Compatibility Determination

Use: Prescribed Grazing for Habitat Management

District Name: Litchfield Wetland Management District

Establishing and Acquisition Authorities:
Waterfowl Production Areas - 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).

District Purposes:
Waterfowl Production Areas - "...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 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:
The Litchfield Wetland Management District (District) will permit prescribed grazing by domestic livestock, chiefly cattle but potentially including other domestic livestock, on District land to improve grassland vigor and health. The use of grazing as a management tool must include a habitat management purpose.

Is the use a priority public use?
Grazing is not a priority public use as identified in the Refuge Improvement Act.

Where would the use be conducted?
The decision to use grazing as a management tool on Waterfowl Productions Areas and easements within the Wetland Management District will occur as part of strategies developed under specific program or unit habitat management planning.

When would the use be conducted?
Grazing may take place any time from April through November. Most commonly, we will use short duration grazing pulses lasting four to eight weeks and then require livestock removal. We will use three typical seasons of use. One season will be early spring (mid April to early June) on native prairie or seeded native grasses designed to reduce the vigor of exotic species and increase the vigor of native species. Summer grazing (July 15 - September 1) may be used to stimulate the grassland after the peak nesting season yet allow vegetative regrowth in the fall. Fall grazing (September 1 - October 31) will be designed to have effects similar to spring grazing, mostly on native prairie remnants or fields seeded with native tallgrass prairie species.

How would the use be conducted?
The District will allow grazing by private individuals for the purpose of habitat management. Permittee selection and associated determination of cost will follow relevant Refuge Manual guidance (5 RM 17 and 6 RM9.11) and Region 3 specific guidance for haying and grazing.

Prescribed grazing is recognized as a valuable tool to stimulate forbs, suppress non-native grasses, remove standing vegetation, reduce vegetative litter, and suppress woody vegetation. The timing and duration of a grazing prescription will depend on the grassland type and condition. In native prairie, we commonly use a grazing technique called spring flash grazing, where the unit is grazed at a relatively high stocking rate for a short duration (4-6 weeks). Spring grazing is useful in a grassland system where the goal is to reduce invasive cool season grasses and promote warm season plants. It has a similar effect as a spring prescribed fire, helping to reduce cool season grasses (especially smooth brome) while promoting native warm season plants. Typically, a grazing plan will include a flash graze in two consecutive springs which may be followed by another flash graze in the fall after the warm-season native grasses are less palatable.

In low-diversity, seeded grasslands that are dominated by either warm season or cool season grasses, a summer graze may be used. In these situations the intent of the graze is to stimulate the grass stand and reduce litter build-up, rather than to reduce the cover of target species. The duration and intensity would be fairly similar to that of a spring graze (high stocking rate, 4-6 weeks).

Grazing with domestic cattle is most common; however we can also use other livestock such as sheep and goats depending on the goals of the graze. It is important to understand which plant species are preferred by the livestock being used. For example, cattle will favor herbaceous species over woody vegetation, so you cannot expect to eliminate a woody invasion issue with cattle. However, goats will eat woody vegetation, making them an excellent option for shrub control.

Grazing activities will be subject to the terms and conditions of a Special Use Permit issued by the Project Leader. The terms of the Permit will ensure compatibility through implementation of Service policy and District specific stipulations.

Frequency of grazing on any unit will be based on site-specific evaluation of the grassland unit being managed. Historically, units have often been grazed for two consecutive years followed by a period (2 – 5 years) of no grazing before grazing is resumed.

Why is this use being proposed?
Grazing is used as a management tool to maintain and restore refuge grasslands and wetland habitats. Some alternative grassland management is required if grazing is not used as the tool for grassland management. Typically, these other tools include prescribed burning, mowing, and haying. Haying has comparable costs to controlled grazing since it also requires administering special use permits. Mowing is more expensive since all costs are the responsibility of the agency. Prescribed burning is an effective grassland management tool but staff limitations lead to fewer acres treated than desired.

Availability of Resources:

What resources are needed to properly (considering quality and compatibility) and safely administer use?
Most of the needed work to prepare for this use would be done as part of routine management duties. The decision to use grazing as a management tool would occur as part of strategies developed under specific program or unit habitat management planning. The additional time needed to coordinate issuance and oversight of the needed Special Use Permits is relatively minor and within existing District resources. The need to monitor grazing effects will take additional time. However, staff time for monitoring will be incorporated into the already existing grassland monitoring program. Many partners are available to assist with grazing plan development, such as local USDA Natural Resource Conservation Service grazing specialists.

Are existing refuge resources adequate to properly and safely administer the use?
Additional fiscal resources are needed in order to install much of the needed infrastructure to implement this use. Many times the cooperator is willing to commit labor to the project thus materials for fencing are typically the greatest expense. Grants and partner funds can also assist with this need. The needed staff time is already committed and available. Most of the work to prepare for this use would be done as part of routine grassland management activities. The decision to use a private operator for grazing would be one option discussed during grassland management strategy sessions. The additional time needed to coordinate issuance and oversight of the needed Special Use Permit for grazing is relatively minor and within existing refuge resources. Monitoring grazing effects will be a part of the existing grassland monitoring program.

Anticipated Impacts of the Use:

How does grazing affect Refuge purposes and the NWRS mission?
The use of grazing provides a management tool that allows the refuge staff to meet habitat goals and objectives stated in the District Habitat Management Plan. U.S. Fish and Wildlife

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 grazing affect Fish, wildlife, plants, and their habitats; and the biological integrity, diversity, and environmental health of the refuge?

Grazing by domestic livestock has severe short-term effects on grassland communities. Many of these effects are desirable and are designed to maintain and improve healthy grassland/wet meadow communities. Some of these effects include removing standing vegetation, trampling of other vegetation, and reducing populations of pioneering woody plants. Other effects, such as areas where livestock may frequently concentrate, are more harmful but generally short-lived. Grazing in the spring can cause direct loss of grassland bird nests due to trampling and loss of standing vegetation. Grazing at any time of year creates an aesthetic issue of concern for some people who enjoy using the Refuge; seeing public land being grazed by domestic livestock reduces the appeal of the visit for many people. Short term benefits may include creating open water pockets for spring migrating waterfowl and shorebirds; setting back invasive emergent wetland vegetation, and creating short grass patches within a prairie landscape for bird species that prefer the structural diversity in the landscape.

Some nest destruction may occur. Wetland Management Districts are managed first and foremost for wildlife (USFWS 2001). But the focus is on wildlife populations not individuals (USFWS 1992). Grazing is likely to cause mortality of some individual animals, but it is not expected to affect the perpetuation of wildlife populations.

Long-term benefits will accrue due to the increased vigor through stimulation of grasses or the establishment of highly desirable native tallgrass prairie species, which will improve conditions for those same species affected by the short-term negative impacts. Prescribed grazing is recognized as a valuable tool to stimulate forbs, suppress non-native grasses, remove standing vegetation, reduce vegetative litter, and suppress woody vegetation. These are all important grassland management objectives that can be met by utilizing grazing as a habitat management tool.

Grazing livestock can create minor direct disturbance of wildlife, such as causing nearby birds to take flight. There is a slight potential for conflict between members of the public and livestock or the permittee.

Public Review and Comment:

This compatibility determination is part of the 10-year review for Compatibility Determinations in the Minnesota Wetland Management Districts' Comprehensive Conservation Plan. Public notification and review will include a comment period from May 29, 2014 through June 12, 2014. Comments received and agency responses will be included in the final version of this Compatibility Determination.

Determination:

Grazing

____ Use is Not Compatible

__x__ Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility:

1. Grazing must meet specific habitat and related wildlife objectives and contribute to the purposes of the Refuge.

2. Grazing will not occur more frequently than three out of every five years on any tract without the preparation of a site-specific compatibility determination.

3. Control and maintenance of the livestock will be the responsibility of the permittee.

4. All livestock grazing will be conducted under strict control of a Special Use Permit.

5. Fencing, water supply, and other livestock management infrastructure needs and costs will be outlined on a site by site basis in the SUP.

6. No insecticides will be used on livestock while they are on Refuge lands with the exception of ear tags.

7. No supplemental feeding will be allowed.

Justification:
Prescribed grazing by domestic livestock will not materially interfere with or detract from the purposes for which the units were established. Limited livestock grazing creates temporary disturbances to vegetation. Many of these disturbances are desirable for grassland management. Grazing produces an undesirable but short-term impact to grassland bird nesting and site aesthetics. Controlled grazing is an alternative management tool that can be used to replace or compliment prescribed burning, mowing, or haying on grasslands. Without occasional disturbance caused by mowing, haying, burning, or grazing, the health of the grassland community would decline, as would the areas' potential for waterfowl production.

Signature: Project Leader _____
(Signature and Date)

Concurrence: Regional Chief _____
(Signature and Date)

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