger shermani</i>	LS		G5T2,S2
Eastern Chipmunk <i>Tamias striatus</i>	LS		G5,S2

Addendum 6—Timber Management Analysis

Three Rivers State Park Timber Management Analysis

The timber assessment required by Chapters 253 and 259, Florida Statutes, was conducted by John McKenzie, Biological Scientist, Bureau of Parks, District 1 in cooperation with staff from the DOF.

The majority of Burn Zones G and E, located in the far eastern portion of the park, were planted with loblolly pines in the late 1950s. Anecdotal evidence indicates that this area was cleared for agricultural purposes prior to the 1950s. Soil and vegetation data indicate that Zone G and the southeastern portion of Zone E were once a contiguous part of the longleaf pine forest in Burn Zone D, immediately adjacent to the west.

The Area of planted loblolly pine is approximately 60 acres in size. Park staff, in conjunction with the Army Corp of Engineers, had this area thinned in the early 1980s, in order to achieve a more natural stand density, distribution of trees, and overall health and appearance. It is estimated that, on average, the remaining canopy forming pines number less than 200 per acre. At the current density, the majority of trees appear to be growing well, although many of the pines have been impacted by Fusiform Rust at some point over their life history. The average dbh of the trees varies throughout the overall site. The average dbh is about 15 – 17 inches throughout the majority of Burn Zone G, however, there are higher numbers of trees in the 10 – 13 inch range in the northwest portion of this burn zone. The average dbh for Burn Zone E is about the same as Zone G (15 – 17 inches), with the exception of the southeastern portion of the zone where the average tends to be 11 – 13 inches. The average tree height for the entire site (Burn Zones G & E), is estimated to be 100 feet. Topography over this site tends to slope towards Lake Seminole to the north. Slopes within the stand are generally less than 5%. A small number of shortleaf and longleaf pines occur here, as well as a few larger hickories and oaks. This portion of the park has a fairly open understory. Grasses are sparse, and other herbaceous plants have a patchy distribution. Other vegetation includes sweetleaf shrubs, sassafras, sweetgum, persimmon, sparkleberry, hawthorns, and woody vines. An additional consideration is the presence of gopher tortoises. A small number of active burrows have been located along the periphery of this site. The best access to this stand is from a gated entrance off of the small county maintained road that leads to Sneads Park.

Some limited, selective removal/harvest of mature loblolly pine, may be considered as a management measure for accelerating the restoration of upland pine community in Burn Zone G and the southern portion of Burn Zone E. This area has benefited greatly from the regular application of Rx fire. Some Upland Pine understory plants are present, however, live fuel continuity is patchy. Loblolly pines provide the majority of fine, one hour fuels present in the understory, and should not be removed in mass. It is therefore recommended that any removal of loblolly pines, for the purpose of longleaf pine reintroduction, be limited to relatively small pockets no larger than ½ acre in size. This would allow for a gradual succession to a more natural longleaf pine dominated stand, in which the role of fire would be uninterrupted. Any pine harvest operations shall be coordinated through the Florida Division of Forestry.

There is no history of significant pine bark beetle infestation within this site. Park staff shall continue to monitor the site for any signs of Southern Pine Beetle, or Ips Engraver Beetle attack, and shall coordinate management actions with the DOF. Routine low intensity, fuel reduction burns will continue to maintain relatively open forest conditions that help guard against beetle attack.

Prepared by: John McKenzie, Biological Scientist, FPS District 1

Addendum 7—Priority Schedule And Cost Estimates

Three Rivers State Park

Priority Schedule And Cost Estimates

Estimates are developed for the funding and staff resources needed to implement the management plan based on goals, objectives and priority management activities. Funding priorities for all state park management and development activities are reviewed each year as part of the Division's legislative budget process. The Division prepares an annual legislative budget request based on the priorities established for the entire state park system. The Division also aggressively pursues a wide range of other funds and staffing resources, such as grants, volunteers, and partnerships with agencies, local governments and the private sector for supplementing normal legislative appropriations to address unmet needs. The ability of the Division to implement the specific goals, objectives and priority actions identified in this plan will be determined by the availability of funding resources for these purposes.

Resource Management

1. Prescribed burning of approximately 225 acres a year. Burn planning/prescription preparation, fire line maintenance, burn zone prep, pre and post burn monitoring (staff hours/in-kind services): \$6,500. Equipment maintenance/replacement, staff PPE, training: \$1,500. **TOTAL ESTIMATED YEARLY COST: \$8,000**
2. Removal of invasive, exotic plants, both upland and emergent aquatics. Estimate based on DEP SNAPS contractor. **ESTIMATED YEARLY COST: \$3,500**
3. Complete survey and inventory of park flora. **ESTIMATED COST: \$12,000**
4. Complete survey and assessment of the park's gopher tortoise population, to include ArcView GIS generated maps representing all active and inactive burrows. **ESTIMATED COST: \$7,500**

Visitor Services/Recreation

5. Maintenance of park interpretive signage. **ESTIMATED YEARLY COST: \$1,000**

Administration

6. OPS Position (outsourcing cost). **ESTIMATED YEARLY COST: \$20,000**

Three Rivers State Park
Priority Schedule And Cost Estimates
Capital Improvements

Item	Quantity	Unit	Unit Price	Multiplier	Amount
Cabins					
Cabins and Furnishings	12.000	ea.	\$120,000.00	1.00	\$1,440,000.00
Campground					
Fixed Boat Dock	3.000	slip	\$9,000.00	1.00	\$27,000.00
Renovation of Existing Structures	1.000	LS	\$95,000.00	1.00	\$95,000.00
Day Use Area					
Enclosed Medium Pavilion With Restrooms	1.000	ea.	\$250,000.00	1.00	\$250,000.00
Fishing Pier	1.000	LS	\$25,000.00	1.00	\$25,000.00
Support Facilities					
Ranger Residence (concrete)	1.000	ea.	\$165,000.00	1.00	\$165,000.00
Trails					
6 Ft. Elevated Boardwalk	80.000	LF	\$165.00	1.00	\$13,200.00
Interpretive Signs	10.000	ea.	\$5,000.00	1.00	\$50,000.00
Small Observation Platform	1.000	ea.	\$45,000.00	1.00	\$45,000.00
				Sub-Total	\$2,110,200.00
				20 Percent Design, Permitting and Contingency Fee	\$422,040.00
				Total	\$2,532,240.00

Note: These preliminary cost estimates, based on Divisions standards, do not include costs for site-specific elements not evident at the conceptual level of planning. Additional costs should be investigated before finalizing budget estimates.

Additional Information

FNAI Descriptions

DHR Cultural Management Statement

Descriptions Of Natural Communities Developed By FNAI

This summary presents the hierarchical classification and brief descriptions of 82 Natural Communities developed by Florida Natural Areas Inventory and identified as collectively constituting the original, natural biological associations of Florida.

A Natural Community is defined as a distinct and recurring assemblage of populations of plants, animals, fungi and microorganisms naturally associated with each other and their physical environment. For more complete descriptions, see Guide to the Natural Communities of Florida, available from Florida Department of Natural Resources.

The levels of the hierarchy are:

Natural Community Category - defined by hydrology and vegetation.

Natural Community Groups - defined by landform, substrate, and vegetation.

Natural Community Type - defined by landform and substrate; soil moisture condition; climate; fire; and characteristic vegetation.

TERRESTRIAL COMMUNITIES

XERIC UPLANDS
COASTAL UPLANDS
MESIC UPLANDS
ROCKLANDS
MESIC FLATLANDS

PALUSTRINE COMMUNITIES

WET FLATLANDS
SEEPAGE WETLANDS
FLOODPLAIN WETLANDS
BASIN WETLANDS

LACUSTRINE COMMUNITIES

RIVERINE COMMUNITIES

SUBTERRANEAN COMMUNITIES

MARINE/ESTUARINE COMMUNITIES

Definitions of Terms Used in Natural Community Descriptions

TERRESTRIAL - Upland habitats dominated by plants which are not adapted to anaerobic soil conditions imposed by saturation or inundation for more than 10% of the growing season.

XERIC UPLANDS - very dry, deep, well-drained hills of sand with xeric-adapted vegetation.

Sandhill - upland with deep sand substrate; xeric; temperate; frequent fire (2-5 years); longleaf pine and/or turkey oak with wiregrass understory.

Scrub - old dune with deep fine sand substrate; xeric; temperate or subtropical; occasional or rare fire (20 - 80 years); sand pine and/or scrub oaks and/or rosemary and lichens.

Xeric Hammock - upland with deep sand substrate; xeric-mesic; temperate or subtropical; rare or no fire; live oak and/or sand live oak and/or laurel oak and/or other oaks, sparkleberry, saw palmetto.

COASTAL UPLANDS - substrate and vegetation influenced primarily by such coastal (maritime) processes as erosion, deposition, salt spray, and storms.

Beach Dune - active coastal dune with sand substrate; xeric; temperate or subtropical; occasional or rare fire; sea oats and/or mixed salt-spray tolerant grasses and herbs.

Coastal Berm - old bar or storm debris with sand/shell substrate; xeric-mesic; subtropical or temperate; rare or no fire; buttonwood, mangroves, and/or mixed halophytic herbs and/or shrubs and trees.

Descriptions Of Natural Communities Developed By FNAI

Coastal Grassland - coastal flatland with sand substrate; xeric-mesic; subtropical or temperate; occasional fire; grasses, herbs, and shrubs with or without slash pine and/or cabbage palm.

Coastal Rock Barren - flatland with exposed limestone substrate; xeric; subtropical; no fire; algae, mixed halophytic herbs and grasses, and/or cacti and stunted shrubs and trees.

Coastal Strand - stabilized coastal dune with sand substrate; xeric; subtropical or temperate; occasional or rare fire; dense saw palmetto and/or seagrape and/or mixed stunted shrubs, yucca, and cacti.

Maritime Hammock - stabilized coastal dune with sand substrate; xeric-mesic; subtropical or temperate; rare or no fire; mixed hardwoods and/or live oak.

Shell Mound - Indian midden with shell substrate; xeric-mesic; subtropical or temperate; rare or no fire; mixed hardwoods.

MESIC UPLANDS - dry to moist hills of sand with varying amounts of clay, silt or organic material; diverse mixture of broadleaved and needleleaved temperate woody species.

Bluff - steep slope with rock, sand, and/or clay substrate; hydric-xeric; temperate; sparse grasses, herbs and shrubs.

Slope Forest - steep slope on bluff or in sheltered ravine; sand/clay substrate; mesic-hydric; temperate; rare or no fire; magnolia, beech, spruce pine, Shumard oak, Florida maple, mixed hardwoods.

Upland Glade - upland with calcareous rock and/or clay substrate; hydric-xeric; temperate; sparse mixed grasses and herbs with occasional stunted trees and shrubs, e.g., eastern red cedar.

Upland Hardwood Forest - upland with sand/clay and/or calcareous substrate; mesic; temperate; rare or no fire; spruce pine, magnolia, beech, pignut hickory, white oak, and mixed hardwoods.

Upland Mixed Forest - upland with sand/clay substrate; mesic; temperate; rare or no fire; loblolly pine and/or shortleaf pine and/or laurel oak and/or magnolia and spruce pine and/or mixed hardwoods.

Upland Pine Forest - upland with sand/clay substrate; mesic-xeric; temperate; frequent or occasional fire; longleaf pine and/or loblolly pine and/or shortleaf pine, southern red oak, wiregrass.

ROCKLANDS - low, generally flat limestone outcrops with tropical vegetation; or limestone exposed through karst activities with tropical or temperate vegetation.

Pine Rockland - flatland with exposed limestone substrate; mesic-xeric; subtropical; frequent fire; south Florida slash pine, palms and/or hardwoods, and mixed grasses and herbs.

Rockland Hammock - flatland with limestone substrate; mesic; subtropical; rare or no fire; mixed tropical hardwoods, often with live oak.

Sinkhole - karst feature with steep limestone walls; mesic-hydric; subtropical or temperate; no fire; ferns, herbs, shrubs, and hardwoods.

MESIC FLATLANDS - flat, moderately well-drained sandy substrates with admixture of organic material, often with a hard pan.

Dry Prairie - flatland with sand substrate; mesic-xeric; subtropical or temperate; annual or frequent fire; wiregrass, saw palmetto, and mixed grasses and herbs.

Mesic Flatwoods - flatland with sand substrate; mesic; subtropical or temperate; frequent fire; slash pine and/or longleaf pine with saw palmetto, gallberry and/or wiregrass or cutthroat grass understory.

Descriptions Of Natural Communities Developed By FNAI

Prairie Hammock - flatland with sand/organic soil over marl or limestone substrate; mesic; subtropical; occasional or rare fire; live oak and/or cabbage palm.

Scrubby Flatwoods - flatland with sand substrate; xeric-mesic; subtropical or temperate; occasional fire; longleaf pine or slash pine with scrub oaks and wiregrass understory.

PALUSTRINE - Wetlands dominated by plants adapted to anaerobic substrate conditions imposed by substrate saturation or inundation during 10% or more of the growing season. Includes non-tidal wetlands; tidal wetlands with ocean derived salinities less than 0.5 ppt and dominance by salt-intolerant species; small (less than 8 ha), shallow (less than 2 m deep at low water) water bodies without wave-formed or bedrock shoreline; and inland brackish or saline wetlands.

WET FLATLANDS - flat, poorly drained sand, marl or limestone substrates.

Hydric Hammock - lowland with sand/clay/organic soil, often over limestone; mesic-hydric; subtropical or temperate; rare or no fire; water oak, cabbage palm, red cedar, red maple, bays, hackberry, hornbeam, blackgum, needle palm, and mixed hardwoods.

Marl Prairie - flatland with marl over limestone substrate; seasonally inundated; tropical; frequent to no fire; sawgrass, spikerush, and/or mixed grasses, sometimes with dwarf cypress.

Wet Flatwoods - flatland with sand substrate; seasonally inundated; subtropical or temperate; frequent fire; vegetation characterized by slash pine or pond pine and/or cabbage palm with mixed grasses and herbs.

Wet Prairie - flatland with sand substrate; seasonally inundated; subtropical or temperate; annual or frequent fire; maidencane, beakrush, spikerush, wiregrass, pitcher plants, St. John's wort, mixed herbs.

SEEPAGE WETLANDS - sloped or flat sands or peat with high moisture levels maintained by downslope seepage; wetland and mesic woody and/or herbaceous vegetation.

Baygall - wetland with peat substrate at base of slope; maintained by downslope seepage, usually saturated and occasionally inundated; subtropical or temperate; rare or no fire; bays and/or dahoon holly and/or red maple and/or mixed hardwoods.

Seepage Slope - wetland on or at base of slope with organic/sand substrate; maintained by downslope seepage, usually saturated but rarely inundated; subtropical or temperate; frequent or occasional fire; sphagnum moss, mixed grasses and herbs or mixed hydrophytic shrubs.

FLOODPLAIN WETLANDS - flat, alluvial sand or peat substrates associated with flowing water courses and subjected to flooding but not permanent inundation; wetland or mesic woody and herbaceous vegetation.

Bottomland Forest - flatland with sand/clay/organic substrate; occasionally inundated; temperate; rare or no fire; water oak, red maple, beech, magnolia, tuliptree, sweetgum, bays, cabbage palm, and mixed hardwoods.

Floodplain Forest - floodplain with alluvial substrate of sand, silt, clay or organic soil; seasonally inundated; temperate; rare or no fire; diamondleaf oak, overcup oak, water oak, swamp chestnut oak, blue palmetto, cane, and mixed hardwoods.

Floodplain Marsh - floodplain with organic/sand/alluvial substrate; seasonally inundated; subtropical; frequent or occasional fire; maidencane, pickerelweed, sagittaria spp., buttonbush, and mixed emergents.

Floodplain Swamp - floodplain with organic/alluvial substrate; usually inundated; subtropical or temperate; rare or no fire; vegetation characterized by cypress, tupelo, black gum, and/or pop ash.

Descriptions Of Natural Communities Developed By FNAI

Freshwater Tidal Swamp - river mouth wetland, organic soil with extensive root mat; inundated with freshwater in response to tidal cycles; rare or no fire; cypress, bays, cabbage palm, gums and/or cedars.

Slough - broad, shallow channel with peat over mineral substrate; seasonally inundated, flowing water; subtropical; occasional or rare fire; pop ash and/or pond apple or water lily.

Strand Swamp - broad, shallow channel with peat over mineral substrate; seasonally inundated, flowing water; subtropical; occasional or rare fire; cypress and/or willow.

Swale - broad, shallow channel with sand/peat substrate; seasonally inundated, flowing water; subtropical or temperate; frequent or occasional fire; sawgrass, maidencane, pickerelweed, and/or mixed emergents.

BASIN WETLANDS - shallow, closed basin with outlet usually only in time of high water; peat or sand substrate, usually inundated; wetland woody and/or herbaceous vegetation.

Basin Marsh - large basin with peat substrate; seasonally inundated; temperate or subtropical; frequent fire; sawgrass and/or cattail and/or buttonbush and/or mixed emergents.

Basin Swamp - large basin with peat substrate; seasonally inundated, still water; subtropical or temperate; occasional or rare fire; vegetation characterized by cypress, blackgum, bays and/or mixed hardwoods.

Bog - wetland on deep peat substrate; moisture held by sphagnum mosses, soil usually saturated, occasionally inundated; subtropical or temperate; rare fire; sphagnum moss and titi and/or bays and/or dahoon holly, and/or mixed hydrophytic shrubs.

Coastal Interdunal Swale - long narrow depression wetlands in sand/peat-sand substrate; seasonally inundated, fresh to brackish, still water; temperate; rare fire; graminoids and mixed wetland forbs.

Depression Marsh - small rounded depression in sand substrate with peat accumulating toward center; seasonally inundated, still water; subtropical or temperate; frequent or occasional fire; maidencane, fire flag, pickerelweed, and mixed emergents, may be in concentric bands.

Dome Swamp - rounded depression in sand/limestone substrate with peat accumulating toward center; seasonally inundated, still water; subtropical or temperate; occasional or rare fire; cypress, blackgum, or bays, often tallest in center.

LACUSTRINE - Non-flowing wetlands of natural depressions lacking persistent emergent vegetation except around the perimeter.

Clastic Upland Lake - generally irregular basin in clay uplands; predominantly with inflows, frequently without surface outflow; clay or organic substrate; colored, acidic, soft water with low mineral content (sodium, chloride, sulfate); oligo-mesotrophic to eutrophic.

Coastal Dune Lake - basin or lagoon influenced by recent coastal processes; predominantly sand substrate with some organic matter; salinity variable among and within lakes, and subject to saltwater intrusion and storm surges; slightly acidic, hard water with high mineral content (sodium, chloride).

Coastal Rockland Lake - shallow basin influence by recent coastal processes; predominantly barren oolitic or Miami limestone substrate; salinity variable among and within lakes, and subject to saltwater intrusion, storm surges and evaporation (because of shallowness); slightly alkaline, hard water with high mineral content (sodium, chloride).

Flatwoods/Prairie Lake - generally shallow basin in flatlands with high water table; frequently with a broad littoral zone; still water or flow-through; sand or peat substrate; variable water chemistry, but characteristically colored to clear, acidic to slightly alkaline, soft to moderately hard water with moderate

Descriptions Of Natural Communities Developed By FNAI

mineral content (sodium, chloride, sulfate); oligo-mesotrophic to eutrophic.

Marsh lake - generally shallow, open water area within wide expanses of freshwater marsh; still water or flow-through; peat, sand or clay substrate; occurs in most physiographic regions; variable water chemistry, but characteristically highly colored, acidic, soft water with moderate mineral content (sodium, chloride, sulfate); oligo-mesotrophic to eutrophic.

River Floodplain Lake - meander scar, backwater, or larger flow-through body within major river floodplains; sand, alluvial or organic substrate; colored, alkaline or slightly acidic, hard or moderately hard water with high mineral content (sulfate, sodium, chloride, calcium, magnesium); mesotrophic to eutrophic.

Sandhill Upland Lake - generally rounded solution depression in deep sandy uplands or sandy uplands shallowly underlain by limestone; predominantly without surface inflows/outflows; typically sand substrate with organic accumulations toward middle; clear, acidic moderately soft water with varying mineral content; ultra-oligotrophic to mesotrophic.

Sinkhole Lake - typically deep, funnel-shaped depression in limestone base; occurs in most physiographic regions; predominantly without surface inflows/outflows, but frequently with connection to the aquifer; clear, alkaline, hard water with high mineral content (calcium, bicarbonate, magnesium).

Swamp Lake - generally shallow, open water area within basin swamps; still water or flow-through; peat, sand or clay substrate; occurs in most physiographic regions; variable water chemistry, but characteristically highly colored, acidic, soft water with moderate mineral content (sodium, chloride, sulfate); oligo-mesotrophic to eutrophic.

RIVERINE - Natural, flowing waters from their source to the downstream limits of tidal influence and bounded by channel banks.

Alluvial Stream - lower perennial or intermittent/seasonal watercourse characterized by turbid water with suspended silt, clay, sand and small gravel; generally with a distinct, sediment-derived (alluvial) floodplain and a sandy, elevated natural levee just inland from the bank.

Blackwater Stream - perennial or intermittent/seasonal watercourse characterized by tea-colored water with a high content of particulate and dissolved organic matter derived from drainage through swamps and marshes; generally lacking an alluvial floodplain.

Seepage Stream - upper perennial or intermittent/seasonal watercourse characterized by clear to lightly colored water derived from shallow groundwater seepage.

Spring-run Stream - perennial watercourse with deep aquifer headwaters and characterized by clear water, circumneutral pH and, frequently, a solid limestone bottom.

SUBTERRANEAN - Twilight, middle and deep zones of natural chambers overlain by the earth's crust and characterized by climatic stability and assemblages of troglonec, troglophilic, and troglotic organisms.

Aquatic Cave - cavernicolous area permanently or periodically submerged; often characterized by troglotic crustaceans and salamanders; includes high energy systems which receive large quantities of organic detritus and low energy systems.

Terrestrial Cave - cavernicolous area lacking standing water; often characterized by bats, such as *Myotis* spp., and other terrestrial vertebrates and invertebrates; includes interstitial areas above standing water such as fissures in the ceiling of caves.

MARINE/ESTUARINE (The distinction between the Marine and Estuarine Natural Communities is often subtle, and the natural communities types found under these two community categories have the same

Descriptions Of Natural Communities Developed By FNAI

descriptions. For these reasons they have been grouped together.) - Subtidal, intertidal and supratidal zones of the sea, landward to the point at which seawater becomes significantly diluted with freshwater inflow from the land.

Consolidated Substrate - expansive subtidal, intertidal and supratidal area composed primarily of nonliving compacted or coherent and relatively hard, naturally formed mass of mineral matter (e.g., coquina limerock and relic reefs); octocorals, sponges, stony corals, nondrift macrophytic algae, blue-green mat-forming algae and seagrasses sparse, if present.

Unconsolidated Substrate - expansive subtidal, intertidal and supratidal area composed primarily of loose mineral matter (e.g., coralgall, gravel, marl, mud, sand and shell); octocorals, sponges, stony corals, nondrift macrophytic algae, blue-green mat-forming algae and seagrasses sparse, if present.

Octocoral Bed - expansive subtidal area occupied primarily by living sessile organisms of the Class Anthozoa, Subclass Octocorallia (e.g., soft corals, horny corals, sea fans, sea whips, and sea pens); sponges, stony corals, nondrift macrophytic algae and seagrasses sparse, if present.

Sponge Bed - expansive subtidal area occupied primarily by living sessile organisms of the Phylum Porifera (e.g., sheepswool sponge, Florida loggerhead sponge and branching candle sponge); octocorals, stony corals, nondrift macrophytic algae and seagrasses sparse, if present.

Coral Reef - expansive subtidal area with elevational gradient or relief and occupied primarily by living sessile organisms of the Class Hydrozoa (e.g., fire corals and hydrocorals) and Class Anthozoa, Subclass Zoantharia (e.g., stony corals and black corals); includes deepwater bank reefs, fringing barrier reefs, outer bank reefs and patch reefs, some of which may contain distinct zones of assorted macrophytes, octocorals, & sponges.

Mollusk Reef - substantial subtidal or intertidal area with relief from concentrations of sessile organisms of the Phylum Mollusca, Class Bivalvia (e.g., molluscs, oysters, & worm shells); octocorals, sponges, stony corals, macrophytic algae and seagrasses sparse, if present.

Worm Reef - substantial subtidal or intertidal area with relief from concentrations of sessile, tubicolous organisms of the Phylum Annelida, Class Polychaeta (e.g., chaetopterids and sabellarids); octocorals, sponges, stony corals, macrophytic algae and seagrasses sparse, if present.

Algal Bed - expansive subtidal, intertidal or supratidal area, occupied primarily by attached thallophytic or mat-forming prokaryotic algae (e.g., halimeda, blue-green algae); octocorals, sponges, stony corals and seagrasses sparse, if present.

Grass Bed - expansive subtidal or intertidal area, occupied primarily by rooted vascular macrophytes, (e.g., shoal grass, halophila, widgeon grass, manatee grass and turtle grass); may include various epiphytes and epifauna; octocorals, sponges, stony corals, and attached macrophytic algae sparse, if present.

Composite Substrate - expansive subtidal, intertidal, or supratidal area, occupied primarily by Natural Community elements from more than one Natural Community category (e.g., Grass Bed and Algal Bed species; Octocoral and Algal Bed species); includes both patchy and evenly distributed occurrences.

Tidal Marsh - expansive intertidal or supratidal area occupied primarily by rooted, emergent vascular macrophytes (e.g., cord grass, needlerush, saw grass, saltwort, saltgrass and glasswort); may include various epiphytes and epifauna.

Tidal Swamp - expansive intertidal and supratidal area occupied primarily by woody vascular macrophytes (e.g., black mangrove, buttonwood, red mangrove, and white mangrove); may include various epiphytes and epifauna.

DEFINITIONS OF TERMS Terrestrial and Palustrine Natural Communities

Physiography

Upland - high area in region with significant topographic relief; generally undulating

Lowland - low area in region with or without significant topographic relief; generally flat to gently sloping

Flatland - generally level area in region without significant topographic relief; flat to gently sloping

Basin - large, relatively level lowland with slopes confined to the perimeter or isolated interior locations

Depression - small depression with sloping sides, deepest in center and progressively shallower towards the perimeter

Floodplain - lowland adjacent to a stream; topography influenced by recent fluvial processes

Bottomland - lowland not on active floodplain; sand/clay/organic substrate

Hydrology

occasionally inundated - surface water present only after heavy rains and/or during flood stages

seasonally inundated - surface water present during wet season and flood periods

usually inundated - surface water present except during droughts

Climatic Affinity of the Flora

tropical - community generally occurs in practically frost-free areas

subtropical - community generally occurs in areas that experience occasional frost, but where freezing temperatures are not frequent enough to cause true winter dormancy

temperate - community generally occurs in areas that freeze often enough that vegetation goes into winter dormancy

Fire

annual fire - burns about every 1-2 years

frequent fire - burns about every 3-7 years

occasional fire - burns about every 8-25 years

rare fire - burns about every 26-100 years

no fire - community develops only when site goes more than 100 years without burning

Descriptions Of Natural Communities Developed By FNAI

LATIN NAMES OF PLANTS MENTIONED IN NATURAL COMMUNITY DESCRIPTIONS

anise - *Illicium floridanum*
bays:
 swamp bay - *Persea palustris*
 gordonia - *Gordonia lasianthus*
 sweetbay - *Magnolia virginiana*
beakrush - *Rhynchospora* spp.
beech - *Fagus grandifolia*
blackgum - *Nyssa biflora*
blue palmetto - *Sabal minor*
bluestem - *Andropogon* spp.
buttonbush - *Cephalanthus occidentalis*
cabbage palm - *Sabal palmetto*
cacti - *Opuntia* and *Harrisia* spp.,
 predominantly *stricta* and *pentagonus*
cane - *Arundinaria gigantea* or *A. tecta*
cattail - *Typha* spp.
cedars:
 red cedar - *Juniperus silicicola*
 white cedar - *Chamaecyparis thyoides* or
 C. henryi
cladonia - *Cladonia* spp.
cypress - *Taxodium distichum*
dahoon holly - *Ilex cassine*
diamondleaf oak - *Quercus laurifolia*
fire flag - *Thalia geniculata*
Florida maple - *Acer barbatum*
gallberry - *Ilex glabra*
gums:
 tupelo - *Nyssa aquatica*
 blackgum - *Nyssa biflora*
 Ogeechee gum - *Nyssa ogeche*
hackberry - *Celtis laevigata*
hornbeam - *Carpinus caroliniana*
laurel oak - *Quercus hemisphaerica*
live oak - *Quercus virginiana*
loblolly pine - *Pinus taeda*
longleaf pine - *Pinus palustris*
magnolia - *Magnolia grandiflora*
maidencane - *Panicum hemitomon*
needle palm - *Rhapidophyllum hystrix*
overcup oak - *Quercus lyrata*
pickerel weed - *Pontederia cordata* or *P. lanceolata*
pignut hickory - *Carya glabra*
pop ash - *Fraxinus caroliniana*
pond apple - *Annona glabra*
pond pine - *Pinus serotina*
pyramid magnolia - *Magnolia pyramidata*
railroad vine - *Ipomoea pes-caprae*
red cedar - *Juniperus silicicola*
red maple - *Acer rubrum*
red oak - *Quercus falcata*
rosemary - *Ceratiola ericoides*
sagittaria - *Sagittaria lancifolia*
sand pine - *Pinus clausa*
saw palmetto - *Serenoa repens*
sawgrass - *Cladium jamaicensis*
scrub oaks - *Quercus geminata*, *Q. chapmanii*, *Q. myrtifolia*, *Q. inopina*
sea oats - *Uniola paniculata*
seagrape - *Coccoloba uvifera*
shortleaf pine - *Pinus echinata*
Shumard oak - *Quercus shumardii*
slash pine - *Pinus elliotii*
sphagnum moss - *Sphagnum* spp.
spikerush - *Eleocharis* spp.
spruce pine - *Pinus glabra*
St. John's wort - *Hypericum* spp.
swamp chestnut oak - *Quercus prinus*
sweetgum - *Liquidambar styraciflua*
titi - *Cyrilla racemiflora*, and *Cliftonia monophylla*
tuliptree - *Liriodendron tulipifera*
tupelo - *Nyssa aquatica*
turkey oak - *Quercus laevis*
water oak - *Quercus nigra*
waterlily - *Nymphaea odorata*
white cedar - *Chamaecyparis thyoides*
white oak - *Quercus alba*
willow - *Salix caroliniana*
yucca - *Yucca aloifolia*

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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 that 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 that 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 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 that 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 that 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(4), 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:

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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 that adversely affects the character, form, integrity, or other qualities that 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.

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4. Each state agency of the executive branch shall assume responsibility for the preservation of historic resources that 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 site is a felony.

C. MANAGEMENT POLICY

The choice of a management policy for archaeological and historic sites within state-owned or controlled land 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 that 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

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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 site is discouraged. There are many endangered sites in Florida (on

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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

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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]).

The 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 that 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.).

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- (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 notifies 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 are 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:

Compliance Review Section
Bureau of Historic Preservation
Division of Historical Resources
R.A. Gray Building
500 South Bronough Street
Tallahassee, Florida 32399-0250

Contact Person

Susan M. Harp
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