

**COMPATIBILITY DETERMINATION**  
for Big Game, Upland Game and Feral Hog  
on  
Sequoyah National Wildlife Refuge.

**Use:** White-tailed deer, swamp and Eastern cottontail rabbit, Eastern gray and fox squirrel and feral hog hunting

**Refuge Name:** Sequoyah National Wildlife Refuge

**Establishing and Acquisition Authorities:**

Sequoyah NWR is an overlay project of the U.S. Army Corps of Engineers (USACE) established on the 42,000 acre Robert S. Kerr Reservoir by Cooperative Agreement No. DACW56-3-71 on December 11, 1970, to "...be administered by him [Secretary of the Interior] directly or in accordance with cooperative agreements...and in accordance with such rules and regulations for the conservation, maintenance, and management of wildlife, resources thereof, and its habitat thereon,..." 16 U.S.C. 664 (Fish and Wildlife Coordination Act).

**Refuge Purposes:**

The underlying reason for establishing the refuge was to protect bottomland hardwood forests and associated habitats to provide food and cover for migratory and resident wildlife. The distinct landscape, diversity of biological communities, and secluded location are inherent characteristics that contribute to the area's value as a natural preserve. The refuge provides a variety of protected habitats for wildlife, open space and nature-oriented recreational activities for the public.

**National Wildlife Refuge System Mission:**

The mission of the System is working with others to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people.

**Description of Use:**

The purpose of this plan is to provide new public hunting opportunities for white-tailed deer, upland game, and the incidental take of feral hogs during designated hunting seasons on Sequoyah National Wildlife Refuge. This hunting plan precedes the overall Visitor Services Plan for Sequoyah NWR and will replace the big game and upland game hunting plans of 1996 and 1988. The refuge will open seven additional hunt units (Girty, Webber, Vian Creek, Possum Hollow, Shelby, Delta Island and Haskell) to big game (white-tailed deer) & feral hog. The refuge will also allow feral hog hunting on existing units where big game and upland game hunts already occur and will open one new hunt unit to upland game hunting (Possum Hollow). These game animals are classified as white-tailed deer (*Odocoileus virginianus*), eastern gray squirrel (*Sciurus carolinensis*), fox squirrel (*S. niger*), swamp rabbit (*Sylvilagus aquaticus*), and eastern

cottontail rabbit (*S. floridanus*). Feral hogs (*Sus scrofa*) are considered invasive animals in this plan.

Where would the use be conducted?

Sandtown, Vian Creek, Webbers, Hisaw/Shelby, Girty, Possum, Delta Islands and Haskell Units would all be open to big game hunting and feral hogs. Sandtown, Vian Creeks, Webbers, Girty and Possum would be open to upland game and feral hog hunts.

When would the use be conducted?

Big Game and Feral hog:

Muzzleloader:

- Hunting period: hunts conducted for three to five days during October, November, and December. Muzzleloader hunts may occur simultaneously among hunt units, and will be limited to no more than 4 total hunts per hunt unit each season. Of the nine hunt units, typically six units will be hunted within a given year, and hunts will not occur simultaneously on the East and West Management Areas.

Archery Hunt:

- Hunting Period: Archery hunts conducted four to seven days, between October, November, and December. Archery hunts may occur simultaneously among hunt units, and will be limited to no more than 2 total hunts per hunt unit each season.

Upland Game:

- Rabbit – open in December 1st - January 31st – Saturday through Tuesday
- Squirrel – open in September, December and January, Saturday through Tuesday.

How would the use be conducted?

Hunting on the refuge is managed in accordance with regulations set forth by the State of Oklahoma. Hunters are required to use non-toxic shot. All hunters are required to sign and carry a refuge hunting permit. Hunters must have all applicable State and Federal licenses, tags, and stamps.

Big Game:

The muzzleloader hunts (adult, and youth) will be conducted with the State of Oklahoma conducting the draw and the refuge serving as host for the event. Hunters wishing to participate in one of the special draw hunts for deer must apply through the Oklahoma Department of Wildlife Conservation (ODWC) website ([www.wildlifedepartment.com](http://www.wildlifedepartment.com)). The ODWC is responsible for handling all applications and conducting the draws and collecting fees.

The archery hunts (adult) will be conducted with the State of Oklahoma conducting the draw and the refuge serving as host for the event. Hunters wishing to participate in one of the special draw hunts for deer must apply through the Oklahoma Department of Wildlife Conservation (ODWC) website ([www.wildlifedepartment.com](http://www.wildlifedepartment.com)). The ODWC is responsible for handling all applications and conducting the draws and collecting fees. Hunters are notified by ODWC that they have been selected.

### Upland Game:

Hunters that participate in upland game hunting are required to obtain and carry a signed annual hunting permit included within the annual refuge hunting brochure. These permits are free of charge and available at the refuge headquarters, kiosks at entry points of the refuge, and the SNWR website (<http://www.fws.gov/refuge/Sequoyah/>). No fees are required for this hunt. Hunters must report number of migratory bird/upland game taken on OMB form 3-2361.

### Why is this use being proposed?

Hunting is one of the six priority public uses of national wildlife refuges. The controlled deer hunts have been a vital tool in the management of the deer herd population on the refuge. These hunts help stabilize the deer population and reduce impacts on habitats and croplands on the refuge. Deer hunting is also a very popular activity among people across the United States and is an important legacy that is passed between generations of families. The deer hunts at Sequoyah NWR provide an avenue for friends and families to participate in this activity. The objective of hunting on the refuge is to provide a safe, high quality, low impact recreational opportunity for public use and enjoyment of wildlife resources. This provides the visitor with an additional recreational opportunity where hunting opportunities on public lands are limited.

Hunts are currently the only tool available to the refuge for the management of the deer herd. By adding new units to the current hunting program it will broaden the refuge's ability to manage the deer herd. This hunting program also offers an excellent platform for the incidental harvest of feral hogs as well.

Feral hog rooting and digging is causing disturbance and harm to native wildlife and plants. The feral hog hunt is being proposed to: (1) help reduce the number of hogs and the destruction caused by their foraging behavior, and (2) provide additional opportunities for priority, wildlife dependent recreation on Sequoyah NWR. A reduction in feral hog numbers will reduce negative impacts caused by feral hogs and help maintain the integrity of refuge habitats.

The upland game hunting program is comprised of cottontail rabbit, swamp rabbit, gray squirrel, and fox squirrel. This program has been very stable and has not experienced dramatic changes in the number of hunters or the numbers of species harvested. The numbers of these species harvested on the refuge are extremely small. These new areas will be enjoyed by the hunters and provides more opportunities to participate in a wildlife dependent recreational opportunity.

### **Availability of Resources:**

Adequate funding and staff are available. Administering the refuge hunt program does not require any developed facilities on the refuge. It has been estimated that it will take approximately 120 staff days each year to operate and manage the annual program, provide brochures and hunting regulations, respond to public inquiries, post signage, and enforcement and bag limit checks. The estimated cost to manage the refuge's hunting program is approximately ten thousand four hundred dollars (\$10,400) annually.

## **Anticipated Impacts of the Use:**

*Short-term impacts:* Providing carefully planned and managed hunting opportunities with restrictions that limit access to specific refuge locations will generally minimize disturbance to wildlife populations, the environment, and non-consumptive users. Direct mortality to hunted species (white-tailed deer, rabbits, squirrels and feral hogs) would, of course, occur. Some wounding of animals may occur as well. The presence and activity of hunters may cause temporary disturbance to other wildlife in the area, but there are no foreseeable detrimental impacts to these species. No anticipated conflicts with hunting and endangered species as most hunting will occur outside the units where endangered species nest, migrate, or breed. Concerns are primarily centered on the possibility of impacting non-target species that are sensitive to disturbance. Minor disturbance of limited duration to other wildlife during the hunts is expected. Short term impacts include a minimal increase in vehicle emissions and stirring of dust from hunting traffic on roads and trails; minor disturbance to habitat/vegetation due to hunter foot traffic during hunts and scouting; a small potential of spreading invasive species by vehicle and hunter foot traffic; temporary disturbance to early spring nesting birds or wildlife with young; and minimal short-term disturbance to migratory wildlife from human noise. A minimal positive impact on the local economy and positive benefit to hunters by allowing the public to enjoy hunting at an affordable rate in a region where public land is limited is anticipated. An inherent public safety risk associated with the use of any type of firearms is always a possibility.

No expected impacts to the biological integrity of the refuge are expected. A potential displacement of other refuge visitors (non-deer hunters) beyond Tuff Boat Ramp would occur for a maximum of 20 days. The area would be closed for safety reasons, however, portions of the refuge will remain available for non-hunting uses.

The proposed use may divert resources from other refuge activities for short periods of time during hunt preparation. These activities would likely be of lower priority - resulting in an overall neutral or positive indirect impact to the refuge.

*Long-term Impacts:* All long-term impacts of allowing upland game, big game and feral hog hunting are expected to be minimal. Water and soil quality are expected to have little impact; minimal positive impacts to habitat quality and quantity are expected; native wildlife will benefit from reduced competition for food and space; minimal erosion along waterways and wetlands is expected;

*Cumulative Impacts:* Currently, hunting is allowed for, white-tailed deer, Eastern and swamp rabbit, fox and gray squirrel. The refuge is proposing hunting in one new unit for upland game, 7 new units for big game hunting and allowing feral hog hunting on existing units where big game and upland game already exist. Other resident wildlife species are also present on the refuge, including songbirds, wading birds, and raptors; small mammals such as gophers, 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. Most of these species are common and widespread. In general, these species are broadly distributed throughout the region and have limited home ranges. Hunting is not expected to affect any wildlife

populations regionally. Some wildlife disturbance (increased human presence and sounds) will occur locally during the hunting season; however, these impacts are expected to be minor for the following reasons. Collectively, the refuge will be open to hunting for a total of 96 days per year with very low number of hunters and there will be no disruption of use by other wildlife-dependent visitors.

A Section 7 Evaluation completed during this assessment determined that the proposed alternative is not likely to adversely affect any threatened or endangered species. The minimal number of hunters that utilize the refuge, along with the restrictions on areas open to hunting, would greatly reduce the possibilities of negatively impacting the Interior Least terns, American Burying Beetle, Northern Long-eared bat, gray bat or the Indiana bat.

The number of people hunting on the refuge on any given day will be low during the 96 days open to hunting. Furthermore, hunters will be dispersed throughout the refuge, and 365 days are open to all other wildlife dependent use and recreation during daylight hours.

The Service has concluded that cumulative impacts on the refuge's wildlife populations, either hunted or non-hunted species will be negligible. The Service has also concluded that the proposed action will not cumulatively impact the refuge environment or refuge programs. This determination was based upon a careful analysis of potential environmental impacts of hunting on the refuge together with other projects and/or actions. All hunts would follow all applicable laws, regulations and policies; including title 50 of the Code of Federal Regulations, the Refuge System Manual, the mission and goals of the Refuge System, and the purposes, goals, and objectives of the refuge. Operating this activity does not hinder the refuge's ability to meet habitat goals, provides for the safety of the area's citizens, and supports several of the primary objectives of the refuge.

**Public Review and Comment:**

Conversations concerning hunting on the refuge have been ongoing with ODWC personnel since June 2015. The ODWC responded in a letter dated July 13, 2016 in support of new hunting opportunities at the refuge. The letter encouraged the refuge to expand hunting opportunities in the future.

Formal scoping for the refuge's hunting program was initiated during September 2015. The Service announced its intent to prepare an Environmental Assessment of alternatives for updating the refuge to open new units to upland, big game and feral hog hunting. A 14-day scoping period (From to when) was established under that notice and posted on the refuge website.

During the scoping period the Service received one comment.

**Determination (check one below):**

Use is Not Compatible

X Use is Compatible with Following Stipulations

**Stipulations Necessary to Ensure Compatibility:**

1. Surveys will continue on the refuge to document abundance of target species to ensure that populations continue to support the refuge hunt program. Proposed harvest levels will be based on distance sampling surveys, camera trap surveys, as well as observation of habitat conditions.
2. Activities will be coordinated between Service and ODWC staff to manage the operation to achieve intended objectives.
3. Both Federal and State law enforcement personnel will ensure compliance with refuge regulations and State laws for the protection of refuge resources and the safety of participants.
4. Of the nine hunt units included in the hunt plan, the refuge will typically only hunt six units within a given year, and hunts will typically not occur simultaneously on both the east and west sides of the river.
5. Certain units will be closed during hunting season to all other public use to ensure visitor safety.

**Justification:**

As defined by the National Wildlife Refuge System Improvement Act of 1997, wildlife-dependent recreational uses may be authorized on a refuge when they are compatible and not inconsistent with public safety. Hunting is included as one of these six wildlife-dependent recreational opportunities, which are to receive enhanced and priority consideration in refuge planning and management. Continued hunting (of white-tailed deer, eastern grey and fox squirrel, swamp and eastern cottontail rabbit and feral hogs), as proposed, on the refuge will not conflict with any of the other priority public uses, adversely impact biological resources, or detract from refuge goals, objectives, and management activities. Through the compatibility determination process, the refuge has determined that hunting, in accordance with the stipulations provided above, will not materially interfere with or detract from the fulfillment of the Refuge System mission or the purposes of each refuge.

Hunting, as proposed, will be managed in such a way to minimize conflicts with other compatible recreational uses and management programs. The refuge will monitor hunter use, compliance with rules and regulations, and any impacts to native wildlife populations and habitats. This information will be used to adjust this hunt program as necessary to protect refuge resources.

Big Game Hunts: The draw system for the white-tailed deer hunts allows the refuge to better manage these hunts to benefit the overall health of the deer herd. The number of hunters participating on any given hunt can be limited and the season lengths can also be limited.

Upland Game Hunts: Hunters that participate in upland game hunting are required to obtain and carry a signed annual hunting permit included within the annual refuge hunting brochure. These permits are free of charge and available at the refuge headquarters, kiosks at entry points of the refuge, and the SNWR website (<http://www.fws.gov/refuge/Sequoyah/>). The refuge is ensuring that all hunters have read and understand all hunting regulations and also have the hunting map before they begin hunting.

**Signature: Refuge Manager** \_\_\_\_\_  
(Signature and Date)

**Concurrence: Regional Chief** \_\_\_\_\_  
(Signature and Date)

**Mandatory 10- or 15-year Re-Evaluation Date: 2030**

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