

Compatibility Determination

Use: Wood Cutting/Timber Harvest on Refuge for Habitat Management Purposes

Refuge Name: Minnesota Valley National Wildlife Refuge

Establishing and Acquisition Authorities:

Minnesota Valley National Wildlife Refuge (refuge) was established by Public Law No. 94-466, 94th Congress on October 8, 1976. The Minnesota Valley National Wildlife Refuge Act authorized acquisition of lands for refuge purposes.

Fish and Wildlife Act of 1956 (16 U.S.C. § 742(a)(4)) and (16 U.S.C. § 742(b)(1))

Emergency Wetlands Resources Act of 1986 (16 U.S.C. § 3901(b), 100 Stat. 3583).

National Wildlife Refuge System Administration Act of 1966 as amended by the National Wildlife Refuge System Improvement Act of 1997, 16 U.S.C. 668dd-668ee (Refuge Administration Act).

Refuge Recreation Act of 1962, 16 U.S.C. 460k-460k-4 (Refuge Recreation Act).

Refuge Purposes:

The Secretary shall develop and administer ... the refuge, in accordance with the National Wildlife Refuge System Act ... The Secretary may also exercise any other authority available to him for the conservation and management of wildlife and natural resources, the development of wildlife-dependent recreational opportunities, wildlife interpretation, and environmental education, to the extent deemed by him to be appropriate ... The Secretary shall construct, administer and maintain, ... a wildlife interpretation and education center ... to promote environmental education and to provide an opportunity for the study and enjoyment of wildlife in its natural habitat.

The purposes of the refuge “are to (1) provide habitat for a large number of migratory waterfowl, fish, and other wildlife species; (2) to provide environmental education, wildlife recreational opportunities, and interpretive programs for hundreds of thousands of Twin City residents; (3) to protect important natural resource areas from degradation; and to (4) protect the valley’s unique social, educational, and environmental assets.”

National Wildlife Refuge System Mission:

The Mission of the National Wildlife 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.

Description of Use:**What is the use?**

The removal of standing or fallen trees by private individuals. This Compatibility Determination applies to all wood removal activities regardless of the ultimate use of the wood (e.g. firewood, pulp, etc.).

Where would the use be conducted?

The scope of the activity and necessary equipment will be dependent on the amount and type of wood available for removal. Impacts to the purpose the System mission are similar regardless of why the wood is removed. This activity will only occur where the Service has determined that a management need exists to remove wood from Service Land consistent with the Unit Development Plan or other document.

Wood removal may be done within former home sites, along existing windbreaks/shelter belts, and in other areas on Service Lands where trees are encroaching on the prairie. Harvest sites will vary in size from a portion of an acre up to several hundred acres depending on the site and management objectives.

When and how would the use be conducted?

Wood removal activities may be authorized throughout the year. Most often, wood removal activities will occur during the winter months when frozen ground will facilitate access and afford protection to underlying soils and vegetation. Wood cutting will not be allowed during periods when the activity will cause damage to roads, grassland and wetland habitat or disturb trust species (including Federally listed bat species and nesting migratory birds during the primary nesting season.)

Equipment used for harvest and site clean-up may range from chainsaws and axes, to traditional logging equipment such as feller-bunchers, skidders or payloaders with tree shears or rotary cutters, log skidders, and intensive hydro-ax (grinding-pulverizing) as well as dozers and excavators. Access may be by car and trailer, pick-up truck, farm tractor, semi-tractor, or larger traditional logging equipment. Differences in scope and necessary equipment will occur depending on the amount and type of wood available for removal.

Why is this use being proposed?

This activity will only occur where the Service has determined that a management need exist to remove wood. Wood removal may be completed where trees are encroaching on the open marshes, grassland areas, native prairie, oak savannahs or where tree growth is degrading integrity of earthen water impoundment structures or other mission critical infrastructure.

Harvest of wood products may be permitted on Refuge Units and WPAs to stop, reduce, or reverse the encroachment and presence of trees on prairie habitats. The Tallgrass Prairie habitat is arguably the most endangered of all North American ecosystems, with less than 1% of the historic habitat remaining. Encroachment of woody vegetation due to fire suppression, absence of landscape-scale grazing, and tree planting practices continue to threaten this habitat type. Waterfowl Production Areas are established to produce waterfowl, and managing woody vegetation to enhance prairie habitat generally facilitates that purpose. Refuge Units are established to protect and restore the native plant and animal communities. In accordance with the System mission, restoration of the tallgrass prairie habitat is appropriate over most of the acreage in the Refuge and the Wetland District. Managing woody vegetation is an important means to that end.

Is the use a priority public use?

Wood cutting is not a priority public use, as defined by the Refuge Improvement Act of 1997, of the National Wildlife Refuge System, but is necessary to meet wildlife habitat goals.

Availability of Resources:**What resources are needed to properly (considering quality and compatibility) and safely administer use?**

Planning, issuing permits or contracts, and monitoring a wood product harvest program would require a minimal commitment of staff hours. Much of this work is discussed as management decisions are made during work planning efforts. All harvest sites are mapped by Service staff and detailed permit conditions are added to the SUP for each site in order to protect the local identified resources. In undertaking a wood products harvest project, the Project Leader has identified a management need and will have secured and prioritized the necessary station resources to implement the use.

Are existing refuge resources adequate to properly and safely administer the use?

No additional fiscal resources are needed to conduct this use. The necessary staff time is already committed and available. Most of the work to prepare for this use is currently part of routine management duties. The decision to allow firewood cutting or a contractor to remove wood will

be determined during the management strategy selection process with the goal of maintaining/enhancing habitat for trust species. The additional staff time needed to coordinate issuance and oversight of a Special Use Permit or Purchase Order is within Service resources. Monitoring timber removal effects will be added to existing grassland monitoring programs.

Anticipated Impacts of the Use:

How does firewood cutting and timber removal affect the National Wildlife Refuge System mission?

In permitting this type of activity, the potential exists to directly impact wildlife by displacement of birds from localized areas due to disturbance, or crushing of nests as a result of access for this activity. These impacts can be minimized by adjusting seasonal timing of the activity in accordance with site specific characteristics. In limited and rare instances, a small number of individuals of tree-nesting species (e.g. wood duck, hooded merganser, etc.) may be displaced from a local area when trees used for nesting are removed.

Indirect impacts to waterfowl production and Refuge goals will occur as a result of removing woody vegetation. In nearly every instance, these impacts will be positive. The removal of woody vegetation from historic prairie habitats impacts waterfowl production and the System mission by facilitating the restoration of tallgrass prairie (i.e. more habitat to nest), reducing habitat fragmentation and removing avian predator perch sites artificially created predator habitat from within Service Lands.

Access for the purpose of removing wood may impact habitat by rutting soils, destroying ground cover, creating weed seed beds, and increasing sedimentation due to runoff in nearby wetlands. These impacts can again be minimized by adjusting seasonal schedule for the permitted activity. Other short term impacts include the creation of mammalian predator den sites when trees are piled instead of moved off the site. Species such as raccoon and skunk often inhabit these wood piles and are primary predators for ground nesting birds. The piles are removed, often through prescribed burning after several years of curing.

Anticipated long-term impacts include the reduction of woody species in Service grasslands which benefits grassland dependent nesting wildlife.

Impacts to the habitat from accessing Service Lands for wood removal purposes are potentially significant, but also easily avoidable. Areas where woody species are removed for the purpose of conversion of the habitat type to prairie will likely receive follow-up treatments of burning, spraying, or farming and eventual restoration through seeding. Ground disturbance in these areas is less problematic and possibly desirable depending on the specific site. Access to and from these areas will need to be carefully controlled via SUP to avoid impacts such as rutting

and increased sedimentation into adjacent lands due to run-off. When existing roads are not present, access can be restricted to seasonal period when the ground is frozen to avoid or minimize impacts to underlying vegetation and soils.

Other indirect impacts are generally considered positive and thus do not materially interfere with or detract from the purpose of waterfowl production or the System mission. The removal of trees along trails, in shelter belts, and within old home sites will benefit waterfowl production by assisting with the restoration of prairie habitat, reducing fragmentation and eliminating predator habitat and perch sites. Individuals participating in the wood harvest program will adhere to conditions stipulated in a SUP to ensure resource protection and achievement of management goals. Control of woody species encroachment on prairie habitats is a necessary management activity for the District in converting areas back to their historical grassland condition and directly supports the mission of the National Wildlife Refuge System.

Public Review and Comment:

This compatibility determination is part of the 10-year review for Compatibility Determinations of the Minnesota Valley National Wildlife Refuge and Wetland Management District Comprehensive Conservation Plan. Public notification and review will include a comment period from September 26, 2016 to October 10, 2016.

Comments received and agency responses will be included in the final version of this Compatibility Determination.

Determination:

Use is Not Compatible

Use is Compatible with following stipulations

Stipulations Necessary to Ensure Compatibility:

1. Work will generally be restricted to areas where soil types indicate that pre-settlement habitat was comprised of native prairie vegetation, associated habitats, or in existing non-native woodlots associated with abandoned farm sites.
2. If work is in an area where waterfowl or other wildlife is nesting, no cutting operations will be permitted from May 15 through July 15.
3. Vehicle access for wood removal will be limited to existing trails or restricted to seasonal periods when the ground is frozen or dry to limit rutting and damage to growing vegetation.
4. A Special Use Permit will be issued to private individuals so stipulations can be established to

- reduce or eliminate site specific impacts and ensure Service management goals are met.
5. Purchase Order/Task Orders will be issued to commercial operations to ensure site specific impacts and Service management goals are met.
 6. A cultural resources review may be required to be compliant with the National Historic Preservation Act and/or Archaeological Resources Protection Act.

Justification:

Direct impacts on wildlife production (take, disturbance, etc.) can be largely avoided by timing the activity so that it does not coincide with the breeding/production season. Removal of trees in certain instances will, on occasion, eliminate wood duck, hooded merganser, or other cavity-nesting species habitat. This would be an irregular and occasional impact and, since most wood harvest will be associated with restoration sites, it is unlikely that these areas would have provided historic nesting sites. Due to the benefits that would be realized by other waterfowl species, and the abundance of artificial and natural nest sites for cavity-nesting species in the area, these impacts would not significantly detract from the Service purpose or System mission.

Signature: Project Leader: _____
(Signature and Date)

Concurrence: Regional Chief: _____
(Signature and Date)

Mandatory 10-year Re-evaluation Date: _____2026_____