

East Everglades Wilderness Study and Proposal



INTRODUCTION

This chapter focuses on the wilderness study and proposal for the East Everglades Addition within Everglades National Park. The first part of this chapter provides background information on the overall wilderness circumstances at Everglades National Park so that readers can better understand the context for the East Everglades Wilderness Study and proposal. The purpose and need for the East Everglades wilderness study is discussed in chapter 1 of this document. The second part of this chapter discusses the wilderness study and proposal for the East Everglades Addition; options vary by alternative.

Originally, this general management planning effort did not include the East Everglades Wilderness Study. However, in 2006 the scope of the general management plan was expanded to include the wilderness study. This made sense from an efficiency and cost standpoint because the two processes have similar environmental compliance and public involvement needs.

In July 2006, the NPS planning team published a newsletter to inform the public that the scope of the general management plan had been expanded to include the East Everglades Wilderness Study. In August 2006, the National Park Service hosted a wilderness study public workshop in Miami, Florida. The purpose of the meeting was to introduce the public to the wilderness study and to gather initial input about the possibility of designating wilderness in the East Everglades Addition.

PURPOSE AND DEFINITION OF WILDERNESS

The purpose of wilderness designation is to preserve and protect wilderness characteristics and values in perpetuity, including opportunities for solitude or primitive and unconfined recreation. With the passage of the 1964 Wilderness Act (16 USC 1131 et seq.), the guiding piece of legislation for all wilderness areas, Congress declared that it is national policy to secure for present and future generations the benefits of an enduring resource of wilderness. Wilderness can be officially designated only through congressional action.

The Wilderness Act of 1964 defines wilderness as follows:

- "lands designated for preservation and protection in their natural condition (section 2(a))
- an area where the earth and its community of life are untrammeled by man (section 2(c)
- an area of undeveloped federal land retaining its primeval character and influence, without permanent improvement or human habitation (section 2(c)
- generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable (section 2(c)
- has outstanding opportunities for solitude or a primitive and unconfined type of recreation (section 2(c)
- shall be devoted to the public purposes of recreation, scenic, scientific, educational, conservation and historic use (section 4(b)
- may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value"—section 2(c)

SUMMARY OF USES, DEVELOPMENTS, AND MANAGEMENT ACTIONS PERMITTED AND PROHIBITED IN WILDERNESS

This section is a brief summary of what is and is not allowed in designated wilderness areas.

The Wilderness Act and agency policies identify uses, facilities, and management actions that are and are not permitted in wilderness areas. Note that submerged marine wilderness (discussed in a separate section below) is a special case in that motorboats are allowed on the water in the national park.

Recreational uses, management actions, and facilities permitted in wilderness areas under the Wilderness Act and NPS policies include the following:

- nonmechanized recreational uses (e.g., hiking, backpacking, picnicking, canoeing/kayaking, camping)
- hunting and trapping (where otherwise permitted by law) and fishing
- American Indian religious activities and other actions recognized under treaty-reserved rights
- guided interpretive walks and on-site talks and presentations
- wheelchair use by individuals whose disability requires its use
- scientific activities, research, and monitoring (provided the activities are appropriate and use the minimum requirement to accomplish project objectives)
- management actions taken to address impacts of human use; examples of such actions include restoration of extirpated species, controlling invasive nonnative species, managing endangered species, and protection of air and water quality
- fire management activities (including fire suppression and prescribed fire)

- as approved in the fire management plan
- preservation of historic properties eligible for listing in the National Register of Historic Places
- trails necessary for resource protection or for providing visitor safety
- campsites where essential for resource protection and preservation or to meet other specific wilderness management objectives
- toilets that would resolve health and sanitation problems or prevent serious resource impacts
- signs (such as those identifying routes and distances) and other infrastructure necessary for visitor safety or to protect wilderness resources
- certain administrative facilities if necessary to carry out wilderness management objectives (e.g., storage or support structures, ranger station)
- uses and facilities permitted for landowners with valid property rights in a wilderness area

Certain uses and developments are prohibited under the Wilderness Act. Under the definition of wilderness in section 2(c) of the act, permanent improvements or human habitation are prohibited. Section 4 (c) specifically prohibits the following:

- commercial enterprises
- permanent roads
- temporary roads
- use of motor vehicles
- use of motorized equipment, motorboats, and airboats
- landing of aircraft
- other forms of mechanical transport (e.g., bicycles)
- structures or installations

With the exception of permanent roads and commercial enterprises, the Wilderness Act recognizes that the above uses may be permitted if necessary to meet the minimum requirements necessary for the administration of the area as wilderness or for emergency purposes. Other sections of the Wilderness Act also provide for some exceptions, including the preservation of features of historical value in section 2(c) and commercial services necessary for activities that are appropriate for realizing the recreational or other wilderness purposes of the area in section 4(d)(6).

Additionally, NPS policies prohibit some other developments as follows:

- new utility lines
- permanent equipment caches (unless necessary for health and safety or determined to be the minimum requirement)
- improvements for nonemergency use
- borrow pits (except for small quantity use of borrow material for trails)
- new shelters for public use (unless determined to be the minimum facility necessary for the health and safety of wilderness users or for the preservation of wilderness resources and values)
- picnic tables
- interpretive signs

Because the National Park Service manages proposed wilderness similar to designated wilderness, these prohibited uses are also prohibited within areas identified as proposed wilderness.

WILDERNESS AT EVERGLADES NATIONAL PARK

Marjory Stoneman Douglas Wilderness

Nearly 87% of Everglades National Park is currently designated wilderness. This wilderness area, originally named "Everglades Wilderness," was created by Congress in 1978, and it comprises nearly 1.3 million acres of Everglades National Park's 1.5 million acres (see "Wilderness Status" map). In 1997, the name was changed to "Marjory Stoneman Douglas Wilderness." The Marjory Stoneman Douglas Wilderness includes most of the park's undeveloped lands and inland waters, and it also includes submerged marine lands, which are a special case (see the "Submerged Marine Wilderness" section below).

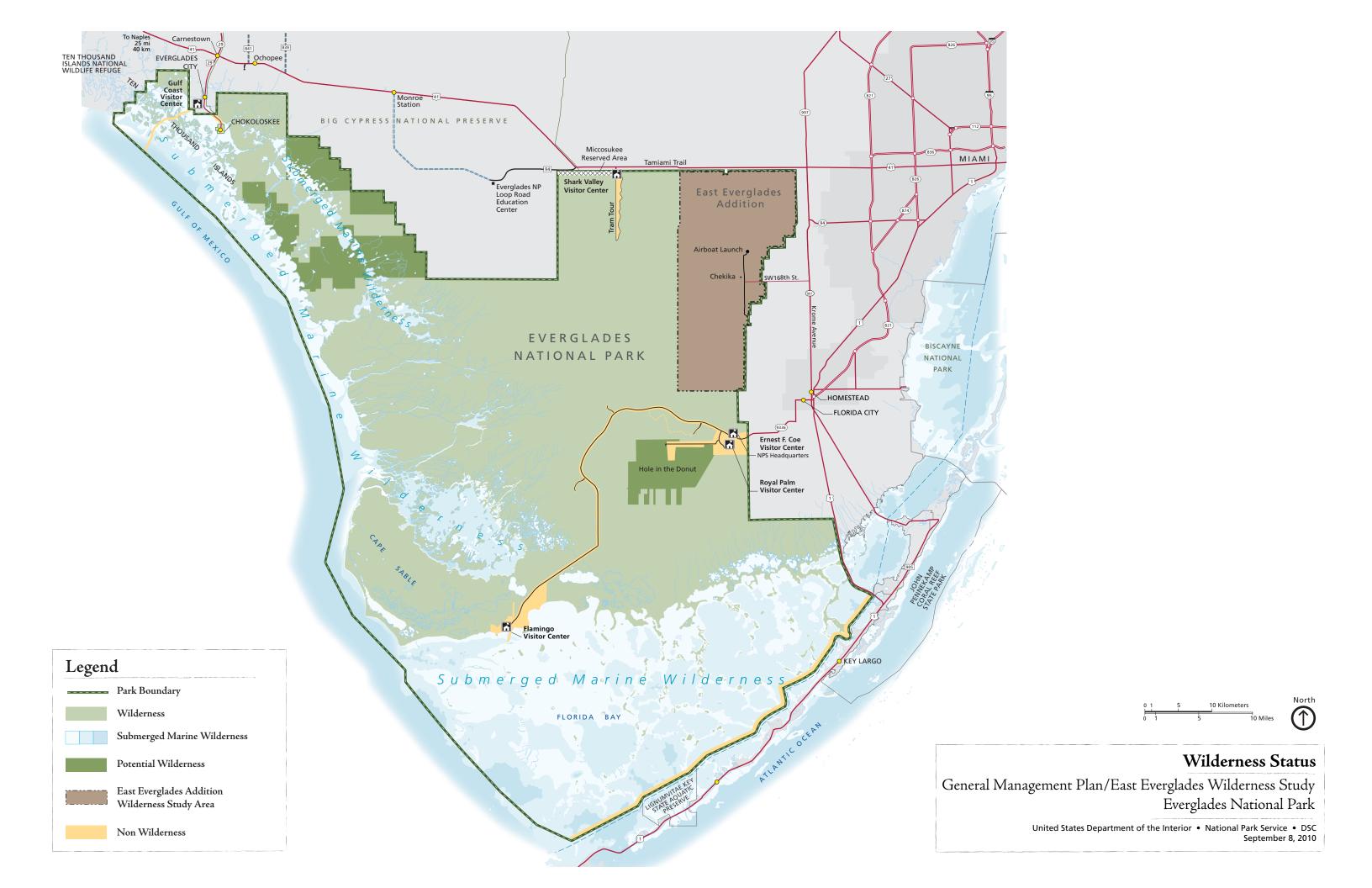
At the same time that wilderness was originally designated within Everglades National Park, 82,000 acres in several locations were designated "potential wilderness," meaning they would be converted to wilderness if or when nonconforming uses end. In the interim, these lands are managed as if they were wilderness, to the extent that is legal and practical to do so. Examples include the Hole-in-the-Donut area in the center of the park, which would become wilderness when restoration efforts are complete, and some parcels in the northwestern part of the park that contain nonfederal mineral rights. Existing wilderness and potential wilderness areas are managed under the Wilderness Act of 1964, NPS Management Policies 2006, and the Everglades National Park Backcountry Management Plan (1981).

Submerged Marine Wilderness (Marine Waters)

The submerged marine (marine waters) portion of the Marjory Stoneman Douglas Wilderness, approximately 530,000 acres in extent, is unusual in that it includes the marine

bottom (benthic surface), but not the water column or the water surface. This distinction, which allows motorboating on the water

surface, was included in the original wilderness recommendation and was carried forward by designation of Congress.



EAST EVERGLADES WILDERNESS STUDY AND PROPOSAL

BRIEF DESCRIPTION OF THE STUDY AREA

In 1989, 109,600 acres were added to Everglades National Park as part of the **Everglades National Park Protection and** Expansion Act of 1989 (16 USC 410r-5). This area is known as the East Everglades Addition. The purposes of the 1989 act were to (1) increase the level of protection of the outstanding natural values of Everglades National Park and enhance and restore the ecological values, natural hydrologic conditions, and public enjoyment of such area by adding the area commonly known as the Northeast Shark River Slough and the East Everglades to Everglades National Park; and (2) assure that the park is managed to maintain the natural abundance, diversity, and ecological integrity of native plants and animals, as well as the behavior of native animals as a part of their ecosystem.

The northeast part of the East Everglades Addition consists primarily of the eastern part of the Shark River Slough, with hammocks or tree islands scattered throughout. Chekika (a former state recreation area) is in the east-central portion. The eastern and southern portions are freshwater marl prairie that is mostly inaccessible because of shallow water and rocky conditions.

The East Everglades Addition is bordered on the north by Tamiami Trail (Highway 41); on the east by residential, commercial, and agricultural lands of Miami-Dade County; on the south by freshwater marl prairie and pinelands of Everglades National Park; and on the west by freshwater slough (Shark River Slough of Everglades National Park). See "Ecosystems" map in chapter 4. More than 99% of the area is federally owned. Six properties along Tamiami Trail are still in private ownership, and a narrow north-south corridor is owned by Florida Power & Light.

The park's 1991 Land Protection Plan provides management guidance for implementing the 1989 act and establishes priorities for land acquisition.

WILDERNESS ELIGIBILITY

The first step in the wilderness study was to evaluate the eligibility of lands within the East Everglades for wilderness designation. Wilderness, as defined by the Wilderness Act, is where

- the earth and its community of life are untrammeled by humans, where humans are visitors and do not remain
- the area is undeveloped federal land retaining its primeval character and influence, without permanent improvements or human habitation, which is protected and managed so as to preserve its natural conditions
- the area generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable
- has outstanding opportunities for solitude or a primitive and unconfined type of recreation
- the area may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value

The Wilderness Act also says that wilderness areas shall be devoted to the public purposes of recreation, scenic, scientific, educational, conservation, and historic use. Using this guidance from the Wilderness Act, together with additional considerations as outlined in NPS management policies, the interdisciplinary planning team evaluated the East Everglades Addition in 2006.

The wilderness eligibility determination associated with this plan was combined with the Wilderness Study in accordance with established NPS policy (Director's Order 41: Wilderness Stewardship). The number of acres identified as eligible for wilderness designation in the draft GMP/East Everglades Wilderness Study in 2012 (102,100 acres) was amended in 2015 to reflect the results of the Wilderness Study as described in the preferred alternative. The amended wilderness acreage was based on continued internal staff analysis of existing conditions and wilderness characteristics along with public comment received on the draft plan.

Of the 109,600 acres within the East Everglades Addition, the final Wilderness Study determined that approximately 85,300 acres meet wilderness eligibility criteria (see "East Everglades Eligibility Assessment" in appendix H). This determination considered the natural resource protection and restoration goals for the area as defined in the purpose of the 1989 act and the long-term continuation of commercial airboating in approximately 16,400 acres (zoned frontcountry) in the northwestern portion of the East Everglades Addition as is described in the NPS preferred alternative.

About 24,300 acres were determined to be ineligible because of long-term nonconforming uses or the presence of infrastructure such as improved roads and/or structures. The following areas were determined to be ineligible:

- the Chekika area (former state recreation area) and a 300-foot buffer
- near Chekika, SW 168th Street and SW 237th Avenue and a 150-foot corridor on either side of the road centerline
- areas of existing development associated with the commercial airboat operations and radio transmission buildings along the south side of Tamiami Trail

- 0.25 mile (1,320 feet) south of the Florida Department of Transportation right-of-way along Tamiami Trail (where the right-of-way meets the park boundary), and east of the area determined ineligible as wilderness where concession airboat tours would operate
- 0.25 mile (1,320 feet) west of the park's eastern boundary for the length of the East Everglades Addition
- a 150-foot corridor on either side of the SW 237 Avenue right-of-way
- approximately 16,400 acres (zoned frontcountry) in the northwestern portion of the East Everglades Addition where airboat tours for visitors, to enhance their understanding and enjoyment of the park, would be provided by NPS concessioners in the long term.

OPTIONS ANALYZED IN THIS WILDERNESS STUDY

This wilderness study evaluates whether, and if so where, wilderness should be designated within the East Everglades Addition, given the best available information about wilderness character, public review and comment, and practical considerations. As the terms are used in this document, proposed wilderness is an area that has wilderness characteristics and would be proposed by the National Park Service for designation. Proposed potential wilderness is an area that has wilderness characteristics but had temporary nonconforming conditions or uses. If these areas were designated by Congress as potential wilderness, they would be converted to designated wilderness once the nonconforming conditions have been rectified.

Using the overall vision for each action alternative and public comment, the planning team developed a range of possibilities for proposed wilderness that would meet the park's purpose. Each wilderness option is included as part of one of the general management plan alternatives; see "Chapter 2: Alternatives, Including the Preferred Alternative." The environmental impact statement included in this document analyzes the consequences of these four wilderness options.

Alternative 1, the no-action alternative, describes continuation of existing management at Everglades National Park. This alternative provides a baseline for evaluating changes and impacts of the three action alternatives. In keeping with the intent of this alternative, none of the East Everglades would be proposed for designation as wilderness.

Under the NPS preferred alternative, approximately 42,200 acres of the East Everglades Addition would be proposed for wilderness designation and about 43,100 acres would be proposed as potential wilderness. Potential wilderness would be converted to designated wilderness once nonconforming uses (primarily private airboat use, activities related to ecosystem restoration efforts, and projects to restore disturbed sites) were discontinued and/or private property comes into federal ownership. In addition to the five ineligible areas described above, 16,400 additional acres in the northwest portion of the East Everglades Addition would not be proposed for wilderness designation to accommodate concessioner airboat tours for park visitors. See the inset on the "NPS Preferred Alternative" map for the visual depiction of these areas.

Under alternative 2, about 39,500 acres in the southern portion of the East Everglades Addition would be proposed for wilderness designation. This southern portion, south of Grossman's Ridge, is marl prairie and is often too dry to accommodate airboat use. See the

inset on the "Alternative 2" map for the visual depiction of these areas.

Under alternative 4, approximately 42,700 acres would be proposed for wilderness designation and 59,400 acres would be proposed as potential wilderness. Potential wilderness would be converted to designated wilderness once nonconforming uses (primarily private airboat use and restoration of disturbed sites) ended and/or private property comes into federal ownership. All of the East Everglades Addition, except areas identified as ineligible on the previous page, would be proposed as wilderness or potential wilderness. See the inset on the "Alternative 4" map for the visual depiction of these areas.

WILDERNESS PROPOSAL (FROM NPS PREFERRED ALTERNATIVE)

The majority of lands south of Grossman's Ridge and west of SW 237th Avenue in the East Everglades Addition (totaling about 42,200 acres) would be proposed as wilderness. The following areas (totaling about 43,100 acres) in the Addition would be proposed potential wilderness: (1) the portion of the East Everglades Addition within which private airboat use would likely continue beyond the life of this plan (zoned frontcountry), and (2) the majority of areas north of Grossman's Ridge and east of SW 237th Avenue, including the north-south corridor owned by Florida Power & Light. Proposed wilderness plus proposed potential wilderness would together make up approximately 78% of the East Everglades Addition. The northwestern portion of the East Everglades Addition, within which airboat tours for park visitors provided under NPS concession contracts would be provided over the long term (about 16,400 acres zoned frontcountry), would not be proposed for wilderness.

TABLE 7. WILDERNESS OPTIONS EVALUATED IN THIS WILDERNESS STUDY

Alternative	Wilderness Proposal for East Everglades		% of East Everglades
Alternative 1: No Action	None	0% total	
NPS Preferred Alternative	Proposed wilderness: Proposed potential wilderness: Total wilderness proposal:	42,200 acres 43,100 acres 85,300 acres	78% total
Alternative 2	Proposed wilderness: Proposed potential wilderness: Total wilderness proposal:	39,500 acres 0 acres 39,500 acres	38% total
Alternative 4	Proposed wilderness: Proposed potential wilderness: Total wilderness proposal:	42,700 acres 59,400 acres 102,100 acres	93% total

[Note: acreage figures and percentages are approximate.]

Exclusions to the wilderness proposal would total approximately 24,300 acres and include the following:

- An east-west strip of 0.25 mile (1,320 feet wide) along the park boundary south of Tamiami Trail east of the 16,400-acre area determined ineligible as wilderness where concessioner airboat tours would operate.
 - The 0.25 mile (1,320-foot)
 exclusion along the south side of
 Tamiami Trail is to allow for
 - o appropriate resource management activities associated with ecosystem restoration projects (e.g., scientific research, monitoring, and analysis to improve natural hydrologic conditions and protect threatened and endangered species habitat)
 - activities associated with Northeast Shark River Slough hydrologic restoration projects (e.g., Modified Water Deliveries Project, Tamiami Trail Modifications: Next Steps, and CERP Decompartmentalization Project)

- Specific management actions that would typically occur in this corridor include road maintenance and improvements including culvert clean-out and maintenance, road/bridge alterations and other work with heavy equipment related to restoring and managing water flow, managing concession airboat sites, and resource management activities such as removal and management of invasive nonnative vegetation.
- This distance is similar to the distance authorized near nonwilderness areas of the park that are adjacent to the 1,296,000-acre Marjory Stoneman Douglas Wilderness such as near the main park road and Long Pine Key Road.
- A 0.25-mile (1,320-foot) strip along the entire length of the eastern boundary. [Note: before the wilderness proposal is forwarded for approval by the National Park Service, the width of this strip would be finetuned based on the best available information.]
 - This exclusion along the eastern boundary of the East Everglades

- area is to allow for resource management and maintenance activities associated with ecosystem restoration projects designed to minimize groundwater seepage eastward out of the park and maintain higher water levels within the park.
- Projects intended to provide these benefits include the C-111 component of the Modified Water Deliveries Project and the L31N Seepage Management Project that is part of the Comprehensive Everglades Restoration Project.
- The developed Chekika area (former state recreation area) and a 300-foot strip around it.
 - The 300-foot corridor around Chekika and adjacent roads (SW 168th Street and SW 237th Avenue (including 150 feet from either side of the center line) is to provide a transition zone to allow for the following activities:
 - road and utility maintenance, invasive nonnative vegetation and fish removal and management, fire management activities and fuel break clearing around visitor use areas
 - providing and maintaining parking/trailhead areas for private airboating and providing and maintaining opportunities for hiking/bicycling and equestrian trips
 - This distance is consistent with the distance authorized near similar moderately developed areas of the park that are adjacent to the 1,296,000-acre Marjory Stoneman Douglas Wilderness such as Shark Valley and the Research Road / Hole-in-the-Donut area.
- Approximately 16,400 acres (zoned frontcountry) in the northwestern portion of the East Everglades

- Addition where airboat tours provided under NPS concession contracts would be provided in the long term.
- This area has historically been used for commercial airboating. For the first time, this visitor opportunity would be provided under NPS concessions contracts with up to four eligible companies, consistent with the 1989 act. If this activity were ever to cease, the area would likely recover its wilderness character over time and possibly be eligible as wilderness at some future time. Should that use end the National Park Service would reevaluate the eligibility of these lands consistent with NPS Management Policies 2006 (6.2.1: "Additionally, lands originally assessed as ineligible for wilderness because of nonconforming or incompatible uses must be reevaluated if the nonconforming uses have been terminated or removed." However, the preferred alternative of the final General Management Plan calls for concessioner airboat tours continuing in this area over the long term (20 years or more). Therefore, the imprint of human activity and impact on solitude would be substantial for the foreseeable future, leaving these lands ineligible as wilderness.

The wilderness proposal for the NPS preferred alternative is illustrated on the East Everglades Addition enlargement on the "NPS Preferred Alternative" map (see chapter 2). Please note that the acreage figures for the various wilderness proposals are estimates based on small-scale maps; the acreage for the approved wilderness proposal would be refined through more specific GIS mapping prior to legislation, using detailed, large-scale maps.

The Record of Decision for the final GMP/East Everglades Wilderness Study will

serve as the formal approval of the lands identified as proposed wilderness. Ultimately, 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 wilderness preservation system. On the basis of the wilderness study in this document, the National Park Service anticipates forwarding a wilderness proposal to the U.S. Department of the Interior at the conclusion of this planning effort. The Secretary of the Interior is then responsible for reviewing this proposal and either approving or revising it before forwarding it on to the president as recommended wilderness. The president then formally transmits this recommendation to both houses of Congress for action.

Public Comment on Wilderness

During public scoping for the East Everglades wilderness study and during public review of the Draft General Management Plan / East Everglades Wilderness Study / Environmental *Impact Statement*, a variety of perspectives on wilderness were expressed. Most people who supported wilderness did so because they value natural conditions; primitive recreation; and opportunities for solitude, particularly as portions of south Florida become more developed. Some who opposed wilderness designation did so because many areas in the East Everglades have some human imprint; others opposed wilderness because of concerns that certain activities (such as airboating and ongoing restoration activities) would be restricted or eliminated. These public comments were considered in the determination of eligible wilderness acres in the Wilderness Study.

Implications of Managing Lands Proposed for Wilderness and Proposed for Potential Wilderness

Lands within the East Everglades Addition that are proposed for wilderness designation in the "Record of Decision" for the final GMP/East Everglades Wilderness Study will be managed as wilderness until such time as Congress specifically decides whether or not to include them in a formal wilderness designation (NPS *Management Policies 2006*). Lands identified as potential wilderness will also be managed as wilderness to the extent that existing nonconforming conditions allow.

As noted above, much of the northern portion of the East Everglades Addition would be proposed as potential wilderness in the NPS preferred alternative. The wilderness character of this area has been and is continuing to be degraded by the presence of nonnative species, both vegetation (e.g., melaleuca, Australian pine, Brazilian pepper, Old World climbing fern) and animals (e.g., Burmese pythons, Mayan cichlids), altered hydrology (due to extensive regional flood protection and water supply actions over many decades, the wrong timing and distribution of freshwater delivery to the park in less than desired quality and amounts has been occurring, resulting in ongoing adverse natural resource impacts), and other evidence of past human manipulation (e.g., dredging canals and establishing an extensive airboat trail network in sawgrass and marsh habitats, manipulating the landscape of naturally formed tree islands in the ridge and slough physiographic region). Park managers recognize that a substantial amount of research and resource management activity is needed to restore the ecosystem of this area, and that motorized vehicle access to sites, use of motorized and mechanized equipment, installation of monitoring devices, and other activities normally prohibited under the Wilderness Act will be required to meet this need. Management actions proposed to address these nonconforming conditions and generally prohibited activities will be subject to a minimum requirements analysis (MRA) as explained below.

The 43,100 acres identified as potential wilderness will be subject to management actions to mitigate or eliminate longstanding impacts and disturbances to the natural environment that have degraded wilderness

character, many natural and cultural resource features, and generally prevented the park from fully meeting its mission. This potential wilderness area in the northern portion of the East Everglades is one of the most critical locations of a multidecade, multibillion dollar interagency effort to restore the Everglades ecosystem (as discussed in chapter 1 of the GMP), and there will be substantial management action taken that in the long term will result in restoring wilderness character, natural habitats, and resource conditions not only in this area, but that will extend through the East Everglades and to other areas of Everglades National Park.

With this long-term vision comes the recognition that park and partner managers will rely on restoration strategies and techniques that have been most successful over time, while also seeking new approaches that can achieve the desired outcomes in less impacting ways. Those strategies and techniques sometimes include the use of motorized and mechanized equipment to achieve long-term success in restoring wilderness and ecosystem resource conditions. In addition, approximately 9,000 acres of the potential wilderness area would allow limited individual, private airboat use as provided for in section 103(c)(2) of the 1989 act (although airboat use is an otherwise prohibited use in wilderness).

It is recognized that these management actions and allowances will be in place for many years. When restoration efforts are successful or wilderness character is sufficiently improved, the lands will be advanced as proposed wilderness or converted to designated wilderness if there has been supporting wilderness legislation passed.

Planning and Management

A wilderness or backcountry management plan is typically developed to guide preservation, management, and use of NPS wilderness areas. Such a plan would be developed with public involvement and would contain measurable objectives for preservation of wilderness values as specified in the Wilderness Act and NPS *Management Policies 2006*. Wilderness management plans, which are often combined with backcountry management plans, articulate management actions such as regulations, monitoring, and permit systems—such as those currently in place for backcountry camping in the park. Such a plan would be developed for any new wilderness areas within the East Everglades Addition. Management of the existing Marjory Stoneman Douglas Wilderness is addressed by the 1981 Backcountry Management Plan.

The proposed management actions in the areas proposed for wilderness designation and as potential wilderness in the Record of Decision for this plan are subject to a minimum requirements analysis. Minimum requirements analyses will take into consideration the concept of wilderness character, which includes the combination of biophysical, experiential, and symbolic ideals that distinguish wilderness from other lands. The five qualities of wilderness character are (1) untrammeled, (2) undeveloped, (3) natural, (4) offers outstanding opportunities for solitude, or primitive and unconfined recreation, and (5) other features of scientific, educational, scenic, or historical value.

Minimum Requirements Analysis

The Wilderness Act of 1964 prohibits certain activities in designated wilderness that detract from wilderness character. Prohibited activities include such actions as installing structures or using motorized equipment. However, the act and NPS policy recognize an exception to this rule: otherwise prohibited activities may be allowed in proposed, potential, and designated wilderness if it can be demonstrated that the activity in question is "the minimum necessary" for administration of the area as wilderness, and that the activity will not cause a significant impact to wilderness resources and character. This showing is made via a Minimum Requirements Analysis.

The nature and scope of the minimum requirements analysis would vary depending on the nature of the activity. For some activities that are short term, reversible in nature, and would not have the potential to degrade long-term wilderness character, a programmatic minimum requirements analysis may be prepared. A programmatic minimum requirements analysis could cover such activities as helicopter landings, minor installations that would be removed within one year, hand-held motorized or mechanized equipment, airboating on existing routes/trails, and limited short-term airboating off existing routes/trails. For activities that would have the potential to result in long-term degradation of wilderness character, an individual or project-specific minimum requirements analysis would be prepared (e.g., for installations that are expected to last more than one year, for creation of new routes/trails to access field sites, for any motorized vehicle use in areas without existing trails or developed roads, or repeated airboat use that departs from the network of existing routes/trails).

Where practical alternatives do not exist, maintenance or other activities may occasionally be accomplished through the use of motorized equipment. The use of motorized equipment should be based on the minimum requirement analysis. Motorized equipment need not be allowed for activities that can reasonably be accomplished using nonmotorized means.

In all cases, the intent of preparing the minimum requirements analysis is to avoid or minimize as much as possible short-term impacts to the area's wilderness character while still allowing needed research, resource management, and restoration activities in proposed designated wilderness and potential wilderness that ultimately would benefit the area's overall wilderness character.

Private Rights

Wilderness designation does not extinguish valid existing private rights such as land or right-of-way ownership or valid mineral interests. Valid private rights in wilderness are administered in keeping with the specific terms and conditions of each right.

Recreational Use

Recreational uses of NPS wilderness are to be of a type and nature that enable the areas to retain their undeveloped primeval character and influence, protect and preserve natural conditions, leave the imprint of man's work substantially unnoticeable, provide outstanding opportunities for solitude or primitive and unconfined types of recreation, and preserve wilderness in an unimpaired condition. Hiking, canoeing, kayaking, and fishing are appropriate uses of wilderness at Everglades National Park. Public use of motorized equipment or any form of mechanical transport such as bicycles is prohibited, except as provided for in specific legislation (e.g., motorboat use is permitted on the waters above (or overlying) submerged marine wilderness areas of the Marjory Stoneman Douglas Wilderness). Wheelchair use is allowed in wilderness. Service animals accompanying persons with disabilities are also allowed in wilderness.

Emergency Services

In emergency situations involving human health and safety, the use of aircraft, motorboats, and other motorized or mechanical equipment is allowed in wilderness. Wildfires would be controlled as necessary to prevent loss of life, damage to property, the spread of wildfire to lands outside wilderness, or unacceptable loss of wilderness values or natural or cultural resources. The use of tool caches, aircraft, motorboats, and motorized firefighting equipment may be permitted for such control. Prescribed fire and hazard fuel reduction

programs may be implemented according to approved plans. The minimum requirement analysis would be followed for all fire activities in wilderness.

Resource Management and Research

Wilderness designation does not prevent the National Park Service from protecting and maintaining historic and other cultural resources within wilderness areas. Using the minimum requirement analysis, cultural resource surveys will be conducted as needed in wilderness areas, and identified resources will be protected and maintained according to the pertinent laws, policies, and plans governing cultural resources. Natural resource management activities, including management of endangered species and critical habitat, may be carried out in a similar fashion under the minimum requirement analysis as addressed by the Carhart National Wilderness Training Center's Minimum Requirements Decision Guide, and will

generally be undertaken only to address the impacts of past and current uses or influences originating outside wilderness boundaries. Natural processes will be allowed, insofar as possible, to shape and control wilderness ecosystems. To allow natural processes to be effective in Everglades wilderness, restoration of natural water flow patterns and invasive nonnative species control (plant and animal) would be necessary (e.g., the removal of vegetation accumulation within downstream outlets of culverts to improve natural water flow patterns and mitigation invasive plant species).

Scientific activities are appropriate in wilderness. Even scientific activities (including inventory, monitoring, and research) that involve a potential impact to wilderness resources or values are allowed when the benefits of what can be learned outweigh the impacts on wilderness resources or values. However, all such activities must be evaluated using a minimum requirement analysis.