

Wekiva Wild and Scenic River System

Florida

August 2010

National Park Service
U.S. Department of the Interior



Environmental Assessment for the Comprehensive River Management Plan

ENVIRONMENTAL ASSESSMENT WEKIVA WILD AND SCENIC RIVER SYSTEM

Florida

Wekiva Wild and Scenic River System was designated by an act of Congress on October 13, 2000 (Public Law 106-299). The Wild and Scenic Rivers Act (16 USC 1247) requires that each designated river or river segment must have a comprehensive river management plan developed. The Wekiva system has no approved plan in place.

This document examines two alternatives for managing the Wekiva River. It also analyzes the impacts of implementing each of the alternatives. **Alternative A** consists of the existing river management and trends and serves as a basis for comparison in evaluating the other alternative. It does not imply that no river management would occur. The concept for river management under **alternative B** would be an integrated program of goals, objectives, and actions for protecting and enhancing each outstandingly remarkable value. A coordinated effort among the many public agencies and entities would be needed to implement this alternative. Alternative B is the National Park Service's and the Wekiva River System Advisory Management Committee's preferred alternative.

The key impacts of implementing alternative A would be continuing minor adverse impacts on scenic values, recreation values, wildlife and habitat values, historic and cultural values, and water quality and quantity values from the continuation of existing situations and conditions. Beneficial impacts on recreation values from ongoing improvement of facilities and on wildlife and habitat from prescribed fire and continued invasive plant control would also occur under alternative A.

Implementing the preferred alternative (B) would result in coordinated multiagency actions that would aid in the conservation or improvement of scenic values, recreation opportunities, wildlife and habitat, historic and cultural resources, and water quality and quantity. This would result in several long-term beneficial impacts on these outstandingly remarkable values.

This *Environmental Assessment* has been distributed to other agencies and interested organizations and individuals for their review and comment. The public comment period for this document will last for 30 days after distribution of the document to the public. Readers are encouraged to give us their comments via the National Park Service Planning, Environment, and Public Comment (PEPC) website at www.parkplanning.nps.gov; send written comments to Jaime Doubek-Racine, National Park Service, 665 South Orange Avenue, Suite H, Sarasota, FL 34236. 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

The Wekiva River System, composed of the Wekiva River, Rock Springs Run, Wekiwa Springs Run, and Black Water Creek, was designated by the U.S. Congress as a national wild and scenic river in October 2000. Five outstandingly remarkable values (ORVs) have been identified for the river system: scenic, recreational, wildlife and habitat, historic and cultural, and water quality and quantity. In accordance with the Wild and Scenic Rivers Act (PL 90-542), these values, the river system's free-flowing characteristics, and its immediate environment "shall be protected for the benefit and enjoyment of present and future generations" (section 1(b)) Wild and Scenic Rivers Act). Unlike most rivers in the national wild and scenic river system that are managed exclusively by either a federal or state agency, the Wekiva River System is considered a partnership wild and scenic river, meaning that it is jointly managed by a consortium of local stakeholder groups referred to as the Wekiva River System Advisory Management Committee (the advisory management committee) with oversight and coordination provided by the National Park Service (NPS).

Section 3(d)(1) of the Wild and Scenic Rivers Act requires that a comprehensive management plan be developed to serve as the basis for protecting a designated river's values. The *Comprehensive River Management Plan* developed by the Wekiva Wild and Scenic River System Advisory Management Committee through collaboration with the NPS (summarized as the preferred alternative in this document) fulfills the requirement of section 3(d)(1).

The Wekiva River System is in central Florida, including parts of Lake, Orange, and Seminole counties. The river system is just north of Orlando, one of Florida's principal metropolitan areas with a rapidly growing population. Approximately two million people reside in the tri-county area according to 2006 estimates by the U.S. Census Bureau.

During the past 30 years, human actions and an increasing population have created challenges to managers of the Wekiva River System's outstanding values. Wildlife habitat has been fragmented, and numerous exotic species have invaded natural areas. Diverse recreation demands have created conflicts between users and threaten the ecological integrity of the natural resources people come to enjoy. Water quality and quantity have also been affected by land use within and around the Wekiva River System. Important cultural resources have been degraded by visitors who are unaware of their value or who deliberately seek to loot artifacts.

Despite these challenges, resources of the Wekiva River System remain relatively intact. Resource managers, the public, and all those who enjoy the river system must be diligent in protecting these resources. Without adequate protection, areas of the river system may lose their values when the sights and sounds of modern life intrude on the back country of the Wekiva River System.

This environmental assessment explores two alternatives for future management of the Wekiva River System.

ALTERNATIVE A: CONTINUE CURRENT MANAGEMENT (THE NO-ACTION ALTERNATIVE REQUIRED BY THE NATIONAL ENVIRONMENTAL POLICY ACT)

Alternative A would continue existing management efforts in the Wekiva River System. The so-called "no-action" alternative does not imply the cessation of ongoing activities but provides a baseline for comparison in evaluating the changes and impacts of the other alternative. Government agencies, including those on the advisory management committee, would continue to manage the river system as it is currently being managed.

SUMMARY

Existing agency operations and visitor facilities would remain in place.

A comprehensive river management plan required by Section 3(d)(1) of the Wild and Scenic Rivers Act would not be approved under this alternative and so it would be in violation of the act.

Alternative A includes the continuation of several actions and activities that benefit outstandingly remarkable values. It would not include specific actions that result in adverse impacts to these values, but would continue other ongoing trends that may be causing adverse impacts. The key impacts of existing management conditions and trends would include the continuation of

- minor adverse impacts on scenic values because of invasive and exotic vegetation, litter, loss of shoreline vegetation, degraded middens, overcrowding, motorized watercraft, roads and bridges in the river basin and viewshed, and light pollution;
- minor adverse impacts on recreation values from increasing recreation demand and crowding and the lack of user etiquette;
- beneficial impacts on recreation values from the expansion and improvement of boat launch/takeout facilities;
- minor adverse impacts on wildlife and habitat values from disturbance of wildlife and habitat caused by recreational use, invasive and exotic species, reduced water quality and quantity, and habitat loss or fragmentation from roads and development;
- beneficial impacts on wildlife and habitat from using prescribed fire and invasive species control;
- minor to moderate adverse impacts on historic and cultural resource values from increasing development and recreation demand;
- minor adverse impacts on water quality and quantity values from continuing

effects of recreational use and land use within the basin and springshed.

ALTERNATIVE B: THE PREFERRED ALTERNATIVE

This alternative proposes an integrated program of goals, objectives, and actions for protecting and enhancing each outstandingly remarkable value. A coordinated effort among the many public agencies and entities would be needed to implement this alternative. Fortunately, public agencies and local governments of the river basin have a long history of partnership and cooperation that will provide a solid foundation for implementing the plan.

The goals, objectives, and actions are separated into five categories, one for each outstandingly remarkable value as well as a sixth category covering educational needs. The following summarizes the goals identified for each outstandingly remarkable value.

Scenic Goals

Maintain and enhance healthy native plant and animal communities in the Wekiva River System.

Maintain and enhance the wild and scenic character of the Wekiva River System by limiting the intrusion of the visual and auditory aspects of human development and activity.

Recreational Goals

Provide opportunities for recreation on the Wekiva River System that are compatible with the area's natural and cultural features and management objectives.

Ensure that river recreation minimizes environmental impacts and user conflicts and is compatible with the preservation of natural and cultural qualities of a national wild and scenic river.

Wildlife and Habitat Goals

Protect aquatic and aquatic-dependant organisms and their habitats throughout the Wekiva River System and its associated wetlands.

Maintain habitat quality, landscape diversity, and ecosystem connectivity within the Wekiva basin and associated ecosystems with an emphasis on the black bear as an umbrella species.

Reduce the impacts of invasive species and exotic species on native species and habitats throughout the Wekiva River System and its associated wetlands.

Cultural and Historic Resource Goals

Identify, protect, and preserve cultural and historic resources from human-related and natural threats.

Foster an understanding among the public of the significance of the historic and cultural resources of the Wekiva basin.

Water Quality and Quantity Goals

Protect water quality and flow regimes of the Wekiva River System.

The key impacts of implementing alternative B would include

- beneficial impacts from the coordination of multiagency actions that contribute to the protection of scenic values
- beneficial impacts from the coordination of multiagency actions that contribute to the protection of preservation and improvement of the river's recreation values
- beneficial impacts from improved coordination of multiagency actions that would contribute to preservation and enhancement of wildlife and habitat values
- beneficial impacts from the coordination of multiagency actions that would

contribute to the protection of the historic and cultural resource values of the Wekiva River System

- beneficial impacts from the coordination of multiagency actions that would contribute to the protection of the water quality and water quantity value conditions of the Wekiva River System

Alternative B also includes a strategy for implementing a user capacity program that would involve the identification of potential impacts from resource use and an impact monitoring program to determine if the level of change is in an acceptable range.

The description of the preferred alternative appearing in this environmental assessment is a summary of the *Wekiva Wild and Scenic River System Management Plan* prepared for the Wekiva Wild and Scenic River System Advisory Management Committee, which is available from the advisory management committee.

THE NEXT STEPS

After the distribution of the *Environmental Assessment*, a 30-day public review and comment period will be held. The NPS planning team will then evaluate comments received from other federal agencies, tribes, organizations, businesses, and individuals regarding this environmental assessment and incorporate appropriate changes into a decision document — a “Finding of No Significant Impact” — that will document the NPS selection of an alternative for implementation. With the signed decision document, the plan can then be implemented by the various agencies and organizations under the auspices of the Wekiva Wild and Scenic River System Advisory Management Committee. However, this approval does not guarantee that funding will be available for implementation.

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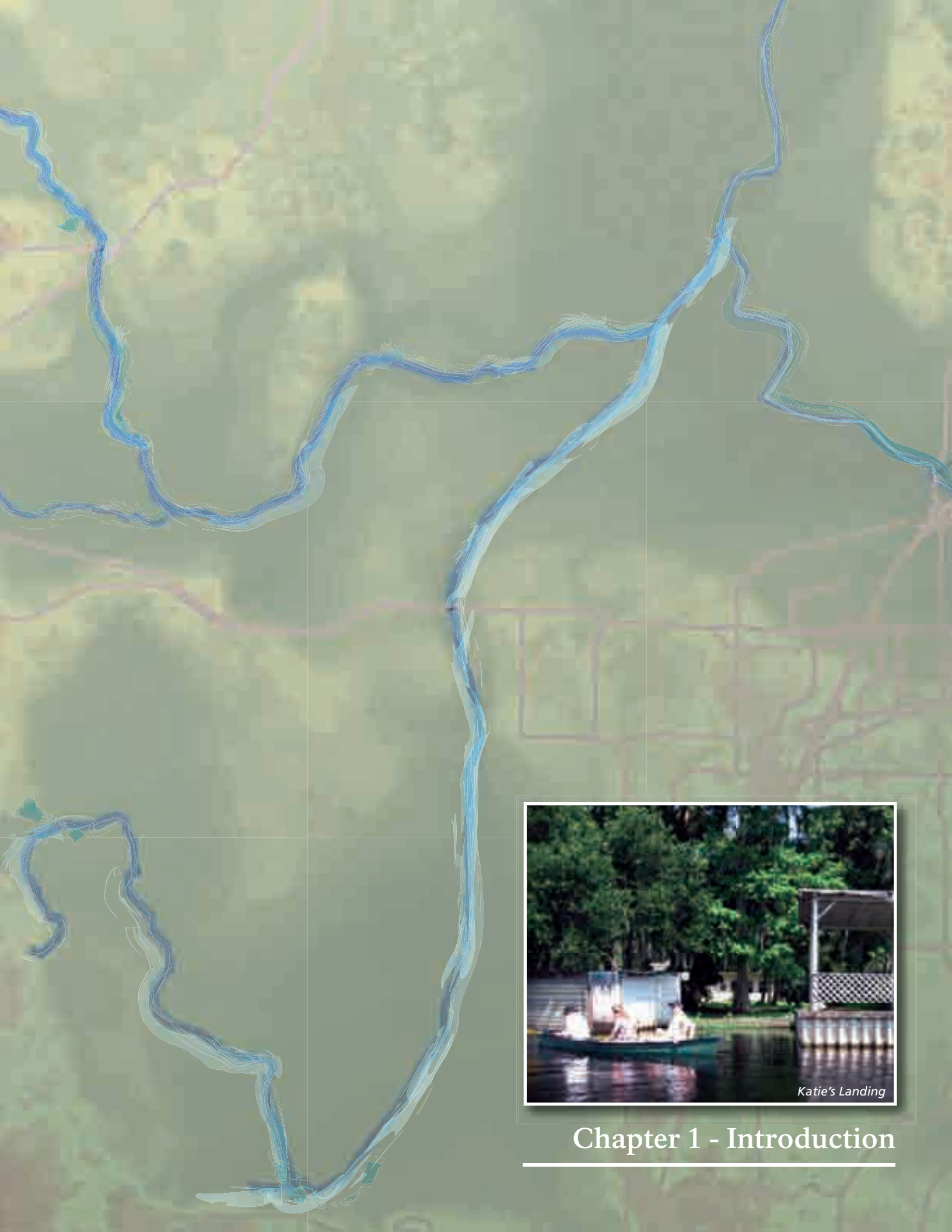
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Katie's Landing

Chapter 1 - Introduction

PURPOSE AND NEED FOR THE ENVIRONMENTAL ASSESSMENT

INTRODUCTION

This *Environmental Assessment* presents and analyzes two alternative future directions for the management and use of the Wekiva Wild and Scenic River System. Alternative A consists of existing management efforts and serves as a basis for comparison to evaluate alternative B, which involves implementation of the Wekiva Wild and Scenic River System Advisory Management Committee's comprehensive river management plan. Alternative B is the NPS's preferred alternative. The potential environmental impacts of both alternatives have been identified and assessed.

Comprehensive river management plans are intended to be long-term documents that establish and articulate a management philosophy and framework for decision making and problem solving. Key elements of a comprehensive river plan include the following:

- Describe the existing resource conditions, including a detailed description of the outstandingly remarkable values.
- Define the goals and desired conditions for protecting river values.
- Address user capacities.
- Address water quality issues and instream flow requirements.
- Reflect a collaborative approach with all stakeholders.
- Identify regulatory authorities of other governmental agencies involved in protecting river values.
- Include a monitoring strategy to maintain desired conditions.
- Develop in compliance with the National Environmental Policy Act.

Actions directed by management plans or subsequent implementation plans are accomplished over time. Budget restrictions, requirements for additional data or regulatory compliance, and competing national park system priorities may prevent immediate

implementation of many actions. Major or especially costly actions could be implemented 10 or more years into the future.

A GUIDE TO THIS ENVIRONMENTAL ASSESSMENT

This environmental assessment includes the components required by NEPA and the Wild and Scenic Rivers Act in the following format: Chapter 1 is the introductory material, the purpose and need for the environmental assessment, and environmental topics that will/will not be analyzed, and the relationship of this environmental assessment to other planning efforts. Chapter 2 contains a description of the existing management as the required "no-action" alternative. It also contains a summary of the *Wekiva Wild and Scenic River System Comprehensive Management Plan*, prepared for the Wekiva Wild and Scenic River System Advisory Management Committee, as the preferred alternative (alternative B). Chapter 3 is a description of the environmental components that could be affected by actions in the alternatives. Chapter 4 describes the impacts that would be expected to occur if the alternatives were implemented. Chapter 5 is a record of the public involvement and other pieces of the planning process.

NEED FOR THE ENVIRONMENTAL ASSESSMENT

The Wild and Scenic Rivers Act requires a comprehensive river management plan for each designated river in the national wild and scenic river system. This environmental assessment provides compliance with the National Environmental Policy Act, the Endangered Species Act, the National Historic Preservation Act, and the Wild and Scenic Rivers Act for the plan.

THE NEXT STEPS

After the distribution of the *Environmental Assessment*, a 30-day public review and comment period will be held. The NPS planning team will then evaluate comments from other federal agencies, tribes, organizations, businesses, and individuals regarding the environmental assessment and incorporate appropriate changes into a decision document — a “Finding of No Significant Impact” — that will document the NPS selection of an alternative for implementation. With the signed decision document, the Comprehensive River Management Plan can then be implemented by the various agencies and organizations under the auspices of the Wekiva Wild and Scenic River System Advisory Management Committee. However, this approval does not guarantee that funding will be available for implementation.

IMPLEMENTATION OF THE PLAN

The implementation of the approved plan will depend on future funding by the managing entities, including the National Park Service. Approval of this environmental assessment does not guarantee that the funding and staffing needed to implement the plan will be forthcoming. Full implementation of the plan could be many years in the future.

BRIEF DESCRIPTION OF THE RIVER

In 1968, acting upon growing public concern about threatened natural waterways, Congress passed the Wild and Scenic Rivers Act (Public Law 90-542). This act recognizes the values of certain rivers and their associated ecosystems as outstanding natural treasures that must be protected for the enjoyment of future generations. Several rivers were designated for immediate protection, and additional rivers were authorized for study as potential components of the federally protected system. Since then, Congress has amended the act to either

designate or authorize study of additional rivers.

In 1996, at the request of local advocates, Congress passed Public Law 101-311 authorizing the study of the Wekiva River, Rock Springs Run, and Seminole Creek as possible additions to the national wild and scenic rivers system. After the “Wekiva River Study” was completed and published in 1999, the Wekiva River, together with Wekiwa Springs Run, Rock Springs Run, and Black Water Creek were designated by Congress as a national wild and scenic river on October 13, 2000 (see appendix A). The Location map depicts the federally designated Wekiva Wild and Scenic River System.

The name “Wekiwa” is a legacy of the Seminole Indians who used the area. There has been confusion about the names Wekiwa and Wekiva, and many people use them interchangeably. Wekiwa is the Creek/Seminole word for bubbling water, hence Wekiwa Springs; Wekiva is the Creek/Seminole word for flowing water, hence Wekiva River (NPS 1999).

The Wekiva River together with Rock Springs Run, Wekiwa Springs Run, and Black Water Creek were selected for protection because they were found to be free-flowing and possessed five outstandingly remarkable values (ORVs) associated with the river environment. These values are scenic, recreation, wildlife and habitat, historic and cultural, and water quality and quantity.

Black Water Creek is the spelling of this tributary to the Wekiva River used by the United States Geographic Survey (USGS), the official keepers of place names for the United States. It is also the spelling of the name in the designating Wild and Scenic Rivers Act amendment. Locally, it is often spelled as one word (“Blackwater Creek”). For consistency, this document will use the former spelling when referring to this tributary.



Location

Wekiva Wild and Scenic River

National Park Service / U.S. Department of the Interior
P99 / 100420 / DSC / Aug 2010

PURPOSE AND SIGNIFICANCE

RIVER PURPOSE

The purpose of Wekiva Wild and Scenic River System is to protect the river and its outstandingly remarkable values for the benefit and enjoyment of present and future generations.

OUTSTANDINGLY REMARKABLE VALUES

Outstandingly remarkable values are the resources or values that make the designated segment of river needing or worthy of extra protection offered by the Wild and Scenic Rivers Act. The significance of Wekiva Wild and Scenic River System is described as its outstandingly remarkable values:

Scenic Values

Much of the designated river segments are in a nearly pristine state and present an outstanding opportunity to see an unspoiled part of natural Florida. The visual resources are exceptional.

Recreation Values

The Wekiva River, Wekiwa Springs Run, and Rock Springs Run are major, nature-based, recreational resources for central Florida,

including the highly urbanized Orlando metropolitan area.

Wildlife and Habitat Values

The Wekiva River System is one of Florida's most valuable and unusual natural resources because of its location in a region of biological transition between two climatic zones. The river provides habitat for three species endemic to the Wekiva River basin and for five federally listed threatened or endangered species.

Historic and Cultural Values

The Wekiva area is considered to be one of the most important archeological areas in central Florida. Known cultural sites provide evidence that the area has been inhabited for more than 10,000 years.

Water Quality and Quantity Values

All of the designated river segments are classified as Outstanding Florida Waters, Florida's highest designation for water quality. Water quality and quantity are influenced by surface water drainage and groundwater flows within the Wekiva basin and springshed.

PLANNING ISSUES / CONCERNS

During the past 30 years, human actions and an increasing population have created challenges to managers of the Wekiva River System's outstanding values. Wildlife habitat has been fragmented, and numerous exotic species have invaded natural areas. Diverse recreation demands often create conflict between users and threaten the ecological integrity of the natural resources people come to enjoy.

Despite these challenges, resources of the Wekiva River System remain relatively intact. Resource managers, government leaders, the public, and all those who enjoy the river must

be diligent in protecting these resources. Without adequate protection, areas of the river system may have diminished values when the sights and sounds of modern life intrude upon the back country of the river system.

Issues that are associated with direct and indirect threats against each of the river system's five outstandingly remarkable values have been identified, and strategies for protecting those values are addressed in the comprehensive river management plan and summarized in this environmental assessment.

IMPACT TOPICS – RESOURCES AND VALUES AT STAKE IN THE PLANNING PROCESS

An important part of planning is seeking to understand the consequences of making one decision over another. To this end, management plans are accompanied, in this case, by an environmental assessment. Environmental assessments identify the anticipated impacts of possible actions on resources and on visitors and neighbors. Impacts are organized by topic, such as impacts on the visitor experience or impacts on vegetation and soils. Impact topics focus the environmental impact analysis and ensure the relevance of impact evaluation. The impact topics identified for this environmental assessment are outlined in this section and are based on the outstandingly remarkable values identified in previous studies of the river. Also included is a discussion of some impact topics that are commonly addressed but that are not addressed in this environmental assessment for the reasons given.

IMPACT TOPICS TO BE CONSIDERED

The topics to be considered for detailed impact analysis in this environmental assessment are the outstandingly remarkable values listed in the designating legislation for the Wekiva Wild and Scenic River System.

Scenic Values

Much of the river system is in a nearly pristine state. Some proposed actions could affect scenic value or aesthetic resources, so this topic is retained for further analysis.

Recreation Values

Actions proposed in the alternatives could affect recreational use in the area. In particular, implementing a user capacity framework could displace some visitors, who might

decide to visit other segments of the river or other areas in the region. The visitor experiences offered in these areas and management of the areas could change under the alternatives proposed in this environmental assessment, so this topic is retained for analysis.

Wildlife and Habitat Value

The river's mammals, birds, amphibians, reptiles, and fish are important resources, and are important also to visitor experiences. Actions proposed in the alternatives could affect fish or wildlife resources. Any loss of habitat or decreases in populations would be of concern to river managers, visitors, and the public.

The Endangered Species Act requires federal agencies to ensure that their activities will not jeopardize the existence of any endangered or threatened species or result in the destruction or adverse modification of critical habitat of such species. Consultation with the U.S. Fish and Wildlife Service and Florida Fish and Wildlife Conservation Commission identified a number of threatened or endangered species or species of concern in the river system. Actions proposed could affect listed species, so this topic is retained for further analysis.

Historic and Cultural Resource Values

Historic and cultural resource values typically comprise the cultural resource types recognized and described by the NPS — archeological resources, historic structures, cultural landscapes, ethnographic resources, and museum collections. The cultural resource type that may be affected by one or more of the alternative actions in

this environmental assessment are archaeological resources — those resources within the river system that are the physical evidence of past human activity and can represent both prehistoric and historic occupations, so this topic is retained for further analysis.

Water Quality and Quantity Values

The water resources in the river segments are protected and managed under the Clean Water Act of 1977. Changes in water quality and quantity can affect fish and wildlife populations as well as the health of visitors. The alternatives could result in a change in the type or level of use, which could affect water quality and/or quantity. This would be of concern to visitors and river managers so this topic is retained for further analysis.

Floodplains and Wetlands

Floodplains can exist even where there are no streams or flowing water. This is especially true in Florida, which is very flat and where connections could exist to the surficial aquifer and flooding may occur during periods of significant rainfall. Floodplain impacts have occurred and may continue to be permitted, although the water management district now requires compensating storage and attention to riparian protection zones. Historically, a significant amount of development has occurred in the floodplain of the Wekiva River System. Under all of the alternatives in this environmental assessment, any new developments would be located to avoid impacts on floodplains.

Wetlands are found in low-lying areas along the rivers and up to 2 miles away. It is common policy to avoid affecting wetlands and to minimize impacts when they are unavoidable. Under all of the alternatives in this environmental assessment, facilities proposed for development should be sited to avoid wetlands or to mitigate wetland impacts that cannot be avoided. Areas that might have

wetlands are delineated before construction is permitted.

These topics are included in the discussions and analysis of wildlife and habitat values and water quality and quantity values and are not be analyzed as separate topics in this document.

IMPACT TOPICS DISMISSED FROM FURTHER CONSIDERATION

Some impact topics that commonly are considered during the planning process were not relevant to the development of this environmental assessment because of the following: (a) implementing the alternatives would have no effect, a negligible effect, or a minor effect on the resource or (b) the resource does not occur in the planning area. These topics are as follows.

Certain Cultural Resource Topics

Certain aspects of cultural resources that are typically analyzed in a document of this type either are not known to exist in the planning area or would not be affected by any proposed actions. These include historic structures, cultural landscapes, ethnographic resources, and museum collections. It is possible that there are some remaining standing historic structures or other resources in these categories in the river corridor, but no actions proposed in this environmental assessment are anticipated to have an effect on them.

Historic structures are those that are generally more than 50 years old and provide insight into the historic significance of a place. These may be listed in the National Register of Historic Places; however, there are no known historic structures of this type in the river corridors.

Ethnographic resources are defined by the NPS as any “site, structure, object, landscape, or natural resource feature

assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it.” A cultural landscape is a reflection of human adaptation and use of natural resources and is often expressed in the way land is organized and divided, patterns of settlement, land use, systems of circulation, and the types of structures that are built. The character of a cultural landscape is defined both by physical materials, such as roads, buildings, walls, and vegetation, and by use reflecting cultural values and traditions.

No ethnographic resources or identified cultural landscapes have been brought to the attention of the planning team, and no actions proposed in the environmental assessment would affect these resources more than negligibly if they do exist. The NPS does not maintain any museum or archive collections associated with the Wekiva River System and so has no responsibility for this aspect of cultural resource management.

For the reasons given above, these topics are dismissed from further analysis.

Prime and/or Unique Farmland

The 1981 Farmland Protection Policy Act (Public Law 97-98) was passed to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses, and to ensure that federal programs are administered in a manner that, to the extent practicable, is compatible with state, local governments, and private programs and policies to protect farmland.

Prime farm lands are defined as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these uses. Prime farmlands are permeable to water and air and are not excessively erodible or saturated with water for a long period of time (*Soil Survey Manual, USDA Handbook No. 18*, October 1993).

Unique farmlands are lands other than prime farmland that are used for the production of specific, high-value food and fiber crops. They have the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality and/or high yields of a specific crop when treated and managed according to acceptable farming methods.

According to the Natural Resources Conservation Service, there are no prime or unique farmlands in Lake, Orange, or Seminole counties (<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx> accessed on 6/26/09). Thus, there is no need to evaluate the impacts of the alternatives on this topic.

Urban Quality and Design of the Built Environment

Consideration of this topic is required by 40 *Code of Federal Regulations* (CFR) 1502.16. The quality of urban areas is not a concern in this planning project except in the developed spring areas and at developed sites on the river system. Emphasis should be placed on designs, materials, and colors that blend in and do not detract from the natural and built environment. There are specific actions in the preferred alternative that address some aspects of this topic. Impacts from implementing either of the alternatives are anticipated to be negligible, so no further consideration of this topic is necessary.

The protection of open space is another aspect of design that can benefit wildlife and habitat, promote aquifer recharge, and reduce the need for water and fertilizers. Action steps that promote the protection of open space through innovative design are identified in actions steps under alternative B.

Air Quality and Night Skies

The Clean Air Act states that land managers have an affirmative responsibility to protect air quality from adverse air pollution impacts.

Engine exhaust is the most common air pollutant in the Wekiva basin and is heaviest around urban areas, major roads, and agricultural operations. Airborne particulates (e.g., dust and smoke) are generated from construction, agricultural operations, and wildfires (both naturally ignited and prescribed burns).

There is no major construction or other actions proposed in any of the alternatives that would have more than a temporary, localized, and negligible effect on local or regional air quality. Under either of the alternatives, traffic and recreational use of various sites along the rivers would likely increase as the human population in the region continues to increase. This would result in increased vehicle emissions that would comprise a slight adverse affect on regional and local air quality. The effects may be partially mitigated over the long term if national emission and mileage standards for vehicles are revised. Because there would be only negligible impacts on air quality, this topic is dismissed from further analysis in this document.

Related to air quality is the clarity of night skies. The clarity of night skies is important to visitor experiences as well as being ecologically important. Air pollution and light pollution from artificial light sources outside the river corridors are diminishing the clarity and visibility of night skies. The proposed Wekiva Parkway project has the potential to impact night sky viewing the in the vicinity of the Wekiva River along SR 46.

Other than this, the continued undeveloped setting of the river corridors would not contribute adverse effects on night sky viewing opportunities. Although there would be continuing adverse effects on night sky viewing opportunities from surrounding

development, there are no actions proposed in either alternative that would affect night skies, so this topic is dismissed from further consideration.

Soundscapes

The natural soundscape along the Wekiva River System is composed of sounds associated with physical and biological resources such as the sounds of birds, insects, wind through the trees, and flowing water. Audible human-caused noise is a direct adverse impact on natural soundscapes. Natural soundscapes are important to healthy ecosystems as well as positive visitor experiences.

Because of the primarily undeveloped nature of the Wekiva Wild and Scenic River System, natural sounds tend to predominate along most of the river segments. However, impacts on the rivers' soundscapes from human-related sources outside the river corridors can be substantial in certain areas. These areas include noise from traffic on State Road 46 (SR 46) where it crosses over the Wekiva River and at developed recreation sites such as Wekiwa Springs, Rock Springs, and private developments. The proposed actions would not appreciably affect these sources.

The alternatives presented in this environmental assessment may result in a change to the distribution or number of visitors or operations activities in a given area, which could have negligible, beneficial, or adverse effects on natural soundscapes, depending on the area. However, because anticipated impacts would be minor or less, this topic is dismissed from further analysis.

Indian Trust Resources

Secretarial Order 3175 requires that any anticipated impacts on Indian trust resources from a proposed project or action by agencies of the Department of

the Interior 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.

The lands comprising the planning area are not held in trust by the Secretary of the Interior for the benefit of Indians due to their status as Indians. Because there are no Indian trust resources in the river system, this topic was dismissed from further analysis.

Environmental Justice

Executive Order 12898, “Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,” requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities.

For the purpose of fulfilling Executive Order 12898, in the context of the National Environmental Policy Act, the alternatives addressed in this environmental assessment were assessed during the planning process. It was determined that none of the alternatives would result in disproportionately high direct or indirect adverse effects on any minority or low-income population or community. The following information contributed to this conclusion:

The developments and actions in the alternatives would not result in any identifiable adverse human health effects. Therefore, there would be no direct or indirect effects on human health within any minority or low-income population or community.

The impacts on the natural and physical environment that would occur due to any of the alternatives would not disproportionately adversely affect any minority or low-income population or community, or be specific to such populations or communities.

The alternatives would not result in any identified effects that would be specific to any minority or low-income community.

Native American tribes have and will continue to be consulted. No adverse effects were identified that disproportionately affect the tribes.

The Socioeconomic Environment

The socioeconomic environment would be slightly affected by implementation of actions proposed in the alternatives that would potentially increase the number of recreationists and would affect the geographic area nearest the river system. Such impacts would be expected to negligibly alter the economic and social structure of nearby communities. The implementation of a user capacity program would possibly have both negligible to minor beneficial and adverse impacts on the local economy. Because the anticipated impacts would be no more than minor, this topic need not be analyzed further in this document.

RELATIONSHIP OF THIS ENVIRONMENTAL ASSESSMENT TO OTHER PLANNING EFFORTS

THE WEKIVA PARKWAY

The Orlando-Orange County Expressway Authority and Florida Department of Transportation are in the planning process for the Wekiva Parkway, a multilane, limited-access, parkway that would traverse the planning area and cross the Wekiva River at the current State Road 46 (SR 46) bridge crossing. The Wekiva Parkway and Protection Act, adopted by the Florida legislature in 2004, authorized this major new road construction project and requires the parkway to help protect area resources in several ways.

There are currently only two wildlife tunnels (totaling 78 feet) under SR 46 in Lake County (west of the bridge over the Wekiva River) that provide safe crossings under SR 46 (between Rock Springs Run State Reserve and Seminole State Forest) for wildlife such as deer, bobcat, coyote, and bear. This configuration should be replaced by an integrated Wekiva Parkway/SR46 design that provides significantly longer elevated spans of roadway for wildlife movement and ecosystem connectivity. Instead of the two small existing tunnels, approximately 1.5 miles of bridging are proposed for the combined Wekiva Parkway/SR46 structure. Elevating the parkway is expected to greatly reduce vehicle collisions with animals and reduce habitat fragmentation.

The parkway plan also proposes a new bridge where SR 46 crosses the Wekiva River. (The current bridge is about 561 feet long.) This new bridge will span over 2000 feet and enhance habitat connectivity within the riparian corridor.

As part of the parkway project, a portion of CR 46A through the Seminole State Forest is proposed to be realigned and connect to SR 46 farther west, outside the forest and the primary ecological corridor. This would

reduce the number of animals harmed by vehicles and provide habitat connectivity in the state forest.

The NPS and Wekiva Wild and Scenic River partners have and will continue to review actions associated with planning, design, and construction of the Wekiva Parkway to ensure that values of the river system are protected.

PUBLIC LAND MANAGEMENT PLANS

Various state agencies and local governments maintain management plans for public lands and resources in the Wekiva basin. State land managers include (1) the Florida Department of Environmental Protection (FDEP), Division of Recreation and Parks (which manages Wekiwa Springs State Park, Lower Wekiva River State Park Preserve, and Rock Springs Run State Preserve), (2) the St Johns River Water Management District (which manages lands associated with the Lake Norris and Black Water Creek), and (3) the Florida Department of Agriculture and Consumer Services (which manages Seminole State Forest). The FDEP Division of Coastal and Aquatic Managed Areas manages sovereign submerged lands in the Wekiva River Aquatic Preserve. Revisions to the Wekiva River Aquatic Preserve Management Plan are in progress and will include actions that provide educational opportunities.

The Lake County Water Authority, a unique entity established by the state legislature, manages lands within the Wekiva area around Lake Norris. Local land managers include Seminole County, Lake County, Orange County, and the city of Apopka. Alternative B seeks to improve coordination among these various entities to achieve objectives of this environmental assessment.

The management plan for public lands in the basin includes some future actions that may increase interpretation and education amenities in the parks.

LOCAL GOVERNMENT PLANS AND AGENCY REGULATIONS

Pursuant to special pieces of state legislation, the Wekiva River Protection Act, and the Wekiva Parkway and Protection Act, various

local governments and agencies are tasked with implementing policies and regulations affecting land use and the protection of natural resources within the Wekiva basin and springshed. Alternative B seeks to improve coordination between agencies and governments to more effectively achieve those objectives.

This environmental assessment would pose no conflicts with plans of the public land managing agencies.

