

Compatibility Determination

Title

Compatibility Determination for deer and feral hog hunting at Buffalo Lake National Wildlife Refuge.

Refuge Use Category

Hunting

Refuge Use Type

Big Game Hunting

Refuge

Buffalo Lake National Wildlife Refuge, Randall County, TX

Refuge Purposes and Establishing and Acquisition Authority

“...for use as an inviolate sanctuary...for any other management purposes...for migratory birds.”
16 U.S.C. 712d (Migratory Bird Conservation Act)

“...shall be administered by him (Secretary of 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)

“...for the development, advancement, management, conservation, and protection of fish and wildlife resources...” 16 U.S.C. 742f (a)(4)

“...for the benefit of the United States Fish and Wildlife Service in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude...” 16 U.S.C. 742f (b)(1) (Fish and Wildlife Act of 1956)

Acquired under the authority of Secretarial Order #2843, Executive Order #10787, and Bankhead-tenant Act 7 V. 5.C. 1011.

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System, otherwise known as the Refuge System, is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans (Pub. L. 105-57; 111 Stat. 1252).

Description of Use

Is this an existing use?

Yes

What is the use?

Buffalo Lake NWR proposes to open the refuge to white-tailed deer, mule deer, and feral hog hunting.

Is the use a priority public use?

Yes

Where would the use be conducted?

All areas of the refuge, except the Prairie Dog Area, Headquarters Area, and certain trails, may be opened for hunting for mule deer (*Odocoileus hemionus*), white-tailed deer (*Odocoileus virginianus*), and feral hogs (*Sus scrofa*) at the refuge manager's discretion, based on population survey data and varying environmental conditions. The refuge has three, distinct management units (North, Middle, and South) within the hunting boundary (Figure 1.).

The North Unit encompasses the area North of Campground Road to F.M. 168 and Grazing Units 11 and 12. This unit occupies 1,035 acres and consists of part of the old lake bottom, riparian areas, mixed grass prairie, and canyon breaks. Vegetation in this area includes a mixture of trees along the old lake edge, many grasses such as little blue stem, side oats grama, blue grama, buffalo, and western wheat grass. This area has canyon outcrops with rocky slopes.

The Middle Unit encompasses the area south of Campground Road to Stewart dike and Grazing Units 1, 2, and part of Unit 3. This unit is 2,966 acres and the area consists of the dry lakebed, riparian areas, and short grass prairie. Vegetation in this area includes trees along the north edge of the old lake bottom, forbs in the old lake bottom, and grasses such as little blue stem, side oats grama, blue grama, buffalo, and western wheat grass.

The South Unit encompasses the area south of Stewart dike and south of Tour Road Wind Mill in Grazing Unit 3, Grazing Units 4, 5, 6, 7, and 8. This unit is 3,063 acres and consists of wooded areas along the old lake bottom edge and Tierra Blanca Creek. Grasses such as western wheat grass, little blue stem, sideoats grama, and buffalo grass. In some areas of this unit, sage bush is present.

When would the use be conducted?

Precise dates of the hunt may vary each year but will occur between approximately October 1st and January 31st based on established TPWD archery seasons for mule deer and white-tailed deer.

Hunters will be allowed 2 days a hunt for a youth or 4 days a hunt for archery. Hunting hours will be from one-half hour before legal sunrise until one-half hour after legal sunset.

How would the use be conducted?

Mule deer, White-tailed deer, and feral hog will be allowed to be harvested on Buffalo Lake NWR by permitted hunters using state approved centerfire rifles (.243 or larger) or archery equipment. Number of hunters, species allowed to be harvested, and harvest limits will be determined

annually by refuge staff. Refuge staff will submit a permit allotment request to the Texas Parks and Wildlife Department (TPWD) each spring, dependent on habitat conditions and deer populations. Antlered or antlerless deer will be legal game to harvest, as management needs dictate. Incidental take of feral hog(s) will be allowed by permitted deer hunters at Buffalo Lake NWR. Hunters will be selected by a lottery system administered by the TPWD Public Hunting Lands Program and the hunts will take place within the dates set in Table 2.

Hunters with a disability that prevents them from accessing remote hunt areas may request a Special Use Permit (SUP) 30 days prior to their awarded hunt. Hunters with disabilities awarded a SUP, are allowed access with an all-terrain vehicle (ATV) or utility terrain vehicle (UTV). All ATVs/UTVs must remain on established roadways/trails.

Youth Rifle

Mule deer, white-tailed deer and feral hog youth rifle hunts will be held on the refuge. Hunters will be selected by lottery through the TPWD Public Hunting Lands Program. Lands entered in this program may specify hunt dates that suit purposed goals. Each hunter will be allowed to harvest up to one mule deer buck or one white-tailed deer buck, up to one mule deer doe, three white-tailed deer does, or a combination of the above species/limits using a centerfire rifle. Harvest limits and species may vary depending on population management goals. Feral hogs may be taken at any time during the youth hunt to reduce or eliminate this invasive species as they occur on the refuge.

Up to four youth rifle hunts will occur during the mule deer and/or white-tailed deer season, which is typically from October to January of each year. Each hunt will include up to three youth hunters. This will allow up to a maximum of ten youth hunters over each hunting season. A two-day Hunt Application 3-2439 NWRS Permit will be issued to youth who are drawn by TPWD. During each of the two-day hunts, the Prairie Dog Area will remain open for other recreational users. All other areas will be closed to the general public during the youth rifle hunts, including the Tour Road and any established trail (Cottonwood, Grassland, and Stewart Marsh) within the hunting units (North, Middle, South).

Archery

Mule deer, white-tailed deer and feral hog archery hunts will be held on the refuge. Hunters will be selected by lottery through the TPWD Public Hunting Lands Program. Lands entered in this program may specify hunt dates that suit purposed goals. Each hunter may be allowed to harvest up to one mule deer buck, one white-tailed deer buck, one mule deer doe, five white-tailed deer does, or a combination of the above species/limits using archery equipment. Harvest limits and species may vary depending on population management goals. Feral hogs may be taken at any time during the hunt to reduce or eliminate this invasive species as they occur on the refuge.

Up to six archery hunts will occur during the mule deer and/or white-tailed deer season, which is typically from October to January of each year. Each hunt may include up to five hunters. This will allow up to a maximum of thirty hunters over each hunting season. Each hunt will have a maximum of four days. A Hunt Application 3-2439 NWRS Permit will be issued to hunters by the refuge to allow hunting access on the refuge. During each of the four-day hunts, the Tour Road, Stewart Marsh observation blind, and Prairie Dog Area will remain open for other recreational users. All other areas will be closed during the archery hunts, including any established trail

(Cottonwood, Grassland, and Stewart Marsh) within the hunting units (North, Middle, South).

Why is this use being proposed or reevaluated?

This hunting program is designed to contribute to and be compatible with the refuge objectives. It will provide a recreational experience to youth and the opportunity to utilize a renewable resource. It will also assist in maintaining wildlife populations at proper management levels. Refuge management goals and objectives may require occasional modifications to the hunting program as wildlife populations and harvest data are analyzed, public use is modified, and other refuge programs are developed.

Availability of Resources

Table 1. Costs to Administer and Manage Deer and Feral Hog Hunting

Category and Itemization	One-time Cost	Recurring Annual Expenses
Develop Plan/NEPA document/opening package	\$9,762	--
Construct facilities	\$0	--
Develop signage and brochures	\$800	\$800
Survey and post use area boundary	\$1,000	\$750
Staff time (LE, administration and management)	\$3,759	\$7,914
Maintenance	--	\$750
Monitoring	--	\$650
Total one-time expenses	\$15,321	
Total recurring annual expenses		\$10,864
Offsetting revenues	-\$X,000	-\$X,000
Total expenses	\$X,000	\$X,000

Anticipated Impacts of the Use

Historically, Big Game hunting has been part of the culture throughout most of Texas. The refuge is also proposing to limit the number of hunters and hunting days to ensure a quality hunt. Although hunting activities may cause minor disturbances to other wildlife, the negative effects of regulated hunting will be minimized through management actions. A Section 7 Consultation under the Endangered Species Act of 1973 will be completed to ensure that no federally endangered or threatened species are at risk.

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 (deer, feral hogs) would, of course, occur. Some wounding of animals may occur as well. In all cases, the refuge would seek to provide a quality hunt experience while minimizing negative impacts to refuge resources. Foot travel associated with these hunting activities could potentially result in vegetation trampling; however, these impacts are expected to be minimal.

The activity of hunters could disturb some wildlife species. Hunters driving or walking in or adjacent to wildlife habitat and gunfire from hunting can result in behavioral responses by other resident wildlife. The permitted activity will cause minor disturbances of limited duration and the effects are likely to be minimal.

Deer:

The refuge has been doing deer surveys since 2010 and overall deer populations have been stable; however, local impacts on riparian habitat have been noted.

The data indicate that the refuge deer herd is at or below the “carrying capacity” (*simplistically defined as the number of individuals an environment can support without significant negative impacts to the given organism and its environment*) on the refuge. While the proposed limited deer hunt will only marginally impact the number of deer on the refuge, hunting is the only management tool currently available to the refuge to affect the deer population. By controlling deer populations through a hunting program, the refuge will be able to maintain healthy riparian zones for all wildlife while making a stronger, healthier deer herd due to decreased competition for habitat and food resources.

Feral Hog:

Feral hogs are invasive species that have been documented causing destruction to habitat that wildlife utilizes on both private and public lands. Their existence on the refuge would be catastrophic to the very animals the refuge is trying to protect. The refuge makes a concerted attempt to control and/or eliminate invasive species in accordance with Executive Order 13112. The feral hog is a destructive invasive species that degrades refuge habitats and adversely impacts native wildlife. Hunting is one management tool used to try to control this species. While the refuge’s hunting program may not impact the overall feral hog population, any reduction in feral hog numbers will reduce the negative impacts caused by this species.

Long-term impacts:

No detrimental long-term impacts from hunting are anticipated as long as wildlife populations are monitored through the refuge biological program or by state officials. When deer populations become over-abundant they can have profound negative impacts on their environment through herbivory thereby directly and indirectly affecting other native plants and wildlife species.

Cumulative Impacts:

No cumulative impacts are expected from the hunt program on the refuge. The hunt program will

be strenuously monitored and staff will manipulate harvest requirements on an annual basis to match the refuge needs and goals. This activity will add to the public use opportunities on the refuge and result in beneficial cumulative impacts on the human environment.

Public Review and Comment

The draft compatibility determination will be available for public review and comment for 45 days concurrent with the federal register notice for the associate hunt plan and categorical exclusion. The public will be made aware of this comment opportunity through the Federal Register and refuge website. Please let us know if you need the documents in an alternative format. Concerns expressed during the public comment period will be addressed in the final.

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

If it is not a compatible use, delete this text and the number list option and use this boilerplate text: "The use cannot be modified with stipulations sufficient to ensure compatibility."

1. Hunting rules and regulations would be enforced by U.S. Fish and Wildlife Service federal wildlife officers and Texas Parks and Wildlife Department law enforcement officers. State hunting regulations apply, but refuge regulations may be more restrictive.
2. Hunting would be conducted only in specially designated areas and during specific time periods to reduce conflicts with other wildlife-dependent recreational uses (e.g., wildlife observation, photography) and refuge operations.
3. Hunters may only use firearms, crossbows, and bows and arrows to engage in permitted hunting activities, and not for any unauthorized activities (e.g., zeroing, test firing, target practice)
4. No fires are allowed on the refuge
5. Hunters must check in and out of refuge while hunting
6. Hunters will be required to have their harvest inspected by refuge staff
7. The use or possession of alcoholic beverages while hunting on refuge lands is not permitted

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. Hunting is accepted as an important recreational use of Texas' natural resources and this opportunity on the refuge will provides a low cost, safe, and enjoyable option for the public. Through the compatibility determination process, the refuge has determined that hunting in accordance with the stipulations provided about, will not material interfere with or detract

from the fulfillment of the Refuge System mission or the purposes for which the refuge was established.

Signature of Determination

Refuge Manager Signature and Date

Signature of Concurrence

Assistant Regional Director (Acting) Signature and Date

Mandatory Reevaluation Date

Delete this text and insert year for reevaluation

Literature Cited/References

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Buffalo Lake NWR Hunt Plan

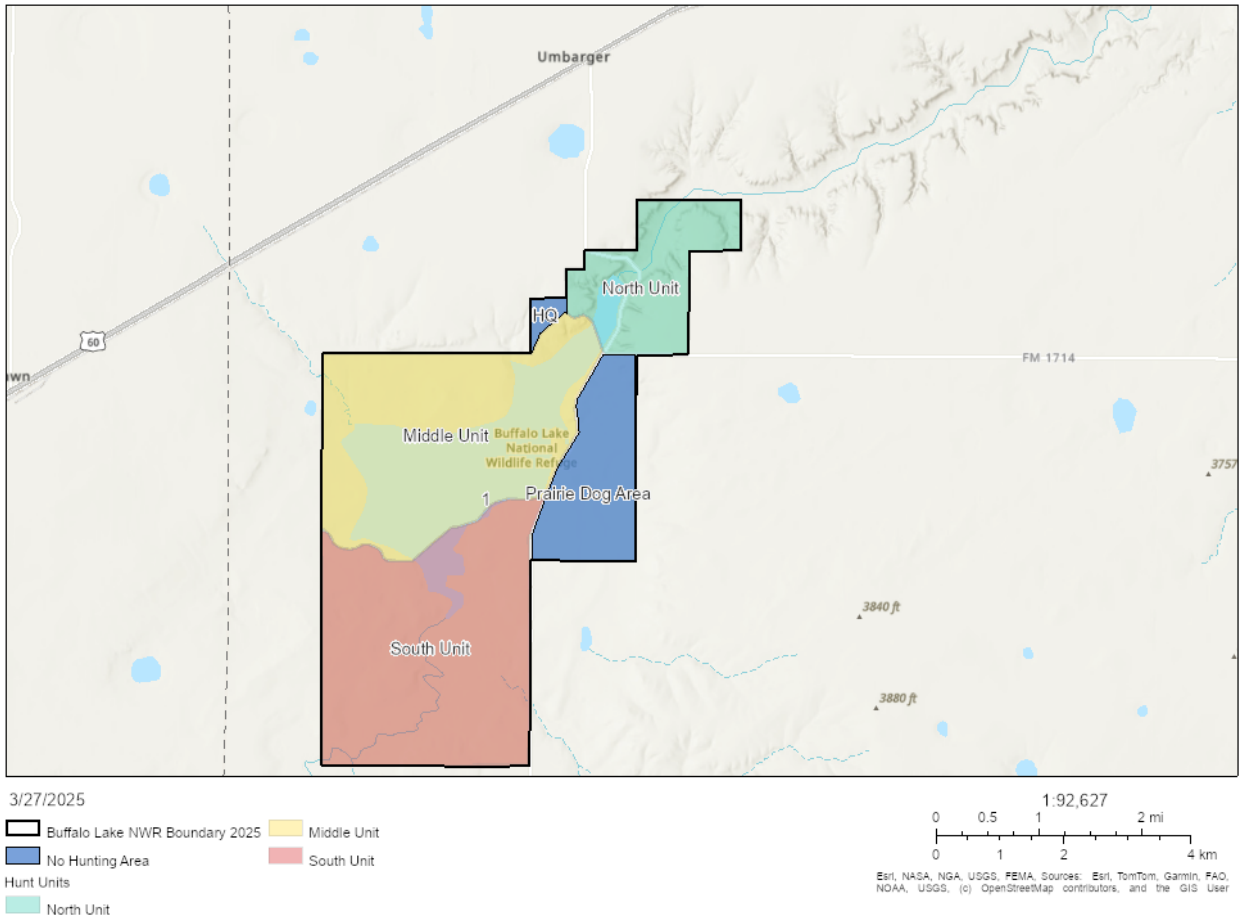


Figure 1. Huntible Units on Buffalo Lake National Wildlife Refuge.