



## BIG CYPRESS NATIONAL PRESERVE — ADDITION

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DRAFT GENERAL MANAGEMENT PLAN/WILDERNESS STUDY/  
OFF-ROAD VEHICLE MANAGEMENT PLAN/ENVIRONMENTAL IMPACT STATEMENT

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MAY 2009



**Draft**  
**General Management Plan / Wilderness Study / Off-road Vehicle Management Plan /**  
**Environmental Impact Statement**  
**Big Cypress National Preserve Addition**  
**Collier County, Florida**

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Big Cypress National Preserve was authorized by Congress on October 11, 1974 (Public Law 93-440), with 582,000 acres. That law was amended on April 29, 1988, when Congress passed Public Law 100-301, the Big Cypress National Preserve Addition Act or “Addition Act,” to expand the Preserve by 147,000 acres. This expansion area is referred to as the Addition.

The National Park Service (NPS) finalized a *General Management Plan* for the original Preserve in 1991. That plan contained no guidance for the Addition. The National Park Service began administration of the Addition in 1996. No comprehensive planning effort has been conducted for the Addition. A general management plan is needed to clearly define resource conditions and visitor experiences to be achieved in the Addition. The plan will provide a framework for NPS managers to use when making decisions about how to best protect Addition resources, identify appropriate areas for visitor access and facilities, and determine how the National Park Service will manage its operations.

This plan examines four alternatives for managing the Addition for the next 15 to 20 years. It also analyzes the impacts of implementing each of the alternatives. Alternative A (no action) describes the continuation of existing management and trends and serves as the basis for evaluating the other alternatives. The three action alternatives (Alternative B, the NPS Preferred Alternative, and Alternative F) present a spectrum of off-road vehicle opportunities, proposed wilderness, and visitor facilities.

This *Draft General Management Plan / Wilderness Study / Off-road Vehicle Management Plan / Environmental Impact Statement* has been distributed to other agencies, interested organizations, and individuals for their review and comment (see “How to Comment on this Plan”). The public comment period for this document will last for 60 days after the Environmental Protection Agency’s Notice of Availability has been published in the *Federal Register*.

## HOW TO COMMENT ON THIS PLAN

Comments on this *Draft General Management Plan/ Wilderness Study / Off-road Vehicle Management Plan / Environmental Impact Statement* are welcome and will be accepted for 60 days after its release. During the comment period, comments may be submitted by any of the following methods:

**On-line:** at <http://parkplanning.nps.gov> and select Big Cypress National Preserve

This is the preferred method for submitting comments. An electronic public comment form is provided through this website.

**Mail:** Big Cypress National Preserve  
Addition General Management Plan  
National Park Service  
Denver Service Center — Planning  
P.O. Box 25287  
Denver, CO 80225

or

Big Cypress National Preserve  
Headquarters  
33100 Tamiami Trail East  
Ochopee, FL 34141-1000

**Hand delivery:** at public meetings to be announced in the media following release of this draft plan

*Note:* Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment — including your personal identifying information — may be made publicly available at any time. Although you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we will be able to do so.

## SUMMARY

### INTRODUCTION

Big Cypress National Preserve was authorized by an act of Congress on October 11, 1974, (Public Law 93-440) with a boundary surrounding 582,000 acres. That act was amended on April 29, 1988, when Congress passed the Big Cypress National Preserve Addition Act (Public Law 100-301), hereafter referred to as the Addition Act, to expand the Preserve boundary by about 147,000 acres. The expansion area is referred to as the Addition.

The National Park Service (NPS) finalized a *General Management Plan* for the Preserve in 1991. That plan addressed only the original Preserve and contained no guidance for the Addition.

The National Park Service began administration of the Addition in 1996. The Addition has been closed to public recreational motorized use and hunting since that time; the only public use that is currently allowed is pedestrian and bicycling access and camping. No comprehensive planning effort has been conducted for the Addition. A plan is needed to clearly define resource conditions and visitor experiences to be achieved in the Addition. The plan will provide a framework for NPS managers to use when making decisions about how to best protect Addition resources, identify appropriate areas for visitor access and facilities, and determine how the National Park Service will manage its operations in the Addition area.

This *Draft General Management Plan / Wilderness Study / Off-road Vehicle Management Plan / Environmental Impact Statement* presents four alternatives, including the National Park Service's preferred alternative, for future management of the Addition. The alternatives, which are based on the Preserve's purpose, significance, and special mandates,

present different ways to manage resources and visitor use and improve facilities and infrastructure in the Addition. The four alternatives include the "no-action" alternative (alternative A), which describes the continuation of current management direction, and three "action" alternatives (alternative B, the preferred alternative, and alternative F).

Additional alternatives (alternatives C, D, and E) and actions were considered. However these alternatives and actions were dismissed from further detailed analysis. These dismissed alternatives and actions are presented, along with the rationale for dismissing them, in the "Alternatives, Including the Preferred Alternative" discussion in chapter 2.

### ALTERNATIVE A: THE NO-ACTION ALTERNATIVE (CONTINUE CURRENT MANAGEMENT)

The no-action alternative describes a continuation of existing management and trends in the Addition and provides a baseline for comparison in evaluating the changes and impacts of the other alternatives. The National Park Service would continue to manage the Addition as it is currently being managed. The Addition would remain closed to public recreational motorized use and motorized hunting, and only minor new construction would be authorized to accommodate visitor access, primarily for hiking and biking. Existing operations and visitor facilities would remain in place. Natural ecological processes would be allowed to occur, and restoration programs would be initiated where necessary. No wilderness would be proposed for designation.

The key impacts of continuing existing management conditions and trends would include minor to moderate adverse localized impacts on surface water flow; moderate long-

## SUMMARY

term adverse impacts on visitor use and experience; and minor to moderate impacts on NPS operations and management.

### ALTERNATIVE B

The concept for management under alternative B would be to enable visitor participation in a wide variety of outdoor recreational experiences. It would maximize motorized access, provide the least amount of proposed wilderness, and develop limited new hiking-only trails. New visitor and operations facilities along the I-75 corridor would also be provided.

The key impacts of implementing alternative B would include moderate, long-term, adverse, and mostly localized impacts on surface water flow; long-term, moderate, adverse and potentially Addition-wide impacts on exotic/nonnative plants; long-term, moderate, adverse and mostly localized impacts on (likely to adversely affect) the Florida panther; long-term, minor to moderate, adverse and mostly localized impacts on (likely to adversely affect) the red-cockaded woodpecker; long-term, minor to moderate, adverse and mostly localized impacts on major game species; long-term, moderate, beneficial and Addition-wide impacts on wilderness resources and values; long-term, moderate, and beneficial impacts on visitor use and experience; and long-term, moderate and beneficial and adverse impacts on NPS operations and management.

### PREFERRED ALTERNATIVE

The preferred alternative would provide diverse frontcountry and backcountry recreational opportunities, enhance day use and interpretive opportunities along road corridors, and enhance recreational opportunities with new facilities and services. This alternative would maximize ORV access, provide a moderate amount of wilderness,

provide nonmotorized trail opportunities and new camping opportunities, and develop a partnership approach to visitor orientation. New visitor and operations facilities along the I-75 corridor would also be provided.

The key impacts of implementing the preferred alternative would include moderate, long-term, adverse, and mostly localized impacts on surface water flow; long-term, moderate, adverse and potentially Addition-wide impacts on exotic/nonnative plants; long-term, moderate, adverse and mostly localized impacts on (likely to adversely affect) the Florida panther; long-term, minor to moderate, adverse and mostly localized impacts on (likely to adversely affect) the red-cockaded woodpecker; long-term, minor to moderate, adverse and mostly localized impacts on major game species; long-term, moderate, beneficial and Addition-wide impacts on wilderness resources and values; long-term, moderate, and beneficial effects on visitor use and experience; and long-term, moderate, and beneficial and adverse impacts on NPS operations and management.

### ALTERNATIVE F

Alternative F would emphasize resource preservation, restoration, and research while providing recreational opportunities with limited facilities and support. This alternative would provide the maximum amount of wilderness, no ORV use, and minimal new facilities for visitor contact along I-75.

The key impacts of implementing the alternative F would include minor, beneficial, long-term, and mostly localized impacts on surface water flow; long-term, minor, adverse, and mostly localized impacts on (not likely to adversely affect) the Florida panther; long-term, major, beneficial, and Addition-wide impacts on wilderness resources and values; long-term, minor, beneficial impacts on visitor use and experience; and long-term, moderate

and beneficial and adverse impacts on NPS operations and management.

## THE NEXT STEPS

After distribution of the *Draft General Management Plan / Wilderness Study / Off-road Vehicle Management Plan / Environmental Impact Statement* there will be a 60-day public review and comment period. After this period the NPS planning team will evaluate comments from other federal agencies, tribes, organizations, businesses, and individuals regarding the draft plan and incorporate appropriate changes into a *Final General Management Plan / Wilderness Study / Off-road Vehicle Management Plan / Environmental*

*Impact Statement*. The final plan will include comment letters from governmental agencies, any substantive comments on the draft document, and NPS responses to those comments. Following distribution of the final plan and a 30-day no-action period, a “Record of Decision” approving a final plan will be signed by the NPS regional director and will be published in the *Federal Register*. The “Record of Decision” will document the NPS selection of an alternative for implementation. With the signed “Record of Decision,” the plan can then be implemented, depending on funding and staffing. However, a “Record of Decision” does not guarantee funds and staff for implementing the approved plan.



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## A GUIDE TO THIS DOCUMENT

This integrated *Draft General Management Plan / Wilderness Study / Off-road Vehicle Management Plan / Environmental Impact Statement* is organized in accordance with the Council on Environmental Quality's implementing regulations for the National Environmental Policy Act, the National Park Service's *Management Policies 2006*, and Director's Order #12 on "Conservation Planning, Environmental Impact Analysis, and Decision Making".

**Chapter 1: Introduction** sets the framework for the entire document. It describes why the document is being prepared and what needs it must address. Chapter 1 gives guidance for the alternatives that are being considered, which is based on the Addition's legislation, its purpose, the significance of its resources, special mandates and administrative commitments, guiding principles for management, and other planning efforts in the area. The chapter also details the planning opportunities and issues that were raised during public scoping (see inset box below) meetings and initial planning team efforts; the alternatives in the next chapter address these issues and concerns to varying degrees. This chapter concludes with a statement of the scope of the environmental impact analysis — specifically what impact topics were or were not analyzed in detail.

*The primary goal of **scoping** is to identify issues and determine the range of alternatives to be addressed. During scoping, the NPS staff provides an overview of the proposed project, including purpose and need and alternatives. The public is asked to submit preliminary comments, concerns, and suggestions relating to these goals.*

**Chapter 2: Alternatives, Including the Preferred Alternative**, begins by describing the management zones that would be used to manage the Addition in the future. Alternative A, the no-action alternative (continuation of

current management and trends in the Addition) is described, followed by alternative B, the preferred alternative, and then alternative F. Information on user capacity, adaptive management, ORV administration and management, and wilderness is then presented, which applies to all of the action alternatives. Mitigative measures proposed to minimize or eliminate the impacts of some proposed actions are described just before the discussion of future studies and/or implementation plans that will be needed. The determination of the environmentally preferred alternative is followed by summary tables of the alternative actions and the environmental consequences (based on information in chapter 4) of implementing those alternative actions. The chapter concludes with a discussion of alternatives or actions that were considered but dismissed from detailed evaluation.

**Chapter 3: The Affected Environment** describes those areas and resources that would be affected by implementing actions in the various alternatives — cultural resources, natural resources, visitor use and experience, the socioeconomic environment, and NPS operations and facilities.

**Chapter 4: Environmental Consequences** analyzes the impacts of implementing the alternatives on topics described in chapter 3. Methods that were used for assessing the impacts in terms of the intensity, type, and duration of impacts are outlined at the beginning of the chapter.

**Chapter 5: Consultation and Coordination** describes the history of public and agency coordination during the planning effort and any future compliance requirements; it also lists agencies and organizations who will be receiving copies of the document.

**Appendixes, Selected References**, a list of **Preparers and Consultants**, and the **Index** are found at the end of the document.

# CHAPTER 1



PURPOSE OF AND NEED FOR THE PLAN



## BACKGROUND AND BRIEF DESCRIPTION OF THE ADDITION

### Why We Do General Management Planning

The National Parks and Recreation Act of 1978 requires each unit of the National Park Service (NPS) to have a general management plan (GMP), and NPS *Management Policies 2006* states “[t]he Park Service will maintain a general management plan for each unit of the national park system” (2.3.1 General Management Planning). But what is the value, or usefulness, of general management planning?

The purpose of a general management plan is to ensure that a national park system unit has a clearly defined direction for resource preservation and visitor use to best achieve the National Park Service’s mandate to preserve resources unimpaired for the enjoyment of future generations. In addition, general management planning makes the National Park Service more effective, collaborative, and accountable by

- providing a balance between continuity and adaptability in decision making — Defining the desired conditions to be achieved and maintained in a park unit provides a touchstone that allows NPS managers and staff to constantly adapt their actions to changing situations while staying focused on what is most important about the park unit.
- analyzing the park unit in relation to its surrounding ecosystem, cultural setting, and community — This helps NPS managers and staff understand how the park unit can interrelate with neighbors and others in ways that are ecologically, socially, and economically sustainable. Decisions made within such a larger context are more likely to be successful over time.
- affording everyone who has a stake in decisions affecting a park unit an opportunity to be involved in the planning process and to understand the decisions that are made — National park system units are often the focus of intense public interest. Public involvement throughout the planning process provides focused opportunities for NPS managers and staff to interact with the public and learn about public concerns, expectations, and values. Public involvement also provides opportunities for NPS managers and staff to share information about the park unit’s purpose and significance, as well as opportunities and constraints for the management of park unit lands.

The ultimate outcome of general management planning for national park system units is an agreement among the National Park Service, its partners, and the public on why each area is managed as part of the national park system, what resource conditions and visitor experience should exist there, and how those conditions can best be achieved and maintained over time.

### BACKGROUND

This *Draft General Management Plan / Environmental Impact Statement* presents and analyzes four alternative future directions for the management and use of the Big Cypress National Preserve Addition —hereafter referred to as the Addition. The potential

environmental impacts of all alternatives are also identified and assessed.

General management plans are intended to be long-term documents that establish and articulate a management philosophy and framework for decision-making and problem solving in the parks. This *General Manage-*

*ment Plan* will provide guidance for the Addition for the next 15 to 20 years.

Actions directed by general management plans or in subsequent implementation plans are accomplished over time. Budget, requirements for additional data or regulatory compliance, and competing national park system priorities could determine the timing of many actions. Major or especially costly actions could be implemented 10 or more years into the future.

## **BRIEF DESCRIPTION OF THE ADDITION**

The Addition, located in Collier County, Florida, was established in 1988 (PL 100-301; see appendix A) as part of Big Cypress National Preserve. The Addition is about 147,000 acres and consists of two separate areas — the Northeast Addition and the Western Addition (see Map 1: Region/Vicinity). Most of the lands, about 128,000 acres in the Northeast Addition, are northeast of the original Preserve boundary. The Western Addition is an approximately 1-mile strip of land (approximately 19,000 acres) between State Road 29 (hereafter referred to as SR 29) and the western boundary of the original Preserve. When unspecified, the “Addition” refers to lands in both areas. The Addition includes private lands (inholdings), some of which are exempt from NPS acquisition.

The Addition is part of the Big Cypress Swamp, which covers more than 2,400 square miles of southern Florida. First-time visitors to the area see a flat, wet, primitive land. The area was named Big Cypress because of its extent, not because of the size of its trees, and visitors can travel for miles through an expanse of open prairies dotted with cypress trees, distant pinelands, and tree islands broken at intervals by dark, forested swamps. Wildlife is abundant; great blue herons, kingfishers, and alligators line the roadside canals and give

visitors an exciting visual focus. On the whole, first impressions are likely to be of an inhospitable land, with no firm ground beyond the highway shoulders.

Naturalists study the area's rich natural history and its delicate ecological balances. And some Miccosukee and Seminole Indians who make their homes in the area depend on the Addition's resources for food, shelter, and spiritual needs.

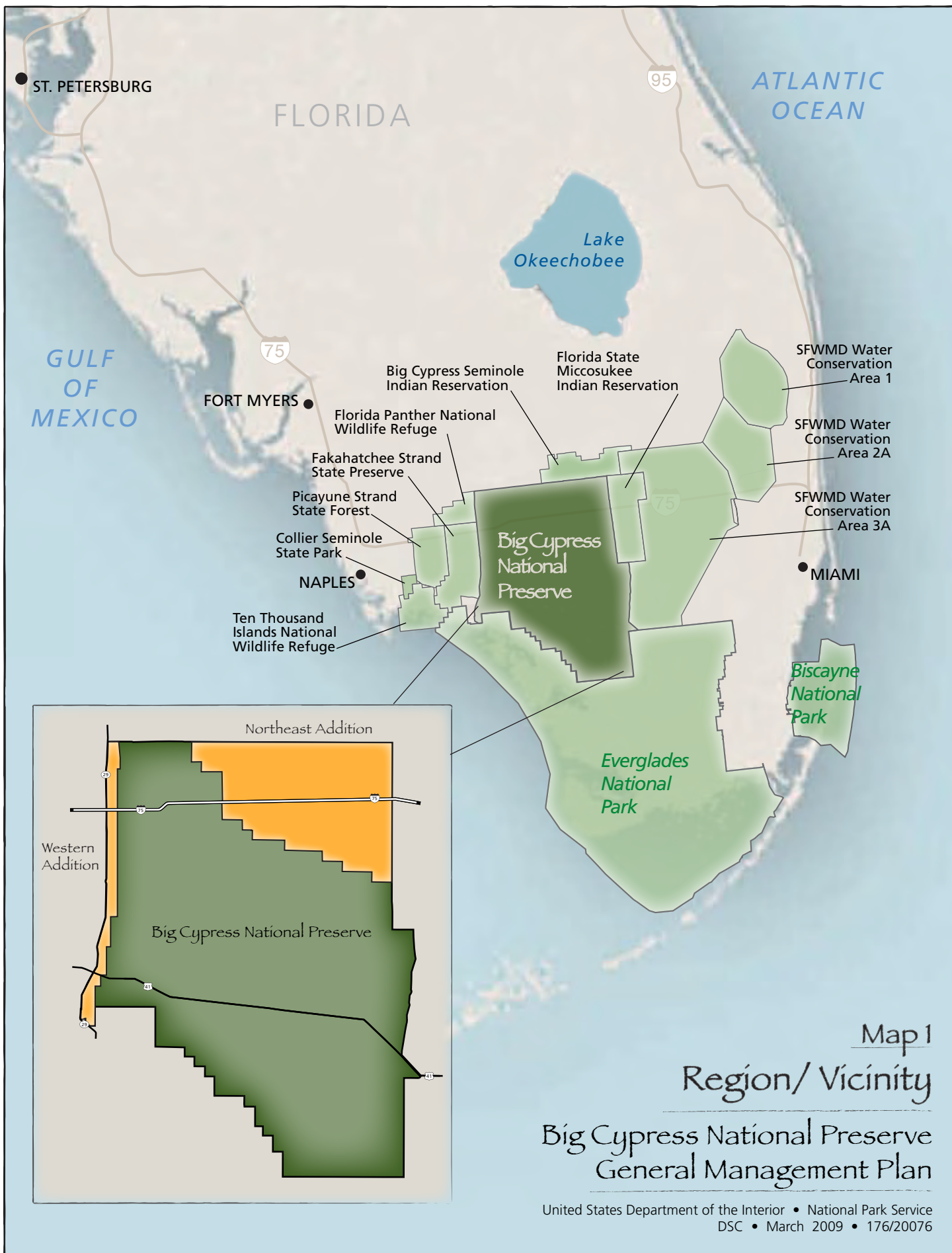
For all of these people and the visitors, however, the Addition must be experienced on its own terms. It never becomes too familiar, and getting lost, stuck, or broken down is part of the challenge of this formidable land.

## **Natural Resources**

Water is a principal natural resource of the entire south Florida region, and most of the Addition is flooded during the wet season. Because of the high annual rainfall (mean annual precipitation is 54 inches, with about 75% falling during the summer) and the flat limestone topography (a seaward slope of about 2 inches per mile), the inundation lasts for several months beyond the actual rainfall period (Duever et al. 1986a). Because the Addition is relatively undeveloped, it serves as a large natural reservoir and nutrient filter, permitting natural biological processes to nourish diverse ecological communities that are distinctive to southern Florida. Throughout the wet season the water flows in a southeasterly direction towards the water conservation areas. The ecology of the Addition is finely tuned to the seasonal flow of water, and any hydrologic changes can alter this sensitive subtropical habitat.

Extensive prairies and marshes, forested swamps, pinelands, and shallow sloughs characterize the Addition. The hydroperiod, the amount of time each year that soils are saturated, is the major determinant of







vegetative communities, and a difference of only a few inches in elevation changes the hydroperiod and leads to the establishment of totally different plant communities. At one time Big Cypress contained pristine cypress strands and old-growth pinelands, but by 1950 virtually all the cypress strands of commercial value and much of the pinelands within the Addition had been logged. The young cypress strands, mixed-hardwood swamps, and pinelands in the Addition today are still recovering. Big Cypress is also noted for its widespread cypress prairies — natural grasslands dotted with stunted cypress trees.

Most wildlife species native to south Florida occur within the Big Cypress watershed. A total of 30 animal species in the Addition receive some level of special protection by the federal government or the state of Florida. Most of these species are limited to south Florida, and they are declining as a result of habitat reduction caused by water management projects, urbanization, and agricultural expansion.

Nine of the 30 species mentioned above are listed as either federally endangered or threatened and reside in the Preserve — 8 of those 9 are known to be present in the Addition. The state lists 14 species as species of special concern. One of the United States' most endangered mammals, the Florida panther (*Puma concolor coryi*), is the subject of an intensive recovery effort throughout the region, including the Addition.

### Cultural Resources

The Preserve and the Addition are located within the Glades region (an area defined by hardwood and pinewood hammocks, sawgrass, and dwarf cypress interspersed with shallow freshwater marshes and prairies) of south Florida. The limited vegetation of this region is a result of thin soils underlain by limestone bedrock. This region also includes the Everglades, portions of the Atlantic coast,

the Ten Thousand Islands, and the Florida Keys. Human habitation of the Glades region can be traced back to the late Pleistocene or Lithic era.

The prehistoric periods of human culture represented by sites in south Florida include (1) the Paleo-Indian period (10,000–8,000 BC), (2) the Archaic period, (which spanned roughly 8,000 BC to 500 BC), and (3) the Glades Tradition (which extends into the historic period, spanning 500 BC to AD 1760).

The historic periods of human culture begin with the initial Spanish contact in 1513 and continue through the 20th century and the creation of Big Cypress National Preserve.

Evidence of Paleo-Indian human habitation is rare in south Florida, and none has been found within the Addition. In all likelihood, most sites associated with the Paleo-Indians of this era are submerged beneath the state's coastal waters. However, at least one area within the Addition, Deep Lake (a sinkhole), has the potential for association with this prehistoric period.

Fifty-seven archeological sites have been identified in the Addition. These resources are associated with the Archaic and Glades periods in the Addition's cultural chronology. Most of these sites are earth middens, which are refuse piles commonly made up of cultural artifacts and faunal remains.

Based on the archeological evidence, Big Cypress was used year-round by early inhabitants for transitory hunting and gathering. Agriculture was apparently insignificant, perhaps because rich plant, fish, and animal food sources were available. Land animals and seafood were the primary sources of protein. Early cultures in the Big Cypress were not as highly developed as other cultures in the Southeast, possibly because people relied on wild food sources rather than cultivating crops, and the foods, especially shellfish, were not easily preserved and stored for later use.

Consequently, only a few large, relatively permanent settlements have been identified.

Today, Seminole and Miccosukee Indians live in the Preserve, including the Addition, and also use these lands as a source of natural materials for housing, crafts, and other cultural and religious uses.

### **Development and Use**

Currently, the Addition is closed to hunting and public recreational motorized use (with the exception of motorized boating in the Everglades City area) — only hiking, camping, bicycling, fishing, and frogging are permitted. Recreational activities allowed in the original Preserve include hunting and fishing, off-road vehicle (ORV) use, hiking, boating and paddling, bicycling, and camping; these same types of activities could be allowed in the Addition.

The principal hiking trail in the Addition is the Florida National Scenic Trail, which uses a temporary route along Nobles Grade and continues north onto Seminole land. It also extends south from I-75 into the original Preserve.

NPS development in the Addition is limited to the Fire Operations Center off SR 29 at Copeland, a fire cache at Deep Lake, and the facilities at Carnestown, which are leased to the Collier County Sheriff's Office and the Everglades City Chamber of Commerce. No formalized/developed access to the Addition currently exists; temporary access is being provided at mile marker 51, Bear Island Grade, and the Florida Department of Transportation rest area at the I-75 (Interstate 75) mile marker 63. See Map 2: The National Preserve.

South Florida has been the site of oil exploration since 1930. The first productive well was drilled in 1943 immediately northwest of the

Addition on the Sunniland trend, a productive oil and gas area that crosses the Addition. Subsequent discoveries have followed a northwest-southeast orientation along the northern and eastern boundaries of the Addition, ending at the northern boundary of Everglades National Park. Bear Island and Raccoon Point are the two major producing oil fields in the original Preserve. The relatively recent discoveries of oil and gas both within and adjacent to the Addition have prompted interest in additional testing, including geophysical exploration and exploratory drilling. Most mineral rights and subsurface estates remain with the respective private or state interests.

### **Landownership**

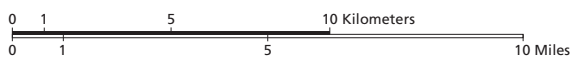
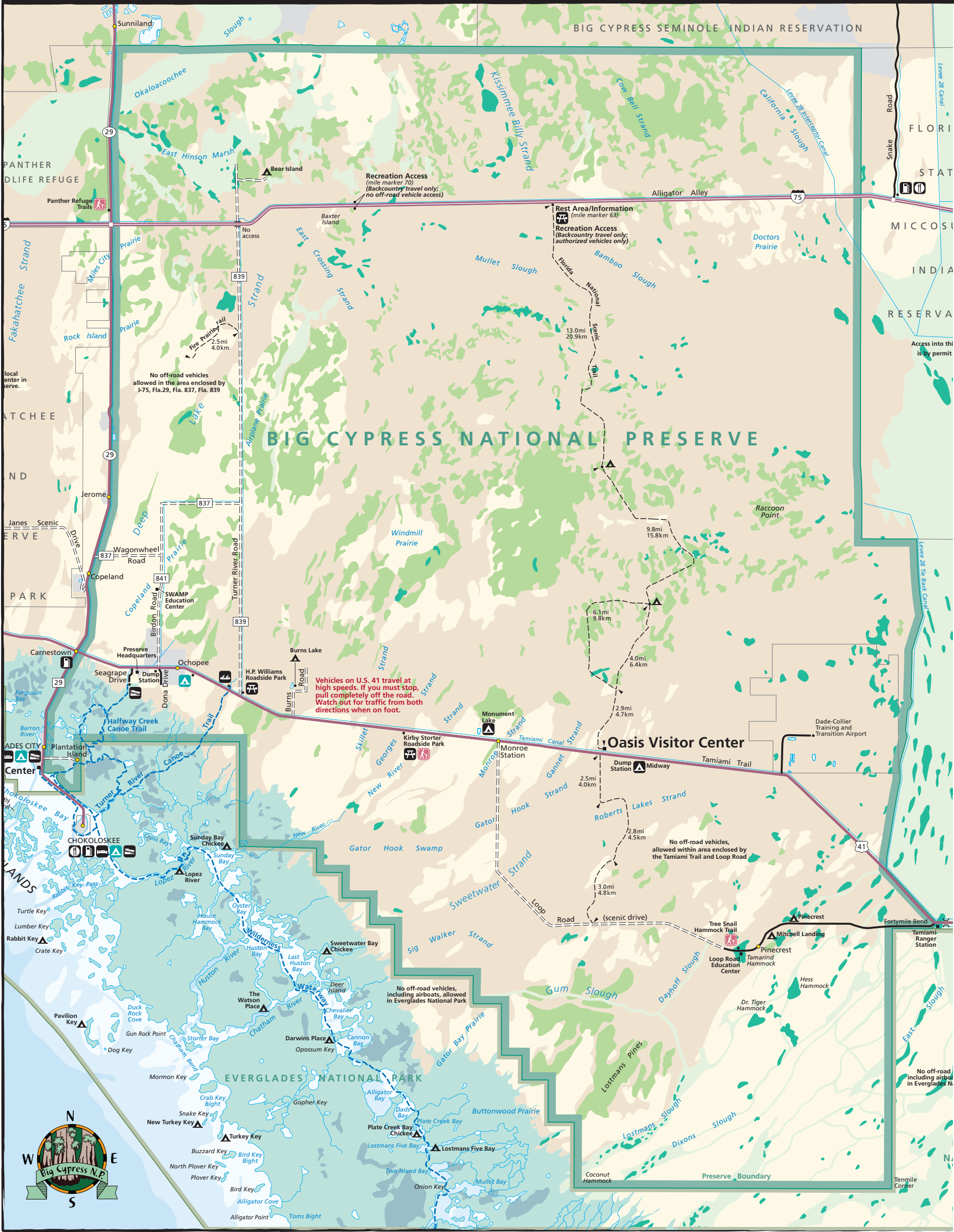
The Addition boundary encompasses about 147,000 acres, and the National Park Service owns about 112,400 acres in the Addition. Nonfederal land in the Addition is owned by the Florida Department of Transportation (about 27,236 acres), the Board of Trustees of the Internal Improvement Trust Fund (3,500 acres), and the Florida State School Board (1,920 acres). There are about 217 privately owned tracts throughout the Addition. Some of these will be classified as improved properties in accordance with the Addition Act, and as such they would be considered acquisition deferred (exempt) unless owners are willing to sell or uses on the land could be detrimental to the purposes of the Addition. About 75 acquisition-deferred, 3-acre parcels are expected to remain.


















The state of Florida has agreed to transfer the lands that they own in the Addition to the National Park Service. The land transfer is currently pending and is expected to take place in the future.

# Big Cypress National Preserve

## Color key to ecosystems

 Cypress	 Freshwater Marl Prairie	 Mangrove
 Hardwood Hammock	 Freshwater Slough	 Marine and Estuarine
 Pineland	 Coastal Marsh	 Developed or disturbed land



 Interpretive trail	 Picnic area	 Unpaved road	 Water depths 0-3 feet (0-1 meter)
 National Park Service campground	 Lodging	 Hiking trail	 Water depths 3-6 feet (1-2 meters)
 National Park Service primitive campsite	 Food service	 Distance indicator	 Water depths more than 6 feet (more than 2 meters)
 State Park campground	 Gas station		
 Private campground	 Boat launch and canoe launch		
	 Canoe launch		

## Map 2 The National Preserve Big Cypress National Preserve General Management Plan

United States Department of the Interior • National Park Service  
DSC • March 2, 2009 • XXXXXXXX





## PURPOSE AND NEED FOR THE PLAN

### PURPOSE OF AND NEED FOR THE GENERAL MANAGEMENT PLAN

As outlined above, the Addition was established in 1988. Under the provisions of the Arizona-Florida Land Exchange, authorized by Public Law 100-696, the United States acquired approximately 108,000 acres of environmentally sensitive land in southwest Florida, and in return the Collier companies received 68 acres of property in downtown Phoenix, Arizona. The Florida lands acquired by the United States in the exchange serve as additions to the Big Cypress National Preserve and the Florida Panther National Wildlife Refuge, and created the Ten Thousand Islands National Wildlife Refuge. As part of the overall public lands effort, the state of Florida was required to contribute 20% of the value of the land to be acquired within the expanded Big Cypress National Preserve.

This general management plan for the Addition is needed because no comprehensive planning effort has ever been conducted for this area of the Preserve. A *General Management Plan* was completed for the Preserve in 1991, but that plan addressed only the original portion of the Preserve and contained no guidance for the Addition because the Addition was in private ownership until it was acquired and transferred to the National Park Service in 1996. The plan is needed to provide direction on how the National Park Service will accommodate and manage visitor access, manage resources, and manage its operations within the Addition. The scope of this general management plan is the Addition only.

A general management plan also is needed to meet the requirements of the National Parks and Recreation Act of 1978 and NPS policy, which mandate development of a general management plan for each unit in the national park system.

When approved, this *General Management Plan* will be the basic document for managing the Addition for the next 15 to 20 years. The purposes of this management plan are as follows:

- Confirm the purpose, significance, and special mandates of the Big Cypress National Preserve Addition.
- Clearly define resource conditions and visitor uses and experiences to be achieved in the Addition.
- Provide a framework for NPS managers to use when making decisions about how to best protect Addition resources, how to provide quality visitor uses and experiences, how to manage visitor use, and what kinds of facilities, if any, to develop in or near the Addition.
- Ensure that this foundation for decision-making has been developed in consultation with interested stakeholders and adopted by the NPS leadership after an adequate analysis of the benefits, impacts, and economic costs of alternative courses of action is completed.

Legislation establishing the National Park Service as an agency and governing its management provides the fundamental direction for the administration of the Addition and other units and programs of the national park system. This *General Management Plan* will build on these laws and the legislation that established the Big Cypress National Preserve Addition to provide a vision for its future. The “Guidance for the Planning Effort” section calls the reader’s attention to topics that are important to understanding the management direction for the Addition. The alternatives in this *General Management Plan* address the desired conditions that are not mandated by law and policy and must be determined through a planning process.

A general management plan does not describe how particular programs or projects should be prioritized or implemented. Those decisions will be addressed in future, more detailed planning efforts. All future plans will tier from the approved general management plan. Unlike typical general management plans, this management plan includes a wilderness study and an ORV management plan.

## PURPOSE AND NEED FOR THE WILDERNESS STUDY

A wilderness study of the Addition was required by the enabling legislation for Big Cypress National Preserve (Public Law 93-440), as amended by the Addition Act (Public Law 100-301):

*[T]he Secretary shall review the area within the preserve or the area within the Addition (as the case may be) and shall report to the President, in accordance with section 3 (c) and (d) of the Wilderness Act (78 Stat. 891; 16 U.S.C. 1132 (c) and (d)), his recommendations as to the suitability or nonsuitability of any area within the preserve or the area within the Addition (as the case may be) for preservation as wilderness, and any designation of any such areas as a wilderness shall be accomplished in accordance with said subsections of the Wilderness Act.*

No wilderness study of the Addition has previously been completed. This wilderness study provides a public forum for evaluating lands within the Addition for possible recommendation to Congress for inclusion in the national wilderness preservation system. Wilderness, which can be designated only by Congress, provides for permanent protection of lands in their natural condition. The wilderness study is included as part of this *General Management Plan* because of public interest and timeliness. A wilderness study may be a separate document accompanied by an environmental impact statement, or it may

be part of a general management plan / environmental impact statement.

Incorporating the wilderness study in this *General Management Plan / Environmental Impact Statement* provides efficiencies of time and money because the two processes have similar legal requirements and public involvement needs.

Public comment has indicated significant interest in the possible designation of wilderness in the Addition. Many believe that in the interest of protecting endangered species such as the Florida panther, the entire Addition should be designated wilderness, thereby excluding the use of motorized vehicles. Others maintain that none of the Addition qualifies as wilderness, and thus motorized use should be allowed. Because of the requirements of law and the implications that a wilderness recommendation would have on public use and management of the Addition, a wilderness study is needed.

The first step of this wilderness study was to conduct a formal evaluation, known as a wilderness eligibility assessment, of lands in the Addition that are eligible for wilderness consideration, i.e., that meet the criteria for wilderness as described in the Wilderness Act. State-owned lands within the Addition were evaluated with permission. To conduct this assessment, interdisciplinary teams of NPS staff reviewed current data, visited key areas of the Addition during 2006, and obtained additional field data. A workshop of NPS staff was conducted in July 2006 to evaluate wilderness characteristics of the Addition. After the approximately 109,000 acres of wilderness-eligible lands were identified, the next step was to determine which of these lands, if any, should be incorporated into each of the action alternatives in this document. The final step was to evaluate the impacts of the various wilderness proposals set forth in the alternatives. This process was completed by an interdisciplinary team of NPS staff from the Preserve, NPS Southeast Regional Office, NPS Denver Service Center, and the NPS

Wilderness Stewardship and Recreation Management Division (Washington, D.C. program office). The results of the eligibility assessment and lands proposed for wilderness in the preliminary alternatives were shared with the public in a newsletter and are presented in appendix B. Public meetings were also held to provide members of the public opportunities to contribute and comment.

Wilderness studies typically result in a recommendation to Congress to designate all, some, or none of the lands possessing wilderness character as part of the national wilderness preservation system. Based on the wilderness study included in this document, the National Park Service will prepare a proposal for such a recommendation to forward to the U.S. Department of the Interior. This proposal will be based on the proposed wilderness incorporated in the selected alternative and documented in the “Record of Decision.”

## **PURPOSE AND NEED FOR THE ORV MANAGEMENT PLAN**

The purpose of the ORV (off-road vehicle) management plan is to provide guidance on how to manage motorized recreational ORV use in the Addition. The plan provides direction on use levels, suitable locations to develop ORV trails, and details on permitting and managing off-road vehicles and permits.

An ORV management plan is needed because the Addition Act calls for some level of public recreational access, and the National Park Service currently does not have a plan in place to meet this mandate. This plan, under alternative B and the preferred alternative, will provide direction that would allow the National Park Service to develop ORV opportunities in the Addition while meeting its responsibilities for resource protection. Through the process of this GMP planning effort, about 140 miles of trails in the Addition

were found to be sustainable for ORV use (see Map 7: Conceptual ORV Trails on page 101).

This plan addresses ORV administration and management in the Addition. Issues related to numbers of permits issued, miles of trail designated, and overall ORV management are evaluated solely with respect to the Addition rather than the original Preserve as a whole. The reason for this approach is that the National Park Service has already evaluated ORV use and associated impacts in the original Preserve. See the *Final Recreational Off-road Vehicle Management Plan / Supplemental Environmental Impact Statement* (2000). To have addressed integrated ORV use over the entire Preserve in the present document would have necessitated expanding the environmental impact statement to cover the entire Preserve. The result would have been significant delays stemming from a greatly expanded planning effort and related environmental analysis. It should be noted, however, that the analysis in this document for the Addition does include an analysis of cumulative impacts associated with ORV use. This analysis includes a consideration of impacts to — and from — lands outside the Addition.

## **THE NEXT STEPS**

After the distribution of the *Draft General Management Plan / Wilderness Study / Off-road Vehicle Management Plan / Environmental Impact Statement*, there will be a 60-day public review and comment period. After this period, the NPS planning team will evaluate comments from other federal agencies, tribes, organizations, businesses, and individuals regarding the draft plan and incorporate appropriate changes into a *Final General Management Plan / Wilderness Study / Off-road Vehicle Management Plan / Environmental Impact Statement*. A public hearing will also be held in accordance with the requirements of the Wilderness Act. The final plan will include letters from governmental agencies, any substantive comments on the draft document,

and NPS responses to those comments. Following distribution of the final plan and a 30-day no-action period, a “Record of Decision” approving a final plan will be signed by the NPS regional director, Southeast Region and will be published in the *Federal Register*. The “Record of Decision” will document the NPS selection of an alternative for implementation. With the signing of the “Record of Decision,” the plan can then be implemented.

## IMPLEMENTATION OF THE PLAN

The implementation of the approved plan will depend on future funding. The approval of a

plan does not guarantee that the funding needed to implement the plan will be forthcoming. Full implementation of the approved plan could be many years in the future or may not occur if funding is not obtained.

The implementation of the approved plan also could be affected by other factors. Once the *General Management Plan* has been approved, additional legislation, additional feasibility studies, and more detailed planning and appropriate environmental documentation may be required before any proposed actions can be carried out. These more detailed plans would tier from this plan, describing specific actions managers intend to take to achieve desired conditions and long-term goals.

## GUIDANCE FOR THE PLANNING EFFORT

### DIRECTION FOR THE PLAN

The direction for the alternatives considered in this draft plan is based on the applicable legislative mandates (see appendix A), NPS policies, and the Preserve's purpose and significance. The purpose statements describe why Big Cypress was established as a national preserve. The significance section describes the unique qualities that make the Preserve a special place. Other legislative mandates help to further define the parameters of how planning should be done and certain elements that the plan must address.

Legislative mandates and special commitments include measures that apply to the entire national park system as well as Preserve-specific requirements. In addition, the National Park Service must comply with all federal statutes, executive orders, and NPS policies. The intent of all the mandates and commitments is to establish sustainable conservation and to preserve these lands. As a result, use can occur only to the extent that it does not result in significant adverse effects on the Preserve's natural and cultural resources.

### National Park Service Mandates

The National Park Service and its mandates are authorized under the NPS Organic Act (16 USC 1, 2-4) and the General Authorities Act (16 USC 1a-8). The Organic Act directs the National Park Service to promote and regulate the use of the national park system units

*by such means and measures as conform to the fundamental purpose of the said parks, . . . which purpose is to conserve the scenery, and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by*

*such means as will leave them unimpaired for the enjoyment of future generations.*

The Redwood Act, passed in March 1978, amended the NPS Organic Act of 1916. In that act, Congress reaffirmed the mandates of the Organic Act and provided the following additional guidance for managing national park system units:

*The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity of the National Park System and shall not be exercised in derogation of the values and purposes for which these various areas have been established.*

According to Senate Report 95-528, the restatement of these principles of park management in the Redwoods Act was intended to serve as the basis for any judicial resolution of competing private and public values and interests in the national park system. If a conflict between visitors' use of a park unit and the protection of resources should occur, this act confirms the intent of Congress to favor resource protection.

The National Park Omnibus Management Act of 1998 (PL 105-391), title II, "National Park System Resource Inventory and Management," supports the integration of scientific study into management practices. This act directs the secretary of the interior to take necessary steps to ensure the full and proper use of the results of scientific studies in making management decisions. In conformance with the 1998 act and the National Environmental Policy Act, this plan has attempted to make use of the best available scientific information.

## Preserve Vision

The National Park Service envisions Big Cypress National Preserve as a nationally significant ecological resource — a primitive area where ecological processes are restored and maintained and cultural sites are protected from unlawful disturbance. Visitors will benefit from aesthetic gratification and relaxation in a natural setting, the challenge of exploring the landscape, the chance to test traditional backcountry skills, and the opportunity to learn more about the natural environment.

### What is a National Preserve, and How Is It Different from a National Park?

The diversity of national park system units is reflected in the variety of titles given to them. These include designations such as national park, national preserve, national monument, national memorial, national historic site, national historical park, national seashore, and national battlefield park. Although some titles are self-explanatory, others have been used in many different ways.

Generally, a **national park** contains a variety of resources and encompasses large land or water areas to help provide adequate protection of the resources. A **national preserve** is established primarily for the protection of certain resources. Activities such as hunting and fishing or the extraction of minerals and fuels may be permitted if they do not jeopardize the natural values. Big Cypress and Big Thicket were authorized as the first national preserves in 1974. As with all units of the national park system, the enabling legislation that accompanies the authorization of a particular park system unit describes its purpose and provides the direction for its establishment and management.

Big Cypress National Preserve was established to protect the watershed values of the Big Cypress Swamp while allowing for the continuation of traditional uses (such as hunting, fishing, ORV use, and mineral extraction) in the area. The national preserve

designation of Big Cypress presents unique opportunities to integrate multiple uses with conservation and preservation — and that is what makes it so different from any other designation within the national park system.

## Purpose and Significance Statements

**Purpose Statements.** Purpose statements are based on the Preserve's legislation, legislative history, and NPS policies. The statements reaffirm the reasons for which the Preserve was set aside as a unit of the national park system and provide the foundation for Preserve management and use.

The purpose of Big Cypress National Preserve, as stated in the enabling legislation, is

*to assure the preservation, conservation, and protection of the natural, scenic, hydrologic, floral and faunal, and recreational values of the Big Cypress Watershed in the State of Florida and to provide for the enhancement and public enjoyment thereof.*

**Significance Statements.** Significance statements capture the essence of the Preserve's importance to our country's natural and cultural heritage. Significance statements do not inventory Preserve resources; rather, they describe the Preserve's distinctiveness and help to place the Preserve within its regional, national, and international contexts. Significance statements answer questions such as why are the Preserve's resources distinctive? What do they contribute to our natural/cultural heritage? Defining the Preserve's significance helps managers make decisions that preserve the resources and values necessary to accomplish the purpose of the Preserve.

The significance of Big Cypress National Preserve is as follows.

Big Cypress National Preserve, including the Addition, contains vestiges of primitive southwest Florida. It is significant as a unit of the national park system because it

- is a large wetland mosaic that supports a vast remnant of vegetation types found only in this mix of upland and wetland environments
- contains the largest strands of dwarf cypress in North America
- is habitat for the Florida panther and other animal and plant species that receive special protection or are recognized by the state of Florida, the U.S. government, or the Convention on International Trade in Endangered Species (CITES)
- provides opportunities for the public to pursue recreational activities in a subtropical environment
- is home to the Miccosukee Tribe of Indians of Florida and Seminole Tribe of Florida and sustains resources that are important to their cultures
- is a watershed that is an important component to the survival of the greater Everglades ecosystem

### Primary Interpretive Themes

Based on the Preserve's purpose and significance, the following interpretive themes have been developed. Primary interpretive themes are the key stories, concepts, and ideas of a park unit. They are the groundwork that NPS staff will use for educating visitors about the park and for inspiring visitors to care for and about the park's resources. With these themes, visitors can form intellectual and emotional connections with park resources and experiences. Subsequent interpretive planning may elaborate on these primary themes.

Although the following themes were written for the original Preserve, they will apply to the Addition after approval of this management plan.

**Water** — *Preserving the Big Cypress watershed is key to the survival of the South Florida ecosystem.*

- Fresh water flowing through the Big Cypress Swamp provides a steady supply of life-giving nourishment to the Ten Thousand Islands, a vital estuary system.
- Wetlands are one of the most endangered ecosystems in the world. Development, recreational use, and non-point source pollutants threaten the Big Cypress Swamp from all sides.
- Subtle geologic features influence water flow and vegetation patterns that, in turn, affect wildlife, fire frequency, and soil compaction.

**Biological Diversity** — *Acting as custodian for ecological and biological processes, Big Cypress National Preserve provides habitat and protection for a great diversity of plant and animal species.*

- The diversity of habitat types found in Big Cypress, from pinelands, mixed hardwood hammocks, wet prairies, dry prairies, and marshes to estuarine mangrove forests, provides for a diversity of plant and animal species.
- Rare subtropical and temperate plants and animals have retreated to this remaining stronghold. Rare orchids, Florida panthers, red-cockaded woodpeckers, and unusual ferns are found here and few other places in the world.
- The vast biological diversity existing in the Big Cypress National Preserve makes it one of the most unusual



natural areas in the world. The Big Cypress is a wetland interspersed with pine islands and hardwood hammocks. One may experience a variety of ecological communities as they are modified and characterized by the presence or absence of water, depending on the hydroperiod.

- Fire and living things have evolved together. Fire is responsible for sculpting the landscape. Prescribed fire returns nutrients to the ecosystem and prevents excessive fuel buildup.
- Exotic species such as melaleuca (*Melaleuca quinquenervia*), Brazilian pepper (*Schinus terebinthifolius*), Old World climbing fern (*Lygodium microphyllum*), water lettuce (*Pistia stratiotes*), hydrilla (*Hydrilla verticillata*), air potato (*Dioscorea bulbifera*), and Australian pine (*Casuarina equisetifolia*) threaten native plant communities. With no natural enemies, exotics multiply rapidly and crowd out native species.

**Human/Culture** — *Big Cypress National Preserve reveals stories from times long past and into the future, reflecting a pattern of changing culture and human involvement.*

- A rich history of human involvement with the swamp spans time. The Miccosukee Tribe of Indians of Florida and the Seminole Tribe of Florida; escaped slaves; land speculators; timber harvesters; and hunters, fishermen, guides, cattlemen, and recreationists have all left their trails through the swamp.
- The establishment of Big Cypress National Preserve is a story of cooperation and conflict between various user groups to stop a threat to a treasured place.

**Recreation/Multiuse** — *Big Cypress National Preserve manages a spectrum of human, recreational, and commercial activities.*

- Big Cypress National Preserve provides an important oasis of wildness for recreation, reflection, and rejuvenation.
- Providing a unique environment with scenic vistas and wild areas, Big Cypress National Preserve hosts opportunities for human activities.
- Water birds, alligators, turkey, deer, raccoons, and many other creatures call the Big Cypress their own. With increasing development in south Florida, opportunities to view such wildlife are becoming rare.
- Allowed multiple uses make the Big Cypress National Preserve different from other national park system units. Integrating multiple uses with conservation and preservation presents unique opportunities for Preserve management.
- Open space, quiet places, and wilderness are endangered in south Florida. Big Cypress National Preserve, along with other natural areas in the region, is vital to the quality of life in the state.
- The Big Cypress is a unique expanse of cypress-dominated scenery. A windshield tour across Alligator Alley or Tamiami Trail provides vast scenic vistas.

### **Special Mandates and Administrative Commitments**

Special mandates and administrative commitments refer to specific legal requirements that apply directly to an individual national park system unit. These formal agreements are most often established concurrently in the unit's enabling legislation. Special

requirement for the Addition (PL 100-301) include the following:

*The Secretary shall administer the lands as a unit of the national park system in a manner that will assure their natural and ecological integrity in perpetuity and in accordance with the NPS Organic Act.*

The Addition Act and its legislative history identify the following six categories of use that are allowed within the Addition, subject to reasonable regulation:

- uses associated with "improved properties"
- exercise of rights associated with oil and gas
- hunting
- fishing
- trapping
- certain Indian rights

The Addition Act further directs that rules and regulations necessary and appropriate to limit or control the following uses be developed:

- motorized vehicles
- exploration for and extraction of oil, gas, and other minerals
- grazing
- the draining or constructing of works or structures that alter natural watercourses
- agriculture
- hunting, fishing, and trapping
- new construction
- such other uses as may need to be limited or controlled

The Addition Act gives specific guidelines regarding the development of rules and regulations for hunting, fishing, trapping, and entry.

*The Secretary shall permit hunting, fishing, and trapping on lands and waters under his jurisdiction within the preserve and the Addition in accordance with the applicable laws of the United States and the State of Florida, except that he may designate zones where and periods when no hunting, fishing, trapping, or entry may be permitted for reasons of public safety, administration, floral and faunal protection and management, or public use and enjoyment. Except in emergencies, any regulations prescribing such restrictions relating to hunting, fishing, or trapping shall be put into effect only after consultation with the appropriate State agency having jurisdiction over hunting, fishing, and trapping activities.*

The Senate and House reports (S. Rept. 93-1128 and H. Rept. 93-502) also give guidance as to how ORVs are to be managed. Although this guidance does not prohibit their use along designated roads and trails, it does say that the use of such vehicles must be carefully regulated to protect the natural, wildlife, and wilderness values of the Preserve (and thus the Addition).

The regulations in 36 CFR (*Code of Federal Regulations*) 7.86 (a)(2)(iii) mandates, among other things, consultation with the state of Florida before making a temporary or permanent closure of an area or route. The point of contact for the state is the executive director of the Florida Fish and Wildlife Conservation Commission.

The Addition Act also permits members of the Miccosukee Tribe of Indians of Florida and the Seminole Tribe of Florida, subject to reasonable regulations, to continue their usual and customary use and occupancy, including hunting, fishing, and trapping on a subsistence basis and traditional tribal ceremonies.

Regarding recreational access, the Addition Act states that

*The Secretary and other involved Federal agencies shall cooperate with the State of Florida to establish recreational access points and roads, rest and recreation areas, wildlife protection, hunting, fishing, frogging, and other traditional opportunities in conjunction with the creation of the Addition and in the construction of Interstate Highway 75. Three of such access points shall be located within the Preserve (including the Addition).*

One of these access points has been constructed at mile marker 71 and provides walk-in access to the original Preserve both north and south of I-75.

Regarding oil and gas exploration and development, the Addition Act states that

*The Secretary shall promulgate . . . rules and regulations governing the exploration for development and production of non-Federal interests in oil and gas located within the boundaries of Big Cypress National Preserve and the Addition . . . as are necessary and appropriate to provide reasonable use and enjoyment of privately owned oil and gas interests, and consistent with the purposes for which the Big Cypress National Preserve and Addition were established.*

Currently, oil and gas exploration in the Addition is managed in accordance with the “Agreement among the United States of America, Collier Enterprises, Collier Development Corporation, and Barron Collier Company” (Addition Lands Agreement) dated May 1988. A Preserve-wide oil and gas management plan is currently in preparation and is scheduled for completion in 2009; when completed, this plan will provide guidance for oil and gas exploration for the entire Preserve, including the Addition.

Regarding wilderness, the Addition Act says the following:

*[T]he Secretary shall review the area within the preserve or the area within the Addition (as the case may be) and shall report to the President, in accordance with section 3 (c) and (d) of the Wilderness Act (78 Stat. 891; 16 U.S.C. 1132 (c) and (d)), his recommendations as to the suitability or nonsuitability of any area within the preserve or the area within the Addition (as the case may be) for preservation as wilderness, and any designation of any such areas as a wilderness shall be accomplished in accordance with said subsections of the Wilderness Act.*

## GUIDING PRINCIPLES FOR MANAGEMENT

A number of guiding principles and strategies for management are described below. These are based on legal mandates and NPS policies that would continue to shape the way in which the Addition is managed under the alternatives being considered in this plan. All the alternatives support the purposes and significance of Big Cypress National Preserve. Some of these principles and strategies describe approaches that NPS staff is currently taking. Other principles and strategies are not being implemented at present, but they are consistent with NPS policy, they are not controversial, and their implementation may not require additional analysis under the National Environmental Policy Act.

### Cultural Resources

The protection of the Addition’s cultural resources is essential for understanding the past, present, and future relationship of people with the area. The strategies mentioned below will enable the National Park Service to protect the Addition’s

cultural resources. At the same time, these strategies will encourage visitors and employees to recognize and understand the value of the Addition's cultural resources and allow their integrity to be preserved unimpaired.

**Archeological Resources, Historic Structures, Cultural Landscapes, and Ethnographic Resources.** The strategies for managing archeological and historic resources, cultural landscapes, and ethnographic resources will be as follows:

- NPS staff will continue to survey and document or inventory cultural resources in accordance with the National Historic Preservation Act and other applicable regulations.
- Field data regarding archeological resources will be gathered to develop a more accurate predictive model of prehistoric site distribution and address related research questions.
- All identified resources will continue to be evaluated in accordance with the eligibility criteria for the National Register of Historic Places.
- Avoidance techniques and other measures will be used to prevent impacts on known significant sites from visitors and project-related disturbances.
- NPS staff will continue to support research and consultation to increase the understanding of all cultural resources.
- As appropriate, federally recognized tribes (the Miccosukee Tribe of Indians of Florida, the Seminole Tribe of Florida, and the Seminole Tribe of Oklahoma), the tribal historic preservation officers, and the state historic preservation officer will continue to be consulted on surveys, studies, excavations, and actions that potentially could affect cultural resources.
- Interpretive- and curricula-based programs and media will continue to educate visitors and the public about

cultural and historic issues relating to the Addition.

**Museum Collections.** Museum collections (prehistoric and historic objects, artifacts, works of art, archival material, and natural history specimens) would be acquired, accessioned and cataloged, preserved, protected, and made available for access and use according to NPS standards and guidelines.

**Relationships with American Indians.**

The National Park Service recognizes that the Big Cypress area has long occupied a prominent position for American Indians in southern Florida. NPS staff will work to ensure that traditional American Indian ties to the Big Cypress are recognized and will strive to maintain positive, productive government-to-government relationships with federally recognized tribes that are culturally affiliated with the Addition. The viewpoints and needs of tribes will continue to be respected, and issues that arise will be promptly addressed. American Indian values will be incorporated in the management and operation of the Addition. To enhance its relationship with the tribes, the National Park Service will carry out the following strategies and actions:

- Consult regularly and maintain government-to-government relations with federally recognized tribes that have traditional ties to resources within the Addition (the Miccosukee Tribe of Indians of Florida, the Seminole Tribe of Florida, and the Seminole Tribe of Oklahoma) to ensure productive, collaborative working relationships.
- Continue to identify and deepen the understanding of the significance of the Addition's resources and landscapes to American Indian people through collaborative research and sharing.
- Once they have been identified, protect and preserve the sites, resources, landscapes, and structures of signifi-

cance to the federally recognized tribes as required under federal laws and NPS *Management Policies 2006*.

- Encourage the participation of tribes in protecting the Addition's natural and cultural resources of interest and concern to them.
- Involve tribes in the Addition's interpretation program to promote accuracy of information about American Indian cultural values and to enhance public appreciation of those values.
- Support the continuation of traditional activities in the Addition by members of the Miccosukee and Seminole tribes to the extent allowed by applicable laws and regulations.

## Natural Resources

The protection, study, and management of the Addition's natural resources and processes are essential for achieving the Addition's purpose and maintaining its significance. The following principles and strategies will help the National Park Service to retain the ecological integrity of the Addition, including its natural resources and processes. These actions will help ensure

- that the Addition's natural features are unimpaired,
- that the Addition continues to be a dynamic, biologically diverse environment, and
- that the Addition is recognized and valued as an outstanding example of resource stewardship, conservation, education, and public use.

Management activities will be evaluated to ensure that the best management practices are used to carry out the proposed action. This evaluation will determine the best method to use to ensure that management actions are completed in a manner that is best for the resource and is conducted in an

efficient manner. NPS administrative ORV use will be limited to what is determined to be necessary to conduct emergency operations and to accomplish essential NPS management activities.

**Air Quality.** The Addition is designated a class II area under the Clean Air Act. The Addition is currently within a designated attainment area (i.e., concentrations below standards) for criteria pollutants. The following policies and strategies will ensure that the Addition's air quality will be enhanced or maintained with no significant degradation and that scenic views are maintained.

- Emissions associated with administration of the Addition will be reduced.
- Baseline information about air-quality-related values will be expanded through research, inventory, and monitoring programs to identify human stressors and general air quality trends.
- The National Park Service will expand programs for sharing air quality information with surrounding agencies and will develop educational programs to inform visitors and regional residents about the threats of air pollution to preserve resources.
- The National Park Service will continue to participate in regional air quality planning, research, and the implementation of air quality standards.
- Fire management will be conducted in compliance with regional air quality standards, and efforts will be made to minimize the effects of smoke from prescribed fire activity.
- The National Park Service will protect views of the Addition's noteworthy night sky for resource purposes and for visitor enjoyment.

**Ecosystem Management.** Approaches to ecosystem management are varied and occur at many levels. To achieve the desired

conditions described for Addition resources, a regional perspective must be considered, and it must be recognized that actions taken on lands surrounding the Addition directly and indirectly affect the Addition. Many of the threats to Addition resources, such as water quality degradation and invasive species, come from outside Addition boundaries. An ecosystem approach is required to understand and manage the Addition's natural resources. An understanding of the health and condition of the ecosystem also is imperative.

Cooperation, coordination, and partnerships with agencies, tribal governments, and neighbors are crucial to meeting or maintaining the desired conditions for the Addition. This approach to ecosystem management may involve many parties or cooperative arrangements with federal and state agencies, tribes, or private landowners to obtain a better understanding of transboundary issues.

Big Cypress is managed holistically as part of a greater ecological, social, economic, and cultural system. The following strategies will allow the National Park Service to lead in resource stewardship and in the conservation of ecosystem values within and outside the Addition. These strategies will allow the National Park Service to maintain good relations with owners of adjacent property, surrounding communities, and private and public groups that affect and are affected by the Addition. The strategies also will allow proactive management of the Addition and will be designed to resolve external issues and concerns and to ensure that Addition values are not compromised.

- The National Park Service will continue its involvement in the implementation of the Comprehensive Everglades Restoration Plan.
- The National Park Service will continue to seek agreements with the South Florida Water Management District, the

Miccosukee Tribe of Indians of Florida, the Seminole Tribe of Florida, and other owners of adjacent property to protect the Big Cypress watershed.

- The National Park Service will continue to work cooperatively to manage nonnative species in the region.
- The National Park Service will continue to act as a partner with the research community to further the knowledge of the natural and cultural resources of the Addition.
- The National Park service will work to protect the values of marine and estuarine resources, including preservation of fundamental physical and biological processes.

**Fire Management.** Prescribed and wildland fire will be used as a tool to meet NPS management objectives. The following strategies will ensure that wildland fire will be used in an effective manner to protect Addition resources.

- The National Park Service will maintain a current fire management plan for the Preserve, including the Addition.
- NPS staff will collaborate with adjacent communities, groups, state and federal agencies, and tribes to manage fire in the Addition and the region.
- NPS staff will continue to support national, regional, and local fire management activities and provide public education on the role of fire management in its historic and ecological context.
- Fire will be used to maintain and restore native plant communities and control nonnative plant species.

**Floodplains.** Natural floodplain values will be preserved or restored. Long-term and short-term environmental effects associated with the occupancy and modification of floodplains will be avoided.

When it is not practicable to locate or relocate development or inappropriate human activities to a site outside the floodplain or where the floodplain will be affected, the National Park Service will

- prepare and approve a statement of findings in accordance with Director's Order 77-2
- use nonstructural measures as much as practicable to reduce hazards to human life and property while minimizing impacts of floodplains on the natural resources
- ensure that structures and facilities are designed to be consistent with the intent of the standards and criteria of the National Flood Insurance Program (44 CFR 60)

**Inventory and Monitoring.** Knowing the condition of natural resources in a particular park unit is fundamental to the National Park Service's ability to protect and manage it. The National Park Service is confronted with increasingly complex and challenging issues in the Addition, and NPS staff need scientifically credible data to make good management decisions. Inventories involve compiling existing information as well as collecting new information. Inventories contribute to a statement of the condition of Addition resources in relation to a standard condition, especially the natural or unimpaired state.

A long-term ecosystem monitoring program is necessary to enable managers to make better informed decisions, to provide early warning of changing conditions in time to develop effective mitigating measures, to convince individuals and other agencies to make decisions benefiting the Addition, to satisfy certain legal mandates, and to provide reference data for relatively pristine sites for comparison with areas outside the Addition. Monitoring also enables NPS staff to evaluate the effectiveness of management actions and obtain more accurate assessments of

progress towards management goals. Using monitoring information will increase confidence in managers' decisions and improve their ability to manage Addition resources.

- Inventories and long-term monitoring programs will continue to be developed to address the status and health of Addition resources. Key indicators of resource or ecosystem conditions will be developed and monitored over the long term to record ecosystem health.
- Inventories will be conducted to identify vertebrate and invertebrate animal species, vascular and nonvascular plant species, and air and water resources in the Addition.
- The Addition will continue to participate in the South Florida/Caribbean Inventory and Monitoring Network. NPS staff will work with its partners, such as the Florida Fish and Wildlife Conservation Commission and the U.S. Fish and Wildlife Service, and collaborators to inventory resources and monitor vital components of the ecosystem including the exchange of relevant natural resource data. This will make it possible to better assess the condition of Addition resources and trends and to develop databases, data analyses, and retrieval tools so that the usefulness of natural resource information can be improved.
- NPS staff will continue to cooperate with the National Park Service's Fire Management Office in the ongoing fire effects monitoring. The monitoring will be used to determine if resource objectives are being met and if any unwanted effects are occurring.

**Natural Sound.** Natural sound predominates in the Addition. Visitors have the opportunity throughout most of the Addition to experience natural sounds. The sounds of modern society are generally confined to the areas near highways in the Addition.

- The National Park Service will protect the Addition's natural sounds for resource purposes and for visitor enjoyment.

**Soil Resources.** Soil resources are an essential component of ecosystem function and plant diversity in the Addition. The following policies and strategies will ensure that the Addition's soil resources are not significantly degraded.

- The National Park Service will allow natural geologic processes to proceed unimpeded.
- NPS staff will actively seek to understand and preserve the Addition's soil resources and prevent to the extent possible its physical removal or contamination.
- High-impact visitor use areas will be monitored, and actions will be taken to reduce impacts on soil resources.

**Threatened or Endangered Species.** The Endangered Species Act mandates that agencies, including the National Park Service, promote the conservation of all federally listed threatened or endangered species and their critical habitats on lands and in waters administered by the agency. Several federally listed and state-listed threatened or endangered species are known to exist in and around the Addition and to use habitats in the area. The following actions will be taken to protect threatened or endangered species.

- NPS staff will continue to work with the U.S. Fish and Wildlife Service, tribal governments, and the Florida Fish and Wildlife Conservation Commission to ensure that NPS actions help special status species (state-listed or federally listed threatened, endangered, rare, declining, sensitive, candidate, or special concern species) to recover. If any state or federally listed or proposed threatened or endangered species are

found in areas that would be affected by construction, visitor use, or restoration activities proposed under any of the alternatives in this plan, NPS staff will consult with the above agencies.

- NPS staff will cooperate with the agencies mentioned above to inventory, monitor, protect, and perpetuate the natural distribution and abundance of all special status species and their essential habitats in the Addition. These species and their habitats will be specifically considered in ongoing planning and management activities.
- The National Park Service will continue to be a partner with the U.S. Fish and Wildlife Service, American Indian tribes, Florida state agencies, and nongovernmental organizations in the recovery of the Florida panther, one of North America's most endangered mammals.
- Interpretive- and curricula-based education programs and media will continue to educate visitors and the public about NPS efforts to maintain native biodiversity.

**Vegetation.** Whenever possible, natural processes will be relied on to maintain native plants and plant communities. Communities will include the diverse species, genetic variability, plant associations, and successional stages representative of an ecologically functioning system in subtropical south Florida. The following actions will be taken to manage the Addition's vegetation.

- Plant communities will be inventoried to determine the species present and monitored to assess their condition. NPS staff will continue efforts to inventory rare plants.
- The National Park Service will continue efforts to eradicate invasive exotic (nonnative) plants in the Addition. NPS staff will continue to work with other federal, state, and local agencies and private landowners to prevent the spread



of exotic plant species into and out of the Addition.

- NPS staff will continue to use fire as a management tool for restoring and maintaining native plant communities.
- Interpretive and curricula-based programs and media will continue to educate visitors and the public about NPS efforts to restore native wetland vegetation and manage exotic plant species.

**Water Resources and Wetlands.** Surface water and groundwater will be protected, and water quality will be met or exceed all applicable water quality standards. To achieve these goals, the National Park Service will

- maintain baseline water quality and water stage monitoring programs
- maintain and operate NPS and NPS-permitted programs and facilities to avoid pollution of surface water and groundwater
- preserve and enhance the natural and beneficial values of wetlands
- conform with NPS management policies and Director's Order 77-1 concerning wetland protection
- maintain a "no net loss of wetlands" policy and strive to achieve a longer-term goal of net gain of wetlands across the national park system through the restoration of previously degraded wetlands
- avoid to the extent possible the long- and short-term adverse impacts associated with the destruction or modification of wetlands and avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative
- compensate for remaining unavoidable adverse impacts on wetlands by restoring wetlands that have been previously degraded

**Wilderness.** This document includes a wilderness study, and the alternatives included in the plan contain different amounts of land that are proposed for wilderness designation.

All the alternatives in this document have been developed to ensure that lands proposed for wilderness designation are managed in accordance with the mandates of the Wilderness Act, which defines wilderness character based on the following four criteria:

**untrammeled** — The Wilderness Act states that wilderness is "an area where the earth and its community of life are untrammeled by man," and "generally appears to have been affected primarily by the forces of nature." In short, wilderness is essentially unhindered and free from modern human control or manipulation. This quality is degraded by modern human activities or actions that control or manipulate the components or processes of ecological systems inside the wilderness.

**natural** — The Wilderness Act states that wilderness is "protected and managed so as to preserve its natural conditions." In short, wilderness ecological systems are substantially free from the effects of modern civilization. This quality is degraded by intended or unintended effects of modern people on the ecological systems inside the wilderness since the area was designated.

**undeveloped** — The Wilderness Act states that wilderness is "an area of undeveloped Federal land retaining its primeval character and influence, without permanent improvements or human habitation," "where man himself is a visitor who does not remain" and "with the imprint of man's work substantially unnoticeable." This quality is degraded by the presence of structures, installations, habitations, and by the use of motor vehicles, motorized equipment, or

mechanical transport that increases people's ability to occupy or modify the environment.

**solitude or a primitive and unconfined type of recreation** — The Wilderness Act states that wilderness has “outstanding opportunities for solitude or primitive and unconfined type of recreation.” This quality is about the *opportunity* for people to experience wilderness; it is not directly about visitor experiences per se. This quality is degraded by settings that reduce these opportunities, such as visitor encounters, signs of modern civilization, recreation facilities, and management restrictions on visitor behavior.

The National Park Service will adhere to the following strategies in the event that Congress designates wilderness in the Addition.

- Management decisions affecting wilderness will be consistent with the minimum requirement concept in accordance with federal laws and policies.
- A wilderness management plan will be developed that will guide the preservation, management, and use of the wilderness area. The plan would, among other elements, address desired future conditions, user capacity indicators and standards, and establish a monitoring program.
- The wilderness will be monitored to ensure that management actions and visitors do not unacceptably impact wilderness resources, values, and character as specified in an approved wilderness plan.
- Natural processes will be allowed to shape and control the wilderness ecosystems.
- Wilderness educational programs will be expanded to inform visitors about wilderness ethics and how to minimize

their impacts on the Addition. “Leave No Trace” and “Tread Lightly” practices will be emphasized.

- Efforts will be expanded to ensure that wilderness features, such as natural soundscapes and views of the night skies, are not degraded.

Until such time as wilderness is designated by Congress, the National Park Service would manage those parts of the Addition eligible for wilderness designation in such a way as to maintain their wilderness character, in accordance with NPS policy.

**Wildlife and Fish.** The condition of wildlife and fish will be determined through baseline inventories and long-term monitoring programs. The following policies and strategies will ensure that the Addition's wildlife and fish are protected.

- NPS staff will seek to perpetuate the native animal life as part of the natural ecosystem. Minimizing human impacts on native animals will be emphasized, as will minimizing human influence on naturally occurring fluctuations of animal populations. Ecological processes will be relied on to control the populations of native species to the greatest extent practicable.
- The preservation of populations and habitats of migratory species inhabiting the Addition will be ensured. Whenever possible, NPS staff will cooperate with others to ensure the preservation of the populations and habitats of migratory species outside the Addition.
- Educational programs will be developed to inform visitors and the general public about wildlife issues and concerns.
- The management of populations of exotic animal species will be undertaken whenever such species threaten Addition resources or public health and when control is prudent and feasible.

- NPS staff will continue to work to restore extirpated native species where suitable habitat exists and restoration is compatible with social, political, and ecological conditions.
- The National Park Service will manage wildlife and hunting in the Addition in accordance with Executive Order 13433, “Facilitation of Hunting Heritage and Wildlife Conservation.”
- Interpretive- and curricula-based programs and media will continue to educate visitors and the public about wildlife issues and concerns.

## NPS Management

**Climate Change.** Climate change is perhaps the most far-reaching and irreversible threat the national park system has ever faced (NPCA 2007). Climate change refers to a suite of changes occurring in the earth’s atmospheric, hydrologic, and oceanic systems. These changes, including increased global air and ocean temperatures, widespread melting of snow and ice, and rising global average sea level, provide unequivocal evidence that the climate system is warming (IPCC 2007). Although the warming trend, commonly referred to as global warming, is discernable over the entire past century and a half, recent decades have exhibited an accelerated warming rate, with 11 of the last 12 years ranking among the 12 warmest years on record. Most of the observed temperature increase can be attributed to human activities that contribute heat-trapping gases to the atmosphere (IPCC 2007). These “greenhouse gases,” particularly carbon dioxide from the burning of fossil fuels, cause Earth’s atmosphere to act like a blanket and trap the sun’s heat. Although the insulating effect (or greenhouse effect) of our atmosphere is important to living systems, the rapid increase in greenhouse gases since the mid 19th century has turned the thermostat up higher than what our systems are adapted to.

Although climate change is a global phenomenon, it manifests itself differently in different places. One of the most dramatic effects of global warming is the impact it has on extreme weather events. A disrupted climate could affect natural and cultural resources, and is likely to interfere with public use and enjoyment of the Addition. Although many places in the world have already observed and recorded changes that can be attributed to climate change, the impacts to the Addition have not been specifically determined, and the actual implications within the lifespan of this general management plan (15-20 years) are unknown.

Climate change is expected to affect human health; damage infrastructure; and alter crop production, animal habitats, and many other features of our natural and managed environments. Rising mean sea levels in combination with increasingly severe storms and high tides are expected to cause more frequent and severe flooding, erosion, and damage to coastal systems and structures. In a place where differences in mean elevation are measured in inches, rising sea levels could have a serious impact on Addition resources, inundating more areas and changing natural communities.

The strategies for responding to the effects of climate change include the following:

- NPS staff will continue to audit their greenhouse gas contributions and make decisions to reduce the agency’s carbon footprint.
- NPS staff will engage their partners to assist with appropriate climate change research.
- NPS staff will engage visitors and the public on the topic of climate change through interpretive and educational media.
- NPS staff will use adaptive management to respond to the effects of climate

change on Addition resources, including facilities.

**Commercial Services.** Commercial services could become a part of providing visitor services in the Addition to achieve the goals and objectives for visitor services. By NPS policy, commercial services must be determined to be necessary and appropriate. NPS authorization is necessary for all commercial services in the Addition. Strategies and objectives for managing possible future commercial services are as follows:

- All commercial operations serving Addition visitors are managed through appropriate types of authorizations such as concession contracts and commercial use authorizations.
- All commercial activities in the Addition provide high-quality visitor experiences while protecting important natural, cultural, and scenic resources.
- Levels of commercial use are consistent with resource protection and high-quality visitor experiences.
- Only those necessary and appropriate commercial operations not conveniently located outside the Addition are authorized.
- The commercial services program in the Addition is managed efficiently and effectively consistent with all applicable laws and policies.

A commercial services plan is currently being prepared for the original Preserve. It will describe in detail the actions required to achieve NPS goals for commercial services and related visitor experiences. The commercial services plan will be amended to include the Addition after this *General Management Plan* is approved.

**Orientation, Interpretation, and Education.** A variety of methods are used to orient visitors to the Addition, to provide information about the Addition, and to

interpret the Addition's resources. NPS staff will continue to pursue strategies to ensure that information is available so that visitors can plan a rewarding visit. Increasing outreach and educational programs will help connect diverse audiences to the Addition's resources, build a local and national constituency, and gain public support for protecting the Addition's resources. Continuing to provide interpretation will build emotional, intellectual, and recreational ties with the Addition and its cultural and natural heritage.

The strategies for managing orientation, interpretation, and education will be as follows:

- Emphasis will continue to be placed on providing information, orientation, and interpretive services in the most effective manner possible. Appropriate techniques and technologies will be used to increase the visibility of the national park system and its programs and to make people aware of issues facing the Addition.
- Interpretive- and curricula-based education programs and media will continue to be grounded in key resource issues, management priorities, and public safety while providing opportunities for visitors to connect Addition resources with national and global issues.
- Cooperative efforts and partnerships with local communities, public and private agencies, tribes, organizations, stakeholders, and land managers in the region will be enhanced so that visitors can be better informed about the abundance, variety, and availability of the region's recreational and interpretive opportunities. This information will orient visitors about what to do (and what not to do), attractions to see, and how to enjoy the Addition in a safe, low-impact manner.

- When feasible, the National Park Service will seek partnerships with other public agencies and with the Miccosukee Tribe of Indians of Florida and the Seminole Tribe of Florida to share orientation, contact stations, and administrative facilities.
- NPS staff will strengthen partnerships with local and state agencies and other national parks, educational institutions, and other organizations to enrich interpretive and educational opportunities regionally and nationally.

**Public Health and Safety.** While recognizing that there are limitations on its capability and constraints imposed by the Organic Act to not impair resources, the National Park Service and its cooperators will seek to provide a safe and healthful environment for visitors and employees. The following strategies will be pursued:

- NPS staff will strive to identify recognizable threats to safety and health and protect property by applying nationally accepted standards.
- Consistent with mandates and non-impairment, NPS staff will reduce or remove known hazards and/or apply appropriate mitigation measures, such as closures, guarding, gating, education, and other actions.

**User Capacity.** The strategy of addressing user capacity for the Addition is a tiered approach that will examine broad trends while focusing more specific monitoring and management on areas where action is most likely needed to achieve desired conditions.

- Sixteen indicators were developed for the Addition, along with standards that could serve as management thresholds for the quality of resources and visitor experiences in the Addition.
- The National Park Service will use a variety of visitor management tools to

help minimize impacts and maintain desired conditions, including education, ORV management through permitting and administration, site and trail management, and regulating access.

- The National Park Service will continue to develop and refine the user capacity indicators and standards to ensure resource protection and facilitate effective management of the Addition and its uses.

**Relations with Private and Public Organizations, Owners of Adjacent Land, and Government Agencies.** The National Park Service must consider that the Addition — socially, politically, ecologically, and historically — is part of a greater area and that actions in the Addition affect the surrounding environment and society. For instance, the management of the Addition influences local economies through tourism expenditures and the goods and services the Park Service purchases to support Addition operations. To ensure that the National Park Service continues to have good relations with landowners and communities surrounding the Addition and to ensure that the Addition is managed proactively to resolve external issues and concerns, the following strategies will be implemented:

- NPS staff will continue to establish partnerships with public and private organizations to achieve the purposes and mission of the Addition. Partnerships will be sought for the purposes of resource protection, research, education, visitor enjoyment, visitor access, and management.
- To foster a spirit of cooperation and encourage compatible uses of adjacent lands, NPS staff will keep landowners, land managers, tribes, local governments, and the public informed about NPS management activities. NPS staff will consult periodically with landowners and communities that are affected by or potentially affected by

Addition visitors and management actions.

- The National Park Service will work closely with local, state, and federal agencies and tribal governments whose programs affect or are affected by activities in the Addition. In particular, to meet mutual management needs, NPS managers will maintain a close working relationship with the U.S. Fish and Wildlife Service, Everglades National Park, the Miccosukee Tribe of Indians of Florida, the Seminole Tribe of Florida, the Florida Division of Forestry, the Florida Fish and Wildlife Conservation Commission, the South Florida Water Management District, and the owners of adjacent private land.

**Sustainable Design/Development.** NPS staff will strive to develop facilities that are harmonious with Addition resources, compatible with natural processes, aesthetically pleasing, functional, as accessible as possible to all segments of the population, energy-efficient, and cost-effective. To meet these goals, the National Park Service will employ the following strategies:

- NPS staff will ensure that all decisions regarding NPS operations, facilities management, and development in the Addition — from the initial concept through design and construction — reflect principles of resource conservation. Thus, all developments and NPS operations will be sustainable to the maximum degree possible and practical. New developments and existing facilities will be located, built, and modified according to the NPS 1993 “Guiding Principles of Sustainable Design” or other similar guidelines.

Through sustainable design and development, the National Park Service will strive to minimize the Addition’s carbon footprint.

**Transportation to and within the Addition.** Visitors will have reasonable access to the Addition.

- Transportation facilities in the Addition will provide access for the protection, use, and enjoyment of Addition resources. They will preserve the integrity of the surroundings, respect ecological processes, protect resources, and provide the highest visual quality and a rewarding visitor experience.
- The National Park Service will participate in all transportation planning forums that may result in links to the Addition or impact Addition resources. Working with federal, tribal, state, and local agencies on transportation issues, the National Park Service will seek reasonable access to the Addition and connections to external transportation systems.

**Utilities and Communication Facilities.** Addition resources or public enjoyment of the Addition will not be denigrated by nonconforming uses. Telecommunication structures will only be permitted in the Addition to the extent that they do not jeopardize the Addition’s mission and resources. No new nonconforming use or rights-of-way will be permitted through the Addition without specific statutory authority and approval by the director of the National Park Service or his representative, and will be permitted only if there is no practicable alternative to such use of NPS lands.

## RELATIONSHIP OF OTHER PLANNING EFFORTS TO THIS GENERAL MANAGEMENT PLAN

The Addition is located in Collier County, Florida. A variety of public lands surround the Addition. Everglades National Park is located to the south; to the east is the Miccosukee Indian Reservation and South Florida Water Management District Conservation Area 3A; to the north is the Big Cypress Seminole Indian Reservation and private lands; and to the west is Fakahatchee Strand Preserve State Park and the Florida Panther National Wildlife Refuge (see Map 1: Region/Vicinity). Private lands are scattered in the area, including within the Addition, but are relatively small in size.

Several plans have influenced or would be influenced by the approved *General Management Plan* for the Addition. These plans have been prepared (or are being prepared) by the National Park Service, the U.S. Fish and Wildlife Service, the state of Florida, and several local agencies and organizations. Some of these plans are described briefly here, along with their relationship to this general management plan.

### NATIONAL PARK SERVICE PLANS

#### Big Cypress National Preserve

##### *Commercial Services Plan*

The *Commercial Services Plan* is intended to address the existing conditions and law in a manner that will be compliant with the 1998 National Park Service Concessions Management Improvement Act (PL 105-391) and regulations. As an implementation plan, this *Commercial Services Plan* must also be consistent with the established planning direction in the 1991 *General Management Plan* for the Preserve and achieve the desired future conditions or goals for the Preserve. This plan covers the original Preserve only; the Addition will be

addressed in an addendum to this plan after the completion of the *General Management Plan* for the Addition, which is expected to be completed in 2010.

The preferred alternative for the original Preserve's *Commercial Services Plan* proposes to develop the Preserve's visitor services to the level and quality described in the 1991 *General Management Plan*. The concept of this alternative is to enhance the Preserve's visitor services by developing one facility at Monroe Station to provide the visitor services deemed necessary and appropriate, with the opportunity to provide a second, smaller facility at Seagrape Drive as funding permits. Other services may begin and end outside the Preserve. Some services expected to be provided include the following: hunting and fishing guides; buggy tours; hiking tours (both day use and multiday); boat and kayak rentals, livery, and guided tours; firewood sales for campgrounds; bicycle rentals; general van tours, birding and wildlife viewing, and photography — by van, foot, or buggy, and offered through a cooperative association (The Everglades Association). The plan also proposes the development of a back-country camping complex in the northern portion of the Turner River Management Unit. Some management changes could be made to improve effectiveness and efficiency, and some minor changes to the level of services could be made for resource protection and visitor experience enhancement to be consistent with the management zone prescriptions established in the 1991 *General Management Plan*.

The *Commercial Services Plan* was reviewed during the development of this *General Management Plan / Wilderness*

*Study / Off-road Vehicle Management Plan / Environmental Impact Statement.*

*Draft South Florida and Caribbean Parks Exotic Plant Management Plan and Environmental Impact Statement (2006)*

The plan outlines the management of exotic plants in nine south Florida and Caribbean parks, including Big Cypress National Preserve and the Addition. The plan promotes restoration of native plant communities and habitat conditions in ecosystems that have been invaded by exotic plants and protects resources, values, visitors, staff, and area residents from adverse effects resulting from exotic plant presence and control activities. The plan takes a collaborative approach to managing exotic plants across the nine parks, improving effectiveness and efficiency and providing a consistent management framework for responding to this threat. The plan also seeks to establish plant and treatment location priorities, reduce new exotic plant introductions, and reduce the number of individually targeted plants to protect natural resources. The range of actions includes a no-action alternative, increased planning, monitoring and mitigation, and active restoration. The *South Florida and Caribbean Parks Exotic Plant Management Plan* includes the Addition and provides specific management direction for exotic plant management in the Addition.

*Fire Management Plan / Environmental Assessment (2005)*

NPS Director's Order #18, "Wildland Fire Management" (NPS 2008), states, "Every park area with burnable vegetation must have a fire management plan approved by the superintendent." Fire is recognized as an ecological process necessary for the maintenance and health of the ecosystem. Fire must be managed to ensure the health and safety of visitors; protect property; ensure firefighter safety; minimize resource damage and costs; protect natural and cultural resources; and perpetuate, restore,

replace, or replicate natural processes. This plan seeks to implement an integrated program of wildland fire suppression, prescribed fire, and wildland fire for resource benefits. The Preserve has the largest fire load of any unit in the national park system, and many plant communities in the original Preserve and the Addition depend on burning for their survival. Wildfire suppression and prescribed fire are covered in the 1991 *General Management Plan*; however, this 2005 *Fire Management Plan* provides detailed guidance regarding fire management for the original Preserve and the Addition.

*General Management Plan / Environmental Impact Statement (1991)*

The general management plan is mandated by the National Parks and Recreation Act of 1978. This plan for the original Preserve was completed in 1991, and it guides visitor use, natural and cultural resource management, and general development for the next 10 to 15 years. It provides a clearly defined direction for resource management and preservation as well as appropriate visitor use and interpretation of the resources of the original Preserve. The *General Management Plan* for the original Preserve contains descriptions of resources that were used in preparation of this *General Management Plan* for the Addition; it also contains guidance for Preserve management that is complimentary and relevant to the Addition.

*I-75 Recreational Access Plan / Environmental Assessment (1991)*

The Addition Act directed the National Park Service to cooperate with the state to develop three recreation access points along I-75 within the Preserve, including the Addition. Many of the requirements and recommendations included in this access plan are incorporated in the 1991 *General Management Plan*. The *I-75 Recreational Access Plan* was used in the development of this management plan for the Addition.



*Land Protection Plan (1988)*

This plan was written in response to the May 1982 policy statement in the *Federal Register* regarding use of the federal portion of the Land and Water Conservation Fund. The monies were to be used to identify land and/or interests in land to be in federal ownership to achieve management purposes that include resource protection and public access in a cooperative, cost-effective manner. The plan identifies methods for protecting the Preserve's resources while taking into consideration public access and visitor experiences. Such resources include natural, historic, scenic, cultural, and recreational resources among others. Due to severance of subsurface oil and gas rights from the surface estate, oil and gas activities are not identified within the plan. The plan delineates the Preserve into zones and subzones for management purposes, and outlines the acceptable activities on "improved property". The *Land Protection Plan* was reviewed during the development of this management plan for the Addition.

*Long-Range Interpretive Plan (2002)*

This plan provides the vision for visitor experiences in the Preserve based on the purpose, significance, and mission put forth in the "Preserve's Strategic Plan." The *Interpretive Plan* proposes both development and management activities to satisfy current visitor demands, and identifies a media and activity action plan to meet future visitor needs. The interpretive plan was meant to guide the Preserve's interpretation direction for 10 years. The significance statements and primary interpretive themes included in the *Long-Range Interpretive Plan* are applied to the Addition in this management plan.

*Minerals Management Plan (1991)*

The 1991 *General Management Plan* included a "Minerals Management" section for the original Preserve that focused on specific surface protection stipulations and actions needed to protect important

resource values within those areas of the original Preserve that are open to oil and gas activity. This section will be superseded by a Preserve-wide oil and gas management plan that is currently in preparation and scheduled for completion in 2009. The new plan will provide guidance for oil and gas exploration for the entire Preserve, including the Addition.

*Recreational Off-road Vehicle Management Plan / Environmental Impact Statement (2000)*

This plan is called for and directed by the 1991 *General Management Plan*. It was also prepared to comply with the 1995 settlement agreement negotiated between the Florida Biodiversity Project and several agencies and bureaus. ORV use is allowed in the original Preserve by the enabling legislation in a manner that is compatible with resource preservation. The ORV plan outlines the management of recreational ORV use in the original 582,000 acres of the Preserve. It specifies that ORV travel is facilitated by a system of designated access points and trails; that sensitive areas be closed; that temporal and seasonal closures be instituted; and that permits and education be required to operate off-road vehicles in the original Preserve. Many of the elements included in the *Recreational Off-road Vehicle Management Plan* are included in the ORV plan for the Addition.

*Resource Management Plan (n. d.)*

The original Preserve was established "to assure the preservation, conservation and protection of the natural, scenic, hydrologic, floral and faunal, and recreational values of the Big Cypress Watershed." The boundary of the Preserve was expanded in 1988 to include about 147,000 acres of adjacent tracts. This plan includes initial planning and resource inventorying for the Addition. Resource conditions in the Preserve vary from nearly pristine to areas where natural function no longer exists. The historical timber harvest, as well as past agriculture activities in the area and those currently occurring outside the

Preserve, threaten natural systems. Urban expansion as well as large-scale expansion of oil and gas extraction is also of concern. The plan outlines issues within the Preserve, including natural resources, cultural resources, exotic plants and wildlife, and the hydrologic environment. The plan emphasizes that conservation, restoration, and preservation must take place on an ecosystem scale. The *Resource Management Plan* was reviewed during the development of this management plan for the Addition.

#### *Water Resources Management Plan (1996)*

The plan complements and is consistent with the 1991 *General Management Plan* and *Minerals Management Plan* for the Preserve and addresses the water resources component of the *Resources Management Plan* in more detail. The plan reviews existing information, analyzes water resource issues, and presents a coordinated action plan to address such issues. This plan reconfirms the premise of the Preserve's original enabling legislation — that water is a controlling force on the ecosystems of the Preserve and provides direction and guidance to staff in managing water problems in the Preserve. The Preserve faces many hydrologic threats to its environmental integrity and thus this plan has been developed. The plan outlines natural resource management and permitting activities in the Preserve and contributes to South Florida water resource management more broadly. The *Water Resources Management Plan* was reviewed during the development of this general management plan.

#### **Everglades National Park**

##### *General Management Plan (in progress)*

Everglades National Park is currently developing a general management plan to replace its 1979 *Master Plan*. The new plan will provide a broad conceptual framework to

guide decisions for long-term NPS management and resource protection during the next 20 years. The *Everglades General Management Plan* was reviewed during the development of this management plan for the Addition.

#### **OTHER FEDERAL AGENCY PLANS**

##### **Army Corps of Engineers**

##### *Comprehensive Everglades Restoration Plan (CERP) (2000)*

The comprehensive plan is a framework and guide to restore, protect, and preserve the water resources of central and southern Florida, including the Preserve. The plan was approved in the Water Resources Development Act of 2000, and it is a component of the world's largest ecosystem restoration effort, encompassing 16 counties and an 18,000-square-mile area. The comprehensive plan includes more than 60 elements designed to capture, store, and redistribute fresh water. Implementation of the comprehensive plan will take more than 30 years to complete and will improve the quality, quantity, timing, and distribution of water flows through the Preserve. The *Comprehensive Everglades Restoration Plan* was reviewed during the development of this management plan for the Addition.

##### **U.S. Fish and Wildlife Service**

##### *Florida Panther National Wildlife Refuge Comprehensive Conservation Plan (1998)*

The National Wildlife Refuge System Improvement Act of 1997 requires the U.S. Fish and Wildlife Service to develop comprehensive conservation plans for all lands and waters of the National Wildlife Refuge System. The *Florida Panther National Wildlife Refuge Comprehensive Conservation Plan* meets the requirements of the act. The refuge was established to

conserve fish, wildlife, and plants listed as endangered and/or threatened species under the Endangered Species Act of 1973, specifically the Florida panther. The Refuge abuts the northwest boundary of the Preserve and functions as a vital habitat linkage for panthers. The *Florida Panther National Wildlife Refuge Comprehensive Conservation Plan* was reviewed during the development of this management plan for the Addition.

*Interagency Florida Panther Response Plan* (2008)

The U.S. Fish and Wildlife Service, in partnership with the National Park Service and the Florida Fish and Wildlife Conservation Commission, prepared a final response plan in October 2008 that includes guidelines for the agencies responding to human-panther interactions and depredations. The plan also provides guidelines for developing an outreach and education program to help people understand panther behavior and actions humans should take when living or recreating in panther habitat.

Related to the response plan is the *Florida Panther Recovery Plan*, updated and released in 2006. This is the third update of the Service's panther recovery plan since 1981 when the first plan was crafted. The revised plan will be substituted for the panther chapter in the Service's *Multi-Species Recovery Plan* as well as its range-wide species recovery plan for the panther.

These plans were reviewed during the development of this management plan for the Addition.

*Manatee Management Plan*

In 2001 the U.S. Fish and Wildlife Service's Southeast Region published a third revision to the *Florida Manatee Recovery Plan*, which identified information on the manatee's endangered status, as well as recovery goals, criteria to ensure a healthy population, and ultimate removal from the

endangered list. Future management and information exchange with researchers throughout the world is also outlined. The plan is part of the *Comprehensive Everglades Restoration Plan* and is part of ongoing research from scientists in the Florida Integrated Science Center, Florida Marine Research Institute, Ten Thousand Islands National Wildlife Refuge, Big Cypress National Preserve, and Everglades National Park (USGS 2005). Manatees are found in the Preserve, and this plan will contribute to their protection. The *Manatee Management Plan* was reviewed during the development of this management plan for the Addition.

*South Florida Multi-Species Recovery Plan* (1999)

This plan was written to recover multiple species by restoring ecological communities throughout the South Florida Ecosystem (26,002 square miles). There are more than 600 species considered either rare or imperiled in South Florida, 68 of which are federally listed as threatened or endangered. A number of limiting factors for habitat-limited species are outlined, including habitat loss, fragmentation, and degradation as a result of urbanization, agriculture or other land-use conversions, wetland drainage and alteration of hydrological patterns, invasion of exotic species, fire suppression, soil subsidence, degradation of water quality, and increased levels of contaminants. Recovery objectives are identified at the species level, while recovery criteria are identified at the species and community level. Recovery actions have been developed to provide consistency between each of the 68 species, and habitat level recovery actions have been developed to facilitate the integration of individual species needs at the community level. The plan does not replace existing approved species recovery plans, but rather outlines South Florida's contribution to rangewide recovery. A number of threatened and endangered species reside

within the Preserve, and the Preserve is a critical habitat link in the ecosystem. The *South Florida Multi-Species Recovery Plan* was consulted during the development of this management plan for the Addition.

## TRIBAL PLANS

### Seminole Tribe of Florida

#### *Seminole Big Cypress Water Conservation Plan (1997)*

The plan was completed in 1997 and addresses a number of issues, including water transfer and conveyance, storage, water quality, and historic flows. This water project began as a *Comprehensive Everglades Restoration Plan* pilot program under the 1996 Water Resource Development Act, is considered a “Critical Restoration Project,” and is currently being implemented. The plan seeks to mitigate man-made impacts on the natural system and contributes to overall ecosystem restoration. The plan ensures that the reservation’s federal water right is met. Further, the plan provides for additional water retention and storage to alleviate flooding and increase residential development potential. Water quality is addressed, and water resource areas will be used to reduce phosphorus loads. These areas, in conjunction with bypass structures under the west feeder canal, will ensure full sheet flow contact across the entire wetland system, rehydrating wetlands and mimicking flows prior to the Central and South Florida projects. Big Cypress National Preserve is directly linked to the Seminole Reservation by the flows from the reservation into the Preserve. The *Seminole Big Cypress Water Conservation Plan* was reviewed during the development of this management plan for the Addition.

## STATE AGENCY PLANS

### Florida Department of Agriculture and Consumer Services, Division of Forestry

#### *Picayune Strand State Forest Management Plan (2008)*

The 10-year plan was approved in August 2008. The plan establishes goals for critical elements of the forest, including restoration, recreation, reforestation, horticulture, exotic plant management, threatened and endangered species, and prescribed fire. It is the first detailed, long-range plan for the forest, and it will guide the management of the forest from 2008 through 2018. The forest is adjacent to Fakahatchee Strand Preserve State Park, which abuts Big Cypress National Preserve to the west. The *Picayune Strand State Forest Management Plan* was reviewed during the development of this management plan for the Addition.

### Florida Fish and Wildlife Conservation Commission

#### *A Conceptual Management Plan for the Everglades Complex of Wildlife Management Areas (ECWMA) (2002)*

The Everglades Complex is part of the Kissimmee-Okeechobee-Everglades basin and lies within three counties — southwestern Palm Beach, western Broward, and northwestern Miami-Dade. It includes three management areas — Holey Land, Rotenberger, and Everglades-Francis S. Taylor. Through a cooperative management agreement with the South Florida Water Management District, the Florida Fish and Wildlife Conservation Commission has management authority over ECWMA lands (mainly lands in Water Conservation Areas 2 and 3) for game and fresh water fish preservation, protection, propagation, and recreational use. The plan lists 28 state and federally listed and endangered or threatened species and their habitat. The majority of the complex is east and northeast of the Preserve; however, the

southwest corner of Everglades-Francis S. Taylor Wildlife Management Area abuts the eastern boundary of the Preserve from the Tamiami Ranger Station north to the Broward County line. The ECWMA plan was reviewed during the development of this management plan for the Addition.

### **Florida Department of Environmental Protection, Division of Recreation and Parks**

#### *Coastal Zone Management Program*

The Florida Coastal Zone Management Program was developed with the passage of the Coastal Zone Management Act of 1966 and approved by the National Oceanic and Atmospheric Administration in 1981. The program gives the state oversight responsibilities in controlling dredge and fill operations, pollution abatement, and other environmental concerns. The National Park Service has reviewed the state coastal zone management plan and has determined that this *General Management Plan* for the Addition is consistent with the Coastal Zone Management Act.

#### *Fakahatchee Strand Preserve State Park Management Plan (2000)*

The plan is intended to meet the requirements in Sections 253.034 and 259.032, Florida Statute and Chapter 18-2, *Florida Administrative Code*. The primary purpose of the state park is outdoor recreation and conservation, with preservation and enhancement of natural conditions taking precedent over user considerations. Park goals outlined in the plan include restoring park hydrology, assisting in the recovery of the Florida panther, appropriately managing cultural resources, and eliminating exotic plant species. Development is restricted to the minimum necessary for ensuring the state park's protection and maintenance, limited access, user safety and convenience, and appropriate interpretation. In relation to the Preserve, the park serves as a critical

link in the water resources of the region. Surface water from the Preserve and the Florida Panther National Wildlife Refuge enters the park from the north on its way to Everglades National Park to the south. The *Fakahatchee Strand Preserve State Park Management Plan* was reviewed during the development of this management plan for the Addition.

#### *State Comprehensive Outdoor Recreation Plan — Outdoor Recreation in Florida (2000)*

This plan assesses recreational supply, demand, and needs for 11 regions in the state. Region 9 (Southwest Florida) includes the Preserve and the surrounding area. The plan identifies goals for recreational opportunities and facilities, including hiking, bicycling, horseback riding, camping, fishing, and ORV use. The actions contained in this general management plan will help meet the state's goals for outdoor recreation.

## **LOCAL PLANS**

### **Collier County**

#### *Collier County Manatee Protection Plan (1995)*

The U.S. Fish and Wildlife Service of the Department of the Interior protects manatees under the Marine Mammal Protection Act of 1972 and the Endangered Species Act of 1973. In addition, the Florida Manatee Sanctuary Act, Chapter 16N-22, *Florida Administrative Code*, provides manatee protection by declaring the state of Florida a "refuge and sanctuary for the manatee, the 'Florida State Marine Mammal.'" The Addition is in Collier County, one of 13 key manatee counties in Florida. This plan seeks to reduce the number of boat-related manatee mortalities, achieve an optimal sustainable manatee population, protect manatee habitat, promote boating safety, and increase public awareness of the need to protect manatees and their environment.

This general management plan is consistent with the *Collier County Manatee Protection Plan*.

*Collier County 2030 Long-range Transportation Plan (2007)*

The *2030 Long-range Transportation Plan*'s purpose is to ensure an organized scope of needs and goals regarding transportation within Collier County and outlying areas through 2030. This plan is updated as necessary and was last done in July 2007.

The *2030 Long-range Transportation Plan* demonstrates the need for both regional and alternative transportation strategies and defines the opportunity to incorporate those components into an overall transportation program. The plan provides for the enhanced funding to expand the operations and services of transit, improve connectivity through the use of pedestrian and bicycle facilities and local road interconnection, congestion management system and intelligent transportation system (CMS and ITS) programs and improvements. The plan has also included the Metropolitan Planning Organization's regional partners in the development and integration of multimodal regional components. This plan also addresses things such as wildlife crossings along SR 29. This general

management plan is consistent with the *Long-range Transportation Plan*.

*Growth Management Plan*

The plan is required under the 1985 Florida Growth Management Act and is to be consistent with state and regional plans. It is composed of many elements, namely the Future Land Use Element, the *Golden Gate Area Master Plan*, the *Immokalee Area Master Plan*, the Capital Improvement Element, Intergovernmental Coordination Element, Housing Element, Recreation and Open Space Element, Conservation and Coastal Management Element, the Economic Element, and Public Utilities Element. When combined, these elements provide the framework to effectively guide future development, while providing for the protection of open space; natural resources; and public health, safety, and welfare. Development in Collier County directly impacts natural resources in the Preserve and Addition. Therefore, managed growth policies outlined in this plan are necessary to reduce negative impacts of development and ensure that the entire Preserve is protected for future generations.

## PLANNING ISSUES AND CONCERNS

### INTRODUCTION

The general public; NPS staff; representatives from other county, state, and federal agencies; and representatives from various organizations identified various issues and concerns during scoping (early information gathering) for this *General Management Plan*. An issue is defined as an opportunity, conflict, or problem regarding the use or management of public lands. Comments were solicited at public meetings, through planning newsletters, and on the NPS web site (see the “Consultation and Coordination” chapter).

Comments received during scoping demonstrated that there is much that the public likes about the original Preserve and the Addition. The issues and concerns for the Addition generally involve determining the appropriate types and levels of visitor use and facility development in the Addition while remaining compatible with desired resource conditions. The alternatives in this general management plan provide strategies for addressing the issues within the context of the Addition’s purpose, significance, and special mandates.

### ISSUES

The following issues were identified for the Addition.

#### Management Direction

Although acquisition of the Addition lands was authorized in the 1988 legislation, these lands were in private ownership until 1996 when most of the lands were acquired through the Arizona–Florida Land Exchange and transferred to the National Park Service. No comprehensive planning has been conducted for the Addition since that time. A general management plan is needed to provide

direction for managing the Addition consistently with the original Preserve and determining what kind of resource conditions and visitor experiences the National Park Service, in consultation with the public, American Indians, and landowners, will seek to achieve.

#### Visitor Access and Use Levels

Many people were concerned about the type of access provided to visitors as well as the use levels that would occur in the Addition. Some expressed concern that not enough motorized access would be allowed for traditional uses; others were concerned that too much motorized use would be allowed, with adverse impacts on resources. People’s opinions about ORV permitting, hunting, and commercial services were highly polarized. The location, number, and types of recreational access points were major points of interest. More than 6 million vehicles travel the I-75 corridor. Many of the people in those vehicles use the Addition, further underscoring the importance of addressing access and use concerns.

#### Resource Impacts from Visitor Use and Facility Development

Many people were concerned about the effects ORV use would have on cultural resources, sensitive wildlife, including the Florida panther, and native plant communities. The level of facility development and the impact it would have on natural hydrologic processes and wildlife habitat was also an issue.

#### Resource Preservation and Restoration

The National Park Service’s ability to preserve and restore natural resources in the Addition

is highly dependent on the range of uses and the levels of motorized access and facility development that are approved. Many people were concerned about the National Park Service's ability to protect resources while meeting the allowed multiple uses in the Addition, including management of hunting, oil and gas operations, motorized use, and access for owners of private property.

### Wilderness

Evaluating the Addition for wilderness eligibility has been a long-standing controversial issue. The National Park Service is required to study the Addition for wilderness suitability based on the requirements of the Addition's enabling legislation passed by Congress. Public opinion about wilderness designation in the Addition is centered on protecting resources through wilderness designation while at the same time providing for a diversity of ORV riding opportunities. Furthermore, public opinion differs regarding whether these lands possess wilderness character.

### Addition Operations and Management

With the exception of two fire management facilities in the Western Addition, the National Park Service currently has no operations facilities in the Addition. The Northeast Addition has no NPS presence, and staff have to drive up to an hour (60 miles) from the Preserve headquarters in Ochopee to get there. To effectively and efficiently manage resources and visitor use in the Addition, suitable locations for operations facilities that will provide for adequate patrol and enforcement, emergency response, resource management, visitor orientation and education, fire management, and maintenance must be determined. No NPS facility exists along the I-75 corridor where the NPS staff can engage and educate the many visitors who travel the interstate annually.

### ISSUES AND CONCERNS NOT ADDRESSED IN THIS GENERAL MANAGEMENT PLAN

Not all of the issues or concerns raised by the public are included in this management plan because they

- are already prescribed by law, regulation, or policy (see the "Guidance for the Planning Effort" section)
- would be in violation of laws, regulations, or policies
- were at a level that was too detailed for a general management plan and would be more appropriately addressed in subsequent planning documents

This section briefly describes each of these issues, and the basis for excluding them from this management plan.

### Usual and Customary Use and Occupancy by American Indians

The Addition's enabling legislation states that the Miccosukee Tribe of Indians of Florida and the Seminole Tribe of Florida have the right to continue their usual and customary use and occupancy of the Addition subject to reasonable regulations.

The National Park Service will work cooperatively with the tribes to develop regulations to accommodate their use and occupancy rights accordingly.

### Hunting, Fishing, and Trapping Management

The Addition Act states that

*the Secretary shall permit hunting, fishing, and trapping on lands and waters under his jurisdiction within the preserve and the Addition in accordance with the applicable laws of the United States and the State of*



*Florida, except that he may designate zones where and periods when no hunting, fishing, trapping, or entry may be permitted for reasons of public safety, administration, floral and faunal protection and management, or public use and enjoyment. Except in emergencies, any regulations prescribing such restrictions relating to hunting, fishing, or trapping shall be put into effect only after consultation with the appropriate State agency having jurisdiction over hunting, fishing, and trapping activities.*

No matter which alternative is implemented, the National Park Service will work with the Florida Fish and Wildlife Conservation Commission to define hunting seasons and

develop hunting regulations consistent with both agencies' policies and goals for the Addition. (Hunting access is addressed in this plan and is provided for in all alternatives.)

### **ORV Management in the Original Preserve**

ORV management in the original Preserve was addressed in the *Recreational Off-road Vehicle Management Plan / Environmental Impact Statement* (2000). Therefore, any concerns or updates needed to the 2000 ORV plan are outside the scope of this general management plan for the Addition.

## IMPACT TOPICS — RESOURCES AND VALUES AT STAKE IN THE PLANNING PROCESS

### IDENTIFICATION OF IMPACT TOPICS

An important part of planning is seeking to understand the consequences of making one decision over another. To this end, this general management plan is accompanied by an environmental impact statement, which identifies the anticipated impacts of possible actions on Addition resources and on visitors and neighbors. Impacts are organized by topic, such as “impacts on the visitor experience” or “impacts on vegetation.” Impact topics focus the environmental analysis and ensure the relevance of impact evaluation.

Impact topics for this document were identified based on federal laws and other legal requirements, Council on Environmental Quality (CEQ) guidelines, NPS management policies, staff subject-matter expertise, and issues and concerns expressed by the public and other agencies early in the planning process (see previous section). The planning team selected the impact topics for analysis based on the potential for each topic to be affected by the alternatives. Also included is a discussion of some impact topics that are commonly addressed in general management plans, but that are dismissed from detailed analysis in this plan for the reasons given.

The “Environmental Consequences” chapter contains a detailed description of the impacts that would result from implementing the actions described in the alternatives.

### IMPACT TOPICS RETAINED AND DISMISSED

To focus the analysis on the key or important impacts, some topics have been dismissed from detailed analysis. Impact topics were dismissed if they were considered during the planning process but determined not to be relevant to the development of this management plan because either: (a) implementing the alternatives would have no effect, negligible effect, or minor effect on the resource, or (b) the resource does not occur in the Addition.

Table 1 identifies all of the impact topics considered for this *General Management Plan / Wilderness Study / Off-road Vehicle Management Plan / Environmental Impact Statement* and states whether they were retained or dismissed. The table is organized by theme (e.g., natural resources, wilderness, cultural resources, visitor use and experience, socioeconomic environment, and NPS operations) and includes a rationale as to why the impact topic was retained or dismissed.

TABLE 1: IMPACT TOPICS RETAINED AND DISMISSED FOR BIG CYPRESS NATIONAL PRESERVE ADDITION

Impact Topic	Retained or Dismissed	Rationale	Relevant Law, Regulation, or Policy
<b>Natural Resource Impact Topics</b>			
<b>Surface Water Flow</b>	Retained	Water was named as a prime resource in the Addition's enabling legislation. The hydrologic cycle is the primary determinant of the distribution, composition, and structure of the Addition's ecological communities. Development can alter, and has altered in the past, natural surface flows, with subsequent effects on the natural environment. Many actions proposed in the plan, including recreational facility development and ORV use, may displace soils in such a way that they change water flow patterns and directions. Therefore, surface water flow was retained as an impact topic.	NPS <i>Management Policies 2006</i> ; Director's Order 77-2
<b>Water Quality</b>	Retained	Surface and subsurface water quality directly affect the health and condition of natural communities, as well as the human environment. Proposed actions outlined in the alternatives, such as continued oil and gas operations, the provision of visitor use facilities, ORV use, and the application of herbicides for exotic plant control, involve potential contaminants. Therefore, water quality was retained as an impact topic.	Clean Water Act; Executive Order 12088; NPS <i>Management Policies 2006</i>
<b>Wetlands</b>	Retained	Most Addition lands are classified as wetlands, with the exceptions being scattered hardwood hammocks, some pinelands, and artificially filled areas. During the wet season (May through October), as much as 90% of the Addition can be inundated with water. Due to the likelihood that one or more actions proposed in the plan could have an impact on wetlands, it was retained as an impact topic.	Executive Order 11990; Clean Water Act; NPS Director's Order 77-1; NPS <i>Management Policies 2006</i>
<b>Soils</b>	Retained	Soils are key to maintaining the ecological integrity of the Addition. Actions included in the alternatives, including recreational facility development, ORV use, and restoration, could cause soil loss or reduced productivity. Any impacts that would adversely affect soil resources would be of concern to NPS managers and the public. Therefore, soils were retained as an impact topic.	NPS <i>Management Policies 2006</i>

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Impact Topic	Retained or Dismissed	Rationale	Relevant Law, Regulation, or Policy
<b>Floodplains</b>	Retained	Portions of the Addition, primarily in the southwest, are classified as being within the 100-year floodplain. Retention of existing facilities and the development of new facilities could adversely affect the protection, management, and use of these floodplains, or substantially change the character and natural processes of the floodplains. Therefore, floodplains were retained as an impact topic.	Executive Order 11988; Director's Order 77-2; <i>NPS Management Policies 2006</i>
<b>Vegetation:</b>  <b>Cypress Strands and Domes, Mixed-Hardwood Swamps, and Sloughs</b>	Retained	The vegetation communities that exist in the Big Cypress region are considered an important resource. The Addition contains a diversity of native plant species. The vegetation types included in this document are identical to those identified in the 2000 <i>Recreational ORV Management Plan</i> , which contains the most comprehensive and current listing of plant communities. Actions in the alternatives of this document, including recreational facility development, ORV use, and prescribed fire use, could result in changes in plant composition or the loss of vegetation. Proposed actions could beneficially or adversely affect these resources, which would be of concern to many people as well as NPS managers. Therefore, this vegetative community was retained as an impact topic.	NPS Organic Act and <i>NPS Management Policies 2006</i>
<b>Vegetation:</b>  <b>Prairies and Marshes</b>	Retained	The vegetation communities that exist in the Big Cypress region are considered an important resource. The Addition contains a diversity of native plant species. The vegetation types included in this document were modeled on those identified in the 2000 <i>Recreational ORV Management Plan</i> , which contains the most comprehensive and current listing of plant communities. Actions in the alternatives of this document, including recreational facility development, ORV use, and prescribed fire use, could result in changes in plant composition or the loss of vegetation. Proposed actions could beneficially or adversely affect these resources, which would be of concern to many people as well as NPS managers. Therefore, this vegetative community was retained as an impact topic.	NPS Organic Act and <i>NPS Management Policies 2006</i>

Impact Topic	Retained or Dismissed	Rationale	Relevant Law, Regulation, or Policy
<b>Vegetation:</b>  <b>Mangrove Forests</b>	Retained	The vegetation communities that exist in the Big Cypress region are considered an important resource. The Addition contains a diversity of native plant species. The vegetation types included in this document were modeled on those identified in the 2000 <i>Recreational ORV Management Plan</i> , which contains the most comprehensive and current listing of plant communities. Actions in the alternatives of this document, including recreational facility development, ORV use, and prescribed fire use, could result in changes in plant composition or the loss of vegetation. Proposed actions could beneficially or adversely affect these resources, which would be of concern to many people as well as NPS managers. Therefore, this vegetative community was retained as an impact topic.	NPS Organic Act and <i>NPS Management Policies 2006</i>
<b>Vegetation:</b>  <b>Pinelands</b>	Retained	The vegetation communities that exist in the Big Cypress region are considered an important resource. The Addition contains a diversity of native plant species. The vegetation types included in this document were modeled on those identified in the 2000 <i>Recreational ORV Management Plan</i> , which contains the most comprehensive and current listing of plant communities. Actions in the alternatives of this document, including recreational facility development, ORV use, and prescribed fire use, could result in changes in plant composition or the loss of vegetation. Proposed actions could beneficially or adversely affect these resources, which would be of concern to many people as well as NPS managers. Therefore, this vegetative community was retained as an impact topic.	NPS Organic Act and <i>NPS Management Policies 2006</i>
<b>Vegetation:</b>  <b>Hardwood Hammocks</b>	Retained	The vegetation communities that exist in the Big Cypress region are considered an important resource. The Addition contains a diversity of native plant species. The vegetation types included in this document were modeled on those identified in the 2000 <i>Recreational ORV Management Plan</i> , which contains the most comprehensive and current listing of plant communities. Actions in the alternatives of this document, including recreational facility development, ORV use, and prescribed fire use, could result in changes in plant composition or the loss of vegetation. Proposed actions could beneficially or adversely affect these resources, which would be of concern to many people as well as NPS managers. Therefore, this vegetative community was retained as an impact topic.	NPS Organic Act and <i>NPS Management Policies 2006</i>

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Impact Topic	Retained or Dismissed	Rationale	Relevant Law, Regulation, or Policy
<b>Vegetation:</b>  <b>Exotic/ Nonnative Species</b>	Retained	<p>The native plant communities that exist in the Big Cypress region are considered an important resource. The Addition contains a diversity of native plant species. Exotic, or nonnative, plant species impact native species by outcompeting them — they aggressively take over disturbed habitats, expand their distribution and displace natives at alarming rates, use more water, and impact wildlife that depend on native plant communities and functional ecosystems. Exotic plants are easily distributed by recreational use and other activities in the Addition and require steadfast management. Another consideration is the effect that wilderness designation and management would have on exotic plant control activities and restoration techniques. The implications of the “minimum tool requirement” could be substantial. Actions in the alternatives could beneficially or adversely affect these resources, which would be of concern to many people as well as NPS managers. Because of the seriousness of these issues, exotic species were specifically included as an impact topic.</p>	<p>NPS Organic Act and NPS <i>Management Policies 2006</i></p>
<b>Federal Threatened and Endangered Species:</b>  <b>Florida Panther</b>	Retained	<p>Panthers have been observed in the Addition. They are subject to the effects of management, visitor use, and development. Proposed actions, including ORV use, hunting, and other activities, could impact the quality of habitat preferred by this species, as well as its behavior and foraging opportunities. Therefore, Florida panthers were retained as an impact topic.</p>	<p>Endangered Species Act; NPS <i>Management Policies 2006</i></p>
<b>Federal Threatened and Endangered Species:</b>  <b>West Indian Manatee</b>	Retained	<p>Manatees use marine resources and waterways within the Addition. Manatees are highly sensitive to the effects that management, visitor use, or development has on marine habitats. Proposed actions, such as motorboat use and other visitor use, could reduce the quality of habitat preferred by these species, directly disturb individual animals, or reduce foraging opportunities. Therefore, the West Indian manatee was retained as an impact topic.</p>	<p>Endangered Species Act; Marine Mammal Protection Act; NPS <i>Management Policies 2006</i></p>
<b>Federal Threatened and Endangered Species:</b>  <b>Red-Cockaded Woodpecker</b>	Retained	<p>At least one red-cockaded woodpecker colony lives in the Addition. Proposed actions, such as ORV use and other visitor use, could reduce the quality of habitat preferred by these species, directly disturb individual animals, or reduce foraging opportunities. Therefore, red-cockaded woodpeckers were retained as an impact topic.</p>	<p>Endangered Species Act; Migratory Bird Treaty Act; NPS <i>Management Policies 2006</i></p>

Impact Topic	Retained or Dismissed	Rationale	Relevant Law, Regulation, or Policy
<b>Federal Threatened and Endangered Species:</b>  <b>Wood Stork</b>	Retained	Wood stork rookeries can be found within the Addition. The wood stork is sensitive to human interference and would likely be subject to the effects of NPS management, visitor use, or development. Proposed actions, such as ORV use and other visitor use, could impact nest sites, reduce the quality of habitat preferred by these species, directly disturb individual animals, or reduce foraging opportunities. Therefore, the wood stork was retained as an impact topic.	Endangered Species Act; Migratory Bird Treaty Act; <i>NPS Management Policies 2006</i>
<b>Federal Threatened and Endangered Species:</b>  <b>Cape Sable Seaside Sparrow</b>	Dismissed	No suitable habitat for Cape Sable seaside sparrows exists in the Addition. None of the proposed actions in the alternatives would affect sparrow habitat. Therefore, this sparrow was dismissed from further consideration.	Endangered Species Act; Migratory Bird Treaty Act; <i>NPS Management Policies 2006</i>
<b>Federal Threatened and Endangered Species:</b>  <b>Everglade Snail Kite</b>	Dismissed	No Everglade snail kite nests exist within the Addition. Their primary habitat and nest sites are found in adjacent conservation area lands owned by the South Florida Water Management District. The kite uses the Addition only for foraging purposes. The actions proposed in this plan would have only negligible to minor effects on kite populations or their habitat, including potential flushing or displacement of individuals or loss of forage resources. Therefore, the Everglade snail kite was dismissed from further consideration.	Endangered Species Act; Migratory Bird Treaty Act; <i>NPS Management Policies 2006</i>
<b>Federal Threatened and Endangered Species:</b>  <b>American Crocodile</b>	Dismissed	Although the American crocodile has been recently observed in the Addition, they are not typically found in the immediate area. The crocodile's range seems to be expanding, which provides further evidence that crocodile populations are stable or growing. None of the actions being proposed in the alternatives would adversely affect the crocodiles that use the Addition or their habitat because the level of development included in the plan is minimal and not located in crocodile use areas. Furthermore, the effects from recreational use on water quality and crocodile habitat would be negligible. Therefore, the American crocodile was dismissed from further consideration.	Endangered Species Act and <i>NPS Management Policies 2006</i>

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Impact Topic	Retained or Dismissed	Rationale	Relevant Law, Regulation, or Policy
<b>Federal Threatened and Endangered Species:</b>  <b>American Alligator</b>	Dismissed	The American alligator is listed because of the similarity of its appearance to the endangered American crocodile. Alligators in the Addition are numerous. The actions proposed in the alternatives would have only negligible to minor effects on alligators, including localized impacts on water quality and habitat values associated with recreational use and limited development. Overall, the integrity of alligator habitat would be maintained. Therefore, the American alligator was dismissed from further consideration.	Endangered Species Act and NPS <i>Management Policies 2006</i>
<b>Federal Threatened and Endangered Species:</b>  <b>Eastern Indigo Snake</b>	Dismissed	The eastern indigo snake has been observed only sporadically in the Addition. No real data on its use of the Addition exists. The greatest threat to these snakes is habitat loss. Little indigo snake habitat would be disturbed because the alternatives would cite ORV trails on suitable substrate that would avoid indigo snake burrows and use areas. Additionally, the establishment of designated ORV trails and limiting the number of ORV permits under the two alternatives that include ORV use would minimize any habitat disturbance. The effects of the alternatives on the indigo snake and its habitat would be minor. Thus the eastern indigo snake was dismissed from further consideration.	Endangered Species Act and NPS <i>Management Policies 2006</i>
<b>Other Federal and State Listed Species</b>	Dismissed	<p>Other federally protected species known to occur in Collier County, such as the piping plover, Crested caracara, Roseate tern, Florida scrub-jay, Kemp's ridley, hawksbill, leatherback, green turtle, and loggerhead were dismissed because these species are not found in the Addition.</p> <p>Bald eagles do not nest in the Addition, but they do roost and forage in the area. The bald eagle was recently removed from the federal Threatened and Endangered Species List and is no longer subject to the Endangered Species Act. However, the species is still protected by other federal and state laws. Visitor use in the Addition could cause short-term adverse impacts on bald eagles, such as flushing and displacement; however, the effect would be negligible to minor. The integrity of bald eagle habitat would be maintained under all alternatives. Therefore, this topic was dismissed from further consideration.</p>	<p>Endangered Species Act; Migratory Bird Treaty Act; National Environmental Policy Act; NPS <i>Management Policies 2006</i></p> <p>Bald and Golden Eagle Protection Act; Migratory Bird Treaty Act; NPS <i>Management Policies 2006</i></p>



Impact Topic	Retained or Dismissed	Rationale	Relevant Law, Regulation, or Policy
<b>Other Federal and State Listed Species (cont.)</b>	Dismissed	Other state protected species known to occur in Collier County, such as the Big Cypress fox squirrel, Miami blue butterfly, southeastern American kestrel, snowy plover, least tern, Florida sandhill crane, Florida black bear, peregrine falcon, and white-crowned pigeon were dismissed because these species typically are not found in the Addition and/or their preferred habitat would not be physically disturbed by any of the actions proposed in the alternatives. Therefore, specific measures to protect these species are not needed, other than the general protection afforded by the Addition.	Florida Fish and Wildlife Conservation Commission's List of Endangered, Threatened, or Species of Special Concern
		The <i>Liguus</i> tree snail is listed as a state species of special concern. Impacts from actions proposed in the alternatives would have only a minor effect on the species due to ongoing threats from illegal collection. The National Park Service currently has a permit process in place to allow for special collection of this species, which should serve to minimize adverse impacts from collection.	Florida Fish and Wildlife Conservation Commission's List of Endangered, Threatened, or Species of Special Concern
		More than 100 state-protected plant species occur in the Addition, three of which are candidates for federal listing. The actions proposed in this plan would have no effect on the relative abundance of these species and would not jeopardize their long-term survival and success. Any facility development would be sited to avoid the preferred habitat of these species.	Rule Chapter 5B-40 of the Florida Administrative Code (Regulated Plant Index)
<b>Major Game Species:</b>  <b>White-tailed Deer, Feral Hogs, and Wild Turkey</b>	Retained	White-tailed deer, feral hogs, and wild turkey are common in the region. They are included as an impact topic because of their importance as prey for the endangered Florida panther and as the principal game animals for potential hunting in the Addition. Hunting activities in the Addition could reduce local populations, thus potentially affecting the panther's foraging opportunities. Actions in the alternatives could beneficially or adversely affect these species, which would be of concern to many people as well as NPS managers.	NPS <i>Management Policies 2006</i> and Executive Order 13443, "Facilitation of Hunting Heritage and Wildlife Conservation"

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Impact Topic	Retained or Dismissed	Rationale	Relevant Law, Regulation, or Policy
<b>Other Wildlife Species</b>	Dismissed	<p>Potential impacts to other wildlife species, such as other birds, reptiles, amphibians, invertebrates, and mammals, resulting from recreational facility development and ORV use would likely include flushing and displacement of individual species, but overall habitat integrity in the Addition would be maintained. The species that are sensitive to habitat loss and the effects of increases in human activity and disturbance have been retained for detailed analysis; those species in the category of "other wildlife" are considered to be generalists and thus more resilient to change and minor impacts. The adverse impact on other wildlife species from the actions included in the alternatives would be negligible to minor. Therefore, effects to other wildlife species were dismissed from further consideration.</p>	NPS Organic Act and NPS <i>Management Policies 2006</i>
<b>Fisheries/Aquatic Life</b>	Dismissed	<p>The Addition contains a variety of native and nonnative fishes. Recreational fishing in the Addition is regulated by the Florida Fish and Wildlife Conservation Commission. None of the alternatives would change the management of fishing or result in changes that would affect the fish populations in the Addition. Recreational fishermen would continue to be able to harvest fish in the Addition under all of the alternatives, subject to the regulations of the Florida Fish and Wildlife Conservation Commission. The National Park Service would continue to work with the state to ensure that healthy fish populations are maintained. No commercial fishing is allowed or would be allowed in the Addition under any of the alternatives.</p> <p>Herbicides are used for exotic plant control in the Addition, but NPS staff follows all Environmental Protection Agency, Florida Department of Agriculture, and manufacturer requirements. Therefore, impacts on water quality and any biotic components that fisheries and aquatic life rely on should be negligible or minor.</p> <p>Because of the reasons stated above, any adverse effects on fisheries/aquatic life from the activities proposed in the alternatives would be negligible to minor. Therefore, this topic has been dismissed from further analysis.</p>	NPS <i>Management Policies 2006</i>

Impact Topic	Retained or Dismissed	Rationale	Relevant Law, Regulation, or Policy
<b>Air Quality</b>	Dismissed	The Addition has been designated a Class II area under the Clean Air Act. The Addition is currently within a designated attainment area (i.e., concentrations are below standards) for criteria pollutants. The contribution of pollutants resulting from implementing any of the alternatives would be negligible compared to current levels. Fugitive dust and exhaust emissions would be produced by recreational development activities, ORV use, and increased vehicular traffic to the Addition; however, these activities would not be expected to cause national ambient air quality standards to be exceeded because visitation increases would be relatively small and the level of new development proposed is minimal. Air quality impacts from the use of prescribed fire were analyzed in the Preserve's <i>Fire Management Plan/Environmental Assessment</i> , which also addresses the Addition. Any amount of pollutants added because of the actions proposed in the alternatives would be negligible compared to existing levels. Therefore, air quality was dismissed from further consideration.	Clean Air Act and NPS <i>Management Policies 2006</i>
<b>Lightscape Management (Dark Night Sky Preservation)</b>	Dismissed	Light pollution is present in some areas of the Addition, although many areas retain a high degree of natural darkness. The National Park Service strives to minimize the intrusion of artificial light into the night scene by limiting the use of artificial outdoor lighting to basic safety requirements, shielding the lights when possible, and using minimal impact lighting techniques. Any new facilities proposed in the alternatives that would necessitate new night-time lighting would be constructed with down lighting that would minimize light pollution. Furthermore, the level and type of new development and lighting proposed in the plan is minimal and dispersed. The effects of actions contained in this plan on natural lightscapes would be minor. Therefore, lightscape was dismissed from further analysis.	NPS Organic Act; enabling legislation; NPS <i>Management Policies 2006</i>

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Impact Topic	Retained or Dismissed	Rationale	Relevant Law, Regulation, or Policy
<b>Prime and Unique Farmlands</b>	Dismissed	Prime farmland is soil that produces general crops such as common foods, forage, fiber, and oil seed; unique farmland produces specialty crops such as fruits, vegetables, and nuts. The Farmland Protection Policy Act (7 USC 4201 <i>et seq.</i> ) and the U.S. Department of the Interior (Environmental Statement Memorandum No. ESM94-7 – Prime and Unique Agricultural Lands) require an evaluation of impacts on prime or unique agricultural lands. No prime or unique agricultural lands exist in the Addition according to the Natural Resources Conservation Service (NRCS). Therefore, this topic was dismissed from further consideration.	Council on Environmental Quality 1980 memorandum
<b>Natural or Depletable Resource Requirements and Conservation Potential</b>	Dismissed	The Addition's enabling legislation permits oil and gas exploration and development by mineral owners. Consequently, oil and gas operations in the Addition are allowed under all Addition management scenarios. None of the actions included in the <i>General Management Plan</i> would result in changes to oil and gas exploration or the extraction of new resources from the Addition. The use and consumption of fuel and other nonrenewable resources for NPS operations, activities, and development associated with the alternatives is small in comparison to that of the region. The National Park Service strives to use sustainable practices and technology and reduce its impact on natural or depletable resources. Under all of the alternatives, ecological principles would be applied to ensure that the Addition's natural resources were maintained and conserved. Therefore, this topic was dismissed from further consideration.	NPS <i>Management Policies 2006</i>
<b>Wilderness Impact Topics</b>			
<b>Wilderness Resources and Values</b>	Retained	Lands within the Addition have been found to possess wilderness characteristics and values. Proposed actions, including visitor use and NPS management activities, could have an impact on wilderness qualities. Actions in the alternatives could beneficially or adversely affect these resources, which would be of concern to many people as well as NPS managers. Therefore, wilderness resources and values were retained as an impact topic.	Wilderness Act and NPS <i>Management Policies 2006</i>

Impact Topic	Retained or Dismissed	Rationale	Relevant Law, Regulation, or Policy
<b>Cultural Resource Impact Topics</b>			
<b>Archeological Resources</b>	Retained	Actions under the alternatives that allow increased access to the Addition, including backcountry camping, hiking, hunting, and ORV use, could result in impacts to archeological resources. Therefore, this topic has been retained for further analysis.	Secretarial Order 13007; National Environmental Policy Act; Director's Order 28; NPS <i>Management Policies 2006</i> ; NPS-28A, "Archeological Resources Management"
<b>Ethnographic Resources</b>	Retained	Actions under the alternatives that allow increased access to the Addition, including backcountry camping, hiking, hunting, and ORV use, could result in impacts on ethnographic resources, including sacred sites. Therefore, this topic has been retained for further analysis.	Secretarial Order 13007; National Environmental Policy Act; Director's Order 28; NPS <i>Management Policies 2006</i> ; NPS-28, "Cultural Resources Management"
<b>Cultural Landscapes</b>	Dismissed	No cultural landscapes have been identified in the Addition. Some village sites and historic homesteads may be evaluated in the future as potential cultural landscapes. However, none of the actions under the alternatives pose impacts on features that would contribute to the integrity of potentially important cultural landscapes. Therefore, this topic was dismissed from further consideration.	NPS-28, "Cultural Resources Management", NPS <i>Management Policies 2006</i>
<b>Historic Structures</b>	Dismissed	None of the structures in the Addition are listed or have been determined eligible for listing in the National Register of Historic Places. Some structures associated with village sites and historic homesteads may be evaluated in the future for listing on the National Register. However, none of the actions under the alternatives pose impacts to these sites. Therefore, this topic was dismissed from further consideration.	NPS-28, "Cultural Resources Management" and NPS <i>Management Policies 2006</i>
<b>Museum Collections</b>	Dismissed	None of the actions under the alternatives pose direct impacts on NPS museum collections. No museum collections are stored in the Addition. All Preserve museum collections are stored in facilities at Everglades National Park. Any museum collections that are generated as a result of implementing the alternatives would be properly catalogued, curated, and managed as part of the Preserve's museum collections program. The Preserve has a current "Collections Management Plan" that was completed in conjunction with all other South Florida national park system units. Therefore, this topic was dismissed from further consideration.	DO-24, Museum Collections Management" and NPS <i>Management Policies 2006</i>

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Impact Topic	Retained or Dismissed	Rationale	Relevant Law, Regulation, or Policy
<b>Indian Trust Resources</b>	Dismissed	<p>Secretarial Order 3175 requires that any anticipated impacts on Indian trust resources from a proposed project or action by Department of the Interior agencies be explicitly addressed in environmental documents. The federal Indian trust responsibility is a legally enforceable fiduciary obligation on the part of the United States to protect tribal lands, assets, resources, and treaty rights, and it represents a duty to carry out the mandates of federal law with respect to American Indian and Alaska Native tribes.</p> <p>None of the actions that might be implemented as a result of the plan alternatives would change any existing conditions or practices concerning American Indian treaty or statutory rights or cultural interests that the tribes traditionally associated with the Addition maintain in relation to the Addition. However, such recognition does not translate into the creation of a trust resource because these actions take place in the context of preserving and managing the resources for the benefit of all Americans as required by the Organic Act and subsequent legislation. There are no Indian trust resources as defined in the order in the Addition. Therefore, this topic was dismissed from further consideration.</p>	Secretarial Order 3175
<b>Visitor Use And Experience Impact Topics</b>			
<b>Recreational Opportunities</b> <b>Motorized Use (ORV Riding)</b> <b>Nonmotorized Use (hiking, horseback riding, and bicycling)</b> <b>Hunting (including fishing and frogging)</b>	Retained	<p>Opportunities for recreational public motorized use (ORV use), nonmotorized use, and hunting vary among the alternatives. The types and levels of access are important components of visitor use and experience in the Addition and are of concern to many people as well as NPS managers. Therefore, the impact topic of recreational opportunities was retained.</p>	Enabling legislation; NPS <i>Management Policies 2006</i>

Impact Topic	Retained or Dismissed	Rationale	Relevant Law, Regulation, or Policy
<b>Soundscape (Natural Sound Preservation)</b>	Retained	<p>An important part of the NPS mission is the preservation of natural soundscapes associated with national park system units. Natural soundscapes exist in the absence of human-caused sound. The natural ambient soundscape is the aggregate of all the natural sounds that occur in a park unit, together with the physical capacity for transmitting natural sounds. Natural sounds occur within and beyond the range of sounds that humans can perceive and can be transmitted through air, water, or solid materials. The frequencies, magnitudes, and durations of human-caused sound considered acceptable varies among national park system units, as well as potentially throughout each park unit; generally acceptable levels are greater in developed areas and less in undeveloped areas.</p> <p>Unnatural sounds, often a byproduct of recreational activities, can be intrusive and can impact natural soundscape conditions that affect visitor experience and use and wildlife. Uses involving motorized activities under one or more of the alternatives could create conditions that would be of concern to NSP managers and the public. Therefore, soundscape was retained as an impact topic, but is discussed under visitor use and experience, relevant wildlife topics, and wilderness resources and values.</p>	NPS Organic Act; NPS <i>Management Policies 2006</i> ; Director's Order 47
<b>Public Health and Safety</b>	Dismissed	The proposed developments and actions in the alternatives would not result in any identifiable adverse impacts on human health or safety. Therefore this topic was dismissed from further analysis.	CEQ regulations; <i>DO-12 Handbook</i>
<b>Socioeconomic Environment Impact Topics</b>			
<b>Local Economy</b>	Retained	Recreation-related tourism plays an important role in the local and regional economy. The alternatives included in this plan propose varying levels of recreational access and opportunities that would affect visitation levels and possibly spending in the local area. Furthermore, the facility development actions and NPS staffing components of the alternatives could affect the local economy. Therefore, local economy was retained as an impact topic.	National Environmental Policy Act

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Impact Topic	Retained or Dismissed	Rationale	Relevant Law, Regulation, or Policy
<b>Transportation</b>	Dismissed	The plan alternatives would have only minor impacts on transportation in or through the Addition. All federal and state highways (including I-75, U.S. 41, and SR 29) would continue to function as they do today. Temporary impacts on traffic flow on I-75 could be experienced as a result of access improvements at mile markers 51 and 63; however, the adverse impacts would only be experienced on a short-term basis during construction and were accounted for under the <i>I-75 Recreational Access Plan/EA</i> . Furthermore, visitor access to the Addition is addressed as part of visitor use and experience, which was retained as an impact topic. Therefore, transportation was dismissed from further analysis.	National Environmental Policy Act
<b>Conformity with Local Land Use Plans</b>	Dismissed	The basic land use of the Addition as a public recreation and resource management area is in conformance with local land use plans. The creation of additional recreation and visitor service opportunities in the Addition as proposed in the alternatives would be consistent with existing Addition land uses or local (non-NPS) or tribal land use plans, policies, or controls for the area. Therefore, this topic was dismissed from further consideration.	CEQ regulations; <i>DO-12 Handbook</i>
<b>Urban Quality and Design of the Built Environment</b>	Dismissed	The quality of urban areas is not a concern in this planning project except possibly in the Carnestown area. Throughout the Addition, vernacular architecture and Addition - compatible design would be considered for new structures built under all of the alternatives. Emphasis would be placed on designs and materials and colors that blend in and do not detract from the natural and built environment. Therefore, adverse impacts are anticipated to be negligible. No further consideration of this topic is necessary.	40 <i>Code of Federal Regulations</i> (CFR)1502.16



Impact Topic	Retained or Dismissed	Rationale	Relevant Law, Regulation, or Policy
<b>Environmental Justice</b>	Dismissed	<p>Executive Order 12898 requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing the disproportionately high or adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. According to the Environmental Protection Agency, environmental justice is the</p> <p><i>fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.</i></p> <p>Collier County contains both minority and low-income populations; however, environmental justice is dismissed as an impact topic for the following reasons:</p> <ul style="list-style-type: none"> <li>• NPS staff and planning team actively solicited public participation as part of the planning process and gave equal consideration to input from all persons regardless of age, race, income status, or other socioeconomic or demographic factors.</li> <li>• Implementation of any of the alternatives would not result in any disproportionate human health or environmental effects on minorities or low-income populations and communities.</li> <li>• The impacts associated with implementation of the alternatives would not result in any effects that would be specific to any minority or low-income community. Any anticipated impacts, such as traffic, would not disproportionately affect minority or low-income populations.</li> <li>• Impacts would not occur all at one time but would be spread over a number of years.</li> <li>• The impacts to the socioeconomic environment resulting from implementation of any of the alternatives would be negligible.</li> </ul>	Executive Order 12898, "General Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,"

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Impact Topic	Retained or Dismissed	Rationale	Relevant Law, Regulation, or Policy
<b>Addition Operations Impact Topics</b>			
<b>NPS Operations and Facilities</b>	Retained	Actions proposed in the alternatives could impact staffing, facility management, resource management, and other management and operations. Support facilities necessary to house, transport, inform, and serve visitors and staff require proper planning, design, programming, construction, operation and maintenance. Facilities should be cost-effective, integrate sustainable design, and consider impacts on the landscape, environs, and resources of the Addition. Actions proposed in the alternatives could impact NPS operations and facilities. Therefore this was retained as an impact topic.	NPS Organic Act; DOI Departmental Manual; NPS <i>Management Policies 2006</i> ; enabling legislation; Director's Order 80

