

DRAFT COMPATIBILITY DETERMINATION

Use:

Agriculture and Weed Management-Cooperative Farming Activities

Refuge Name:

Washita National Wildlife Refuge

Establishing and Acquisition Authority(ies):

The Washita National Wildlife Refuge (Refuge) was established under provisions of the Fish and Wildlife Coordination Act (16 USC 664), Migratory Bird Conservation Act (16 USC 715d), and the Refuge Recreation Act (16 USC 460 k-1). By cooperative agreement, administration of 8,075 acres of land and water on the northern portion of Foss Reservoir was transferred from the Bureau of Reclamation to the Bureau of Sport Fisheries and Wildlife (now the U.S. Fish and Wildlife Service) on April 15, 1961.

Refuge Purpose(s):

1. The refuge “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 USC 664, Fish and Wildlife Coordination Act).
2. The refuge shall be administered “for use as an inviolate sanctuary, or for any other management purpose, for migratory birds” (16 USC 715d, Migratory Bird Conservation Act).
3. The refuge is “suitable for – (1) incidental fish and wildlife oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species ...” (16 USC 460 k-1, Refuge Recreation Act). “... the Secretary ... may accept and use ... real ... property. Such acceptance may be accomplished under the terms and conditions of restrictive covenants imposed by donors ... “(16 USC 460k, Refuge Recreation Act [16 USC 460k-460k-4], as amended).

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 1996, as amended [16 U.S.C. 668dd-ee]).

Description of Use:

(a) What is the use?

Cooperative farming is utilized to manage a portion of the Refuge's croplands. Approximately 2,000 acres of croplands on the Washita National Wildlife Refuge are farmed to provide food for wildlife. Mowing, haying, and chemical application are utilized to maintain agriculture fields, control invasive plant species, mitigate the proliferation of non-beneficial plants, maintain native grass stands, and improve public access.

(b) Where is the use conducted?

Approximately 25% of the Refuge's total land base is farmed. The majority of the farm fields are located along the western half of the Refuge. Of the 2,000 acres of croplands, 1,500 acres are farmed by a cooperative farmer under an annual Cooperative Farming Agreement. The agreement identifies which crops are to be planted, crop plant and harvest dates, fields, and acreages. Refuge staff force account farms 500 additional acres of Refuge lands.

(c) When is the use conducted?

Haying and mowing occur after August 1 each year to limit disturbance to ground nesting birds and other wildlife. Wheat and rye fields are prepared for planting by plowing throughout the summer as needed to control weeds. Herbicides are applied on a case by case basis. Wheat fields are sown in the fall in late August through September. Wheat harvest occurs in June or July. Milo is planted in June and disked under in late February or March. Wildlife food plots, consisting of Japanese millet, is seeded in late June and left standing.

Soil builders, such as guar, hairy vetch, and Austrian winter peas are planted on Refuge lands as well. Guar is planted in March and disked under prior to the flowering stage. Hairy vetch is planted with winter wheat and disked in March. Austrian winter peas are planted in February and disked under prior to the flowering stage.

(d) How is the use conducted?

Winter wheat, milo, and Japanese millet are the primary crops grown. Conventional seeds are utilized exclusively on the Refuge due to past performance and yields. All Refuge farming objectives and the mission of the National Wildlife Refuge System are accomplished through the use of conventional seeds.

Dryland farming practices are used. Low rainfall and high evapo-transpiration rates, are limiting factors for crop production. The sand silt soils are highly erodible; therefore, cooperators and Refuge staff rely on "soil saving" equipment like sweep type stubble mulch plows.

Integrated Pest Management practices are employed on the Refuge to control plant pests. Both the cooperators and Refuge staff use 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. Cultivation practices have been adopted that further reduce chemical inputs. A stubble mulch plow is used to sever weed roots below the surface to allow new crops to be drilled through the existing stubble from the previous year. 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.

Mowing is a management tool to remove invasive plant species, mitigate the proliferation of non-beneficial plants, and remove standing vegetation during restoration of native grasses and forbs in areas previously dominated by non-native vegetation. Mowing is also critical in maintaining field edges, access roads, and parking areas. To mitigate the disturbance to ground nesting birds and other wildlife, mowing is delayed until August 1.

Haying occurs on limited areas planted to native grasses, subject to issuance of Special Use Permits and cooperators are randomly selected through a lottery system. It is used as a management tool to control invasive plant species, remove standing vegetation and to maintain grassed waterways. To mitigate the disturbance to ground nesting birds and other wildlife, haying is delayed until August 1.

(e) Why is this use being proposed?

Winter wheat provides a source of green browse during the fall and winter months for geese, cranes, deer and other wildlife. Milo provides a high carbohydrate grain used by waterfowl, songbirds, deer and other wildlife during the colder months of winter.

Availability of Resources:

Adequate funding, farm implements and staff are available. Annual plantings of force account crops are a major effort during spring and fall, and cultivation to control agricultural weed pests occurs throughout the spring and summer months. Cultivation and planting typically requires in excess of 400 staff hours, and equipment maintenance requires an additional 400 hours. Fuel, equipment repairs, seed, fertilizer, and herbicide application costs usually exceed \$26,000 per year. Administering Annual Cooperative Farming Agreements requires 120 staff hours each year.

Anticipated Impacts of the Use:

Short and Long Term Impacts:

Due to standard practices associated with farming, some degree of erosion may take place; however, erosion is minimized by planting cover crops (e.g. guar and Austrian winter peas) and by crop residue management.

Surrounding fields are well vegetated so no water bodies are expected to be impacted by runoff. Cooperative farmers are allowed to use only Refuge approved chemicals. Refuge approved chemicals typically have low toxicity and fast biodegradable rates compared to other commonly used chemicals.

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. Any nesting disturbance should be minimal and mowing regimes will be authorized after nesting seasons to minimize nest loss of ground nesting birds. All haying and mowing operations are prohibited until August 1.

Positive long-term benefits result in providing food/habitat for migratory and resident wildlife and minimizing crop depredation on neighboring farms. This activity provides for the early detection and treatment of invasive species, thereby creating a healthier environment for native plant communities. This is especially important in areas targeted for native plant restoration projects.

Cumulative Impacts:

Farming only occurs on lands that have been previously farmed. The impacts described 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 nationwide.

Public Review and Comment:

This compatibility determination is available for public review and comment. The Service will consider all substantive comments received. *[Final CD will describe public review opportunities and comments.]*

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 special use permits for haying 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 cooperators greatly reduces the budgetary and manpower requirements that would be needed if the Refuge staff farmed all of the cropland. Mowing and 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. White-tailed deer, turkey, quail, numerous songbirds, and other resident wildlife 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