# DRAFT COMPATIBILITY DETERMINATION

**Use:**
Agriculture – Cooperative Farming Activities

**Refuge Name:**
Salt Plains National Wildlife Refuge

**County:**
Alfalfa County, Oklahoma

**Establishing and Acquisition Authorities:**
The Salt Plains National Wildlife Refuge was established March 26, 1930 by Executive Order No.5314 and under provisions of the Fish and Wildlife Coordination Act (16 USC 664), Migratory Bird Conservation Act (16 USC 715d), Public Land Order No. 144 authorized by Executive Order No. 9337.

**Refuge Purpose(s):**

1. "... as a refuge and breeding ground for birds..." Executive Order 5314, dated Mar. 26, 1930
2. "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C.§715d (Migratory Bird Conservation Act)
3. "... shall be administered by him [Secretary of the Interior] directly or in accordance with cooperative agreements...and in accordance with such rules and regulations for the conservation, maintenance, and management of wildlife, resources thereof, and its habitat thereon, ..." 16 U.S.C.§664 (Fish and Wildlife Coordination Act)
4. "...for the development, advancement, management, conservation, and protection of fish and wildlife resources ..." 16 U.S.C.§742f(a)(4)
5. "... for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude ..." 16 U.S.C.§742f(b)(1) (Fish and Wildlife Act of 1956)

**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 this use?**
Cooperative farming is utilized to manage a portion of the Refuge's croplands. Approximately 1,231 acres of croplands on the Salt Plains National Wildlife Refuge are farmed to provide food and habitat for wildlife.

**(b) Where is the use conducted?**
Although the percentage varies somewhat from year to year, cooperative farmers farm approximately 2% of the total acreage of land farmed on the Refuge. A map is attached showing location of cooperative farming.

**(c) When is the use conducted?**
The farmer plants either winter wheat or rye each year in the fall. In the spring or early summer the farmer either cuts the crop for hay or harvests the seed produced by the plant.

**(d) How is the use conducted?**
Cooperative farming currently occurs on the Salt Plains National Wildlife Refuge through issuance of a special use permit. The proposed use would be conducted utilizing accepted conventional farming practices. Winter wheat and rye are the primary crops grown.

The farmer provides all of the seed and fertilizer necessary to produce the crop. The Refuge portion of the crop is consumed by waterfowl, upland game birds, deer, and song birds while the crop is growing. After wildlife feed on the crop during the winter and spring months, the farmer retains the remaining crop either in hay or by harvesting the seed.

Rainfall is variable from year to year which creates problems from either too dry to plant or too wet to prepare the fields thus preventing the farmer from planting seeds. During these adverse weather conditions the land lays fallow.

Integrated Pest Management practices are employed on the Refuge to control plant pests. The cooperator uses some chemical herbicides to control weeds, 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 drilling new crops through the existing stubble of the previous season are used where possible, to control weeds with reduced chemical inputs. All chemical use must be approved through the Pesticide Use Proposal process. Service policy requires that only minimal amounts of chemicals are used on Refuge lands.

**(e) Why is the use being proposed?**

Winter wheat and rye provide a source of green browse during the fall and winter months for geese, cranes, deer and other wildlife.

## Availability of Resources:

Adequate funding and staff are available to manage the cooperative farming program. Cultivation and planting typically requires in excess of 10 staff hours, and equipment maintenance requires an additional 5 hours. The annual biological monitoring cost to assess the impact of farming on natural resources is under 5 hours. Fuel, equipment repairs, seed, fertilizer, and herbicide application costs usually exceed $2,000 per year. Administering Annual Cooperative Farming Agreements requires 4 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 ducks, geese, sandhill cranes and whitetail deer 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 160,000 Canada, white front and snow geese, 100,000 Northern pintail, mallard, teal, wood duck, gadwall, redhead, Northern Shoveler, ruddy and, American Wigeon ducks collectively, 130,000 sandhill cranes and over 1,000 whitetail deer. Soil erosion of the fields is minimized by planting cover crops and by crop residue management. Chemical use is planned to prevent or limit acute or chronic adverse effects to wildlife. While some disturbance to ground nesting birds may result from the haying and harvesting operations, the timing of these operations 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. Public notice has been posted in eight locations in Cherokee, OK, two locations in Jet, OK, in the Cherokee

Newspaper, and the Anthony KS Newspaper. No comments were received by the Refuge during or after the comment period.

**Determination (check one below):**
___ Use is Not Compatible
_X_ Use is Compatible with Following Stipulations

**Stipulations Necessary to Ensure Compatibility:**
The annual issuance of cooperative farming agreements and special use permits for farming that include special conditions for conducting the activity, along with routine inspections of the fields to insure compliance with the terms of the agreement 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. Timing of harvests will be modified to minimize the impact to occupied nests.

**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 cooperators reduces the budgetary and manpower requirements that would be needed if the Refuge staff farmed all of the cropland. Haying benefits wildlife by providing and maintaining open areas for feeding and resting, retarding encroachment by woody species, and removing standing vegetation in areas targeted for native plant restoration.

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. Whitetail deer and other resident wildlife indirectly benefit from Refuge farming practices. Additionally, wildlife viewing opportunities are enhanced through concentrating birds.

**Signature:** Refuge Manager _____
(Signature and Date)

**Concurrence:** Regional Chief _____
(Signature and Date)

**Mandatory 10-year Re-Evaluation Date (for uses other than the six-priority wildlife dependent public uses):** 2020