Draft Compatibility Determination Title

Draft Compatibility Determination for Cooperative Farming at Cokeville Meadows National Wildlife Refuge

Refuge Use Category

Agriculture

Refuge Use Type

Farming (cooperative)

Refuge

Cokeville Meadows National Wildlife Refuge

Refuge Purpose and Establishing and Acquisition Authorities

- "...for the conservation of the wetlands of the Nation in order to maintain the
 public benefits they provide and to help fulfill international obligations
 contained in various migratory bird treaties and conventions...." 16 U.S.C. §
 3901(b) (Emergency Wetlands Resources Act of 1986)
- "...for conservation purposes" 7 U.S.C. § 2002 (Consolidated Farm and Rural Development Act) "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds..." (Migratory Bird Conservation Act, as amended [16 U.S.C. 715-715d, 715e, 715f-715r])
- "...for the development, advancement, management, conservation and protection of fish and wildlife resources...for the benefit of the U.S. Fish and Wildlife Service, in performing its activities and services..." (Fish and Wildlife Act of 1956, as amended [16 U.S.C. 742a-742j, not including 742d-l])

Cokeville Meadows NWR was established in 1993–94 after public comment and process. Initial refuge establishment was promoted by Wyoming Game and Fish Department, especially after surveys done in mid to late 1980s documented large numbers of breeding waterfowl in the valley. Most of the land in the valley was in private ownership and there has been approximately 6,300 acres acquired from willing sellers to date. In 2016–2017 session Wyoming State legislature passed a measure that rescinded support for the refuge to acquire more land in fee title.

Refuge Purpose

"to preserve and protect wetland riparian habitat for its migratory waterfowl and other migratory bird values; for resident big game, small game, furbearers and upland game birds; for public educational and interpretive values; and for public recreational values." (USFWS 1990)

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System (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 (Pub. L. 105–57, 111 Stat. 1252).

Description of Use

Is this an existing use?

Yes

Agricultural crop production on existing agricultural ground to benefit resident and migratory species. Cooperative farming may also be used to prepare seedbeds for native vegetation restoration. Cooperative farming will improve habitat conditions, benefit migratory and resident wildlife species and comply with the provision of the Cokeville Meadows Final Environmental Impact Statement that established the refuge. Permitees will plant, irrigate and harvest small grains, legume, and legume/grass mix in accordance with provisions outlined within permits or cooperative agriculture agreements. Cooperative farming has been conducted on the refuge since at least 2004. The use of farming was evaluated in conjunction with the Cokeville Meadows National Wildlife Refuge Proposal, Final Environmental Impact Statement, published in June of 1992. Farming is consistent with the 2014 Cokeville Meadows NWR Comprehensive Conservation Plan and the Finding of No Significant Impact from March of 2014.

What is the use?

Farming (Cooperative) - farming for habitat restoration and management purposes on lands owned in fee title by the National Wildlife Refuge System. This use is a refuge management economic use.

Is the use a priority public use?

Where would the use be conducted?

Cooperative farming would occur on approximately 1,200 acres of upland that was previously farmed before refuge acquisition. Small grains, legumes or a mix of legumes/grains will be grown in areas identified as stopover habitat/brood rearing areas. No areas of native vegetation will be farmed. One unit will be farmed to return to native vegetation from fallow or a nonnative grass cover crop. An additional 400 acres of nonnative grass are not actively farmed but are planted in a long-term cover crop of nonnative grasses.

When would the use be conducted?

Cooperative farming activities would occur from early spring to September and will include periodic plowing in April, May or in some cases November. Seeding would generally happen in May/June or October/November and irrigation activities would start in May and continue until September annually. Harvest of crops would be from July to August, depending upon the crop.

How would the use be conducted?

Areas identified for farming will be documented in the Special Use Permit (SUP) or Cooperative Agriculture Agreement (CAA). Preferred crops, planting times, rotation schedule, will be identified in the SUP, CAA or added by addendum to the CAA/SUP. Operations will occur primarily between May and October, the refuge owns the irrigations systems and will maintain irrigation systems, however the cooperator will provide agricultural equipment and is responsible for all costs associated with the production of agricultural crops. Irrigation on the varies from flood, wheel-line, and center pivot irrigation systems. These will require occasional disturbance for ditch cleaning, and maintenance activities.

Why is this use being proposed or reevaluated?

Cooperative farming is being reevaluated to continue on Cokeville Meadows NWR because of the value the farmed areas provide as important wildlife food and cover sources, in addition to management of weed species. Provision of the Final Environmental Impact Statement establishing Cokeville Meadows NWR states:

Local farmers/ranchers will function as permittees/cooperators on 1,800 acres of cropland. They will produce about 400 acres of small grains on the refuge as protection again crop depredation by cranes, geese and ducks on lands outside the refuge. They will also produce alfalfa or alfalfa/grass mix in rotational haying on the 1,400 acre remainder. Local operators will also be used to conduct haying and grazing cooperator programs on about 75% of the 12,098 acres of hayable wetland meadows located within the fee acquisition area each year.

The area around the refuge is predominately sagebrush uplands, irrigated farmland is only found in valley bottoms along the Bear River and is valued for the high-quality forage produced and proliferation of insects and forbs that provide for many migrating bird species as well as resident birds, such as sage grouse, and native ungulates, such as pronghorn antelope, mule deer and elk. With limited water resources and land ownership patterns (Bureau of Land Management (BLM) manages much of the intact sagebrush uplands in the surrounding area), irrigated farm ground is highly valued wildlife habitat in the valley. The Wyoming Game and Fish Department has expressed support to continue the refuge's farming program, to help offset depredation claims in the valley. Another consideration to continue the farming program is the water rights implications. The refuge owns many senior water rights that are associated with the farmed lands as well. Maintaining those water rights through continued irrigation and historic practices is crucial to exercising the water rights to avoid loss as well as adhering to the original provisions of the refuge's initial Environmental Impact Statement.

Availability of Resources

Each year, staff administration time is estimated to require 9-15 hours for coordination, billing, permitting, monitoring, and permit sale package preparation per management unit. Total time spent is 2-3 weeks per year, and that time requirement would be less during years 2-5 if we issue multi-year SUPs or CAAs, up to 5 years. Less than 10% of one full time employee's time, will be spent administering the cooperative farming program. Off-setting revenue will also be collected in rental fees; revenue collected will first be subject to fund PILT payments to the county and approximately 80% that is retained by the station will be used to improve habitat conditions, pay maintenance costs associated with the farming unit and to maintain necessary infrastructure on the refuge.

Anticipated Impacts of the Use

Determine what resources may be impacted:

The effects and impacts of the proposed use to refuge resources, whether adverse or beneficial, are those that are reasonably foreseeable and have a reasonably close causal relationship to the proposed use. This CD includes the written analyses of the environmental consequences on a resource only when the impacts on that resource could be more than negligible and therefore considered an "affected resource." Soil, water, vegetation, wildlife cover, wildlife food resources, will not be more than negligibly impacted by the action and have been dismissed from further analyses.

Potential impacts of a proposed use on the refuge's purpose(s) and the Refuge System mission

Cooperative farming will result in short-term disturbances and long-term benefits to both resident and migratory wildlife using the refuge. Short-term effects include direct displacement of wildlife due to disturbance from equipment use and temporary loss of poor-quality cover when areas are being tilled and planted, which should only be every 2-3 years out of 7-10 years. Wildlife may find food on farmed areas. Establishing diverse or more desirable habitat for nesting, escape cover, perching or noncrop feeding activities would be a longer-term benefit resulting from cooperative farming that restores native vegetation. Cooperative farming in areas for legumes and small grains will annually provide stop-over habitats or brood rearing feeding areas for resident and migrating wildlife, especially waterfowl and waterbirds. Resulting stopover habitat with resting areas and food sources would offset negative effects from short term of farming activities.

Short-term impacts

Short-term impacts would be disturbance directly related to equipment use during farming operations, which would equate to 7-10 days over the farming season May - September. Other short-term impacts would be soil disturbance and temporary loss of poor-quality cover in areas being tilled and seeded, which would only be for approximately a month every 2-3 years out of 7-10 years in the legume and small grain rotated areas. Short-term impacts in areas that are farmed to be restored to native cover would be soil disturbance and wildlife disturbance associated with equipment use in areas. In areas farmed for wildlife food as a stopover habitat, or brood-rearing areas, the long-term positive effects offset the short-term affects. In areas farmed for restoration, short-term affects would be offset by long term positive effects of reestablishment of native vegetation and more permanent vegetation better suited for nesting and hiding cover

Long-term impacts

Long-term impacts of farming could include potential loss or reduction in quality of topsoil through less organic matter. This impact could be offset by implementation of voluntary organic farming measures which would ideally monitor soil health and seek to improve soil health beyond the use of synthetic fertilizers. Long-term impacts of farming in areas where we are providing stopover habitat and high-quality food through farming, the potential to affect wildlife use patterns is present as well. Wildlife use patterns have the potential to be impacted by changes in timing, duration and density of wildlife in an area due to high-quality food made available through farming. The disturbance of wildlife could affect wildlife use patterns on the refuge,

including migratory stopover use or resident use of areas for nesting and brood-rearing. In areas that farming would be to re-establish native vegetation, long-term impacts would be positive with more permanent vegetation suited for nesting and hiding cover.

Public Review and Comment

The draft compatibility determination will be available for public review and comment for 30 days from 8/30/2023 to 9/30/2023. The public will be made aware of this opportunity to comment through letters to potentially interested people such as adjacent landowners, states, and tribes). A hard copy of this document will be posted at Refuge Headquarters, and at the Cokeville US Post Office. It will be made available electronically on the refuge website www.fws.gov/refuge/cokeville_meadows. Concerns expressed during the public comment period will be addressed in the final Compatibility Determination.

Determination

Yes, cooperative farming is compatible.

Stipulations Necessary to Ensure

Compatibility

- 1. No genetically modified organism (GMO) seed used in farming operations.
- 2. No neonicotinoid treated seed or insecticide applied to refuge lands.
- 3. Require general and special conditions for each permit to ensure specific management objectives are met.
- 4. Only chemicals for fertilizer or weed treatment allowed. These must be approved by refuge manager before application and demonstrated to be necessary and consistent with refuge habitat goals as well.
- 5. No new areas are farmed, only acres that previously were farmed are eligible to be farmed.

Justification

Habitat conditions would deteriorate without the use of a full range of management tools. Farming is a tool that will help the refuge manage areas that have previously been farmed to continue to provide high quality areas for stopover, resting and

feeding areas for resident and migrating wildlife. Farming is also used to aid in seedbed preparation to re-establish native vegetation in areas where farming infrastructure has deteriorated to the point that it would be too costly to continue farming. In areas where native vegetation is re-established permanent native vegetation would be available for nesting and hiding cover and would offset any short-term negative effects of farming.

Cooperative Farming, as outlined in this compatibility determination, would not conflict with national policy to maintain the biological diversity, integrity, and environmental health of Cokeville Meadows National Wildlife Refuge.

Based on the stipulations outlined above, it is anticipated that wildlife populations will find sufficient food resources and resting places such that their abundance and use of the Refuge will not be measurably lessened as a result of allowing cooperative farming on Cokeville Meadows NWR. The relatively limited number of individual animals expected to be adversely affected as a result of cooperative farming will not cause wildlife populations to materially decline, the physiological condition and production of species present will not be impaired, their behavior and normal activity patterns will not be altered dramatically, and their overall welfare will not be negatively impacted. Based on available science and best professional judgement, the Service has determined that the cooperative farming at Cokeville Meadows National Wildlife Refuge, in accordance with the stipulations provided here, would not materially interfere with or detract from the National Wildlife Refuge System mission or the purposes of Cokeville Meadows National Wildlife Refuge. Rather, appropriate and compatible cooperative farming would be a use of Cokeville Meadows National Wildlife Refuge through which the public can develop an appreciation for wildlife and wild lands.

Signature of Determination

Refuge Manager Signature and Date

Signature of Concurrence

Mandatory Reevaluation Date

2033

Literature Cited/References

USFWS. 1990. Proposed Cokeville Meadows National Wildlife Refuge, Lincoln County, Wyoming: Draft Environmental Impact Statement. DOI, Lakewood, CO.

USFWS. 1992. Cokeville Meadows National Wildlife Refuge Proposal, Lincoln County, Wyoming: Final Environmental Impact Statement. DOI, Lakewood, CO.

USFWS. 2014. Comprehensive Conservation Plan - Cokeville Meadows National Wildlife Refuge, Wyoming. DOI, Lakewood, CO.

Figure 1

Cokeville Meadows Base

