

Compatibility Determination

Use: Wood Cutting and Timber Removal

Refuge Name: Big Stone Wetland Management District (WMD)

Establishing and Acquisition Authorities:

Waterfowl Production Areas (WPAs)- The Migratory Bird Hunting and Conservation Stamp Act, March 16, 1934, (16 U.S.C. Sec. 718-718h, 48 Stat. 452) as amended August 1, 1958, (P.L. 85-585; 72 Stat. 486) for acquisition of “Waterfowl Production Areas”; the Wetlands Loan Act, October 4, 1961, as amended (16 U.S.C. 715k-3 - 715k-5, Stat. 813), funds appropriated under the Wetlands Loan Act are merged with duck stamp receipts in the fund and appropriated to the Secretary for the acquisition of migratory bird refuges under provisions of the Migratory Bird Conservation Act, February 18, 1929, (16 U.S.C. Sec. 715, 715d - 715r), as amended.

FmHA fee title transfer properties - Consolidated Farm and Rural Development Act 7 U.S.C. § 2002.

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).

Refuge Purposes:

Waterfowl Production Areas (WPAs) - “....as Waterfowl Production Areas” subject to “....all of the provisions of such Act [Migratory Bird Conservation Act]....except the inviolate sanctuary provisions....” and “...for any other management purpose, for migratory birds.”

FmHA fee title transfer properties - “....for conservation purposes....”

National Wildlife Refuge System (NWRS) Mission:

The Mission of the NWRS 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:

The removal of standing or fallen trees by private individuals or by paid contractors for the purpose of habitat management. This compatibility determination covers all wood removal activities regardless of the ultimate use of the wood (e.g., firewood, pulp, biomass, etc.).

Is the use a proposed new use or an existing use?

Wood cutting and tree removal are existing uses on WPAs.

Is the use a priority public use?

Wood cutting and timber removal (e.g., firewood, pulp, biomass, etc.) are not priority public uses of the NWRS.

Where would the use be conducted?

The scope of the activity will be determined by the management objective for the area and by the quantity and quality of available wood. This activity will only occur where the U.S. Fish and Wildlife Service (Service) has determined that a management need exists to remove wood from WPAs consistent with habitat goals and objectives. Harvest sites will vary in size from less than an acre to several hundred acres, depending on the site and management objectives.

When would the use be conducted?

Wood removal activities may be authorized throughout most of the year. Most often, wood removal activities will occur September through December, while commercial harvest activities occur during the winter months when frozen ground will facilitate access and afford protection to underlying soils and vegetation from compression and matting from vehicle tires. Wood cutting will not be allowed during periods when the activity will cause damage to roads, grassland and/or wetland habitat, or disturb nesting birds during their primary nesting season.

How would the use be conducted?

Equipment used for harvest and site clean-up may range from chainsaws and axes to more traditional logging equipment such as feller-bunchers, skidsteers 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?

The harvest of wood products may be permitted on 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. WPAs are established to produce waterfowl and provide habitat for a variety of wetland and grassland dependent migratory birds. Actively managing woody vegetation to enhance prairie habitat generally facilitates that purpose. In accordance with the NWRS mission, the restoration, enhancement, and maintenance of tallgrass prairie habitat through woody vegetation control is appropriate over most of the acreage in the Big Stone WMD.

Availability of Resources:**What resources are needed to properly 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 WMD staff and detailed permit conditions are added to the Special Use Permit (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 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 SUP or Purchase Order is within existing WMD 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 WMD purposes and the NWRS mission?

The use of firewood cutting and timber harvest is a management tool that allows WMD staff to meet habitat goals and objectives. Service policy calls for maintaining or restoring refuge habitats to historic conditions if doing so does not conflict with refuge purposes (U. S. Fish and Wildlife Service 2001).

How does firewood cutting and timber removal affect fish, wildlife, plants, and their habitats; and the biological integrity, diversity, and environmental health of the WMD?

In permitting this type of activity, the potential exists to directly impact waterfowl production by displacement of birds from localized areas due to disturbance, or crushing of nests as a result of vehicle movement for this activity. These impacts can be minimized by adjusting seasonal timing of the permitted 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 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 positively impacts waterfowl production and the NWRS mission by facilitating the restoration of tallgrass prairie (i.e. more habitat to nest), reducing habitat fragmentation and removing avian predator perch sites from within WMD grassland habitats.

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 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 WMD grasslands which benefits grassland dependent nesting wildlife.

Impacts to the habitat from accessing WPAs for wood removal purposes are potentially significant, but also easily avoided. 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 wetlands due to run-off. When existing roads are not present, access can be restricted to seasonal periods 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 NWRS 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 WMD in converting areas back to their historical grassland condition and directly supports the mission of the NWRS.

Public Review and Comment:

This compatibility determination is part of the 10-year review for Compatibility Determinations in the Big Stone WMD Comprehensive Conservation Plan. Public notification and review will include a comment period from 13 February through 7 March, 2014. Comments received and agency responses will be included in the final version of this Compatibility Determination.

Determination:

Wood cutting and timber removal

Use is Not Compatible

Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility:

1. Work will generally be restricted to areas where soil types indicate that habitat was historically 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 nesting is likely, no cutting operations will be permitted from April 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 SUP 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 Orders/Task Orders will be issued to commercial operations to ensure site specific impacts and Service management goals are met.

Justification:

Direct impacts on waterfowl production (take, disturbance, etc.) can be largely avoided by timing the activity so that it does not coincide with the waterfowl 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 WMDs purpose or NWRS mission.

This use contributes to the achievement of WMD purposes. Removal of woody vegetation that is encroaching into historic prairie habitat is an ongoing management concern for the WMD. Private citizens can be a valuable partner in removing and controlling woody vegetation in localized areas to benefit migratory bird habitat.

Signature: Project Leader _____
(Signature and Date)

Concurrence: Regional Chief _____
(Signature and Date)

Mandatory 10- or 15-year Re-Evaluation Date: 2024