

general management plan
final environmental impact statement
w/ Record of Decision
and Statement of Findings

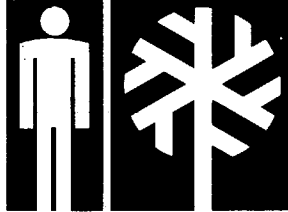
volume 1

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FES 91-26
Vol. 1 of 2



BIG CYPRESS



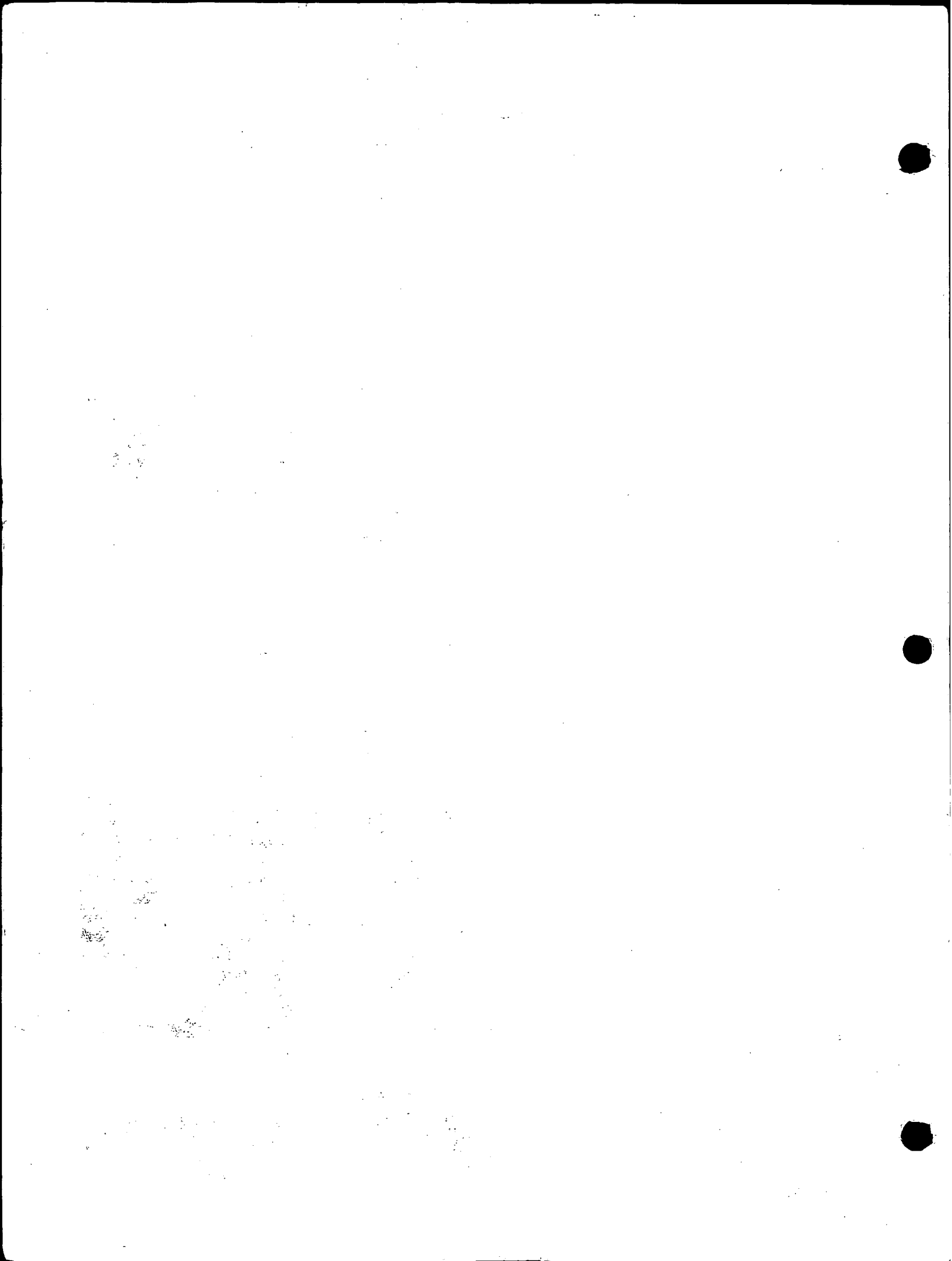
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United States Department of the Interior

NATIONAL PARK SERVICE SOUTHEAST REGIONAL OFFICE

75 Spring Street, S.W.

Atlanta, Georgia 30303

RECORD OF DECISION

IN REPLY REFER TO:

General Management Plan Big Cypress National Preserve

Introduction

In October 1991, the proposed Big Cypress National Preserve General Management Plan/Final Environmental Impact Statement (GMP/FEIS) was made available to the public. The GMP/FEIS evaluates the environmental consequences of the proposed plan and its alternatives. The purpose of this Record of Decision is to document the National Park Service's determination of how Big Cypress National Preserve will be managed for the next 10 to 15 years. Copies of the Record of Decision are being distributed to Federal, State and local government agencies and other interested parties. In addition, the Record of Decision is being printed in newspapers published in communities near the preserve and will be available at public libraries in the region.

Alternatives Considered

The alternatives considered in formulating the preserve's General Management Plan were:

Status Quo Alternative

Alternative A--Emphasizing recreational use

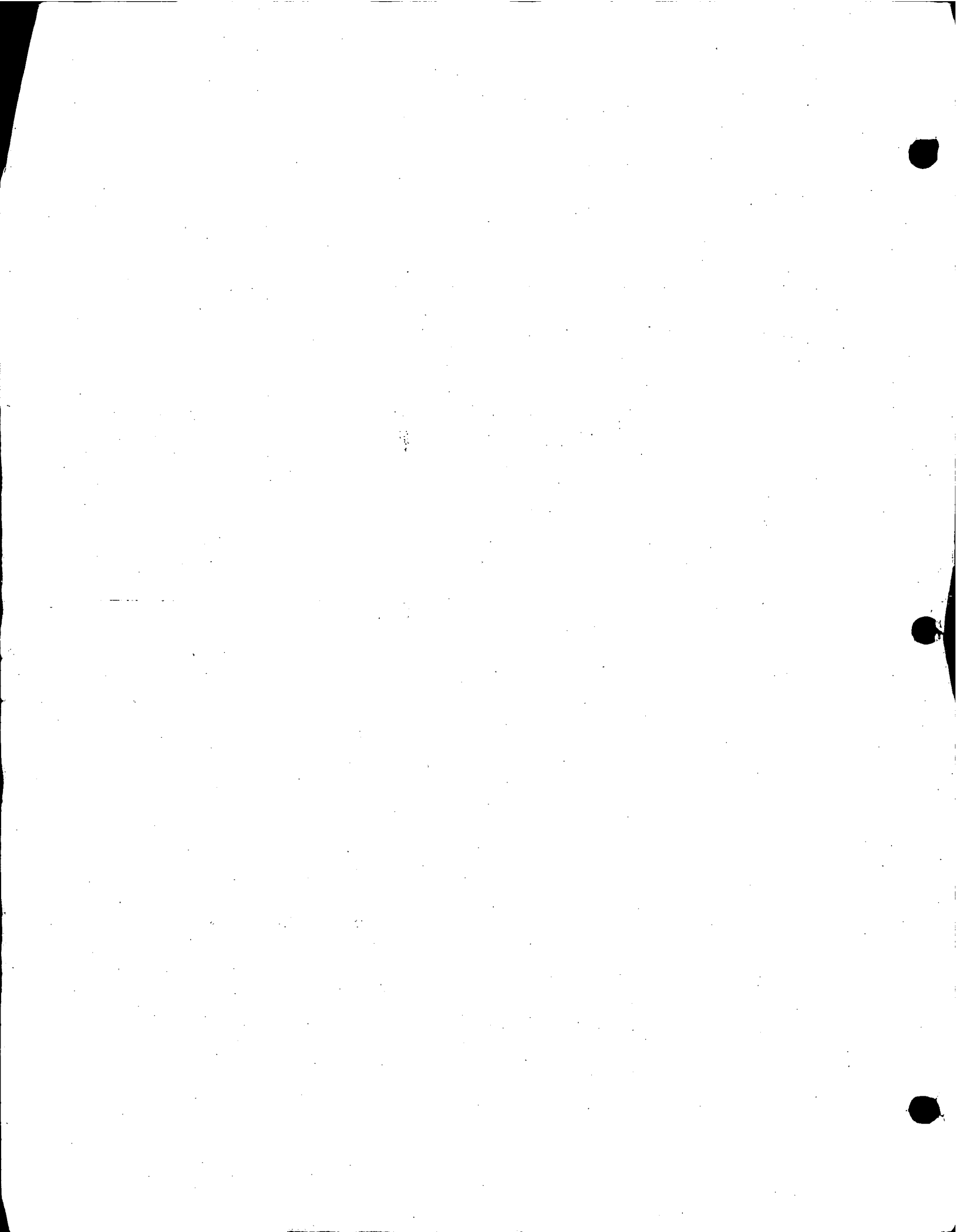
Alternative B--Emphasizing resource protection

Proposed Plan--Combination of A and B

Alternative B can be considered an environmentally preferable alternative because adverse environmental impacts would be minimal. The proposed plan incorporates features of Alternative B, since preservation of natural systems and scenic quality are objectives of the proposed plan. However, the proposed plan also incorporates features of Alternative A, because the proposed plan calls for continuation and/or addition of certain visitor activities and opportunities. The environmental effects of the preceding visitor services development will not be significant with mitigating measures in place, and any costs are expected to be overshadowed by the benefit of enhanced visitor opportunities and visitor appreciation. The proposed plan also contains a "Minerals Management" section which outlines oil and gas activities in the preserve as required in the enabling legislation.

Comments on the GMP/FEIS

Comments received on the GMP/FEIS were similar to those made during public review of the draft document and no new issues were raised.



The principal mineral owner in the preserve provided comments on the GMP/FEIS. They raised several concerns on what they perceived to be changes from the draft GMP/EIS to the final GMP/FEIS, but indicated that these concerns "should be evaluated as more technical information becomes available, and on a case-by-case basis under 36 CFR Plan of Operations approval procedures for specific oil and gas proposed sites in the BCNP." We concur.

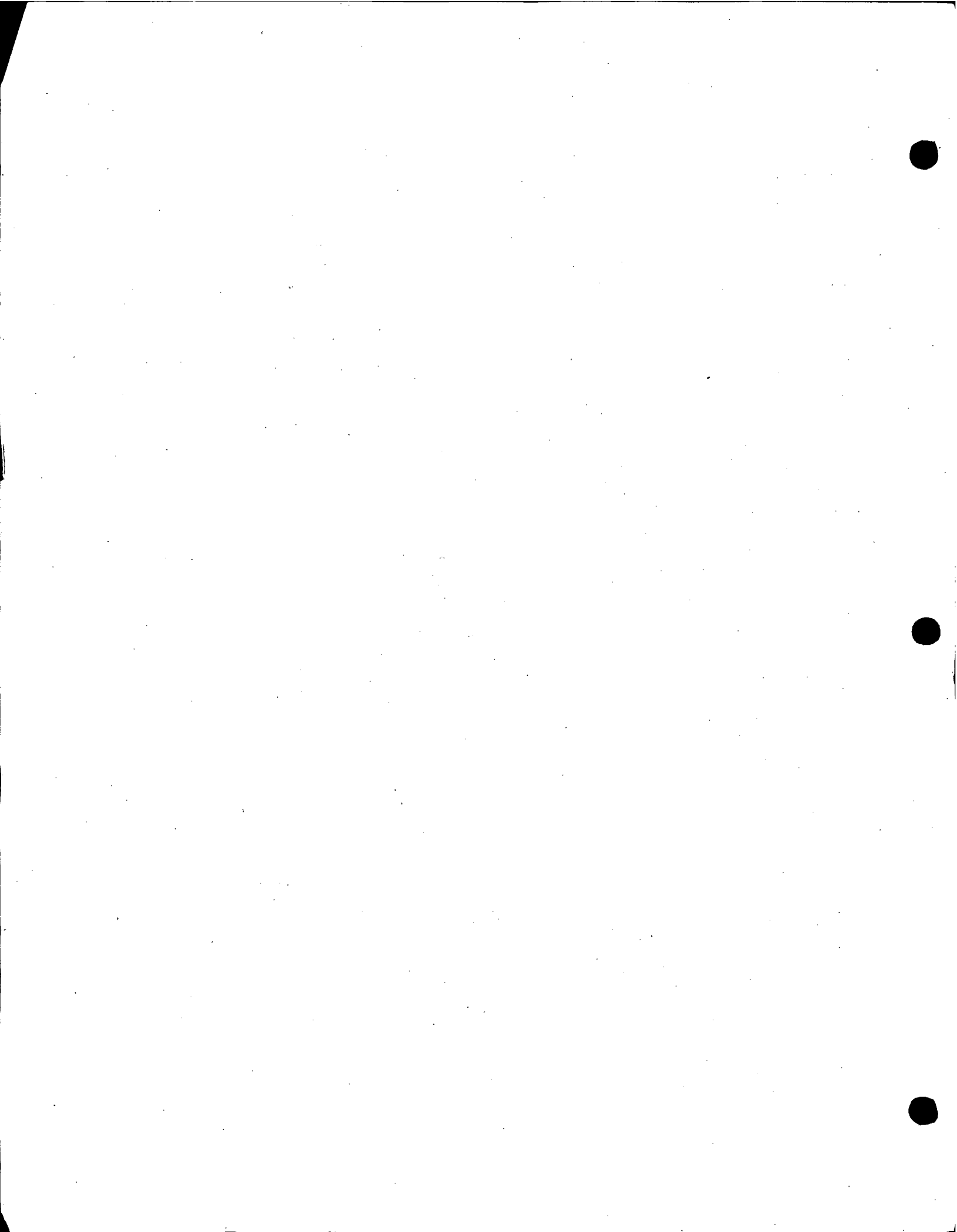
After reviewing the GMP/FEIS, the Office of the Governor of Florida informed the National Park Service that the plan was found to be consistent with the Florida Coastal Zone Management Program and National Environmental Policy Act guidelines. However, the state requested that, without delaying implementation of the GMP/FEIS, further discussions be held regarding visitor access to the preserve from I-75. The National Park Service has initiated a dialogue with the State in this regard.

The hunting community reiterated many of the same concerns with the final GMP/FEIS as they raised with the draft document. Agreements regarding hunting reached between the Florida Game and Fresh Water Fish Commission and the NPS during the development of the GMP/EIS are reflected in the document. As a part of these agreements, the Commission and NPS will meet periodically to discuss and establish hunting regulations. During these periodic discussions, the concerns of the hunting community will be considered.

Any significant variances proposed to the GMP/FEIS emanating from these future discussions would be preceded by public involvement and adherence with the requirements of the National Environmental Policy Act and other applicable regulations before implementation.

Decision and Rationale

After analysis of the proposed plan and alternatives as presented in the GMP/FEIS and consideration of public comments on the entire plan, the National Park Service has determined that the proposed plan in the October 1991 General Management Plan provides acceptable management direction for Big Cypress National Preserve. The preserve will be managed to conserve natural and cultural resources and ecological processes while accommodating uses and experiences that do not adversely affect the area's ecological integrity. Major NPS developments, to the maximum extent feasible, will continue to be limited to existing roads and previously disturbed sites. The proposed plan's elements are considered technically and economically feasible, and the proposed plan represents a sound balance between protecting preserve resources and providing enjoyable visitor experiences.



All practicable means will be taken to avoid or minimize environmental harm in implementing the plan. This will include close monitoring during construction of new facilities to avoid adverse impacts on cultural and natural resources. Other mitigating measures incorporated in the plan's implementation are identified on pages 384-388 of the GMP/FEIS.

Changes to the Proposed Plan in the Final GMP/FEIS

1. The ORV permits are returned to draft GMP level--the draft GMP/EIS projected issuance of 2,500 ORV permits and assessed the associated environmental impacts at these levels. The final GMP/EIS proposed lowering these projections to 2,000. However, actual 1989 through 1992 utilization levels indicate that the draft level of 2,500 permits was more appropriate and the final GMP/EIS is hereby changed to the 2,500 level.

2. Oil and gas development in red-cockaded woodpecker (RCW) colony areas are returned to draft level--the draft GMP/EIS would not have allowed oil and gas development closer than 500 feet to RCW colony sites. The final GMP/EIS raised that distance to .5 of a mile. A review of Fish and Wildlife Service guidelines and the GMP/FEIS (which does not allow any development in mature pine stands) indicates that the draft GMP/EIS, along with Section 7 reviews as a part of the 9B regulations at specific sites, provides adequate protection. Therefore, the final GMP/FEIS relative to oil and gas development in the vicinity of RCW colony sites is hereby returned to the 500-foot distance.

Conclusion

It is our determination that the proposed plan for management direction presented in the October 1991 Big Cypress National Preserve General Management Plan and Final Environmental Impact Statement and changes addressed in this document are in keeping with Public Law 93-440 which established the preserve in 1974, and with other applicable laws and regulations. Therefore, the proposed plan in the General Management Plan, as herein modified, is accepted and approved today as the management approach to be followed at Big Cypress National Preserve.

Recommended:

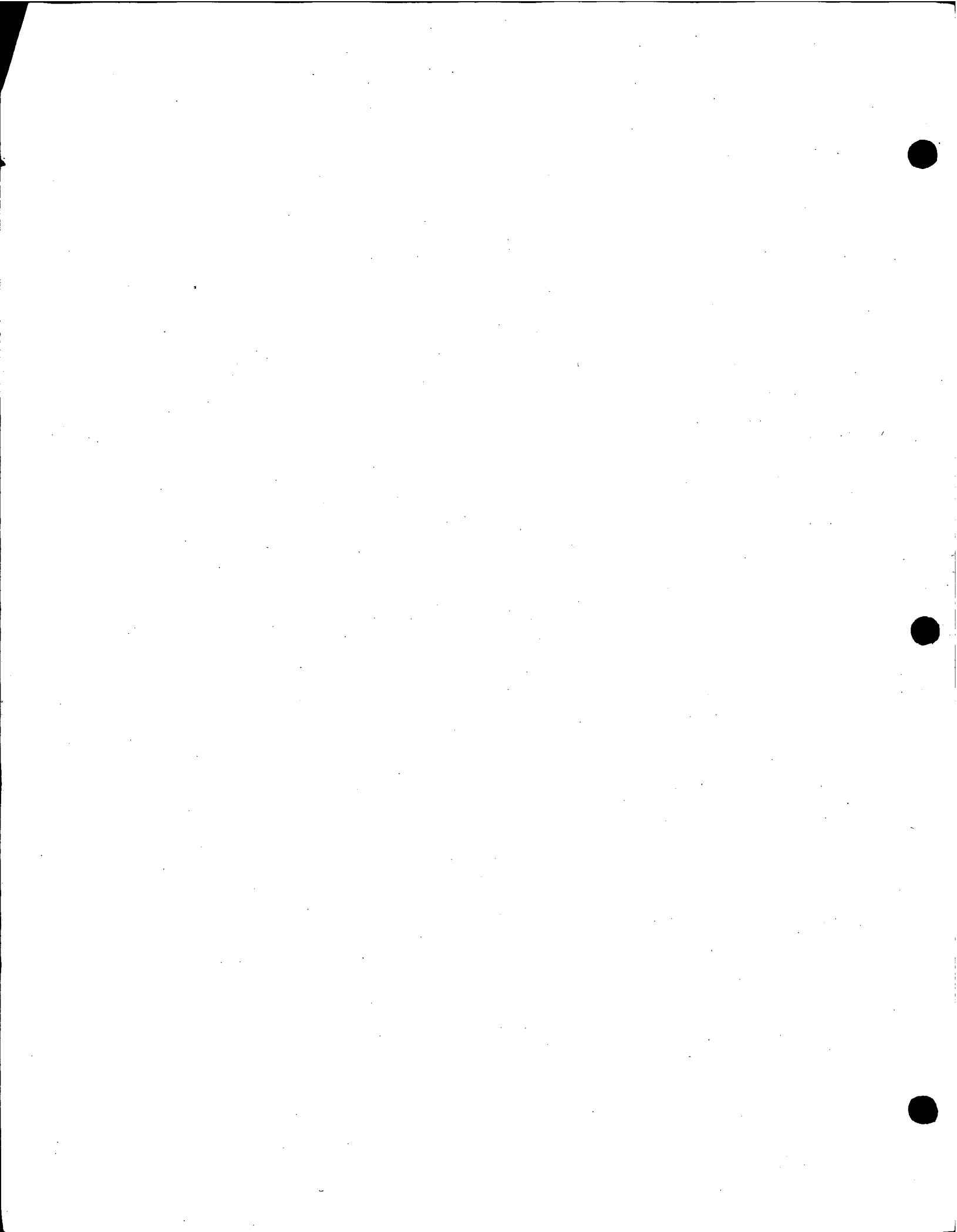
Wallace A. F. [Signature]
Superintendent

1-27-92
Date

Approved:

[Signature]
Regional Director
Southeast Region

1-27-92
Date



STATEMENT OF FINDINGS FOR FLOODPLAINS AND WETLANDS
(Executive Orders 11988 and 11990)

Big Cypress National Preserve
General Management Plan/Final Environmental Impact Statement

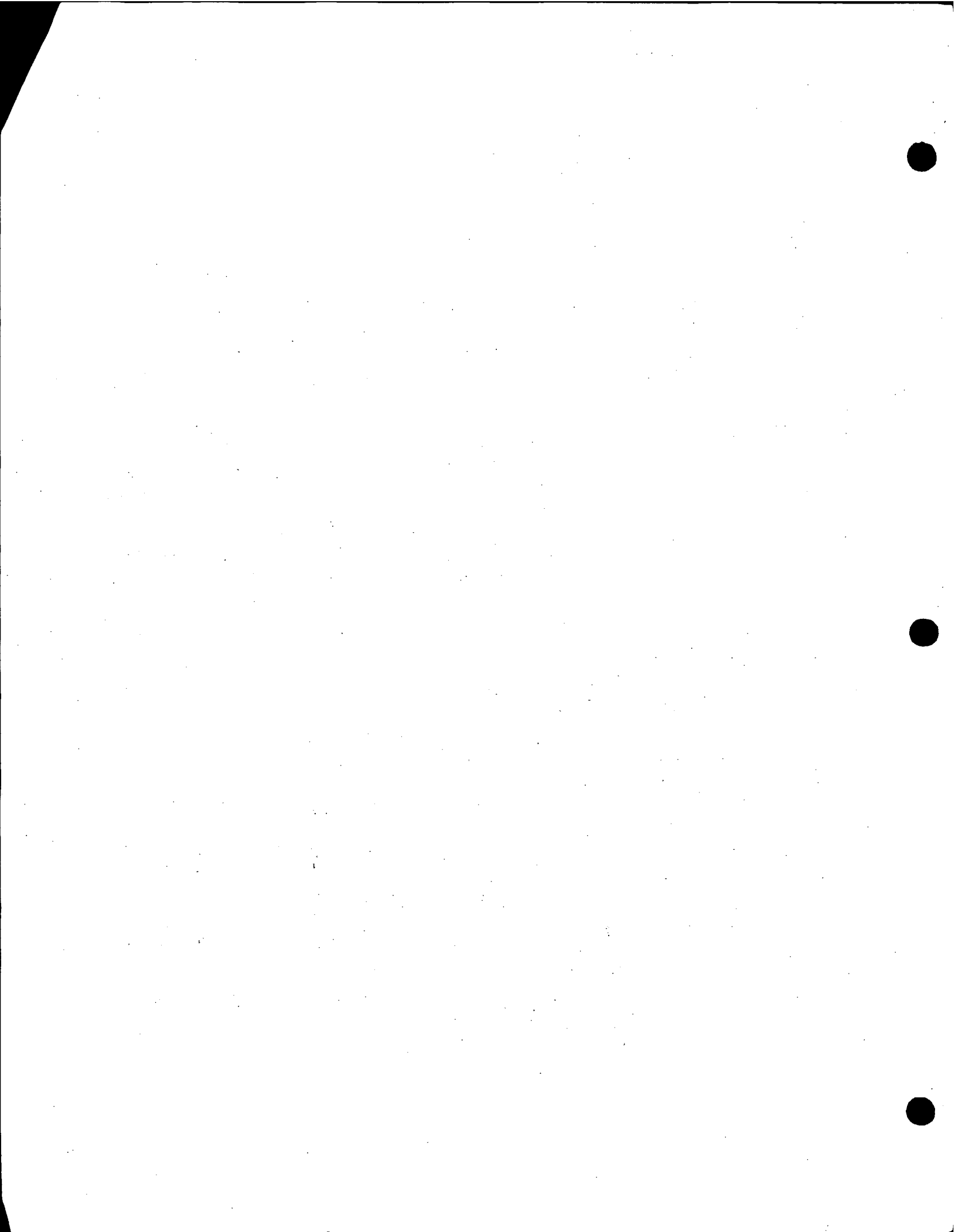
Approved: _____

Director

National Park Service

Date

1/9/92



STATEMENT OF FINDINGS FOR FLOODPLAINS AND WETLANDS

INTRODUCTION

Big Cypress National Preserve is in southern Florida. It was established to ensure the preservation, conservation, and protection of the natural, scenic, hydrologic, floral and faunal, and recreational values of the Big Cypress watershed. The National Park Service (NPS) is also to provide for public enjoyment of these protected resources.

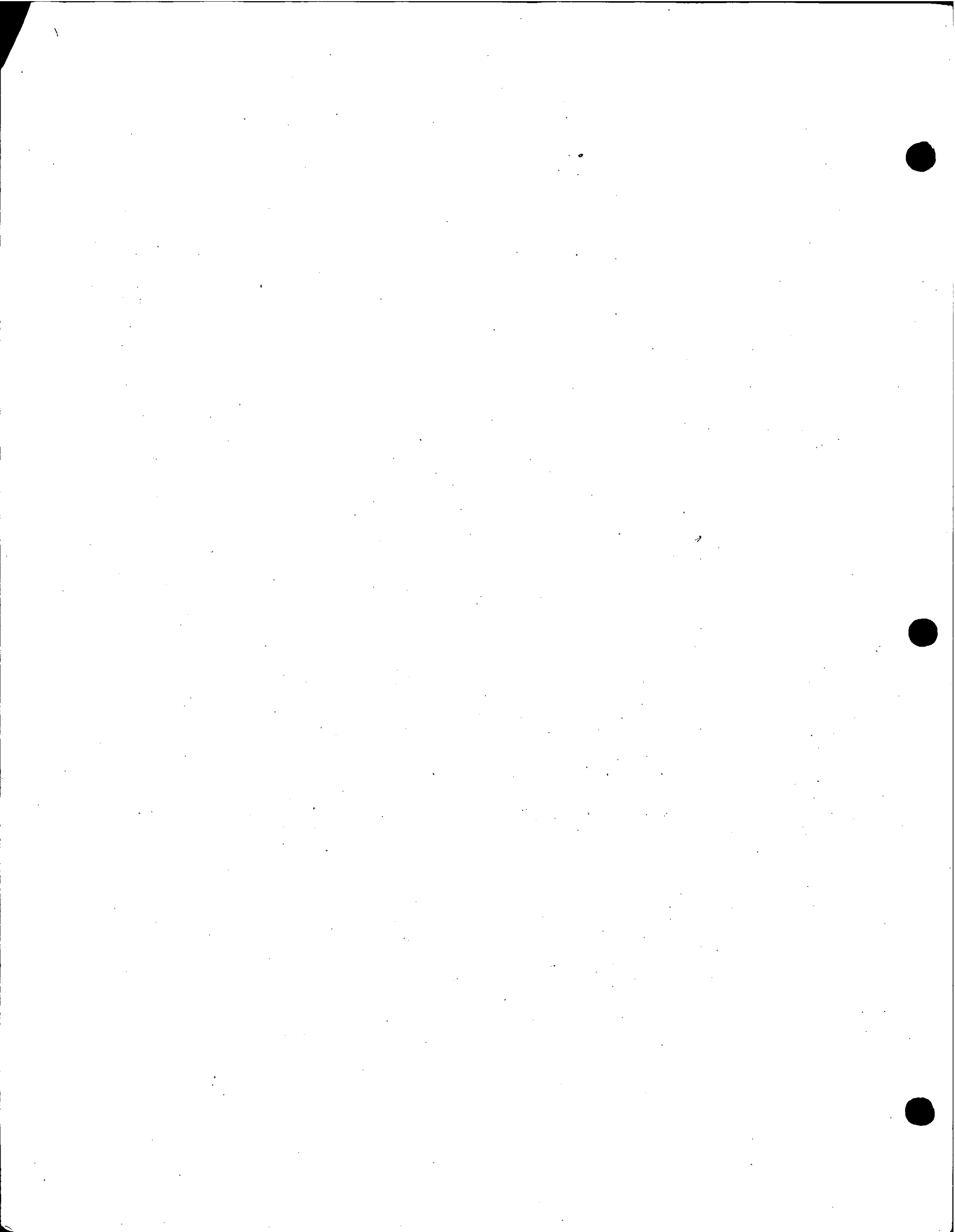
The National Park Service is in the process of adopting a General Management Plan/Environmental Impact Statement (GMP/EIS) for the preserve. Its purpose is to guide visitor use, natural and cultural resource management, and general development for the next 10 to 15 years. This plan will state the NPS intent with regard to managing the area's resources, providing for legislatively authorized uses, and allowing for appropriate visitor use and interpretation of the resources. The great majority of Big Cypress is both floodplain and wetlands, and some occupation of these resources is unavoidable if visitor use and recreation are to be provided.

Executive Orders 11988 ("Floodplain Management") and 11990 ("Protection of Wetlands") require the NPS and other Federal agencies to evaluate the likely impacts of actions in floodplains and wetlands. The objectives of the executive orders are to avoid to the extent possible the long- and short-term adverse impacts associated with the occupancy, modification, or destruction of floodplains and wetlands and to avoid indirect support of development and new construction in such areas wherever there is a practicable alternative.

The purpose of this statement of findings is to present the rationale for locating proposed actions in, and to document the anticipated effects on, floodplain and wetland values.

FLOODPLAINS AND WETLANDS WITHIN THE PROJECT AREA

Big Cypress National Preserve is centrally located between Miami and Naples (see South Florida Region map in the General Management Plan/Final Environmental Impact Statement). The southwestern corner of the preserve, including the Ochopee and Burns Lake areas, was mapped for floodplains by the Federal Emergency Management Agency (flood insurance rate map #120067-0325A). According to that map, the headquarters and residential area at Ochopee are within the 100-year floodplain. Flooding at Ochopee would be caused by a hurricane storm surge and could flood the area to a depth of 8 feet above mean sea level. There are no areas within the preserve in the coastal high hazard area, and no areas are subject to flash flooding.



Other floodplains have not been specifically mapped for the preserve but are believed to closely coincide with wetlands that are annually flooded (described below). The original preserve boundary (prior to the enlargement of the preserve in 1988) encloses most of a single watershed (approximately 5 percent of the preserve lands are outside the Big Cypress watershed). The great expanse of flood-prone wetlands in the region spreads runoff from storm-related rainfall and dampens the fluctuation of flood. This dampening effect is indicated by the presence of hardwood hammocks and pinelands, both upland types that are sensitive to flooding and that occupy sites only inches above normal high water in the preserve. Consequently, for the majority of the preserve, the 100-year flood level is probably not much higher than normal high water.

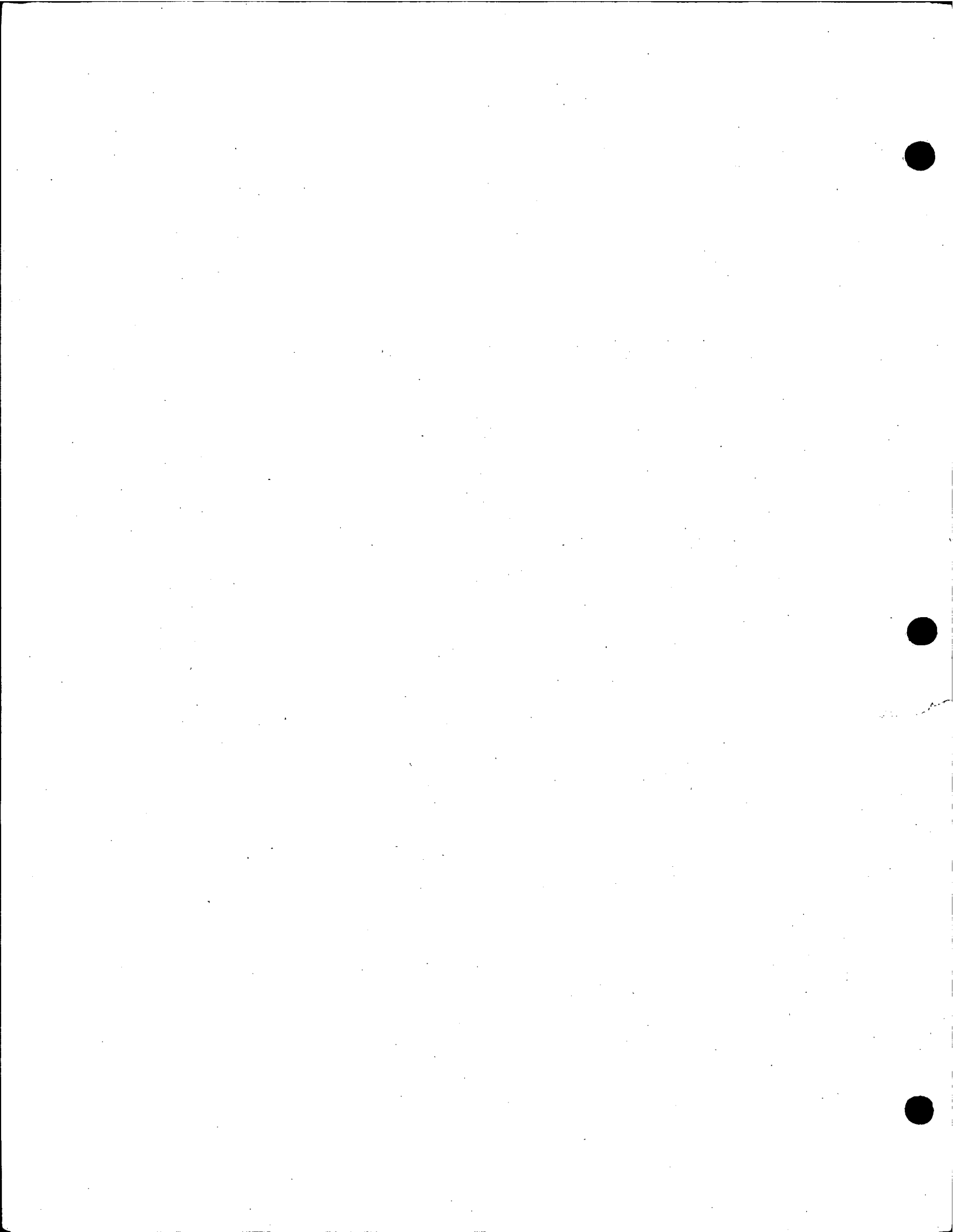
Wetlands have been mapped by the U.S. Fish and Wildlife Service as part of the National Wetlands Inventory. The majority of preserve lands are classified as wetlands with the exceptions being scattered hardwood hammocks, some pinelands, and artificially filled areas. Hydroperiod, the amount of time each year that soils are saturated, is the major determinant of vegetative communities, and a difference of only a few inches in elevation subsequently changes the hydroperiod and leads to the establishment of totally different plant communities. At the peak of the rainy season (May through October) as much as 90 percent of the preserve is inundated to depths ranging from a few inches to more than 3 feet. When the dry season begins, the water levels recede until at its driest, perhaps only 10 percent of the preserve is covered by water (i.e., the lowest areas such as ponds, cypress domes, and sloughs).

THE PROPOSED ACTION IN RELATION TO FLOODPLAINS AND WETLANDS

The proposed action is described in detail in the General Management Plan/Final Environmental Impact Statement. The proposed developments provide the facilities necessary for a quality visitor experience, while minimizing impacts on the preserve's resources.

The construction of NPS administrative, maintenance, and permanent housing facilities would be restricted to existing filled or disturbed upland sites at Ochopee, Oasis, and Pinecrest (see the "General Development" section of the GMP/EIS) to minimize any effects on water resources and further occupation of wetlands.

The Ochopee area, including preserve headquarters and proposed Dona Drive campground, is within the 100-year floodplain; therefore, the National Park Service would continue to maintain an emergency evacuation plan to protect lives and limit property damage. The design of new structures or the rehabilitation of existing structures would conform to requirements minimizing storm damage as contained in the National Flood Insurance Program's "Floodplain Management Criteria for Flood-Prone Areas" (44 CFR 60.3).



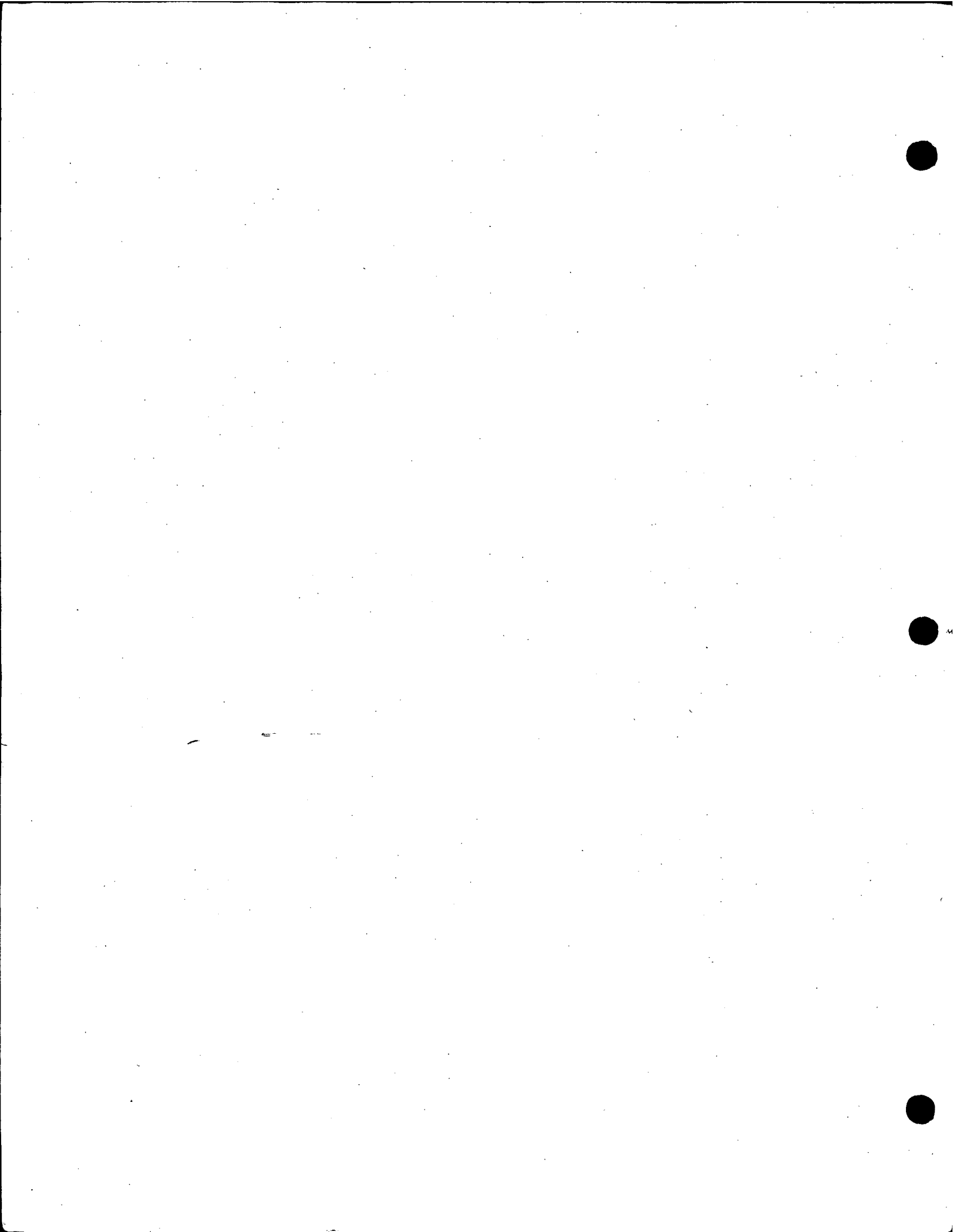
Constructing visitor use facilities will require filling of wetlands. Fill will be needed at 10 of 15 proposed off-road vehicle (ORV) staging areas and seven other parking areas along US 41, the Loop Road, and Turner River Road. Most of the filled areas would be less than 0.5 acre and would require no more than 2,500 cubic yards of material per site. Some additional fill would also be needed to improve existing campgrounds. Proposed NPS developments would occupy 11.9 acres, and 3 acres of fill at existing developments would be removed and surface flows restored, for a net total loss of 8.9 acres of developed wetlands. To mitigate for the loss of wetlands, alleviating drainage problems related to the Loop Road, Turner River/Birton roads, and Bear Island Road would restore natural surface flows on an estimated 38,000 acres, thus improving the quality of the wetlands.

Providing recreational roads, parking areas, and associated facilities--including toilets, dumpster pads, and other proposed amenities--within floodplains is an exempt action under NPS guidelines for compliance with EO 11988 so long as flood-proofing in design and construction is included. Providing boat-launching ramps (which also would include airboat ramps) is functionally dependent on being within the floodplain and NPS has determined that there is no practical alternative site outside the floodplain.

As advised by the Florida Department of Environmental Regulation, all development would be designed to minimize the size of the fill pad and to avoid segmenting wetland communities. Wetland types that have been identified by the NPS as important resource areas would be avoided to the maximum extent possible (only 0.2 acre would be in cypress strand/mixed hardwoods and 0.2 acre in marsh), and wetland disturbance would be limited primarily to cypress prairie (the remaining 8.5 acres), which is one of the most widespread and least productive vegetation types in the preserve (Duever, et al, 1986; U.S. Forest Service 1980). Filling would be mitigated by the removal of up to 100 acres of abandoned fill material in wetlands from other areas of the preserve and the region. Replacement wetlands will be of similar or greater productivity than those taken.

In addition, natural resource management would emphasize the perpetuation of floodplain and wetland values. The preserve would actively assist private landowners and Federal, State, and local regulatory agencies in protecting wetlands that are outside the preserve boundary, but whose use may affect preserve resources. Moreover, wetlands and floodplains would be used for their educational, recreational, and scientific qualities through expanded interpretive programs and research emphasis.

The National Park Service has determined that the proposed action conforms to State and local ordinances concerning floodplains, wetlands, and coastal zone management.



ALTERNATIVES CONSIDERED

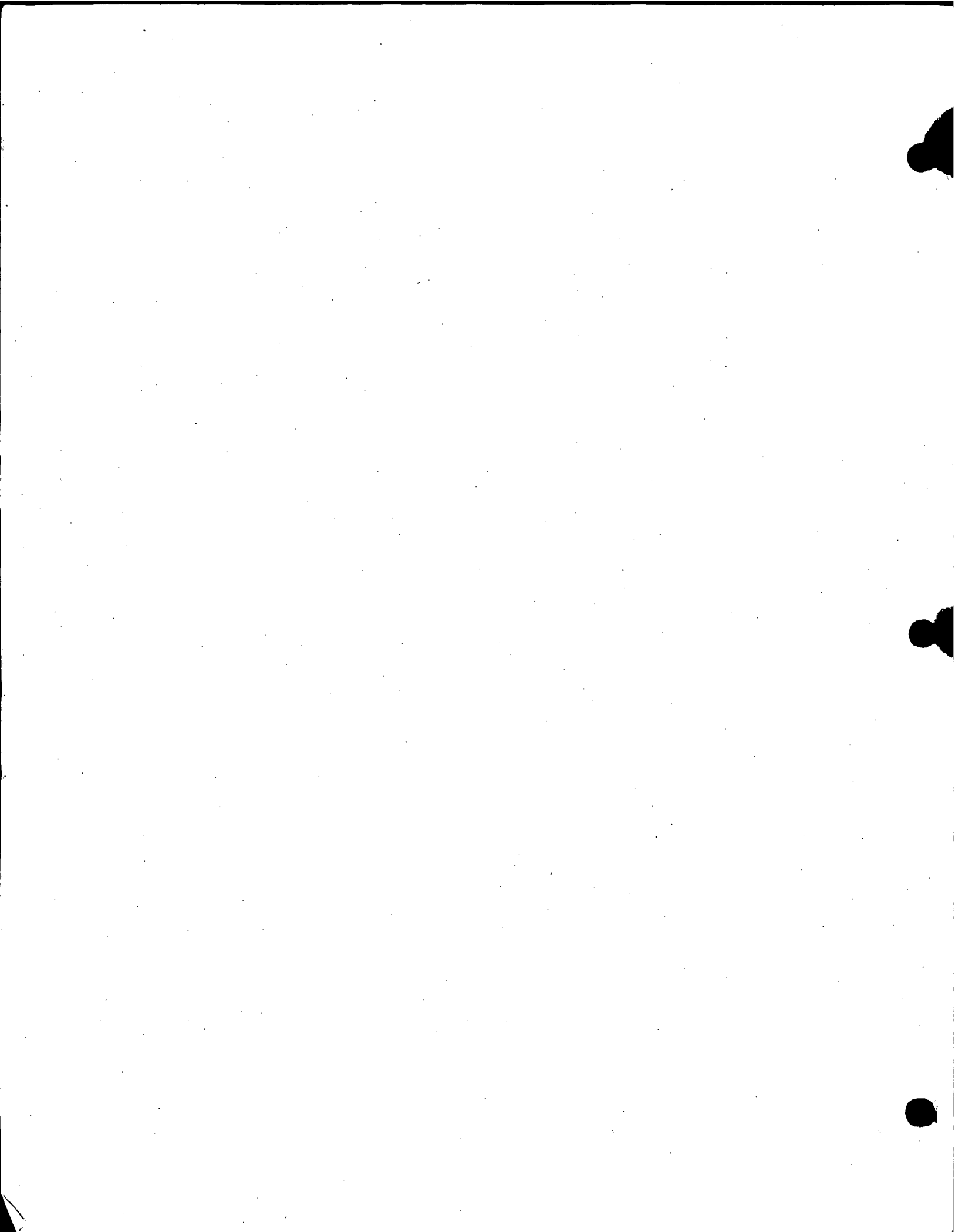
Three other alternatives are described in detail and assessed in the General Management Plan/Final Environmental Impact Statement. Under alternative A, as with the proposed action and alternative B, more natural surface flows and hydroperiods would be restored to as much as 38,000 acres through various restoration projects. Alternative A would provide more extensive visitor-related developments and, therefore, would displace more wetlands than under the status quo alternative or the proposed action. About 48 acres of wetlands would be filled. Impacts on floodplains and wetlands due to oil and gas activities are expected to be lower under alternative A than the status quo alternative.

Alternative B is intended to provide a primitive, challenging visitor experience while minimizing visitor and vehicle presence in the backcountry. Under this alternative there would be a net reduction (rather than increase) in fill areas currently disrupting surface flow on about 93 acres of wetlands as a result of NPS-related developments. This would be due to the removal of NPS facilities in the Ochopee area and site restoration. Under this alternative, only 6 acres of undisturbed wetlands would be displaced at other locations.

The status quo alternative describes the scenario that would occur if conditions remained essentially as they are today. The disruption because of inadequate drainage under the Loop Road and the Bear Island Road and because of diverted surface flows would continue. In addition, unreclaimed, abandoned roads and fill sites would continue to divert or impound surface water. Displacement from oil and gas activities could occur anywhere in the preserve, and the limitation on oil and gas development effects to 10 percent of the preserve at any one time would not apply. Consequently, overall oil and gas impacts under this alternative are expected to be the highest of any alternative.

CONCLUSION

The National Park Service concludes that there is no practicable alternative to locating the proposed developments in the 100-year floodplain and in wetland communities. Providing recreational roads, parking areas, and boat ramps is an exempt action under NPS floodplain guidelines. Further, filling approximately 8.9 acres of wetlands would be mitigated by removing abandoned fill material and restoring original surface flows at other wetland sites in the preserve and the region. Therefore, the NPS finds the proposed action to be acceptable under Executive Orders 11988 and 11990.



UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

GENERAL MANAGEMENT PLAN
and
FINAL ENVIRONMENTAL IMPACT STATEMENT
Volume 1

BIG CYPRESS NATIONAL PRESERVE
Collier, Monroe, and Dade Counties, Florida

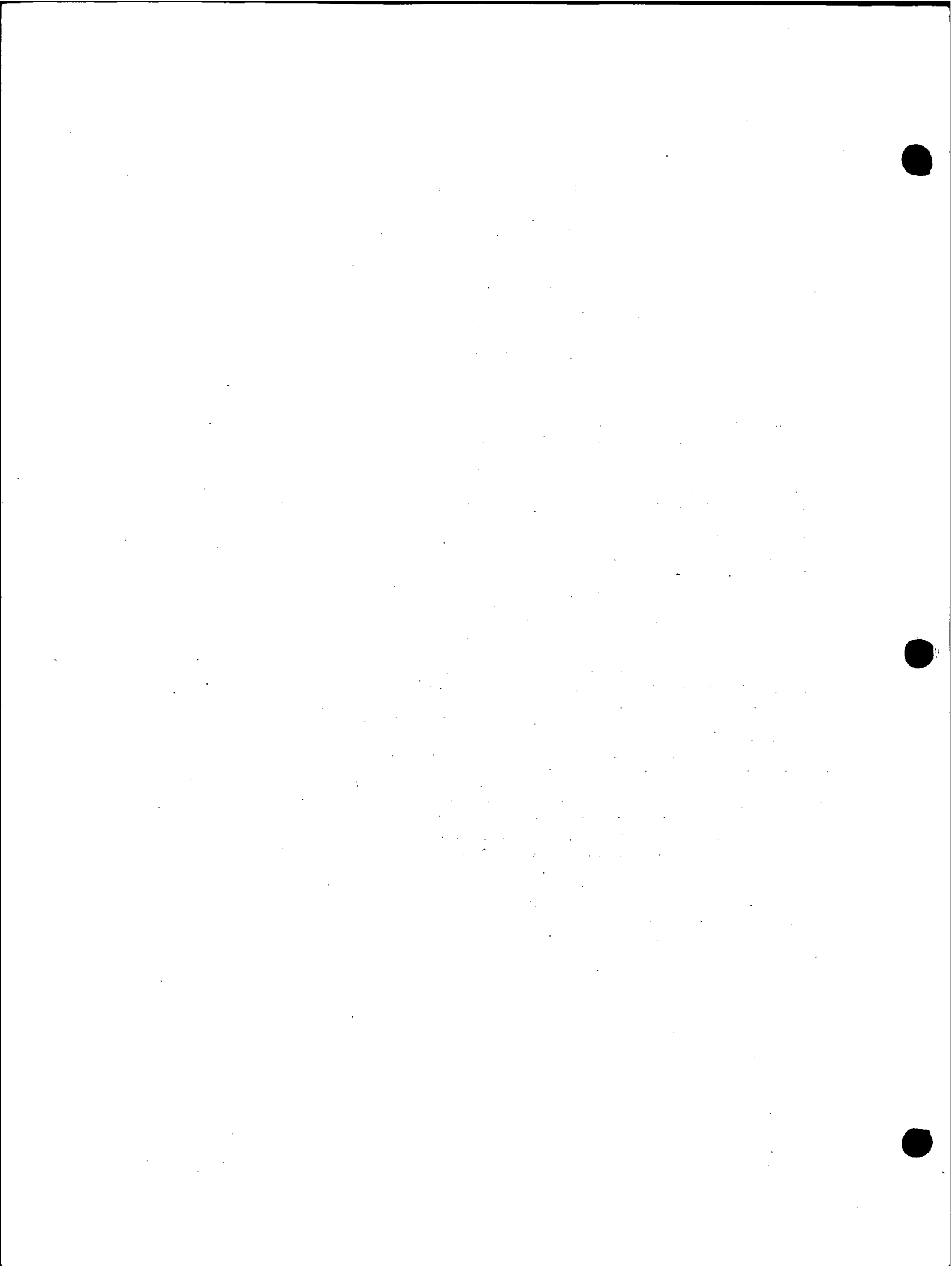
The proposed action and three alternatives for the general management of Big Cypress National Preserve are presented in this document, and the environmental consequences of their implementation are analyzed. The National Park Service envisions the preserve as a nationally significant ecological resource -- a primitive area where ecological processes are restored and maintained and where cultural sites are protected from unlawful disturbance. Visitors would have the opportunity to appreciate and learn about the preserve's resources in a natural setting. The proposed action would establish a 43- to 49-day general gun season divided into three quota hunts and one non-quota hunt. Only bow hunting would be permitted in the Deep Lake unit. No dogs would be permitted in the Deep Lake and Loop units, and only bird dogs and retrievers would be permitted in the rest of the preserve. Off-road vehicle (ORV) use would be allowed with certain restrictions in all units except Loop and Deep Lake. The interpretive program would be expanded, and recreational opportunities would be developed for canoeing, hiking, camping, and picnicking. Two canals would be rehabilitated to restore more natural surface water flows. Oil and gas exploration and development would be permitted to influence no more than 10 percent of the preserve at any one time. Eleven important resource areas would be protected, including superior natural resource areas, areas essential for maintaining water flow and quality, habitat necessary for the survival of threatened or endangered plant or animal species, and native American cultural sites or important historic or archeological resources. Wildlife programs would be expanded to protect species listed by the federal and state governments, and to improve habitat for white-tailed deer. Feral hogs would be managed so long as they are considered as important prey for the Florida panther. Exotic plants and animals would be selectively controlled. All sites on or eligible for listing on the National Register of Historic Places would be protected, as would significant native American sites. Subject to the development of reasonable regulations, Miccosukee and Seminole Indians would be allowed their usual and customary use and occupancy of federal lands within the preserve. The regulations would be developed with the assistance of these groups and other interested parties. With respect to environmental consequences, the proposed action would restore more natural surface water flows to approximately 38,000 acres, would ensure the protection of important resource areas, and would improve the habitat of the Florida panther. The number of hunters and total ORV recreational users would probably decrease. More interpretive and recreational opportunities would be provided for the general public. Proposed actions could inconvenience private property owners. Oil and gas owners, lessees, and operators could be affected if their proposed oil and gas activities would influence more than 10 percent of the preserve, potentially delaying additional development. The other alternatives include continuing management policies as of 1985-86 (status quo alternative), providing regional recreational opportunities (alternative A), and emphasizing the preservation of both natural and cultural resources and allowing limited recreational opportunities (alternative B). The status quo alternative would provide the least protection of important resource areas, would have no effect on existing hunting and ORV use patterns, would provide few interpretive and recreational opportunities for general visitors, and would result in no additional constraints on oil and gas owners, lessees, or operators. Alternative A would provide moderate protection of important resource areas; hunters and ORV users would be subject to moderate restrictions compared to recent management; and general visitors would be offered more recreational and interpretive opportunities. Actions could inconvenience private property owners. Oil and gas interests under alternative A could be affected by limiting the influence of exploratory and development activities to no more than 10 percent of the preserve. Alternative B would provide the greatest level of protection for important resource areas, a potential decrease in hunting by up to 75 percent, a decrease in ORV trails and use of ORVs for hunting, a limited increase in interpretive and recreational opportunities for general visitors, inconvenience to private property owners, and severe restrictions on oil and gas interests because of lack of access to most oil and gas resources. Comments on the *Draft General Management Plan / Draft Environmental Impact Statement*, and National Park Service responses, are printed in volume 2.

For further information about this document, contact

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or

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SUMMARY

The purpose of this *General Management Plan / Final Environmental Impact Statement* for Big Cypress National Preserve is to guide visitor use, natural and cultural resource management, and general development within the original boundary of the preserve for the next 10 to 15 years. Important resources, management issues, and alternative strategies to address the issues are presented, along with the potential environmental consequences of implementing those alternatives. (These topics will be addressed for the 146,000 acres added to the preserve in 1988 in a later addendum to the general management plan.)

THE PROPOSED ACTION (GENERAL MANAGEMENT PLAN) AND ALTERNATIVES

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 where cultural sites are protected from unlawful disturbance. Visitors would have the opportunity to appreciate and learn about the preserve's resources in a natural setting.

A proposed action and three alternatives have been considered. The overall direction of the proposed action is to establish reasonable regulation of most existing uses and to provide diverse recreational opportunities.

The proposed action would establish an interpretive program at the preserve, including six self-guiding walks and several new wayside exhibits. Other visitor services would include a designated canoe trail, six primitive frontcountry campgrounds, up to 50 backcountry shelters, new picnic facilities at Oasis, and concessioner visitor services and ORV storage. Backcountry camping would be allowed throughout the Turner River and Loop units and would be permitted at designated sites in the Bear Island, Deep Lake, Corn Dance, and Stairsteps units. NPS administrative and residential facilities would continue to be centered at Ochopee and Oasis.

Future hunting regulations would propose a 43- to 49-day general gun season, divided into three 9-day quota hunts and a three-week non-quota hunt. Hunting with dogs for white-tailed deer, feral hogs, and raccoons would be prohibited. Bird dogs and retrievers would be permitted in all units except the Deep Lake and Loop units. The Loop unit would continue to be a walk-in hunting area. The Deep Lake unit would be converted to a walk-in area and would be reserved for bow hunting. Hunting of some type would be permitted up to a total of 171 days per year.

A total of 37 off-road vehicle (ORV) access points would be provided. In the Bear Island unit specific ORV trails would be designated; in the Turner River, Corn Dance, and Stairsteps units ORV use would be dispersed by designating both trails and use areas. An ORV management plan would be developed, and new regulations would be promulgated to address specific ORV use, vehicle types, and area restrictions. Under these regulations only airboats would be permitted in marshlands south and east of Gum and Dayhoff sloughs in the Stairsteps unit; a designated buggy trail would be provided in the Lostmans Pines area. As at present, no ORVs would be allowed in the Loop unit, and the Deep Lake unit would also be closed to ORVs. As

Summary

many as 2,000 ORV permits would be issued annually. Tracked vehicles would be prohibited in the preserve.

Under the proposed action, natural resource management would emphasize the restoration of hydrological regimes by mitigating artificial obstructions and diversions affecting the Turner River and Deep Lake Strand, improving flows under the Loop Road and through Paces Dike, and other projects. The use of prescribed fire would be expanded to better manage vegetation and wildlife habitat, as well as to reduce hazardous fuel accumulations. Special management actions would be taken to protect species listed by federal and state law as endangered or threatened, particularly the Florida panther, Cape Sable seaside sparrow, red-cockaded woodpecker, bald eagle, and *Liguus* tree snails. Monitoring, research, habitat management, and hunting regulations would be expanded to better manage white-tailed deer as a native ungulate, a popular game species, and the primary prey of the endangered Florida panther. Feral hogs would be managed as prey in areas where they may be important to the Florida panther; they would be eliminated or controlled as an exotic species elsewhere.

All prehistoric and historic archeological sites (395 are currently known) would be evaluated by the National Park Service and the Florida state historic preservation officer to determine their eligibility for listing on the National Register of Historic Places. Eligible sites would be managed for protection against vandalism, exotic plants and animals, fire, erosion, or other destructive forces.

The National Park Service would work to establish and promote good relations with Miccosukee and Seminole people who reside in the preserve or use its resources. In consultation with tribal groups and other interested parties, reasonable regulations to govern the usual and customary use and occupancy of the preserve would be promulgated. Research and documentation would be conducted to preserve native American ethnographic resources.

Oil and gas exploration and production operations would be managed so that no more than 10 percent of the preserve would be influenced by these activities at any one time. Regulated geophysical exploration would be allowed in all units, subject to applicable resource protection stipulations. Surface occupancy for exploratory drilling and production operations would be permitted only outside vegetation communities and cultural sites identified as important resource areas. In the Bear Island unit new exploration and production activities would only be permitted if the area of oil- and gas-related direct impact in the unit did not exceed the current acreage in the unit of unreclaimed oil and gas access roads, pads, pipelines, and geophysical survey lines. All operators proposing to conduct operations that are subject to compliance with section 404 (dredge and fill requirements) of the Clean Water Act would be required to perform appropriate mitigation. All plans of operations would be reviewed on a case-by-case basis to ensure compliance with the preserve's establishing legislation (Public Law 93-440) and regulations at 36 CFR 9B. Site-specific mitigating actions for oil and gas development would be guided by the preserve's "Minerals Management Plan" (see appendix C) and by a plan of operations for each project.

Of the three alternatives considered besides the proposed action, the status quo alternative would continue existing programs, development, and trends as of 1985-86. Alternative A would provide a level of management intermediate between the status quo alternative and the proposed action and would involve the greatest amount of facility development. Conversely, alternative B would provide the least development and the most conservative management of

