

**FANNING SPRINGS STATE PARK**

**UNIT MANAGEMENT PLAN**

**APPROVED**

**STATE OF FLORIDA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**  
**Division of Recreation and Parks**

**APRIL 18, 2003**



# Department of Environmental Protection

Jeb Bush  
Governor

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Tallahassee, Florida 32399-3000

David B. Struhs  
Secretary

April 18, 2003

Ms. Bryanne White  
Office of Park Planning  
3900 Commonwealth Blvd., M.S. 525  
Tallahassee, Florida 32399-3000

Fanning Springs State Park

Lease Number: # 4142

Dear Ms. White:

On April 18, 2003, the Acquisition and Restoration Council recommended approval of the Land Management Plan for Fanning Springs State Park. Therefore, the Office of Environmental Services, acting as agent for the Board of Trustees of the Internal Improvement Trust Fund approves this plan. Pursuant to Section 253.034 and 259.032, Florida Statutes, and Chapter 18-2, Florida Administrative Code the plan's five-year update will be due in April 2008.

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

Sincerely,

*Delmas T. Barber*

Delmas T. Barber, OMC Manager  
Office of Environmental Services  
Division of State Lands

*"More Protection, Less Process"*

*Printed on recycled paper.*

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## INTRODUCTION

Fanning Springs State Park is located in Levy County (see Vicinity Map) in the town of Fanning Springs on the Suwannee River. Access to the park is from U.S. Highway 19/98. The vicinity map also reflects significant land and water resources existing near the park.

At Fanning Springs State Park, public outdoor recreation and conservation is the designated single use of the property. There are no legislative or executive directives that constrain the use of this property. The park was acquired in 1993 and funded through the P2000/CARL program (see Addendum 1).

Currently the park contains approximately 204<sup>±</sup> acres. For this plan, park acreage has been calculated based on the composition of natural communities, in addition to ruderal and developed areas.

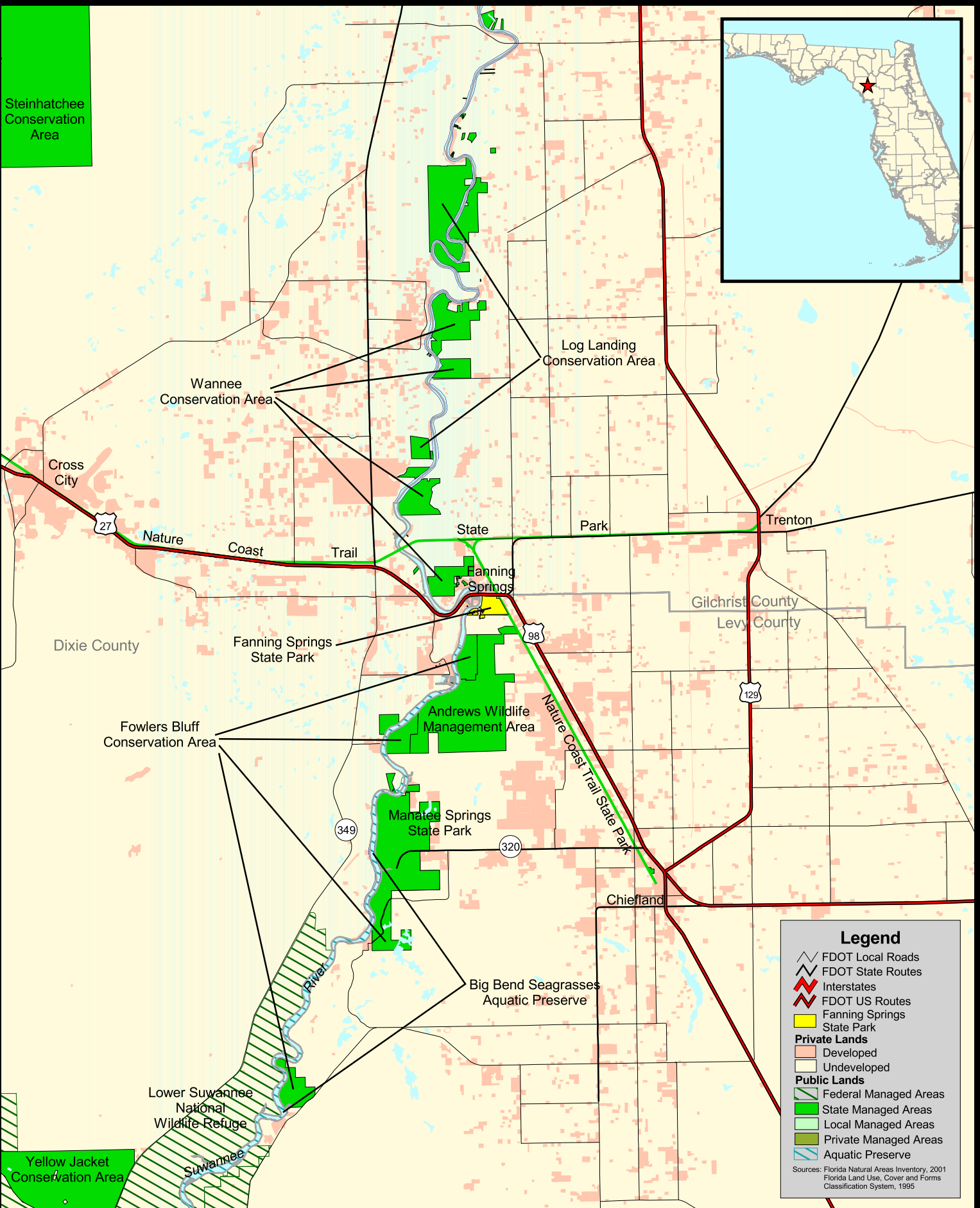
### PURPOSE AND SCOPE OF THE PLAN

This plan serves as the basic statement of policy and direction for the management of Fanning Springs 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. With approval, this management plan will supercede and replace the current approved plan of March 26, 1999. 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 cultural resources, management needs, aesthetic values, visitation and visitor experiences. For this park, it was determined that no secondary purposes could be accommodated in a manner that would not interfere with the primary purpose of resource-based outdoor recreation and conservation. 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.



Steinhatzee  
Conservation  
Area



Log Landing  
Conservation Area

Wannee  
Conservation Area

Cross  
City

27

Nature  
Coast

Trail

State

Park

Trenton

Dixie County

Fanning Springs  
State Park

Fanning  
Springs

98

Gilchrist County  
Levy County

129

Fowlers Bluff  
Conservation Area

Andrews Wildlife  
Management Area

349

Manatee Springs  
State Park

320

Nature Coast Trail State Park

Chiefland

Big Bend Seagrasses  
Aquatic Preserve

Lower Suwannee  
National  
Wildlife Refuge

River

Suwannee

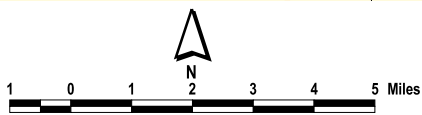
Yellow Jacket  
Conservation Area

**Legend**

- FDOT Local Roads
- FDOT State Routes
- Interstates
- FDOT US Routes
- Fanning Springs 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

**Fanning Springs State Park  
Vicinity Map**



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 multiple-use management activities would not be appropriate as a means of generating revenues for land management. Instead, techniques such as entrance fees, concessions and similar measures will be employed on a case-by-case basis as a means of supplementing park management funding.

## **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 affect 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 Fanning Springs 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 of the natural, aesthetic and educational attributes of the park.

### **Park Goals and Objectives**

The following park goals and objectives express the Division 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 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. Restore areas damaged by artificial soil disturbances, and take measures to prevent additional disturbances.
  - A. Continue to manage visitor access to the swimming area at Fanning Spring in order to protect areas recovering from erosion.
  - B. Continue to trap and remove feral hogs from the park.
  - C. Continue to protect native aquatic vegetation in Fanning Springs from degradation by swimmers in the swimming area.
  - D. Continue to cooperate with other agencies in efforts to control exotic aquatic weeds in the swimming area. Continue to replant native aquatic plants to stabilize sediments and provide habitat for fish and manatees.
  - E. Continue to remove rocks, sandbags, and buried pipes located near the Little Fanning Spring vent.
  - F. Restore semi-developed areas along the river south of Little Fanning Spring by removing fill materials and culverts in the causeways, fill material in the raised septic drain fields, and buried electric cables and electric service platforms.
2. Continue to monitor water quality and flow in the springs, and study the spring recharge area.
  - A. Continue to cooperate with agencies (SRWMD, USGS, FGS, and DEP) to monitor water quality in the springs and park wells and flow rates in the springs.
  - B. Continue to support research necessary to determine the extent of the groundwater recharge area for Fanning Springs.
  - C. Identify any additional direct connections between the Floridan aquifer and the ground surface in the recharge area.
  - D. Maintain close coordination with agencies collecting information that may affect the management of Fanning Springs. Compile monitoring data in suitable formats and distribute to park staff, volunteers and the public for their use.
3. Monitor proposed activities outside the park for potential threats to park resources, and take action to protect park resources from degradation by activities occurring outside the park boundary.
  - A. Encourage and participate in the protection of spring flows and spring water quality on a regional level, placing an emphasis on preventing excessive groundwater pumping and controlling nutrient and pollutant loading in the watershed.
  - B. Coordinate with permitting agencies and local governments in the review of Environmental Resource Permitting, Water Use Permitting, Comprehensive plan amendments and land development regulations governing properties adjacent to the park, or in the Fanning Springs recharge area. Provide Division review and comments regarding proposed land use changes or permit requests that may affect park resources.
  - C. Participate in public outreach and education activities geared toward springs

- protection, and encourage landowners in the Fanning Springs recharge basin to implement BMP's that protect groundwater.
4. Protect designated species and their habitat from disturbances.
    - A. Continue to monitor manatees in the spring area.
    - B. Protect the West Indian manatee from disturbance in the spring run to the greatest extent possible, particularly during the winter months. Design and implement a plan for seasonal closure of Fanning Springs run to all watercraft, providing alternate boat mooring and park access from the Suwannee River.
    - C. Prohibit swimming activity in the spring when manatees are present.
    - D. Protect the gopher tortoises located within the ruderal area of the park from development impacts and disturbance during special events.
  5. Consider alternative options to traditional sewage treatment within the park.
    - A. Wherever feasible, use state of the art, performance-based sewage treatment designs that minimize construction-related ground disturbance and reduce the volume of effluent nutrients released to the groundwater. Retrofit existing systems to meet the highest standards of nutrient reduction possible.
    - B. Determine the location of underground conduits associated with Fanning Springs.
    - C. Support efforts to establish a municipal, wastewater treatment facility in the City of Fanning Springs.
  6. Protect cultural resources from additional impacts from park development activities.
    - A. Develop a protection plan for known cultural resources that includes documentation of changes and impacts to cultural resources in accordance with the Florida Park Service Operations Procedures Manual.
    - B. Conduct level II archaeological surveys in areas slated for development, as required by DHR. Include funding for these surveys in budgets for development projects.
    - C. Develop and implement programs to stabilize historic and archaeological sites, and provide cyclical monitoring and maintenance.
  7. Buffer or salvage endangered cultural resources, such as Lv505 and Lv79.
    - A. Minimize future impacts to archaeological site Lv505 by regularly top-dressing the soil surface, laying sod, or plugging turf grass on an annual schedule, and by installing erosion control devices.
  8. Design and implement a park procedure for accepting artifacts and other probable cultural materials recovered by visitors and insure their transfer to the Division of Historic Resources.
  9. Adopt a cyclical maintenance plan for Di77, the bridge segment.
    - A. Maintain the historic bridge element (formerly Di77), now located in the wayside park, so that it is free of vegetative contact and overhang.
    - B. Adapt the existing Department of Transportation (DOT) painting schedule to meet park requirements for maintaining the bridge segment.
    - C. Obtain from DOT a record of the paints and undercoats that were used on the bridge in an effort to identify possible lead or other heavy metals hazards. Modify coating and cleaning schedules accordingly.
  10. Protect park resources from degradation caused by activities that may occur outside the park boundary.
    - A. Continually review comprehensive plan amendments and land development regulations that govern proposed changes in land use on properties adjacent to the park.
    - B. Monitor permits requested from the SRWMD for activities that may impact the watershed of the Suwannee River and Fanning Springs.
    - C. Formally present to appropriate governing bodies and agencies the Division's

comments regarding proposed land use changes or permit requests.

11. Initiate restoration of upland fire-maintained natural communities through use of periodic prescribed fire, supplemented by other measures as needed.
12. Continue implementing exotic plant and animal removal plans for invasive species.
13. Restore natural vegetation on unused, abandoned roads within the park.

#### **Recreational Goals**

14. Continue to provide quality resource based outdoor recreational and interpretive programs and facilities at the state park.
  - A. Continue upgrading facilities to meet the Americans with Disabilities Act (ADA) standards.
  - B. Carefully implement recreational activities desired by the community without compromising FPS standards.
  - C. Build community support through partnerships with local organizations for events and activities. Strive to promote events that relate directly to the parks cultural and natural resources.
15. 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. Increase staffing to a level that is consistent with increases in visitation, facilities and management responsibilities.
  - B. Continue training of park staff to improve the level of visitor services programs.
  - C. Develop additional interpretive materials to promote protection and understanding of surface and groundwater resources. All interpretive activities will build upon the Park Statement of Interpretation.

#### **Park Administration/Operations**

16. Assure that the park meets all applicable state and federal safety guidelines.
17. Promote the park as a significant tourist destination both locally and nationally.
  - A. Actively participate in the development and management of the Suwannee River Wilderness Trail project.
  - B. Continue to promote the park through increased programming.
  - C. Continue to encourage tourism in the park through contacts with the media and writers' associations.
  - D. Continue to promote the park through association with local organizations.

#### **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 Division 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 Monday, February 3, 2003. The purpose of this meeting was to present this draft management plan to the public. An Advisory Group meeting was held on Tuesday, February 4, 2003. The purpose of this meeting was to provide the Advisory Group members the opportunity to discuss this draft management plan. Addendum 1 contains the list of advisory group members and the advisory group meeting staff report.

### **Other Designations**

Fanning Springs 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 adjacent to the Big Bend Seagrasses 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**

Fanning Springs is located in the Northern Physiographic Zone of the state within the Gulf Coastal Lowlands, a landform lying directly west of the Bell Ridge. Elevations range from 10 to 30 feet. The Gulf Coastal Lowlands are characterized by narrow floodplains formed at the mouths of streams, which cut across the low-lying terrain. Alluvial deposits, which formed during late Pleistocene times, occur along the valleys of the Suwannee and Withlacoochee Rivers, and limestone of Tertiary Age is exposed along the channels and elsewhere. The lower reach of each valley has been entrenched in the limestone bedrock probably since the last significant rise in sea level.

Fanning Springs is situated on the Pamlico Terrace of Pleistocene origin. Topographic relief within the park is slight and slopes are gradual. Elevations range from about 30 feet NGVD (National Geodetic Vertical Datum of 1929) to less than five feet NGVD in the floodplain swamp along the Suwannee River.

Numerous features characteristic of karstic activity are contained within the park, including springs, limestone outcrops, solution pipes and sinkholes.

The natural terrain of the park is largely altered. There is a shallow pit on the property where limestone was once excavated. Fill material has been removed from at least two areas adjacent to the Little Fanning Spring run. The slopes around the Fanning Spring boil have been manipulated to reduce the impacts of recreation there. Topography south of the Little Fanning Spring-run is altered by past development of home sites. In this portion of the park,

several causeways pass through lowland areas, and raised drain fields, underground electrical cables, and at least three aboveground electrical service panels are sited in the floodway of the Suwannee River. Although the causeways are culverted, the fill material associated with these and the other infrastructure impedes surface hydrology within the natural floodway of the Suwannee River.

Less obvious topographic disturbances in the park exist in the form of roads and firebreaks, a few of which are now obsolete.

### **Geology**

Listed in descending order of age, regional underlying deposits include the Pamlico deposits, Ocala Group, Avon Park Limestone, Lake City Limestone, Oldsmar Limestone, and Cedar Keys Limestone. Suwannee Limestone, of Oligocene age, often overlies the Ocala group, but it is absent in Levy County (Slabaugh et al. 1996).

The Pamlico Terrace, the most diversified of the Pleistocene deposits laid down when sea levels fluctuated in response to successive glaciations, consists of irregular patches of sand or sandy clay alluvium, brackish-water clay or sand and marl; pasty, sandy, non-fossiliferous limestone presumed to be a bay deposit; and sandy, coquina marl and marly sand that is locally dolomitized. The thickness of the terrace varies with the degree of erosion to which it has been subjected.

The Ocala Group of limestones, of Eocene age, is next in sequence. Outcrops of this group are visible about the main spring. Three limestone formations make up the group; from youngest to oldest, these are the Crystal River, Williston, and Inglis Formations.

The Crystal River Formation is typically white to cream in color and consists of a soft, massive, friable coquina set in a pasty calcite matrix. It may reach a thickness of 125 feet. The Williston Formation comprises two variations of a commonly silicified, fossiliferous marine limestone. One type is essentially a cream-colored coquina while the other is a cream to tan, detrital limestone. This formation averages 30 feet in thickness. The Inglis Formation is a cream to tan, granular, rarely pasty, porous, very hard, massive, and shallow-water marine limestone having a plentiful fauna, in part a coquina. The base is dolomitized, the dolomite being tan to brown, highly porous but only slightly permeable. This formation averages 50 feet in thickness (Crane 1986).

Below the Ocala Group lies the Avon Park Limestone, also of Eocene age. In Levy County, this limestone is variable in lithology. Three variations are found, all having a distinct fossiliferous fauna and a high content of lignitic and other carbonaceous plant residues. Any of them may be irregularly or completely dolomitized. One variation is a cream to brown, highly fossiliferous, fragmental to pasty, marine limestone that weathers to white and purple-tinted hues. Another is a cream to brown, very fossiliferous, pasty and fragmental, peat-flecked and seamed, marine limestone. The last is a tan to brown, thin-bedded and laminated, finely crystalline, marine dolomite, interbedded with layers of lignite and carbonaceous plant remains. The Avon Park Limestone can reach a thickness of at least 300 feet.

Below the Avon Park formation is Lake City Limestone. In Levy County, this deposit is varied in composition. In general, the formation consists of a tan to cream-colored, fragmental, often peat-flecked, granular and pasty limestone embedded with foraminifera, crystals of calcite and echinoid plates. Sometimes the limestone is a coquina. Gypsum may be present, so much so that fossils appear to be embedded in the mineral. Thin beds and seams of anhydrite and selenite may also be present. Dolomitization occurs in varying degrees. Finally, concentrated in the upper portions but found throughout, are pseudo-oolite beds; a brown to coffee-colored chert; an oftentimes siliceous clay; and a brownish-gray, laminated, finely

crystalline dolomite with carbonaceous and perhaps fossiliferous seams. This deposit measures from 575 to 900 feet in thickness.

The deepest deposit of Eocene age is Oldsmar Limestone, a brown, porous, friable, granular limestone of calcite grains loosely embedded in a limestone paste and interbedded with brown, coarsely crystalline, sugary, porous dolomite having seams of white chert and anhydrite; coffee-colored chert; and finely crystalline, tan to brown dolomite. The base is commonly a brown, granular, porous, foraminiferous coquina in a soft limestone paste. This formation varies from just under 400 feet to slightly over 550 feet in thickness.

The Cedar Keys Limestone, of Paleocene age, in this area is composed of interbedded tan to gray, granular, fragmental, often fossiliferous limestone and tan to brown, crystalline to chalky dolomite. Gypsum has impregnated large sections and may occur as thin lenses. The Cedar Keys formation is some 600 feet thick (Crane 1986).

Surficial limestone was once excavated from a small area within the park to a depth of less than 15 feet. Otherwise, no remarkable alterations of the park's geological formations are known to have taken place.

### **Soils**

Four soil types exist within Fanning Springs State Park (see Soils Map). Addendum 3 contains complete soils descriptions. The upland soils found in the park are generally well drained to excessively drained, whereas soils within the floodplain of the Suwannee River tend to be poorly drained. The Levy County soil survey characterizes most of the soils found within the park as very deep except for the Seaboard soils in the Jonesville-Otela-Seaboard complex. In these soils, limestone underlies the sand at relatively shallow depths (Slabaugh et al. 1996).

Limestone outcrops are frequent south of Fanning Spring and north of the Little Fanning Spring-run. As previously mentioned, these outcrops show evidence of alteration, possibly from mining. Soils overlying the apparently mined outcrops are thin or nonexistent, suggesting removal during the mining process or may never have occurred there.

Erosion around Fanning Spring and along the eastern portion of Little Fanning Spring, as discussed in the Hydrology section, may degrade water quality in the springs and spring runs. Other soil disturbances within the park include roads, firebreaks, and rooting by feral hogs.

Management activities will follow generally accepted best management practices to prevent soil erosion and to conserve soil and water resources on site.

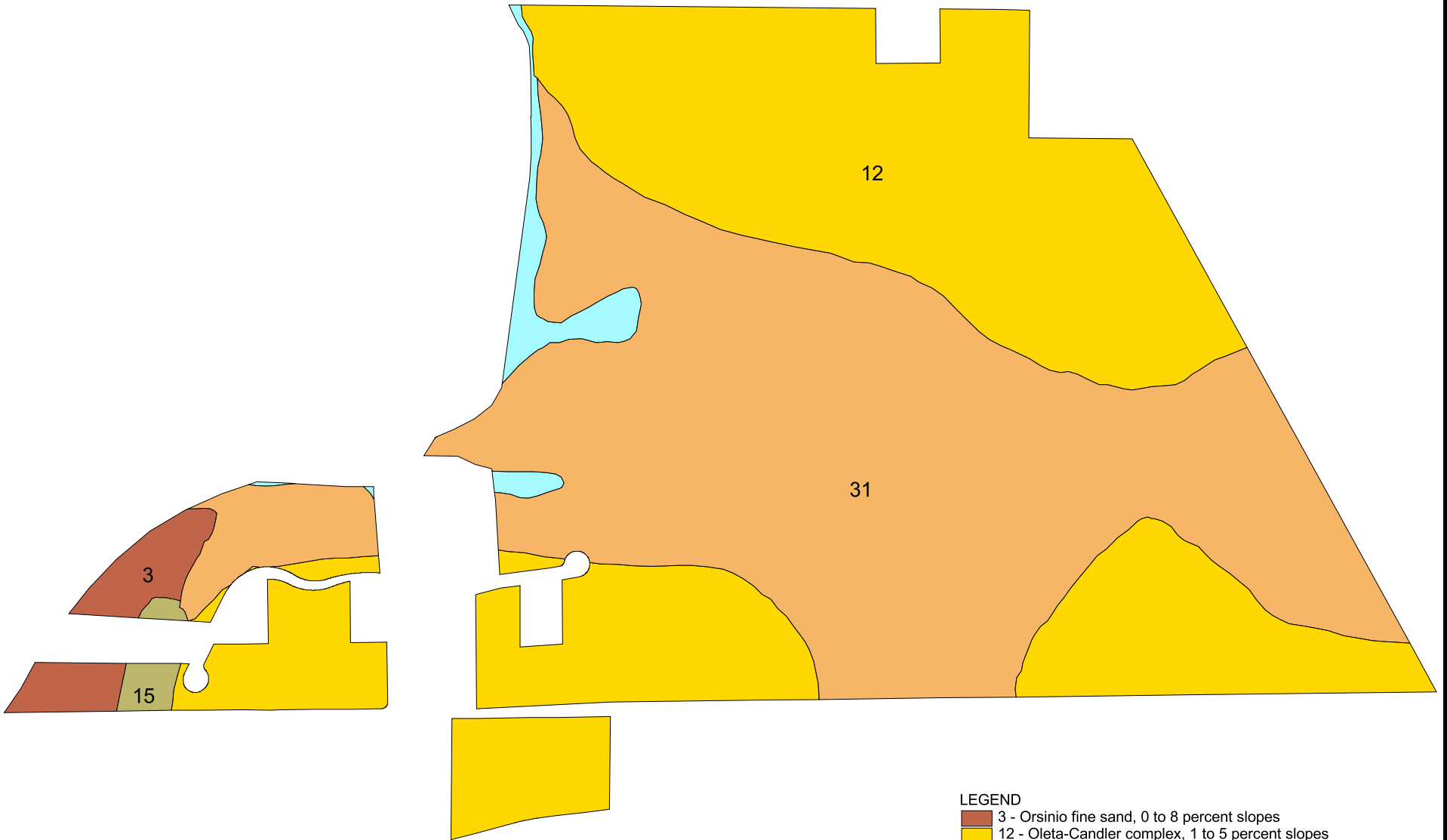
### **Minerals**

Limited removal of limestone has occurred along the northern edges of the spring run of Little Fanning Spring. Although limestone deposits occur within the park, it is not known if mineral deposits of commercial value exist in the area.

### **Hydrology**

Fanning Spring and Little Fanning Spring are contained within the lower Suwannee River drainage basin. The lower Suwannee River, from U.S. Highway 19 to the Gulf of Mexico, is part of the Big Bend Sea Grasses Aquatic Preserve. The Suwannee River is designated an Outstanding Florida Water, to complement an earlier recognition of the system as Class III Waters. The entire Suwannee River basin drains some 10,000 square miles in Florida and Georgia. An average of 7,100 million gallons of water per day (mgd) are discharged by the river into the Gulf of Mexico, which is located approximately 40 miles southwest of the park. To date, approximately 121 riverine springs, including Fanning Springs, have been identified as contributing to the flow of the Suwannee River (Hornsby and Mattson 1997).

**FANNING SPRINGS  
STATE PARK**



**LEGEND**

- 3 - Orsinio fine sand, 0 to 8 percent slopes
- 12 - Oleta-Candler complex, 1 to 5 percent slopes
- 15 - Holopaw-Pineda complex, frequently flooded
- 31 - Jonesville-Oleta-Seaboard complex, 1 to 5 percent slopes
- Water



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

**SOILS MAP**

Fanning Spring is one of Florida's 33 first magnitude springs, with spring flows ranging from 56 cubic feet per second (cfs) during drought to 188 cfs when recharge and groundwater levels are high (Hornsby and Mattson 1997). Fanning Spring is approximately 200 feet wide and 350 feet long with the main vent located in the southeast portion of the run. The funnel-shaped vent averages 30 feet wide and 12 feet to more than 20 feet deep depending on river stage. The spring run is estimated to be 100 feet wide, between 1-10 feet deep and 100 feet long. Much of the bottom is sandy and covered with patches of algae. Little Fanning Spring is located approximately 500 feet south of Fanning Spring and has a nearly horizontal opening into a limestone hillside. The spring run is 10 to 40 feet wide, and flows southwest and then west approximately 1000 feet before flowing into the Suwannee River.

In 2001, the Governor's Springs Initiative focused the attention of government and the private sector on the need to protect springs on a regional level. Before that time, monitoring of flow, water quality and biology at Fanning Springs was sporadic and inconsistent. Funding from the 2001 initiative, and from the subsequent 2002 Springs Initiative, has supported research and work to protect springs. Water quality and quantity monitoring at Fanning Springs is greatly improved. Discharge is monitored continuously, and water quality is monitored monthly. In addition to water quality and quantity monitoring, projects funded to date by the Springs Initiatives also include: recharge basin delineation, baseline biological surveys of spring fauna, semi-annual stream condition index (SCI) monitoring of the spring runs, establishing best management practices for land use in springs recharge areas, and providing public forums for education and outreach to improve the understanding of springs management. Preservation of Florida's springs requires protection of spring flows and water quality. Protection of these relies on the scientific data collected in the monitoring programs and studies funded by the Springs Initiatives.

Discharge from Fanning and Little Fanning Springs was first measured by the U.S. Geological Survey (USGS) in the 1930s, and more recently by the Suwannee River Water Management District (SRWMD). Sample discharge data for Fanning Spring are below.

<b>Data Collected By:</b>	<b>Date</b>	<b>Discharge (cfs)*</b>	
USGS	10/25/1930	109	
	3/14/1932	79	
	12/17/1942	137	
	5/1/1956	64	
	11/18/1960	111	
	3/27/1963	83	
	4/25/1972	98	
	1/18/1985	188	
	SRWMD	7/24/1997	77
		6/15/1998	109
6/17/1999		93	
10/16/2000		56	

\*Cubic feet per second

Regionally, the Floridan aquifer is near the surface and is unconfined. Thus, springs and seeps discharge into the river and augment its flow. During flood stage, however, the cycle may reverse and the springs may act as insurgence points. Fanning Spring discharges a relatively large volume of water and is classified as a first magnitude spring (Rosenau et al. 1977). Due to its high volume discharge, Fanning Spring rarely reverses its direction of flow. In recent drought years, however, "brown outs" have become more common, during which river water

flows up the spring run and into the spring. The primary means of aquifer recharge under normal conditions, however, continues to be groundwater percolation.

The groundwater recharge basin for Fanning Springs is not yet defined, however scientists from the SRWMD and the Florida Geological Society (FGS) are working to complete its delineation. The information gained in their studies will help land managers and policy makers protect the flow and quality of water issuing from the springs.

Nitrate levels in the outflow of Fanning and Little Fanning Springs are elevated, and are, in fact, the highest observed in a state park spring. In 2001, Fanning Springs discharged groundwater with nitrate nitrogen levels ( $4.0 \text{ mg L}^{-1}$ ) that exceeded background levels ( $0.05 \text{ mg L}^{-1}$ ) but did not exceed drinking water standards ( $10 \text{ mg L}^{-1}$ ). Unfortunately, nitrate levels at Fanning Spring have been recorded as elevated relative to background levels since the earliest USGS measurements in 1946 ( $2.0 \text{ mg L}^{-1}$ ). Subsequent records for 1956 ( $1.3 \text{ mg L}^{-1}$ ) and 1960 ( $1.4 \text{ mg L}^{-1}$ ) (Rosenau et al., 1977) indicate that as well. A rise in nitrate levels over the last 50 years is consistent with observations in other areas of the Suwannee watershed. The local municipality supplies potable water to the park.

In the middle Suwannee River watershed, the majority of the Floridan aquifer system is unconfined or semi-confined. The lack of a continuous clay layer allows water-soluble contaminants (such as nitrate nitrogen) to leach into the ground water of the Floridan aquifer system. The DEP Ground Water Quality Monitoring Program has identified the middle Suwannee River watershed as the largest area of elevated, groundwater nitrate-nitrogen concentrations in the state. As shown in the SRWMD's Surfacewater Quality and Biological Monitoring Annual Report (Hornsby and Mattson 1997), springs in the middle Suwannee River watershed have nitrate nitrogen concentrations ranging from  $1.2$  to  $19.2 \text{ mg L}^{-1}$ . Groundwater from this watershed is affecting the surface water quality of the Suwannee River via springs and seeps in the riverbed. The possible sources of nitrate nitrogen in groundwater include fertilizers, animal waste, and septic tanks. Currently, much of the lower basin of the Suwannee River is utilized for silvicultural or agricultural practices, although weekend and retirement home sites are increasing in numbers within the river corridor.

Contamination of groundwater within the recharge area of Fanning and Little Fanning Springs is a threat to the ecological health, and therefore the recreational potential, of the springs. Unfortunately, knowledge of the recharge area of the springs is incomplete. The conduits that transmit most of the spring's flow have not been formally explored or mapped. Direct, point source contamination of conduits is possible wherever sinkholes exist that may form connections between the conduits and the ground surface. Contamination of ground water is also possible through uncapped wells.

Threats to surface water quality from erosion and runoff within the park have also been a concern historically. Increased public use before management by the Division of Recreation and Parks had led to accelerated erosion of the slopes adjacent to and east of Fanning Spring, resulting in an unusually high accumulation of eroded materials in the spring. Recent park improvements (concrete ramps and steps, boardwalks, terracing) have largely mitigated the erosion problem. Portions of the shoreline in the swimming area, where erosion is still acute, are now roped off and public access is restricted. Within the spring vent itself, sand and other sediments have accumulated. The likely cause of this accumulation is, in large part, swimmers stirring up bottom sediments that later settle around the main vent. The sediments do not appear to be a serious threat to the hydrodynamics of the spring, however. Accumulation of some sediment in spring vents is a natural process. During periods of high water pressure, stronger spring flows push most of the accumulated sediments clear of the main vent.

Following four years of drought and record low spring flows, the main spring boil at Fanning Springs was dredged in 2002. The purpose of the dredge project was to remove eroded sediments from the main spring boil and restore original depth to the spring basin. After extensive archaeological survey to determine the depth of intact sediments, over 400 cubic yards of sand and debris were removed from the spring boil using state of the art suction dredge method. Submerged aquatic vegetation (SAV) was replanted along the side slopes of the boil. Additional sediment removal is needed in the swimming area, as shallow conditions there will likely cause more sediment to shift to the spring boil.

Historical narratives and photographic accounts indicate that in areas away from the vent, much of the bottom was once covered with eelgrass. Today, vegetation occurs in only a few small patches that cover less than ten percent of the spring run. As swimmers dislodge bottom sediments, they also dislodge aquatic plants. The suspended sediments cloud the water and decrease the intensity of sunlight reaching the remaining submerged plants. At Little Fanning, public access is restricted, and the aquatic vegetation is recovering from past impacts of propeller dredging and human activity. Portions of the bottoms of both springs are now covered with algae. Algal growth may have been present in the past, growing on submerged vegetation, but it may now be more abundant due to higher nutrient levels in the spring water.

Numerous small spring boils and seeps occur in vicinity of Fanning and Little Fanning Springs and provide a minor contribution to flow in the spring runs. The only other water body within the park is a portion of floodplain swamp that is adjacent to the Suwannee River south of Little Fanning Spring. Before purchase by the state, this area was impounded for the development of home sites along the river. Several small sinkholes also occur within the park. These sinkholes are shallow and do not normally contain standing water.

### **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.

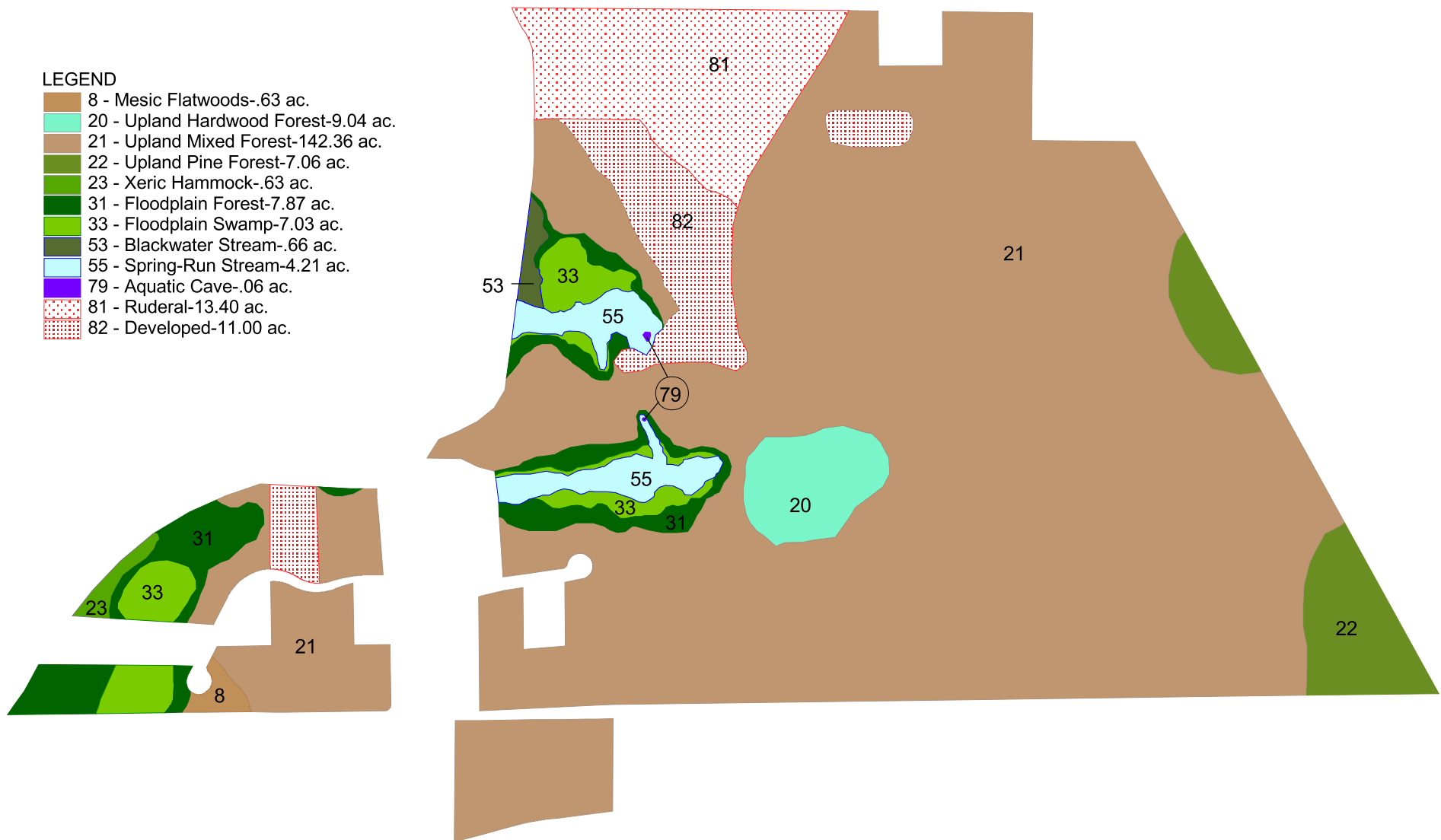
The park contains 11 distinct natural communities (see Natural Communities Map—only ten communities have been mapped) in addition to ruderal and developed areas. Park specific assessments of the existing natural communities are provided in the narrative below. A list of plants and animals occurring in the unit is contained in Addendum 4.

**Mesic flatwoods.** A small area of mesic flatwoods occurs in the southwestern portion of the park just upslope from the floodplain. This small remnant of flatwoods is contiguous with mesic flatwoods that occur on adjacent private lands to the south. Although the mesic flatwoods within the park are fire-suppressed, they retain many of the characteristic shrub species. If adjacent lands were acquired, restoration of these mesic flatwoods would be feasible.

**Sinkhole.** Several sinkholes are found within the upland hardwood and upland mixed forests of the park. Their number, size and spatial distribution make accurate mapping of this natural community infeasible, therefore, they are not included in the Natural Communities Map. The sinks are located along a roughly east-west trending line that extends from the eastern limits

**LEGEND**

- 8 - Mesic Flatwoods-.63 ac.
- 20 - Upland Hardwood Forest-9.04 ac.
- 21 - Upland Mixed Forest-142.36 ac.
- 22 - Upland Pine Forest-7.06 ac.
- 23 - Xeric Hammock-.63 ac.
- 31 - Floodplain Forest-7.87 ac.
- 33 - Floodplain Swamp-7.03 ac.
- 53 - Blackwater Stream-.66 ac.
- 55 - Spring-Run Stream-4.21 ac.
- 79 - Aquatic Cave-.06 ac.
- 81 - Ruderal-13.40 ac.
- 82 - Developed-11.00 ac.



**FANNING SPRINGS  
STATE PARK**



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

**NATURAL COMMUNITIES  
MAP**

of Little Fanning Spring. It is likely that these sinks reflect some underground fault or weakness in the underlying limestone. The sinkholes are in relatively good condition and are not impacted by foot traffic at this time.

**Upland hardwood forest.** A relatively small area of high quality upland hardwood forest occurs along the nature trail east of Little Fanning Spring in association with several sinkhole depressions. This area is dominated by mature southern magnolia and pignut hickory. The canopy is estimated to be at least 70-80 ft tall. Although American beech and shortleaf pine are lacking in this region of the state, this area most closely resembles the upland hardwood forests of the Florida Panhandle rather than the upland mixed forests more typical of north-central Florida (Johnson and Scafidi 1998). This area is unique within the park and should be afforded a high level of protection.

**Upland mixed forest.** Upland mixed forest is the predominant community at Fanning Springs. The acreage of upland mixed forest in the park today probably far exceeds the original extent. Even allowing for the fire shadow effect of the Suwannee River, it is unlikely that all of the areas currently included in the upland mixed forest category are the result of natural shielding from frequent fires. Human suppression of fire in fire-maintained natural communities undoubtedly also played a role. Long-term fire exclusion in upland pine forest and sandhills typically results in the gradual succession of those communities to upland mixed forest.

Other human endeavors may have also contributed to the evolution of upland mixed forest at the park, particularly past logging activities and possibly farming as well. Revegetation of fire-suppressed disturbed areas over an extended period would have favored pioneer species such as loblolly pine, water oak and laurel oak. Undoubtedly, however, some of the upland mixed forest areas are natural at Fanning Springs, particularly at lower elevations near the Suwannee River and in the areas near the springs and sinkholes.

**Upland pine forest.** This community type is often transitional between upland mixed forest and sandhill. It is prone to relatively rapid invasion by hardwoods when fires are suppressed. It is likely that this community was once much more extensive than it is now at Fanning Springs. What was not lost to agriculture probably has succeeded to upland mixed forest in the absence of a natural fire regime.

Longleaf pines are located along the eastern edge of the park where several areas of upland pine forest persist. These areas have the greatest potential for restoration of examples of upland pine forest despite a general lack of upland pine groundcover species. The Nature Coast Greenway, which runs along the east boundary of the park along an abandoned railroad right-of-way, contains several remnant patches of upland pine forest groundcover. As additional fieldwork locates remnant species in the park's uplands, additional areas of upland pine forest may be documented and targeted for restoration.

**Xeric hammock.** A small area of xeric hammock is located in the southwest portion of the park on the river levee. Although the community types found on levees of blackwater streams such as the Suwannee River often do not fit the FNAI classification scheme very well, the most appropriate classification for the wooded areas on the Fanning levees is xeric hammock. Impacts on this area include at least one raised drainfield and septic system, although no one ever actually operated the system.

**Floodplain forest.** Floodplain forest occurs within the park in association with the Suwannee River floodplain. Located upslope from adjacent floodplain swamps, the floodplain forests typically are relatively narrow and linear areas that parallel the Suwannee River and the spring-run streams within the park.

In most cases, the floodplain forest is in relatively good condition; however, the floodplain forest in the southwest portion of the park has been impacted by a housing development project (Fort Fanning Subdivision). In this area, causeways were built across the floodplain forest to access lots along the river levee. At least one of these causeways is located within the park. Although culverts allow drainage under most of the causeways, these culverts are not sufficient to prevent impoundment of water in the floodplain. Other impacts include the installation of several raised drainfields and septic systems, along with underground electrical service in the floodplain. Although these utilities were never actually used, they remain as disturbances within the floodplain and river levee.

Historical disturbances include logging and some limited extraction of limestone. An area in the floodplain north of Little Fanning Springs contains exposed limestone bedrock, numerous solution holes, rubble piles, and berms. Whether this area is completely natural or at least partially due to past human activity is unknown.

**Floodplain swamp.** The floodplain swamp is located in areas of the floodplain that are typically flooded most of the year. Floodplain swamp occurs in the southwest portion of the park adjacent to the spring-run streams and within the floodplain. The floodplain swamp has been impacted by the causeways and other development impacts described in the floodplain forest section above. Erosion and human impacts on the spring-run streams have undoubtedly impacted adjacent floodplain swamp as well.

**Blackwater stream.** The Suwannee River runs along the western boundary of the park. The lower Suwannee River is not currently known to have any major water quality problems. Nevertheless, constant monitoring of the river by appropriate agencies is necessary in order to detect any changes in that status. Nitrates are of particular concern since a significant increase in nitrate levels has been detected recently in stretches of the middle Suwannee River upstream from the park.

Hydrilla, a noxious exotic plant, is established in the Suwannee River. Fortunately, hydrilla does not flourish in the dark, tannin-stained waters as well as it does in clearer water. The hydrilla located in the river, however, is relatively difficult or impossible to eradicate completely, and it will always serve as a possible source of infection for the spring-run.

**Spring-run stream.** Two spring-run streams are located within the park, Fanning and Little Fanning Springs. These are fed by several large spring vents as well as by numerous smaller springs that emerge from the sides and bottom of the spring-run streams. The Hydrology section above describes the condition of the spring-run streams and the various factors that may negatively impact the streams.

**Aquatic cave.** Aquatic caves of unknown size and extent undoubtedly exist in association with the Floridan aquifer that supplies Fanning and Little Fanning Springs. Although these caves are not accessible by humans, they may provide habitat for troglobitic species of crustaceans such as those found within the Manatee Springs cave system to the south.

**Ruderal.** The main ruderal area within the park is located in the northwest portion of the park south of U.S. Highway 19/98. Originally, this area was probably upland pine forest, but it was cleared decades ago and is now dominated by pasture grasses. Some remnant upland pine forest species such as southern red oak remain, but restoration to the natural community would be very difficult. This area is used during special events for vendor spaces and portions may be developed in the future.

**Developed.** Developed areas within the park include the swimming facilities and boardwalks at Fanning Spring along with a parking area and associated recreation areas in the uplands

north of Fanning Spring. The park contains several buildings, including a park office south of Fanning Spring and two staff residences in the northeast portion of the park. Another residence, a currently unoccupied cabin, is located in the southwest portion of the park on a large cleared lot adjacent to the Suwannee River. A Florida Department of Transportation wayside park located at the northwest corner of the park is also managed by the Division.

### **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.

Perhaps the most significant designated species that occurs at Fanning Springs is the West Indian manatee. Manatees are regularly sighted in the Suwannee River and in the spring and spring run, especially during cold weather. Manatees avoid becoming hypothermic in the cold river waters by seeking refuge in the springs, which are often warmer and more constant in temperature.

Another designated species that occurs within the Suwannee River adjacent to Fanning Springs is the Gulf sturgeon, a federally threatened subspecies of the Atlantic sturgeon. At certain times of the year, sturgeons are readily apparent at the park, leaping into the air as they navigate the river.

Gopher tortoises also occur within the park. The tortoise and other species common to upland pine forest have suffered from fire suppression and community alterations within the park. Because of the loss of the open upland pine forest and its replacement with a closed canopy upland mixed forest, the remaining gopher tortoises at Fanning Springs have relocated to the ruderal area south of U.S. Highway 19/98. Several large and active gopher burrows occur in this open field and represent the only known significant population of gopher tortoises within the park. A gopher tortoise population also occurs along the Nature Coast State Trail that runs east of the park boundary, but unsuitable habitat separates the two populations.

### **Special Natural Features**

Fanning Spring is one of Florida's 33 first magnitude springs, with spring flows ranging from 26 cubic feet per second (cfs) when groundwater levels are low to 188 cfs when groundwater levels are high. Fanning Spring is approximately 200 feet wide and 350 feet long, with the main vent located in the southeast portion of the run. The funnel-shaped vent averages 30 feet wide, and 12 feet to more than 20 feet deep, depending on river stage. The water temperature is approximately 72 degrees Fahrenheit year round.

### **Cultural Resources**

Evaluating the condition of cultural resources is accomplished by using a three part evaluative scale, expressed as good, fair, 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.

The Florida Master Site File (FMSF) currently lists 10 sites within the park. These include upland archaeological sites, a historic bridge segment, an unmarked historic cemetery and one underwater archaeological site. In 2000, one multi-component site, Lv537, was documented within the park, subsuming six previously distinct sites (Lv35, Lv79, Lv505, Lv506, Lv511, Lv512 (Bland & Chance 2000). Recovered artifacts date from the early Archaic period (6,500 BC), the Deptford and Weeden Island-Related Periods (500 B.C. - A.D. 700), the Alachua period (A.D. 700 - 1565), and possibly much earlier, from the Paleoindian period (12,000 B.C. - 6,500 B.C.). Historic artifacts recovered likely date from the Seminole War Period (A.D. 1817 - 1842) (Weisman and Newman 1995, Wheeler 1997).

The sites subsumed into Lv537 include Lv35, and Lv79, which John Goggin initially recorded in the 1950s. The Big Fanning site, Lv505, is an apparent village midden, possibly associated with Lv79. Both Lv79 and Lv505 are located within Fanning Spring's day use and swimming area. The Log Cabin site, Lv506, is a lithic site within a twentieth century residential and recreational site (Weisman and Newman 1995). Other sites include Lv511, a mid 19th century site, possibly associated with nearby Fort Fanning; and Lv512, a prehistoric site. Both were recorded during the process of construction of staff residence areas (Wheeler 1997). Site Lv538, in the southwest section of the park northeast of Lv506 was recorded as a prehistoric mound of unknown cultural affiliation.

In addition to the multi-component site now known as Lv537, an underwater site, Lv113, locally considered a Civil War era shipwreck, is located in the Suwannee River near the mouth of Fanning Spring Run. It has not been sighted for several years (Stokes and Faught 1996). The McGrew Family Cemetery, Lv539, is believed to be located just north of Little Fanning Spring although its exact location and boundary is unidentified and so is not yet officially recorded as an archaeological site or historic cemetery. It consists of an unknown number of family graves, identified through bibliographic and interview research. Finally, a large object, which is a partial segment of an important Pratt-truss highway bridge, the Fanning Springs Bridge or Di77, was moved from its original location and is now located in a former Department of Transportation wayside park that is now managed as part of Fanning Springs.

Most cultural resources within Fanning Springs State Park are classified as fair because they were recorded during the course of work which altered portions of the site. Those sites have not changed noticeably since recording, however staff should visit and monitor them periodically. Sites formerly known as Lv505 and Lv79 are in poor condition. Their positions within areas of current and historic heavy use makes preservation of these resources problematic. Steps should be taken to salvage or extensively fill the areas in order to provide a physical buffer. The condition of Lv113, the alleged shipwreck, is unknown. The bridge segment, formerly part of Di77, is in good condition, and maintaining that level of object integrity will be a matter of adhering to existing Department of Transportation maintenance schedules. Since the boundaries of Lv539 (McGrew Family Cemetery) have not been identified, this site is in unknown condition.

The park has been subjected to a broad-scale cultural resource survey) which indicated that most of the park falls within an archaeological site (Lv537) (Bland & Chance 2000). Fanning Springs was a local recreation resource during the first years of the twentieth century, and subsurface evidence of recreation activity may exist. Additionally, the park contains a portion of a planned residential subdivision whose wetlands were not surveyed for cultural resources before site preparation. These areas may bear evidence of human activity, although important contextual information may have been altered or lost.

## 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.

A timber management analysis was not conducted for this park. The total acreage for the unit is below the 1,000-acre threshold established by Florida Statutes. Timber management will be reevaluated during the next revision of this management plan.

#### **Additional Considerations**

The Division has management authority over a 400-foot zone from the edge of mean high water along the Suwannee River where it passes through or alongside the park. Where emergent wetland vegetation exists, the zone extends waterward 400 feet beyond the vegetation. Within this zone, the park staff will enforce Division regulations. All wildlife within this zone, with the exception of fish, is protected from harvest, as stated in the Designated Species section, above. In addition, pre-cut timber harvesting (dead head logging) is prohibited within this zone.

Fanning Springs State Park contains two natural communities of special concern, the spring-run stream and the aquatic cave system. Both are relatively rare in the state, are sensitive to disturbance, and provide essential habitat for designated species. While it is relatively short in length, the spring run is increasingly important as a manatee refuge. Warm water refugia are critical habitats for manatees during cooler weather and are relatively rare in the northern parts of Florida. Fanning Springs is the second warm water refuge manatees encounter when swimming upriver from the mouth of the Suwannee at the Gulf of Mexico, some 34 miles away.

For this reason, unfettered manatee access to the spring run is imperative. The best way to insure that manatees continue to utilize the spring and spring run without disturbance is to exclude motorized vessels from the spring run seasonally—particularly during winter months when manatees are seeking warm water refugia. A docking facility on the river would allow traditional boat access to the park to continue via the new river boardwalk. This solution was successfully achieved at nearby Manatee Springs State Park. Restricting boat access in the spring run would also benefit the park by eliminating the constant reintroduction of the exotic plant hydrilla by boat propellers. Complete eradication of the plant in Fanning Springs is not achievable until boats are permanently restricted from the spring run.

Open water divers utilize Big Fanning Spring for training and recreational diving. Carrying capacity for the number of divers utilizing the spring at one time is set in the land use component of the unit management plan. Divers are not permitted to collect artifacts or harass wildlife while diving in the spring. Divers are encouraged to clean and check their equipment to ensure that it is free of any fragments of hydrilla before entering the spring.

#### **Management Needs and Problems**

1. Artificial soil disturbances have altered natural topography, hydrology, and vegetation.

- A. Areas between the boardwalk and the swimming area at Fanning Spring are still recovering from erosion caused by human activity.
  - B. Feral hogs are disturbing soils and possibly increasing nutrient input to portions of the run of Little Fanning Spring.
  - C. Swimmers continually dislodge aquatic plants in the swimming area.
  - D. Hydrilla and other exotic aquatic plants occur in the springs and spring runs.
  - E. Rocks, sandbags, and buried pipes near the Little Fanning Spring vent are evidence of past human disturbance.
  - F. Other signs of human disturbance are visible south of Little Fanning Spring, where causeways impound portions of the floodplain swamp, septic drain fields are established, and electric cables lie buried.
2. Water quality of the groundwater and spring discharge is degraded, and spring flow is threatened.
- A. Nitrate levels detected in the spring discharge are alarmingly high.
  - B. The extent of the groundwater recharge area is undefined, as are the possible sources of nitrates within that area.
  - C. Direct connections between the Floridan aquifer and the ground surface in the recharge area are unidentified.
  - D. Multiple agencies collect hydrological and biological data from Fanning Springs and its groundwater recharge basin. Data collected are disseminated sporadically and in differing formats.
3. Activities occurring outside the park boundary may impact resources within the park.
- A. Protection of spring flow and spring water quality requires a regional effort, and depends upon preventing excessive groundwater pumping and controlling nutrient and pollutant loading in the watershed.
  - B. Consistent coordination between the Division, local governments and permitting agencies is crucial to ensure park resources, including the springs, are adequately protected.
  - C. Public education and outreach are needed to promote springs protection, and the use of BMP's for groundwater protection, among landowners in the Fanning Springs recharge area.
4. Park development and recreational use may affect designated species.
- A. Manatees are known to enter the spring run of Fanning Spring and may especially seek this warm water refuge during winter cold snaps. Recreational swimmers, visitor access ramps, and boardwalks in the spring run may discourage manatees from entering the run, subjecting them to hypothermic conditions.
  - B. Motorized vessels are not compatible with manatees, particularly in such close quarters.
  - C. Several gopher tortoises currently reside in the ruderal area that is used by vendors during special events at the park. Current uses of the area, including maintenance of open space by mowing and some limited recreation, are not entirely incompatible with the gopher tortoise presence. The use of traditional sewage treatment systems in the park threatens both cultural resources and spring water quality.
  - D. Siting of septic drainfields often occurs with little knowledge of the locations of underground spring conduits, posing a potential threat to spring water quality.
5. Cultural resources are vulnerable to impacts from park development activities.
- A. Cultural resource changes and impacts need monitoring in accordance with the Florida Park Service Operations Procedures Manual.
  - B. Historic and archaeological sites require stabilization and cyclical monitoring and maintenance.

- C. A cemetery recently recorded within the park, Lv539, is not fully delineated.
- 6. Endangered cultural resources require preservation.
  - A. Archaeological site Lv505 (now a part of Lv537) requires buffer protection. Regular top-dressing of the soil surface, laying sod, or plugging turf grass on an annual schedule are appropriate protection measures, as is installation of erosion control devices.
- 7. The bridge segment, site Di77, requires cyclical maintenance.
  - A. The bridge segment requires maintenance painting.
  - B. Lead and other heavy metals may exist on the bridge segment, requiring special coating and cleaning techniques.
- 8. Activities occurring outside the park boundary may impact resources within the park.
  - A. Comprehensive plan amendments and land development regulations govern proposed land use changes on properties adjacent to the park.
  - B. The SRWMD permits activities within the watershed of the Suwannee River and Fanning Springs.
  - C. As a land management agency, the Division may comment to appropriate governing bodies and agencies regarding proposed land use changes or permit requests.
- 9. Upland fire-maintained natural communities require restoration, using periodic prescribed fire and other measures as needed.
- 10. Exotic invasive plants and animals occur within the park.
- 11. Unused, abandoned roads fragment natural areas within the park.

#### **Management Objectives**

The resources administered by the Division are divided into two principal categories: natural resources and cultural resources. The Division 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. Restore areas damaged by artificial soil disturbances, and take measures to prevent additional disturbances.
  - A. Continue to manage visitor access to the swimming area at Fanning Spring in order to protect areas recovering from erosion.
  - B. Continue to trap and remove feral hogs from the park.
  - C. Continue to protect native aquatic vegetation in Fanning Springs from degradation by swimmers in the swimming area.
  - D. Continue to cooperate with other agencies in efforts to control exotic aquatic weeds in the swimming area. Continue to replant native aquatic plants to stabilize sediments and provide habitat for fish and manatees.
  - E. Continue to remove rocks, sandbags, and buried pipes located near the Little Fanning Spring vent.
  - F. Restore semi-developed areas along the river south of Little Fanning Spring by removing fill materials and culverts in the causeways, fill material in the raised septic drain fields, and buried electric cables and electric service platforms.
- 2. Continue to monitor water quality and flow in the springs, and study the spring recharge area.
  - A. Continue to cooperate with agencies (SRWMD, USGS, FGS, and DEP) to monitor water quality in the springs and park wells and flow rates in the springs.
  - B. Continue to support research necessary to determine the extent of the groundwater recharge area for Fanning Springs.
  - C. Identify any additional direct connections between the Floridan aquifer and the

- ground surface in the recharge area.
- D. Maintain close coordination with agencies collecting information that may affect the management of Fanning Springs. Compile monitoring data in suitable formats and distribute to park staff, volunteers and the public for their use.
3. Monitor proposed activities outside the park for potential threats to park resources, and take action to protect park resources from degradation by activities occurring outside the park boundary.
    - A. Encourage and participate in the protection of spring flows and spring water quality on a regional level, placing an emphasis on preventing excessive groundwater pumping and controlling nutrient and pollutant loading in the watershed.
    - B. Coordinate with permitting agencies and local governments in the review of Environmental Resource Permitting, Water Use Permitting, Comprehensive plan amendments and land development regulations governing properties adjacent to the park, or in the Fanning Springs recharge area. Provide Division review and comments regarding proposed land use changes or permit requests that may affect park resources.
    - C. Participate in public outreach and education activities geared toward springs protection, and encourage landowners in the Fanning Springs recharge basin to implement BMP's that protect groundwater.
  4. Protect designated species and their habitat from disturbances.
    - A. Continue to monitor manatees in the spring area.
    - B. Protect the West Indian manatee from disturbance in the spring run to the greatest extent possible, particularly during the winter months. Design and implement a plan for seasonal closure of Fanning Springs run to all watercraft, providing alternate boat mooring and park access from the Suwannee River.
    - C. Prohibit swimming activity in the spring when manatees are present.
    - D. Protect the gopher tortoises located within the ruderal area of the park from development impacts and disturbance during special events.
  5. Consider alternative options to traditional sewage treatment within the park.
    - A. Pursue funding for state of the art, performance-based sewage treatment designs that minimize construction-related ground disturbance and reduce the volume of effluent nutrients released to the groundwater. Retrofit existing systems to meet the highest standards of nutrient reduction possible.
    - B. Determine the location of underground conduits associated with Fanning Springs.
    - C. Support efforts to establish a municipal, wastewater treatment facility in the City of Fanning Springs.
  6. Protect cultural resources from additional impacts from park development activities.
    - A. Develop a protection plan for known cultural resources that includes documentation of changes and impacts to cultural resources in accordance with the Florida Park Service Operations Procedures Manual.
    - B. Conduct project-specific archaeological surveys in areas slated for development, as required by DHR. Include funding for these surveys in budgets for development projects.
    - C. Develop and implement programs to stabilize historic and archaeological sites, and provide cyclical monitoring and maintenance.
    - D. Continue research about Lv539, the McGrew Family Cemetery, to determine its exact location and boundary.
  7. Buffer or salvage endangered cultural resources, such as Lv505 and Lv79.
    - A. Minimize future impacts to archaeological site Lv505 by regularly top-dressing the soil surface, laying sod, or plugging turf grass on an annual schedule, and by

installing erosion control devices.

8. Consult with DHR to design and implement a park procedure for accepting artifacts and other probable cultural materials recovered by visitors, to ensure the location is documented and information is forwarded to DHR for comment and recommendations.
9. Adopt a cyclical maintenance plan for Di77, the bridge segment.
  - A. Maintain the historic bridge element (formerly Di77), now located in the wayside park, so that it is free of vegetative contact and overhang.
  - B. Adapt the existing Department of Transportation (DOT) painting schedule to meet park requirements for maintaining the bridge segment.
  - C. Obtain from DOT a record of the paints and undercoats that were used on the bridge in an effort to identify possible lead or other heavy metals hazards. Modify coating and cleaning schedules accordingly.
10. Protect park resources from degradation caused by activities that may occur outside the park boundary.
  - A. Continually review comprehensive plan amendments and land development regulations that govern proposed changes in land use on properties adjacent to the park.
  - B. Monitor permits requested from the SRWMD for activities that may impact the watershed of the Suwannee River and Fanning Springs.
  - C. Formally present to appropriate governing bodies and agencies the Division's comments regarding proposed land use changes or permit requests.
11. Initiate restoration of upland fire-maintained natural communities through use of periodic prescribed fire, supplemented by other measures as needed.
12. Continue implementing exotic plant and animal removal plans for invasive species.
13. Restore natural vegetation on unused, abandoned roads within the park.

### **Management Measures for Natural Resources**

#### **Hydrology**

The hydrology of Fanning Springs involves both surface and ground waters. The park is an interface where deep groundwater becomes surface water that eventually mixes with a riverine system. Currently, there is regional concern about groundwater quality and elevated nitrate levels. Water quality monitoring will continue as funding permits. Enforcement of groundwater standards remains the responsibility of regulatory authorities, however. Staff will continue to monitor land use changes outside the park and will provide comments to public officials if any threats to Fanning Springs' groundwater resources become apparent.

Measures to protect water quality are also required within the park. The use of fertilizers adjacent to the springs has ceased. Erosion control plantings now use native species that are adapted to growth in natural soils with no added fertilizers. If fertilizers are used in other areas of the park, they will have slow release formulas that contain organic nitrogen.

Septic tanks designed to serve small numbers of visitors have failed in recent years, requiring new and larger systems. Location of these systems is problematic in terms of protecting both groundwater quality and cultural resources within the park. When using traditional septic drainfield design, the footprint of the new systems is large, requiring extensive soil disturbance that may overlap known cultural resource sites. Furthermore, since little is known about the groundwater conduit system associated with the spring, many of the new septic systems may be located in close proximity to the conduits, posing a threat to spring water quality. For these reasons, the Division must seek new methods to treat wastewater generated by the park. Until the City of Fanning Springs acquires a municipal wastewater treatment system, park designers should consider state of the art, performance-based sewage treatment systems for all future development in the park. These systems should be designed with the

goal of reducing effluent nutrients released to the groundwater. In the meantime, existing systems should be retrofitted with wastewater treatment components designed to do the same.

Management of surface waters in the park requires various measures of continuous erosion control to protect water quality and aquatic vegetation. These measures include continuing to manage visitor foot traffic by using designated walkways; planting, maintaining and protecting native vegetation along the spring banks and within the spring; and abandoning service roads in erosion sensitive areas. The alteration of low-lying terrain in the form of causeways may hinder natural sheet flow in some areas. Total removal of some causeways or installation of additional culverts will resolve these problems. Removal of evidence of past disturbances will help to maintain high aesthetic values within the park as well.

### **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.

Most of the fire-type natural communities within the park have disappeared due to human impacts and to succession to upland mixed forest. Several islands of longleaf pine and red oak remain, however, located within patches of upland pine forest in very poor condition. Application of prescribed fire to these areas is planned in an effort to increase habitat diversity and reduce fuel loads, and to help determine if future restoration of the upland pine forest community is feasible at these sites. Selective removal of offsite hardwoods such as laurel and water oaks will be used to complement and enhance prescribed fires in these areas. Both mechanical removal and selective herbiciding may be used on a case-by-case basis to speed the restoration of upland pine forest in vicinity of the longleaf pine islands. Restoration of fire-type natural communities within the park could potentially provide habitat for species, such as the gopher tortoise, which have been displaced by the succession of upland pine forest and sandhill to upland mixed forest.

### **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. The Division will consult and coordinate with appropriate federal, state and local agencies for management of designated species.

As mentioned in the Management Objectives section 3 above, the West Indian manatee must be protected from impacts due to park development and recreational use. Harassment of manatees will not be tolerated and park staff will continue to provide visitors with interpretive information to inform them about manatees and their protection. Staff will also keep a record of manatee use of the spring-runs and document interactions with park visitors. All incidents of manatee harassment by park visitors are recorded on a standard Incident Report as required for all incidents involving negative impacts on designated species.

Because Fanning Springs is an important warm water refuge for Manatees during cold weather, seasonal closure of the spring run to all watercraft is necessary to allow manatees unfettered access to the spring and spring run. Alternate boat access to the park can be provided during these times, as specified in the Land Use Component.

Gopher tortoises should also be protected from future development impacts. Unfortunately, the gopher tortoises are located in a ruderal area due to the lack of suitable natural habitat nearby. A long-term and intensive prescribed burning and planting program would be necessary to restore sufficient upland pine forest on site to support the current gopher tortoise population. As more experience is gained in restoring the small remnants of upland pine forest in the park, consideration will be given to the restoration of larger areas that could better support the gopher tortoise population.

As is the case with other large aquatic turtles and the gopher tortoise, the Suwannee cooter is often harvested for human consumption. Park staff should be particularly vigilant to protect these species from poaching within the park. The Suwannee cooter and other aquatic turtles require relatively open and sunny upland areas in which to lay their eggs to ensure proper incubation temperatures. Maintenance of open areas within the ruderal and developed areas should benefit these species. Restoration of the fire-maintained upland pine forest would also serve this purpose where that community type is close to the river.

### **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. Consequently, it is the strategy of the Division to remove exotic species from native natural communities.

Fortunately, the park does not have a significant exotic plant problem. Several invasive exotic plants do occur on site, however, and these should be removed as soon as possible. Of particular concern is the hydrilla in the spring and spring run, and Japanese climbing fern and Japanese honeysuckle. Other species of slightly lower priority for removal include mimosa and two aquatic species, water hyacinth and alligator weed. A complete list is found within Addendum 4. Ornamental plant species will not be used in landscaping in the developed areas if they are included on the Florida Exotic Pest Plant Council's list of non-native invasive species. Consideration should be given to replacing non-invasive exotics with native species in landscaped areas.

Feral hogs pose a significant management problem at Fanning Springs State Park. Even a single feral hog can cause a great deal of damage in floodplain areas. The park will continue a feral hog-trapping program in accordance with Division policy. Since the feral hog density may vary seasonally as the animals move about in the Suwannee River floodplain, trapping may only be efficient when feral hog densities are higher.

### **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.

At this time, there are no known problem species at Fanning Springs. The potential exists for conflicts between recreational swimmers and alligators, however. Park staff will follow Division guidelines when dealing with potential nuisance alligators.

### **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.

1. Conduct archaeological surveys in areas slated for development, as required by DHR. Include funding for these surveys in budgets for development projects.
2. Research and document the park's history including its history as a local and regional recreation resource, particularly during the twentieth century.
3. In cooperation with the Florida Bureau of Archaeological Research, develop and implement plans either to protectively buffer or to salvage endangered cultural resources such as Lv505 and Lv79.
4. In cooperation with DHR's Bureau of Archaeological Research, develop and adopt procedures for accepting artifacts and other probable cultural materials recovered and turned over by visitors, and adopt procedures for forwarding them to the Bureau with appropriate documentation.
5. Consult with the Department of Transportation and adopt a cyclical maintenance plan for Di77, the bridge segment.

### **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. A survey of the size and distribution of populations of designated species in the park, particularly the West Indian manatee, to provide useful information for park management decisions.
2. Additional floral and faunal surveys to provide management with important baseline information on species occurrences within the park.
3. Monitoring and investigation of the sources of increased nitrate levels in the springs.
4. Delineation of the groundwater recharge area for the springs.

#### **Cultural Resources**

1. Research into the twentieth century history of Fanning Springs.
2. Additional research for the delineation of Lv539, the McGrew Family Cemetery site.
3. Specific research about disappeared recreation buildings and structures to document those absent resources to the most complete extent possible, including drawings and perspective sketches.
4. Professional underwater archaeological research about Lv113 to supplement the 1996 survey.

### **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 6. Cost estimates for conducting priority management activities are based on the most cost effective methods and recommendations currently available (see Addendum 6).

### **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. The managing agency shall consider the findings and recommendations of the land management review team in finalizing the required update of its management plan.

Fanning Springs 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, 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 interaction with other facilities.

Fanning Springs State Park is located within Levy County, about 10 miles north of Chiefland in the north part of the state. The populations Levy and the adjacent Dixie and Gilchrist counties have grown 26 percent since 1990, and are projected to grow an additional 19 percent by 2010 (BEBR, University of Florida, 2000). As of 2000, 19 percent of residents in these counties were in the 0-14 age group, 39 percent in the 15-44 age group, 26 percent in the 45-64 age group, and 16 percent were aged 65 and over, which reflects the state average for these groupings (BEBR, University of Florida, 2000). Nearly 400,000 people reside within 50 miles of the park, which includes the cities of Fanning Springs, Chiefland, Cross City, and Gainesville. (Census, 2000).

Fanning Springs recorded 241,034 visitors in FY 2001-2002. This represents a net increase over the last five years. By Division estimates, these visitors contributed \$6 million in direct economic impact and the equivalent of 135 jobs to the local economy (Florida Department of Environmental Protection, 2002).

### **Existing Use of Adjacent Lands**

Fanning Springs is located in northwestern Levy County, on the east bank of the Suwannee River, within the city limits of Fanning Springs. Fort Fanning, a small residential area is adjacent to the southwestern portion of the park, along the Suwannee River. Mixed-use and commercial development exists north of the park, along U.S. Highway 19/98. Additional residential development parallels Old Fanning Road, on the park's eastern side.

Significant recreational opportunities exist along the Suwannee River corridor north and

south of the park. Public lands including the Nature Coast Trail State Park, Andrews Wildlife Management Area, Manatee Springs State Park, and the Lower Suwannee National Wildlife Refuge exist within a short driving distance of Fanning Springs. Camping, hiking, swimming, picnicking, bicycling and hunting are the main recreational pursuits on these public lands. On the west, the park is defined by the Suwannee River, which is heavily used for recreational boating, fishing and personal watercraft. The SRWMD owns several tracts of land along the river. With Fanning Springs acting as a hub for the Suwannee River Wilderness Trail, an increase in recreation on the river as well as in the park is expected.

The 200-foot right of way and four-lane U.S. Highway 19/98 is the largest adjacent land - use to the park. No major improvements to that highway are scheduled by the current DOT Five Year Plan.

### **Planned Use of Adjacent Lands**

Development on the land uses adjacent to Fanning Springs is generally planned to remain at the current level. Land use and zoning restrictions on the residential lots on the southern boundary will hold future development to densities that are not incompatible with the park's resources, although the acquisition of undeveloped lots is recommended to avoid additional development. Future residential development along Old Fanning Road to the east and south of the park is not expected to create appreciable impacts on the state park. The primary effects of adjacent land uses on the park derive from the heavy, and essentially unregulated, recreational uses of the river for boating, fishing, jet skiing, canoeing and kayaking. Large numbers of boats and personal watercraft enter the spring run from the river and active management is necessary to provide protection for the manatee populations within this region. Future increases in the recreational boating population should be expected.

Decisions on future modifications to U.S. Highway 19/98 will have implications on both Fanning Springs and the Nature Coast Trail State Park, therefore, extensive coordination between DEP and the DOT is needed to integrate the plans for the state park and the state trail.

### **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**

Over 174 of the park's 204 acres consist of natural landscapes typical of the Suwannee River floodplain, and historically significant lands, showing evidence of human usage over more than a thousand years. The upland natural communities of this park include upland hardwood forest, upland mixed forest, upland pine forest, and xeric hammock, which provide for resource based recreation and wildlife habitat. The park lies within reach of

nearly 400,000 Florida residents, and is easily accessible to tourists traveling on U.S. Highway 19/98.

### **Water Area**

The park is located along the Suwannee River, an Outstanding Florida Water and possibly Florida's most famous river. It provides a tremendous recreational and ecological resource to those people located within its watershed. Two springs, Fanning and Little Fanning, flow into the Suwannee from the park and provide almost a mile of spring run shoreline.

### **Shoreline**

Approximately half a mile of Suwannee River shoreline and almost a mile of spring run shoreline are contained within this park. Within the park's boundaries, the Suwannee River shoreline is mainly a series of bluffs, providing exceptional views. The shoreline near the springs however is significantly lower and provides for access to the river during the dryer seasons.

### **Significant Wildlife Habitat**

With Fanning Springs being located on the Suwannee River and containing two springs, significant wildlife habitat abounds. Over 11 natural communities exist within the boundaries of the state park and support a diversity of species, including several that are state or federally listed. Among the most significant listed species found at the park is the West Indian manatee. Gulf sturgeon, gopher tortoises, and the Suwannee cooter are also found within the park boundaries. All designated species will be protected under established Division management policies, and visitor impacts to listed species carefully monitored to identify potential impacts in advance.

### **Natural Features**

The two springs, Fanning Spring and Little Fanning Spring, are the most significant natural features in the park. Fanning Spring is a first magnitude spring, and discharges a relatively large volume of water. It has a funnel shaped vent, with a spring run approximately 100 feet wide, and 400 feet long. The spring pool is about 20 feet deep. The surrounding land has a relief of 10 - 15 feet with rather steep banks. Several smaller seepage springs are known to flow into the Fanning Spring run. Recreational activity, mainly swimming, is centered on this spring.

Little Fanning Spring is a second magnitude spring, located approximately 500 feet south of Fanning Spring. It flows in a southwesterly direction before emptying into the Suwannee River. According to local residents, the upper head pool of Little Fanning Spring was dredged, and the area around the spring boil collapsed and/or was dynamited following the death of a hardhat diver in 1947. Water levels and discharges in both springs fluctuate dramatically depending on precipitation and tidal activity. The springs and the Suwannee River are the primary visual resources of this park.

### **Archaeological and Historical Features**

Fanning Springs contains many important historical and archeological sites because of the first and second magnitude springs, and its boundary with the Suwannee River, a productive river and important transportation corridor. The FPS and DHR are working together to balance needed public improvements with the need to document, protect and interpret cultural resources.

According to the Florida Master Site File, there are nine upland archaeological sites and one underwater site. One of the terrestrial sites contains multiple pre-historic elements, the earliest of which is dated to 6,500 BP.

During the Seminole Wars (AD 1817-1842), a fort was erected in the settlement then

known as Palmetto. In 1835-36, the residents changed the name of the town and fort in honor of Colonel Alexander Wilder Campbell Fanning, the fort commander. Throughout the Civil War, the fort served as a Confederate outpost. Within the park boundaries there is one known historic site that dates to the Seminole Wars period, and one Civil War site (a sunken gun boat). In addition to the known archaeological sites, several disturbed locations require further study to complete the historical record of Fanning Springs, as noted in the Cultural Resources section.

A segment of the Fanning Springs Bridge, one of only two multiple, fixed span, truss bridges in Florida, is located in the riverside picnic area. This bridge, constructed in 1935, once spanned the Suwannee River. A plaque honoring Stephen Foster is attached to the steel structure.

### **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**

Fanning Springs has been occupied since pre-historic times. Since the late 19th and early 20th centuries, Fanning Springs has served as a recreation center for the local communities. During the first three decades of this century, a resort that included a motel, dance & skating pavilion, bowling alley, bathhouse and snack bar was developed around Fanning Spring. During the 1960s, the property was owned by Mr. Bell (of Taco Bell restaurant fame). It was during this period that the old buildings on the property were bulldozed. In the late 1960s and early 1970s, a commune “homesteaded” on the property. The Crossroads Church of Christ acquired the property in the mid-70s, intending to turn the property into a religious retreat. The Office of Greenways and Trails purchased the property in 1993. Ownership and management were transferred to the Division in 1997. DOT developed wayside park and its facilities along the banks of the Suwannee, as a rest area for drivers on U.S. Highway 19/98. Since 1997, the wayside park has been managed by the Division as an integral part of Fanning Springs.

#### **Recreational Uses**

Picnicking and swimming are the traditional recreational activities at Fanning Springs. A nature trail is currently provided east of the springs. Boating and personal watercraft uses are popular activities in the Suwannee River along the park shoreline. The Red Belly Days special event is a popular celebration at the park each year.

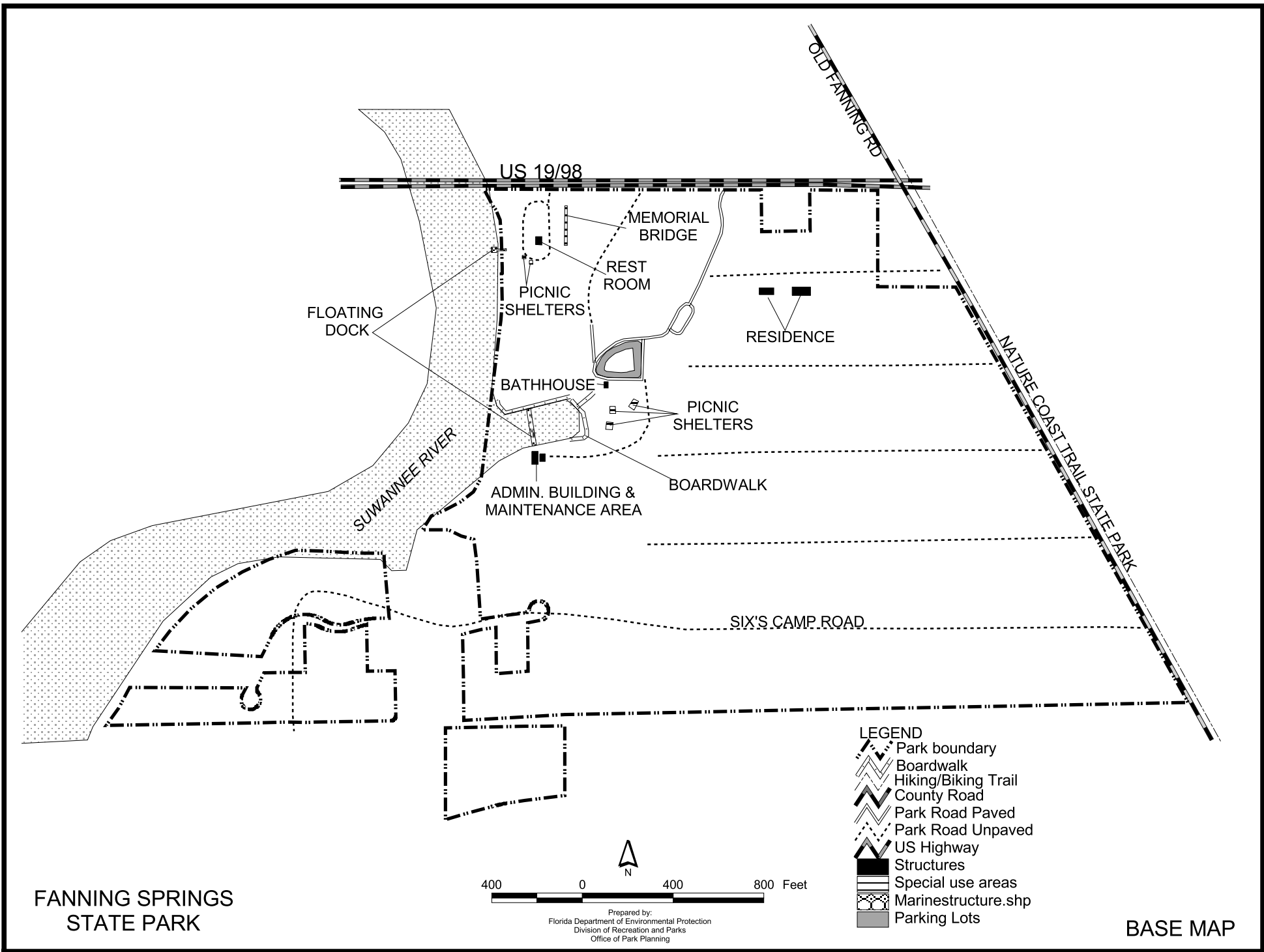
#### **Other Uses**

Six’s Camp Road, a stabilized road associated with the two Fort Fanning residences on the parks’ southwestern boundary, is the only permanent non-park use within the park boundaries. A log cabin is found in the southwestern part of the park. It is currently unused and in need of renovation or dismantling.

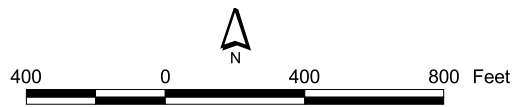
#### **Protected Zones**

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.



FANNING SPRINGS  
STATE PARK



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

- LEGEND**
- Park boundary
  - Boardwalk
  - Hiking/Biking Trail
  - County Road
  - Park Road Paved
  - Park Road Unpaved
  - US Highway
  - Structures
  - Special use areas
  - Marinestructure.shp
  - Parking Lots

BASE MAP

At Fanning Springs State Park, all wetland communities including the springs, the spring run, blackwater streams, sinkholes, and the upland pine communities have been designated as protected zones as delineated on the Natural Communities Map.

### **Existing Facilities**

#### **Recreation Facilities**

##### **Spring Swimming and Picnic Area**

Small picnic shelters (3)  
Picnic tables and grills (10)  
Playground  
Boardwalk and overlook  
Swimming Platform / Deck (3)  
Floating Dock (200; 65 ft.)

##### **Log Cabin**

##### **Trails**

Nature Trail (0.5 mi.)

##### **Wayside Picnic Area**

Small picnic shelters (2)  
Picnic tables and grills (5)  
Boat dock

#### **Support Facilities**

##### **Spring Swimming and Picnic Area**

Concession building  
Restrooms (2)  
Stabilized Parking (86 spaces)  
Administration building  
Storage sheds

##### **Ranger residences (2)**

##### **Service roads (2 mi.)**

##### **Wayside Picnic Area**

Restrooms (2)  
Parking (25 spaces)

### **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.

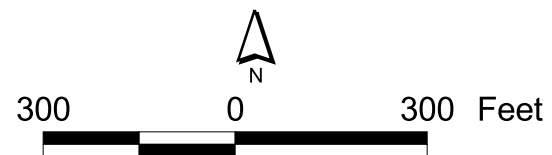
During the development of the unit management plan, the Division assesses potential impacts of proposed uses on the resources of the property. Uses that could result in unacceptable impacts are not included in the conceptual land use plan. Potential impacts are more thoroughly identified and assessed 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**

The Suwannee River Wilderness Trail initiative envisions a system of public and private recreation and visitor service sites along 160 miles of the Suwannee River making the region's outstanding outdoor recreation and heritage resources more available to the public.



**FANNING SPRINGS STATE PARK  
 CONCEPTUAL LAND USE PLAN**



Florida Department of Environmental Protection  
 Division of Recreation and Parks  
 Office of Park Planning  
 APPROVED PLAN

Recreational “hubs” will provide bases from which visitors may explore the surrounding areas by canoe, boat, bicycle, horseback, or on foot, or enjoy local parks and cultural sites for activities such as swimming, picnicking, fishing, birding and wildlife observation, nature study and interpretive programs. Seven primary hubs have been identified including: Stephen Foster Folk Culture Center State Park, the Spirit of the Suwannee Park (private), Suwannee River State Park, Blue Spring Park (Lafayette County), Branford, Fanning Springs State Park and the town of Fanning Springs, and the town of Suwannee. Each of these hubs will provide day use activities as well as overnight accommodations in vacation cabins, primitive or developed camping areas or at private sector lodgings. The implementation of this concept will provide single- and multi-day opportunities for a variety of nature and heritage based tours, whether outfitted and guided by local businesses, or organized by individual visitors. Partnerships between the Department of Environmental Protection, the Suwannee River Water Management District (SRWMD), local, county and city governments and the private sector will be keynotes of the Suwannee River Wilderness Trail (SRWT).

Division staff has approached planning for Fanning Springs within the context of a regional public lands framework, as provided by the Nature Coast Trail State Park, the lands managed by the SRWMD and the FFWCC, and the Suwannee River Wilderness Trail. This Nature Coast Trail State Park connects the town of Fanning Springs to Chiefland, Cross City and Trenton. The town of Fanning Springs and the state park are at the very center of the trail. Because of this configuration, the park is the trail’s recreational hub. The park, because of its geographic location as well as its resource base, will also act as a hub on the Suwannee River Wilderness Trail.

Multiple use trails, nature trails, picnicking, swimming, primitive camping, vacation cabin accommodations, canoeing, natural and cultural resource interpretation and environmental education are the activities and facilities proposed for Fanning Springs. Educational and interpretive tours by qualified staff and volunteers should be important components of the park’s programs.

### **Recreation Facilities**

**Cabins.** Up to 10 vacation cabins are proposed for Fanning Springs State Park. The cabins will accommodate up to 60 guests and will accommodate both people using the SRWT as well as other park visitors.

Fanning Springs is both a culturally and naturally significant park with archaeological features as well as two springs and sinkhole systems. Because of this, much thought and study has been conducted into the location of the vacation cabins. It has been determined that the best location for the cabins is in the northeastern part of the park in an area of upland mixed forest because it is both away from the spring and sinkhole systems and in an area where the fewest cultural resources have been uncovered. The Division consulted with the DHR on the location of the facilities to ensure that these facilities will be constructed in a sensitive manner and away from known cultural resource sites. DHR has given their approval contingent upon an archaeological resource study being conducted before construction.

A new road will need to be developed on a stabilized old roadbed between the park entrance station, through the cabin area and to the proposed maintenance area to allow for access to these facilities. Utilities will be brought in from Old Fanning Road along the old roadbed. An aerobic sewage system will be developed in an area that will minimize disturbance to the resources and the potential for nutrient input to groundwater. Mounded drainfield construction will minimize excavation and potential disturbance to cultural resources on the

site. Archaeological monitoring will be provided site preparation and any excavation work needed for the proposed construction projects.

**Spring head floating dock modifications.** The floating dock located in the Fanning Springs swimming area needs to be modified to allow manatees to access the spring head during periods of low water. Boating will be restricted in the spring run during the winter months to allow manatees a safe haven from boat traffic on the Suwannee.

**Canoe/kayak launch and floating dock facility.** The discontinued boat ramp (concrete has been removed) on the river north of the Big Fanning spring run needs to be reconstructed to serve a dual purpose as a canoe/kayak launch and floating dock facility. The floating dock should be of such a size that 6-8 boats can tie up to it. The launch/landing and floating dock will allow better access to and from the Suwannee River for the various individuals, groups and outfitters using the park as a hub for an experience on the SRWT and for visitors to the state park. The floating dock will serve park visitors year round and will, more specifically, allow boaters to tie up and have access to the spring when the spring run is closed during the winter months.

A floating dock is located upstream on the river at the Wayside Picnic Area, but is rarely used by boaters. Consideration should be given to relocating this floating dock to the downstream landing site proposed here. An overlook on the river should be retained at the Wayside Park to continue public access for viewing, but the ramp, pilings and floating structure would be relocated.

**Primitive campsites.** Four primitive campsites should be developed a short distance from the canoe/kayak launch/landing. These campsites should be left in a mostly-primitive condition and should consist of a designated tent area, a fire ring and a chemical toilet. Additional plantings should be added to the area to help designate the sites and provide screening from other park visitors. The campsites should be designated as a pack-in/pack-out area in terms of garbage removal and Leave No Trace ethics should be promoted using appropriate signage. The campsites will serve both SRWT users as well as those park visitors looking for a more primitive park experience.

**Interpretive exhibit upgrades.** Interpretation is a major focus of the Florida State Park system. Upgraded interpretive displays and exhibits are needed throughout the park including in the picnic area, around Fanning Springs, along hiking trails, in the proposed visitor center and elsewhere. Potential interpretive themes at Fanning Springs include prehistoric and historic use of the lands, the springs, underground cave systems, rare and endangered species, natural communities, and the SRWT. The success of the SRWT will depend on interpretation and education as well as the development of facilities and partnerships. An interpretive plan for the SRWT should be developed. It needs to outline themes that can be used at all of the state parks involved in the SRWT as well as themes specific to each park.

**Trails.** A paved shared use trail is proposed to connect the main use area of the park to the cabins and the Nature Coast Trail State Park. The connection from the Nature Coast State Trail to the park should be located along the southern right of way of U.S. Highway 19, connecting to the existing sidewalk along the park entrance road, if possible. A nature trail is also proposed to connect the shared use trail to an existing nature trail through the mixed uplands and through the karst environment surrounding Little Fanning Springs. Interpretive stations should be located at various locations along the trails.

**Picnic area expansion.** The current picnic area needs to be expanded. It is too small to comfortably fit the optimum number of users. The chain link fence surrounding the area

should be removed.

**Visitor Center.** A small visitor center is proposed to be located between the cabin area and the picnic area. It will provide a central resource in the park for environmental education programs for school groups and the public. The facility should include a classroom/meeting space, an audiovisual room, laboratory facilities, and an office to support the park's educational and interpretive programs. The Visitor Center could also provide much needed space for CSO sponsored events. No additional parking should be included in the construction of this facility.

**Covered stage.** A covered stage is proposed to accommodate the many musical activities and special events in the town of Fanning Springs. It should be located in the northwestern area of the park, south of the wayside picnic area. The design of this facility should be flexible and allow for a number of activities including music performances and plays, wedding and other small social events. In addition to the use of the wayside picnic area loop road, about 200 (grass) spaces will be available, during events only, along the park boundary and U.S. Highway 19/98.

### **Support Facilities**

**Swim area bathhouse replacement/renovation.** The swimming area bathhouse needs replacement or renovation to bring it up to current Division standards.

**Wayside picnic area renovations.** One of the restrooms in the wayside park should be removed.

**Maintenance area relocation and expansion.** The maintenance area needs to be relocated so that it is outside the main use area and convenient to the cabins. A three bay equipment shelter and shop building should be constructed in addition to a flammable/small storage building. The current storage building should be relocated to this area and an additional storage building should be added as well as two RV sites to help accommodate cabin hosts or park volunteers. The existing office building located above the headspring should remain in its current location and should act as a facility for meetings. The septic system serving this building should be upgraded. A service road will need to connect this facility to the rest of the park. It is recommended that the road be built on a stabilized old roadbed and that utilities for this facility as well as the cabins be brought in from Old Fanning Road.

### **Facilities Development**

Preliminary cost estimates for the following list of proposed facilities are provided in Addendum 6. 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 (10)  
Springhead floating dock modifications  
Canoe/kayak launch and floating dock  
Wayside floating dock repairs  
Primitive campsites (4)  
Trails  
Picnic area expansion  
Interpretive exhibit upgrades  
Visitor center  
Covered stage

#### **Support Facilities**

Swim area bathhouse  
replacement/renovations  
Wayside picnic area renovations  
Maintenance area relocation and expansion

### 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.

**Table 1**  
**Existing Use And Optimum Carrying Capacity**

Activity/Facility	Existing Capacity		Proposed Additional Capacity		Estimated Optimum Capacity	
	One Time	Daily	One Time	Daily	One Time	Daily
<b>Springs Swimming/ Picnic Area</b>	450	900			450	900
<b>Springs Diving</b>	15	30			15	30
<b>Cabins</b>			60	60	60	60
<b>Boating</b>						
Canoe/Kayak			20	40	20	40
Boats	60	60			60	60
<b>Primitive Camping</b>			8	8	8	8
<b>Visitor Center</b>			40	160	40	160
<b>Trails</b>						
Nature	5	20	10	40	15	60
<b>TOTAL</b>	<b>530</b>	<b>1,010</b>	<b>138</b>	<b>308</b>	<b>668</b>	<b>1,318</b>

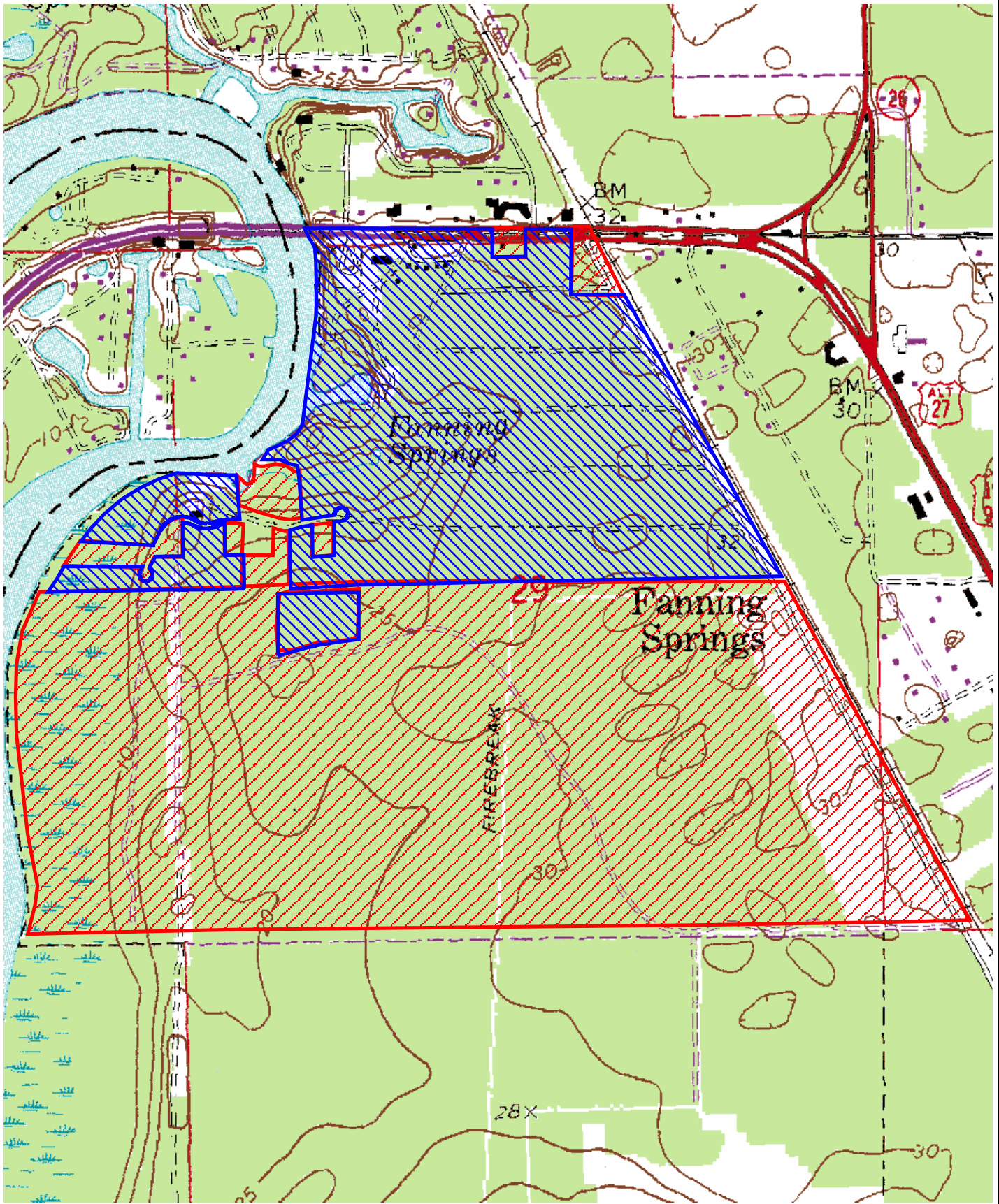
### Optimum Boundary

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.

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

The optimum boundary map reflects lands identified for direct management by the Division as part of the park. These parcels may include public as well as privately owned lands that improve the continuity of existing park lands, provide additional natural and cultural resource protection, and/or allow for future expansion of recreational activities. At this time, no lands are considered surplus to the needs of the park.



The optimum boundary for Fanning Springs includes approximately 410 acres. Three parcels, totaling approximately seven acres, are the lots located between the main body of the park and U.S. Highway 19/98. South of the park boundary are approximately 400 acres of the First Magnitude Springs CARL project. Purchase of the undeveloped lots in this area is recommended. These acquisitions would "square off" the park boundary, connect the state recreation area with Andrews Wildlife Management Area and enhance the park's resource base, allowing for future expansion of recreational.



**FANNING SPRINGS  
STATE PARK**



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

- LEGEND**
-  Park boundary
  -  Optimum boundary

**OPTIMUM BOUNDARY  
MAP**

**Addendum 1--Acquisition History. Advisory Group List and Staff Report**

## Fanning Springs State Park Acquisition History

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### Sequence of Acquisition

On December 3, 1993, the Board of Trustees of the Internal Improvement Trust Fund (Trustees) obtained title to the property which later became Fanning Springs State Park. The property was purchased with funds from the P2000/CARL program.

Initially the Trustees leased Fanning Springs State Park to the Department of Environmental Protection, Office of Greenways and Trails (OGT), but OGT surrendered and released its leasehold interest to the property on March 11, 1997. Subsequently, on March 10, 1997, the Trustees conveyed management authority of the property to the Department of Environmental Protection, Division of Recreation and Parks under lease No. 4142.

### Title Interest

The Trustees hold fee simple title to Fanning Springs State Park, and the Division manages the property under lease No. 4142. The lease is for a period of fifty (50) years, and it will expire on March 9, 2047.

### Special Conditions on Use

Fanning Springs State Park is designated single-use to provide resource-based public outdoor recreation and other related uses. 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 will be discouraged. In accordance with the Divisions's lease agreement with the Trustees, the property must be utilized for public outdoor recreation and related purposes.

### Outstanding Reservations

Following is a listing of outstanding rights, reservations, and encumbrances which apply to Fanning Springs State Park.

<b>Instrument:</b>	Declaration Of Covenants, Conditions, And Restrictions Of Little Fanning
<b>Instrument Holder:</b>	Fort Fanning, Inc.
<b>Beginning Date :</b>	January 18, 1982
<b>Ending Date :</b>	There is no specific ending date given.
<b>Outstanding Rights, Uses, Etc.:</b>	The declarant (fort fanning, inc. ) for itself, its representatives, successors, grantees and assigns specifically reserves and retains an express easement to all common areas for ingress, egress and use thereof, as well as an express, non-exclusive easement for ingress and egress over and upon all roads and roadways as shown on the recorded plat of little fanning, together with the right to tie into for the benefit of any other property, all designated roads, easements, and utilities located within little fanning including, but not limited to, all streets, roadways, easements, water lines, sewer lines, utility lines, gas lines, cable tv lines, and security systems lines. Moreover, easements are reserved through the property as may be required for utility service in order to serve little fanning adequately and to adequately serve any recreational facilities to be constructed and established on the property and lands adjacent thereto.

**Fanning Springs State Park  
DEP Advisory Group List**

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The Honorable Carol J. McQueen  
Mayor  
City of Fanning Springs  
17651 Northwest 90th Court  
Fanning Springs, Florida 32693

The Honorable Danny Stevens  
Chair  
Levy County Board of County  
Commissioners  
355 South Court Street  
Bronson, Florida 32621

Sally Lieb, Manager  
Suwannee Basin GEOpark  
11650 Northwest 115th Street  
Chiefland, Florida 32626

Desiree Mills, Chair  
Levy Soil and Water Conservation  
District  
625 North Hathaway Avenue  
Bronson, Florida 32621

Don West, Center Manager  
Florida Division of Forestry  
The Waccasassa Forestry Center  
1600 Northeast 23rd Avenue  
Gainesville, Florida 32609

Neal Eichholze, Biologist  
Florida Fish and Wildlife Conservation  
Commission  
663 Plantation Road  
Perry, Florida 32347

Matt Pollack, Regional Biologist  
Florida Fish and Wildlife Conservation  
Commission  
Post Office Box 177  
Olustee, Florida 32072

Mr. Charlie Houder  
Suwannee River Water Management  
District  
9225 County Road 49  
Live Oak, Florida 32060

Cheryl Nekola, President  
Fanning Springs Chamber of Commerce  
17871 Northwest U.S. Highway 19  
Fanning Springs, Florida 32693

Svenn Lindsfold, President  
Save Our Suwannee, Inc.  
6400 Northwest 55<sup>th</sup> Street  
Bell, Florida 32619

Mr. George Griffin  
Suwannee Audubon Society  
400 Madison Avenue  
Old Town, Florida 32680-0222

Mr. John Webb  
Suwannee Exhibitions  
614 Southwest Ivy Park Drive  
Branford, Florida 32008

Ms. Becky Sanford  
Suwannee River Cruisers Boat Club  
Post Office Box 1222  
Old Town, Florida 32680

Ms. Shelby Hollingsworth  
Post Office Box 1395  
Chiefland, Florida 32644

Danielle Judd, Secretary  
Friends of Fanning Springs State Park  
Post Office Box 1886  
Trenton, Florida 32693

**Fanning Springs State Park  
DEP Advisory Group Staff Report**

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The Advisory Group appointed to review the proposed land management plan for Fanning Springs State Park was held on Tuesday, February 4, 2003, at the state park.. Mayor McQueen was represented by Ms. Barden, Mr. West was represented by Mr. Ash, Mr. Pollack was represented by Mr. Roof and Mr. Houder was represented by Mr. Demott. Commissioner Parker, Ms. Mills, Mr. Griffin, Mr. Webb and Ms. Judd did not attend. Florida Park Service staff attending included Steve Davenport, K.C. Bloom, Mickey Bryant, Craig Parenteau, Susie Hetrick and Lew Scruggs.

Ms. Bloom began the meeting by explaining the purpose of the advisory group and reviewing the meeting agenda. She and Mr. Scruggs also provided a brief overview of the Division's planning process and summarized public comments received during the previous evening's public workshop. She then asked each member of the advisory group to express his or her comments on the plan.

**Summary Of Advisory Group Comments**

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**Ms. Barden** asked what the park service's intention is regarding seasonal closure of the spring run to boaters for manatee protection. **Mr. Ash** suggested that a stronger statement is needed if the intention is to implement seasonal closures. **Mr. Lindskold** stated that the Suwannee River is being assaulted by too many users, especially motorized watercraft users who often do not behave safely for the natural resources or for other people. He noted that the entire system, river and shorelines, is in need of closer attention and more protection. He stated support for seasonal closure of the spring run at Fanning Springs, and recommended that managed areas such as park entrances should receive more attention, thereby heightening awareness of the larger stewardship needs on the river. **Ms. Barden** asked what length of time was anticipated as being necessary to close the run. Staff responded that the recommendation is to commence with the seasonal closure as soon as an alternate docking facility can be provided so that boaters can enter the park during those times. The spring run will probably be closed from December 1 to March 31 each year. However, flexibility should be allowed so that management can respond to fall and spring temperatures as they occur. Suggested revisions to the language of the management plan are provided under Staff Recommendations below.

**Ms. Nekola** discussed the proposed bandshell facility. She suggested that the bandshell could be designed as a multi-purpose building that would accommodate weddings and other events. She stated agreement with the recommendation for seasonal closure of the spring run. She suggested that cabins at the park should include bunkhouse-type buildings to accommodate youth groups, trail groups and others who don't require the amenities of the proposed vacation cabins.

**Mr. Lindskold** asked if the bandshell could be provided in the development plan for the City's Fort Fanning park project, rather than in the state park. Mr. Lindskold urged the park service to pursue mapping projects to locate the caves and conduits that supply the springs and to make appropriate efforts to address nutrient loads that are increasing in the spring discharge. He pointed out that septic tanks are known to be contributors to elevated nitrate levels of the springs and river. He also urged park staff to protect manatees in the mixing zone where the spring run joins the river, and to address problems with excessive boat speeds adjacent to the state park.

Mr. Lindskold stated that his organization is vehemently opposed to the Suwannee River Wilderness Trail project. He said that the land management agencies should concentrate on natural and cultural resource management and protection, not on far-ranging development plans for new facilities. He stated that the private sector should provide services like lodging and that state funds should not be spent to compete with those providers, but should be spent for natural communities restoration projects along the river. He offered the opinion that the term "wilderness" applied to a corridor that is not wilderness is an insult. Mr. Lindskold recommended eliminating the vacation cabins proposed in the draft management plan for the state park.

**Ms. Sanford** said that she understands the need for manatee protection, and agrees with the recommendation for seasonal closure of the spring run to all watercraft. As a representative of a recreational boating group, she stated that boaters want assurance that they will be able to enter the

**Fanning Springs State Park  
DEP Advisory Group Staff Report**

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park from the river during the closure periods.

Ms. Sanford said that she is fearful of economic growth plans that may change the character of the Suwannee River corridor, and has some concerns that the Suzanne River Wilderness Trail project may accelerate those types of changes. She said that the \$100,000 cost of the proposed cabins is too expensive for state park development. She agreed that bunkhouse-style cabins would be more appropriate to the park setting.

**Mr. Ash** noted that the task of the Florida Park Service is a balancing act between the needs for resource protection and the needs for public access to park lands. He commended the park service on the efforts of the draft management plan in those regards. He noted that forestry practices can often further natural community restoration goals, and should be tools for park service managers, where appropriate.

**Ms. Barden** said that she had no specific statements to relay from Mayor McQueen. She noted that the draft management plan seemed to be well done. She asked if there were any plans for new improvements to the aquatic area of the park. Staff responded that, with the exception of modifying the floating dock for better low-water access for manatees, no further improvements to the swimming area are proposed.

**Mr. Roof** provided no specific comments. He noted that the park's species list needs to be expanded, and management measures for wildlife enhancement might be appropriate in the future.

**Mr. Hollingsworth** said that Little Fanning Spring run formerly supported a good stand of watercress, and was much more attractive than it is now. He noted that the park service removed a dam from the spring run without discussions with adjacent residents, and suggested consideration of replacing the water control structure to impound a minimal level of water in the run during dry periods.

**Mr. Demott** stated that the Suwannee River Water Management District supports the recreational use concepts that include the Suwannee River Wilderness Trail project. He observed that the District, like the park service, is faced with a balancing act in managing public lands for conservation and recreation. He noted the large interest that the District has in protecting and improving water quality and addressing the problems of elevated nutrient levels in the river's watershed. He mentioned district monitoring programs, the local agricultural best management practices initiative, and District efforts to assist local communities in developing wastewater treatment systems. He commended the park service on their efforts to upgrade the sewage disposal and stormwater management systems in the state park.

**Staff Recommendation**

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A number of excellent suggestions were provided by the Advisory Group members who attended the meeting, and appropriate revisions have been made to the draft plan. The plan will be clarified regarding the intent to close the spring run to all watercraft, seasonally, to provide an adequate refuge for manatees. Revised text to address these changes is provided below.

The comments regarding opposition to the Suwannee River Wilderness Trail (SRWT), the seemingly high expense of proposed cabins at Fanning Springs State Park and the suggestion that bunkhouse cabins rather than vacation cabins would be more appropriate to the state park are included in this report as part of the public record of our meeting. As discussed at the meeting, the park management plan is separate from the joint initiative by the Department of Environmental Protection and the Suwannee River Water Management District and local city and county governments and individuals, known as the Suwannee River Wilderness Trail project, which calls for overnight accommodations at the state park as one of the recreational Hubs of the trail system. The cost of construction of high-quality, low maintenance facilities suitable for state park uses, and universally accessible for all users was explained at the Advisory Group meeting. A follow-up to the idea to provide a different form of cabin accommodations is discussed in the staff recommendation below.

**Fanning Springs State Park  
DEP Advisory Group Staff Report**

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As well as being a component of Suwannee River Wilderness Trail, the proposed cabins are an important component of the plan for Fanning Springs State Park. We believe that river visitors, recreational users visiting the Nature Coast State Trail and traditional park visitors who arrive via US 19 will find these accommodations at the park extremely convenient and enjoyable. As part of the river trail initiative, the type of cabins described in the draft management plan are needed to provide a consistent level of accommodation at this hub of the regional recreation network. It is likely that five cabins will be built at the park initially. The form of additional cabins to be constructed in the future, whether vacation-style or bunkhouse-style, should be decided after the initial phase has been operated for some time, so that evaluations of market demand and preferences can be included in the decision making process.

Staff recommends approval of the draft management plan for Fanning Springs State Park, as presented, with the following changes. Attached is a revised Conceptual Land Use Plan that illustrates the proposed location of additional docking facilities, and locates the proposed covered stage (formerly Bandshell).

### **INTRODUCTION**

3. Protect designated species and their habitat from disturbances.
  - A. Continue to monitor manatees in the spring area.
  - B. Protect the West Indian manatee from disturbance in the spring run to the greatest extent possible, particularly during the winter months. Design and implement a plan for seasonal closure of Fanning Springs run to all watercraft, providing alternate boat mooring and park access from the Suwannee River.
  - C. Prohibit swimming activity in the spring when manatees are present.
  - D. Protect the gopher tortoises located within the ruderal area of the park from development impacts and disturbance during special events.

### **RESOURCE MANAGEMENT COMPONENT**

#### **Management Measures for Natural Resources**

#### **Designated Species Protection**

As mentioned in the Management Objectives section 3 above, the West Indian manatee must be protected from impacts due to park development and recreational use. Harassment of manatees will not be tolerated and park staff will continue to provide visitors with interpretive information to inform them about manatees and their protection. Staff will also keep a record of manatee use of the spring-runs and document interactions with park visitors. All incidents of manatee harassment by park visitors are recorded on a standard Incident Report as required for all incidents involving negative impacts on designated species.

Because Fanning Springs is an important warm water refuge for Manatees during cold weather, seasonal closure of the spring run to all watercraft is necessary to allow manatees unfettered access to the spring and spring run. Alternate boat access to the park can be provided during these times, as specified in the Land Use Component.

### **CONCEPTUAL LAND USE PLAN**

#### **Potential Uses and Proposed Facilities**

**Canoe/kayak launch and floating dock facility.** The discontinued boat ramp (concrete has been removed) on the river north of the Big Fanning Spring run needs to be reconstructed to serve a dual purpose as a canoe/kayak launch and floating dock facility. The floating dock should be of such a size that 6-8 boats can tie up to it. The launch/landing and floating dock will allow better access to and from the Suwannee River for the various individuals, groups and outfitters using the park as a hub for an experience on the SRWT and for visitors to the state park. The floating dock will serve park visitors year round and will, more specifically, allow boaters to tie up and have access to the spring when the spring run is closed during the winter months for manatee protection.

**Fanning Springs State Park  
DEP Advisory Group Staff Report**

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**[Please note: the ideas presented in the following paragraph were not discussed at the Advisory Group meeting. Staff requests group members to respond by telephone, in writing or via e-mail if they disagree with this idea, or would like to discuss pertinent questions or comments.]**

A floating dock is located upstream on the river at the Wayside Picnic Area, but is rarely used by boaters. Consideration should be given to relocating this floating dock to the downstream landing site proposed here. An overlook on the river should be retained at the Wayside Park to continue public access for viewing, but the ramp, pilings and floating structure would be relocated.

**Covered Stage.** A covered stage is proposed to accommodate the many musical activities and special events in the town of Fanning Springs. It should be located in the northwestern area of the park, south of the wayside picnic area. The design of this facility should be flexible and allow for a number of activities including music performances and plays, weddings and other small social events. In addition to the use of the wayside picnic area loop road, about 200 (grass) spaces will be available, during events only, along the park boundary and U.S. Highway 19/98.

**Addendum 2--References Cited**

**Fanning Springs State Park  
References Cited**

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**Addendum 3--Soils Descriptions**

## Fanning Springs State Park Soils Descriptions

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**(3) Orsino fine sand, 0 to 8 percent slopes** – This moderately well-drained, very deep, nearly level to gently rolling soil is on dunes and ridges. Individual areas are generally circular or elongated and range from 2 to nearly 750 acres in size.

Typically, the surface layer is gray fine sand about 4 inches thick. The subsurface layer is fine sand. It is very pale brown to a depth of about 8 inches and white to a depth of 13 inches. The subsoil is fine sand. It is brownish yellow to a depth of 48 inches, light yellowish brown to a depth of 58 inches, and brownish yellow to a depth of 70 inches. The underlying material to a depth of 80 inches or more is white fine sand.

On 95 percent of the acreage mapped as Orsino fine sand, 0 to 8 percent slopes, Orsino and similar soils make up about 88 to 100 percent of the mapped areas. Dissimilar soils make up less than about 12 percent. On 5 percent of the acreage, the dissimilar soils make up more than 12 percent of the mapped areas.

Included in mapping are soils that are similar to the Orsino soil but do not have a leached subsurface layer; have a surface layer that is made up dominantly of shell fragments; have limestone bedrock below a depth of 60 inches; have a dark, organically stained subsoil; have a seasonal high water table at a depth of 20 to 42 inches; or do not have a seasonal high water table within a depth of 60 inches.

Dissimilar soils that are included with the Orsino soil in mapping occur as small areas of Immokalee, Myakka, Otela, Placid, Pompano, Popash, Samsula, Smyrna, and Sparr soils and soils that have limestone bedrock within a depth of 60 inches. Placid, Popash, and Samsula soils are in depressions. Immokalee, Myakka, Pompano, Smyrna, and Sparr soils are in the slightly lower landscape positions. Otela soils are in the positions on the landscape similar to those of the Orsino soil. They have a loamy subsoil at a depth of 40 to 80 inches.

In most years, the seasonal high water table is at a depth of 48 to 60 inches in the Orsino soils for 1 to 6 months. Permeability is very rapid. Available water capacity is low.

**(12) Otela-Candler complex, 1 to 5 percent slopes** - This map unit consists of a moderately well drained Otela soil and an excessively drained Candler soil. These very deep, nearly level to gently sloping soils are on karst uplands. Individual areas are generally irregular in shape and range from 5 to more than 10,000 acres in size.

Typically, the surface layer of the Otela soil is dark grayish brown fine sand about 8 inches thick. The subsurface layer is fine sand. It is brown to a depth of about 21 inches, very pale brown to a depth of 32 inches, and white to a depth of 50 inches. Below this is a mixed subsurface layer and subsoil that is brownish yellow fine sandy loam to a depth of about 61 inches, brownish yellow sandy clay loam to a depth of 68 inches, and light gray sandy clay loam to a depth of 80 inches or more.

Typically, the surface layer of the Candler soil is grayish brown fine sand about 7 inches thick. The subsurface layer is grayish brown fine sand to a depth of about 14 inches, pale brown fine sand to a depth of 30 inches, and very pale brown fine sand to a depth of 75 inches. Below this to a depth of 80 inches or more is a mixed subsurface layer and subsoil of white fine sand that has common thin, horizontal lenses of yellowish brown loamy fine sand.

Generally, the mapped areas average about 56 percent Otela and similar soils and 33 percent Candler and similar soils. The components of this map unit are so intermingled that it is not practical to map them separately at the scale used in mapping. However, the proportions of the Otela and Candler soils and the similar soils are fairly consistent in most mapped areas.

Included in mapping are soils that are similar to the Otela soil but have a dark surface layer that is more than 10 inches thick, have bedrock at a depth of 50 to 60 inches, have a seasonal high water

## Fanning Springs State Park Soils Descriptions

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table at a depth of 20 to 42 inches, or do not have a seasonal high water table within a depth of 72 inches. Also included are soils that are similar to the Candler soil but have more than 5 percent silt and clay between depths of 10 and 40 inches, have a dark surface layer that is more than 8 inches thick, do not have sandy or loamy lenses within a depth of 80 inches, or have a seasonal high water table at a depth of 40 to 72 inches.

Dissimilar soils that are included with the Otela and Candler soils in mapping occur as small areas of Adamsville, Bonneau, Bushnell, Hague, Jonesville, Moriah, Placid, Popash, and Shadeville soils. Bonneau, Hague, Jonesville, and Shadeville soils are in positions on the landscape similar to those of the Otela and Candler soils. Adamsville, Bushnell, and Moriah soils are in the lower landscape positions. Placid and Popash soils are in depressions. Bonneau, Hague, Jonesville, and Shadeville soils have a loamy subsoil within a depth of 40 inches. Jonesville soils have a limestone bedrock within a depth of 40 inches.

In most years the seasonal high water table is perched at a depth of 48 to 72 inches in the Otela soil for 1 to 4 months. It is below a depth of 72 inches in the Candler soil throughout the year. Permeability is slow or moderately slow in the Otela soil and rapid in the Candler soil. Available water capacity is low in the Otela soil and very low in the Candler soil.

**(15) Holopaw-Pineda complex, frequently flooded** – These poorly drained, very deep, nearly level soils are on flood plains along rivers and creeks. They are frequently flooded. Individual areas are generally elongated and range from 3 to nearly 300 acres in size. Slopes range from 0 to 2 percent.

Typically, the surface layer of the Holopaw soil is very dark gray fine sand about 3 inches thick. The subsurface layer is light brownish gray fine sand to a depth of about 50 inches and pale brown fine sand to depth of 60 inches. The subsoil is gray sandy clay loam to a depth of 80 inches or more.

Typically, the surface layer of the Pineda soil is black fine sand about 4 inches thick. The upper part of the subsoil is brown fine sand to a depth of about 14 inches. The underlying material is light gray fine sand to a depth of about 28 inches and white fine sand to a depth of 35 inches. The lower part of the subsoil is light gray fine sandy loam to a depth of about 52 inches. The underlying material is gray fine sand to a depth of 80 inches or more.

Generally, the mapped areas average about 55 percent Holopaw and similar soils and 29 percent Pineda and similar soils. The components of this map unit are so intermingled that it is not practical to map them separately at the scale used in mapping. However, the proportions of the Holopaw and Pineda soils and of the similar soils are fairly consistent in most mapped areas.

On 80 percent of the acreage mapped as Holopaw-Pineda complex, frequently flooded, Holopaw, Pineda, and similar soils make up about 76 to 93 percent of the mapped areas. Dissimilar soils make up about 7 to 24 percent. On 20 percent of the acreage, the dissimilar soils make up more than 24 percent of the mapped areas.

Included in mapping are soils that are similar to the Holopaw soil but do not have a loamy subsoil within a depth of 80 inches, have a dark surface layer that is more than 7 inches thick, or have a subsurface layer that has colors in shades of yellowish brown. Also included are soils that are similar to the Pineda soil but do not have a sandy subsoil that is more than 4 inches thick, do not have sandy pockets and intrusions in the upper 2 to 10 inches of the loamy subsoil, or have a dark surface layer that is more than 10 inches thick. Also included are soils that are similar to the Pineda and Holopaw soils but have bedrock or layers of shell fragments below a depth of 60 to 80 inches or have a surface layer of muck, loamy sand, or sandy loam that is more than 3 inches thick.

Dissimilar soils that are included with the Holopaw and Pineda soils in mapping occur as small

## Fanning Springs State Park Soils Descriptions

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areas of Albany, Bradenton, Chobee, Gator, Ousley, and Terra Ceia soils and soils that have limestone bedrock within a depth of 60 inches. Bradenton and Chobee soils are in positions of the landscape similar to those of Holopaw and Pineda soils. Albany and Ousley soils are in the slightly higher landscape positions. Gator and Terra Ceia soils are in the lower landscape positions. Bradenton soils have a loamy subsoil with a depth of 20 inches. Chobee soils are loamy throughout.

In most years the seasonal high water table is within a depth of 12 inches in the Holopaw and Pineda soils for 2 to 6 months, but it can recede to a depth of about 60 inches during droughty periods. Areas of this map unit are flooded by adjacent rivers or creeks for periods of 1 to 4 months during most years. Permeability is moderate in the Holopaw soil and slow or very slow in the Pineda soil. Available water capacity is low in both soils.

**(31) Jonesville-Otela-Seaboard complex, 1 to 5 percent slopes** - This map unit consists of a well drained, moderately deep Jonesville soil; a moderately well drained, very deep Otela soil; and a moderately well drained, shallow or very shallow Seaboard soil. These nearly level to gently sloping soils are on karst uplands. Individual areas are generally irregular in shape and range from 5 to more than 10,000 acres in size.

Typically, the surface layer of the Jonesville soil is gray fine sand about 5 inches thick. The subsurface layer is pale brown fine sand to a depth of about 14 inches and very pale brown fine sand to a depth of 27 inches. The subsoil is brownish yellow sandy clay loam to a depth of about 35 inches. Limestone bedrock is at a depth of about 35 inches.

Typically, the surface layer of the Otela soil is brown fine sand about 4 inches thick. The subsurface layer is light gray fine sand to a depth of about 22 inches, brownish yellow fine sand to a depth of 40 inches, very pale brown fine sand to a depth of 50 inches, and brownish yellow fine sand to a depth of 58 inches. The subsoil is yellowish brown sandy clay loam to a depth of 66 inches. Limestone bedrock is at a depth of about 66 inches.

Typically, the surface layer of the Seaboard soil is dark grayish brown fine sand about 8 inches thick. The underlying material is pale brown fine sand to a depth of about 17 inches. Limestone bedrock is at a depth of about 17 inches.

Generally, the mapped areas average about 48 percent of Jonesville and similar soils, 25 percent Otela and similar soils, and 16 percent Seaboard and similar soils. The components of this map unit are so intermingled that it is not practical to map them separately at the scale used in mapping. However, the proportions of the Jonesville, Otela, and Seaboard soils and of the similar soils are fairly consistent in most mapped areas.

On 95 percent of the acreage mapped as Jonesville-Otela-Seaboard complex, 1 to 5 percent slopes, Jonesville, Otela, Seaboard, and similar soils make up about 82 to 96 percent of the mapped areas. Dissimilar soils make up about 4 to 18 percent. On 5 percent of the acreage, the dissimilar soils make up more than 18 percent of the mapped areas.

Included in mapping are soils that are similar to the Jonesville soil but do not have a loamy subsoil or do not have bedrock within a depth of 40 inches. Also included are soils that are similar to the Otela soil but do not have a seasonal high water table within a depth of 72 inches, have a dark surface layer that is more than 10 inches thick, or have bedrock at a depth of 45 to 60 inches. Also included are soils that are similar to the Seaboard soil but have a loamy subsoil that overlies the bedrock, have a dark surface layer that overlies the bedrock or that is more than 10 inches thick, or have less than 5 percent silt and clay in the subsurface layer.

Dissimilar soils that are included with the Jonesville, Otela, and Seaboard soils in mapping occur as small areas of Bushnell, Candler, Levyville, Lutterloh, Mabel, Moriah, and Tavares soils; small

## Fanning Springs State Park Soils Descriptions

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areas of strongly sloping soils; and areas of rock outcrop on the edges of sinkholes. Bushnell, Candler, Levyville, Lutterloh, Mabel, Moriah, and Tavares soils are in positions on the landscape similar to those of the Jonesville, Otela, and Seaboard soils. Bushnell and Mabel soils have a clayey subsoil within a depth of 20 inches. They are somewhat poorly drained. Candler and Tavares soils are sandy to a depth of 80 inches or more. Levyville soils have a loamy subsoil within a depth of 20 inches. Moriah and Lutterloh soils are somewhat poorly drained.

Throughout the year the seasonal high water table is below that bedrock in the Jonesville and Seaboard soils. It is perched at a depth of 42 to 72 inches for 1 to 4 months during most years in the Otela soil. Permeability is moderately slow or moderate in the Jonesville soil, moderate in the Otela soil, and rapid in the Seaboard soil. Available water capacity is very low in the Jonesville and Seaboard soils and low in the Otela soil.

**Addendum 4--Plant And Animal List**

## Fanning Springs State Park

### Plants

Common Name	Scientific Name	Primary Habitat Codes (for designated species)
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#### PTERIDOPHYTES

Ebony spleenwort	<i>Asplenium platyneuron</i>	
Resurrection fern	<i>Pleopeltis polypodioides</i>	
Tailed bracken	<i>Pteridium aquilinum</i> var. <i>pseudocaudatum</i>	
Water spangles	<i>Salvinia minima</i>	
Widespread maiden fern	<i>Thelypteris kunthii</i>	
Marsh fern	<i>Thelypteris palustris</i> var. <i>pubescens</i>	
Virginia chain fern	<i>Woodwardia virginica</i>	

#### GYMNOSPERMS

Red cedar	<i>Juniperus virginiana</i>	
Slash pine	<i>Pinus elliottii</i>	
Longleaf pine	<i>Pinus palustris</i>	
Loblolly pine	<i>Pinus taeda</i>	
Bald-cypress	<i>Taxodium distichum</i>	
Coontie	<i>Zamia pumila</i>	21,22

#### ANGIOSPERMS

##### Monocots

Pindo palm *	<i>Butia capitata</i>	
Longleaf Chasmanthium	<i>Chasmanthium laxum</i> var. <i>sessiliflorum</i>	
Florida yam	<i>Dioscorea floridana</i>	
Burrhead	<i>Echinodorus</i> sp.	
Common waterhyacinth *	<i>Eichhornia crassipes</i>	
Green-fly orchid	<i>Epidendrum conopseum</i>	31
Common yellow stargrass	<i>Hypoxis curtissi</i>	
Dotted duckweed*	<i>Landoltia punctata</i>	
Little duckweed	<i>Lemna obscura</i>	
Woodsgrass	<i>Oplismenus hirtellus</i>	
Bahiagrass *	<i>Paspalum notatum</i> var. <i>saurae</i>	
Savannah Panicum	<i>Phanopyrum gymnocarpon</i>	
Blackseed needlegrass	<i>Piptochaetium avenaceum</i>	
Pickernelweed	<i>Pontederia cordata</i>	
Starrush whitetop	<i>Rhynchospora colorata</i>	
Short bristle horned beaksedge	<i>Rhynchospora corniculata</i>	
Bluestem palmetto	<i>Sabal minor</i>	
Cabbage palm	<i>Sabal palmetto</i>	
Strap-leaved Sagittaria	<i>Sagittaria kurziana</i>	
Tall nutgrass	<i>Scleria triglomerata</i>	
Saw palmetto	<i>Serenoa repens</i>	
Narrowleaf blueeyed grass	<i>Sisyrinchium angustifolium</i>	
Saw greenbrier	<i>Smilax bona-nox</i>	
Cat greenbrier	<i>Smilax glauca</i>	
Sarsaparilla vine	<i>Smilax pumila</i>	
Common duckweed	<i>Spirodela polyrhiza</i>	
St. Augustinegrass	<i>Stenotaphrum secundatum</i>	
Bartram's airplant	<i>Tillandsia bartramii</i>	
Spanish moss	<i>Tillandsia usneoides</i>	

\* Non-native Species

## Fanning Springs State Park

### Plants

Common Name	Scientific Name	Primary Habitat Codes (for designated species)
Adam's needle	<i>Yucca filamentosa</i>	
<b>DICOTS</b>		
Red maple	<i>Acer rubrum</i>	
Spotflower	<i>Acmella oppositifolia</i>	
Red buckeye	<i>Aesculus pavia</i>	
Mimosa *	<i>Albizia julibrissin</i>	
Alligatorweed *	<i>Alternanthera philoxeroides</i>	
False indigobush	<i>Amorpha fruticosa</i>	
Peppervine	<i>Ampelopsis arborea</i>	
Eastern bluestar	<i>Amsonia tabernaemontana</i>	
Devil's walkingstick	<i>Aralia spinosa</i>	
Slimleaf pawpaw	<i>Asimina angustifolia</i>	
Small-flower pawpaw	<i>Asimina parviflora</i>	
Sea myrtle	<i>Baccharis halimifolia</i>	
Herb-of-grace	<i>Bacopa monneieri</i>	
Rattan vine	<i>Berchemia scandens</i>	
River birch	<i>Betula nigra</i>	
Beggarticks	<i>Bidens alba</i>	
Crossvine	<i>Bignonia capreolata</i>	
False nettle	<i>Boehmeria cylindrica</i>	
American beautyberry	<i>Callicarpa americana</i>	
Trumpet creeper	<i>Campsis radicans</i>	
American hornbeam	<i>Carpinus caroliniana</i>	
Mockernut hickory	<i>Carya alba</i>	
Water hickory	<i>Carya aquatica</i>	
Pignut hickory	<i>Carya glabra</i>	
Southern Catalpa	<i>Catalpa bignonioides</i>	
Madagascar periwinkle *	<i>Catharanthus roseus</i>	
Sugarberry	<i>Celtis laevigata</i>	
Common buttonbush	<i>Cephalanthus occidentalis</i>	
Redbud	<i>Cercis canadensis</i>	
Citrus	<i>Citrus</i> sp.	
Netleaf leather-flower	<i>Clematis reticulata</i>	
Tread-softly	<i>Cnidoscolus stimulosus</i>	
Blue mistflower	<i>Conoclinium coelestinum</i>	
Roughleaf dogwood	<i>Cornus asperifolia</i>	
Flowering dogwood	<i>Cornus florida</i>	
Virginia buttonweed	<i>Diodia virginiana</i>	
Common persimmon	<i>Diospyros virginiana</i>	
Elephantsfoot	<i>Elephantopus</i> sp.	
Coralbean	<i>Erythrina herbacea</i>	
American strawberrybush	<i>Euonymus americanus</i>	
White ash	<i>Fraxinus americana</i>	
Carolina ash	<i>Fraxinus caroliniana</i>	
Yellow jessamine	<i>Gelsemium sempervirens</i>	
Water locust	<i>Gleditsia aquatica</i>	
Carolina silverbell	<i>Halesia carolina</i>	
Pennywort	<i>Hydrocotyle</i> sp.	
Bedstraw St. John's-wort	<i>Hypericum galioides</i>	

\* Non-native Species

## Fanning Springs State Park

### Plants

Common Name	Scientific Name	Primary Habitat Codes (for designated species)
St. Andrew's-cross	<i>Hypericum hypericoides</i>	
Possumhaw	<i>Ilex decidua</i>	
American holly	<i>Ilex opaca</i>	
Crape-myrtle *	<i>Lagerstroemia indica</i>	
Japanese privet *	<i>Ligustrum japonicum</i>	
Sweetgum	<i>Liquidambar styraciflua</i>	
Japanese honeysuckle *	<i>Lonicera japonica</i>	
Creeping primrosewillow	<i>Ludwigia repens</i>	
Japanese climbing fern *	<i>Lygodium japonicum</i>	
Rusty staggerbush	<i>Lyonia ferruginea</i>	
Southern magnolia	<i>Magnolia grandiflora</i>	
Angle-pod	<i>Matelea suberosa</i>	
Climbing hempvine	<i>Mikania scandens</i>	
Partridgeberry	<i>Mitchella repens</i>	
Lax hornpod	<i>Mitreola petiolata</i>	
Wax myrtle	<i>Myrica cerifera</i>	
Pricklypear	<i>Opuntia humifusa</i>	
Virigina creeper	<i>Parthenocissus quinquefolia</i>	
Red bay	<i>Persea borbonia</i>	
Red-leaf Photina *	<i>Photina glabra</i>	
Capeweed	<i>Phyla nodiflora</i>	
Slenderleaf false dragonhead	<i>Physostegia leptophylla</i>	
Cheesewood	<i>Pittosporum</i> sp.	
Swamp smartweed	<i>Polygonum hydropiperoides</i>	
Marsh mermaidweed	<i>Proserpinaca palustris</i>	
Carolina laurelcherry	<i>Prunus caroliniana</i>	
Black cherry	<i>Prunus serotina</i>	
Flatwoods plum	<i>Prunus umbellata</i>	
Southern red oak	<i>Quercus falcata</i>	
Laurel oak	<i>Quercus laurifolia</i>	
Water oak	<i>Quercus nigra</i>	
Bluff oak	<i>Quercus sinuata</i>	
Virginia live oak	<i>Quercus virginiana</i>	
Indian azalea *	<i>Rhododendron simsii</i>	
Winged sumac	<i>Rhus copallinum</i>	
Tropical Mexican clover *	<i>Richardia brasiliensis</i>	
Sand blackberry	<i>Rubus cuneifolius</i>	
Southern dewberry	<i>Rubus trivialis</i>	
Carolina wild petunia	<i>Ruellia carolinensis</i>	
Pineland pimpernel	<i>Samolus valerandi</i> ssp. <i>parviflorus</i>	
Canadian blacksnakeroot	<i>Sanicula canadensis</i>	
Rattlebox *	<i>Sesbania punicea</i>	
Gum bully	<i>Sideroxylon lanuginosa</i>	
Common sweetleaf	<i>Symplocos tinctoria</i>	
Carolina basswood	<i>Tilia americana</i> var. <i>caroliniana</i>	
Eastern poison ivy	<i>Toxicodendron radicans</i>	
Forked bluecurls	<i>Trichostema dichotomum</i>	
American elm	<i>Ulmus americana</i>	
Sparkleberry	<i>Vaccinium arboreum</i>	

\* Non-native Species

# Fanning Springs State Park

## Plants

<b>Common Name</b>	<b><i>Scientific Name</i></b>	<b>Primary Habitat Codes (for designated species)</b>
Highbush blueberry	<i>Vaccinium corymbosum</i>	
Deerberry	<i>Vaccinium stamineum</i>	
Walter's viburnum	<i>Viburnum obovatum</i>	
Prostrate blue violet	<i>Viola walteri</i>	

## Fanning Springs State Park

### Animals

Common Name	Scientific Name	Primary Habitat Codes (for all species)
<b>MOLLUSKS</b>		
Asian clam *	<i>Corbicula fluminea</i>	55
Variable spike	<i>Elliptio icterina</i>	55
Southern Fatmucket	<i>Lampsilis straminea claibornensis</i>	55
Mussel	<i>Quincuncina kleiniana</i>	55
<b>FISH</b>		
Gulf sturgeon	<i>Acipenser oxyrinchis desotoi</i>	53,55
Alabama shad	<i>Alosa alabamiae</i>	53,55
Yellow bullhead	<i>Ameiurus natalis</i>	53,55
Brown bullhead	<i>Ameiurus nebulosus</i>	53,55
Spotted bullhead	<i>Ameiurus serracanthus</i>	53,55
Bowfin	<i>Amia calva</i>	53,55
Lake chubsucker	<i>Erimyzon sucetta</i>	53,55
Redfin pickerel	<i>Esox americanus</i>	53,55
Chain pickerel	<i>Esox niger</i>	53,55
Eastern mosquitofish	<i>Gambusia affinis holbrooki</i>	53,55
Channel catfish	<i>Ictalurus punctatus</i>	53,55
Longnose gar	<i>Lepisosteus osseus</i>	53,55
Florida gar	<i>Lepisosteus platyrhincus</i>	53,55
Redbreast sunfish	<i>Lepomis auritus</i>	53,55
Warmouth	<i>Lepomis gulosus</i>	53,55
Bluegill	<i>Lepomis macrochirus</i>	53,55
Redear sunfish	<i>Lepomis microlophus</i>	53,55
Suwannee bass	<i>Micropterus notius</i>	53,55
Florida largemouth bass	<i>Micropterus salmoides floridanus</i>	53,55
Striped mullet	<i>Mugil cephalus</i>	53,55
Golden shiner	<i>Notemigonus crysoleucas</i>	53,55
Shiner	<i>Notropis sp.</i>	53,55
Black crappie	<i>Pomoxis nigromaculatus</i>	55
Atlantic needlefish	<i>Strongylura marina</i>	53,55
Hogchoker	<i>Trinectes maculatus</i>	53,55
<b>AMPHIBIANS</b>		
<b>Frogs and Toads</b>		
Southern toad	<i>Bufo terrestris</i>	21
Gray treefrog	<i>Hyla chrysoscelis</i>	21,31
Green treefrog	<i>Hyla cinerea</i>	21
Squirrel treefrog	<i>Hyla squirella</i>	21
Spring peeper	<i>Pseudacris crucifer</i>	21,31
Bullfrog	<i>Rana catesbeiana</i>	31
Southern leopard frog	<i>Rana sphenoccephala</i>	31
Eastern spadefoot toad	<i>Scaphiopus holbrooki holbrooki</i>	22
<b>REPTILES</b>		
<b>Crocodylians</b>		
American alligator	<i>Alligator mississippiensis</i>	53,55

\* Non-native Species

## Fanning Springs State Park

### Animals

Common Name	Scientific Name	Primary Habitat Codes (for all species)
<b>Turtles</b>		
Florida snapping turtle	<i>Chelydra serpentina osceola</i>	33
Gopher tortoise	<i>Gopherus polyphemus</i>	22,81,82
Florida mud turtle	<i>Kinosternon subrubrum</i>	33
Alligator snapping turtle	<i>Macrochelys temminckii</i>	53
Suwannee cooter	<i>Pseudemys concinna suwanniensis</i>	53
Florida redbelly turtle	<i>Pseudemys nelsoni</i>	53
Loggerhead musk turtle	<i>Sternotherus minor</i>	55
Stinkpot	<i>Sternotherus odoratus</i>	55
<b>Lizards</b>		
Green anole	<i>Anolis carolinensis</i>	MTC
Southeastern five-lined skink	<i>Eumeces inexpectatus</i>	22
Broadhead skink	<i>Eumeces laticeps</i>	21
Southern fence lizard	<i>Sceloporus undulatus undulatus</i>	81
Ground skink	<i>Scincella lateralis</i>	21
<b>Snakes</b>		
Florida cottonmouth	<i>Agkistrodon piscivorus conanti</i>	33
Southern black racer	<i>Coluber constrictor priapus</i>	21
Eastern diamondback rattlesnake	<i>Crotalus adamanteus</i>	21
Eastern indigo snake	<i>Drymarchon corais couperi</i>	22
Rat snake	<i>Elaphe obsoleta</i>	21
Redbelly water snake	<i>Nerodia erythrogaster erythrogaster</i>	55
<b>BIRDS</b>		
<b>Cormorants</b>		
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	53
<b>Darters</b>		
Anhinga	<i>Anhinga anhinga</i>	53
<b>Hérons and Bitterns</b>		
Great Egret	<i>Ardea alba</i>	53
Great Blue Heron	<i>Ardea herodias</i>	53,55
Cattle Egret	<i>Bubulcus ibis</i>	81,82
Green Heron	<i>Butorides virescens</i>	53,55
Little Blue Heron	<i>Egretta caerulea</i>	53
Snowy Egret	<i>Egretta thula</i>	55
Tricolored Heron	<i>Egretta tricolor</i>	53
<b>Ibises and Spoonbills</b>		
White Ibis	<i>Eudocimus albus</i>	33
<b>Vultures</b>		
Turkey Vulture	<i>Cathartes aura</i>	MTC
Black Vulture	<i>Coragyps atratus</i>	MTC
<b>Ducks and Geese</b>		
Wood Duck	<i>Aix sponsa</i>	53
<b>Hawks, Eagles and Kites</b>		
Red-tailed Hawk	<i>Buteo jamaicensis</i>	22
Red-shouldered Hawk	<i>Buteo lineatus</i>	33
Swallow-tailed Kite	<i>Elanoides forficatus</i>	53
Mississippi Kite	<i>Ictinia mississippiensis</i>	MTC

\* Non-native Species

## Fanning Springs State Park

### Animals

Common Name	<i>Scientific Name</i>	Primary Habitat Codes (for all species)
Osprey	<i>Pandion haliaetus</i>	53
<b>Turkey and Quail</b>		
Wild Turkey	<i>Meleagris gallopavo</i>	21
<b>Sandpipers</b>		
Spotted Sandpiper	<i>Actitis macularia</i>	53
<b>Gulls and Terns</b>		
Royal Tern	<i>Sterna Maxima</i>	53,OF
<b>Doves</b>		
Mourning Dove	<i>Zenaida macroura</i>	MTC
<b>Cuckoos</b>		
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	21
<b>Owls</b>		
Eastern Screech Owl	<i>Otus asio</i>	21
Barred Owl	<i>Strix varia</i>	21
<b>Goatsuckers</b>		
Chuck-will's-willow	<i>Caprimulgus carolinensis</i>	81
Whip-poor-will	<i>Caprimulgus vociferus</i>	81
Common Nighthawk	<i>Chordeiles minor</i>	81
<b>Swifts</b>		
Chimney Swift	<i>Chaetura pelagica</i>	MTC
<b>Hummingbirds</b>		
Ruby-throated Hummingbird	<i>Archilochus colubris</i>	21
<b>Kingfishers</b>		
Belted Kingfisher	<i>Ceryle alcyon</i>	53
<b>Woodpeckers</b>		
Northern Flicker	<i>Colaptes auratus</i>	22
Pileated Woodpecker	<i>Dryocopus pileatus</i>	21
Red-bellied woodpecker	<i>Melanerpes carolinis</i>	MTC
Downy Woodpecker	<i>Picoides pubescens</i>	MTC
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>	21
<b>Flycatchers</b>		
Acadian Flycatcher	<i>Empidonax virescens</i>	31
Great Crested Flycatcher	<i>Myiarchus crinitus</i>	22
Eastern Phoebe	<i>Sayornis phoebe</i>	22
<b>Vireos</b>		
White-eyed Vireo	<i>Vireo griseus</i>	MTC
Red-eyed Vireo	<i>Vireo olivaceus</i>	21
Blue-headed Vireo	<i>Vireo solitarius</i>	21
<b>Jays and Crows</b>		
American Crow	<i>Corvus brachyrhynchos</i>	MTC
Fish Crow	<i>Corvus ossifragus</i>	MTC
Blue Jay	<i>Cyanocitta cristata</i>	MTC
<b>Chickadees and Titmice</b>		
Tufted Titmouse	<i>Baeolophus bicolor</i>	MTC
Carolina Chickadee	<i>Poecile carolinensis</i>	MTC
<b>Wrens</b>		
Carolina Wren	<i>Thryothorus ludovicianus</i>	MTC
<b>Kinglets</b>		
Ruby-crowned Kinglet	<i>Regulus calendula</i>	MTC

\* Non-native Species

## Fanning Springs State Park

### Animals

Common Name	Scientific Name	Primary Habitat Codes (for all species)
<b>Gnatcatchers</b>		
Blue-gray Gnatcatcher	<i>Poliophtila caerulea</i>	MTC
<b>Thrushes</b>		
Eastern Bluebird	<i>Sialia sialis</i>	81,82
American Robin	<i>Turdus migratorius</i>	MTC
<b>Thrashers</b>		
Gray Catbird	<i>Dumetella carolinensis</i>	21
Northern Mockingbird	<i>Mimus polyglottos</i>	81,82
Brown Thrasher	<i>Toxostoma rufum</i>	81,82
<b>Starlings</b>		
European Starling *	<i>Sturnus vulgaris</i>	81,82
<b>Waxwings</b>		
Cedar Waxwing	<i>Bombycilla cedrorum</i>	MTC
<b>Warblers</b>		
Yellow-rumped Warbler	<i>Dendroica coronata</i>	MTC
Yellow-throated Warbler	<i>Dendroica dominica</i>	22
Magnolia Warbler	<i>Dendroica magnolia</i>	21
Pine Warbler	<i>Dendroica pinus</i>	22
Black-and-white Warbler	<i>Mniotilta varia</i>	MTC
Northern Parula	<i>Parula americana</i>	MTC
Prothonotary Warbler	<i>Protonotaria citrea</i>	33
Hooded Warbler	<i>Wilsonia citrina</i>	31
<b>Tanagers</b>		
Summer Tanager	<i>Piranga rubra</i>	22
<b>Sparrows</b>		
House Sparrow *	<i>Passer domesticus</i>	81,82
Chipping Sparrow	<i>Spizella passerina</i>	81
<b>Cardinals, Grosbeaks, and Buntings</b>		
Northern Cardinal	<i>Cardinalis cardinalis</i>	MTC
<b>Meadowlarks, Blackbirds and Orioles</b>		
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	31
Brown-headed Cowbird *	<i>Molothrus ater</i>	MTC
Common Grackle	<i>Quiscalus quiscula</i>	MTC
<b>Finches</b>		
American Goldfinch	<i>Carduelis tristis</i>	MTC
<b>MAMMALS</b>		
<b>Didelphids</b>		
Opossum	<i>Didelphis virginiana</i>	MTC
<b>Moles</b>		
Eastern mole	<i>Scalopus aquaticus</i>	22
<b>Edentates</b>		
Nine-banded armadillo *	<i>Dasyopus novemcinctus</i>	MTC
<b>Lagomorphs</b>		
Eastern cottontail	<i>Sylvilagus floridanus</i>	MTC

\* Non-native Species

## Fanning Springs State Park

### Animals

Common Name	<i>Scientific Name</i>	Primary Habitat Codes (for all species)
<b>Rodents</b>		
Beaver	<i>Castor canadensis</i>	53
Southeastern pocket gopher	<i>Geomys pinetis</i>	81,82
Southern flying squirrel	<i>Glaucomys volans</i>	MTC
Gray squirrel	<i>Sciurus carolinensis</i>	MTC
<b>Carnivores</b>		
Bobcat	<i>Felis rufus</i>	MTC
River otter	<i>Lutra canadensis</i>	53,55
Raccoon	<i>Procyon lotor</i>	MTC
Gray fox	<i>Urocyon cinereoargenteus</i>	21
<b>Artiodactyls</b>		
White-tailed deer	<i>Odocoileus virginianus</i>	MTC
Wild pig *	<i>Sus scrofa</i>	31
<b>Manatees</b>		
West Indian manatee	<i>Trichechus manatus</i>	53,55

\* Non-native Species

## Natural Community Habitat Designation

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### 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

### Lacustrine-continued

- 46 Flatwood/Prairie Lake
- 47 Marsh Lake
- 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**

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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

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

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

**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.

**Fanning Springs State Park**

**Designated Species**

**Plants**

<b>Common Name/ <i>Scientific Name</i></b>	<b>FDA</b>	<b><u>Designated Species Status</u></b>		
		<b>USFWS</b>	<b>FNAI</b>	
Green fly orchid Epidendrum conopseum	CE			
Coontie Zamia pumila	CE			

**Fanning Springs State Park**

**Designated Species**

**Animals**

<b>Common Name/ Scientific Name</b>	<b>Designated Species Status</b>		
	<b>FFWCC</b>	<b>USFWS</b>	<b>FNAI</b>
<b>FISH</b>			
Spotted bullhead <i>Ameiurus serracanthus</i>			G3,S3
Suwannee bass <i>Micropterus notius</i>	LS		G3,S3
<b>REPTILES</b>			
American alligator <i>Alligator mississippiensis</i>	LS	T(S/A)	G5,S4
Eastern diamondback rattlesnake <i>Crotalus adamanteus</i>			G4,S3
Eastern indigo snake <i>Drymarchon corais cooperi</i>	LT	LT	G4T3,S3
Gopher tortoise <i>Gopherus polyphemus</i>	LS		G3,S3
Alligator snapping turtle <i>Macrochelys temminckii</i>	LS		G3G4,S3
Suwannee cooter <i>Pseudemys concinna suwanniensis</i>	LS		G5T3,S3
<b>BIRDS</b>			
Little blue heron <i>Egretta caerulea</i>	LS		G5,S4
Snowy egret <i>Egretta thula</i>	LS		G5,S3
Tricolored heron <i>Egretta tricolor</i>	LS		G5,S4
Swallow-tailed kite <i>Elanoides forficatus</i>			G5,S2
White ibis <i>Eudocimus albus</i>	LS		G5,S4
Osprey <i>Pandion haliaetus</i>			G5,S3S4
<b>MAMMALS</b>			
West Indian manatee <i>Trichechus manatus</i>	LE	LE	G2,S2

**Addendum 6--Priority Schedule And Cost Estimates**

**Fanning Springs State Park  
Priority Schedule And Cost Estimates**

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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.

1. Control erosion along shoreline of Fanning Spring and establish protected zones for native aquatic vegetation. **Estimated Cost: \$5,000.**
2. Remove causeways, septic systems, and underground electrical service lines located within the floodplain of the park in the Fort Fanning Subdivision. **Estimated Cost: \$25,000.**
3. Monitor designated species including West Indian manatee and gopher tortoise. 0-5 years. **Estimated Cost: \$15,000.**
4. Design and retrofit existing wastewater treatment facilities to meet performance based treatment requirements and minimize nutrient discharge to groundwater. 1-2 years. **Estimated cost: \$30,000.**
5. Develop and implement programs to stabilize historic and archaeological sites and provide cyclic monitoring and maintenance. 0-5 years. **Estimated Cost: \$10,000.**
6. Adopt and implement a cyclical maintenance plan for Di77, the bridge segment. 0-5 years. **Estimated cost: \$4,000.**
7. Initiate an active program of natural community restoration, including prescribed burning, using supplementary staff and equipment provided by Manatee Springs State Park. 1-5 years. **Estimated Cost: \$4,000.**
8. Continue exotic plant removal. 0-5 years. **Estimated cost: \$5,000.**
9. Increase staffing by four positions to meet needs generated by development of new facilities, which will cause corresponding increases in visitor service and maintenance responsibilities. 1-5 years. **Estimated Cost: \$320,000.**

**TOTAL ESTIMATED COST: \$418,000.**

**Fanning Springs State Park  
Priority Schedule And Cost Estimates**

<b>Item</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Multiplier</b>	<b>Amount</b>
<b>Recreation Facilities</b>					
Bandshell	1.000	LS	\$75,000.00	1.00	\$75,000.00
Cabins and Furnishings	10.000	ea.	\$100,000.00	1.00	\$1,000,000.00
Canoe/kayak Launch/landing	1.000	ea.	\$20,000.00	1.00	\$20,000.00
Floating Dock Modifications	1.000	ea.	\$10,000.00	1.00	\$10,000.00
Relocate Floating Dock	1.000	ea.	\$65,000.00	1.00	\$65,000.00
Interpretive Exhibit Upgrades	1.000	ea.	\$20,000.00	1.00	\$20,000.00
Nature Trail	2500.000	LF	\$2.00	1.00	\$5,000.00
Picnic Area Expansion	1.000	ea.	\$1,000.00	1.00	\$1,000.00
Primitive Campsite	4.000	ea.	\$500.00	1.00	\$2,000.00
Visitor Center	1.000	ea.	\$200,000.00	1.00	\$200,000.00
<b>Support Facilities</b>					
3 Bay Shop Building	1.000	ea.	\$135,000.00	1.00	\$135,000.00
6 Ft. High Chain Link Fence	900.000	LF	\$13.00	1.00	\$11,700.00
Aerobic Sewage System	1.000	ea.	\$100,000.00	1.00	\$100,000.00
Bathhouse Renovations	1.000	LS	\$200,000.00	1.00	\$200,000.00
Chemical toilet	1.000	ea.	\$2,000.00	1.00	\$2,000.00
Fire Ring	4.000	ea.	\$100.00	1.00	\$400.00
Flammable/Small Storage Building	1.000	ea.	\$9,600.00	1.00	\$9,600.00
Relocate Storage Shed to Shop Area	1.000	LS	\$5,000.00	1.00	\$5,000.00
Septic System Replacement	1.000	ea.	\$75,000.00	1.00	\$75,000.00
Small Storage Shed	1.000	ea.	\$10,000.00	1.00	\$10,000.00
Underground Electrical	1000.000	LF	\$10.00	1.00	\$10,000.00
Sub-Total					\$1,959,200.00
20 Percent Contingency Fee					\$391,840.00
<b>Total</b>					<b>\$2,351,040.00</b>

**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.