

STATEMENT FOR MANAGEMENT

BASIC OPERATIONS STATEMENT

CONGAREE SWAMP NATIONAL MONUMENT

200 Caroline Sims Road  
Hopkins, South Carolina 29061-9118



Recommended:

\_\_\_\_\_

Superintendent

\_\_\_\_\_

Date

Approved:

\_\_\_\_\_

Regional Director

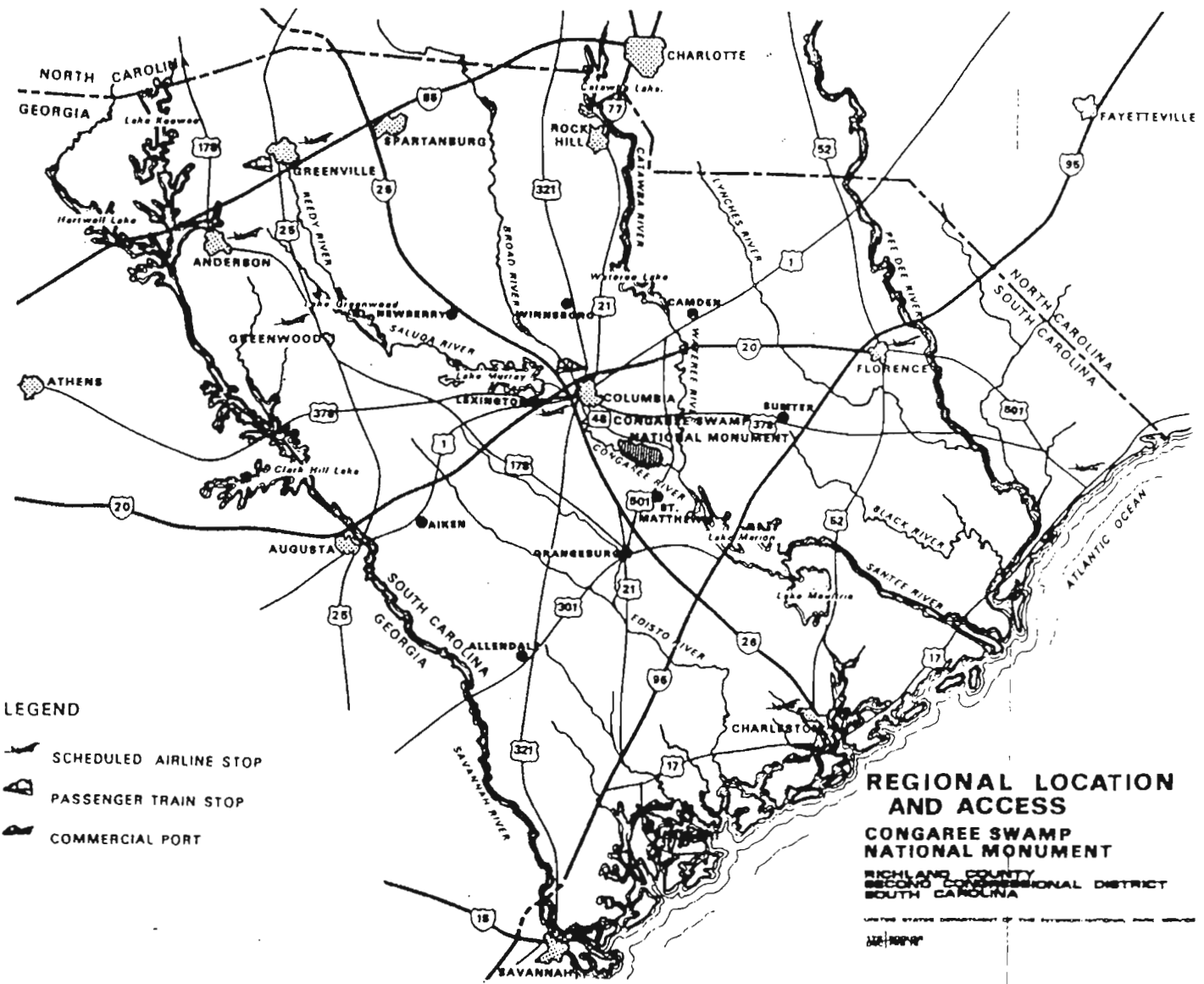
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Date

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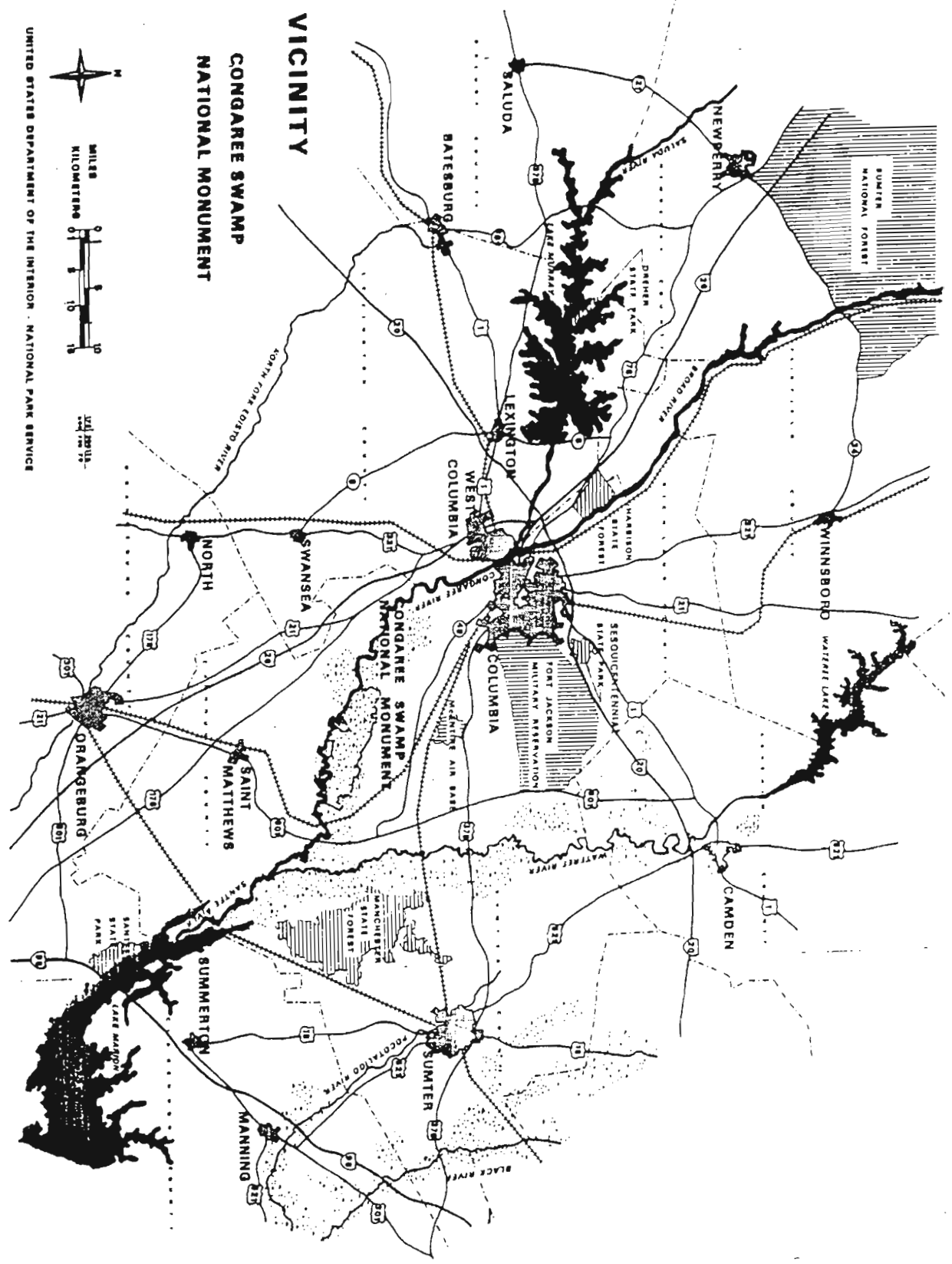
# LOCATION



- LEGEND**
- SCHEDULED AIRLINE STOP
  - PASSENGER TRAIN STOP
  - COMMERCIAL PORT

**REGIONAL LOCATION AND ACCESS**  
**CONGAREE SWAMP NATIONAL MONUMENT**  
 RICHLAND COUNTY  
 SECOND CONGRESSIONAL DISTRICT  
 SOUTH CAROLINA

UNITED STATES DEPARTMENT OF THE INTERIOR, BUREAU OF LAND MANAGEMENT  
 1972-10-19



UNITED STATES DEPARTMENT OF THE INTERIOR · NATIONAL PARK SERVICE

## PURPOSE AND SIGNIFICANCE

The enabling legislation, Public Law 94-545, was approved on October 18, 1976, and adequately states the purposes for which Congaree Swamp National Monument was established.

### Public Law 94-545

Sec. 1. "...preserve and protect for the education, inspiration and the enjoyment of the present and future generations an outstanding example of near virgin southern hardwood forest situated on the Congaree River floodplain...."

The legislation, Public Law 39-535, that established the National Park Service also cites the purposes for establishing Congaree Swamp National Monument, and all parks within the system.

### Public Law 39-535

Sec. 1. "The Service thus established shall promote and regulate the use . . . by such means and measures as conform to the fundamental purpose of said parks . . . which purpose is to conserve the scenery and the natural and the historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations . . ."

The significance of Congaree Swamp National Monument lies in: (1) it's unique bottomland hardwood forest community associated with the swamp-like floodplain, with visible former river courses reflected in its topography and vegetative patterns; (2) the remarkable size of its loblolly pine, bald cypress, tupelo, sweetgum, sycamore, cottonwood, oak, and holly trees, not only in diameter, but especially in height; and (3) the presence of a swamp ecology of the hardwood-type, with relatively unspoiled flora.

Local ardent conservationists saw the importance of this magnificent southern bottomland forest within the Congaree floodplain. In the early fifties, they began a campaign to save the giant trees from the axe and from subsequent use by the rapidly-growing lumber industries. The National Park Service was requested to do a study of the area. The study report was completed in 1963, with a recommendation that Congaree Swamp be favorably considered as an addition to the National Park System as a National Monument. Very little tangible support for the project ensued until the early seventies, when owners began harvesting the old-growth forest again. This action rekindled public support, and the Monument was established in 1976.

In 1974, the bottomland swamp area was declared a "National Natural Landmark," with some 20,000 acres earmarked as the designated Landmark. This action formally recognized the significance of the area.

In 1976, Congress passed the enabling legislation and a 15,138-acre tract was acquired in 1978. The Monument was officially occupied on January 1, 1983, upon the expiration of a five-year hunting lease that was authorized in the Enabling Legislation.

On June 30, 1983, the Monument was designated as part of the "South Atlantic Coastal Plain Biosphere Reserve," administered by the International Man and The Biosphere Program under the auspices of U.N.E.S.C.O.

The South Carolina Chapter of the Society of American Foresters, National Natural Areas Program, acknowledged the significance of the Monument by designating a 100-acre tract as a representative area of sweetgum and mixed-hardwood forest. A Certificate of Registration was issued on December 4, 1992, and information concerning the site will be published in the South Carolina Edition of Natural Forestry Sites.

The South Carolina delegation introduced significant legislation in the 100th Congress. Public Law 100-524, which authorized expansion of the Monument by 7,000 acres, cleared Congress and was signed by the President on October 24, 1988. The bill designated approximately 15,010 acres as "wilderness" and approximately 6,840 acres as "potential wilderness." The expanded boundary includes approximately 37 additional tracts, owned by 30 families and corporations. Within the newly-authorized boundaries of the Monument, approximately 3,300 acres of forest have been clearcut and 900 acres selectively cut. Inclusive, of the total authorized boundary, 24% of the Monument's acreage has been clearcut, 13% selectively cut, and the remainder is old-growth forest.

Omission of the Devil's Elbow area from the proposed boundary expansion creates a possible land ownership dispute. The Congaree River channel changed its course during the period 1929-1930, leaving the island with an oxbow lake on the north, west, and east sides, and the Congaree River on the south. The island remains in Calhoun County. The county line between Calhoun and Richland counties lies in the middle of the oxbow lake. Since the State of South Carolina retains ownership of lands beneath the rivers, the change of channel could position them as landowners in our pursuit for future land acquisitions. Now that the old river channel is an oxbow lake, the owner of the island could declare ownership to all or part of the lands that existed under the former channel of the Congaree River.

The Monument, with its potential for botanical and scientific studies, could be a mecca for research projects. These projects might involve foresters, environmentalists, educators, ecologists and scientists from many colleges and universities and international agencies, in conjunction with the Biosphere Reserve Program.

## INFLUENCES: INVENTORY AND ANALYSIS

### LEGISLATIVE AND ADMINISTRATIVE REQUIREMENTS

#### Overview

Public Law 94-545, which established the Monument, required adherence to certain criteria regarding management of the area. Numbers 1, 3, 4 and 5 listed below have now been superseded by other legislation, but are stated herein as part of the planning record. These include:

1. Any lands or interests owned by the State of South Carolina or any political subdivision thereof may be acquired by donation only.
2. Sport fishing shall be permitted in accordance with applicable laws, except that the Secretary may designate zones or time periods where no fishing shall be permitted for reasons of public safety, administration, fish or wildlife management, or public use and enjoyment. Regulations will be placed in effect only after consultation with the appropriate fish and game agency for the State of South Carolina.
3. Within three years from the effective date of the Enabling Legislation, the Secretary shall review the area within the Monument and shall report to the President his recommendation as to the suitability of any area within the Monument for preservation as "wilderness," in accordance with the Wilderness Act.
4. Within three years of the effective date of the Enabling Legislation, the Secretary shall, after consulting with the Governor of South Carolina, develop and transmit to Congress a General Management Plan for use and development of the Monument, indicating:
  - a. The lands and interests in land adjacent or related to the Monument, which are deemed necessary or desirable for the purpose of resource protection, scenic integrity, or management and administration of the area, in furtherance of the purpose of PL 94-545, and the estimated cost thereof.
  - b. The number of visitors and type of public use within the Monument that can be accommodated, in accordance with the protection of its resources.
  - c. The location and estimated cost of facilities deemed necessary to accommodate such numbers of visitors and uses.

5. Authorization is \$35.5 million for purchase of lands, and \$500,000 for development.

Public Law 98-141, dated 10/31/83 (97 Stat 909), increased the authorization to \$62.5 million for acquisition and \$2.5 million for development.

Public Law 98-506, dated 10/19/84 (98 Stat. 2338), legislatively named the Park's future visitor center in honor of the late Harry R.E. Hampton. Hampton was a noted conservationist and outdoor writer and was involved in early efforts to preserve the Congaree.

Public Law 100-524, dated 10/24/88 (102 Stat. 2606), designated Wilderness and Potential Wilderness Additions, raised the land acquisition ceiling to 22,200 acres, and the development ceiling to \$3 million. The Public Law provides for the expenditure of funds as are necessary from the Land and Water Conservation Fund for acquisition of lands approved for purchase in the Land Protection Plan.

Public Law 100-446 authorized the Secretary of the Interior to spend \$3 million for land acquisition.

Congaree Swamp National Monument is substantially an alluvial floodplain, not a swamp. As such, and to comply with Executive Order 11988 relative to floodplain management, any major developments should be on ground that is above the expected 100-year flood line.

### Issues and Objectives

1. Study South Carolina riparian law to determine the impact on the authorized boundary in the event that the Congaree River changes its main channel course. Conceivably, a new channel could be cut into what is now the Monument.

#### Objective

Seek relief in the disputed lands separating the Devils Elbow island from the Monument. This coincides with completion of our land acquisition program.

2. Designated wilderness areas within the Monument as specified in Public Law 100-524 will require documentation. Acreage for wilderness designation in the Public Law is greater than the total amount of acreage that is to be acquired. There is a surplus of authorized acreage of 330.19 acres once the acquisition of land is completed.

#### Objective

Complete a Wilderness Management Plan for the Monument to coincide with the requirements of the General Management Plan and Public Law 100-524.



## RESOURCES

### Forest

The bottomland hardwood forest that covers the majority of the Monument represents the primary resource. The diversity of the Congaree forest is attributed to the ever-changing water levels and subsequent soil deposition of the alluvial floodplain. It is a remnant of the primitive riparian forests that dominated the region before settlement.

The unique and diverse plant community of the Congaree forest contains vast stands of magnificent tupelo, bald cypress, oak and sweetgum. Interspersed among the hardwoods are numerous loblolly pines, reaching tremendous heights of nearly 150 feet and 10-15 feet in circumference. Combined, there are 87 different species of trees listed within the interior of the Monument. The Nutmeg Hickory, Wahoo, Umbrella Tree, Florida Adder's Mouth, Green Fringed-Orchid, and False Rue-Anemone, are plants of Statewide significance, which may also be found in the Monument.

On September 22, 1989, Hurricane Hugo, stated by authorities as the most devastating hurricane to hit South Carolina in the past 50 years, did considerable damage to the forests in the Monument. An assessment after the Hurricane indicated that approximately 25% of the canopy trees in the Monument were severely damaged. This storm, combined with other high-velocity windstorms, has resulted in the downfall of several National and State champion trees. The number of National and State record trees remaining is in dispute. In addition to the long-term forest regeneration study started after the Hurricane, a study to determine the location and ecology of champion trees was begun in 1992. These big trees, officially designated as National Champions and State Records, represent a significant part of the natural resource and recreational value of the Monument. As such, a thorough and systematic survey is underway to update the status, condition, and other pertinent information regarding the National Champion and State Record trees.

### Hydrology

Hydrology is the single most important factor integrating the natural physical and biological components of the Monument. The hydrologic system of the Monument plays the major role in providing nutrients to the vegetative community. The Congaree River is formed just below the fall line, identified as the erosional front between the crystalline rocks of the piedmont and the softer unconsolidated sediments of the coastal plain. The floodplain (locally called the Swamp) extends an average of three miles north and one mile south of the River. The rich silt deposited by the river's floodwaters accumulates in the old channels of the ever-shifting river and provides for the production of plant communities in the Monument. The interconnected black-water streams, lakes, and sloughs and bogs, all contribute to the fertile plant communities and general biological processes.

## Fauna

The wildlife population of the Monument is typical of a southeastern floodplain. The diversity of habitat provides for a variety and abundance of species, including over 180 species of birds recorded in the area.

Rare bird species represented include the Swainson's warbler, Mississippi kite, swallow-tailed kite, Red-cockaded woodpecker, and the bald eagle. The eagle is an occasional visitor and rarely nests in the area. However, the woodpecker is known to have an active colony within a 150-acre tract of the Monument.

Large mammals include the white-tailed deer, feral hog (including Russian boar), raccoon, opossum, rabbit and squirrel. Occasional sightings of the black bear, bobcat, fox, mink, skunk and river otter are recorded. Numerous other small mammals are recorded, including members of the bat, mole and shrew families. Sightings of cougar are occasionally reported, but they are not considered residents of the Monument.

Gamefish include largemouth bass, bluegill, crappie, yellow perch, catfish, and several species of sunfish. Non-game species present are the gar, bowfin, carp and a variety of minnows and darters. Striped bass are found in the Congaree River.

## Ecosystem

The floodplain ecosystem is very diverse and complex. The importance of each species is especially apparent by the multitude of interactions and co-dependencies present. On the south side of the Congaree River, steep sandhill bluffs rise as high as 225 feet, to dominate over the adjacent floodplain. This setting is contrasted on the north side of the river, where low bluffs (10 to 25 feet) define high-water limits. In between the higher plateaus on the river are lower lying areas, penetrated by sloughs, or "guts." These guts are the primary means for high water entering and exiting the floodplain.

The floodplain, having an elevation change of only 10 feet in over 13 miles, has a surprisingly varied and complex pattern of vegetative communities. These exist in response to slight topographic gradients and the successional stages related to sedimentation of old channels of the river. Because of this minimal relief, even slight elevation changes affect the duration and frequency of flooding, and therefore, the variety of plant communities. In general appearance, these areas of the forest left unimpacted by Hurricane Hugo are grove-like and largely free of heavy undergrowth, except vines and shrubs. In hurricane-damaged areas there are now gaps in the canopy, which have resulted in increased light and abundant and thick understory regeneration.

Periodic flooding eliminates most herbaceous cover by moving the sediment and preventing the development of mature soil profiles. Only along the higher areas, such as the banks along the river, are thick stands of cane present. Floodplain succession is considerably slower, in comparison to the upland areas.

The geographic location (on the meandering Congaree River), the undisturbed and pristine quality of the forest, the abundance and variety of life, the champion-sized trees, and the fact that nowhere in the National Park System is a similar climax forest represented -- these all contribute to the National and International significance of Congaree Swamp.

### Cultural

Prehistoric and historic activities of man, in what is now the Monument, have been documented through field research and literature review. Findings have been limited to brief reconnaissance of known sites and features. So far, investigation has yielded regionally-significant periods of occupation, with primarily Indian, colonial agricultural and commerce themes.

Management objectives focus on natural processes, and no development is currently planned which will affect known cultural resources. Development for future visitor access will require specific site analyses and will avoid conflict with recognized sites. Sites are currently being impacted only by natural processes, including flooding, erosion, rooting by feral hogs, and vegetative succession. Discoveries of additional sites or evidence during field operations will be documented and reviewed as necessary.

Cultural influences on the natural system, i.e., Indian activities, farming, logging and hunting, will be treated as a minor sub-theme in interpretive programming. There are no sites currently listed on the National Register of Historic Places. However, the dikes and cattle mounts have been nominated and are in the process of being reviewed. These structures have also been documented and are monitored periodically by the Monument staff.

The Southeast Archeological Center completed a "Cultural Sites Inventory" (CSI) in August 1984. However, it does not include the 7,000 acres that have been and will be acquired as part of the boundary expansion.

### Issues and Objectives

1. Baseline data profiles of the major resource components remain incomplete. In particular, small mammal and amphibian inventories have yet to be conducted. Likewise, comprehensive studies to determine rare and endangered species of all flora and fauna have received only cursory evaluations.

Also, newly-acquired lands obtained as part of the boundary expansion require extensive inventory and assessment.

Objective

Inventory and monitor all small mammals, amphibians, endangered and threatened species.

2. With the influence that the hydrological system has on biological processes, surface and ground water monitoring is inadequate. The State of South Carolina established gauging stations, but later dismantled them due to equipment deficiencies and funding shortages. Overall, water monitoring efforts have been short-lived for the same reasons. A water resource management program is being developed to address these problems and to identify inventory and monitoring needs.

Also, considering the significance of flooding to all biological processes and the impact on Monument operations, including visitor safety responsibilities, flood prediction and magnitude forecasting needs to be developed. In an average year, 10 separate flooding events may occur. In general, 75% of the Monument will flood during each event, and 90% will be inundated at least once a year. As the Monument continues to gain in popularity, backcountry use (including camping) is increasing. Therefore, flood warning measures need to be developed. A related warning and evacuation responsibility is the need to prepare an Emergency Action Plan for the postulated failure of the Lake Murray Dam, located on the Saluda River upstream of the Monument.

Objective

Develop a long-range monitoring program for the hydrologic resources of the Monument. Prepare a Water Resource Management Plan to address the status of the Monument's hydrologic network. Develop strategies and make recommendations for assuring surface and ground water and wetlands quality control. Secure permanent base funding for the operation of two continuous-record gaging stations needed to monitor water stage and flow during flood events.

3. An air-quality monitoring station is operated by the S.C. Department of Health and Environmental Control. Data is difficult to obtain from this site at times, due to its isolation during flooding events. This, coupled with antiquated equipment, has recently resulted in marginal overall performance of the station. A fully-automated station, with newly-developed technologies, located outside of the floodplain and wilderness areas is desirable. This would alleviate many of the current problems.

A station is needed to comply with the Monument's listing as a Class II area and its obligations as a Biosphere Reserve. An efficient air-quality monitoring station is an integral and necessary component for the Monument to function as a recognized barometer area for global environmental change. Similarly, in the late 1970's and early 1980's, when the area was being considered as a Class I area, State and Federal government representatives recognized that continued air-quality monitoring and correlated vegetative studies would be required to preserve area integrity. The vegetative studies were never initiated, and the air-quality data has yet to be analyzed to determine any adverse effects.

#### Objective

Consult with the NPS, Denver-based Air Quality Division, and the South Carolina Department of Health and Environmental Control regarding air-quality parameters and indicators. Coordinate operations of the on-site air-quality monitoring station with all parties who have a vested interest. Initiate studies and cost-share, and where feasible, investigations to develop air-quality trend analysis and correlated impacts upon vegetation, if any, during the last 15 years.

4. Located approximately five miles from the Monument's northwest boundary is an Environmental Protection Agency (EPA) Superfund Site. The site previously contained storage drums of hazardous waste substances, which have since been removed. The site has been assessed for environmental damage and existing and potential contamination.

In September 1990, EPA signed a document, called a Record of Decision, formally selecting the cleanup remedy for the site. The cleanup plan includes treatment of contaminated groundwater and approximately 45,000 cubic yards of contaminated soil. Contaminated soil will be treated in place, using in-situ vacuum extraction. Extracted ground water will be treated on-site, using an air-stripping process, and then reinjected into the ground. The cleanup is expected to take 16 years, at an estimated net present worth cost of \$5.6 million.

Extensive sampling at and around the site shows soil contamination limited to the site, and groundwater contamination limited to a plume, extending about 2,200 feet southwest of the site and 1,000 feet wide. Pertinent documentation concerning this site needs to be reviewed by NPS technical advisers to determine if testing and data were sufficient to represent Monument resource interests.

Before releasing this site, management's recommendation is to establish a gauging station on Cedar Creek for long-term water-quality monitoring. The station would serve as a safeguard to assure that site contaminants remain contained and are not leeching into the surrounding watershed. If the site were to contaminate Myers Creek, a tributary to Cedar Creek that flows through the Monument, the area's aqua-dependent biota would be severely threatened. Therefore, early detection is imperative to protecting Monument interests.

Objective

Review State and EPA monitoring of the Bluff Road Superfund Site to predict impacts on Monument resources in the event of continued spread of contaminants. Recommend that long-term water-quality monitoring of the Cedar Creek watershed, including Myers Creek, be incorporated into site improvement proposals.

5. Since 1982, when all hunting was abolished, there has been a recognizable increase in feral hog and white-tail deer populations. This is evident from staff sightings, visitor reports, and visual signs, including increased concentrations of grazing and vegetation uprooting. A control program needs to be developed and implemented to maintain acceptable population balances for these species and insure that carrying capacities are not exceeded.

Similarly, exotic plant species are known to exist within the interior and perimeter areas of the Monument. All area acreage needs to be assessed for encroachment by these invading species and a control program developed and implemented to prevent spread. In particular, new land acquisitions contain Kudzu. If left untreated, the Kudzu could continue its migration toward established old-growth forests and, thereby, threaten natural successional tendencies. The same is true for cut-over sections, where regeneration could be adversely affected if Kudzu colonies are allowed to advance.

Objective

Assess the location and extent of feral hogs, white-tail deer and exotic plant species. Develop eradication strategies and control programs and incorporate into a Integrated Pest Management Plan.

6. As the Monument continues to evolve as a recognized area for scientific research, there is an increasing need to establish a research facility at the Monument. Such a facility would better enable completion of much-needed baseline inventories, improve laboratory capabilities and analysis, and overall encourage field studies to proceed.

### Objective

Complete baseline inventories to meet levels required for Biosphere Reserve status and NPS resource management guidelines. Promote proposals and support efforts to establish the Monument as a barometer research area for monitoring global environmental change. Prioritize the research program and all projects to focus on the primary goal of better understanding the major components of the swamp ecosystem.

7. Historical and archeological documentation is incomplete. Archeological studies completed in the late 1970's recommended additional research for certain sites discovered within the Monument. This research has yet to be initiated, but is needed to fulfill responsibilities with respect to the Historic Preservation Act. Likewise, recently-acquired lands also need to be inventoried for archeological and cultural significance.

### Objective

Proceed with archeological and cultural inventories on newly-acquired lands and initiate studies to further document historic and prehistoric occupations.

8. Given the "wilderness" designation in 1988, actions are needed to comply with Wilderness Management Guidelines. A Wilderness Management Plan is needed to identify wilderness-related issues and problems and to provide management direction.

### Objective

Prepare a Wilderness Management Plan, to properly direct the Service in future operations of the Monument as a Wilderness Area.

## LAND USES AND TRENDS

### Overview

Public Law 100-524 expanded the Monument acreage from 15,135 acres to a total not to exceed 22,200 acres. A Land Protection Plan has been approved, which identifies acquisition priorities and specific rights in lands that are required to meet management objectives.

The Congaree River is formed in Columbia at the confluence of the Saluda and Broad Rivers. The Lake Murray Reservoir is located on the Saluda River. There are no major impoundments of water on the Broad River at this time. However, we must always be alert to any new development on the Broad River, since most floodwater affecting the Monument emanate from this source.

Damming of the Broad River for industrial or recreational use could affect the natural conditions of the Monument. Some companies are also evaluating the resources of the Broad River for purposes of developing new hydro-electric plants. We have also learned that the Westmoreland Energy Corporation, based in Charlottesville, Virginia, is looking at an area near the Carolina Eastman Plant in Calhoun County as the possible site of a fossil fuel electric generating plant. The proposal is in its preliminary stages and, as yet, no summary documentation has been prepared.

Water impounded by Lake Murray, and subsequently released by the South Carolina Electric and Gas Company (SCE&G), the operator of the hydroelectric plant, can influence the amount and duration of water that flows into the Congaree River. Flooding generally occurs when excessive rainfall occurs in the western section of North and South Carolina, an area encompassing 8,032 square miles, and by release of water from the Lake Murray Reservoir on the Saluda River. South Carolina Electric and Gas Company recently completed an Emergency Action Plan (EAP) for the postulated failure of the dam. According to Federal guidelines, the Monument must now prepare its own EAP to comply with early warning and evacuation responsibilities.

Columbia is located on the Congaree River, approximately 25 miles upstream from the Monument. Waste from this rapidly-developing city, if not properly treated, can adversely affect water entering the Monument. Also upstream from the Monument is Teepak, Inc., a manufacturer of synthetic skins for meat products, and the Carolina Eastman Company, a manufacturer of synthetic filament products. Both of these plants discharge into the Congaree River. The effluent from these plants is treated and is monitored by the State Department of Health and Environmental Control and the State Water Resources Commission.

It is imperative that these and other proposed developments along the Congaree River watershed be continually reviewed and monitored as sources for potential threats to the swamp ecosystem.

The Congaree River receives effluent from many smaller manufacturing plants and from sewage-treatment facilities in Columbia and adjacent counties. These plants are also monitored by the State regulatory agencies mentioned above.

The Westinghouse Corporation, Nuclear Fuel Division, operates a plant within four miles of the Park's western boundary (on S. C. State Highway 48). Little is known about this operation or its effects on Monument resources. Because of the nature of its manufactured items, information may be difficult to obtain.

Similarly, non-point pollution from agriculture and other industries may also be detrimental to the various biological processes at the Monument and need to be studied for possible corollary affects.



Local hunt clubs, who lease large tracts of land adjacent to the Park boundary for hunting, create a compelling management concern for future protection of the Monument's natural resources. Most of these hunt clubs use dogs for driving game from surrounding areas past their hunting stands. Free-roaming dogs, which cannot be controlled by boundary signs, create most of the problems, driving deer out of the Monument onto adjacent properties. There is also concern regarding feral dogs inhabiting the Monument. If the feral dog population is left unchecked, the dogs will continue to increase their domain within the Monument and have even greater impacts on the native fauna. This is evidenced by the occasional carrion discovered by Monument staff or reported by visitors.

Noise from military aircraft overflights has an adverse effect on the visitor's experience and may impact birds and wildlife. Observations are being recorded, and an overall impact assessment has begun. The number of flyovers along the Congaree River corridor is increasing, which appears to be a contributing factor as to why bald eagles and other raptors are not using this suitable habitat for nesting purposes.

The area immediately surrounding the Monument is primarily used for farming or lumbering. If any change is to be expected over the next 10-20 years, it will be a transformation from agricultural to residential and/or industrial use. An increasing amount of land is being marketed for sale in one- to five-acre tracts. Infrastructure plans, completion of Interstate 77 in the near future, ample railways, etc., make this section of the county a prime target for additional industrial development.

State government agencies which may be concerned with the management of the Monument include: the Central Midlands Regional Planning Commission; the Richland and Calhoun County legislative delegations; Department of Wildlife and Marine Resources; Department of Parks, Recreation and Tourism; Water Resource Commission; Land Resources Commission; and the Department of Health and Environmental Control. A restructuring of State government is currently underway, which is likely to result in some of these governmental bodies being realigned and consolidated.

The Sunrise Foundation, composed of area citizens, representatives of local industries, State, county, city, and Federal agencies, is chartered to be an oversight group for the development of lower Richland County. This group is on schedule with its planning effort. The Future Group and Congaree Trust are two other coalitions established for purposes of advocating the preservation and protection of natural and cultural resources and promoting the quality of life in Richland County.

A 1988 Statewide Rivers Assessment found the Congaree River to be one of only seven rivers to have Statewide or greater than Statewide significance in seven resource categories. The proposed State Scenic Rivers Program lists the Congaree River as a Class II, Pastoral River. The river also appears to be eligible for inclusion in the National Wild and Scenic Rivers System and would make an excellent candidate as a State-administered component. To date, however, in spite of the recognized merit of the Congaree River (especially the undeveloped lower section), measures to assure its continued unaltered condition have yet to be initiated.

### Issues and Objectives

1. Pursuant to a Land Protection Plan, acquisition of lands within the expanded boundary needs to proceed.

#### Objective

Complete land acquisition in accordance with the Land Protection Plan and available funds.

2. The boundary expansion has resulted in a 45% increase in acreage and 100% increase in visitation within the last five years (1988 to 1993). There has not been a sufficient base funding increase and no additional FTE's have been received to coincide with the increased demands of the boundary expansion. This has limited management's ability to effectively meet legislative requirements and administrative responsibilities of preserving and protecting the resources, while also providing for environmental education and visitor support.

#### Objective

Secure adequate base funding and FTE's to enable basic park operations.

3. Impact on Park resources as a result of hunt clubs using dogs to chase game on property adjacent to Monument lands.

#### Objective

Develop available options for addressing the problem of hunting dogs in the Monument.

4. Discharge of industrial waste and outflow from sewage treatment plants into the watershed, which may be influencing Monument resources. Also non-point pollution, including agricultural run-off containing pesticides and herbicides, may be affecting Monument resources.

Objective

Establish permanent gauging stations on Cedar Creek and the Congaree River for purposes of long-term water-quality monitoring and flood prediction. Initiate studies to determine the location, extent, and effect of non-point and industrial pollution, which may be impacting water resource and general biological processes.

5. Noise infringement on wilderness qualities and perturbing effects from low-flying aircraft on raptors that otherwise would be intent on using the Congaree River corridor for roosting and nesting purposes.

Objective

Continue overflight studies and identify and coordinate with Base Commanders, Defense Department representatives, and the Federal Aviation Administration, regarding military maneuvers over the Monument. Document overflight data, including the cumulative effects upon all Monument resources and prepare a report of findings.

6. Construction of any hydroelectric dam on the Broad River upstream from Columbia. This would control water flowing downstream and, therefore, would have a negative impact upon the natural hydrologic regime comprising the Congaree floodplain.

Objective

Be alert to any development directly affecting water flow on the Broad River by reading news releases and listening to the media. Contact all planning commissions that have an interest in development along the Broad River in the Carolinas.

7. The scenic bluffs and the Congaree River corridor in Calhoun County, identified in feasibility study reports as contributing significantly to the aesthetic qualities of the Monument, remain unprotected.

Objective

In cooperation with the South Carolina Water Resources Commission, work with neighboring communities and other entities who have a vested interest in the Congaree River, to find the best way to develop and implement plans to conserve and protect the integrity of the corridor.

## VISITOR USE ANALYSIS

### Overview

Visitor use of the Monument has steadily increased since the Park first became operational in 1978. Between 1978 and 1982, visitor access was limited to special programs due to a pre-existing hunt club lease on the property. During this time, only estimates of visitation were recorded. Visitor use statistics became more formalized in 1983, when the Park officially opened to the public and visitor registration began. Beginning in January 1993, a traffic counter was installed and Monthly Public Use Reports were computerized, resulting in more accurate information on visits. Actual visits by year are as follows:

<u>YEAR(S)</u>	<u>ACTUAL VISITS</u>
1978-1982	5,176
1983-1987	61,728
1988	26,257
1989	25,445
1990	23,223
1991	30,975
1992	40,018
1993	54,699

Statistics on specific categories of park visitation were added to the Monthly Public Use Report beginning in 1985 and continued to 1993, when the reports were computerized. During this period, visitor statistics were documented in the categories listed below:

<u>YEAR</u>	<u>FISHERS</u>	<u>HIKERS</u>	<u>Guided Walk's</u>	<u>G.Canoe</u>	<u>Campers</u>
1985	1202	8939	1756	151	115
1986	879	12802	2412	24	211
1987	715	15848	3208	63	293
1988	919	20234	4531	27	395
1989	604	21054	3067	35	335
1990	990	18549	3258	52	246
1991	1621	25134	3479	22	389
1992	1878	33072	4011	0	510
<b>TOTALS</b>	<b>8808</b>	<b>155632</b>	<b>25722</b>	<b>374</b>	<b>2494</b>
Perct.	4.5%	81%	13.3%	.2%	1%

Two boardwalks (each 3/4-mile long) and approximately 20 miles of hiking trail are marked and maintained for public use. Most hiking trails are within the floodplain. Two self-guided hiking trails are available for visitor use. One, the Elevated Boardwalk Trail, has numbered signs on its rails, corresponding to an accompanying brochure. The other, the Bluff Trail, has interpretive signs along a 1/4-mile segment. The low boardwalk was designed to enhance a primitive experience, while also complying with Wilderness Management Guidelines, and, therefore, no interpretive signing is planned. Approximately 80% of all hikers use at least one of the boardwalks. The elevated boardwalk (handicap-accessible) was constructed to make the floodplain accessible to visitors during flood events, while the low boardwalk was constructed to make available a relatively undisturbed and unimpacted portion of the old-growth forest. Another area used consistently by visitors is the 18-mile Cedar Creek Canoe Trail. This trail is used by canoeists, boaters and fishermen and has seen a steady increase in use.

Visitor use patterns have remained consistent, with most visits recorded during the spring and fall seasons. A majority of the requests for guided programs are also made for these times. As visitation has steadily increased, so have the requests for guided walks and general information about interpretive programs. Guided walks are conducted for schools, colleges and universities, conservation groups, community groups, teacher workshops, and other Federal and State agency personnel.

In the last five years, the overall increase in visitation and the need to provide orientation and interpretive information to visitors has risen. It has become extremely difficult for management to meet increased visitor demand as a result of additional land acquisition and the Park generally becoming better known. This matter will continue to worsen if additional funding and FTE are not secured to resolve the situation.

Currently information is provided to the visitor regarding area significance and to orient them to Park activities, including hiking, fishing, boating, canoeing, picnicking, and primitive camping.

The overriding need of the interpretive program is to prepare an "Interpretive Prospectus" (IP), in tandem with a Development Concept Plan. A primary component of the IP will be a Sign and Wayside Exhibit Plan to provide sequential direction concerning signage at selected areas on boardwalks, hiking trails, canoe trail, Ranger Station, and trailheads.

### Issues and Objectives

1. Continuous maintenance is required to keep Cedar Creek clear for sustained public use by canoeists. Essential services are not provided, due to lack of funding and personnel. Also, requests for guided canoe tours are increasing, but cannot be accommodated due, again, to the lack of funds and personnel.

Objective

Retain Cedar Creek as a viable and active canoe trail for visitor recreation and observation of the old-growth forest, not otherwise accessible to the public. Seek an increase in funds and personnel to meet visitor demand and otherwise provide opportunities for the visitor to better understand how the floodplain ecosystem functions.

2. Off-site programs are provided on a limited basis, depending upon availability of staff and priorities of park operations.

Objective

Continue off-site programs as personnel and funds allow.

3. There are an insufficient number of trailhead and interpretive signs to educate and orient visitors on the salient features of Monument resources.

Objective

Improve wayside exhibits and informational signing at all main access areas.

4. The increase in visitation has caused great concern in our providing adequate interpretive services for Park visitors.

There is a lack of formal programming due to the limited space in the Visitor Center. Also, interpretive displays are virtually non-existent, but necessary to portray the natural and cultural resources found in the Monument.

Objective

Seek to move as quickly as possible on park-wide development, as proposed in the General Management Plan. A Development Concept Plan and Interpretive Prospectus should be developed to support the General Management Plan.

5. The two boardwalks should be connected to form one complete loop and make them handicap-accessible.

Objective

Connect the low boardwalk with the high boardwalk in order to establish a continuous boardwalk loop that will give handicapped persons an opportunity to visit and appreciate the Monument. Continue coordination, planning and fund-raising efforts to fulfill this objective.

## FACILITIES AND EQUIPMENT ANALYSIS

The Monument has no permanent roads nor buildings that fall within the purview of an approved General Management Plan. All facilities constructed up to now have been done in compliance with the Monument's approved Environmental Assessment and Finding of No Significant Impact.

Following is a list of buildings and facilities that have been constructed, along with the square footage of each: administration building (1,982); public restroom (144); storage shed (192); storage shed (1,200); maintenance shed (432); fire cache building (128); maintenance building (720); well house (96); flammable storage building (52), and fully-automated weather station (1/4-acre).

The Park has installed an above-ground gasoline/diesel storage tank in the Maintenance Area. The tank holds approximately 750 gallons of gasoline and 250 gallons of diesel fuel. The unit is properly placed and meets all safety standards.

The hunt club lodge (2,479) and the patrol cabin (160) were acquired with the property and are now being used by the Monument when needed. The Dawson Cabin (500) was acquired as a part of the 1990 land acquisition program.

There are approximately 22 miles of primitive trails and connecting bridges in the west central section of the Monument. A 3/4-mile boardwalk has been constructed from the bluff line near the Ranger Station to Weston Lake. The boardwalk provides an excellent means for senior citizens and disabled persons to see the Monument floodplain. A second 3/4-mile low boardwalk was constructed in 1990. It is located west of the old boardwalk and ties the Bluff Trail to the Weston Lake Loop Trail and then continues to Cedar Creek. This new trail eliminates the use of a service road, which previously had also been used as a hiking trail. As funds become available, we plan to connect the high and low boardwalks to make them handicap-accessible.

Utility systems include one underground septic tank that serves the administration building and the public restrooms. Also at this location is a water system, consisting of an 80' well with submersible pump and chlorinator system. There are two exposed septic tanks without drain fields and a 480'-well with submersible pump and chlorinator system at the old-hunt club remaining in the floodplain. Electricity is furnished by Tri-County Electric Cooperative. Utilities at the Dawson Cabin include a well, telephone line, water and sewer system, and electricity by Tri-County Electric Cooperative.

Monument equipment consists of two outboard motor boats, two late-model pickup trucks, one new 4WD Jeep, two old surplus pickup trucks, a tractor, a small surplus dump truck, a 1974 500-gallon International Type 4 fire engine, two slip-on pumpers (125 and 200 gallons), a small motor grader, and one 4WD Honda ATV. Other items of equipment are small units used in various maintenance jobs. As funds become available, adequate equipment for proper maintenance of the Monument and its facilities is being acquired, as well as surplus equipment that is transferred from other parks or Federal agencies.

Considering recent land acquisitions, which increased the area acreage by 45 percent, there is a critical need to secure new patrol vehicles for resource management and protection purposes.

The Park's radio system transmitter is located in Calhoun County. There is a base station located at the Ranger Station. A tele-connect system has also been established, which better improves internal and external communication linkages.

The park has a 10-man fire cache. Subsequent to Hurricane Hugo in 1989 and the resulting increases in fuel loads, additional personal protective, suppression, and capitalized equipment became necessary. The combination of the natural disaster of Hurricane Hugo, coupled with a significant increase in acreage (including large tracts of upland pine), makes it imperative that equipment be secured to meet the projected 5-10 year increase in wildland fire danger. Currently, 60% of these needs have been met.

### Issues and Objectives

1. The General Management Plan identifies appropriate development but has become outdated.

#### Objective

The General Management Plan needs to be reviewed and, where necessary, revised and made more current with the Monument's needs. Secure support for preparing a Development Concept Plan, which is essential to effectively implementing the GMP.

2. The lack of trailhead development, including pertinent infrastructure, such as adequate parking and restroom facilities, continues to result in visitor use being concentrated into one general area.

#### Objective

Encourage visitor use of facilities available at Bannister's Bridge, Cedar Creek Road, and Kingville areas for fishing, hiking and canoeing activities.

3. There is a critical deficiency of adequate and fully-equipped all-terrain vehicles needed to conduct resource management and resource protection functions.



Objective

Secure new and fully-operational all-terrain patrol vehicles to better perform resource management and protection responsibilities.

4. The poor condition of the acquired patrol cabin on the east side makes extended patrol and resource management work in this area more difficult. Field projects could be accomplished much more readily if a new cabin, protected from outside elements and complete with water, were built. The overall deteriorated condition does not make it prudent to renovate the cabin. Another factor associated with the recommended removal and replacement of this patrol cabin, is its inappropriate location, adjacent to Cedar Creek, which is recognized in planning documentation as a primitive canoe trail and designated wilderness area. This structure detracts from the integrity of the area as intended under wilderness management policy and guidelines.

Objective

Investigate the feasibility of constructing a new patrol cabin on the east side, located away from Cedar Creek, and in harmony with wilderness management guidelines. Pursue appropriate planning and prepare a funding request document.

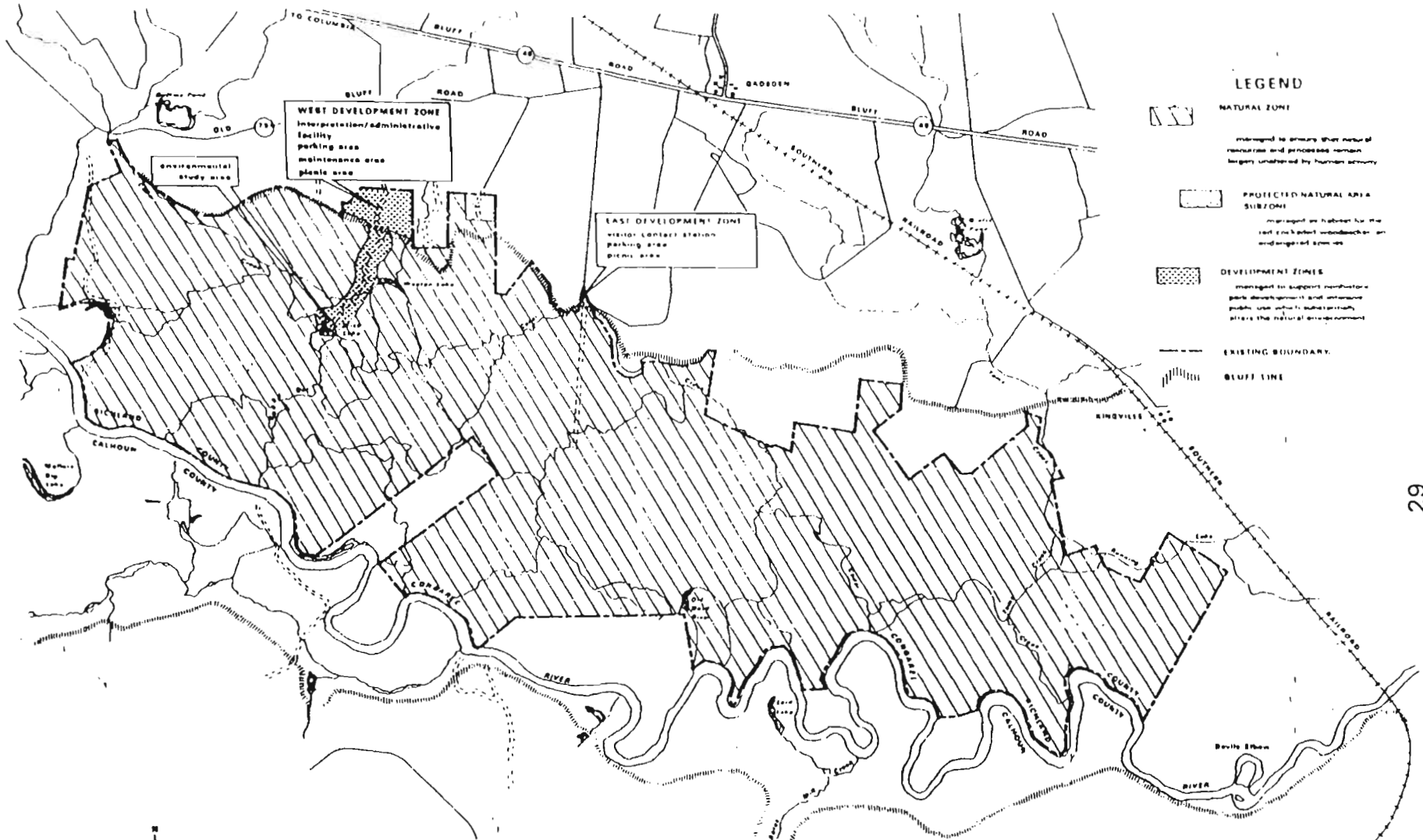
STATUS OF PLANNING

<u>Name of Plan or Study</u>	<u>Preparer</u>	<u>Date Approved</u>	<u>Adequacy</u>	<u>Repository</u>
<b>GENERAL MANAGEMENT PLANS</b>				
Analysis of Boundary & Management Alternatives	DSC	1976	UPDATED	PARK
Assessment of Alternatives	DSC	1979	UPDATED	PARK
GMP, Wilderness Suitability Study & Env. Assmnt.	SERO	1987	UPDATED	PARK
General Management Plan	SERO	1988	UPDATED	PARK
<b>GENERAL MANAGEMENT PLAN AMENDMENTS AND SUPPLEMENTS</b>				
Resource Management Plan	NPS	1993	CURRENT	PARK

<u>Name of Plan or Study</u>	<u>Preparer</u>	<u>Date Approved</u>	<u>Adequacy</u>	<u>Repository</u>
<b><u>IMPLEMENTATION PLANS</u></b>				
<u>Natural Resources</u>				
Fire Management Plan	NPS	1988	UPDATE	PARK
Wilderness Management Plan	NPS		IN PROGRESS	
Water Resource Management Plan	NPS		IN PROGRESS	
<u>Cultural Resources</u>				
Park Administrative History	NPS		IN PROGRESS	
<u>Wilderness</u>				
DEIS, Preliminary Wilderness Proposal	SERO	1980	ADEQUATE	PARK
<u>Visitor Services</u>				
Park Hazards Plan	NPS	1990	CURRENT	PARK
Park Safety Plan	NPS	1990	CURRENT	PARK
Visitor Use Study	NPS	1987	ADEQUATE	PARK
<u>Land Protection</u>				
Land Protection Plan	NPS	1991	CURRENT	PARK
<u>Other (Natural Resources)</u>				
Natural Resource Inventory	GADDY	1979	UPDATE	PARK
Vegetation of Congaree Swamp	GADDY	1980	UPDATE	PARK
Vegetation Analysis	GADDY	1975	UPDATE	PARK

<u>Name of Plan or Study</u>	<u>Preparer</u>	<u>Date Approved</u>	<u>Adequacy</u>	<u>Repository</u>
Floristic Analysis of the Congaree River Floodplain	CREWZ	1976	ADEQUATE	PARK
Vegetation Type Map	SMATHERS	1980	UPDATE	PARK
Herptofaunal Study	MANCKE	1979	ADEQUATE	PARK
Biological Recon- naissance Report	CZUHAI	1971	ADEQUATE	PARK
Biological Assessment for T & E Species	USFWS	1980	ADEQUATE	PARK
Forest Structure and Dynamics of Congaree Swamp	SHARITZ	1990	ADEQUATE	PARK
Water Quality of Congaree Swamp	BIRCH	1984	ADEQUATE	PARK
Hydrologic and Vegetative relationships of Congaree Swamp	USGS	1985	INITIAL	PARK
Hydrology and its Effects on Dist. in Congaree Swamp	RIKARD	1988	ADEQUATE	PARK
Concentrations of Metals in Cedar Creek	USGS	1990	ADEQUATE	PARK
Larval Fish Study	WINN	1990	ADEQUATE	PARK

<u>Name of Plan or Study</u>	<u>Preparer</u>	<u>Date Approved</u>	<u>Adequacy</u>	<u>Repository</u>
<u>Other (Cultural Resources)</u> Cultural Resource Study	MANLY	1976	ADEQUATE	PARK
Cultural Sites Inventory	SEAC	1980	UPDATE	PARK
Archeological Survey	U.S.C.	1980	UPDATE	PARK
<u>Other (General)</u> Research Bibliography	U.S.C.	1979	ADEQUATE	PARK
Preliminary Mgt. Survey for the Congaree River	RUDELL	1982	ADEQUATE	PARK



**LEGEND**

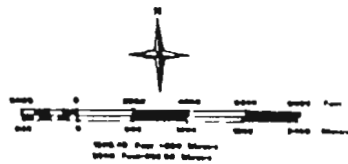
**NATURAL ZONE**  
 managed to ensure that natural resources and processes remain largely unaffected by human activity

**PROJECTED NATURAL AREA SUBZONE**  
 managed as habitat for the rare and select woodpecker and endangered species

**DEVELOPMENT ZONES**  
 managed to support moderate park development and encourage public use without substantially altering the natural environment

**EXISTING BOUNDARY**

**BLUFF LINE**



# GENERAL DEVELOPMENT MANAGEMENT ZONING PLAN

SOUTH CAROLINA

CONGAREE SWAMP NATIONAL MONUMENT

UNITED STATES DEPARTMENT OF THE INTERIOR PARK SERVICE

## **MAJOR ISSUES**

While several major issues are of concern to management, those related to the Enactment of Public Law 100-524 are paramount. Major concerns are as follows:

1. The designation of the Monument as a "Wilderness" area requires that we complete a Wilderness Management Plan as soon as possible.
2. Authorization to expand the boundaries of the Monument has been included in a Land Protection Plan. Completion of land purchases as stated in the LPP should continue as fast as possible.
3. With the completion and approval of the Monument's General Management Plan and recent boundary expansion, work must earnestly begin to prepare a Development Concept Plan (DCP). Completion of a DCP will better define and expedite much-needed visitor support facilities typical of the Service -- the high standard that the visiting public has come to expect.
4. The Monument's recently-approved Resource Management Plan (RMP) provides a comprehensive resource evaluation and identifies 61 project statements delineating needed research, and inventory and monitoring initiatives. The long-term resource management objective is to assess the structure and function of the Monument's ecosystem. In other words, to determine what is there and how is it arranged? What controls the ecosystem structure is one of the major scientific questions that needs to be addressed.

Key components to understanding ecosystem function are: (1) establishing a hydrological monitoring program, complete with gauging stations capable of measuring water quality parameters and generating data for purposes of developing a flood prediction and magnitude model; (2) studying forest dynamics by focusing on regeneration, recruitment, and general successional processes; (3) completing baseline inventories, against which future changes can be measured; (4) determining the structure and function of plant/animal interactions; and (5) assessing the function of nitrogen and carbon cycles. Other integral resource components, where significant data are lacking are: (1) a tree ring and big-tree program analysis to yield information on relative growth rates of different tree species within the Monument and provide predictive capabilities about species and growth changes currently underway; (2) successional studies and baseline inventories of natural resources in new areas purchased in 1990-92; (3) air-quality profile and correlating vegetative analysis; and, (4) investigative studies done relative to archeological and cultural interests on new additions.

5. Also recognized is the need to improve the quality of the visitors' experiences by providing a better understanding of the significance of the area. Currently, there is an insufficient amount of interpretive media available for the visitor to identify the components and functions of the swamp ecosystem. An Interpretive Prospectus is necessary for adding non-personal services, including wayside exhibits, self-guided trails, special population services, audiovisual aids, and interpretive signing. Completing an Interpretive Prospectus will mean these non-personal services will be formally addressed and not continue to languish for lack of direction.

## **MANAGEMENT OBJECTIVES**

### **Short-term**

1. Prepare a Wilderness Management Plan.
2. Prepare a Water Resources Management Plan.
3. Revise and update Fire Management Plan.
4. Complete boundary surveys and marking.
5. Prepare visitor-use and carrying capacity studies.
6. Prepare wayside exhibit and handicapped access plans that address the needs of the visitor and are compatible with existing visitor support facilities.
7. Review the General Management Plan for possible updating, revising or amending.

### **Long-term**

#### **Natural Resources**

1. Protect and perpetuate the Monument's natural resources, including the bottomland hardwood ecosystem by protecting the complex hydrological and biological processes. Manage these resources in ways that enhance natural ecological and hydrological processes and mitigate the adverse effects of human activities.
2. Manage the Monument as a wilderness area, except for those non-wilderness zones specified in the General Management Plan.

3. Manage the water resources of the Monument to ensure that the water regime is not impaired and that the adverse effects on the natural resources are minimized.
4. Educate and control visitors, as necessary for the management of wildlife, the preservation of other natural resources and for the protection of the visitor.
5. Provide opportunities for fishing under applicable State laws and in conformance with other stated management objectives.
6. Minimize disturbance of natural landforms, vegetation, and wildlife habitat due to vehicle use, Monument development, and recreational activities.
7. Restore natural ecological conditions to wilderness lands affected by previous development by removing inappropriate structures.
8. Perpetuate, free from the adverse effects of human disturbance, suitable habitat conditions to support the Monument's rich flora and fauna, with particular emphasis on endangered and threatened species, or species uncommon elsewhere.
9. Reduce the spread of, and to the extent necessary and practicable, eliminate existing populations of exotic animals and plants introduced through man's activities.
10. Compile and condense into a Geographic Information System (GIS) format the findings contained in significant area studies. Develop a GIS to integrate information on key ecosystem components for management use.
11. Prepare a Vegetation Management Plan to provide protection and mitigation strategies necessary to preserve the swamp ecosystem.
12. In consultation with NPS and other agency experts, develop a feral hog and feral dog control and eradication program.
13. Recognize and cultivate opportunities to complete project statements identified in the Resource Management Plan.
14. Upon preparation of a Task Directive and Developmental Concept Plan for visitor support facilities, address provisions for research facilities necessary to conduct and complete field studies.



### Cultural Resources

1. Clarify boundaries of historic resources.
2. Reevaluate significance and clarify the status of sites nominated to the National Register of Historic Places (NRHP).
3. As sites previously recommended for further study are investigated, and as other significant sites may be discovered, submit nominations to the NHRP as appropriate.
4. Monitor the condition and develop strategies and mitigation where necessary for protecting known cultural sites.
5. Conduct archeological survey and cultural sites inventory for newly-acquired lands.
6. Complete a special resource historic study concerning "Huger's Ferry," including park/local/State significance, area across the Monument route likely traversed, bridge crossings, and other pertinent investigation regarding this subject.
7. Conduct a new archeological survey for entire park, including aerial reconnaissance and other technologies and methods to better inventory all areas within the expanded authorized boundary.

### Visitor Use

1. Provide a visitor experience of resource appreciation and study, quiet contemplation, and solitude.
2. Provide orientation, information, and essential services to visitors at locations (development zones) identified in the General Management Plan. This information would solicit and encourage the visitors, as well as park neighbors, to help protect the Monument's ecosystem.
3. Foster public enjoyment, appreciation, and understanding of the significance of Congaree Swamp National Monument and its plant and animal communities.
4. Provide a greater opportunity for disadvantaged patrons by connecting high and low boardwalks and thereby enabling a continuous loop that is handicap accessible.

### Visitor Safety

1. As warranted, provide for visitor safety by notifying visitors about detected hazards and other precautionary measures they may wish to take, given certain conditions and seasons.
2. Develop an efficient management capability in law enforcement and emergency services, including crime detection, apprehension and prevention, search and rescue, first aid, and early flood warning and evacuation.

### Development

1. Provide development for visitor services and administration, as indicated in the General Management Plan.
2. Ensure that all facilities are visually compatible with each other and with the floodplain and woodland environment, and that any visual intrusions are eliminated.
3. Obtain or provide water, power, communications and waste disposal systems that will meet management and visitor needs, without adversely affecting the ecosystem or the scenic values.
4. Ensure, to the greatest extent possible, that all facilities utilize and contain energy-efficient construction and are handicap accessible.

### Environmental Education

1. Encourage and assist schools and other groups studying alluvial floodplain ecology.

### Promulgation

1. Disseminate adequate information to facilitate effective management of the Monument's resources and to ensure the safety of visitors and employees.
2. Encourage research by educational institutions, and other suitable groups for the purpose of developing new information on which to base sound management.

3. Maintain inventory and status information of the National and State Record Trees and other trees that are 80% of champion size within the boundary of the Monument.
4. Review South Carolina riparian law to determine any legal implications that may occur, should changes occur in the Congaree River channel.

#### Lands

1. Complete acquisition within the expanded boundary, pursuant to the Land Protection Plan.
2. Establish a permanent, surveyable boundary that does not fluctuate with natural phenomena.

#### Cooperation

1. Cooperate with the State of South Carolina, Richland and Calhoun counties, other governmental agencies, and private interest groups to assure protection of Monument resources. Cultivate greater awareness concerning the need to conserve the scenic values associated with the Congaree River corridor and protect the area in general from the adverse impacts of boating, industrial development and operations, urban development, and other potential threats.
2. Cooperate with other agencies monitoring the Congaree Swamp environment to identify, locate, and assess activities within the region that are polluting or otherwise adversely affecting Monument resources.
3. Establish liaison with appropriate agencies of the State of South Carolina and other concerned coalitions to study the Congaree River and determine the best possible methods of river management and the legal responsibility for that management.

## APPENDICES

Public Law 94-545  
94th Congress

An Act

To authorize the establishment of the Congaree Swamp National Monument in the State of South Carolina, and for other purposes.

Oct. 18, 1976  
[H.R. 11891]

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That in order to preserve and protect for the education, inspiration, and enjoyment of present and future generations an outstanding example of a near-virgin southern hardwood forest situated in the Congaree River floodplain in Richland County, South Carolina, there is hereby established the Congaree Swamp National Monument (hereinafter referred to as the "monument"). The monument shall consist of the area within the boundary as generally depicted on the map entitled "Congaree Swamp National Monument", numbered CS-80, 001-B, and dated August 1976 (generally known as the Heidler Tract), which shall be on file and available for public inspection in the offices of the National Park Service, Department of the Interior. Following reasonable notice in writing to the Committees on Interior and Insular Affairs of the Senate and House of Representatives of his intention to do so, the Secretary of the Interior (hereinafter referred to as the "Secretary") may make minor revisions of the boundary of the monument by publication of a revised map or other boundary description in the Federal Register, but the total area may not exceed fifteen thousand, two hundred acres.

Congaree Swamp  
National  
Monument, S.C.  
Establishment.  
16 USC 431 not

Notice to  
congressional  
committees.  
Publication in  
Federal Register

**Sec. 2. (a)** Within the monument the Secretary is authorized to acquire lands, waters, and interests therein by donation, purchase with donated or appropriated funds, or exchange. Any lands or interests therein owned by the State of South Carolina or any political subdivision thereof may be acquired only by donation.

Land  
acquisition.  
16 USC 431 not

**(b)** With respect to any lands acquired under the provisions of this Act which at the time of acquisition are leased for hunting purposes, such acquisition shall permit the continued exercise of such lease in accordance with its provisions for its unexpired term, or for a period of five years, whichever is less: *Provided*, That no provision of such lease may be exercised which, in the opinion of the Secretary, is incompatible with the preservation objectives of this Act, or which is inconsistent with applicable Federal and State game laws, whichever is more restrictive.

**Sec. 3. (a)** The Secretary shall administer property acquired for the monument in accordance with the Act of August 25, 1916 (39 Stat. 535), as amended and supplemented, and the provisions of this Act.

Administration.  
16 USC 431 not

**(b)** The Secretary shall permit sport fishing on lands and waters under his jurisdiction within the monument in accordance with applicable Federal and State laws, except that he may designate zones where and establish periods when no fishing shall be permitted for reasons of public safety, administration, fish or wildlife management, or public use and enjoyment. Except in emergencies, any regulations promulgated under this subsection shall be placed in effect only after consultation with the appropriate fish and game agency of the State of South Carolina.

Sport fishing.

Report to  
President.  
16 USC 431 note.

Sec. 4. Within three years from the effective date of this Act, the Secretary shall review the area within the monument and shall report to the President, in accordance with subsections 3(c) and 5(d) of the Wilderness Act (78 Stat. 890; 16 U.S.C. 1132 (c) and (d)), his recommendation as to the suitability or nonsuitability of any area within the monument for preservation as wilderness, and any designation of any such area as wilderness shall be accomplished in accordance with said subsections of the Wilderness Act.

16 USC 431 note.

Sec. 5. (a) The Secretary may not expend more than \$25,500,000 from the Land and Water Conservation Fund for land acquisition nor more than \$500,000 for the development of essential facilities.

General  
management  
plan. report to  
congressional  
committees.

(b) Within three years from the effective date of this Act the Secretary shall, after consulting with the Governor of the State of South Carolina, develop and transmit to the Committees on Interior and Insular Affairs of the United States Congress a general management plan for the use and development of the monument consistent with the purposes of this Act, indicating:

(1) the lands and interests in lands adjacent or related to the monument which are deemed necessary or desirable for the purposes of resource protection, scenic integrity, or management and administration of the area in furtherance of the purposes of this Act, and the estimated cost thereof;

(2) the number of visitors and types of public use within the monument which can be accommodated in accordance with the protection of its resources;

(3) the location and estimated cost of facilities deemed necessary to accommodate such visitors and uses.

Approved October 18, 1976.

#### LEGISLATIVE HISTORY:

HOUSE REPORT No. 94-1570 (Comm. on Interior and Insular Affairs).

SENATE REPORT No. 94-1311 (Comm. on Interior and Insular Affairs).

CONGRESSIONAL RECORD, Vol. 122 (1976):

Sept. 21, considered and passed House.

Sept. 28, considered and passed Senate, amended.

Sept. 29, House agreed to Senate amendment.

WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS, Vol. 12, No. 43:

Oct. 19, Presidential statement.

Note.—A change has been made in the slip law format to provide for one-time preparation of copy to be used for publication of both slip laws and the United States Statutes at Large volumes. Comments from users are invited by the Office of the Federal Register, National Archives and Records Service, Washington, D.C. 20408.

NATIONAL PARK SYSTEM AND PUBLIC LANDS

For Legislative History of Act, see p. 1308

An Act to amend certain provisions of law relating to units of the national park system and other public lands, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Public Lands and National Parks Act of 1983".*

SEC. 2. (a) The Secretary of the Interior is authorized to accept a conveyance of approximately four acres of land adjacent to the Effigy Mounds National Monument in the State of Iowa, and in exchange therefor to convey the grantor, without monetary consideration, approximately three acres of land within the monument, all as described in subsection (b) of this section. Effective upon consummation of the exchange, the land accepted by the Secretary shall become part of Effigy Mounds National Monument, subject to the laws and regulations applicable thereto, and the land conveyed by the Secretary shall cease to be part of the monument and the boundary of the monument is revised accordingly.

(b) The land referred to in subsection (a) which may be accepted by the Secretary is more particularly described as that portion of the southeast quarter of the southeast quarter of section 28 lying south and east of County Road Numbered 561, and the land referred to in subsection (a) which may be conveyed by the Secretary is more particularly described as that portion of the northeast quarter of the northeast quarter of section 33 lying north and west of County Road Numbered 561, all in township 96 north, range 3 west, fourth principal meridian, Allamakee County, Iowa.

SEC. 3. Section 9 of the Act entitled "An Act to provide for the establishment of Cape Cod National Seashore", approved August 7, 1961 (16 U.S.C. 459b-8), is amended by striking out "\$33,500,000" and inserting in lieu thereof "\$42,917,575".

SEC. 4. Section 8 of the Act entitled "An Act to provide for the establishment of the Cape Lookout National Seashore in the State of North Carolina, and for other purposes", approved March 10, 1966 (16 U.S.C. 459g-7), is amended by striking out "\$7,903,000" and inserting in lieu thereof "\$13,903,000".

SEC. 5. Section 15 of the Act entitled "An Act to establish in the State of Michigan the Sleeping Bear Dunes National Lakeshore, and for other purposes", approved October 21, 1970 (16 U.S.C. 460x-14), is amended by striking out "\$66,153,000" and inserting in lieu thereof "\$82,149,558".

SEC. 6. Section 5(a) of the Act of October 18, 1976, entitled "An Act to authorize the establishment of the Congaree Swamp National Monument in the State of South Carolina, and for other purposes" (Public Law 94-545; 90 Stat. 2517; 16 U.S.C. 431 note) is amended by striking out "\$35,500,000" and substituting "\$60,500,000"; and by striking out "\$500,000" and inserting in lieu thereof "\$2,000,000".

Public Law 98-506  
98th Congress

An Act

Oct. 19, 1984  
[S. 1889]

To amend the Act authorizing the establishment of the Congaree Swamp National Monument to provide that at such time as the principal visitor center is established, such center shall be designated as the "Harry R. E. Hampton Visitor Center", and for other purposes

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled.*

National parks,  
monuments, etc.

SECTION 1. Section 3 of the Act approved October 18, 1976 (90 Stat. 2517), is amended by adding at the end the following new subsection:

"(c) At such time as the principal visitor center at such monument is established, such center shall be designated as the 'Harry R. E. Hampton Visitor Center'."

Waste disposal,  
16 USC 4601-22.

SEC. 2. Section 5 of the Act of July 15, 1968 (82 Stat. 354), is amended by redesignating subsection (c) as subsection (d) and by inserting the following new subsection (c) after subsection (b):

"(c) In order to protect the air, land, water, and natural and cultural values of the National Park System and the property of the United States therein, no solid waste disposal site (including any site for the disposal of domestic or industrial solid wastes) may be operated within the boundary of any unit of the National Park System, other than—

"(1) a site which was operating as of September 1, 1984, or

"(2) a site used only for disposal of wastes generated within that unit of the park system so long as such site will not degrade any of the natural or cultural resources of such park unit.

Regulations,  
Waste disposal

The Secretary of the Interior shall promulgate regulations to carry out the provisions of this subsection, including reasonable regulations to mitigate the adverse effects of solid waste disposal sites in operation as of September 1, 1984, upon property of the United States."

Approved October 19, 1984.

LEGISLATIVE HISTORY—S. 1889

HOUSE REPORT No. 98-1069 (Comm. on Interior and Insular Affairs);  
SENATE REPORT No. 98-553 (Comm. on Energy and Natural Resources);  
CONGRESSIONAL RECORD, Vol. 130 (1984):

Aug. 9, considered and passed Senate.

Sept. 24, considered and passed House, amended.

Oct. 5, Senate concurred in House amendments.

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CONGAREE SWAMP NATIONAL MONUMENT AREA

Prepared under contract for the  
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