

DRAFT COMPATIBILITY DETERMINATION

USE:

Agriculture – Cooperative Farming Activities

REFUGE NAME:

Las Vegas National Wildlife Refuge

ESTABLISHING AND ACQUISITION AUTHORITY:

The 8,672 acre Las Vegas National Wildlife Refuge, located in San Miguel County, New Mexico, was approved for acquisition on August 24, 1965, by the Migratory Bird Conservation Commission. The first tract of land was purchased in 1966.

REFUGE PURPOSE(S):

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

NATIONAL WILDLIFE REFUGE SYSTEM MISSION:

The mission of the 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.” (National Wildlife Refuge System Administration Act of 1966, as amended [16 U.S.C. 668dd-668ee])

DESCRIPTION OF USE:

(a) What is the use?

Cooperative farming is an economic use that is periodically utilized to manage a portion of the Refuge’s croplands. To provide food and habitat for wildlife, approximately 760 acres of croplands on the Las Vegas National Wildlife Refuge are farmed in winter wheat, peas, corn, barley, rye, pasture mix (native & tame grasses), and alfalfa/smooth brome. Approximately 120 acres are planted to an irrigated grass/alfalfa mix.

(b) Where is the use conducted?

Although the ratio varies somewhat from year to year, cooperative farmers could potentially farm approximately 25% of the total acreage of land farmed on the refuge. The number of acres farmed in any given year is dependent on water availability. In years when water is limited, the Refuge may need to modify or suspend cooperative farming agreements.

(c) When is the use conducted?

The planting, growing, and harvesting season is from April 1 to October 31. Warm season rotations include pasture mix (native & tame grasses), corn, barley, peas and spring wheat. Cool season crops are winter wheat, rye, and winter peas.

(d) How is the use conducted?

The Refuge administers the cooperative farming program through issuance of Annual Cooperative Farming Agreements and/or Cooperative Land Management Agreements (CLMAs) between cooperators and the Refuge. Crops include corn, spring wheat, barley, winter wheat, winter rye, winter peas, spring peas, and pasture mixes. No genetically modified crops are grown on the Refuge. Green browse and/or cereal grains are grown and mowed to be made available to wintering waterfowl and cranes from October through February. Other migratory birds and resident wildlife also utilize these areas for food and cover.

Crops require between 12 to 24 inches of water obtained through irrigation. The circle pivot irrigation system is the primary source of water for croplands. This irrigation system eliminates the need to land level for consistent pitch and slope to ensure complete ground coverage. The Refuge practices low input sustained agriculture which involves a 3 to 4 crop rotation for soil enrichment. Mechanical and biological methods of weed removed are implemented. A sweep plow cuts weeds 3 to 4 inches below the surface without disturbing the soil holding thatch on the surface. Weeds are typically turned under three times prior to the growing season. Where possible, crops are drilled through the remnants of last year's planting, avoiding the need to disk and cultivate.

The Refuge employs Integrated Pest Management practices to control invasive plant species. Fish & Wildlife personnel use some chemical herbicides to control invasive plant species, but chemical application is limited to prevent harm to non-target plants, water quality, or wildlife using refuge-farmed land. A variety of cultivation practices such as using a sweep plow to sever weed roots below the surface and plant new crops through the existing stubble of the previous season, crop rotation, and pasture mix are used when possible to control invasive plant species with reduced chemical applications. All chemical use must be approved through the Pesticide Use Proposal process. Service policy requires that only minimal amounts of chemicals be used on refuge lands.

(e) Why is this use being proposed?

Las Vegas NWR in Northeastern New Mexico lies within an area that is recognized as a key section of the Central Flyway. The Refuge was established to aid in the restoration of this section of New Mexico as an important waterfowl and crane migration area. The value of the Las Vegas area to waterfowl had diminished prior to the acquisition and development of the Refuge because of changes in agricultural practices in the community. The Refuge's farming program goes hand in hand with

the reason for the establishment of the Refuge. Also, the Refuge farming program goals include incorporation of crop rotation, using farming practices to reduce wind erosion, providing grain crops and green browse for wildlife, building soil fertility, and using irrigation water to improve yields and fill impoundments. Refuge farming produces timely and healthy crops to feed overwintering waterfowl and cranes. Specifically, agricultural practices on the Refuge provide food for migrating mallard, pintails, Canada geese, light geese, and sandhill cranes.

Agricultural practices are planned and implemented to produce over 1 million pounds of grain and over 10,000 pounds of browse to meet the forage requirements of geese, ducks, and cranes for approximately a 5 month period (a total of 6 million use days).

AVAILABILITY OF RESOURCES:

Adequate funding and staff are available to manage the cooperative farming program. Cultivation and planting typically requires in excess of 1280 staff hours, and equipment maintenance requires an additional 240 hours. Fuel, equipment repairs, seed, fertilizer, water assessments and herbicide application costs usually exceed \$ 40,000 per year. Administering Annual Cooperative Farming Agreements and/or Cooperative Land Management Agreements (CLMAs) requires 120 staff hours each year.

ANTICIPATED IMPACTS OF THE USE:

Short and Long-term Impacts:

Farming and agricultural activities on the refuge are directly related to and support the purposes for which the refuge was established. Cooperative farming will result in short-term disturbances and long-term benefits to both resident and migratory wildlife using the Refuge. Short-term impacts will include disturbance and displacement of wildlife that is typical of any heavy equipment operation. Positive long-term benefits result in providing food/habitat for migratory and resident wildlife and minimizing crop depredation on neighboring farms. The crops grown on the refuge provide food for a peak population of 4000 Canada geese, 4000 light geese, 1500 mallards, 500 pintails, and 1000 sandhill cranes. Planting cover crops and utilizing crop residue management minimizes soil erosion of the fields. Chemical use is planned to prevent or limit acute or chronic adverse effects to wildlife and is conducted only in regards to invasive plant species management. While some disturbance to ground nesting birds may result from the harvesting operations, the timing of harvests will be modified to minimize the impact to occupied nests.

Cumulative Impacts:

Farming only occurs on lands that have been previously farmed. The impacts described above are minimal and short-term. The proposed action is not expected to incrementally add to any other state, private, or federal actions that are proposed or

currently occurring in the area. The proposal benefits numerous wildlife species and supports hunting, wildlife observation, wildlife photography, environmental education, and interpretation. This activity does not significantly impact other refuge activities or wildlife populations locally or nationwide.

PUBLIC REVIEW AND COMMENT:

This compatibility determination is available for public review and comment. The Service will consider all substantive comments received. Comments will be accepted until August 1, 2010. Comments should be sent to Rob.Larranaga@fws.gov or mailed to Refuge Manager, Las Vegas National Wildlife Refuge, Route 1, Box 399, Las Vegas, New Mexico 87701

DETERMINATION (CHECK ONE BELOW):

Use is Not Compatible

Use is Compatible with Following Stipulations

STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY:

The annual issuance of Cooperative Farming Agreements and/or Cooperative Land Management Agreements (CLMAs) that include special conditions for conducting the activity, along with routine inspections of the fields to insure compliance with the terms of the agreements, will ensure that compatibility is maintained. Service policy, directives and instructions in the Refuge Manual require reporting on farming, chemical weed management and haying activities.

JUSTIFICATION:

The agricultural program supports the Refuge purposes by providing grain and forage for wildlife and by contributing to a diversity of habitat types. The acreage farmed by Refuge staff and cooperators greatly reduces the budgetary and manpower requirements that would be needed if the Refuge staff farmed all of the cropland. The Refuge's farming program serves the objectives for the establishment of the Refuge by providing adequate grain and browse to meet the feeding requirements for waterfowl and cranes.

Cooperative farming on the Refuge is consistent with local practices and is accomplished on land suitable for such management. Refuge croplands supplement natural food sources on the Refuge and provide undisturbed areas where wintering waterfowl can forage. The Refuge farming program minimizes crop depredation on area lands, thus preventing economic loss to private landowners. Other migratory birds and resident wildlife directly benefit from Refuge farming practices. Additionally, wildlife viewing opportunities are enhanced through concentrating birds.

