

UNITED STATES FISH AND WILDLIFE SERVICE

ENVIRONMENTAL ACTION STATEMENT

Within the spirit and intent of the Council on Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA), and other statutes, orders, and policies that protect fish and wildlife resources, I have established the following administrative record and determined that the proposed Hunting Plan for Savannah National Wildlife Refuge in Effingham and Chatham Counties, Georgia and Jasper County, South Carolina:

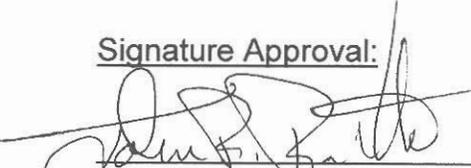
Check One:

- is a categorical exclusion as provided by 516 DM 2, Appendix 1 and 516 DM 6, Appendix 1, Section 1.4 A (4). No further NEPA documentation will therefore be made.
- is found not to have significant environmental effects as determined by the attached Environmental Assessment and Finding of No Significant Impact.
- is found to have significant effects and, therefore, further consideration of this action will require a notice of intent to be published in the Federal Register announcing the decision to prepare an EIS.
- is not approved because of unacceptable environmental damage, or violation of Fish and Wildlife Service mandates, policy, regulations, or procedures.
- is an emergency action within the context of 40 CFR 1 506.1 1. Only those actions necessary to control the immediate impacts of the emergency will be taken. Other related actions remain subject to NEPA review.

Other Supporting Documents:

Endangered Species Act, Section 7 Consultation, 2007  
Compatibility Determination, 2004

Signature Approval:

 _____ (1) Originator	<u>4/5/07</u> Date	 _____ (2) Regional Environmental Coordinator	<u>4/19/07</u> Date
 _____ (3) Regional Chief, NWRS, Southeast Region	<u>4/19/2007</u> Date	 _____ (4) Regional Director, Southeast Region	<u>4/24/07</u> Date

Environmental Assessment

**HUNT PLAN**

for

SAVANNAH NATIONAL WILDLIFE REFUGE  
Chatham and Effingham Counties, Georgia  
Jasper County, South Carolina

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## 1. PURPOSE AND NEED FOR ACTION

In response to a 2003 lawsuit by the Fund for Animals, the U.S. Fish and Wildlife Service (Service) will amend or rewrite environmental assessments that describe hunting programs at twenty-three national wildlife refuges located in the Southeast Region. The new environmental assessments will address the cumulative impacts of hunting at all refuges which were named in or otherwise affected by the lawsuit. This document addresses the hunting programs at Savannah National Wildlife Refuge in Georgia and South Carolina.

The U.S. Fish and Wildlife Service, Savannah National Wildlife Refuge (Service), located in Chatham and Effingham Counties, Georgia and Jasper County, South Carolina, proposes to modify an existing hunt plan. The need is to (1) control feral hog damage to ecosystem integrity; (2) adaptively manage hunting activities consistent with public interest and changed environmental conditions, particularly to reopen an area for waterfowl hunting; (3) continue the tradition of providing the general public with wildlife-oriented experiences and an opportunity to utilize a renewable natural resource (hunnable game and waterfowl); and (4) maintain healthy populations of wildlife and accomplish related refuge objectives.

The Service has prepared a Revised Hunt Plan, dated March 2007, to accomplish the needs identified above. Our preferred alternative is to adopt and implement the Revised Hunt Plan.

Savannah NWR was established by Executive Order 4626 on April 6, 1927, in Jasper County, South Carolina, on 2,352 acres of land owned by the United States near the Savannah River. Originally called the Savannah River Bird Refuge, these lands were reserved for use by the Department of Agriculture as a preserve and breeding ground for native birds.

On November 12, 1931, President Herbert Hoover signed Executive Order 5748, revoking Executive Order 4626, adding 207 acres to the present land base and renaming the unit the Savannah River Wild Life Refuge. Executive Order 7391, signed by Franklin D. Roosevelt on June 17, 1936, increased the acquisition boundary of the refuge to include an additional 22,870 acres of land either acquired or to be acquired by the federal government. Between 1935 and 1938, a total of 9,980 acres of land were either transferred to or purchased by the Service to be added to the refuge, and on July 30, 1940, Presidential Proclamation 2416 renamed the refuge the Savannah National Wildlife Refuge. In 1956, a 5-acre tract was purchased from an individual landowner, and in 1964, 459 acres were added when the fee title to Hog Marsh Island and adjacent lands to the north were acquired through an exchange of spoilage rights with Chatham County, Georgia. That same year, Savannah Electric and Power Company deeded 34 acres to the refuge in exchange for a power line right-of-way under the Fish and Wildlife Act of 1956. South Carolina landowner Donald Livingston donated 37 acres to the refuge in 1968, and in 1974, 24 acres were acquired from the Seaboard Coast Line Railroad Company. The 12,493-acre Argent Swamp tract was purchased from Union Camp Corporation in 1978 using Migratory Bird Conservation Act funds, and years later, 54 additional acres were added to the tract to straighten out the refuge's east boundary. In 1983, a land exchange with David C. Barrow III resulted in the acquisition of 18 acres. Mr. Barrow later sold a 432-acre tract to the Service in 1998. In

Effingham County, Georgia, 712 acres known as Bear Island were purchased in 1993 from William Bradley, et. al. In 2000, 887 acres known as the Solomon Tract were purchased from Oak Grove Bluff, Inc., and in 2001, 401 acres were purchased from John C. Wylly Jr. (both tracts located in Chatham County, GA). In 2002, the Service entered into an agreement with the Georgia Department of Natural Resources, thus assuming management authority over an 840-acre tract located in Effingham County. Later that year, a 240-acre tract was purchased from Joseph H. Harrison, bringing the current refuge acreage to 29,175.

Limited public hunting of white-tailed deer and feral hogs can be used to protect refuge habitats. Limited public hunting of squirrel, turkey and waterfowl will provide for quality wildlife-oriented recreational activities as stated in the Refuge Manual (8RM5). The purpose and need for these actions include:

1. To prevent loss or damage to the habitat, resulting in adverse impacts to ecological diversity and succession.
2. To maintain a healthy deer herd.
3. To provide a means to accomplish refuge objectives.
4. In accordance with Service policy, to eliminate or severely reduce exotic feral animal populations (feral hogs).
5. To provide the general public with a quality wildlife-oriented recreational experience and an opportunity to utilize a renewable resource (squirrel, turkey and waterfowl).

Feral hogs compete with native species for food resources (particularly available mast), and can damage pond dikes and roads. Rooting by wild hogs profoundly disrupts natural communities, individual species populations, forest successional patterns and forest nutrient cycles (Great Smoky Mountains National Park , 1993). Areas uprooted by hogs experience notable declines in small mammal populations (Singer et al., 1982) potentially impacting native predator species (e.g. snakes and raptors). Feral hogs can also destroy nests of gallinaceous birds.

Feral hogs are currently removed as dictated by Service policy dealing with feral animals on national wildlife refuges. To facilitate feral hog control and expand hunting opportunities for the general public, we propose to include feral hogs in the list of animals that are open to recreational hunting on the refuge by the general public.

Refuge lands north of SC 170, including both banks of the Savannah Front River and the west bank of the Middle River, were open for waterfowl hunting between 1980 and 1989. During that time, conditions changed, and the quality of hunting opportunities declined; hunter participation declined to the point that the Refuge Manager deemed it no longer cost effective to manage the area for waterfowl hunting. Consequently, the area was not open for hunting beginning in 1990. Environmental conditions have changed again, however, and

waterfowl use of the area is substantially higher than it was in 1990. Public interest in hunting the area has likewise increased. To facilitate the changed conditions, public interest, and cost effectiveness, we propose to reopen the area for recreational waterfowl hunting by the general public.

## **2. ALTERNATIVES INCLUDING THE PROPOSED ACTION**

### **2.1 No Action**

Under this alternative, we would not take action to meet the needs identified above. We would not adopt nor implement the Revised Hunt Plan. General public recreational hunting would continue unchanged. We would not add feral hogs to the list of species managed partly by hunting, and we would not reopen the area that we believe can once again provide the general public with a high-quality waterfowl hunting experience.

### **2.2 Limited Public Hunting (Proposed Action)**

Under this alternative, we would adopt and implement the March 2007 Revised Hunt Plan. Current general public recreational hunting opportunities would be expanded to include feral hogs and reopen the identified area for waterfowl.

### **2.3 Trapping and Relocation**

Under this alternative, some recreational hunting on the refuge would be terminated, and nuisance animals would be controlled by live trapping and relocation off-site. We expect that the trapping and relocation would focus on feral hogs.

### **2.4 Introduce Predators to Control Hog Populations**

Under this alternative, a trophic bio-control agent, such as bobcat, cougar, or other large carnivorous predator, would be introduced to the refuge to control nuisance populations of feral hog. The agent would be an animal that is native to the area, and is either still present or locally extirpated. The animal would become re-established on the refuge. The target number of predators would be dependent on a variety of ecological factors.

## **3. ENVIRONMENTAL CONSEQUENCES**

### **3.1 Description of Environment**

The Savannah National Wildlife Refuge includes a fringe of upland hardwoods, some administrative areas, and bottom land hardwoods, and palustrine, estuarine, and tidal riverine wetlands. Approximately 5,600 acres of these wetlands are manmade impoundments. Recreational opportunities for the general public include wildlife observation, photography, hiking, nature interpretation, sport fishing, hunting and others.

The recreational hunting program is administered and managed by refuge personnel in accordance with the applicable federal, state and local laws and regulations, as well as local refuge regulations. Recreational hunters must obtain, sign, and carry a refuge hunt permit in addition to state licenses and federal stamps. The program is administered to minimize disturbance to non-game and non-target wildlife, avoid damage to habitat and/or the primary values to each area, and to avoid conflict with other recreation activities. The program is managed to provide a high quality recreational hunting experience to the general public.

We review the anticipated environmental consequences of each alternative below.

### **3.2 No Action Alternative**

The expansion of the hunting program would add to the potential wildlife disturbance from hunters. However, hunt areas would be open to other use by the general public if hunts were not expanded, thus the potential for wildlife disturbance would remain.

In the absence of regulated hunting, hog densities would increase to the point that habitat damage could result. Allowing the hog population to expand without control could result in significant negative impact on other plant and animal species. Without hunter harvest, habitat damage (particularly during years of poor mast crops) would be far more extensive, and under-story dependant species of mammals and song birds would be negatively impacted.

Potential song bird species which could experience negative impacts from under-story damage include migratory nesters such as painted bunting, common yellowthroat and wood thrush; migrant species including black-throated blue warblers, yellow warbler, worm-eating warbler, hooded warbler, ovenbird, gray-cheeked thrush, Swainson's thrush and hermit thrush; and resident species such as the gray catbird, brown thrasher, and white-eyed vireo.

The reopening of waterfowl season would provide additional wildlife oriented recreational opportunities for the public. Waterfowl hunting provides a high quality recreational use from a renewable resource. The no action alternative would eliminate the possibility for the public to experience this recreational activity.

The "No Action" alternative would not address the needs we identified above. This action would not enhance the quality of recreational hunting opportunities on the refuge, and would not provide a substantial wildlife benefit. It appears that the transfer of benefits from hunters to non-hunters would not be equivalent; the general public would suffer a net loss in overall recreational use values on the refuge if this alternative were selected. This alternative would reject the use of adaptive management strategies to react to new information and changed conditions.

### **3.3 Limited Public Hunting Alternative (Proposed Action)**

Adopting and implementing the Revised Hunt Plan may have the potential to cause minimal disturbance to other wildlife, as does any public use activity. The short duration of the hunts is designed to minimize associated disturbance to wildlife. Waterfowl hunts are allowed within a limited area of the refuge, all outside of the managed wetlands on the refuge were the majority of the waterfowl winter.

The removal of feral hogs through hunting aids in the refuge's attempts to control this exotic species. Uncontrolled, feral hog populations would rapidly expand; causing extensive habitat damage that could impact native wildlife species. An annual reduction in feral hogs can prevent/minimize potential damage to the habitat, associated wildlife species, and ecological diversity.

This alternative meets our needs, enhances recreational use values, and provides wildlife management benefits without additional harm to wildlife.

### **3.4 Trapping and Relocation Alternative**

Methods for this alternative include: trapping, netting and/or immobilization and relocating feral hogs to off-refuge sites. This method was attempted for deer on Blackbeard Island NWR, a Georgia barrier island refuge, but trapping and removal failed to control population growth (Osborne et al., 1992). In addition, trapping and relocation are labor intensive and expensive. Cost per deer can range from \$113 to \$800 (Ishmael and Rongstad, 1984; O'Bryan and McCullough, 1985). We would expect the same or higher costs would be incurred for hog removal from Savannah NWR. The refuge is surrounded by state and private lands with substantial feral hog populations. The probability is high of immigration from these populations onto refuge property following a reduction of refuge hog numbers through trapping, thus, requiring an annual removal.

We would suspect feral hog mortality from trapping and removal would be equivalent to that experienced with trapping and relocation of deer. An approximate average mortality of four percent from traumatic injury can be expected during trapping and relocation efforts (Ellingwood and Caturano, 1988). Delayed mortality can be significantly higher than initial mortality due in part to capture myopathy, a stress related disease. Delayed mortality (from 4 to 15 months following relocation) resulted in losses of 85, 55, and 58 percent in California, New Mexico and Florida (O'Bryan and McCullough, 1985). The costs and anticipated mortality from trapping and relocation of feral hogs would render this alternative ineffectual.

In conclusion, trapping and relocation is costly and labor intensive. Time and manpower needed to accomplish removal objectives (assuming these objectives could be met) would result in extensive periods of wildlife disturbance. Potential high mortality (initial and delayed) would negate the purpose for trapping.

This action would not enhance the quality of recreational hunting opportunities on the refuge, and would not provide a substantial wildlife benefit relative to the cost of implementation. It

appears that the transfer of benefits from hunters to non-hunters would not be equivalent; the general public would suffer a net loss in overall recreational use values on the refuge if this alternative were selected.

### **3.5 Introduce Predators to Control Deer Populations Alternative**

The only hog predators remaining on Savannah NWR are the American alligator and bobcat. Large alligators have been known to take hogs, but are ineffective in controlling hog population growth. Feral hogs are occasionally preyed upon by bobcats, but not in sufficient numbers to control overpopulations and resulting habitat destruction. Large, more effective predators such as red wolf, cougar, and black bear likely inhabited Savannah NWR during pre-colonial times. The reestablishment of these species for the purpose of hog population management is questionable. Acceptance of such an action by adjacent land/home owners is unlikely, and the potential for large predators to be shot on-site by the local populace is very high. The possibility of large predators expanding their range onto neighboring private lands is highly likely.

In general, predator/prey interactions are highly variable (Mech, 1984). Predators tend to stabilize populations at relatively high densities (McCullough, 1979). The stocking of large predators on Savannah NWR would be cost prohibitive, require state concurrence, and would likely be unacceptable to the public and adjacent landowners. The ecological and socioeconomic impacts of this management option (positive or negative) would be largely speculative. Even with the stocking of large, effective predators, the necessity of additional hog harvesting is probable.

## **4. CUMULATIVE IMPACTS ANALYSIS**

### **4.1 Anticipated Direct and Indirect Impacts of Proposed Action on Wildlife Species**

#### **4.1.1 Migratory Birds (Waterfowl)**

The U.S. Fish and Wildlife Service annually prescribe frameworks, or outer limits, for dates and times when hunting may occur and the number of birds that may be taken and possessed. These frameworks are necessary to allow state selections of season and limits for recreation and sustenance; aid federal, state, and tribal governments in the management of migratory game birds; and permit harvests at levels compatible with population status and habitat conditions. Because the Migratory Bird Treaty Act stipulates that all hunting seasons for migratory game birds are closed unless specifically opened by the Secretary of the Interior, the Service annually promulgates regulations (50 CFR Part 20) establishing the frameworks from which states may select season dates, bag limits, shooting hours, and other options for each migratory bird hunting season. The frameworks are essentially permissive in that hunting of migratory birds would not be permitted without them. Thus, in effect, federal annual regulations both allow and limit the hunting of migratory birds.

Migratory game birds are those bird species so designated in conventions between the United States and several foreign nations for the protection and management of these birds. Under the Migratory Bird Treaty Act (16 U.S.C. 703-712), the Secretary of the Interior is authorized to determine when "hunting, taking, capture, killing, possession, sale, purchase, shipment, transportation, carriage, or export of any ... bird, or any part, nest, or egg" of migratory game birds can take place, and to adopt regulations for this purpose. These regulations are written after giving due regard to "the zones of temperature and to the distribution, abundance, economic value, breeding habits, and times and lines of migratory flight of such birds, and are updated annually (16 U.S.C. 704(a)). This responsibility has been delegated to the U.S. Fish and Wildlife Service as the lead federal agency for managing and conserving migratory birds in the United States. Acknowledging regional differences in hunting conditions, the Service has administratively divided the nation into four flyways for the primary purpose of managing migratory game birds. Each flyway (Atlantic, Mississippi, Central, and Pacific) has a Flyway Council, a formal organization generally composed of one member from each state and province in that flyway. Savannah NWR is within the Atlantic Flyway.

The process for adopting migratory game bird hunting regulations, located in 50 CFR part 20, is constrained by three primary factors. Legal and administrative considerations dictate how long the rule making process will last. Most importantly, however, the biological cycle of migratory game birds controls the timing of data-gathering activities and thus the dates on which these results are available for consideration and deliberation. The process of adopting migratory game bird hunting regulations includes two separate regulations-development schedules, based on "early" and "late" hunting season regulations. Early hunting seasons pertain to all migratory game bird species in Alaska, Hawaii, Puerto Rico, and the Virgin Islands; migratory game birds other than waterfowl (e.g. dove, woodcock, etc.); and special early waterfowl seasons, such as teal or resident Canada geese. Early hunting seasons generally begin prior to October 1. Late hunting seasons generally start on or after October 1 and include most waterfowl seasons not already established. There are basically no differences in the processes for establishing either early or late hunting seasons. For each cycle, Service biologists and others gather, analyze, and interpret biological survey data and provide this information to all those involved in the process through a series of published status reports and presentations to Flyway Councils and other interested parties (USFWS, 2006). Under the proposed action, Savannah NWR estimates a maximum of 100 additional ducks would be harvested each year from the Georgia portion of the refuge and 100 from the South Carolina portion of the refuge. This harvest impact represents 0.11% of Georgia's four-year average harvest of 94,450 ducks, and 0.06% of South Carolina's four-year average of 171,400 ducks (USFWS, 2005).

Because the Service is required to take abundance of migratory birds and other factors in to consideration, the Service undertakes a number of surveys throughout the year in conjunction with the Canadian Wildlife Service, state and provincial wildlife-management agencies, and others. To determine the appropriate frameworks for each species, the Service considers factors such as population size and trend, geographical distribution, annual breeding effort, the condition of breeding and wintering habitat, the number of hunters, and the anticipated harvest. After frameworks are established for season lengths, bag limits, and areas for migratory game bird hunting, migratory game bird management becomes a cooperative effort

of state and federal governments. After Service establishment of final frameworks for hunting seasons, the states may select season dates, bag limits, and other regulatory options for the hunting seasons. States may always be more conservative in their selections than the federal frameworks, but never more liberal. Season dates and bag limits for National Wildlife Refuges open to hunting are never longer or larger than the state regulations. In fact, based upon the findings of an environmental assessment developed when a National Wildlife Refuge opens a new hunting activity, season dates and bag limits may be more restrictive than the State allows. At Savannah NWR, season length is concurrent with the waterfowl seasons for South Carolina and Georgia. Total acres available for waterfowl hunting (11,471) are less than acres available for other hunts on the refuge (19,398).

NEPA considerations by the Service for hunted migratory game bird species are addressed by the programmatic document, "Final Supplemental Environmental Impact Statement: Issuance of Annual Regulations Permitting the Sport Hunting of Migratory Birds (FSES 88-14)," filed with the Environmental Protection Agency on June 9, 1988. We published Notice of Availability in the Federal Register on June 16, 1988 (53 FR 22582), and our Record of Decision on August 18, 1988 (53 FR 31341). Annual NEPA considerations for waterfowl hunting frameworks are covered under a separate Environmental Assessment, "Duck Hunting Regulations for 2006-07," and an August 24, 2006, Finding of No Significant Impact. Further, in a notice published in the September 8, 2005, Federal Register (70 FR 53376), the Service announced its intent to develop a new Supplemental Environmental Impact Statement for the migratory bird hunting program. Public scoping meetings were held in the spring of 2006, as announced in a March 9, 2006, Federal Register notice (71 FR 12216). More information may be obtained from: Chief, Division of Migratory Bird Management, U.S. Fish and Wildlife Service, Department of the Interior, MS MBSP-4107-ARLSQ, 1849 C Street, NWR, Washington, DC 20240.

Waterfowl hunting would cause a limited amount of disturbance to other migratory bird species, as would any public use activity. However; due to the seasonality of the waterfowl hunting season, most other migratory bird species (songbirds) are not on the refuge during the waterfowl season.

Feral hog hunting would cause some disturbance to migratory birds; however, the benefits to migratory birds from the reduction of the feral hog population would be significant. Feral hogs consume the food resources otherwise available for migratory birds. Their rooting activities destroy and/or eliminate wetland plant species that produce high quality waterfowl foods and provide cover and roosting areas for waterfowl and other wildlife species. Impacts from hog rooting also damage understory plant species that provide food, cover and nesting habitat for many migratory songbird species.

#### **4.1.2 Resident Game**

Feral hogs compete with deer, turkeys and squirrels for available mast and other food resources. In addition, the rooting activity of hogs is very destructive to habitat for resident game species. If feral hog populations are uncontrolled, populations could increase to levels that would result in severe reduction or elimination the regeneration of native tree species,

reduction of understory plant species, the reduction of nesting habitat for turkeys and the destruction of turkey nests.

Waterfowl hunting would cause a limited amount of disturbance to resident game species, as would any public use activity.

#### **4.1.3 Feral Hogs**

Feral hogs are an extremely invasive, introduced non-native species. No bag limits are established for feral hogs. Hunting of feral hogs provides the refuge with another management tool in reducing this detrimental species, and at the same time, is widely enjoyed by local hunters. Cumulative effects to an exotic, invasive species should not be of concern because the refuge would like to extirpate this species on refuge lands. Hunting of hogs is not considered detrimental to the biological integrity of the refuge, is not likely to create conflict with other public uses, and is within the wildlife dependant public uses to be given priority consideration. Since hogs are exotic, they are a priority species for refuge management only in terms of their negative impacts on refuge biota and need for eradication. They are a popular game species though, and the public interest would best be served by allowing this activity on the refuge. However, even with hunting, feral hogs are likely to always be present because they are prolific breeders.

#### **4.1.4 Non-hunted Wildlife**

Non-hunted wildlife would include non-hunted migratory birds such as song birds, wading birds, raptors, and woodpeckers; small mammals such as voles, moles, mice, shrews, and bats; reptiles and amphibians such as snakes, skinks, turtles, lizards, salamanders, frogs and toads; and invertebrates such as butterflies, moths, other insects and spiders. Except for migratory birds and some species of migratory bats, butterflies and moths, these species have very limited home ranges and hunting could not affect their populations regionally; thus, only local effects will be discussed.

Disturbance to non-hunted migratory birds could have regional, local, and flyway effects. However, regional and flyway effects would not be applicable to species that do not migrate such as most woodpeckers, and some song birds including cardinals, titmice, wrens, chickadees, etc. The cumulative effects of disturbance to non-hunted migratory birds under the proposed action are expected to be negligible for the following reasons. Hunting season would not coincide with the nesting season for migratory birds. Long-term future impacts that could occur if reproduction was reduced by hunting are not relevant for this reason. Disturbance to the daily wintering activities, such as feeding and resting, of birds might occur. Disturbance to birds by hunters would probably be commensurate with that caused by non-consumptive users.

The cumulative effects of disturbance to non-hunted small mammals, reptiles, amphibians under the proposed action are expected to be negligible for the following reasons. Small mammals, including bats, are inactive during winter when hunting season occurs. These species are also nocturnal. Both of these qualities make hunter interactions with small

mammals very rare. Hibernation or torpor by cold-blooded reptiles and amphibians also limits their activity during the hunting season when temperatures are low. Hunters would rarely encounter reptiles and amphibians during most of the hunting season. Encounters with reptiles and amphibians in the early fall are few and should not have cumulative negative effects on reptile and amphibian populations. Invertebrates are also not active during cold weather and would have few interactions with hunters during the hunting season. The refuge has estimated current hunter density on peak days to be no more than 1 hunter per 160 acres. During the vast majority of the hunting season, hunter density is much lower (1 hunter/1,000 acres). Refuge regulations further mitigate possible disturbance by hunters to non-hunted wildlife. Most refuge hunters access the refuge by boat and vehicles are restricted to one road and the harassment or taking of any wildlife other than the game species legal for the season is not permitted.

Some species of bats, butterflies and moths are migratory. Cumulative effects to these species at the “flyway” level should be negligible. These species are in torpor or have completely passed through Georgia and South Carolina by hunting season. Some hunting occurs during October when these species are migrating; however, hunter interaction would be commensurate with that of non-consumptive users.

#### **4.1.5 Endangered Species**

Endangered and threatened species that utilize the refuge are bald eagle, wood stork, manatee, and flatwoods salamander. A Section 7 Evaluation was conducted in association with this assessment for opening hunting on Savannah NWR. It was determined that the proposed alternative would not likely adversely affect these endangered species.

Bald eagles currently winter in areas that are open to waterfowl, deer, and small game hunting without noticeable adverse effects. The active bald eagle nest is located in a “no hunting” area and is closed to all public entry throughout the year providing a buffer area of over 8,000 acres. The nest has been active for over 25 years and has been successful most years.

Wood storks feed within the marshes, creeks and managed wetlands within the refuge. Highest use periods for wood storks are during the post nesting season (July- September). Disturbance to wood storks should be minimal since peak use times by this species will be outside the hunt season.

Manatees use the Savannah River during summer months. They can be found throughout the river system, but frequent the freshwater creeks feeding on wild rice and water hyacinth. Impacts to manatees should be negligible because they do not occur within the refuge during hunting season.

Flatwoods salamander may possibly occur on the refuge within upland areas along the eastern border of the refuge. This species occupies burrows during most of the year. The possibility of encounters with hunters is negligible.

Refer to the Section 7 Evaluation for hunting on the Savannah NWR for more information.

#### **4.1.6 Summary of Cumulative Impacts**

Hunting on Savannah NWR is a component of the State's efforts (Georgia and South Carolina) to manage state wildlife populations. Hunting opportunities provided on Savannah NWR are a component of the state's wildlife management, an essential part of the cumulative impact of the refuge hunting program. Control of hunted populations insures habitat quality preventing habitat damage from over population. Hunting, considered collectively with other management on numerous national wildlife refuges, state managements areas and other public lands conserve the cumulative health of the habitats within the flyways, river corridors and ecosystems and the migratory birds and other wildlife utilizing those flyways and ecosystems.

### **4.2 Anticipated Direct and Indirect Impacts of Proposed Action on Refuge Programs, Facilities, and Cultural Resources**

#### **4.2.1 Wildlife-Dependant Recreation**

As public use levels expand across time, unanticipated conflicts between user groups may occur. The Refuge's visitor use programs would be adjusted as needed to eliminate or minimize each problem and provide quality wildlife-dependent recreational opportunities. Experience has proven that time and space zoning (e.g., establishment of separate use areas, use periods, and restrictions on the number of users) is an effective tool in eliminating conflicts between user groups.

The level of recreation use and ground-based disturbance from visitors would be largely concentrated on the Laurel Hill Wildlife Drive. This area is closed to hunting. Most hunters access the refuge by boat. Most non-hunting visitors (fishermen, wildlife photographers, bird watchers, etc.), who access the refuge by boat, do so during late spring and summer months when hunting season is closed. This would provide a spatial and temporal segregation of user groups. Use of the refuge by visitors (hunters and non-hunters) could have a negative effect on nesting bird populations. However, the hunting season (except for the limited turkey hunt) is during the winter and not during most birds' nesting periods.

The opportunities for hunting would expand under the proposed action. High deer numbers are recognized as a problem reducing some forest under-story species, and reducing reforestation seedling survival. Hunting would be used to keep the deer herd and other resident wildlife in balance with the habitat's carrying capacity, resulting in long-term positive impacts on wildlife habitat.

The refuge would control access under this alternative to minimize wildlife disturbance and habitat degradation, while allowing current and proposed compatible wildlife-dependent recreation. Some areas, such as waterfowl sanctuaries, would be closed seasonally to hunting to minimize disturbance to wintering waterfowl.

#### **4.2.2 Refuge Facilities**

The Service defines facilities as: "Real property that serves a particular function(s) such as buildings, roads, utilities, water control structures, raceways, etc." Under the proposed action those facilities most utilized by hunters are: roads, parking lots, trails and boat launching ramps. Maintenance or improvement of existing facilities (i.e. parking areas, roads, trails, and boat ramps) will cause minimal short term impacts to localized soils and waters and may cause some wildlife disturbances and damage to vegetation. The facility maintenance and improvement activities described are periodically conducted to accommodate daily refuge management operations and general public uses such as wildlife observation and photography. These activities will be conducted at times (seasonal and/or daily) to cause the least amount of disturbance to wildlife. Siltation barriers will be used, when needed, to minimize soil erosion, and all disturbed sites will be restored to as natural a condition as possible. During times when roads are impassible due to flood events or other natural causes those roads, parking lots, trails and boat ramps impacted by the event will be closed to vehicular use.

#### **4.2.3 Cultural Resources**

Hunting, regardless of method or species targeted, is a consumptive activity that does not pose any threat to historic properties on and/or near the refuge. In fact, hunting meets only one of the two criteria used to identify an "undertaking" that triggers a federal agency's need to comply with Section 106 of the National Historic Preservation Act. These criteria, which are delineated in 36 CFR Part 800, state:

1. An undertaking is any project, activity, or program that can alter the character or use of an archaeological or historic site located within the "area of potential effect;" and
2. The project, activity, or program must also be either funded, sponsored, performed, licensed, or have received assistance from the agency.

Consultation with the pertinent State Historic Preservation Office and federally recognized tribes are, therefore, not required.

#### **4.2.4 Anticipated Impacts of Proposed Hunt on Refuge Environment and Community**

The refuge expects negligible adverse impacts of the proposed action on the refuge environment which consists of soils, vegetation, air quality, water quality and solitude. Some disturbance to surface soils and vegetation would occur in areas selected for hunting; however impacts would be minimal. Hunting would benefit vegetation as it is used to keep many resident wildlife populations in balance with the habitat's carrying capacity. The refuge would also control access to minimize habitat degradation.

The refuge expects impacts to air and water quality to be minimal and only due to refuge visitors' automobile and boat motor emissions and run-off on road and trail sides. The effect of these refuge-related activities, as well as other management activities, on overall air and

water quality in the region are anticipated to be relatively negligible, compared to the contributions of industrial centers, power plants, and non-refuge vehicle traffic. Existing state water quality criteria and use classifications are adequate to achieve desired on-refuge conditions; thus, implementation of the proposed action would not impact adjacent landowners or users beyond the constraints already implemented under existing state standards and laws.

Impacts associated with solitude are expected to be minimal given time and space zone management techniques, such as seasonal access, special segregation and area closures used to avoid conflicts among user groups.

The refuge would work closely with state, federal, and private partners to minimize impacts to adjacent lands and their associated natural resources; however, no indirect or direct impacts are anticipated. The hunts would result in a net gain of public hunting opportunities positively impacting the general public, nearby residents, and refuge visitors. The refuge expects increased visitation and tourism to bring additional revenues to local communities but not a significant increase in overall revenue in any area.

#### **4.2.5 Other Past, Present, Proposed, and Reasonably Foreseeable Hunts and Anticipated Impacts**

Cumulative effects on the environment result from incremental effects of a proposed action when these are added to other past, present, and reasonably foreseeable future actions. While cumulative effects may result from individually minor actions, they may, viewed as a whole, become substantial over time. The proposed hunt plan has been designed so as to be sustainable through time given relatively stable conditions. Changes in refuge conditions, such as sizeable increases in refuge acreage or public use, are likely to change the anticipated impacts of the current plan and would trigger a new hunt planning and assessment process.

The implementation of any of the proposed actions described in this assessment includes actions relating to the refuge hunt program (see 2007 Revised Hunt Plan for Savannah NWR). These actions would have both direct and indirect effects (e.g., new site inclusion would result in increased public use, thus increasing vehicular traffic, disturbance, etc); however, the cumulative effects of these actions are not expected to be substantial.

The past refuge hunting program has been very similar to the proposed action in season lengths, species hunted, and bag limits. The refuge does not foresee any changes to the proposed action in the way of increasing the intensity of hunting in the future.

#### **4.2.6 Anticipated Impacts if Individual Hunts are Allowed to Accumulate**

National Wildlife Refuges, including Savannah NWR, conduct hunting programs within the framework of state and federal regulations. Savannah NWR is at least as restrictive as the states of South Carolina and Georgia (waterfowl) and in many cases more restrictive (deer, hog, turkey, and squirrel). By maintaining hunting regulations that are as, or more, restrictive than the states, individual refuges ensure that they are maintaining seasons which

are supportive of management on a more regional basis. The proposed hunt plan has been reviewed and is supported by the South Carolina and Georgia Departments of Natural Resources. Additionally, refuges coordinate with both state agencies annually to maintain regulations and programs that are consistent with the state management program.

## **5. CONSULTATION AND COORDINATION WITH OTHERS**

All alternatives have been thoroughly reviewed and discussed with refuge staff and biologists with the Georgia Department of Natural Resources (GADNR) and South Carolina Department of Natural Resources (SCDNR). State hunt proposals (including hunts on national wildlife refuges) are reviewed and approved by GADNR and SCDNR, and are processed through their public meeting forum. In addition, refuge hunt programs are routinely published in newspapers and magazines in Georgia and South Carolina (see Appendix: Public Comments).

## **6. RATIONALE FOR SELECTION OF PREFERRED ALTERNATIVE**

Feral hog and waterfowl hunting provide a high quality, wildlife-oriented recreational activity. In addition, these hunts enable harvesting of a renewable resource with minimal disturbance to other wildlife populations. Everett (1982), monitored movements of wild turkeys before, during, and after squirrel, deer and turkey hunts, and found no permanent movement out of established ranges which could be attributed to hunting. We would expect the same results following feral hog and waterfowl hunts.

Due to the migratory nature of waterfowl, the availability of resources is determined on a larger scale. The U.S. Fish and Wildlife Service Office of Migratory Birds Management and the Flyway Councils, together with state agencies, set and adopt annual regulations establishing seasons and limits for waterfowl. These regulations are carefully established by professionals who consider the availability and condition of habitats waterfowl use and depend on, and the welfare of the waterfowl resource on a national and flyway scale. These rules are established and enforced to ensure the continued health and viability of waterfowl populations for future generations of Americans. Disturbance to wildlife will be minimal. During fall and winter months, waterfowl and other migratory birds are concentrated on the managed wetlands which will be closed to hunting.

## **7. REGULATORY COMPLIANCE**

The Revised Hunt Plan and Environmental Assessment were prepared pursuant to the National Environmental Policy Act.

The proposal, including all alternatives, is a minor change to current operations. The preferred alternative has been determined to be consistent with the Endangered Species Act, National Wildlife Refuge System Improvement Act, Information Quality Act, Regulatory Flexibility Act, and the Homeland Security Act. Further, any alternative would be consistent

with Section 106 of the National Historic Preservation Act, the Coastal Zone Management Act, Coastal Barrier Resources Act, Migratory Bird Treaty Act, Migratory Bird Conservation Act, Wilderness Act, Anadromous Fish Conservation Act, and Executive Orders 11988, Floodplain Management; 11990, Protection of Wetlands; 12898, Environmental Justice; 13045, Protection of Children; 13186, Protection of Migratory Birds; 13112, Invasive Species; and 12866, Regulatory Planning and Review.

## 8. LITERATURE CITED

- Everett, D.D. Jr. 1982. Factors limiting populations of wild turkeys on state wildlife management areas in North America. Ph.D Dissertation. Auburn University. 135 pp.
- Great Smoky Mountains National Park. 1993. Wild hog management guidelines. 44 pp.
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- Osborne, J.S., A.S. Johnson, P.E. Hale, R.L. Marchinton, C.V. Vansant, and J.M. Wentworth. 1992. Population ecology of the Blackbeard Island white-tailed deer. Tall Timbers Research, Inc. Bull 26. 108 pp.
- Singer, F.J., W.T. Swank, and E.E.C. Clebsch. 1982. Some ecosystem responses to European wild boar rooting in a deciduous forest. U.S. Department of the Interior, National Park Service, NPS-SER Research/Resources Management Report No. 54. 31 pp.
- U.S. Fish and Wildlife Service. 2005. Waterfowl harvest and population survey data: Estimates of U.S. harvest, hunting activity, and success derived from the state-federal cooperative harvest information program. Division of Migratory Bird Management, Columbia, Missouri, 92 pp.
- U.S. Fish and Wildlife Service. 2006. Waterfowl population status, 2006. Division of Migratory Bird Management, Laurel, Maryland, 60 pp.

## APPENDIX: Public Comments

We received four comments on our draft EA titled Revised Hunt Plan for Savannah National Wildlife Refuge Chatham and Effingham Counties, Georgia, Jasper County South Carolina that was available for public comment from March 4, through April 4, 2007. Three of these comments were in support of the Service's preferred Alternative in the draft EA. One comment was in opposition to the preferred Alternative. Copies of all comments are attached.

We received an e-mail from a South Carolina resident, Greg Bonham, and a letter from U.S. Sportsmen's Association (Washington D.C.) both in support of the preferred Alternative.

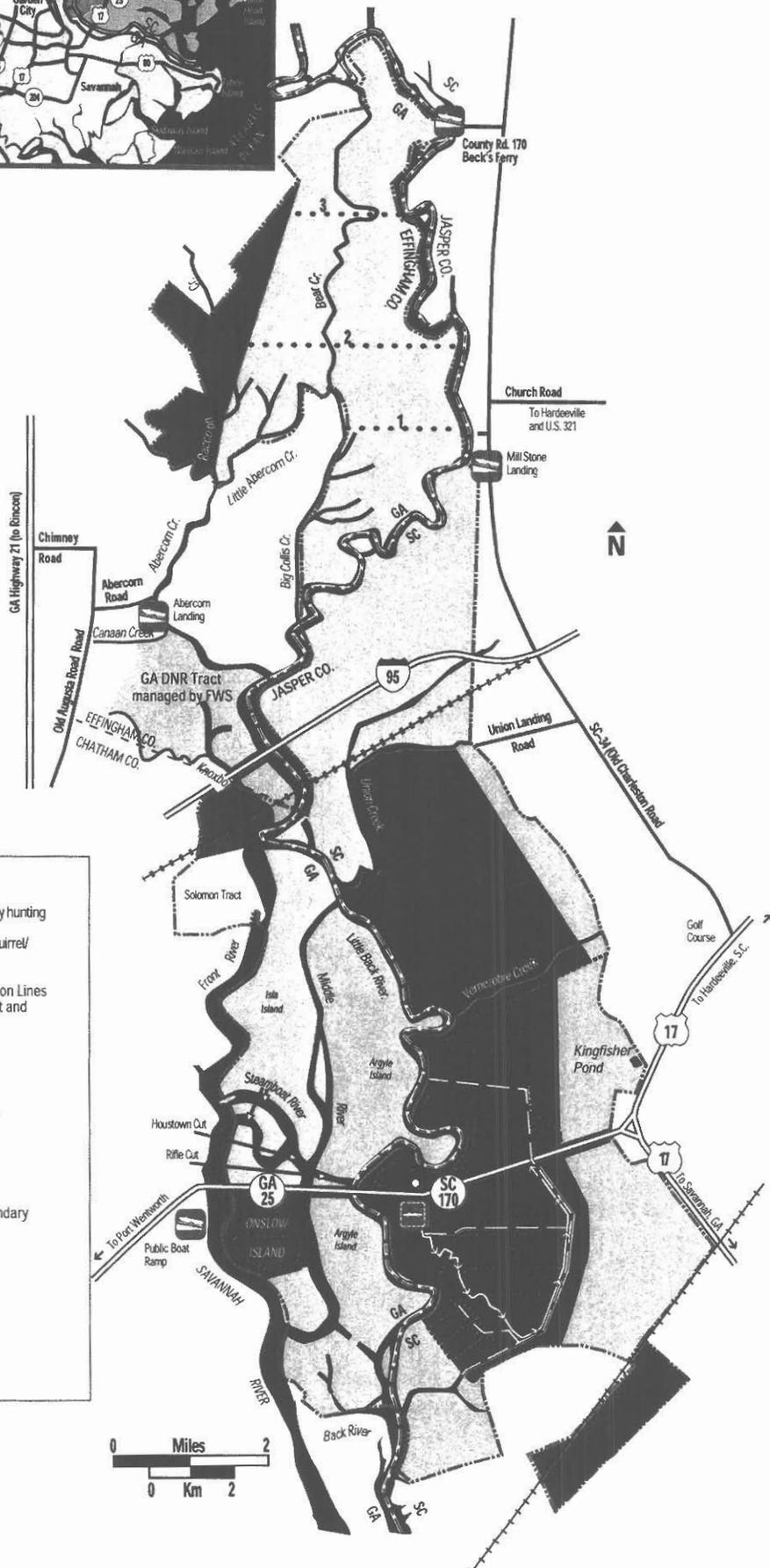
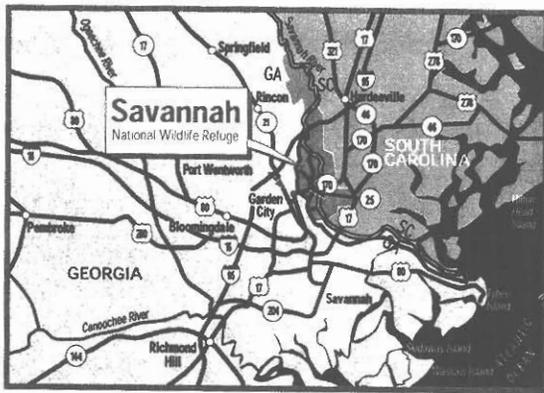
We received a letter of comment from Safari Club International in support of the Service's proposed Alternative recommending the following:

"We recommend that, in addition to noting the state's concurrence with the Hunt Plan, that the Hunt Plan and EA include the state agency's input about how hunting on the refuge assists with and/or is and element of the state's efforts to manage state wildlife populations. The fact that the hunting opportunities provided on the refuge are a component of the state's wildlife management is an essential part of the cumulative impact of the refuge hunting program."

"We recommend that the FWS add to its cumulative analysis an explanation of how the control and/or reduction of hunted populations, considered collectively with similar wildlife management efforts on numerous refuges throughout the National Wildlife Refuge system, conserves the cumulative health of the habitat of the flyway in which the refuge is located and the migratory birds that utilize that flyway. In addition, the benefits that hunting brings to each refuge improves the entire refuge system's available habitat and native wildlife populations and thus provides the public generally with more valuable and diverse refuge recreational opportunities of all kinds."

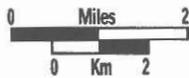
The Service agrees with these recommendations and the Environmental Assessment and Hunt Plan have been modified to include these comments (see section 4.1.6).

We received a letter from the Humane Society of the United States that contained comments related to hunting on the National Wildlife Refuge System as a whole and containing elements related to litigation filed in 2003 by the Fund for Animals against the Service. These comments were not specific to this draft EA and are noted but not responded to here.



**Legend**

- Open to deer/hog/squirrel/turkey hunting
- Open to waterfowl/deer/hog/squirrel/turkey hunting
- (1, 2, & 3) East/West Orientation Lines (trees marked with blue paint and reflectors)
- Areas closed to all hunting
- Open to youth hunts only
- Refuge Maintenance Center
- Laurel Hill Wildlife Drive
- Boat Launching Ramp
- Georgia/South Carolina Boundary
- Refuge Boundary
- Diversion Canal
- Dikes
- Railroad
- County/State Roads





April 5, 2007

Ms. Amy Ochoa  
Refuge Ranger  
Savannah National Wildlife Refuge  
1000 Business Center Drive, Suite 10  
Savannah, GA 31405  
E-mail: [Amy\\_Ochoa@fws.gov](mailto:Amy_Ochoa@fws.gov)

Re: Draft Sport Hunting Plan and Environmental Assessment for Savannah National Wildlife Refuge

Dear Ms. Ochoa:

Safari Club International and Safari Club International Foundation (“SCI and SCIF”) appreciate the opportunity to provide our comments on the draft Sport Hunting Plan and Environmental Assessment (“*Hunt Plan and EA*”) for Savannah National Wildlife Refuge. We applaud the Service’s recognition of hunting as a priority use of the unit and an essential wildlife management tool, both for the refuge and for the areas surrounding the refuge.

Safari Club International, a nonprofit IRC § 501(c)(4) corporation, has approximately 53,000 members worldwide, many of whom hunt on refuges throughout the National Wildlife Refuge system. SCI’s missions include the conservation of wildlife, protection of the hunter, and education of the public concerning hunting and its use as a conservation tool. Safari Club International Foundation is a nonprofit IRC § 501(c)(3) corporation. Its missions include the conservation of wildlife, education of the public concerning hunting and its use as a conservation tool, and humanitarian services. More specifically, the conservation mission of SCIF is: (a) to support the conservation of the various species and populations of game animals and other wildlife and the habitats on which they depend; and (b) to demonstrate the importance of hunting as a conservation and management tool in the development, funding and operation of wildlife conservation programs. SCI and SCIF participated as Defendant-Intervenors in the ongoing litigation in support of the U.S. Fish and Wildlife Service’s compliance with the National Environmental Policy Act in refuge planning.

At the outset, SCI and SCIF wish to commend the U.S. Fish and Wildlife Service (“FWS”) and the refuge personnel specifically for the efficient and comprehensive manner with which they have examined and reported the effects of hunting on the refuge and on the areas beyond the refuge boundaries that are affected or potentially affected by hunting or the absence of hunting on the refuge.

The draft Hunt Plan and EA make clear that the hunting of white-tailed deer, feral hogs, squirrel, turkey and waterfowl is not only compatible with the purpose for which Savannah NWR was established, but actually assists the FWS in carrying out the refuge's purposes including preventing loss or damage to habitat and maintaining healthy wildlife populations. Not only will the proposed hunting opportunities have no detrimental effect on the refuges' wildlife and their habitat but the hunting will in fact benefit both species and environment. The draft Hunt Plan and EA recognize that, without the ongoing sport hunting of white-tailed deer and the proposed feral hog hunting, the populations of these two species that reside in and around the refuge can be detrimental to the habitat and to the conservation of other wildlife sharing the refuge and surrounding areas. Deer overbrowsing and feral hog behavior can cause extensive damage to the refuge ecosystem, and the consequent loss of plant health and diversity can detrimentally impact both game and non-game species.

The draft Hunt Plan and EA do an excellent job of assessing the cumulative impact that hunting on Savannah NWR will have on the surrounding and/or interrelated areas that include the refuge lands. SCI and SCIF are pleased that the refuge has clearly documented the extensive cumulative research and analysis that the FWS conducts on migratory bird hunting and its flyway-wide and national environmental effects both on species and habitat. SCI and SCIF have a few additional recommendations on how the FWS can enhance its cumulative analysis of the impact of hunting opportunities. We suggest that the Hunt Plan and EA feature more prominently the refuge's consultation with the state fish and game agency. We recommend that, in addition to noting the state's concurrence with the Hunt Plan, that the Hunt Plan and EA include the state agency's input about how hunting on the refuge assists with and/or is an element of the state's efforts to manage state wildlife populations. The fact that the hunting opportunities provided on the refuge are a component of the state's wildlife management is an essential part of the cumulative impact of the refuge hunting program.

SCI and SCIF also note that the Hunt Plan and EA's cumulative analysis appears to focus primarily on the detrimental cumulative effects of hunting, as opposed to the beneficial ones. We recommend that the FWS add to its cumulative analysis an explanation of how the control and/or reduction of hunted populations, considered collectively with similar wildlife management efforts on numerous refuges throughout the National Wildlife Refuge system, conserves the cumulative health of the habitat of the flyway in which the refuge is located and the migratory birds that utilize that flyway. In addition, the benefits that hunting brings to each refuge improves the entire refuge system's available habitat and native wildlife populations and thus provides the public generally with more valuable and diverse refuge recreational opportunities of all kinds.

Ms. Amy Ochoa  
April 5, 2007  
Page 3 of 3

Thank you again for the opportunity to comment on these important planning documents.

Sincerely,

A handwritten signature in black ink that reads "Ralph S. Cunningham". The signature is written in a cursive style with a large, prominent initial "R".

Ralph S. Cunningham  
President,  
Safari Club International  
Safari Club International Foundation

**U.S.**  
**SPORTSMEN'S**  
**ALLIANCE**



**Federal Affairs Office**  
1155 Connecticut Avenue, NW, Suite 1200  
Washington, D.C. 20036 phone 202 659-5800  
fax 202 659-1027 e-mail [whorn@dc.bhb.com](mailto:whorn@dc.bhb.com)

*Formerly The Wildlife Legislative Fund of America*

April 4, 2007

Ms. Amy Ochoa  
Refuge Manager  
U.S. Fish and Wildlife Service  
1000 Business Center Drive  
Parkway Business Center  
Suite 10  
Savannah, GA 31405

Protecting &  
Advancing  
America's  
Heritage  
of Hunting,  
Fishing &  
Trapping

RE: Savannah NWR Hunting Plan EA

Dear Ms. Ochoa:

The United States Sportsmen's Alliance ("USSA") strongly supports Alternative 2, the proposed action for "Limited Public Hunting," described in the March 2007 Draft Environmental Assessment ("Draft EA") for the Revised Hunt Plan for Savannah National Wildlife Refuge ("Savannah NWR") in Chatham and Effingham Counties, Georgia, and Jasper County, South Carolina. The USSA provides direct lobbying and grassroots coalition support to protect and advance the rights of hunters, anglers, trappers and scientific wildlife management professionals. The USSA seeks to promote sustainability of animal species and biodiversity in an effort to protect the rights of its members to engage in hunting, fishing, trapping, and similar traditional American activities.

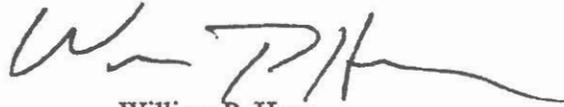
Expanding hunting opportunities at Savannah NWR complies with Congress's mandate in the National Wildlife Refuge System Improvement Act of 1997 that "compatible wildlife-dependent recreational uses [including hunting, 16 U.S.C. § 668ee(1), (2)] are the priority general public uses of the System and shall receive priority consideration in refuge planning and management[.]" 16 U.S.C. § 668dd(a)(3)(C). Furthermore, the Draft EA adequately responds to the U.S. District Court for the District of Columbia's August 31, 2006 Order in Fund for Animals v. Hall, 448 F. Supp. 2d 127 (D.D.C. 2006) by "address[ing] the cumulative impacts of hunting at all refuges which were named in or otherwise affected by the lawsuit." Draft EA at 1. As the Draft EA and Revised Hunt Plan demonstrate, the Department of Interior ("DOI"), Fish and Wildlife Service ("FWS"), and refuge management have adequately considered the environmental impacts of the proposed action, including cumulative impacts, and have reasonably concluded that the Revised Hunt Plan should go forward.

801 Kingsmill Parkway, Columbus, Ohio 43229-1137 • phone 614 888-4868 • fax 614 888-0326  
e-mail us at [info@ussportsmen.org](mailto:info@ussportsmen.org) • visit our website at <http://www.ussportsmen.org>

Ms. Amy Ochoa  
April 4, 2007  
Page 2 of 2

The Draft EA concludes that negative impacts, including cumulative impacts, on hunted, non-hunted, and endangered species from the Revised Hunt Plan will be minimal. Even given some minimum level of impacts, however, the proposed action should be selected. Neither NEPA nor any other relevant law or regulation requires that actions such as the proposed alternative be free from all environmental impacts and, as noted above, Congress has expressed its preference for hunting as a priority use of refuge resources. The proposed alternative represents a proper conservation and management measure and is an element of a sound nationwide policy of expanding hunting and fishing opportunities at National Wildlife Refuges in respect for Congress's mandate in the National Wildlife Refuge System Improvement Act of 1997.

Sincerely,



William P. Horn  
Director, Federal Affairs



docbonham@aol.com  
03/07/2007 04:10 PM

To Amy\_Ochoa@fws.gov  
cc  
bcc

Subject changes in hunting regulation

History:

✉ This message has been forwarded.

If I understand correctly that review of current usage or Savannah. I as a concerned South Carolina citizen that we have very few places to duck hunt and that no regulations are enacted to limit our already limited hunting opportunities. Thanks Greg Bonham D.C.

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Scheduled for March 5 to April 3, 2007

Savannah Morning News

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is hereby given that the Savannah National Wildlife Refuge's revised hunt plan and environmental assessment will be available for public review and comment from March 5 to April 3, 2007. Documents may be reviewed online at [www.fws.gov/savannah](http://www.fws.gov/savannah) or at the refuge headquarter office, during regular business hours (M-F, 8:00 a.m. - 4:30 p.m.), located in the Parkway Business Center, 1000 Business Center Drive, Suite 10, Savannah, GA 31405. All comments must be submitted in writing no later than April 4, 2007.

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# Jasper County Sun & Hardeeville Today

P.O. Box 1030, 104 S. Railroad Ave.  
Ridgeland, SC 29936

Timothy Anderson, Publisher

Voice (843) 726-6161 • Fax: 726-8661

Affidavit of Publication  
State of South Carolina  
County of Jasper

Personally appeared before me, Nancy O. White,  
a Notary Public in and for said State and County

South Carolina

Jasper County

who being duly sworn according to law, deposes  
and says that he or she is employed by the *Jasper  
County Sun*, and *Hardeeville Today*, newspapers  
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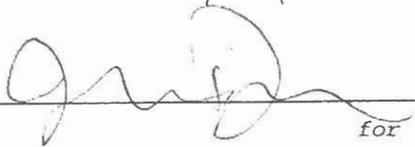
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and for 5 times in the *Hardeeville Today* in  
the issues dated:

3/7/07, 3/14/07, 3/21/07, 3/28/07

Subscribed and sworn to before me this date,

3/31/07



for the Publisher

Nancy O. White

My Commission Expires 7/8/2008

Notary Public

#### Public Notice

Notice is hereby given that the Savannah National Wildlife Refuge's revised hunt plan and environmental assessment will be available for public review and comment from March 5 to April 3, 2007. Documents may be reviewed online at [www.fws.gov/savannah](http://www.fws.gov/savannah) or at the refuge headquarter office, during regular business hours (M-F, 8:00 a.m. - 4:30 p.m.), located in the Parkway Business Center, 1000 Business Center Drive, Suite 10, Savannah, GA 31405. All comments must be submitted in writing no later than April 4, 2007.

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## PUBLIC NOTICE

Notice is hereby given that the Savannah National Wildlife Refuge's revised hunt plan and environmental assessment will be available for public review and comment from March 5 to April 3, 2007. Documents may be reviewed online at [www.fws.gov/savannah](http://www.fws.gov/savannah) or at the refuge headquarter office, during regular business hours (M-F, 8:00 a.m. - 4:30 p.m.), located in the Parkway Business Center, 1000 Business Center Drive, Suite 10, Savannah, GA 31405. All comments must be submitted in writing no later than April 4, 2007.

Ad shown is not actual print size

52 Persimmon Street P.O.Box 486  
 Bluffton SC 29910

**FINDING OF NO SIGNIFICANT IMPACT**  
**For**  
**Limited Public Hunting of Deer, Feral Hog,**  
**Squirrel, Turkey and Waterfowl**  
**Savannah National Wildlife Refuge**

I have determined that the use of limited public hunting for white-tailed deer and feral hogs on Savannah National Wildlife Refuge, Chatham and Effingham Counties, Georgia and Jasper County, South Carolina to control overpopulation problems and to protect valuable wildlife resources, and limited public squirrel, turkey and waterfowl hunting, as outlined in the attached hunt plan and environmental assessment, will not have a significant affect on the human environment within the meaning of Section 102 (2) (c) of the National Environmental Policy Act of 1969. Accordingly, an environmental impact statement is not needed and will not be prepared.

**The Service has analyzed the following alternatives to the proposal in an Environmental Assessment (copy attached):**

No action alternative – Under this alternative we would not adopt nor implement the Revised Hunt Plan. General public recreational hunting would continue unchanged. We would not add feral hogs to the list of species managed partly by hunting, and we would not reopen the area that we believe can once again provide the general public with a high-quality waterfowl hunting experience.

Trapping and Relocation – Under this alternative, some or all recreational hunting on the refuge would be terminated, and nuisance animals would be controlled by live trapping and relocation off-site. We expect that the trapping and relocation would focus on white-tailed deer and feral hogs. Some recreational hunting, for small mammals and waterfowl, would continue.

Introduce Predators - Under this alternative, a trophic bio-control agent, such as bobcat, cougar, or other large carnivorous predator, would be introduced to the refuge to control nuisance populations of white-tailed deer and feral hog. The agent would be an animal that is native to the area, and is either still present or locally extirpated. The animal would become re-established on the refuge. The target number of predators would be dependent on a variety of ecological factors.

Proposed action            Under this alternative, we would adopt and implement the March 2007 Revised Hunt Plan. Current general public recreational hunting opportunities would be expanded to include feral hogs and reopen the identified area for waterfowl.

**The preferred alternative was selected over the other alternatives because:**

1. Controlling deer and feral hog populations is essential to preventing significant physical environmental degradation.
2. Alternatives to limited public hunting included: 1) no action, 2) trapping and relocation, and 3) introduce predators. These alternatives are not feasible due to biological, economic and/or social limitations.
3. Limited public hunting, as outlined in the refuge hunt plan, is the most cost effective, efficient, and natural method of controlling deer and feral hog populations.
4. Hunting will be limited to the minimum days necessary to achieve harvest goals, minimizing wildlife disturbance.
5. Reduction of feral hog numbers will enhance the survival of native species. Threatened and endangered species will be afforded protection through education, time and zoning regulations, and law enforcement efforts.
6. Limited public squirrel and turkey hunts will not result in undue wildlife disturbance, and at the same time, will provide for an increase in quality and diversity of the existing refuge public recreation programs.
7. Current waterfowl hunting strategies at Savannah NWR do not interfere with or detract from the fulfillment of the National Wildlife Refuge System mission. Moreover, waterfowl hunting does not conflict with the purpose specified in the executive order that established the refuge.

**Implementation of the agency's decision would be expected to result in the following environmental, social, and economic effects:**

1. The refuge could better manage wildlife populations.
2. This would allow the public to harvest a renewable resource.
3. The public would have increased opportunity for wildlife-oriented recreation.
4. Local businesses would benefit from hunters visiting from surrounding counties.
5. The Service will be perceived as a good steward of the land by continuing traditional uses of land in Georgia and South Carolina.

**Measures to mitigate and/or minimize adverse effects have been incorporated into the proposal. These measures include:**

1. Refuge permits are required for all hunts.
2. Baiting will be prohibited.
3. Camping will not be allowed on the refuge.
4. A large portion of the refuge is closed to all hunting, including the refuge impoundment system where wintering waterfowl and other migratory bird species are located.

5. Only temporary blinds are permitted. All hunting blinds/stands must be removed daily.
6. The refuge law enforcement program and closely regulated hunting season will ensure hunt regulation compliance and will protect refuge resources.
7. Hunting seasons for deer, turkey, hog and squirrel are much shorter than the states of Georgia or South Carolina.

**The proposal is not expected to have any significant adverse effects on wetlands and flood plains, pursuant to Executive Orders 11990 and 11988 because this area has historically had a high use of recreational hunting with no detrimental long-term effect on wetlands.**

**The proposal has been thoroughly coordinated with all interested and/or affected parties. Parties contacted include:**

U.S. Fish and Wildlife Service, Division of Ecological Services, Charleston, South Carolina  
Georgia Department of Natural Resources  
South Carolina Department of Natural Resources

**Copies of the Environmental Assessment are available by writing:**

Savannah Coastal Refuges  
1000 Business Center Dr., Suite 10  
Savannah, GA 31405

**Therefore, it is my determination that the proposal does not constitute a major Federal action significantly affecting the quality of the human environment under the meaning of section 102(2)(c) of the National Environment Policy Act of 1969 (as amended). As such, an environmental impact statement is not required. This determination is based on the following factors (40 CFR 1508.27):**

(for each factor list the page numbers of the EA where the factor was discussed.)

1. Both beneficial and adverse effects have been considered and this action will not have a significant effect on the human environment (EA, page 14-15)
2. The actions will not have a significant effect on public health and safety (EA, page 14-15).
3. The project will not significantly effect any unique characteristics of the geographic area such as proximity to historical or cultural resources, wild and scenic rivers, or ecologically critical areas (EA, page 13-15).
4. The effects on the quality of the human environment are not likely to be highly controversial (EA, page 15-16).
5. The actions do not involve highly uncertain, unique, or unknown environmental risks to the human environment (EA, page 14-15).

6. The actions will not establish a precedent for future actions with significant effects nor does it represent a decision in principle about a future consideration (EA, pages 15).
7. There will be no cumulative significant impacts on the environment. Cumulative impacts have been analyzed with consideration of other similar activities on adjacent lands, in past action, and in foreseeable future actions (EA, pages 6-15).
8. The actions will not significantly affect any site listed in, or eligible for listing in, the National Register of Historic Places, nor will they cause loss or destruction of significant scientific, cultural, or historic resources (EA, pages 14).
9. The actions are not likely to adversely affect endangered or threatened species, or their habitats (Intra-Service Section 7 Biological Evaluation Form attached to EA).
10. The actions will not lead to a violation of federal, state, or local laws imposed for the protection of the environment (EA, pages 17).

**References:** Environmental Assessment of 2007 Hunt Plan for Savannah NWR, Hunt Plan, Compatibility Determination, Letters of Concurrence, Refuge-specific Regulations, Intra-Service Section 7 Evaluation

**Supporting References:**

Hunt Plan  
Environmental Assessment  
Section 7 Evaluation

  
\_\_\_\_\_  
Director, Region 4  
U.S. Fish & Wildlife Service  
Atlanta, Georgia

4/2-107  
Date