

# Draft Compatibility Determination

## Title

Draft Compatibility Determination for Haying, Cokeville Meadows National Wildlife Refuge.

## Refuge Use Category

Agriculture

## Refuge Use Type(s)

Haying

## 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 pushed by Wyoming Game and Fish Department, especially after surveys done in mid to late 80s that documented very large numbers of breeding waterfowl in the valley. All the land was in private ownership and has been acquired from willing sellers to date. In January 2017 Wyoming State legislature passed an amendment to Wyoming statute 23-1-106, regarding the acreage of the migratory bird refuge in the Bear River Area, that reduced the acres the refuge could acquire with the state's consent to lands owned prior to January 1, 2017, which consisted of approximately seven thousand (7,000) acres (Wyoming statute 23-1-106).

## 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.

1. This compatibility determination reviews and replaces the 2014 compatibility determination for the use of prescribed haying.
2. This use is being reevaluated at least every 10 years per policy (603 FW 2.6N).
3. The use of prescribed haying has been conducted on the refuge since at least 2005. The use was evaluated in conjunction with the Cokeville Meadows National Wildlife Refuge Proposal, Final Environmental Impact Statement, published in June of 1992 and found to be compatible.
4. The use is consistent with the 2014 Cokeville Meadows National Wildlife Refuge Comprehensive Conservation Plan and the Finding of No Significant Impact from March of 2014.

What is the use?

Haying - prescribed haying is the cutting or mowing of vegetation for habitat restoration and management purposes on lands owned in fee title or managed through agreement by the National Wildlife Refuge System. This is a refuge management economic use (603 FW 2.6 N.).

Is the use a priority public use?

No

Where would the use be conducted?

Prescribed haying will be used on approximately 1,200 acres of flood irrigated wet meadow habitat on Cokeville Meadows NWR. Areas have been manipulated and have a native understory and Garrisons creeping foxtail overstory that was inter-seeded prior to refuge acquisition. Hay may be temporarily stored in areas identified with refuge manager before feeding or hauling off refuge.

When would the use be conducted?

The use of prescribed haying activities would occur from August 1st to mid-September each year. A few days of earlier visits in May/June/July would be required to manage water on the units.

#### How would the use be conducted?

Flood irrigation utilizing water rights from the Covey Canal, BQ West canal, BQ East canal, Pixley ditch, Pixley dam, and Woodruff Narrows Reservoir share water will be sheet flowed across wet meadows from as early in spring as possible (must work with other private users on the ditches) to no later than July 15th (per memo with Wyoming State Engineers Office) unless prior agreements made with private water users and the WSEO to irrigate longer. Oxbow Reservoirs on west side of river are the exception. Boards need to be pulled and water drained from all meadows (except Oxbow Reservoirs 1 & 2) to allow haying to begin August 1st on the refuge and possibly sooner on neighboring private lands. Swathers cut the hay, then it will be raked into rows, dried, and baled and hauled either to temporary stack yards or off the refuge to private lands.

#### Why is this use being proposed or reevaluated?

The use of prescribed haying is being reevaluated to continue on Cokeville Meadows NWR because the renewal period of 10 years is nearly up (603 FW 2.11 H). The use of prescribed haying is a management tool that helps maintain productivity of the refuge's wet meadows habitats. Hayed areas are generally native vegetation intermixed with Garrison creeping foxtail, which is a nonnative grass, and in areas of thick cattails and bulrush. Irrigated wetlands, naturally or through a series of man-made ditches and levees, can become choked with undisturbed vegetation that can become so thick that productivity declines and habitat conditions deteriorate. Wetlands require periodic disturbance to maintain productivity, haying helps to open the canopy for sunlight and warmth earlier in spring to create areas where invertebrates, vegetation and amphibians are jump started in the spring. These hayed areas provide food for migratory birds using the area as a stopover during migration as well as migratory birds that will use the area for nesting and brood-rearing. Open hayed areas are critical to reduce chytrid fungus, which thrives in shaded cool areas with dense vegetation. Healthy amphibian populations, mainly leopard frogs and Boreal chorus frogs, are one of our main goals of our haying program.

#### Availability of Resources

Annual, reoccurring expenses are estimated to take about 10 hours between coordination, billing, permitting, monitoring, and permit sale package preparation per permittee. This would come to a total of approximately one to two weeks to manage

the haying program per year, which might come out to less than 10% of one FTE's time spent administering the program. Off-setting revenue will be collected as well; 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 or 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." Wildlife and aquatic species, habitat and vegetation, soils, visitor use and experience 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

The use of prescribed haying 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 a potential for direct loss of birds who don't flush while haying equipment is going over the area. Areas cut will also have a temporary loss of cover, however the cut areas can also be used for feeding. Wildlife will find food on hayed areas, in frogs, snails, aquatic invertebrates, and new vegetation regrowth in areas drained to be hayed.

Establishing more desirable and productive habitat for nesting, escape cover, and especially feeding are longer-term benefits resulting from prescribed haying.

Prescribed haying 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 haying activities.

### Short-term impacts

Short term impacts would be disturbance directly related to equipment use during haying operations, which would equate to several days over the haying season, August to mid-September. Potential for birds to be directly taken during operations is attempted to be minimized by delaying haying date to August 1st each year to give broods a chance to fledge and best management practices like cutting from the

middle outwards or from one side to another rather than circling into trap wildlife will also be used to minimize direct take of any wildlife utilizing the area to be hayed.

### Long-term impacts

Long term impacts are positive with better habitat quality available to migratory birds either stopping over during migration or using the area for nesting and brood-rearing. The potential for disturbance and effects of wildlife behavior is there as well, but not well studied.

### Public Review and Comment

The draft compatibility determination will be available for public review and comment for 30 days from 8/31/2023 to 9/30/2023. The public will be made aware of this opportunity to comment through. A hard copy of this document will be posted at Refuge Headquarters, and the Cokeville, WY US Post Office. It will be made available electronically on the refuge website at [www.fws.gov/refuge/cokeville\\_meadows](http://www.fws.gov/refuge/cokeville_meadows). Concerns expressed during the public comment period will be addressed in the final Compatibility Determination.

### Determination

Yes, the use is compatible.

### Stipulations Necessary to Ensure Compatibility

1. Haying operations do not begin until August 1st unless prior approval is obtained from refuge manager.
2. Use of best management practices as recommended by NRCS, especially mowing in a pattern than does not trap wildlife in the center of field being hayed.

### Justification

Habitat conditions would deteriorate without the use of a full range of management tools. Prescriptive haying is a tool that will help the refuge manage flood irrigated areas/ wet meadow habitats to continue to provide high quality areas for stopover, resting and refueling for resident and migrating wildlife. Haying is a tool that also will help keep Garrison creeping foxtail in check and maintain the understory of native vegetation. Haying in sedge and grass communities will support or improve the health and vigor of vegetation and keep the area as open wet meadows or grasslands for use by sandhill cranes, shorebirds, ducks, geese and other marsh species.

Continued irrigation of wet meadows provides foraging, nesting, or resting areas for geese, ducks, cranes, sage-grouse, bitterns, soras, Virginia rails, white-faced ibis, black necked stilts, avocets and other migratory birds. Other species that will be

directly helped include deer, elk, pronghorn, and amphibian species. Continued use of the water supply will keep water rights for the refuge valid, which are needed to maintain the wetland habitats on the refuge.

Haying as outlined in this compatibility determination, would not conflict with national policy to maintain the biological diversity, integrity, and environmental health of Cokeville Meadows NWR.

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 haying on Cokeville Meadows NWR. The relatively limited number of individual animals expected to be adversely affected as a result of haying 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 haying at Cokeville Meadows NWR, 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 the Cokeville Meadows NWR. Rather, appropriate and compatible haying would be a use of the Cokeville Meadows NWR through which the public can develop an appreciation for wildlife and wild lands.

## Signature of Determination

Refuge Manager Signature and Date

## Signature of Concurrence

Assistant Regional Director Signature and Date

## Mandatory Reevaluation Date

2033

### Literature Cited/References

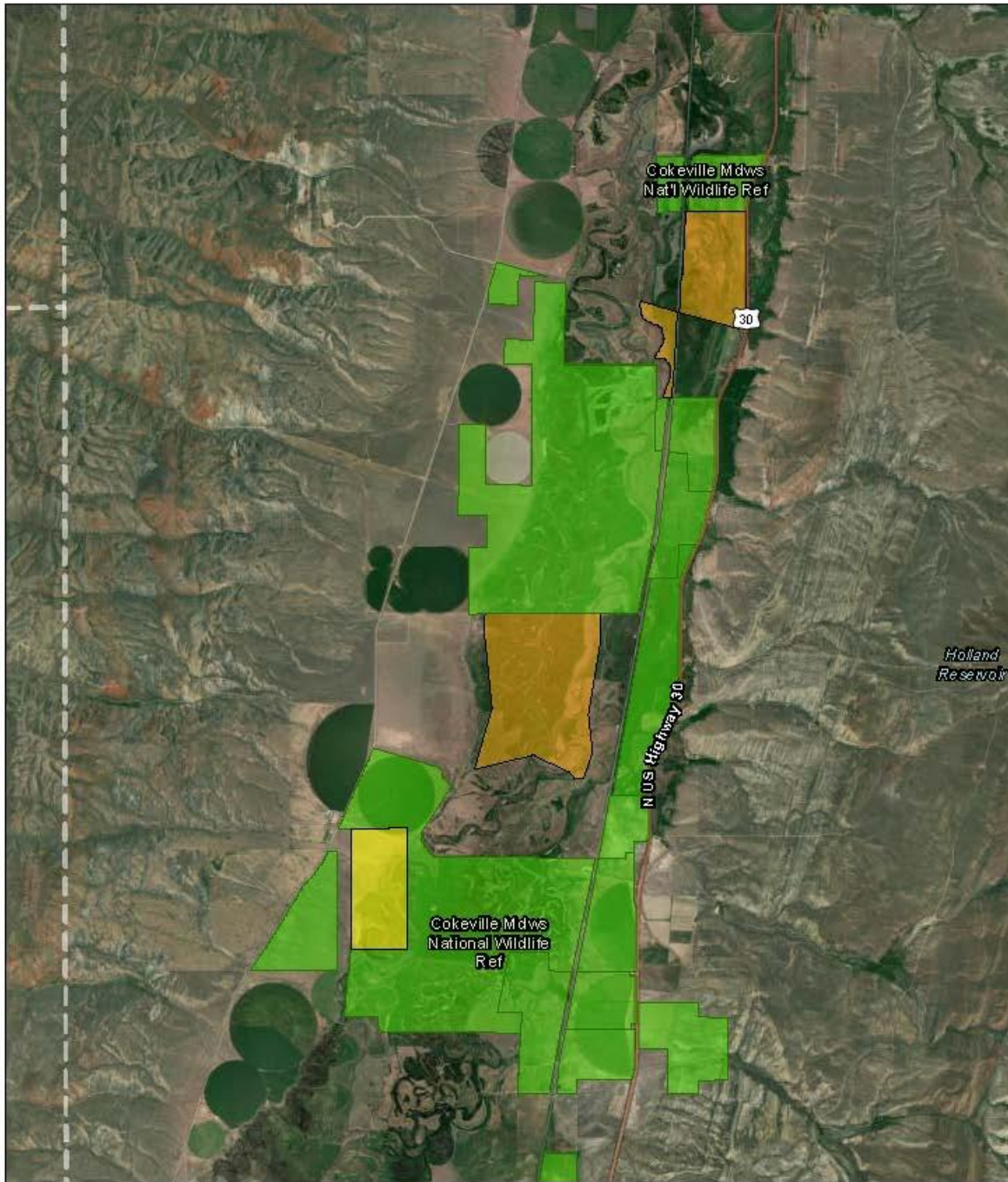
USFWS. 1990. Proposed Cokeville Meadows National Wildlife Refuge, Lincoln County, Wyoming: Draft Environmental Impact Statement. DOI, Lakewood, CO.

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



8/1/2023

FWS National Realty Tracts

- Fee
- Easement
- Lease

World Imagery

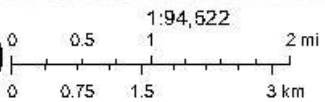
Low Resolution 15m Imagery

High Resolution 60cm Imagery

High Resolution 30cm Imagery

Citations

19m Resolution Metadata



Earthstar Geographics, Lincoln County, WY, Utah Geospatial Resource Center, Esri, HERE, Garmin, Swisstopo, GeoTechnologies, Inc., METI/ NASA, USGS, Bureau of Land Management, EPA, NPS, USDA