



# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
P.O. Box 1306  
Albuquerque, New Mexico 87103



In Reply Refer To:  
FWS/R2/ NWRS-PLN

JUL 29 2010

Dear Interested Party:

The Southwest Region of the U.S. Fish and Wildlife Service (Service) is in the process of evaluating farming programs on National Wildlife Refuges (Refuge) throughout the Region, to ensure that they are consistent with current laws and policies (National Environmental Policy Act of 1969, National Wildlife Refuge System Improvement Act of 1997, etc.) and meet the purposes of the Refuges. Throughout Texas, New Mexico, Arizona and Oklahoma there are 20 Refuges with farming programs currently being reviewed (see attached list).

You are being contacted because you, or your organization, may be interested in this review.

On many refuges throughout the nation, farming programs provide benefits for both resident and migrating animals. For example, farming programs provide supplemental forage for resident and migratory wildlife, manage undesirable and/or invasive vegetation, restore native habitats and aid in the recovery of threatened or endangered species, and in some cases provide a safe resting spot for migrating waterfowl and help to keep them off private farm fields. Farming programs also provide increased wildlife observation, photography, and environmental education opportunities.

Farming is conducted by Service personnel and/or by local farmers under the terms and conditions of a Cooperative Farming Agreement or Special Use Permit. Cooperative Farming Agreements list number of acres farmed by each cooperator, crop division percentages or acres, and special conditions to be followed. Refuge staff works with local farmers to ensure that the program achieves wildlife and habitat management goals while providing economic benefits to the community. Under the Cooperative Farming Program, all or a portion (typically 25-33%) of each crop is left as food for wildlife. A variety crops are grown throughout the Region, including corn, sorghum, soybeans, clover, wheat, cowpeas, millet, milo, sunflowers, alfalfa and grass hay.

As part of this review, several refuges are currently accepting comments from the public on their farm programs. Some refuges that have cooperative farming programs are also updating their compatibility determinations (CDs). The CDs will be available for review as they are completed. To learn more about the farming programs under review throughout the Southwest Region, including a description of individual Refuge Farm Programs, current status of review and instructions for providing comments on those programs please visit:

[www.fws.gov/southwest/refuges/Plan/planindex.html](http://www.fws.gov/southwest/refuges/Plan/planindex.html)

Dear Interested Party

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If you have any comments or concerns about specific Refuge programs, please provide them in writing by **August 31, 2010** to the appropriate Refuge Manager, as instructed on the website referenced above. For questions about Regional policy, please contact Carol Torrez, NWRS NEPA Coordinator, at (505) 248-6821 or [carol\\_torrez@fws.gov](mailto:carol_torrez@fws.gov). Thank you for your interest in the work of the National Wildlife Refuge System.

Sincerely,

**Acting** 

Regional Chief  
Southwest Region NWRS

Enclosure

## **Southwest Region Refuges with Farming Programs**

### **Arizona**

#### **Havasu NWR**

Havasu National Wildlife Refuge manages 245 acres of farmlands, including agricultural fields (100 acres), Bermuda field (70 acres) and moist soil units (75 acres). All farming is conducted by refuge personnel for the purpose of providing forage for wintering and migrating waterfowl. Crops include winter wheat, barley, annual ryegrass, mixed forage (rye, oats, barley, peas, etc.), Japanese millet, and watergrass. No genetically modified crops are grown on the Refuge.

#### **Southwest Arizona Refuge Complex**

The Southwest Arizona Refuge Complex currently manages 1,338 acres of cropland on two of its refuges (1,253 acres on **Cibola NWR** and 85 acres on **Imperial NWR**). On Cibola NWR a cooperative farmer plants 132 acres of field corn and 1,088 acres of alfalfa and Refuge personnel maintain 33 acres of wheat. Corn and wheat are mainly planted to provide food for wintering greater sandhill cranes and Canada geese. Alfalfa is used in the crop rotation to provide green browse and improve tilth and nutrients in the soil while ensuring the economic viability of the farming program for a cooperative farmer. Crops are also grown to maintain the land in a non-successional state to prevent salt cedar. On Imperial NWR, the farming program is conducted by refuge employees, for the purpose of feeding migrating and wintering waterfowl. The Refuge plants mixed-grasses and fields are rotated between agriculture and moist soil units. Moist soil units are managed for endangered marsh birds. No genetically modified crops are used on either refuge.

### **New Mexico**

#### **Bitter Lake NWR**

Bitter Lake NWR **currently** manages approximately 330 of up to about 500 farmable acres, through a cooperative farming program on the refuge. Primarily, corn and other grains are planted each year to provide protein-rich green browse and high carbohydrate cereal grains for wintering cranes and waterfowl. Alfalfa is used in the crop rotation to provide additional green browse and improve tilth and nutrients in the soil while ensuring the economic viability of the farming program for a cooperative farmer. Genetically modified crops are currently not permitted on Bitter Lake NWR.

#### **Bosque del Apache NWR**

Bosque del Apache NWR manages approximately 1,110 acres of farmland through force account (70 acres) and a cooperative farming program (1,040 acres). Of the acres farmed under the cooperative farming program, 25 percent are planted in corn and 75 percent are planted in a crop of the co-op farmer's choice (usually alfalfa). Refuge personnel plants 30 acres of alfalfa for nitrogen fixation, 20 acres of corn, and 20 acres in a wetland/agricultural rotation. Crops are planted to meet waterfowl foraging needs. No genetically modified crops are used on the refuge.

#### **Maxwell NWR**

There are 440 acres of cropland on Maxwell NWR, which are farmed primarily by refuge personnel and as necessary, by cooperative agreement. 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. Crops include corn wheat, triticale, barley, buckwheat, oats, alfalfa, winter grains, and pasture grass mixes. Farming practices primarily utilize drought tolerant crop species to minimize irrigation water use. No genetically modified crops are grown on the refuge. Agricultural practices on the refuge fulfill the primary purposes for which the refuge was established, i.e., to provide feeding areas for wintering migratory waterfowl and minimize crop depredation on adjacent private lands.

### **Las Vegas NWR**

There are 760 acres of cropland on the refuge, which are farmed primarily by refuge personnel and as necessary, by cooperative agreement. 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. Crops include corn, spring wheat, barley, millet, winter wheat, winter rye, winter peas, spring peas, and alfalfa/grass mixes. No genetically modified crops are grown on the refuge. Agricultural practices on the refuge provide food for migrating mallard, pintails, Canada geese, snow geese and sandhill cranes.

### **Oklahoma**

#### **Sequoyah NWR**

The Sequoyah NWR manages approximately 2,800 acres of croplands. The majority is farmed through the cooperative farming program, but a small amount (25 acres) of Force Account Farming is conducted. The purpose of the farming program at Sequoyah is to meet waterfowl management objectives by providing supplemental forage for migratory birds. Crops used for wildlife food include winter wheat, Japanese millet, and corn. In addition, the refuge permits the use of genetically modified crops (Roundup Ready Soybeans, Roundup Ready Corn, and BT Corn) on approximately 2,100 acres, primarily for the cooperator's share.\*

#### **Salt Plains NWR**

The Salt Plains NWR manages 1,231 acres of cropland. The farming program is conducted primarily by refuge staff, with a small number of acres (26 acres of wheat) grown through a cooperative farming agreement with a local farmer. Farming has been accomplished primarily to provide food for wintering and migrating geese, ducks, and cranes. Deer, upland game birds, and song birds also benefit. No genetically modified crops are used on Salt Plains NWR.

#### **Tishomingo NWR**

Tishomingo NWR manages approximately 1,000 acres of croplands. The farming is conducted by refuge personnel (force account) primarily to provide browse for wintering and spring waterfowl feeding needs but also include crop production to hold geese after the hunting season to minimize crop depredation on neighboring private lands. Crops planted include milo (sorghum), corn, sunflower, cow peas, winter wheat, and millets.

#### **Washita NWR**

Washita NWR manages approximately 2,000 acres of croplands to provide food for wildlife. Although the ratio varies somewhat from year to year, refuge staff farms approximately half of the acreage and the balance is cooperatively farmed by area farmers operating under Cooperative Farming Agreements with the refuge. Winter wheat and milo are the primary crops grown. Winter wheat provides a source of green browse during the fall and winter months for geese, cranes, deer

and other wildlife. Milo (grain sorghum) provides a high carbohydrate grain used by waterfowl, songbirds, deer and other wildlife during the colder months of winter. A variety of specialty crops are also grown for specific wildlife foods, including millet, sunflowers, or soil builders such as clovers, vetch, cowpeas and winter peas.

### **Optima NWR**

The Optima NWR currently manages 363 acres of cropland. Farming is accomplished through Refuge personnel on 50 acres and 313 acres are farmed by an area farmer operating under a cooperative agreement. Agriculture practices on the Refuge fulfill the current management strategies of providing cover and/or food for resident wildlife and migratory birds (including waterfowl), soil stabilization, and minimizing crop depredation on adjacent private lands. Crops included winter wheat, elbon rye, milo, Japanese millet, and various forbs.

## **Texas**

### **Anahuac NWR**

Anahuac NWR has 1,716 acres that are rotated from moist soil units to organic rice crop. The Refuge plants rice on approximately 637 acres annually with remaining being in moist soil units. Rice is planted through a cooperative farming program. These fields support large flocks of northern pintail, green-winged teal, snow geese, white-faced ibis and other waterfowl. Anahuac NWR does not permit the use of genetically modified crops.

### **Aransas NWR**

Aransas NWR manages 154 acres of organic rice through a cooperative farmer. This rice crop is rotated among available cropland. After the first rice crop is harvested, the fields are flooded again and the second crop of rice is left for wildlife. This method provides a valuable food supply, but more importantly, flooded fields provide shallow water habitat in mid-summer when freshwater is a rare commodity. The remaining fallow fields provide feeding area for waterbirds and waterfowl, with water being added at strategic interval to best provide for the species reliant upon it.

### **Attwater Prairie Chicken NWR**

Attwater Prairie Chicken NWR manages up to 150 acres in three agricultural food plots. The farming is conducted by refuge personnel (force account), for the purpose of providing supplemental food for the endangered Attwater's Prairie Chicken (APC) and other wildlife on the refuge. Crops include milo, soybeans, sunflowers, and millet. Herbicides, pesticides, and genetically modified crops are not used for management of these food plots. Food plots are identified as a need in APC recovery Plan.

### **Buffalo Lake NWR**

Buffalo Lake NWR manages a cooperative farming program on 581 acres in a portion of the dry lake bed. The number of acres farmed varies from year to year. Crops planted include winter wheat, milo, and sorghum. Farming on the refuge is utilized to reduce excessive nutrient levels in the soil, prevent/reduced monotypic stands of Kochia and salt cedar, reduce wildfire hazard resulting from weed invasion, and to provide food and cover for a variety of migratory and resident wildlife species.

### **Hagerman NWR**

The Hagerman NWR currently manages approximately 500 acres of croplands. The farming is conducted force account using Refuge personnel. Crops are produced to provide browse for wintering and spring feeding needs, but also include grains of high caloric value like corn during high stress periods. Crops currently grown include Japanese millet, winter wheat, soybeans, mung beans, clover mix, and corn. Other wildlife species such as white-tailed deer, north bobwhite quail, and wild turkeys benefit and utilize the crops planted for migrating waterfowl. Hagerman NWR does not use genetically modified crops.

### **South Texas Refuge Complex**

The South Texas Refuge Complex currently manages 7,782 acres of cropland on two of its refuges (324 acres on **Laguna Atascosa NWR** and 7,458 acres on **Lower Rio Grande Valley NWR**). Farming is accomplished through a cooperative farming program, which allows the Refuges to work with area farmers to restore native habitat. The primary purpose of the farming program is to maintain these acres in an early successional state to prevent the establishment of non-native, invasive grasses prior to habitat restoration. The number of acres farmed in any given year is dependent on how many acres are planted back to native vegetation the previous year and if any new tracts are added through acquisition. Grain sorghum is the primary crop grown (7,069 ac grown in 2010), with minor amounts of other crops such as corn (316 ac), onions, carrots and melons (16 ac). Some acres (381 ac) were left fallow. The majority of the farming on the refuge is dryland (non-irrigated), which limits the types of crops that can be produced. No genetically modified crops are grown on Laguna Atascosa NWR, but there are genetically modified crops (Roundup Ready corn-316 ac in 2010) used on Lower Rio Grande Valley NWR, under its farmland phase out program and associated habitat restoration programs.\*

### **Texas Mid-Coast Refuge Complex**

The Texas Mid-Coast Refuge Complex conducts farming on all three of its refuges.

**Brazoria NWR** administers a cooperative farming program on approximately 1,000 acres. Out of these 1,000 acres approximately 220-350 acres are farmed on a given year and remaining acreages left fallow. The units essentially become a moist soil unit and may be flooded to provide wildlife habitat during non-production years. Rice is the main crop in production with the occasional grain sorghum. Crops provide wintering food for migrating waterfowl.

**San Bernard NWR** manages a 10 acre plot through force account located in the headquarters area. This minimal field is planted with rye grass during the winter as a source of winter browse and to attract wildlife with emphasis on white-fronted geese to the area for winter wildlife viewing. At other times, the field is basically used for administrative purposes such as testing plastic sphere ignition devices, testing and demonstrating rocket nets or other activities requiring a minimally vegetated area.

**Big Boggy NWR** plants a total of 90 acres using force account. The entire 90 acres is planted with rye grass to provide winter browse for waterfowl.

\*The Service's Ecological Integrity Policy (601 FW 3) limits the use of GMCs to circumstances where they are essential for accomplishing refuge purposes and where the Regional Chief approves their use (601 FW 3, Amendment 1). These refuges have provided the appropriate documentation and justification for use of GMCs and have received approval from the Regional Chief, NWRS, Southwest Region.