

Compatibility Determination

Use: Cooperative farming as a habitat management tool to enhance and restore refuge grasslands

District Name: Minnesota Valley 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:

Cooperative farming is the term used for cropping activities done by a third party on land which is owned or controlled by the U.S. Fish and Wildlife Service (Service) through a restrictive easement. This type of activity is usually done on a short term basis (five years or less) to prepare an optimum seed bed for the establishment of native prairie species.

The cropping is done under the terms and conditions of a Special Use Permit issued by the Project Leader. The terms of the Permit insure that all current Service and District guidelines and restrictions are followed. 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 farming.

Cooperative farming activities are only compatible on previously disturbed areas which have unacceptable levels of chemical residue, noxious weeds, or non-native plant species or ecotypes or to honor the land use clauses of a purchase agreement. To ensure that all Service policies are met,

all such land use clauses must be approved by the Wetland District Manager prior to Service acceptance of the purchase agreement.

Waterfowl Production Areas in Minnesota average less than 200 acres in size and are intermingled with private and other public lands. Although the specific acreage of fields to be cooperatively farmed will vary by unit they will typically range from a few acres to a couple hundred acres.

Contracts are typically written for 3-5 years. In many cases the Service acquires new land that is currently being cropped. The cropland needs to be restored to native habitat once the land is purchased. When converting poor quality habitat to better quality habitat, the cooperator breaks up the ground the first year and then farms it for the remaining 2-4 years. The last year of the agreement in both cases requires the cooperator to seed the field to soybeans. Soybean stubble is the preferred substrate for the District to seed native grasses and forbs into the soil.

Farming entails the use of mechanical equipment such as tractors, disks, and seeders. Each site is tilled prior to spring planting. Tilling requires 1-2 days per site. Some sites may also be treated with herbicide prior to planting. Crops such as corn and soybeans are planted. Typically, planting is completed in one day or less on any individual site and planting on all sites usually begins as early as mid-April and is completed as late as early June depending on soil conditions and type of crop planted. Cooperators are limited to using only FWS approved herbicides. The use of Genetically Modified Crops (GMO crops), specifically Glyphosate-tolerant corn and soybeans, will be authorized on refuge lands consistent with current Regional Policy. The use of genetically-modified, glyphosate-tolerant corn and soybeans will be used only for the purpose of habitat restoration.

The use of neonicotinoid treated seeds will be eliminated from farming programs within Region 3 of the Service by calendar year 2016. During the transition years of 2014 and 2015 the Project Leader will need to provide justification and have an approved Pesticide Use Proposal before allowing the planting of neonicotinoid treated seeds on District lands under their management. The Project Leader will exhaust all alternatives before allowing the use of neonicotinoid treated seeds on District lands in 2014 and 2015.

Harvest techniques are the same for both no-till and traditional farming practices. Harvest begins in the fall, using a self-propelled harvesting implement such as a combine, and usually takes about one day per site and is complete on all sites by late October.

Availability of Resources:

The needed staff time for development and administration of cooperative farming programs is already committed and available. Most of the needed work to prepare for this use would be done as part of routine grassland management duties. The decision to use a cooperative farmer would occur as part of strategies developed under grassland development and management discussions. The additional time needed to coordinate issuance and oversight of the needed Special Use Permit is relatively minor and within existing District resources.

The cooperative farming of Service land will in most cases generate income for the Service. In accordance with Service policy, some of the farming income may be reduced to achieve the ultimate purpose of the agreement (grassland cover) by having the cooperator purchase seed or apply herbicide for the grassland restoration as the final step of the farming agreement. All farming income received will be submitted for deposit in the Refuge Revenue Sharing Account and is not

available at the Refuge level to offset station costs incurred in administration of this use. All Service employees involved in the administration of the program must however be sensitive to the primary purpose of cooperative farming; providing an optimum seed bed for native prairie plant species. The Service should receive a fair market value from cooperative farmers, but generation of income is a secondary consideration when developing the terms and conditions of a cooperative farming agreement.

To lessen any appearance of favoritism or impropriety District Managers should document how cooperators were selected and how rental rates were derived (see Refuge Manual).

Anticipated Impacts of the Use:

How does farming affect Refuge purposes and the NWRS mission?

The use of farming provides Refuge staff with a management tool that allows the refuge staff to meet the 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 farming affect fish, wildlife, plants, and their habitats; and the biological integrity, diversity, and environmental health of the refuge/NWRS?

Cooperative farming to prepare suitable seed beds for native prairie plantings will result in short-term disturbances and long-term benefits to both resident and migratory wildlife using Waterfowl Production Areas and Service managed upland easements. Short-term impacts will include disturbance and displacement typical of any noisy heavy equipment operation. Cropping activities in old fields or abandoned croplands will also result in short-term loss of habitat for any animal or insect species using those areas for nesting, feeding, or perching. Long-term benefits are extremely positive due to establishment of diverse nesting cover including native tallgrass species. The resulting habitat will greatly improve conditions for most of the same species affected by the short-term negative impacts. Strict time constraints placed on this use will limit anticipated impacts to these relatively minor areas.

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 30 April 2014 through 14 May 2014. Comments received and agency responses will be included in the final version of this Compatibility Determination.

Determination: Cooperative farming for habitat management / restoration

Use is Not Compatible

Use is Compatible With Following Stipulations

Stipulations Necessary to Ensure Compatibility:

1. Cooperative farming agreements will be limited to five years or less.
2. Farming activity will only take place on previously altered tracts of land within the refuge and must meet specific habitat and related wildlife objectives and contribute to the purposes of the Refuge.

3. Cooperating farmers will be subject to Service policy and regulation regarding use of chemicals. Herbicide and pesticide use is restricted by type and to the minimum necessary amount applied.
4. Special conditions of Special Use Permits will address unique local conditions as applicable.
5. Planting and harvest activities are restricted to minimize disturbance of wildlife species.
6. The use of GMO crops is limited to Glyphosate-tolerant corn and soybeans.
7. The use of genetically-modified, glyphosate-tolerant corn and soybeans will be used only for the purpose of habitat restoration.
8. The use of neonicotinoid treated seeds will be eliminated from farming programs within Region 3 of the Service by calendar year 2016

Justification:

Farming, both conventional and with the use of Glyphosate-tolerant corn and soybeans, contributes to the achievement of the District's purposes and the National Wildlife Refuge System mission because it helps enhance and restore grassland habitat for migratory birds and resident wildlife. The cooperative farming of previously disturbed areas which are owned or under easement by the Service and have unacceptable levels of chemical residue, noxious weeds, or non-native plant species or ecotypes or are being farmed to honor the land use clauses of a purchase agreement to prepare an optimum seed bed for the establishment of native prairie species, will not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purposes of Waterfowl Production Areas or FmHA transfer lands for the following reasons:

1) Only areas that have already been significantly manipulated or altered by cropping activities will be affected. These areas contain few if any native plants and offer extremely limited value to the ecological integrity of the unit or landscape.

2) Cooperative farming activities in most cases, provide the fastest, most cost effective way to establish native prairie species on areas that have unacceptable levels of chemical residue, noxious weeds, or non-native plant species or ecotypes. District staff could complete all work, but for most districts that would require additional equipment and/or staff to efficiently break up non-native brome sod, or to cultivate and control weeds on small, widely scattered tracts of land. Hiring contractors to do this work at rates which can approach \$100/acre is a possibility, but would require additional funds in years when the farming acres were high. By using local farmers to conduct these farming activities, district budgets and staff time can be better allocated to completing the needed restoration (seeding of native grasses and forbs) on lands which have completed the farming cycle and are in good condition for seeding.

3) Short term impacts of farming small tracts of land are minor. No wildlife or habitat losses occur when land purchased in row crop is farmed for an additional period of 2-5 years. Low quality grassland which is farmed as a first step to conversion to higher-value native grasslands will result in habitat loss for trust resources during the farming period. The long term benefits to the ecological integrity of the district and landscape by restoring these degraded or row cropped areas to native prairie plant species are significant and exceed the short term losses incurred through the cropping process.

Signature: Project Leader _____
(Signature and Date)

Concurrence: Regional Chief _____
(Signature and Date)

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