

Comprehensive Conservation Plan

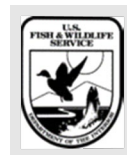
*Charles M. Russell Wetland Management District and
Associated National Wildlife Refuges*

August 2025



Grass Lake NWR, Hailstone NWR, War Horse NWR, War Horse WPA, Clark's Fork WPA,
Lake Mason NWR. Cover photos by USFWS.

The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect, and enhance fish, wildlife, plants, and their habitats for the continuing benefit of the American people.



The mission of the National Wildlife 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.

Comprehensive Conservation Plan

*Charles M. Russell Wetland Management District and
Associated National Wildlife Refuges*

Montana

August 2025

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Introduction

The National Wildlife Refuge System Improvement Act of 1997 (Improvement Act) Pub. L. No. 105-57, 111 Stat. 1252 (1997) (codified at 16 U.S.C. 668dd-668ee). requires every national wildlife refuge (NWR) to develop a comprehensive conservation plan (CCP) and revise it every 15 years, as needed. CCPs ensure that each unit of the National Wildlife Refuge System (NWRS) is managed to fulfill the purpose(s) for which it was established.

This CCP is for the Charles M. Russell Wetland Management District and associated NWRs (the District). It describes the District's role in supporting the mission of the NWRS, as well as conservation efforts in the larger landscape around the District. The CCP:

- Provides the District with a long-term management plan for the conservation of fish, wildlife and plant resources and their related habitats
- Sets a long-term [vision](#) for the District, as well as management [goals](#), [objectives](#) and strategies
- Identifies opportunities for compatible public uses
- Achieves the District's purposes, fulfills the mission of the system and maintains and, where appropriate, restores biological diversity, integrity and environmental health
- Communicates the U.S. Fish and Wildlife Service's ([Service's](#)) management priorities for the District

Pre-planning for this CCP began in 2016 and three public scoping meetings were conducted in February and March 2017 in Winnett, Roundup, and Laurel, Montana. However, the planning process stalled. On June 29, 2022, the Service published a notice of intent in the *Federal Register* announcing the intent to reinstate the planning process to develop a CCP and EA for the District (87 FR 38775). The Service received comments from two individuals and three organizations during the new scoping comment period, which closed on July 29, 2022. All comments were shared with the planning team and considered throughout the planning process. Some of the valuable comments focused on public opportunity, wildlife resources, and livestock grazing. Findings from public comments and other information were used to develop the proposed action for the District and to analyze the management alternatives.

The draft CCP and associated Environmental Assessment (EA) were released for a 30-day public review and comment period from January 14, 2025 through February 14, 2025. During the public review period, we received five comment letters from 10 private citizens; two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. A

summary of the public involvement in this planning process, including State of Montana and Tribal coordination, as well as public comments received and the Service's response to those comments can be found in Appendix I.

The planning process is based on the NWRS planning policies (602 FW 1-6). The resulting requirements and guidance for NWRS plans, including CCPs and CCP step-down management plans, ensure that planning efforts comply with the Improvement Act.

Scope

The District is located in the Northern Great Plains (NGP) of central and south-central Montana (Figure 1) and bounded on the north by the Missouri River Breaks and on the south by the Greater Yellowstone Ecosystem. It encompasses four NWRs and is composed of six waterfowl production areas (WPAs) in five Montana counties: Petroleum, Musselshell, Golden Valley, Yellowstone and Stillwater. Clark's Fork WPA (Carbon County) is managed by the District but is not inside the District boundary. There are also five [conservation easements](#) in the District. These are the District's units and easements:

- War Horse WPA and War Horse NWR and its three units
- Lake Mason NWR and its three units
- Hailstone WPA and NWR
- Grass Lake NWR
- Spidel WPA
- Tew WPA
- Clark's Fork WPA
- James L. Hansen WPA
- Farmers Home Administration (FmHA) conservation easements: Hardy Tract, Kurz Tract, Overturf Tract, Weyer Tract, Jansen Tract
- Other leases: flowage easements, state grazing leases

Units or conservation easements added to the District in the future will be managed under the direction of this CCP and incorporated into future revisions and amendments.

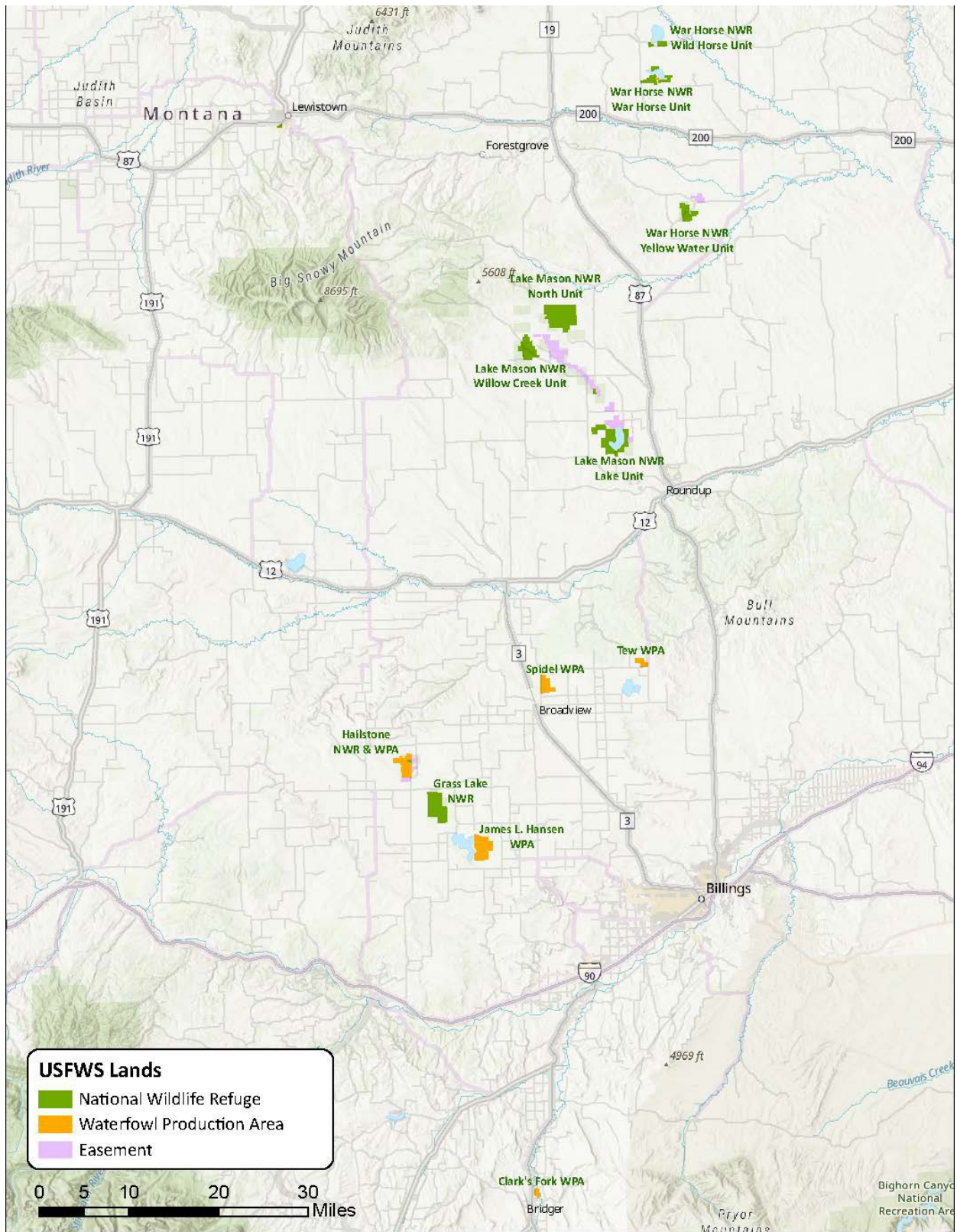


Figure 1. Map of Charles M. Russell Wetland Management District

Purpose and Mission of the U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service (Service) is the principal federal agency responsible for fish, wildlife and plant conservation. It was established in the Department of the Interior in 1940 through the consolidation of bureaus then operating in several federal departments. The Service enforces federal wildlife laws, manages migratory bird populations, restores nationally significant fisheries, conserves and restores vital wildlife habitat, protects and recovers endangered species, and helps other governments with conservation efforts.

The Service also partners with others to fund conservation and connect people with nature, including distributing hundreds of millions of dollars to states for fish and wildlife restoration, boating access, hunter education and related programs.

The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect, and enhance fish and wildlife and their habitats for the continuing benefit of the American people.

Purpose and Mission of the National Wildlife Refuge System

The Service manages an unparalleled network of public lands and waters called the NWRS. NWRs are lands that can be designated congressionally, through Executive Orders signed by the President, or administratively. They are managed to conserve, protect and enhance fish, wildlife, plants and their habitats for the continuing benefit of the American people.

Together, individual refuges comprise the NWRS, which is the largest collection of lands in the world specifically managed for wildlife. The system encompasses more than 150 million acres within more than 571 refuges, more than 3,000 WPAs and 38 wetland management districts (WMDs). There is at least one refuge in every state and five U.S. territories.

Refuges are places where people can enjoy wildlife through bird watching, fishing, hunting, photography and other wildlife pursuits. The nation's fish and wildlife heritage contribute to the quality of American lives and is an integral part of the country's greatness. Wildlife and wild places have always given people special opportunities to have fun, relax and appreciate the natural world.

Fish, wildlife, plants and their habitats receive the highest priority in refuge management. Public uses (with a priority on wildlife-dependent recreation) are allowed and encouraged, as long as they are compatible with the purposes of each Service unit and the mandate of the Improvement Act.

The mission of the National Wildlife 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.

Wetland Management Districts and Waterfowl Production Areas

A WMD provides oversight over multiple WPAs, which may be scattered across one or more counties. WPAs are small, natural wetlands and grasslands that provide breeding, resting and nesting habitat for waterfowl, shorebirds, grassland birds and other wildlife.

The Service acquires WPAs under the authority of the Migratory Bird Hunting and Conservation Stamp Act, which authorizes funds from the sale of Federal Duck Stamps and import duties to be deposited into the Migratory Bird Conservation Fund (MBCF) to purchase or lease wetlands and wildlife habitat for inclusion in the NWRS. The NWRS has 38 WMDs that are composed of thousands of WPAs; it is responsible for conserving more than three million acres of habitat nationally.

WPAs may be acquired by the Service in fee-title or through a conservation easement. WPAs owned by the Service in fee-title are open to hunting, fishing and other compatible wildlife-dependent recreation. WPAs where the Service holds a conservation easement allow property owners to continue to live on and work their land while conserving wetlands and grasslands on their property. Public access to WPA conservation easements is controlled by the landowners. All WPAs in the District are owned in fee-title by the Service. For hunting, fishing and other recreational opportunities available on WPAs in the District, see the "Visitor Use and Access" section.

Established Purposes of the District

Every NWR and WMD has a stated purpose. All programs — from biology and visitor use to maintenance and facilities — are built on this foundational purpose. No action by the Service or public may conflict with this purpose. The Charles M. Russell WMD's vision,



Figure 2. War Horse WPA's grassland-savanna character features a unique mix of Ponderosa pines, old, downed timber, sporadic junipers and rich grasslands that flank a reservoir. Photo by Cortez Rohr/USFWS

goals and strategies in this CCP are intended to support the individual purposes for which District units were established.

War Horse NWR and WPA

War Horse NWR consists of three units: War Horse, Wild Horse and Yellow Water. The 40-acre War Horse WPA connects two parcels of refuge lands on the War Horse Unit. War Horse NWR was not established by a specific Executive Order but through a transfer of lands by the authority of the Bankhead-Jones Farm Tenant Act in 1959. The act authorized the federal government to acquire damaged lands (lands homesteaded and later abandoned), rehabilitate those lands and use them for various purposes.

Executive Order 10787 (November 6, 1958) and Secretary's Order 2843 (November 17, 1959) transferred jurisdiction over these lands from the Secretary of Agriculture to the Secretary of the Interior and directed that these lands be "for use and administration

under applicable laws as refuges for migratory birds and other wildlife.” These scattered land parcels of various sizes were grazed or farmed but reverted to government ownership after attempts at homesteading failed during the Great Depression. War Horse NWR was established as a refuge and breeding ground for migratory birds and other wildlife. The Refuge comprises 2,876 acres.

Lake Mason NWR

Lake Mason NWR consists of three units: Lake, Willow Creek and North. The U.S. Department of Agriculture acquired perpetual flowage easements, described further below, in 1937 and 1938 on lands around Lake Mason and along Willow Creek and Jones Creek upstream from Lake Mason. The Service acquired fee-title lands in this Refuge through a transfer authorized by the Bankhead-Jones Farm Tenant Act.

Through an Executive Order 10787 (November 6, 1958) signed by President Dwight D. Eisenhower and Secretary’s Order 2843 (November 17, 1959), jurisdiction of these lands transferred from the Secretary of Agriculture to the Secretary of the Interior. Lake Mason NWR was managed as a flowage and refuge easement to allow flooding (natural or human caused) of the lands with the purpose of creating habitat for migratory birds and for other wildlife conservation purposes. The Refuge includes 12,369 acres in fee title, 1,220 lake acres and 5,578 acres in Refuge and flowage easements.

Hailstone WPA and NWR

President Franklin D. Roosevelt signed Executive Order 9292 on December 31, 1942, to establish Hailstone WPA and NWR as an easement refuge of 2,748 acres. Hailstone WPA



Figure 3. Wetlands at Hailstone NWR and WPA are surrounded with sedges, rushes and grasses that provide critical concealment and nesting habitat for waterfowl, shorebirds and wading birds. Photo by Cortez Rohr/USFWS

and NWR are part of the Lake Basin area (a closed basin) and were established as breeding grounds for waterfowl and other wildlife. They were originally managed as a flowage and refuge easement. The initial benefit of the easement was that it allowed the Works Progress Administration to enhance wetland basins. The Refuge and WPA includes 1,988 acres in fee title and 760 acres in flowage easement.

Grass Lake NWR

Grass Lake NWR is also part of the Lake Basin area. President Franklin D. Roosevelt signed Executive Order 9167 on May 19, 1942, establishing Grass Lake NWR. The order created it “as a refuge and breeding ground for migratory birds and other wildlife,” although it did not transfer any lands. It was initially managed as a flowage and refuge easement. The Service purchased 3,279 acres in fee title in 1987, which included most of the original easement lands. The flowage easement at Grass Lake NWR is 399 acres.

Spidel WPA

The lands for Spidel WPA were acquired in 1980 using the MBCF. The Service manages its 1,246 acres for waterfowl production under the WPA program. Nearly 700 acres of this WPA is wetland drained by previous owners for crop production that still holds great value for waterfowl and shorebirds. The former wetland area has potential for restoration, which increases its importance for migratory birds.

Tew WPA

The 532-acre Tew WPA was established in 1980 using the MBCF; it is one of a few areas in central Montana with natural temporary and seasonal wetland basins. It contains six wetland basins: three temporary (semipermanent) and three seasonal. The basins are in small watersheds, and above-average precipitation and surface runoff are required to fill them. When wet, the area provides excellent nesting and brood-rearing habitat for waterfowl and other wildlife species.

Clark's Fork WPA

The 271-acre Clark's Fork WPA is an FmHA conservation easement the Service acquired as fee-title in 1991. It has one and a half miles of river frontage along the Clark's Fork of



Figure 4. The full banks of the Clark's Fork of the Yellowstone River flow beside the wetlands and grasslands of Clark's Fork WPA. This area is noted for its high waterfowl capacity and the many neotropical migrant songbirds that call it home in spring and summer. Photo by Cortez Rohr/USFWS

the Yellowstone River. After acquisition, the Service coordinated a 66-acre wetland creation project, working with Ducks Unlimited and Montana Fish, Wildlife and Parks (MFWP). The WPA provides habitat for a great variety of waterfowl, shorebirds, grassland birds, plants, insects and wildlife.

James L. Hansen WPA

The James L. Hansen WPA was acquired in January 2023 using the MBCF. The unit is 2,683 acres, with about 450 acres comprising deepwater habitat, 1,403 acres [emergent](#) wetland habitat and the remaining 830 acres upland habitat. The WPA is adjacent to the Big Lake Wildlife Management Area administered by MFWP. The WPA provides abundant habitat for nesting waterfowl, grassland birds, shorebirds, plants, insects and other wildlife.

Farmers Home Administration Conservation Easements

FmHA conservation easements are authorized for conservation, recreation and wildlife purposes on properties foreclosed by the federal government (Consolidated Farm and Rural Development Act, as amended, 7 U.S.C. 1985(g)). The purposes of these perpetual easements are to preserve and maintain wetland and floodplain areas, as well as protect plant and animal habitats and populations.

Easement covenants include rules against building any structures or altering any vegetation or hydrology and require landowners to control all noxious plants in compliance with the law. The United States retains rights to inspect properties for compliance and to establish, reestablish, or enhance wetland functional values and vegetation.

FmHA easements do not provide for public access, although the landowner may permit entry for recreational purposes. The Service manages conservation easements included in the NWRS according to the limited rights acquired by the Service in the easement document (7 U.S.C. 2002).

The Service manages five FmHA conservation easements in the District:

- The 120-acre Hardy Tract, obtained in 1989, is in Custer County. A 43-acre semipermanent wetland was created in 1990 in cooperation with Ducks Unlimited and MFWP. Water for this project was purchased from the Tongue and Yellowstone Irrigation Company and obtained via a diversion in a nearby ditch.
- The 100-acre Kurz Tract, obtained in 1998, is in Bighorn County. It is adjacent to the Bighorn River.
- The 25-acre Overturf Tract, obtained in 1988, is in Bighorn County. It is adjacent to the Little Bighorn River.
- The 960-acre Weyer Tract, obtained in 1997, is in Wibaux County.
- The 280-acre Jansen Tract, obtained in 2000, is in McCone County. A management plan jointly developed and agreed to by the Service and Natural Resources Conservation Service (NRCS) allows hay cutting and grazing.

Other Easements

Flowage Easements. The Service administers other types of easements that are part of the District's NWRs and WPAs. Flowage easements were purchased in the late 1930s. These are the covenants included with flowage easements:

The exclusive and perpetual right and easement to flood with water, and maintain and operate an artificial lake, and/or to raise the water level of a natural lake or stream, upon the lands ... by means of dams, dikes, fills, ditches, spillways, and other structures, for water conservation, drought relief, and for migratory bird and wildlife conservation

purposes, and ... to operate and maintain a wildlife conservation demonstration unit and a closed refuge and reservation for migratory birds and other wildlife.

The initial objective of flowage easements was to allow the Works Progress Administration to enhance wetland basins. Later, in the 1980s, most of the lands encumbered by easement were purchased in fee-title at Hailstone and Grass Lake NWRs. The easements at Lake Mason NWR and along Willow Creek were never fully developed. Only the Miller Lake project (Lake Mason NWR) was attempted, but it is currently nonfunctional.

The current acreage of flowage easements: Hailstone NWR (760 acres), Grass Lake NWR (399 acres) and Lake Mason NWR (5,502 acres). An easement for wildlife habitat protection was retained on 560 acres of land that was divested during the 2004 land exchange at the Yellow Water Unit (War Horse NWR). Permanent vegetative cover must be preserved on these lands and cannot be altered without the Service's permission.

State Grazing Leases. The Service purchased three grazing leases from Montana's Department of Natural Resources and Conservation. These are 10-year renewable leases for grazing privileges on State lands within an NWR or WPA that require an annual payment based on the available [animal unit months](#) (AUMs).

The Service does not regularly use these leases for livestock grazing; they are predominantly kept in non-use to provide residual cover for nesting migratory birds and other wildlife. The three leases are located adjacent to Grass Lake NWR (the lease is 640 acres), Spidel WPA (160 acres) and the Lake Unit (160 acres) of Lake Mason NWR.

Vision and Goals

Vision

The District's **vision** is a future-oriented statement designed to be achieved through management of the District throughout the life of the CCP and beyond:

The Charles M. Russell Wetland Management District, located in the heart of the Northern Great Plains, consists of national wildlife refuges, waterfowl production areas, and conservation easements. These mixed grassland, sagebrush, and vital wetland habitats support abundant wildlife populations. In collaboration with partners, these habitats are managed to support the biological diversity and integrity of the District and its surrounding landscapes and provide a variety of recreational opportunities. Visitors enjoy a sense of serenity and wonder through the presence of diverse habitats and wildlife, connecting them with nature.

Goals for the Wetland Management District

The Service developed seven **goals** for the District based on the Improvement Act, the various established purposes of the NWRs, WPAs and conservation easements within the District, and information developed during the planning process. These goals will direct management actions toward achieving the District's vision and purposes for each unit and outline approaches for managing District resources.

Natural Resources

1. **Upland Habitat and Associated Wildlife:** Protect, enhance and manage upland habitat for breeding and migratory birds and other wildlife while maintaining the biological diversity and integrity of native grasslands and sage-steppe prairie.
2. **Wetland Habitat and Associated Wildlife:** Protect, enhance and manage wetland habitat for breeding and migratory birds and other wildlife to maintain the biological diversity and integrity of the District's wetlands.
3. **Research and Inventory:** Improve scientific knowledge of natural resources and ecological processes to inform management within the District through monitoring and applied research.

Visitor Use and Access

4. **Visitor Use:** Provide visitors with wildlife-dependent recreational and educational opportunities that foster an appreciation of the District's wildlife and plant communities.

5. **Partnerships:** Collaborate with partners to protect, enhance and manage for healthy, productive and diverse habitats and wildlife populations on District and surrounding lands.

Operations

6. **Operations:** Emphasize the protection of District resources using staff, partnerships and volunteer programs.

Cultural Resources

7. **Cultural Resources:** Identify and protect cultural resources to preserve the District's [precontact](#) and historic past.

Associated Objectives and Strategies

The Service has developed several **objectives** and **strategies** to achieve the District's vision and goals. This CCP presents objectives and strategies in its sections on natural resources, visitor use, partnerships, operations and cultural resources. These will be updated as necessary through the NWRS's step-down planning process (602 FW 4).

Natural Resources

The Landscape

The District is in central and south-central Montana. It is bounded on the north by the Missouri River Breaks and on the south by the Greater Yellowstone Ecosystem. The District includes wetlands with a mix of grasses, rushes and occasional greasewood; areas of Ponderosa pine woodlands; creek bottoms filled with cottonwoods; coulees having a mix of juniper, sagebrush and deciduous shrubs with grass components; and vast, open, flat and rolling grassland hills mixed with sagebrush in some areas.



Figure 5. The North Unit of Lake Mason NWR features rolling grasslands and coulees composed of mixed-grass prairie interspersed with sagebrush. This Refuge is important for many grassland nesting birds, pronghorn mule deer and elk (seen in this photo). Forested mountains are nearby. Photo by Cortez Rohr/USFWS

Seasonal and temporary wetland basins provide critical waterfowl and grassland bird habitat for feeding and nesting. The District also lies on the western edge of the Central Flyway and near the eastern edge of the Pacific Flyway. The core of the District's work is managing wetland habitat to benefit waterfowl, wading birds and shorebirds.

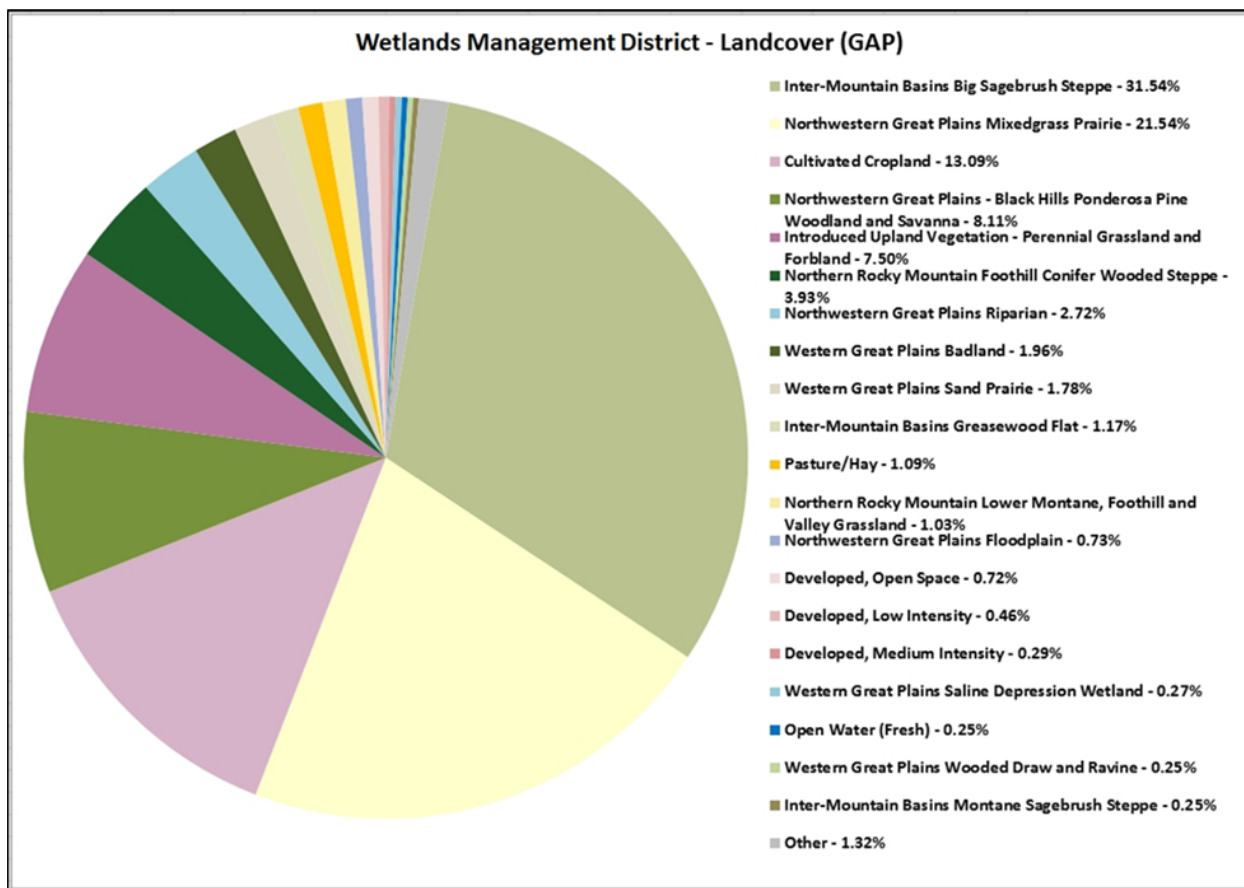


Figure 6. Percentage of landcover types in Charles M. Russell WMD

Upland Habitat

The District's upland areas comprise vast expanses of mixed-grass prairie, sagebrush mixed-grass prairie, greasewood mixed-grass prairie, three fields of disturbed grasslands replanted to dense nesting cover and 225 acres of unique ponderosa pine woodland and savanna. Large, intact native plant communities are still found throughout the District and central Montana, making this area important for native wildlife. A native plant community is an area of previously unbroken, unfarmed sod where the natural soil composition remains intact.

The plant species present are similar, whether grass, sagebrush or greasewood dominates a site. Common grasses and grass-like species include western wheatgrass, bluebunch wheatgrass, green needlegrass, needle and thread, prairie Junegrass, blue grama and threadleaf sedge. Common native [forbs](#) are phlox, salsify, fringed sagewort, western yarrow and American vetch. Shrubs are big sagebrush, greasewood, saltbush and rubber rabbitbrush. Other vegetation includes prickly pear cactus and dense clubmoss. Figure 6 shows the percentage of landcover types in the District, and Figure 7 shows the distribution of landcover across the District.

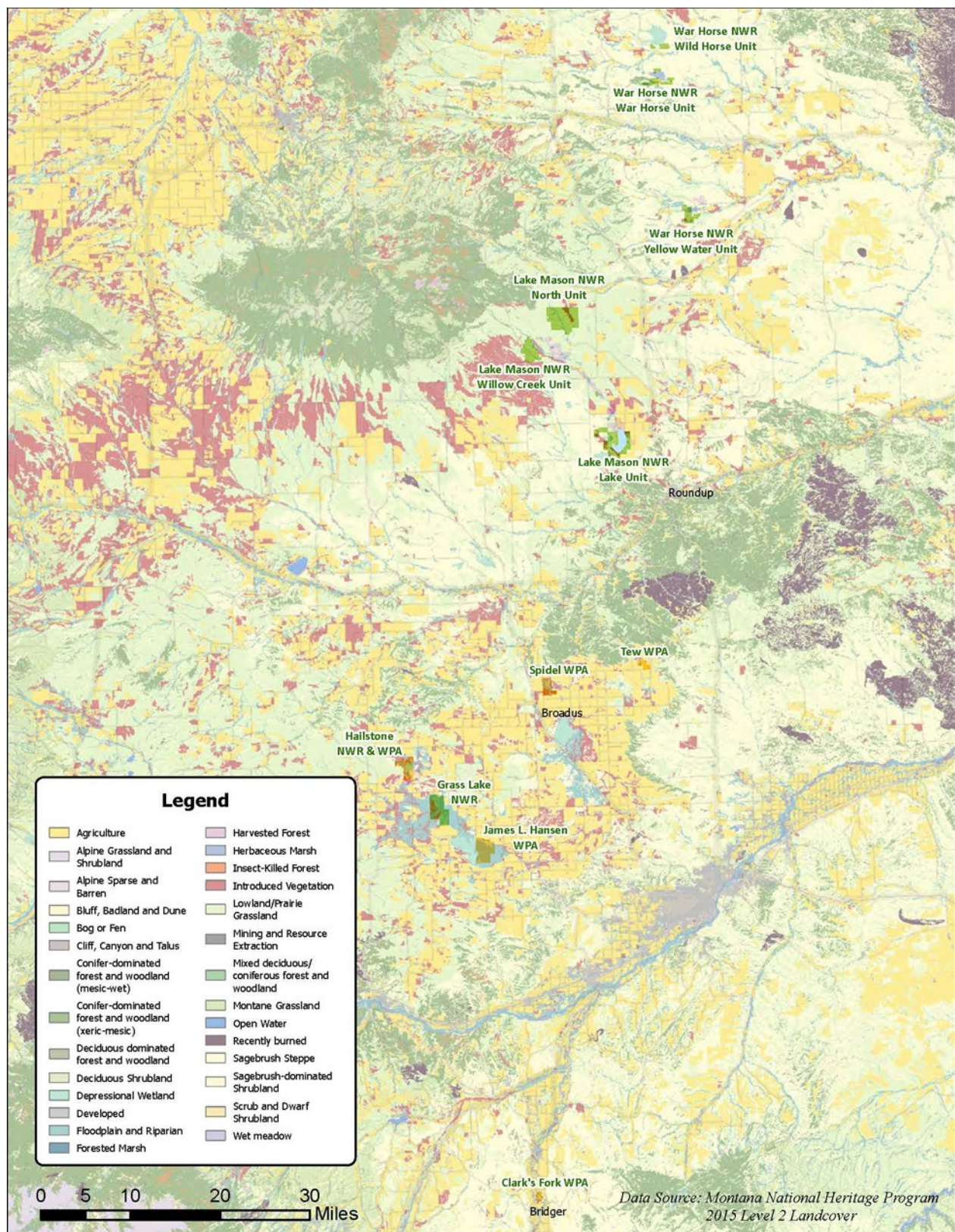


Figure 7. Distribution of landcover types in Charles M. Russell WMD

Some NWR and WPA properties in the District contained croplands when they were purchased; these areas are referred to as disturbed grasslands. These fields were converted to dense nesting cover with a seed mixture of cool-season wheatgrasses and legumes. The predominant wheatgrass species were intermediate, tall, pubescent and western. The legumes were alfalfa and yellow sweet clover.

These species were chosen based on research that showed they are highly attractive and beneficial to nesting waterfowl (Duebbert 1969). Research conducted in the late 1960s and 1970s indicated ducks had higher nesting success in dense nesting cover than in surrounding upland habitats (Duebbert 1969; Duebbert and Lokemoen 1976; Kaiser et al. 1979).

Lands adjacent to NWR and WPA properties (that were converted from native prairie) are generally flatter areas with deeper, more productive soil types and are now used for grain production. Croplands are adjacent to or in the vicinity of Lake Mason (Lake Unit), Hailstone WPA and NWR, Grass Lake NWR and all WPAs.

Ponderosa Pine Habitat

There are 225 acres of native Great Plains Ponderosa pine woodland and savanna in the War Horse Unit (of War Horse NWR). The native Ponderosa pine woodland and savanna is a unique plant community composed of plants common to the area.

Birds and small mammals consume the seeds of ponderosa pine, and mice, porcupines and other rodents use the bark for nesting material. The trees are important to various bird species for cover, roosting and nesting sites (NRCS 2004).



Figure 8. The interior of the War Horse Unit. Stands of mature Ponderosa pines and open grassy meadows provide habitat for mule deer, elk and scores of songbirds. Gnaw marks on the cambium layer of the pines are evidence of porcupines. Photo by Cortez Rohr/USFWS

Wetland and Riparian Habitat

The District acquired properties with natural wetlands to provide habitat for wetland-dependent wildlife species. Four of the larger, natural, semipermanent wetlands (Lake Mason, Hailstone Basin, Halfbreed Lake and War Horse) were modified with the addition of dikes and emergency spillways to increase depth and storage capacity. The Service holds water rights in several NWRs and WPAs but does not exercise all those rights. The Service has lacked the staff and resources to maintain the water control structures,



Figure 9. Wading birds and shorebirds such as the white-faced ibis, long-billed curlews and willets (shown here) are regular visitors at Lake Mason NWR. Fluctuating water levels provide the periodic shallow water and open mudflat habitat niche these and similar birds need to thrive. Photo by Cortez Rohr/USFWS

ditches, dikes and other infrastructure needed to maximize our full water right potential, which would allow us to further restore and/or replicate the natural hydrologic function of these units.

The District's natural and managed wetlands vary from freshwater to moderately saline. Water for District wetlands originates from annual precipitation and surface runoff. The amount of water available to a wetland also depends on the size of its watershed. Significant runoff can occur when precipitation falls on frozen or saturated soils during an

extremely heavy rainstorm. These major runoff events are the most important water sources for District wetlands. Water levels fluctuate throughout the year based on summer precipitation patterns and evaporation. Levels tend to be highest in the spring and decline through the summer, occasionally leaving the basin dry.

During consecutive good water years, wetlands may be full year-round, as was the case from 2011 to 2012. The opposite may occur during consecutive poor water years when the basins lack water the entire year. These cycles are typical for seasonal wetlands and are necessary to maintain their health and productivity. Water fluctuations on Lake Mason NWR were monitored from 1983 to 1997 (see Table 2) — the fluctuations that occurred during those 14 years could apply to other semipermanent District wetlands.

Table 2. Water Levels on Lake Mason NWR From 1983 to 1997

Water Fluctuations in Wetlands	Frequency of Occurrence (%)	Number of Times Occurred
Water present during spring, lake dry by mid-summer	40	6
Water present entire year	34	5
Water present during fall only	13	2
Lake dry entire year	13	2

Wetland habitats contain emergent and [submergent plants](#). *Emergent plants* are those rooted in the substrate, having foliage that grows partially or entirely above the water surface. Emergent plants found in the District include hardstem bulrush, alkali bulrush and common cattail. *Submergent plants* are those that have roots in the substrate but do not emerge above the surface of the water (except some that have floating leaves). Common submergent plants include northern watermilfoil, widgeongrass and sago pondweed.

Many wetland plants have broad salt tolerances and can be found in freshwater and saline wetlands; however, species richness for emergent and submergent vegetation decreases as salinity increases (Johnson 1990). Other notable species that occur along the shores of lakes and marshes include foxtail barley, goosefoot and saltgrass.

A [riparian area](#) is the interface between land and a river or stream. Riparian areas provide important nesting and breeding habitat for migratory songbirds and foraging and brood-rearing habitat for greater sage-grouse. According to Montana's Comprehensive Fish and Wildlife Conservation Strategy (MFWP 2005), riparian areas support the greatest concentration of plants and animals yet constitute only four percent of Montana's land cover.

Clark's Fork WPA is the only unit in the District that contains broadleaf riparian habitat. That riparian area is located where one and a half miles of the Clark's Fork of the Yellowstone River forms its east boundary. Riparian habitat consisting of grasses and sedges is also present along Cedar Creek on Grass Lake NWR and Jones Creek on the North Unit of Lake Mason NWR.

Upland Birds

Some common nongame birds in upland areas are horned lark, vesper sparrow, Brewer's sparrow, Savannah sparrow, grasshopper sparrow, lark bunting and western meadowlark. Game bird species such as sharp-tailed grouse, pheasants, gray partridge and greater sage-grouse occur on most District properties.



Figure 10. A western meadowlark takes flight at Spidel WPA, where grassland songbirds are abundant. Photo by Cortez Rohr/USFWS

In February 2010, the Service determined the greater sage-grouse was "warranted but precluded" for listing under the Endangered Species Act (ESA). This means the listing was warranted but other species have a higher priority; therefore, the greater sage-grouse is listed as a federal candidate species.

The Final Management Plan and Conservation Strategies for Sage-Grouse in Montana (Montana Sage-Grouse Working Group 2005) contains a map showing the distribution of

greater sage-grouse and sagebrush ecotypes throughout Montana and a table with population distribution and trend data. All District properties are in greater sage-grouse habitat range.

A status review conducted by the Service in 2015 found that the greater sage-grouse was abundant and well-distributed across its 173-million-acre range and did not face extinction. The Service determined that protection under the ESA was no longer warranted and withdrew the species from the candidate species list.

All units of War Horse NWR and the west side of the Lake Unit (Lake Mason NWR) are in high-priority habitat for greater sage-grouse. Sage-grouse are year-round residents of these properties, which they use for nesting, brood rearing and wintering. Known [lek](#) sites are on the North Unit (Lake Mason NWR) and Yellow Water Unit (War Horse NWR). There are also known lek sites within a four-mile radius of the Wild Horse Unit (11 lek

sites), War Horse Unit (10), Yellow Water Unit (14), North Unit (one) and Lake Unit (three), indicating the importance of these properties for sage-grouse.

Wet areas along intermittent streams, seepage sites below artificial reservoirs and around wetlands provide the insects and forbs hens and chicks feed on during the summer. Upland bird species that are neotropical migrant species and greater-sage grouse are priority species for the District.

You can find the entire species list for the District on it's [website](#). Information in this species list came from a combined Service database and Environmental Summary Report for the entire District from the Montana Natural Heritage Program (MTNHP). MTNHP's purpose is to provide information on species and biological communities to inform all stakeholders in environmental review, permitting and planning processes.

Waterbirds

Waterfowl. Waterfowl migration begins shortly after ice-out in the spring and usually runs from mid-March through April and again from mid-September through October or until freeze-up occurs. The number of birds using District wetlands is directly related to the quantity of water present.



Figure 11. Waterfowl, shorebirds, wading birds and water-obligate bird species at Grass Lake NWR. Photo by Cortez Rohr/USFWS

Estimates from bird observations over a 20-year period show that when semipermanent wetlands are in good condition (at least 50% of the basin is wet), up to 25,000 ducks, 1,000 Canada geese, 50 snow geese, 200 tundra swans and 15,000 American coots use

them during spring and fall migrations. You can find the entire list of waterfowl and other birds with potential or observed presence in the District on it's [website](#).

Marsh and Wading Birds. Marsh and waterbird spring migration usually begins a few weeks after waterfowl migration. Most species continue north to their nesting areas, although several species remain to nest in the District, including black-necked stilt, American avocet, ring-billed and California gulls, marbled godwit and Wilson's phalarope.

The number and diversity of birds using the District is greatest during spring and fall migration. Peak migration use of each of the larger wetlands by marsh and waterbirds has also been documented for eared grebes (5,000), Wilson's phalarope (5,000), Franklin's gull (3,000) and California gull (750).

Shorebirds. More shorebirds use the District during the fall migration than in spring. Nesting shorebirds include marbled godwit, willet, upland sandpiper, long-billed curlew and common snipe. Peak migration use was documented for shorebird species including long-billed dowitcher (1,000), short-billed dowitcher (250), American avocet (100), semipalmated sandpiper (165), least sandpiper (400), western sandpiper (400) and Baird's sandpiper (200).

These numbers (and those for marsh and waterbirds) are based on nearly 20 years of bird observation data collected from the mid-1980s through 2004 by a refuge volunteer from the Yellowstone Chapter of the Audubon Society, along with field notes by District staff.

Mammals

Incidental observations have confirmed the species present in the District include Richardson ground squirrel, thirteen-lined ground squirrel, northern pocket gopher, deer mouse, beaver, muskrat, white-tailed jackrabbit, cottontail rabbit, raccoon, long-tailed weasel, mink, badger, striped skunk, coyote and red fox (see the entire species list [here](#)).



Figure 12. Pronghorn flourish in Tew WPA's lush grasslands. Photo by Cortez Rohr/USFWS

Muskrat, mink, raccoon and beaver are the most common mammals using wetland

habitats, and white-tailed deer, beaver, raccoon, porcupine, mink and red fox can be observed in riparian areas.

Pronghorn antelope and mule deer are the most common big-game species on all units except Clark's Fork WPA. White-tailed deer are common on Clark's Fork WPA and have been sighted on Lake Mason NWR's North Unit. About 700 head of elk wintered in the North Unit during winter 2010-2011 when deep snows forced them from the traditional winter range in the Little Snowy Mountains, which are about 10 miles west of the North Unit.

Colonies of black-tailed prairie dog (a Montana species of concern) are found on flat, open grasslands that contain a shrub component and low, relatively sparse vegetation. The most frequently occupied habitat in Montana is dominated by western wheatgrass, blue grama and big sagebrush (MTNHP 2024). The black-tailed prairie dog is found on the Yellow Water Unit (War Horse NWR), North Unit and Lake Unit (Lake Mason NWR), Hailstone NWR, Grass Lake NWR and James L. Hansen WPA. Each colony is small in acreage and distant from other colonies.

The colonies also provide habitat for other wildlife species such as mountain plovers and burrowing owls. The black-footed ferret has not been documented in any of these colonies.

Reptiles and Amphibians

Incidental observations and systematic surveys conducted in 1998 and 1999 (Hendricks 1999) have documented eastern racer, western rattlesnake, gopher snake, plains garter snake and greater short-horned lizard. The greater short-horned lizard has been found at Hailstone WPA and studied by the biology department at Montana State University-Billings. Milk snake, western hognose snake, greater short-horned lizard and common sagebrush lizard are on Montana's list of reptile species of concern.

Nineteen amphibian species have been observed or are expected to occur in wetland habitats based on data from the MTNHP (see the entire list [here](#)). The surveys conducted in 1989 and 1998 (Hendricks 1999) also documented tiger salamander, western chorus frog, northern leopard frog, plains spadefoot toad, Woodhouse's toad and painted turtle.

Invertebrates

Upland invertebrates (insects) diversity has not been inventoried or quantified, but prairie and tame grasslands produce many grasshoppers, leafhoppers, butterflies, beetles, spiders and ants. Wetlands normally have high invertebrate populations, and nesting waterfowl, waterfowl



Figure 13. Melissa blue butterfly (*Plebejus melissa*) pollinates Drummond's milkvetch (*Astragalus drummondii*) in Tew WPA's grasslands. Photo by Cortez Rohr/USFWS

broods, marsh birds, waterbirds and shorebirds are highly dependent on them as protein food sources for healthy, vigorous growth.

Common aquatic macroinvertebrates documented in the District include midges, backswimmers, water boatman, snails, damselflies, dragon flies and scuds. The same species are found in fresh and saline wetlands, but diversity decreases with increased salinity (Johnson 1990).

Fish

District wetlands are within closed basins, are too intermittent in nature, or are too far away from perennial lakes, rivers or streams to support fisheries. The exceptions are Yellow Water and War Horse reservoirs, where the MFWP stocks fingerling rainbow trout and large-mouth bass when water depths are adequate. The reservoirs occasionally experience winter kills due to inadequate winter water levels; when this occurs, rainbows are stocked when adequate water levels return.

Clark's Fork WPA is in the transition zone between cold and warm water fisheries — species of both fisheries are present in low numbers and include rainbow and brown trout, burbot, channel catfish, common carp, several species of sucker and a variety of minnows (MFWP 2016).

Priority Habitats and Species

The District has outlined the habitats and species deemed long-term priorities for management based on the District's various established purposes and its role in the landscape. The District provides critical migratory bird habitat due to its location in the western Central Flyway and proximity to the eastern portion of the Pacific Flyway. Consequently, migratory birds and their [guilds](#) guide many of the selected priority

habitats in the District, specifically wetlands and grasslands adjacent to or near wetlands providing waterfowl nesting habitat.

Sage-grouse and the sage-steppe/grasslands they inhabit provide the District's remaining priority habitat. Protecting these wetland, grassland and sage-steppe/grassland ecosystems and habitats is crucial to maintaining ecosystem resilience in the face of changing ecological conditions and human encroachment.

The District's priority species are migratory and year-round resident birds and mammals that rely on its habitats to rest, forage, nest, stage, shelter, birth and breed. District lands encompass a mosaic of various habitats. An Inventory and Monitoring plan developed in June 2022 identifies and prioritizes management for guilds and species. The habitat types corresponding to prioritized guilds and species for the District are described below.

Wetlands: Wetlands and grasslands within the District's wetland basins provide a critical network of habitat linkages within migration corridors for various species of migratory and year-round resident wildlife. The District contains both permanent and semipermanent wetlands. Wetland habitats contain emergent and submergent plants.

Wetland Species: waterfowl, waterbirds, shorebirds, wading birds



Figure 14. Spidel WPA's seasonal wetlands are critical feeding areas for shorebirds like these Wilson's phalaropes. The grasslands, sedges and cattails surrounding this wetland also provide cover and nesting habitat. Photo by Cortez Rohr/USFWS

Sage-Steppe: Wildlife migrants and year-round residents of the District can also be found in sage-steppe. This semi-arid environment features abundant sagebrush — typically basin big sagebrush, Wyoming big sagebrush and silver sagebrush with other native shrubs, grasses and flowering plants mixed in. These include rabbitbrush, greasewood, phlox, yarrow, mixed bunchgrass species and occasionally prickly-pear cactus.



Figure 15. Sagebrush and bunchgrass meet at the Wild Horse Reservoir at War Horse NWR. Sage-grouse and other species find cover and food here. Photo by Cortez Rohr/USFWS

Sage-Steppe Species: greater sage-grouse, pronghorn, black-tailed prairie dog, neotropical migratory birds

Grasslands: Semi-arid grasslands are also used by wildlife migrants and year-round residents. The District has grasslands composed of mixed-grass prairie, sagebrush-mixed-grass prairie and greasewood-mixed-grass prairie. Common grasses and grass-like species include western wheatgrass, bluebunch wheatgrass, green needlegrass, needle and thread, prairie Junegrass, blue grama and threadleaf sedge. Forbs may include phlox, salsify, western yarrow and American vetch.



Figure 16. The black-tailed prairie dog community at Grass Lake NWR with the Absaroka Mountains in the background. Prairie dogs create microhabitats that benefit other species such as the burrowing owl and mountain plover (a Montana species of concern). Photo by Cortez Rohr/USFWS

Grasslands Species: waterfowl, greater sage-grouse, black-tailed prairie dog, pronghorn, neotropical migratory birds

Threats to Natural Resources

Habitat Quality and Health

District planning focuses on how best to restore, protect and improve grasslands, shrublands, ponderosa pine savannas and woodlands, and wetlands, which are important habitats for the species that nest, breed and forage on District lands. Environmental changes such as increased temperatures, exacerbated drought conditions, changes in water type and availability (snow vs. rain), vegetation [phenology](#) and animal movement may change animal behaviors.

These weather and climatic changes may threaten wildlife and wildlife habitat in the future, so protecting District lands is critical. Staff will continuously monitor wildlife presence, plant communities and water conditions to assess any ecological transformations that may be related to changes in climate.

Invasive Plants

Appendix B discusses problems caused by invasive nonnative (exotic) and native plants found throughout the District. The primary invasive species in upland habitats are cheatgrass, Japanese brome, crested wheatgrass, leafy spurge, black henbane, Russian olive and whitetop. Wetland and riparian areas are affected by invasive (native and nonnative) plants such as cattail, Russian olive and willow.

Invasive plants can (1) reduce biodiversity by displacing plants from plant communities and eventually the animals that depend on those plants for food and habitat; (2) reduce forage quality and quantity and crop, pasture and rangeland productivity; (3) reduce soil moisture and nutrients early in the season; and (4) increase the operating costs for public and private lands. The increased density of some flammable invasive woody plants and associated litter increases fire frequency and intensity (Zedler and Kercher 2004).

Invasive wetland plants also affect wetland and riparian areas by outcompeting native plants, displacing native animals (USFWS 2007) and greatly altering the physical structure of a wetland. This creates a potential for shifting hydrological conditions and animal use (USFWS 2007), which negatively impacts native plants and animals in wetlands, riparian zones and marshes. When invasive plants become dense, they can lower water tables to the disadvantage of native species and dewater wetlands (Zedler and Kercher 2004).

Trespass Livestock

Trespass livestock create problems on Service lands not intended for grazing. This can occur where older fencing is in poor condition or there is not enough fencing to prohibit cattle from entering NWRs and WPAs. Grazing can defoliate vegetation in areas where

upland habitat loss affects wildlife that depend on abundant quality grasslands. Livestock grazing in wetland and riparian areas can destroy riparian vegetation, compact soils, change stream channel morphology, enhance erosion and impair water quality (Belskey et al. 1999). Trespass livestock are limited but cause some problems in the District.

Wildfire Response and Fire Return Interval

Wildfires in the District have been minimal; records show only four fires in the last 20 years. Full [suppression](#) of wildfires is the only option; the proximity of private property and the presence of fire-sensitive sagebrush habitat limit managing wildfires for resource management objectives as described in the Guidance for Implementation of Federal



Wildland Fire Management Policy ([USDA/USDI](#) 2009).

Fuel loading in forested areas ranges from moderate to high and includes dry grasses ([ground fuels](#)), shrubs, seedlings, saplings and low branches that serve as [ladder fuels](#).

Figure 17. A wildland firefighter uses a torch to selectively apply prescribed fire to remove junipers. This practice rejuvenates grasslands and restores normal fire intervals. Photo by Cortez Rohr/USFWS

[Fire return interval \(or fire interval\)](#) is the period (number of years) between naturally occurring wildfires. Fire intervals vary by vegetation type and location. Fire, as much as other environmental factors, has helped shape grasslands and associated woody vegetation. In pre-settlement times, wildfire frequency was variable, occurring every five to 10 years (Frost 1998, Wright and Bailey 1980).

Based on vegetation recovery intervals and bird-nesting studies, Naugle and Bakker (2000) recommends three- to 10-year fire intervals in the wetter regions of the NGP and 10-year or greater intervals in the drier mixed-grass and short-grass zones. The fire return interval in the District's ponderosa pine areas is exceeding 80 years; the ideal fire return interval in those forested areas is 10 to 30 years.

Water Quality

Water quality issues stem from elevated salinity and selenium levels and other contaminants (such as pesticides) in some District wetlands. Contaminated waters can indirectly affect wildlife by degrading wetland habitat through reduced vegetation growth (Rouse 2012), which limits the availability of drinkable water and reduces the abundance of prey (Nelson and Reiten 2007). Direct effects on wildlife after exposure to a contaminant (such as salinity, selenium, or pesticide) can include reduced growth, impaired reproduction and death.

A study conducted by Nelson and Reiten (2007) evaluated the background hydrogeologic conditions, selenium source and geochemistry, as well as the distribution of selenium and other constituents of concern. The Service has documented the impacts of these seeps on waterfowl and shorebirds (USFWS 1991). Water sources for livestock are unusable in many areas; in some places, ranchers have ceased livestock operations (Holzer et al. 1995).

Climate Conditions

Central and eastern Montana's climate is mainly semi-arid continental, characterized by warm summers and moderately cold winters. In summer, average daytime high temperatures are 80°F with infrequent hot periods exceeding 100°F. The average winter low temperature is near 0°F with occasional colder periods that fall below -20°F for short periods. Average annual precipitation varies from 12 to 14 inches, mostly falling as rain from April to June. From July to September, intense thunderstorms can drop more than an inch of rain or hail in a short period. More than 12 inches of winter snow is uncommon, but harsh winters with deep snow do occur and can devastate wildlife.

Observations since the middle of the past century confirm that Montana's climate has consistently changed over time. Average temperatures in winter and spring have risen by almost 3.14°F between 1950 and 2020 (Brust 2022; Whitlock et al. 2017). Increased temperatures have been associated with decreased mountain glacier and snow cover, earlier spring melt, higher runoff, and warmer lakes and rivers. Precipitation changes have varied across the state. In the Northern Rockies, average winter snowfall decreased by 0.69 inches from 1950 to 2015, while spring precipitation in the southeastern plains increased by 1.86 inches in the same period (Brust 2022; Whitlock et al. 2017).

Many trends observed from Montana's historical record are projected to continue or accelerate by mid-century. Temperature projections show a general trend upward, with average annual temperature increases of 2.93°F to 4.82°F expected by mid-century. Over the same time frame, the number of freeze-free days will increase by 17.59 to 27.56 days, and the number of days exceeding 90°F will increase by 9.93 to 23.32 per year (Brust

2022; Whitlock et al. 2017). This will lead to growing seasons that begin earlier and last longer.

Although precipitation is expected to increase slightly in winter, spring and fall by mid-century, summer precipitation is expected to decrease slightly (Brust 2022; Whitlock et al. 2017). The combination of warmer temperatures intensifying drought conditions, reduced snowfall and increased rainfall is changing the availability of water and residency time (MioE 2017; Frankson et al. 2022). We continue to monitor the District's fish, wildlife, plants, lands and waters to detect early signals of ecological transformation from these changing conditions.

Collaborative Conservation in the Landscape

The District plays an important role in national and regional collaborative conservation efforts. Its location in the Pacific and Central Flyways makes it instrumental to national conservation efforts protecting migratory birds, such as the North American Waterbird Conservation Plan (NAWCP) and the North American Waterfowl Management Plan (NAWMP).

The District protects areas that are known to be critical for waterfowl and other waterbirds and provides migratory waterfowl with areas to stage, rest and feed during spring and autumn migration events. It also provides nesting cover for species when spring migration ends.

The District's conservation efforts also support many of Montana's priority conservation efforts. The District is in the Lower Musselshell area, a focal area identified in the 2015 Montana State Wildlife Action Plan (SWAP) outlining state conservation efforts for non-game species with critical needs. The District's priority habitats (wetlands, sage-steppe and grasslands) are among those the SWAP has identified as important to conservation.

The District's priority species align with many in the SWAP: greater sage-grouse, black-tailed prairie dog, pronghorn, waterfowl, shorebirds, wading birds, wetland-dependent species and neotropical migrant birds. As District lands provide critical habitat protection and sanctuary for various breeding, nesting and migrating species, we directly support SWAP's conservation efforts for imperiled species and their habitat requirements.

The Montana Action Plan (MAP) for the conservation of big-game habitat and migratory corridors outlines large swaths of grasslands and sage-steppe areas as priorities for big-game conservation (also identified as District priority habitats for management). The MAP also identifies pronghorn (a District priority species) as a priority big-game species.

The Northern Great Plains Joint Venture (NGPJV) provides landscape planning and design to guide conservation efforts. It provides a comprehensive design for broad conservation of grasslands in the NGP, where the District resides. The NGPJV's mission is

“to retain, enhance, restore, and protect grassland, sagebrush-steppe, wetland, and riparian ecosystems, with an emphasis on sustaining and increasing populations of migratory and resident birds while supporting working lands and communities that sustain these habitats.” The District’s conservation work, including its priorities, vision and goals, fully align with those of the NGPJV.

For more information on landscape initiatives and partnerships, see Appendix C, Landscape Plans and Designs.

Natural Resource Goals, Objectives and Strategies

Based on the District’s priorities and identified threats to fish, wildlife and habitats, the Service has developed the following goals, objectives and strategies for managing the fish, wildlife and habitats of the District, ensuring the District’s continued role in larger landscape conservation efforts:

Goal 1 – Upland Habitat and Associated Wildlife: Protect, enhance and manage upland habitat for breeding and migratory birds and other wildlife while maintaining the biological diversity and integrity of native grasslands and sage-steppe prairie.

Rationale: The District’s upland habitats comprise landscape components crucial to the behavioral, migratory, seasonal, reproductive and habitat shelter needs of its priority species and other migratory bird and wildlife species. This goal ensures we meet the District’s established purposes and one of our foundational mandates “to ensure biological integrity, diversity and environmental health of the System are maintained for the benefit of present and future generations of Americans.” (Improvement Act, 16 U.S.C.668dd(4)(a)(3)(B)).

As the world’s population continues its upward trajectory, it consumes more natural resources and encroaches into wild areas. Continued weather and climate extremes make protecting these areas of paramount importance. However, merely protecting habitat is not enough when invasive species colonize and displace native species and the absence of natural phenomena (fire and the presence of large ungulates, which acted as grazers and landscape disturbers) are no longer present. These challenges require habitat management to restore, maintain and enhance the biological integrity of upland habitats such as grasslands and sagebrush-steppe.

Managing toward this goal also ensures we are contributing to the conservation efforts of our partners, all of which seek further wildlife conservation in the landscape and emphasize conserving native grasslands and sagebrush-steppe prairie to do so.

Associated Objectives, Strategies and Step-Down Plan

The Service will implement the following objectives, strategies and step-down plan to reach this goal. Additional information about these objectives, strategies and step-down plan, and their anticipated impacts are in the associated EA) for this CCP (Appendix A – “Alternative B”).

Objective 1 – Grassland Management: Provide nesting, foraging, protective cover and brood-rearing habitat for waterfowl, grassland nesting birds and other avian species that use upland habitat by ensuring upland habitat is contiguous and has a greater than 70% native vegetation component and moderate to high litter cover throughout the life of the CCP.

Strategies:

- Continue to suppress all wildfires to avoid significantly altering important structural biomass at critical times for wildlife and to prevent spreading onto off-District lands and causing potential infrastructure damage to adjacent lands.
- Identify core areas of native component grasslands within five years of CCP approval; focus preservation and invasive species eradication in core areas using mechanized, chemical and/or [prescribed fire](#) treatments where applicable and feasible.
- Conduct a vegetation and/or species occupancy monitoring program to assess if waterfowl and grassland bird species’ habitat requirements are being met within seven to 10 years of CCP approval.
- Identify waterfowl and grassland nesting bird species and determine occupancy in select areas of mixed and short grass prairie grassland habitats on select refuges and WPAs within 10 years of CCP approval.
- Where applicable, use mechanized and chemical treatments, prescriptive cattle grazing (as further described in the Grazing Compatibility Determinations for the District in Appendix D), and/or prescribed fire through adaptive management to maintain and improve vegetation characteristics, particularly in areas invaded by Japanese brome, crested wheatgrass and leafy spurge.
- Work with partners and neighboring landowners to mitigate cattle trespass.
- Remove old, nonfunctional and discarded human-made objects from grasslands to improve aesthetics and return to a more natural state.

Step-Down Plan: Develop a [fire management plan](#) within five years of approval of the CCP to further plan and implement the fire management strategies discussed in this CCP.

Objective 2 – Grasslands and Dense Nesting Cover Restoration: Restore 50 acres of grasslands that are severely compromised by invasive grasses and forbs with native grass species to provide nesting and foraging habitat for migratory birds within 10 years of the CCP approval.

Strategies:

- Establish focus areas for restoration efforts where probability of success is both high and feasible within five years of CCP approval.
- Examine revegetation options for grasslands and dense nesting cover fields based on the surrounding native plant communities and initiate reseeding efforts using native species within six to nine years of CCP approval.
- Where applicable and practical, use [prescribed burns](#), prescriptive cattle grazing (as further described in the Grazing Compatibility Determinations in Appendix D), mechanical and chemical treatments, biological control methods or any combination of these to eradicate invasive vegetation in preparation for restoring native grasslands or dense nesting cover fields.

Step-Down Plan: Ensure the [fire management plan](#) includes implementation of the fire management strategies discussed above.

Objective 3 – Sagebrush and Sagebrush-Mixed-Grass Prairie: Maintain the sagebrush and sagebrush-mixed-grass prairie habitat with a greater than 70% native vegetation component for sagebrush-dependent species including sage thrasher, Brewer’s sparrow and greater sage-grouse.

Strategies:

- Continue to suppress all wildfires to avoid significantly altering the slow-growing sagebrush communities that wildlife depends on and to prevent fire from spreading onto off-District lands and causing potential infrastructure damage to adjacent lands and irreparable harm to adjacent fragile sagebrush ecosystems.
- Identify and monitor existing core sagebrush and sagebrush-mixed-grasslands habitat and growth opportunity areas of sagebrush and sagebrush-mixed-grasslands for invasive species and conifer encroachment.
- Reduce sage mortality using prescribed fire and/or mechanized treatments to remove encroaching conifers and reduce hazardous fuels, and minimize the threat of catastrophic fires
- Focus preservation and invasive vegetation species eradication in core and growth areas using mechanized and chemical treatments where applicable and feasible.
- Continue to monitor greater sage-grouse leks and share data with the MFWP.

Step-Down Plan: Ensure the [fire management plan](#) includes implementation of the fire management strategies discussed above.

Objective 4 – Great Plains Ponderosa Pine Woodland and Savanna: Maintain a Ponderosa pine stand of various age classes within a Great Plains Ponderosa pine woodland and

savanna for cavity-nesting birds and other migratory and resident wildlife within 10 years of the CCP approval.

Strategies:

- Continue to suppress all wildfires to avoid significantly altering the critical woodland and savanna habitat that wildlife depends on and to prevent fire from spreading onto off-District lands and potentially damaging human infrastructures on adjacent lands and destroying entire woodlands.
- Use prescribed fire and mechanical and chemical treatments to thin Ponderosa pine woodland areas and reduce hazardous fuels, minimizing the threat of catastrophic stand replacement fires.
- Monitor Ponderosa pine woodlands and savanna for woody and invasive plant species and use chemical and mechanical treatments where applicable and practical for control and elimination.

Step-Down Plan: Ensure the [fire management plan](#) includes implementation of the fire management strategies discussed above.

Goal 2 – Wetland Habitat and Associated Wildlife: Protect, enhance and manage wetland habitat for breeding and migratory birds and other wildlife to maintain the biological diversity and integrity of the District’s wetlands.

Rationale: The District is in the western portion of the Central Flyway and near the eastern portion of the Pacific Flyway. This goal is critical to migratory and year-round residents that depend on the District for survival and reproduction. Due to the semi-arid climate, the presence of wetlands provides critical habitat resources for waterfowl, shorebirds, wading birds and other wetland-dependent species.

This goal helps achieve the District’s established purposes and one our foundational mandates “to ensure biological integrity, diversity, and environmental health of the System are maintained for the benefit of present and future generations of Americans.” (Improvement Act, 16 U.S.C.668dd(4)(a)(3)(B))

Continued agriculture expanse has led to significant wetland drainage and conversion to agricultural lands in some areas. Weather extremes over longer periods of time are leading to climatic changes such as extended drought and hotter temperatures, increasing the need for wetland protection. However, it is not always enough to simply protect wetlands.

Occasional District management — exercising water rights, replacing water control structures and improving waterways to restore natural wetland hydrology — ensures these habitats reach their full ecosystem potential for the wildlife and plants that inhabit

them. This goal contributes to the conservation priorities and efforts of the NGPJV, NAWCP and NAWMP.

Associated Objectives and Strategies

The Service will implement the following objectives and associated strategies to reach this goal. Additional information about these objectives, strategies and step-down plan, and their anticipated impacts are in the associated EA for this CCP (Appendix A – “Alternative B”).

Objective 1 – Water Quality: Improve the water quality in wetlands identified as having high selenium and/or salt content within seven years by working with partners to develop a protocol to measure current and future water quality and mechanisms to support its improvement.

Strategies:

- Monitor the water quality of wetlands having high selenium and salt concentrations.
- On alkaline wetlands where applicable, possible and practical, explore water quality improvement mechanisms (e.g., increased phytoremediation, natural snow fences to harness snowmelt) within seven years of the CCP approval.
- Allow wetland units to flood and dry naturally in 10-year cycles to encourage deflation of salts and selenium.

Objective 2 – Wetland Management and Improvement: Provide and improve shoreline, hemi-marsh and open water wetland habitats for nesting, foraging, loafing, staging and brood-rearing waterfowl, wading birds, shorebirds, waterbirds and other avian species that use wetland habitat by ensuring heterogeneous wetland habitat is available within five years of the CCP approval.

Strategies:

- Replace water gauges with more-advanced devices that accurately measure waterflow and depths to ascertain water rights usage and compliance of surrounding users whose water use affects District lands.
- Evaluate existing culverts and water control structures and begin to remove and replace nonfunctioning structures with ones that increase management capabilities and help restore natural hydrology within the first five years of the CCP approval.
- Improve the function of ditches to facilitate waterflow in and out of wetlands.
- Maintain and exercise water rights (e.g., flushing and draining wetlands periodically where appropriate, practical and possible).

- In wetlands with dense cattail and bullrush stands, periodically conduct [prescribed burns](#) and use chemical and mechanical methods to open areas, allowing exposure to wetland surfaces for increased habitat heterogeneity.
- Remove old, nonfunctional and discarded manmade objects from wetlands to improve aesthetics and return to a more natural state.

Step-Down Plan: Ensure the [fire management plan](#) includes implementation of the fire management strategies discussed above.

Goal 3 – Research and Inventory: Improve scientific knowledge of natural resources and ecological processes to inform management within the District through monitoring and applied research.

Rationale: To respond to the evolving and complex changes and threats to our natural resources and ecological processes, we must constantly increase our scientific knowledge of the species and habitats we are entrusted to protect. We must focus our conservation efforts on the highest and best use of our very limited staff and capacity by focusing on the District’s greatest priorities.

This goal ensures we are taking a science-based approach (using various research methodologies and conducting inventories) to fill critical knowledge gaps. This will help focus our management on actions that deliver the greatest conservation benefit for the District’s priority habitats and species.

Associated Objectives, Strategies and Step-Down Plan

The Service will implement the following objectives, strategies and step-down plan to reach this goal. Additional information about these objectives, strategies and step-down plan, and their anticipated impacts are in the associated EA for this CCP (Appendix A – “Alternative B”).

Objective – Research and Inventory: Use the best available science to answer and predict natural occurrences and supplement ecological and natural resource decision-making to benefit wildlife and wildlife habitat.

Strategies:

- Use the applied research of regional Service scientific staff, universities and partners to enhance knowledge and inform decisions about managing wildlife and wildlife habitat.
- Apply regional Service scientific staff, universities, non-governmental organizations (NGOs) or citizen scientists’ knowledge to identify and inventory priority and core habitat areas, wildlife species presence, or populations to inform management decisions.

Visitor Use and Access

Compatible Wildlife-Dependent Recreation and Research

The following uses are compatible with the NWRS's mission and the District's established purposes. You can find the associated Compatibility Determinations in Appendix D.

Hunting

Hunting is one of the six priority wildlife-dependent recreational uses identified in the Improvement Act. All recreational activities are secondary to the refuge unit's primary purpose and must be compatible. Hunting provides traditional recreational activities throughout the District and local areas with no definable adverse effects on the biological integrity or habitat sustainability of District resources as defined in the Improvement Act.

NWRs with a migratory bird focus often maintain a portion of the refuge as sanctuary for waterfowl and/or migratory birds that is closed to hunting.

Hunting opportunities are available on specific NWRs and WPAs in the District; however, Grass Lake NWR is closed to all visitor access and use, and the north portion of the Lake Unit (Lake Mason NWR) is closed to visitor access. All other District units are open for hunting big game, upland game birds and migratory game birds, except Hailstone NWR, which has never been opened to big game hunting. Spidel WPA, Tew WPA, James L. Hansen WPA, Hailstone WPA, War Horse WPA and Clark's Fork WPA are open for hunting and trapping according to State regulations.

Hunting, where permitted, is in accordance with State regulations and game classifications and on units in the District where visitor access is allowed. Refer to the District and each NWR's website for unit-specific information and maps.

Shotgun hunters may only possess and use nontoxic shot to hunt upland game birds and migratory game birds on fee-title lands in the District (50 CFR 32.2(k)), and vehicle travel and parking is restricted to roads, pullouts and parking areas. Outfitted or guided hunting is not permitted.

Fishing

NWRs may be opened to sport fishing only after this activity is determined to be compatible with the refuge's established purposes. The sport-fishing program must follow sound fishery management principles and be in the public's interest. The District's only fishing opportunities are in the Clark's Fork WPA river and the reservoirs associated with the War Horse and Yellow Water units (War Horse NWR), although visitors generally do not use Service lands to access the reservoirs. Fishing in Clark's Fork WPA is allowed in the river but not in the wetland.

Wildlife Observation and Photography, Environmental Education and Interpretation

Wildlife observation and photography as well as environmental education and interpretation are popular wildlife-dependent recreational activities throughout the District. Users tend to be bird watchers and nature enthusiasts. The diversity of habitats and wildlife species provides observation, photography, education and interpretation opportunities year-round.

Commercial filmmakers who wish to film on District lands must contact the District manager and follow specific requirements, regulations and conditions to protect wildlife and habitats and avoid disrupting other visitors' enjoyment.

Other Recreational Activities

Hiking is allowed throughout the District on all NWRs and WPAs, except for Grass Lake NWR and the northern portion of Lake Mason NWR, which are designated as refugia for wildlife and are permanently closed to all public access.

Stock use (horses, mules, donkeys) is allowed on Lake Mason NWR – North Unit only. Certified weed-free hay is required when using stock.

Recreational Activities Not Authorized in the District

The following prohibitions apply to all NWRs and WPAs in the District, as outlined in [50 CFR part 27](#) and other applicable Federal regulations:

- Drone use for any purpose is not permitted.
- Searching for, collecting, or removing objects of antiquity, animals, animal nests, rocks, antlers, horns, bones, skulls, flowers, berries, vegetation or mushrooms is not permitted.
- Bicycling is permitted only on and within designated parking areas and designated District roads open to travel. Bicycling is not permitted on any other District lands.
- Offroad vehicle use is not permitted on any District lands. Mechanized vehicles are permitted only in designated parking areas and on designated District roads open to travel. Any all-terrain vehicle/utility task vehicle/off-road utility vehicle/motorcycle must be legally operated and licensed by the State of Montana or its state of origin.
- Snowmobile use is not permitted on any District lands, including parking areas and roads.
- Remote/unattended trail cameras or wildlife cameras are not permitted.
- Field trials and dog training using wild and/or captive-reared game birds is not permitted.
- Geocaching is not permitted.

- Possession or use of fireworks is not permitted.
- Motorized boat use is not permitted. Non-motorized boats are permitted in designated areas.
- Target practice or shooting — archery or firearms — is not permitted. Firearms or archery equipment may ONLY be discharged in connection with a legal hunt for which the hunter is licensed. Persons may only use (discharge) firearms in accordance with the Code of Federal Regulations (50 [CFR](#) 27.42 and specific refuge regulations in 50 CFR part 32).
- Trapping is not permitted on any NWRs lands within the District. Trapping is permitted on WPAs in accordance with State regulations.
- Camping of any kind — vehicle or tent — is not permitted.

Research

The District has been open to scientific research by non-Service personnel for decades, even on units that do not allow access to the general public. Researchers must acquire a special use permit to conduct research and surveys on Service lands. Permits for research are considered on a case-by-case basis, as staff availability allows. Acceptable research methods include, but are not limited to, bird banding, mist netting, point count surveys, radio-telemetry tracking, cameras, recorders and public surveys.

The results of the research should increase knowledge of our natural resources and improve methods to manage, monitor and protect the District's biological resources and visitor uses.

Partnerships

The Service partners with MFWP to enforce game laws, conduct wildlife research and manage hunting seasons.

The Audubon Society helps monitor units and remove invasive plants. Members of the Audubon Society have also conducted bird counts. For example, a volunteer from the Yellowstone Chapter of the Audubon Society spent nearly 20 years (mid-1980s through 2004) collecting data from bird observations.

The Service hires local weed Districts (county-level organizations that have expertise in weed control and herbicide use); has cooperative relationships with local, state and federal fire agencies; and issues special use permits to academia and researchers for monitoring and educational work.

Impediments to Visitor Use and Access

Visitor and Employee Safety

Large areas in remote parts of the District lack service for radio and cellphones. Radios and repeaters that do exist do not provide coverage for many locations. Cellphone coverage throughout the District is limited, except near population centers such as Lewistown, Roundup, Billings and Laurel. Limited cell reception could pose a problem for visitors or staff in the event of an emergency (e.g., medical issue, accident). There have been no major incidents due to lack of communication, but someone could be stranded, injured, or in need of aid with no way of calling for help.

Access, Parking and Signage

Access into many NWRs and WPAs is by two-track dirt roads, which become muddy and impassable when wet, limiting visitor use. Most District units have no designated parking areas, so visitors park on grasses; this can be a [fire hazard](#) when vegetation dries during summer and fall. There are some small boundary signs at locations around some units, but detailed signage with information about allowed uses is lacking.

Off-Road Travel

Not all NWRs and WPAs in the District experience a problem with off-road vehicle use. Where it does occur, users who fail to stay on open roads create new trails or ruts. Off-road vehicle use can cause problems such as habitat loss and degradation, soil erosion and compaction, and after precipitation events, create mud holes and gullies that can alter hydrologic patterns and intensify erosion.

Closed Areas

Closed areas are designated to protect habitat and prevent wildlife disturbance caused by human presence and activities. Grass Lake NWR is closed to all visitor access and use, and the north portion of the Lake Unit (Lake Mason NWR) is also closed to visitor access. All other NWRs and WPAs are open to foot access only, except Lake Mason NWR, which permits the use of stock (horses, mules, donkeys) in its North Unit only and non-motorized boats in the open area of its Lake Unit.

Visitor intrusions into closed areas can degrade habitat and disturb wildlife, particularly during breeding, nesting and brood rearing.

Lead Ammunition and Fishing Tackle

The use of lead tackle by anglers and single projectile ammunition by big game hunters are still authorized in the District. However, we encourage anglers and big game hunters to take steps while recreating on the District to minimize the addition of lead into the environment. The Service continues to educate hunters and anglers on the impacts of lead on the environment, and particularly on human health and safety concerns of ingesting animals harvested with lead ammunition. We encourage hunters and anglers to

voluntarily use nontoxic ammunition and tackle for all harvest activities and remove carcasses of harvested big game animals, including gut piles, from District lands. Lead alternatives to both ammunition and tackle are becoming more widely available and used by hunters and anglers; however, they remain more expensive.

The Service believes it is important to encourage refuge-State partnerships to reach decisions on lead usage. The impacts of the introduction of lead into the environment from hunting and angling opportunities in the District are discussed in the EA associated with this CCP (Appendix A).

Visitor Use and Access Goals, Objectives and Strategies

Based on the types of visitor use allowed in the District and the identified impediments, the Service has developed the following goals, objectives and strategies for managing visitor use and access:

Goal 4 – Visitor Services: Provide visitors with wildlife-dependent recreational and educational opportunities that foster an appreciation of the District’s wildlife and plant communities.

Rationale: This goal was created based on the requirements of the Improvement Act, which established one of the core mandates of the NWRS: to provide opportunities for wildlife-dependent recreation at refuges when compatible with the purposes of the Refuge and the mission of the NWRS (16 U.S.C. 668dd(4)(a)(3)(i). Priority wildlife-dependent uses include hunting, fishing, wildlife observation, photography, environmental education and interpretation.

With such a range of wildlife, plant species and landscape features, the District offers visitors many wildlife-dependent recreation opportunities. Signs, brochures and visual media help visitors understand the importance of the natural world and the relationship between the NWRS and those who value the natural resources it protects.

Associated Objectives, Strategies and Step-Down Plans. The Service will implement the following objectives, strategies and step-down plan to reach this goal. Additional information about these objectives, strategies and step-down plan, and their anticipated impacts are in the associated EA for this CCP (Appendix A – “Alternative B”).

Objective 1 – Hunting and Fishing: Provide and, where appropriate, expand hunting and fishing opportunities for the public and youth on District lands.

Strategies:

- Hunting and fishing on District lands that are open for hunting and fishing will remain the same and include the lead-free ammunition requirement for upland game bird and migratory game bird hunting (50 CFR 32.2(k)).
- The Service will open Hailstone NWR to big game hunting and the north portion (north of the railroad right-of-way) of Grass Lake NWR to big game hunting, upland game bird and migratory game bird hunting and include the lead-free ammunition requirement for upland game bird and migratory game bird hunting.
- Additionally, in response to public comments and concerns related to the safety of big game hunting near neighboring landowners, the Service will be restricting the hunting of elk, deer, and pronghorn on Clark's Fork WPA to archery only equipment.
- Finally, the Service is proposing to increase access for hunting and other wildlife-dependent recreation opportunities on Clark's Fork WPA by constructing a path for foot traffic and emergency vehicle access in the next several years.

Step-Down Plan: The Service will develop a Hunt and Fish Step-Down Plan to finalize opening additional eligible District lands for big game, migratory game birds and upland game bird hunting as analyzed in the EA (Appendix A – "Alternative B") for the 2026-2027 hunting season. Opening new areas to hunting would not take effect until the federal rulemaking process is completed as part of the NWRS's Hunt/Fish Rule, which includes the requirement to develop a District-specific Hunt and Fish Step-Down Plan and associated regulatory language. The public will have opportunities to provide additional input during that process.

Objective 2 – Wildlife Photography, Wildlife Observation, Environmental Education and Interpretation: Provide and, where appropriate, expand wildlife photography, wildlife observation, environmental education and interpretation opportunities.

Strategies:

- On eligible District lands that are not currently designated as refugia for wildlife and are permanently closed to all entry, allow entry to visitors for wildlife viewing, photography, environmental education and interpretation.
- Continue to provide visitors with opportunities for wildlife viewing, photography, environmental education and interpretation opportunities on District lands that are already open.

Objective 3 – Visitor Access: Improve access to District lands that are open to wildlife-dependent recreation opportunities within 10 years of CCP approval.

Strategies:

- Work with county commissioners, owners of adjoining lands and land managers to improve access roads. Use gravel to create more solid substrates for vehicle

travel to prevent damage to natural resources by eliminating muddy conditions, ruts and driving off roadways, which can also cause vehicle damage.

- Create designated gravel parking areas for visitors to reduce mud and ruts, which lead to unwanted expansion of parking areas that damages the natural resource.

Objective 4 – Public Information: Improve information about visitor access to the District within the first five years of the CCP approval.

Strategies:

- Develop informative tear sheets or other publications for James L. Hansen WPA and Grass Lake NWR that are comparable to other District lands' informative tear sheets within the first year of CCP approval.
- Continuously add and update information about all District lands on the District's website and each refuge website so visitors can make informed decisions. Post informational tear sheets with the updated information.
- Erect entry signage on 60% of all District lands.
- Document existing signs at strategic access points and in parking areas on all District lands, then design and install improved signs that provide boundary and site-specific information to help visitors make informed decisions while on District lands.

Goal 5 – Partnerships: Collaborate with partners to protect, enhance and manage for healthy, productive and diverse habitats and wildlife populations on District and surrounding lands.

Rationale: This goal was created based on the need for conservation agencies and organizations to collaborate and use resources to benefit our communities and further our collective conservation goals. Partnerships are vital to conducting the District's work meeting its other goals.

Associated Objectives and Strategies. The Service will implement the following objective and associated strategies to reach this goal. Additional information about these objectives, strategies and step-down plan, and their anticipated impacts are in the associated EA for this CCP (Appendix A – "Alternative B").

Objective – Partnerships: Forge, facilitate and strengthen relationships between the District and its partners to further wildlife and wildlife habitat conservation.

Strategies:

- Meet with owners of adjacent properties to facilitate relationships and find areas of common interest regarding wildlife and habitat conservation within the first five years of CCP approval.

- Work with stakeholders, conservation NGOs, volunteers, sister federal agencies, Tribes, and State, county and local officials on projects that further the mission of conservation for wildlife and wildlife habitat.
- Meet with community leaders and students in local community schools about the mission of the Service and the District; foster connections and awareness of the value of wildlife and habitat conservation.

Operations

Service operations consist of the staff, facilities, equipment and supplies needed to administer resource management and visitor use programs throughout the District, which crosses a five-county area covering more than 9,175 square miles. The Service is responsible for protecting more than 30,000 acres of District lands and waters.

Staff

The District manager stationed at the Charles M. Russell NWR Complex (NWR Complex) in Lewistown, Montana, is responsible for managing and administering the District. District administration is greatly affected by staff numbers, which are minimal. Staffing levels and other factors involved in District administration dictate the type and amount of work that can be accomplished.

NWR Montana Law Enforcement Patrol Zone staff, which includes several full-time Federal Wildlife Officers, is responsible for law enforcement for the District. Patrols are conducted as needed. The NWR Complex and District staff includes 12 permanent full-time employees for the NWR Complex and one employee for the District.



Figure 18. Cortez Rohr, district manager for the Charles M. Russell Wetland Management District, poses by the sign for the Lake Mason NWR North Unit. Photo by Cortez Rohr/USFWS

Facilities

No District unit has visitor use or administrative facilities (e.g., comfort stations, boardwalks, kiosks). Because one NWR on the District is closed to visitor use and all the units within the District are unstaffed, no areas in the District are suitable for use as visitor services or administrative facilities. All visitor services and administrative facilities for the District are located at the Charles M. Russell NWR Complex in Lewistown, Montana.

Exterior fencing and boundary signage in the District is used to support habitat and wildlife management programs and wildlife-dependent public use activities and helps visitors understand unit boundaries, allowed uses and regulations. In addition to fencing

and signage, the Service maintains water control structures and ditches for water management in District wetlands.

Impediments to Operations

Limited Budgets and Staff

Planning District land administration is difficult because of limited budgets and the need to hire additional staff to manage and monitor District resources. Another challenge is that the District's units are spread across a large area, much of which is far from NWR Complex facilities. The nearest support staff and facilities are in Lewistown, Montana. Because of this, District staff can only focus on minimal resource protection, monitoring and maintenance. Staff size is inadequate to monitor problems caused by trespass livestock and off-road vehicles. The Service continues to prioritize staff, time, and budgets on greatest management needs while partnering with others to accomplish the District's goals.

Operations Goals, Objectives and Strategies

The Service has developed the following goals, objectives and strategies for managing operations in the District:

Goal 6 – Operations: Emphasize the protection of District resources using staff, partnerships and volunteer programs.

Rationale: The District encompasses more than 30,000 acres spread across a five-county area greater than 9,175 square miles. Current staffing levels are insufficient to accommodate the vast and unique needs of each District unit. Given this dilemma, we must enlist the help of volunteers, outside agencies, internal staff members and adjacent willing landowners to carry out some land management activities, including reporting suspicious activities and violations. Effectively reaching this goal is critical to achieving the District's other goals.

Associated Objectives and Strategies. The Service will implement the following objectives and associated strategies to reach this goal. Anticipated impacts of these actions are in the associated EA for this CCP (Appendix A – "Alternative B").

Objective – Operations: Take preventative, protective and informative measures to protect District lands and their natural resources within five years of the CCP approval.

Strategies:

- Work with Service federal wildlife officers to identify high visitor use areas and areas prone to violations; increase patrols and presence in those areas.

- Partner with and establish memoranda of understanding with local, State and federal law enforcement agencies to protect District lands and deter violations and impairment of natural resources.
- Encourage neighboring landowners and visitors to report violations of District lands and natural resources.

Cultural Resources

Cultural resources are the non-renewable physical remnants of past human activities that have cultural or historical value and meaning to a group of people or society. Legal authorities use different terminology and definitions when discussing cultural resources. The term “cultural resources” includes:

- Historic properties, as defined by the National Historic Preservation Act of 1966, as amended (NHPA; 54 U.S.C. § 300101 et seq)
- National Historic Landmarks, as defined in 36 CFR Part 65
- Archaeological resources, as defined by the Archaeological Resources Protection Act of 1979 (ARPA; 16 U.S.C. § 470aa-470mm)
- Sacred sites, as defined by Executive Order 13007, which grants access in accordance with the American Indian Religious Freedom Act of 1978 (AIRFA; 42 U.S.C. § 1996)
- Collections, as defined in 36 CFR Part 79
- Cultural items, as defined in the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA; 25 U.S.C. § 3001 et seq.)
- Heritage assets, as defined by the Service in the report required by Section 3 of Executive Order 13287 “Preserve America”

Although not technically a cultural resource, paleontological resources, as defined by the Paleontological Resources Preservation Act of 2009 (PRPA; 16 U.S.C. 470aaa 1-11), fall under the Service’s Cultural Resources Management Program.

This section summarizes the District’s Cultural Resources Report (USFWS 2017a), which is available at the Charles M. Russell NWR Complex office in Lewiston, Montana. This section covers cultural resources that may be or are present on a refuge or WPA.

Known Cultural Resources

Few cultural resources investigations have been conducted, so we know of few sites on District NWRs and WPAs. This does not mean such sites do not exist on District units; rather, it reflects the limited work previously completed. Digital files and records were reviewed to determine the numbers and types of previous cultural resource investigations and previously documented sites within District NWRs and WPAs. These are detailed in the District’s Cultural Resources Report (USFWS 2017a).

Future undertakings on District units would involve minimal ground disturbance. District NWRs and WPAs may include site types and resources such as precontact and protohistoric open camps, stone circles, cairns, lithic scatters, rock shelters, drive lines, kill sites, hunting blinds and rock imagery as well as historic homesteads and ranches,

outbuildings, livestock infrastructure (e.g., corrals, loading facilities, stock dams), ditches, water control structures (e.g., culverts, dams, dikes), trails and roads.

War Horse NWR and WPA. A search of digital files and records revealed that four cultural resource investigations were previously conducted on the refuge; these investigations and the three sites documented on the refuge are detailed in the District's Cultural Resources Report (USFWS 2017a). All three sites are either eligible for listing in the National Register of Historic Places (NRHP) or have not been evaluated and must be treated as eligible.

Lake Mason NWR. Approximately 5,048 acres of the refuge (about 25% of the total acreage) have been surveyed for cultural resources. A search of digital files and records indicates that 12 cultural resource investigations have been conducted on the refuge, and 63 sites have been documented. These are detailed in the District's Cultural Resources Report (USFWS 2017a). Forty-five of the known sites are eligible, unevaluated, or unresolved for eligibility in the NRHP and must be treated as eligible.

Additionally, archeological collections were made in association with Taylor and Bennett 1980/1981 (sites 24ML132-24ML139, two isolates); Greiser et al. 1985 (sites 24ML201-24ML226); and Aaberg 1988/1989 (24ML362-24ML368) investigations. These collections are curated by various organizations and repositories, including Montana State University.

Hailstone WPA and NWR. One cultural resource investigation was conducted in association with a 2008 dam removal project. Two sites were documented on the refuge — the historic Hailstone Dam and Spillway (24ST344) and a precontact lithic scatter (USFWS Field No. HSNWR-001); the sites have not been formally documented.

The Hailstone Dam and Spillway was constructed by the Works Progress Administration in the 1930s and is considered eligible for inclusion in the NRHP under Criteria A and C. Site HSNWR-001 has not been formally documented or evaluated for its significance, so it is considered unevaluated for inclusion in the NRHP but must be treated as eligible.

The results of a search through digital files and records reveals that six cultural resources investigations were previously conducted on District WPAs; these are detailed in the District's Cultural Resources Report (USFWS 2017a). No sites were documented on Hailstone WPA.

A file search of the Montana State Historic Preservation Office (SHPO) cultural resources database was not conducted because of the high cost of conducting a search for the extremely large land expanses that make up Hailstone WPA and NWR. However, any work done at Hailstone WPA and NWR should begin with a project-location-specific file search of the Montana SHPO cultural resources database.

Grass Lake NWR. One cultural resource investigation was conducted on the refuge in association with a 2004 repair/reconstruction project for Halfbreed Dam (24ST345). The historic Halfbreed Dam (24ST345) was previously documented on the refuge. This structure was constructed by the Works Project Administration in the 1930s. It is not considered eligible for inclusion in the NRHP.

A file search of the Montana SHPO cultural resources database was not conducted because of a known lack of previous cultural resource work and previously recorded resources documented at Grass Lake NWR. Any work undertaken at Grass Lake NWR should begin with a project-location-specific file search of the Montana SHPO cultural resources database.

Spidel, Tew, Clark's Fork and James L. Hansen WPAs. A search of digital files and records indicate that six cultural resource investigations were previously conducted on Spidel, Tew and Clark's Fork WPAs; these are detailed in the District's Cultural Resources Report (USFWS 2017a). James L. Hansen WPA was acquired in 2023, and no cultural resources investigations were previously conducted. No sites were documented on any of the WPAs.

A file search of the Montana SHPO cultural resources database was not conducted because of the high cost of conducting a search for the extremely large land expanses that make up Clark's Fork, Spidel and Tew WPAs. Any work undertaken on these WPAs should begin with a project-location-specific file search of the Montana SHPO cultural resources database.

Impediments to Stewarding Cultural Resources

The Service does not expect any management activities or visitor use to impact cultural resources in the District, especially with its mitigation measures, which are designed to prevent or minimize any impacts (Appendix E). The biggest impediments to stewarding cultural resources in the District are lack of information about the District's cultural resources, limited staff and limited capacity.

Cultural Resource Goals, Objectives and Strategies

The Service has developed the following goals, objectives and strategies for managing cultural resources in the District:

Goal 7 – Cultural Resources: Identify and protect cultural resources to preserve the District's precontact and historic past.

Rationale: This goal was created based on the Refuge's responsibilities under the NHPA and our desire to honor and understand the District's important cultural history.

Associated Objectives and Strategies. The Service will implement the following objectives and associated strategies to reach this goal. Anticipated impacts of these actions are in the associated EA for this CCP (Appendix A – “Alternative B”).

Objective 1 – Stewarding Known Cultural Resources on District Lands: Use preventative, protective and informative measures to any cultural resource known to exist on District lands.

Strategies:

- On discovering any cultural resource or site of cultural significance in the District, the Service will work with its archeologist and local Tribes to understand the cultural resource and its history and will endeavor to design and implement appropriate protective and preservation measures.
- The Service will protect cultural resources during District management activities. Appendix E contains a list of mitigation measures designed to protect cultural resources during wildfire suppression and other activities by the Service.

Objective 2 – District Resources Important to Tribes. Respect any natural resources and traditional land uses identified as significant to Tribes.

Strategies:

- Consult with Tribes regarding traditional use of NWRs and WPA lands to identify and ensure access to traditional cultural properties, which include burial locations, plant-gathering areas and ceremonial locations.
- Require a special use permit for Tribal members interested in collecting small quantities of plants or other natural resource materials for ceremonial purposes.
- Continue to provide found eagle feathers and parts to tribal members for ceremonial purposes through the National Eagle Repository in Colorado.

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Glossary and Abbreviations

°F: degrees Fahrenheit

AIRFA: American Indian Religious Freedom Act

animal unit month: A unit used to estimate how much forage is eaten by a specific animal in a month. In range and pasture management related to beef production, an AUM is often defined as the approximate amount of forage that a 1,000-pound cow will eat in a month.

ARPA: Archaeological Resources Protection Act

BLM: Bureau of Land Management

burn plan/prescribed burn plan: A plan required for each fire application ignited by management. Plans are documents that are prepared by qualified personnel and approved by the agency administrator, and they include criteria for the conditions under which the fire will be conducted (a prescription).

CCP: comprehensive conservation plan

CFR: Code of Federal Regulations

conservation easement: A voluntary legal agreement between a landowner and a government agency or qualified conservation organization that restricts the type and amount of development that may take place on a property in the future. Conservation easements aim to protect habitat for birds, fish and other wildlife by limiting residential, industrial or commercial development. Contracts may prohibit alteration of the natural topography, conversion of native grassland to cropland, drainage of wetland and establishment of game farms. Easement land remains in private ownership.

District: Charles M. Russell Wetland Management District

EA: environmental assessment

emergent plants: Plants rooted in the substrate having foliage that grows partially or entirely above the water surface.

fire hazard: A fuel complex, defined by volume, type condition, arrangement and location, that determines the degree of ease of ignition and of resistance to control.

fire management plan: A plan that identifies and integrates all wildland fire management and related activities in the context of approved land/resource management plans. Such a plan defines a program to manage wildland fires (wildfire and prescribed fire). It is supplemented by operational plans, including preparedness plans, preplanned dispatch plans, prescribed fire burn plans and prevention plans. Fire management plans assure that wildland fire management goals and components are coordinated.

fire return interval (or fire interval): The period (number of years) between naturally occurring wildfires.

FmHA: Farmers Home Administration

forbs: Flowering plants (excluding grasses, sedges and rushes) that do not have a woody stem and die back to the ground at the end of the growing season.

fuel: Any combustible material, including wildland fuels.

fuel load/loading: The amount of fuel present in a given area in terms of weight of fuel per unit area. This may be available fuel (consumable fuel) or total fuel and is usually dry weight.

fuel reduction: Manipulation, including combustion, or removal of fuels to reduce the likelihood of ignition and/or to lessen potential damage and resistance to control.

goal: A descriptive, open-ended and often broad statement of desired future conditions that conveys a purpose but does not define measurable units.

ground fuels: All combustible materials below the surface litter, including duff, tree or shrub roots, punky wood, peat and sawdust, that normally support a glowing combustion without flame.

guild: Groups of species in a community that use the same set of resources in a similar manner but are not necessarily closely related.

ladder fuels: Fuels that provide vertical continuity between strata (layers), allowing fire to carry from surface fuels into the crowns of trees or shrubs with relative ease. They help initiate and assure the continuation of crowning.

lek: An area where sage-grouse gather in the spring. The males choose an area where there is less vegetation so females can easily see their courtship displays. These areas may be sparsely vegetated naturally or due to activity by animals or humans.

MAP: Montana Action Plan

MCBF: Migratory Bird Conservation Fund

MFWP: Montana Fish, Wildlife and Parks

MloE: Montana Institute on Ecosystems

MTNHP: Montana Natural Heritage Program

NAGPRA: Native American Graves Protection and Repatriation Act

NAWCP: North American Waterbird Conservation Plan

NAWMP: North American Waterfowl Management Plan

NGO: non-governmental organization

NGP: Northern Great Plains

NGPJV: Northern Great Plains Joint Venture

NHPA: National Historic Preservation Act

NRCS: Natural Resources Conservation Service

NRHP: National Register of Historic Places

NWR: national wildlife refuge

objective: A concise statement of what we want to achieve, how much we want to achieve, and when and where we want to achieve it. Objectives derive from goals and provide the basis for determining strategies, monitoring refuge accomplishments and evaluating the success of strategies. Objectives are specific, measurable, achievable, results-oriented and time-fixed (SMART) descriptions about how we will accomplish conservation.

phenology: The study of the timing of recurring biological events, the causes of their timing with regard to biotic and abiotic forces, and the interrelation among phases of the same or different species.

precontact: Of or relating to the period before contact of an indigenous people with an outside culture. *Note: This term is interchangeable with the term "prehistoric" in North American archaeology.*

prescribed fire: Any fire intentionally ignited by management actions in accordance with applicable laws, policies and regulations to meet specific objectives.

PRPA: Paleontological Resources Preservation Act

NWRS: National Wildlife Refuge System

riparian area/riparian zone: Long strips of vegetation adjacent to streams, rivers, lakes, reservoirs and other inland aquatic systems that affect or are affected by the presence of water. This vegetation contributes to unique ecosystems.

Service: U.S. Fish and Wildlife Service

SHPO: State Historic Preservation Office

SMART: specific, measurable, achievable, results-oriented and time-fixed

strategy: A specific action, tool, technique, (or a combination of these) used to meet objectives.

submergent plants: Plants that have roots in the substrate and do not emerge above the surface of the water (except for some that have floating leaves).

suppression: Management action to extinguish a fire or confine fire spread beginning with its discovery.

SWAP: State Wildlife Action Plan

USDA: U.S. Department of Agriculture

USDI: U.S. Department of the Interior

USFWS: U.S. Fish and Wildlife Service

vision: A concise statement of the planning unit's desired future conditions based primarily on the NWRS's mission, specific refuge purposes, the role of the planning unit in the landscape and other mandates.

wetland: An area inundated or saturated by surface or ground water at a frequency and duration sufficient to support vegetation adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes and bogs.

WMD: wetland management district

WPA: waterfowl production area

Equal opportunity to participate in and benefit from programs and activities of the U.S. Fish and Wildlife Service is available to all individuals regardless of physical or mental ability. Dial 711 for a free connection to the state transfer relay service for the hearing impaired. For more information or to address accessibility needs, please contact the refuge staff.

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August 2025

Final

**Finding of No Significant Impact and
Environmental Assessment of the
Comprehensive Conservation Plan**

**Charles M. Russell Wetland Management District
and Associated National Wildlife Refuges**

Montana

August 2025



U.S. Department of the Interior
Fish and Wildlife Service
Region 6 Mountain-Prairie Region
Division of Refuge Planning
1 Denver Federal Center
Building 52, Room FW-192
Denver, CO 80225

Finding of No Significant Impact and Decision for the Comprehensive Conservation Plan

Charles M. Russell Wetland Management District and Associated National Wildlife Refuges

Petroleum, Musselshell, Golden Valley, Yellowstone and Stillwater Counties, Montana

The U.S. Fish and Wildlife Service (Service) proposes to adopt and implement a Comprehensive Conservation Plan (CCP) for the Charles M. Russell Wetland Management District and Associated National Wildlife Refuges (hereinafter District). This CCP will best achieve the District's established purposes; fulfill the mission of the National Wildlife Refuge System (NWRS) consistent with sound fish and wildlife management; and maintain the biological integrity, diversity and environmental health of the NWRS. The CCP includes proposals for natural resource management, visitor use and access, and cultural resource stewardship.

The Service has prepared an environmental assessment (EA) evaluating three alternatives, including the No Action Alternative. A notice of availability for the draft CCP and EA was published in the Federal Register on January 14, 2025 (90 FR 3240). It is incorporated as part of this finding. The comments received on the draft CCP and EA and the Service's responses to those comments can be found in Appendix I of the CCP.

Selected Action

Alternative B- Implementation of the CCP with Allowed Use of Lead Ammunition for Big Game Hunting and Fishing Tackle

Under Alternative B, the Service will implement the CCP, which would require increased resource management activities to control invasive plant species and improve habitat and enhance visitor use and experience.

This alternative will implement planned and regular invasive species management within the District by expanding the Service's suite of management tools to include:

- Transition to Prescriptive Grazing
- Use of Prescribed Fire
- Increased Use of Mechanical Treatment
- Increased Use of Chemical Control of Invasive
- Increased Biological Control

Using the tools described above, dense nesting cover (DNC) will be rejuvenated. Existing fields and grasslands will be renovated and seeded with a diverse mix of native grasses and forbs to improve diversity and vigor. Under Alternative B, the Service would continue existing management activities, including working with partners on water quality

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monitoring. The Service will also attempt to improve water quality by flushing or draining wetland systems and will improve wetland structures. In addition to maintaining water rights, the Service proposes to exercise water rights to benefit resources in specific District National Wildlife Refuges (NWR) and Waterfowl Production Areas (WPA).

The Service will continue current activities related to visitor experience in the District under Alternative B, to include opportunities for wildlife observation and photography. It will also continue providing hunting opportunities for big game, upland game birds and migratory game birds. The use of lead ammunition is prohibited for hunting of upland game birds and migratory game birds (50 CFR 32.2(k)); however, the Service will continue to allow the use of lead ammunition for big game hunting and fishing tackle consistent with Montana hunting and angling regulations.

Additionally, to enhance visitor use and experience, the Service is proposing to open:

- Grass Lake NWR's north portion (north of the railroad right-of-way) to hunting of big game, upland game birds and migratory game birds; wildlife observation and photography; environmental education and interpretation; and research.
- Hailstone NWR to big game hunting.

In response to serious public safety concerns, the District is proposing to restrict the hunting of elk, deer, and pronghorn on Clark's Fork WPA to using archery only equipment.

Visitor experience will also be enhanced through new signage and brochures and although access will continue to be by foot travel only, the Service will add gravel parking areas, marked and bordered to contain vehicles under this alternative. Additionally, the Service is proposing to create a path for foot traffic to improve public access to the wetland and other areas of the Clark's Fork WPA in the next several years.

The Service will work with counties to apply gravel to existing two-track dirt roads to provide all-weather access. In addition, the Service will take advantage of anticipated infrastructure improvements that will increase communication (cellphone service) capabilities within the District to enhance visitor safety.

The existing staff of one station manager will be maintained under Alternative B.

This alternative was selected over the other alternative because it meets the purpose and need for action as identified in the draft EA, which is incorporated here by reference, and is responsive to input from the public, congressmen, and Montana Fish Wildlife and Parks.

Other Alternatives Considered and Analyzed in the Final EA

The final EA evaluated the potential environmental impacts associated with one other alternative. The no action alternative (Alternative A) would continue opportunistic control of invasive plant species and the use of lead ammunition for big game hunting and

Appendix A — Finding of No Significant Impact and Environmental Assessment of the Comprehensive Conservation Plan: Charles M. Russell Wetland Management District and Associated National Wildlife Refuges, Montana

fishing tackle. This alternative was not selected because the Service would remain unable to effectively implement objectives and strategies to meet statutory obligations, CCP goals, and the purposes for which the District was established.

Alternative C has the same basic elements as Alternative B and would proactively control and manage invasive species to improve water quality in the District's water bodies and wetlands. Improved roadways and parking areas would enhance visitor experience. However, lead-free ammunition and lead-free fishing tackle would be required for all hunting and fishing activities in the District under Alternative C. This alternative was not selected based on public, congressional, and state comments.

Summary of Effects of the Selected Action

Implementation of the Proposed Action for the District would be expected to result in the following environmental, social, and economic effects.

Upland Vegetation and Habitat

The transition to prescriptive grazing, use of prescribed fire, and increased application of mechanical treatment and chemical and biological controls will improve habitat conditions for specific wildlife and focal bird species, migratory songbirds and other grassland-obligate species as well as control invasive/exotic plant species. Prescribed fire will be used to restore vegetation communities that are adapted to and benefit from fire will be restored and invasive/exotic plant species removed, particularly in the ponderosa pine woodland and savanna found on the War Horse WPA.

Wildlife

The implementation of the management activities identified in the Proposed Action, including prescribed burns, mechanical/chemical/biological controls, would result in the rejuvenation of DNC and improved habitat conditions for specific resident wildlife or focal bird species, migratory songbirds, and other grassland-obligate species. Regarding effects of lead on wildlife, hunting opportunities on District lands are mostly lead-free, but ammunition for big game hunting and fishing tackle may still contain lead. However, the amount of levels of lead introduced into the environment because of these activities on the District remains very low, as discussed in the EA, and does not have a significant impact on lead accumulation in the environment or to the wildlife or public health safety of the District. The Service remains committed to its education of hunters on the effects of lead and encouragement of hunters to reduce lead in the environment through their voluntary actions.

Air Quality

Several proposed management activities (use of chainsaws, rejuvenating DNC by reseeding, driving trucks and using other diesel and gas-powered equipment) would produce air emissions. However, prescribed fire is the activity most likely to affect air quality. However, air impacts from prescribed burning would a sporadic and temporary source of air pollution (lasting several hours to one day) and would not contribute to county air quality standards exceeding acceptable limits. Smoke from prescribed fire would not cause long-term adverse public health effects, but sensitive nearby private

landowners or individuals who visit a Service unit during a prescribed burn could suffer temporary minor effects.

Wetlands and Riparian Vegetation, Habitat and Water Resources

The replacement of nonfunctioning water gauges by the Service to monitor water use and improving ditches and replacing or maintaining culverts will allow more water would be carried to a wetland rather than absorbed into the ground and allow for natural flushing of some contaminants (like salt and selenium) from wetlands. This will benefit wetland wildlife and habitat. Prescribed fire will remove undesirable vegetation such as cattails.

Climate Change

The selected action will support climate change adaptation by increasingly monitoring the condition of the District's resources and acting (via prescribed fire) to protect resources, including habitat, from changing climatic conditions (less precipitation and higher temperatures).

Cultural and Historic Resources

Proposed management activities could disturb cultural resources during such activities as habitat restoration or prescribed burning. Consultations with the State Historic Preservation Office (SHPO) under Section 106 of the Natural Historic Preservation Act will be conducted on a project-by-project basis.

Socioeconomics

Implementation of the proposed CCP management activities would rejuvenate the District's grasslands and wetlands, enhancing visitor use and experience. A broader user group may choose to visit the District for hunting, wildlife observation and other activities. Additional visitors would increase the money spent in the local economy on food, supplies and fuel.

Public Health and Safety

The proposed CCP's public health and safety impacts would include smoke emissions from wildfire and prescribed fire, use of chemical and biological controls for managing invasive plant species, and effects of lead. While lead is a known toxin in variable concentrations for various species including humans, the District has no known instances or sightings of human or animal species illnesses or fatalities. Lead-free ammunition is required for hunting of upland game birds and migratory game birds (50 CFR 32.2(k) on all District land. While lead ammunition for big game hunting and lead tackle for angling would still be authorized consistent with Montana hunting and angling regulations, risk of human ingestion of lead as a result is very minimal. The Service will continue to educate hunters and anglers on the human health risks associated with lead in the environment.

Visitor Use and Experience

Hunting (but not fishing) opportunities would expand under the selected alternatives, adding approximately 1,783 acres for hunting big game, upland birds and migratory birds. In addition, this acreage would remain open for wildlife observation and

Appendix A — Finding of No Significant Impact and Environmental Assessment of the Comprehensive Conservation Plan: Charles M. Russell Wetland Management District and Associated National Wildlife Refuges, Montana

photography. Fishing opportunities on War Horse NWR and Clark's Fork WPA would not be affected. Also, road improvements proposed could draw more visitors to the District and resolve some problems visitors cause by driving on dirt roads (e.g., soil erosion and compaction, and after precipitation, mud holes and gullies). Additional visitor access would likely boost the volume of visitors.

Visitors would also benefit from the construction of gravel parking areas, which would be marked and bordered to contain vehicles and protect adjacent land. Containing the parking areas would benefit habitat and wildlife by reducing the risk of wildfire from vehicles parking on dry vegetation. In addition, new signs and brochures will aid visitors to the District.

Camping would not be allowed at the North Unit of Lake Mason NWR, but this will cause negligible adverse effects on visitor use and experience as camping opportunities are available nearby on BLM and State of Montana lands.

Management and Operations

Maintaining current staffing (one station manager) would provide slightly more management capability than has been historically provided.

Measures to Mitigate and/or Minimize Adverse Effects

Measures to mitigate and/or minimize adverse effects have been incorporated into the selected action and are the same as identified in Appendix E of the final EA. These mitigation measures address public health and safety; wildfire prevention; education and response; prescribed fire, smoke management; firefighter safety; how mechanical, chemical, and physical treatments of will be conducted to protect sensitive natural resources, wildlife, invasive/exotic plants, post treatment control and monitoring, and cultural resources. Should paleontological, archeological, or historical remains be encountered, the Service will halt the activity, notify the regional archaeologist, and the appropriate Tribal Historic Preservation Officer.

While refuges and waterfowl production areas, by their nature, are unique areas protected for conservation of fish, wildlife and habitat, the selected action at the District will not have a significant impact on refuge resources and uses for the same reasons identified in the final EA.

Intra-Service consultation under Section 7 of the Endangered Species Act was completed on May 8, 2025 (see the Section 7 Intra-Service Consultation Form in CCP Appendix G).

Public Review, State and Tribal Coordination

Between January 14 and February 13, 2025, the USFWS made the *Draft Environmental Assessment* available for public review and comment. The USFWS received one comment letter from two U.S. Senators and two U.S. Congressmen. Additionally, we received five comment letters from 10 private citizens; two comment letters from non-government organizations, and one comment from a university.

Appendix A — Finding of No Significant Impact and Environmental Assessment of the Comprehensive Conservation Plan: Charles M. Russell Wetland Management District and Associated National Wildlife Refuges, Montana

The Regional Director sent a letter to Montana Fish, Wildlife and Parks (MFWP) and the Department of Natural Resources and Conservation, as well as county governments, inviting them to take part in the planning process. The State agencies designated a representative, and their staff members have been involved in the planning process. MFWP also provided comments on the draft CCP and EA and those comments and responses are addressed below. The county governments did not designate a representative to take part on the planning team but were provided opportunities to participate and submit comments.

Early in the planning process (September 30, 2016), the Regional Director sent a letter to Tribes identified as possibly having a cultural and historical connection to areas in the District:

- Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation
- Blackfeet Tribe of the Blackfeet Indian Reservation of Montana
- Cheyenne River Sioux of the Cheyenne River Reservation
- Crow Creek Sioux Tribe of the Crow Creek Reservation
- Crow Tribe of Montana
- Flandreau Santee Sioux Tribe of South Dakota
- Fort Belknap Indian Community of the Fort Belknap Reservation of Montana
- Oglala Sioux
- Lower Brule Sioux Tribe of the Lower Brule Reservation
- Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation
- Rosebud Sioux Tribe of the Rosebud Indian Reservation
- Standing Rock Sioux Tribe of North & South Dakota
- Three Affiliated Tribes of the Fort Berthold Reservation

A representative from the Northern Cheyenne Tribe asked to be included in planning team updates and has been included in the team correspondence regarding CCP development. The other Tribal councils did not submit responses to the Region 6 letter but were provided opportunities to comment. The Service sent advanced copies of the draft CCP and EA to eight tribes in October 2024 for review, comment, and consultation, but the Service has not received any responses to date.

- Assiniboine & Sioux Tribes of the Fort Peck Indian Reservation
- Blackfeet Tribe of the Blackfeet Indian Reservation of Montana
- Chippewa Cree Indians of the Rocky Boy's Reservation
- Confederated Salish and Kootenai Tribes of the Flathead Reservation
- Crow Tribe of Montana
- Fort Belknap Indian Community of the Fort Belknap Reservation of Montana
- Little Shell Tribe of Chippewa Indians of Montana
- Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation

Finding of No Significant Impact

While units of the National Wildlife Refuge System, by their nature, are unique areas protected for conservation of fish, wildlife and habitat, the selected action will not have a significant impact on the human environment for several reasons:

- The action will result in beneficial impacts to the human environment, including the biodiversity and ecological integrity of the District, as well as the wildlife-dependent recreational opportunities and socioeconomics of the local economy, with only negligible adverse impacts to the human environment as discussed above.
- The Service works closely with the State to ensure that species harvested on a refuge are within the limits set by the State to ensure healthy populations of the species for present and future generations of Americans.
- In the context of local/State/refuge hunting/fishing programs, the selected action will only result in a negligible addition of lead into the environment.
- The adverse direct and indirect effects of the selected action on air, water, soil, habitat, wildlife, aesthetic/visual resources, and wilderness values are expected to be minor and short-term. The benefits to long-term ecosystem health that these efforts will accomplish far outweigh any of the short-term adverse impacts discussed in this document.
- The NWRS uses an adaptive management approach to all wildlife management on refuge lands, monitoring and re-evaluating the management actions on the District on an annual basis to ensure that the Service's action continue to contribute to the biodiversity and ecosystem health.
- The action, along with proposed mitigation measures, will ensure that there is low danger to the health and safety of staff, visitors, and the hunters/anglers themselves.
- The action is not in an ecologically sensitive area.
- The action is not expected to jeopardize the continued existence of a species proposed for listing or a candidate species, or adversely modify an area proposed for designation as critical habitat.
- The action will not impact any cultural or historical resources.
- The action will not impact any wilderness areas.
- There is no scientific controversy over the impacts of this action and the impacts of the selected action are relatively certain.
- The proposal is not expected to have any significant adverse effects on wetlands and floodplains.

Based upon a review and evaluation of the information contained in the EA, as well as other documents and actions of record affiliated with this CCP, the Service has determined that the proposal to adopt and implement the CCP for the District does not constitute a major Federal action significantly affecting the quality of the human environment under the meaning of section 102 (2) (c) of the National Environmental Policy Act of 1969 (as amended). As such, an environmental impact statement is not required.

Decision

The Service has decided to adopt and implement the actions described in the final CCP for the District to continue the management and improvement of the conservation lands entrusted to the Service in Petroleum, Musselshell, Golden Valley, Yellowstone and Stillwater Counties, Montana. This action subject to availability of funding and other resources and is compatible with the purposes of the District and the mission of the NWRS.

The action is consistent with applicable laws and policies.

Signature

Environmental Assessment for the Comprehensive Conservation Plan

**Charles M. Russell Wetland Management District and Associated
National Wildlife Refuges**

***Petroleum, Musselshell, Golden Valley, Yellowstone and Stillwater
Counties, Montana***

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Executive Summary

This environmental assessment (EA) evaluates two action alternatives and a no-action alternative. The proposed action is to prepare and implement a Comprehensive Conservation Plan (CCP) for certain units of the Charles M. Russell (CMR) National Wildlife Refuge Complex (NWRC) in the Northern Great Plains (NGP) in central and south-central Montana. These units include the waterfowl production areas (WPAs) in the CMR Wetland Management District (WMD) and associated national wildlife refuges (NWRs), collectively referred to as the District hereinafter. The CCP identifies management proposals for sound fish and wildlife management to ensure the biological integrity, diversity and environmental health of the District, provide for cultural resource stewardship, and improve visitor use and access.

The no-action alternative (Alternative A) would continue opportunistic control of invasive plant species and the use of lead ammunition for big game hunting and fishing tackle. Alternatives B and C include proactively controlling and managing invasive plant species to improve water quality in the District's bodies of water and wetlands. Improved roadways and parking areas would improve the visitor experience. Alternative B would allow the use of lead ammunition for big game hunting and fishing tackle. Alternative C would require the use of lead-free ammunition for big game hunting and fishing tackle. All other management activities under Alternative C would duplicate those under Alternative B.

This EA examines the potential environmental impacts of the proposed action and complies with the National Environmental Policy Act (NEPA). Executive Order 14154, Unleashing American Energy (Jan. 20, 2025), and a Presidential Memorandum, Ending Illegal Discrimination and Restoring Merit-Based Opportunity (Jan. 21, 2025), require the Department to strictly adhere to the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 et seq. Further, such Order and Memorandum repeal Executive Orders 12898 (Feb. 11, 1994) and 14096 (Apr. 21, 2023). Because Executive Orders 12898 and 14096 have been repealed, complying with such Orders is a legal impossibility. The U.S. Fish and Wildlife Service verifies that it has complied with the requirements of NEPA, including the Department's regulations and procedures implementing NEPA at 43 C.F.R. Part 46 and Part 516 of the Departmental Manual, consistent with the President's January 2025 Order and Memorandum. The EA analyzed natural resources, cultural and historic resources, socioeconomics, public health and safety, visitor use and experience, and management and operations. The USFWS initially considered other resources but dismissed them from further analysis because the proposed action and its alternatives would have negligible impacts on these resources.

Based on the EA analysis, in consultation with federal, state and local agencies and federally recognized Native American tribes, the USFWS has determined that the proposed action and its alternatives would not significantly impact the natural and human environment.

Chapter 1: Introduction

This EA examines the potential environmental impacts of implementing the CCP for the CMR WMD and associated NWRs (District) in compliance with NEPA. The District is in the NGP of central and south-central Montana (Figure 1) and bounded on the north by the Missouri River Breaks and on the south by the Greater Yellowstone Ecosystem. It encompasses four NWRs and is composed of six WPAs in five Montana counties: Petroleum, Musselshell, Golden Valley, Yellowstone and Stillwater. Clark's Fork WPA (Carbon County) is managed by the District but is not inside the District boundary. There are also five conservation easements in the District. The District's units and easements are:

- War Horse WPA and War Horse NWR and its three units
- Lake Mason NWR and its three units
- Hailstone WPA and NWR
- Grass Lake NWR
- Spidel WPA
- Tew WPA
- Clark's Fork WPA
- James L. Hansen WPA
- Farmers Home Administration conservation easements: Hardy Tract, Kurz Tract, Overturf Tract, Weyer Tract, Jansen Tract
- Other leases: flowage easements, state grazing easements

This EA does not evaluate any management actions at CMR NWR or its CCP, which was completed in 2012.

1.1 Background

NWRs are guided by the mission and goals of the National Wildlife Refuge System (NWRS), the purposes of an individual refuge, federal laws and executive orders, Service policy, and international treaties. Relevant guidance includes the NWR Administration Act 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997 (Improvement Act, 16 U.S.C., 668dd et seq.), the Refuge Recreation Act of 1962, and portions of the Code of Federal Regulations and the Service Manual. See Appendix A for relevant laws and regulations.

The mission of the NWRS is:

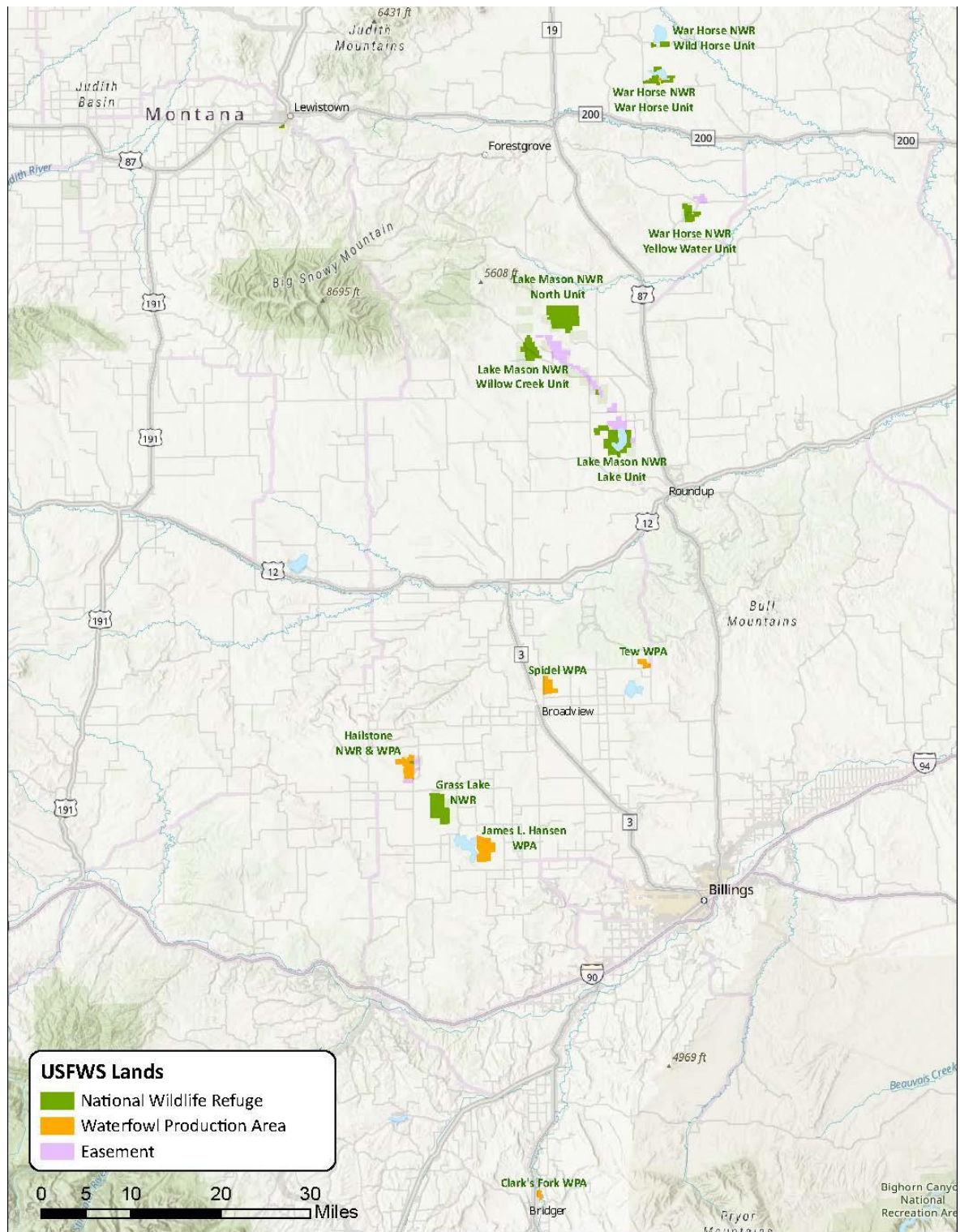
"... to administer a national network of lands and waters for the conservation, management and, where appropriate, restoration of the fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans."

The Improvement Act directs the Secretary of the USDI to ensure that the mission of the Refuge System and purposes of individual refuges are carried out (16 U.S.C. 668dd(4)(a)(3)). It requires each NWR unit to develop a CCP to ensure that it is managed to fulfill its established purpose and meet the mission of the Refuge System (16 U.S.C. 668dd(4)(e)(1)(a)). Each unit must be managed consistently with the CCP until conditions

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that affect the refuge or planning unit have changed significantly and a revision is deemed necessary (16 U.S.C. 668dd(e)(1)).

Figure 1. CMR WMD and Associated Refuges and WPAs



1.2 Planning Context

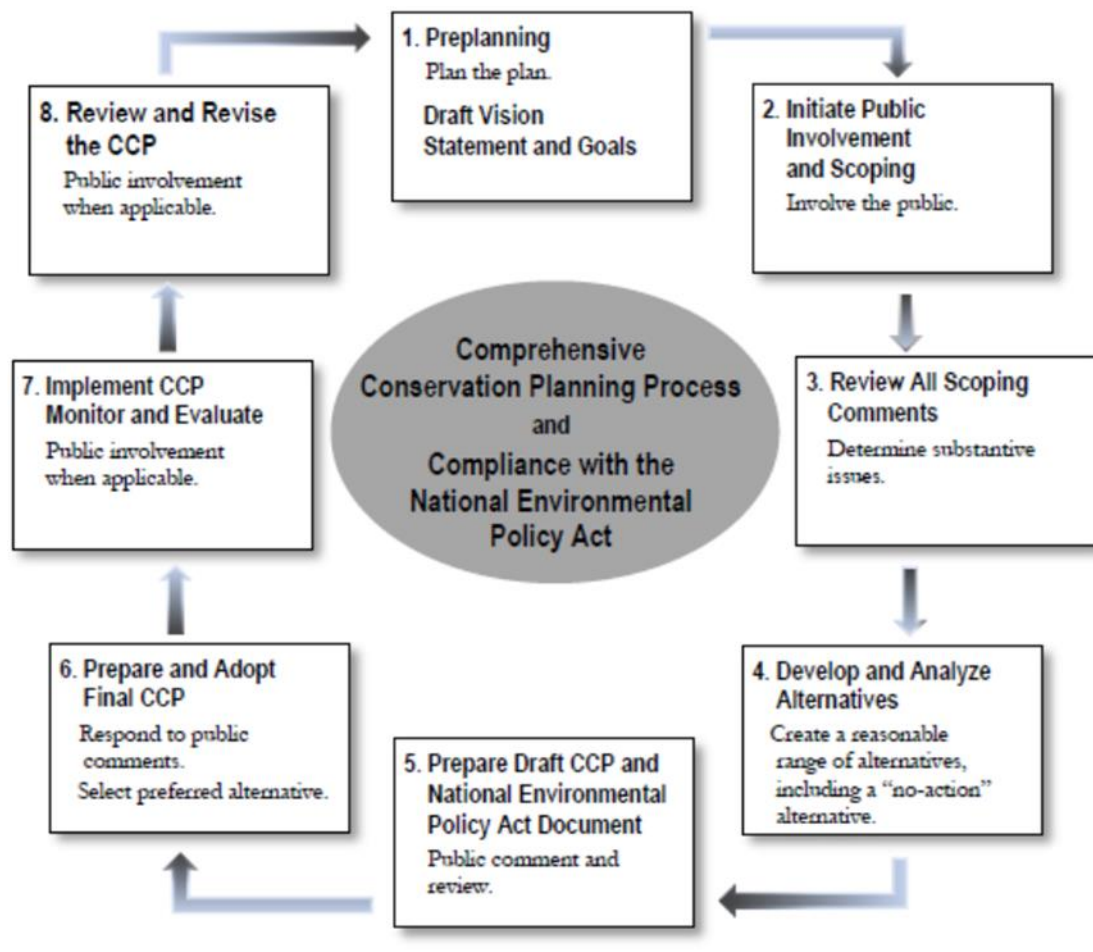
The Service began step one (preplanning) of the CCP planning process (Figure 2) for the District in the fall of 2016 by creating a planning team of Service staff from the CMR NWRC (the Complex) and Service Region 6 Division of Refuge Planning. Staff began thinking about how to address and correct District planning issues. They discussed the values and qualities of the District that must be protected, maintained and improved. Staff developed vision and goals statements based on the refuge system's mission and the District units' legislative purposes.

During the public scoping process (step two), the public was asked to review and offer suggestions on the vision and goals statements. During three public, open-house meetings, attendees viewed a PowerPoint presentation about the District and an overview of the CCP and NEPA processes, as well as the purpose and vision for each unit. Attendees were encouraged to ask questions and offer comments. Each attendee received a comment form for submitting their thoughts or questions in writing. Meeting attendees participated in small discussion groups with Service staff.

Attendance during the three public scoping meetings was relatively low: There were six attendees at the Winnett meeting, three at the Roundup meeting and five at the Laurel meeting. Attendees were primarily local citizens, including ranchers. No one made formal oral comments during the meetings. Written comments for the initial scoping effort were due March 31, 2017, and the Service received nine comments (from eight individuals and one organization).

On June 29, 2022, the Service published a Notice of Intent in the Federal Register announcing it would be reinitiating the District's CCP planning process. During the new scoping comment period, the Service received comments from two individuals and three organizations.

Figure 2. Process Steps for Comprehensive Conservation Planning and Associated Environmental Analysis



The CCP planning process ensures that issues with the greatest potential effect on District resources and programs are resolved or prioritized over the life of the CCP. The comments collected from the scoping meetings and correspondence focused on public opportunity, wildlife resources and livestock grazing and were used to develop a final list of issues for developing the proposed action and analyzing the management alternatives. The Service developed alternatives to address the planning issues and problems, which are presented in this EA (Chapter 3).

After the scoping process, a draft CCP was developed that includes a vision and a series of goals. This EA presents a range of alternative objectives and strategies for achieving them and analyzes the impacts of each alternative on the human environment.

1.3 Proposed Action

The Service proposes to develop and implement a CCP to best achieve the District's established purposes; fulfill the mission of the NWRS consistent with sound fish and

wildlife management; and maintain the biological integrity, diversity and environmental health of the NWRS. The CCP includes proposals for natural resource management, visitor use and access, and cultural resource stewardship.

1.4 Purpose and Need for Action

The purpose of developing the CCP is to provide long-term guidance for managing the District's programs and activities to ensure the District is meeting its established purposes and the mission of the NWRS, as required by the Improvement Act. There is no formal District management plan. The District needs a CCP to guide general operations, natural resource management, visitor use and access, and cultural resource stewardship.

This CCP describes the District's role in supporting the mission of the NWRS as well as conservation efforts for the larger landscape. Fish, wildlife, plants and their habitats receive the highest management priority. Visitor uses (with a priority on wildlife-dependent recreation) are allowed and encouraged if they are compatible with each Service unit's purpose and as mandated by the Improvement Act.

The CCP is intended to:

- Provide the District with a long-term management plan for the conservation of fish, wildlife, plants and their related habitats
- Set a long-term vision for the District, as well as management goals, objectives and strategies to achieve that vision
- Provide opportunities for compatible visitor uses
- Achieve the District's purposes, fulfill the System's mission, and maintain and restore ecological integrity
- Communicate to the public the Service's management priorities for the District

As expressed in the proposed CCP, the vision for the District is:

The Charles M. Russell Wetland Management District, located in the heart of the Northern Great Plains, consists of NWRS, WPAs and conservation easements. These mixed grassland, sagebrush and vital wetland habitats support abundant wildlife populations. In collaboration with partners, these habitats are managed to support the biological diversity and integrity of the District and its surrounding landscapes and provide a variety of recreational opportunities. Visitors enjoy a sense of serenity and wonder in the presence of diverse habitats and wildlife, which connects them with nature.

The CCP identifies seven goals for managing the District's natural resources, visitor use and access, and cultural resources:

Natural Resources

- **Upland Habitat and Associated Wildlife:** Protect, enhance and manage upland habitat for breeding and migratory birds and other wildlife while maintaining the biological diversity and integrity of native grasslands and sage-steppe prairie.

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- **Wetland Habitat and Associated Wildlife:** Protect, enhance and manage wetland habitat for breeding and migratory birds and other wildlife to maintain the biological diversity and integrity of the District's wetlands.
- **Research and Inventory:** Improve scientific knowledge of natural resources and ecological processes to inform management within the District through monitoring and applied research.

Visitor Use and Access

- **Visitor Services:** Provide visitors with wildlife-dependent recreational and educational opportunities that foster an appreciation of the District's wildlife and plant communities.
- **Partnerships:** Collaborate with partners to protect, enhance and manage for healthy, productive, and diverse habitats and wildlife populations on District and surrounding lands.

Operations

- **Operations:** Emphasize the protection of District resources using staff, partnerships and volunteer programs.

Cultural Resources

- **Cultural Resources:** Identify and protect cultural resources to preserve the District's precontact and historic past.

Chapter 2: Involvement, Coordination and Consultation

2.1 Public Involvement

The draft CCP and this draft EA were made available for public review and comment for 30 days from January 14, 2025 to February 13th, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025 and the draft documents were posted on the District [website](#). The draft document was made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457] via email [cmr@fws.gov] and on the District [website](#). Comments were also received at both the physical and email addresses.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received on the Draft EA and the Service's responses to the comments are included in the final CCP (Appendix I of the CCP).

2.2 Federal Coordination

The Regional Director (Service Region 6) invited the Montana state office of the Bureau of Land Management (BLM) to take part in the planning process. The BLM designated a representative to take part, and staff members were involved in the planning process.

Intra-Service consultation under Section 7 of the Endangered Species Act was completed on August 8, 2023. See the attached Section 7 Intra-Service Consultation Form (CCP Appendix G).

Consultations with the State Historic Preservation Office (SHPO) under Section 106 of the National Historic Preservation Act will be conducted on a project-by-project basis.

2.3 State Coordination

The Regional Director sent a letter to Montana Fish, Wildlife and Parks (MFWP) and the Department of Natural Resources and Conservation, inviting them to take part in the planning process. Both agencies designated a representative, and their staff members were involved in the planning process. Appendix I details comments provided by MFWP on the draft EA and CCP and the Service's response.

2.4 County Coordination

The Regional Director sent letters to the Golden Valley, Musselshell, Petroleum, Stillwater and Yellowstone County commissioners. These counties did not designate a representative to take part on the planning team but were provided opportunities to participate and submit comments.

2.5 Tribal Consultation

Early in the planning process (September 30, 2016), the Regional Director sent a letter to Tribes identified as possibly having a cultural and historical connection to areas in the District:

- Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation, Montana
- Blackfeet Tribe of the Blackfeet Indian Reservation of Montana
- Cheyenne River Sioux of the Cheyenne River Reservation, South Dakota
- Crow Creek Sioux Tribe of the Crow Creek Reservation, South Dakota
- Crow Tribe of Montana
- Flandreau Santee Sioux Tribe of South Dakota
- Fort Belknap Indian Community of the Fort Belknap Reservation of Montana Oglala Sioux
- Lower Brule Sioux Tribe of the Lower Brule Reservation, South Dakota
- Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, Montana
- Rosebud Sioux Tribe of the Rosebud Indian Reservation, South Dakota
- Standing Rock Sioux Tribe of North & South Dakota
- Three Affiliated Tribes of the Fort Berthold Reservation, North Dakota

A representative from the Northern Cheyenne Tribe asked to be included in planning team updates and has been included in the team correspondence regarding CCP development. The other Tribal councils did not submit responses to the Region 6 letter but were provided opportunities to comment. The Service provided early copies of the draft CCP and associated documents, including this EA, to the following eight tribes for review and also offered formal consultation on the CCP. The Service has not received a response from any of these Tribes at this time.

- Assiniboine & Sioux Tribes of the Fort Peck Indian Reservation, Montana
- Blackfeet Tribe of the Blackfeet Indian Reservation of Montana
- Chippewa Cree Indians of the Rocky Boy's Reservation, Montana
- Confederated Salish and Kootenai Tribes of the Flathead Reservation
- Crow Tribe of Montana
- Fort Belknap Indian Community of the Fort Belknap Reservation of Montana
- Little Shell Tribe of Chippewa Indians of Montana
- Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, Montana

Chapter 3: Alternatives

3.1 Decision Framework

The planning team reviewed all public comments on the draft CCP and EA and has prepared a final CCP and EA. A summary of all substantive public comments submitted to the Service has been given to the Regional Director, who has considered the environmental effects of all alternatives, including information gathered during public review. A management alternative for the District has been selected based on the effects analysis in the final CCP and EA. A “finding of no significant impact” (FONSI) has been prepared and is included with the final EA (Appendix A). The actions in the selected alternative detailed in the FONSI compose the final CCP.

The planning team will publish this final CCP and EA on the District’s website: [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Electronic files for this final CCP will be available for download, or a hard copy will be mailed to those who have requested a paper version. The Service will implement the CCP with help from partner agencies, other organizations and the public.

3.2 Alternatives

Alternatives are different management approaches designed to achieve the purposes, vision and goals of the District; the mission of the NWRS; and the mission of the Service. Alternatives are formulated to address significant issues, concerns and problems identified by the Service, cooperating agencies, interested groups, tribal governments and the public during public scoping. The public did not identify any additional alternatives for review and analysis for the final CCP and EA..

Alternative A – No-Action Alternative

The No-Action Alternative describes the current ongoing management activities and existing staffing levels. This alternative provides a benchmark the decision-maker can use to compare what would happen to the environment if current management actions were to continue unchanged. Alternative A might not meet all CCP goals, but it provides a basis for comparison with the proposed action.

Current Management Activities for Control of Invasive Plant Species

Grazing is currently allowed in certain units of the District in grassland, mixed sagebrush grassland habitats. Grazing is administered on an annual basis in accordance with the Service’s Cooperative Agriculture Use Policy (620 FW 2) and a Cooperative Agriculture Agreement (CAA) consisting of a Commercial Special Use Permit (SUP) having special conditions and a detailed Plan of Operations outlining allowable animal unit months (AUM) (the amount of forage to fulfill the metabolic requirements for one animal for one month), on-off dates, unit locations, unit rotations and specific instructions pertinent to grazing.

Other management activities in the District include wildfire suppression and intermittent application of mechanical treatments and chemical and biological controls in response to spontaneous outbreaks of invasive plant species.

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Mechanical treatments include the use of handheld tools, chain saws and heavy equipment (e.g., to reduce hazardous fuels and remove invasive species). Chemical controls include herbicides, and biological controls involve the use of organisms or viruses to control pests (e.g., insects, mites, plant diseases).

Current Water Quality Management

Some District waterbodies and wetlands contain dissolved solids, elevated salinity and selenium levels, and other contaminants (such as pesticides). Current water quality management activities involve:

- Working with partners (e.g., state and county governments) to monitor water quality
- Maintaining wetland structures in their current condition
- Maintaining water rights

Refuge Resources — Current Visitor Use and Experience

The District's WPAs offer hunting and trapping opportunities for big game, upland game birds and migratory game birds. The use of lead ammunition is prohibited for hunting of upland game birds and migratory game birds (50 CFR 32.2(k)). The Grass Lake NWR and the north portion of the Lake Unit (Lake Mason NWR) are closed to visitor access and use. The Hailstone NWR has never been open to big game hunting.

The District's only fishing opportunities are in the Clark's Fork of the Yellowstone River at Clark's Fork WPA and in the reservoirs associated with the War Horse and Yellow Water units (War Horse NWR), although visitors do not use Service lands to access the reservoirs. Fishing in Clark's Fork WPA is allowed in the river but not in the wetland.

Wildlife observation and photography, as well as environmental education and interpretation, are popular wildlife-dependent recreational activities in the District. Users tend to be bird watchers and nature enthusiasts. The diversity of habitats and wildlife species provides year-round opportunities for wildlife observation, photography, education and interpretation. The District has been open to scientific research by non-Service personnel for decades, even on units that do not allow access to the public.

Visitor use and experience in the District is hampered by access, parking, signage and communications issues. Specifically, entry into many of the NWRs and WPAs is by two-track dirt roads that become muddy and impassable when wet. Most units in the District have no designated parking areas, so visitors park on grasses, which can cause a fire hazard when vegetation dries during the summer and fall months. Users sometimes fail to stay on open roads, creating new trails or ruts. Small boundary signs are located within the units, but boundary maps and information about allowed uses are lacking.

Management and Operations

The District's staff consists of one station manager.

Alternative B – Implementation of the CCP with Allowed Use of Lead Ammunition for Big Game Hunting and Fishing Tackle

Under Alternative B, the Service would implement the CCP, which would require increased resource management activities to control invasive plant species and enhance visitor use and experience.

Invasive Species Management Activities

Alternative B would implement planned and regular invasive species management within the District by expanding the Service's suite of management tools, which would include:

- **Transition to Prescriptive Grazing.** The Service would transition units of the District to prescriptive grazing regimens throughout the grassland and mixed sagebrush grassland habitats within the District as necessary to meet habitat goals and objectives. Prescriptive grazing is the planned application of livestock grazing at a specific season, duration and intensity to accomplish specific vegetation management objectives. This could include short-duration, high-intensity grazing treatments to control invasive plants (USFWS 2011); habitat management for specific wildlife or focal bird species; or multiple-unit rotational systems to provide long-term rest between grazing treatments.

These and other prescriptions, such as prescribed fire, may be considered to achieve vegetation structure, composition and habitat objectives, and develop a mosaic of habitat conditions that support a variety of wildlife species. The Service would continue to maintain and install wildlife-friendly fencing to prohibit cattle from trespassing on District lands.

- **Use of Prescribed Fire.** Fire affects wildlife by altering habitat (Wright 1974). Its benefits include creating habitat diversity, recreating lost or degraded habitats for indigenous species, and allowing animal species eliminated because of habitat degradation to be reintroduced (Wright 1974).

Prescribed fire would be used in addition to the current practice of wildfire suppression. Prescribed fire is a planned wildland fire ignited in accordance with applicable laws, policies and regulations to meet specific objectives. All planned ignitions must have an approved prescribed fire plan. Federal prescribed fire programs are guided by the principles of the 1995 Federal Wildland Fire Management: Policy and Program Review (U.S. Department of Agriculture [USDA], USDI, 1995) and the 2001 update (USDA, USDI, et al., 2001).

Federal wildland fire policy is guided by the 2009 Guidance for Implementation of Federal Wildland Fire Management Policy (USDA, USDI, et al., 2009). Collectively, these principles establish that wildland fire programs should be implemented equally, consistently and concurrently, as a means to protect, maintain and enhance resources. Firefighter and public safety are priorities in planning and implementing fire management activities.

Prescribed fire planning and implementation is conducted in accordance with Interagency Standards for Fire and Fire Aviation Operations (USDA/USDI 2024) and the National Wildfire Coordinating Group (NWCG) Standards for Prescribed Fire Planning and Implementation (NWCG 2022).

- **Increased Use of Mechanical Treatment.** The Service would increase the use of mechanical treatments within the District. These treatments may be used in conjunction with chemical control and prescribed fire treatments as part of the overall treatment process to meet project objectives and goals.
- **Increased Use of Chemical Control of Invasive Plants.** District staff would increase the use of herbicides to treat invasive plant species and federally and state-listed noxious plant species, and to restore and maintain native habitats. Chemical control may be used in conjunction with mechanical and prescribed fire treatments as part of the overall treatment process to meet project objectives.
- **Increased Biological Control.** District staff would increase the use of biological controls to control pests (e.g., insects, mites) and plant disease.

Dense nesting cover (DNC) of native grasses provides valuable wildlife habitat. However, most DNC fields in the District were established more than 20 years ago, and many contain nonnative species. These DNC fields likely need rejuvenation using the tools described above (e.g., prescribed fire and mechanical, chemical and biological treatment/control), replanting or conversion to native grass species. The Service would renovate and seed existing fields and grasslands with a diverse mix of native grasses and forbs to improve diversity and vigor.

Water Quality Management

Under Alternative B, the Service would continue existing management activities, including working with partners on water quality monitoring. The Service would also:

- Attempt to improve water quality by flushing or draining wetland systems
- Improve wetland structures:
 - Replace nonfunctioning water gauges
 - Improve the condition of ditches and replace or maintain culverts
 - Evaluate and improve existing structures to achieve wetland habitat goals, including restoring natural hydrology

In addition to maintaining water rights, the Service proposes to exercise water rights to benefit resources in specific District NWRs and WPAs.

Refuge Resources — Visitor Use and Experience

Under Alternative B, the Service will continue current activities related to visitor experience in the District, including opportunities for wildlife observation and photography. It will also continue providing hunting opportunities for big game, upland game birds and migratory game birds. The Service will continue to allow the use of lead ammunition for big game hunting and fishing tackle. The use of lead ammunition is prohibited for hunting of upland game birds and migratory game birds (50 CFR 32.2(k)).

To enhance visitor use and experience, the Service proposes to open:

- Grass Lake NWR's north portion (north of the railroad right-of-way) to hunting of big game, upland game birds and migratory game birds; wildlife observation and photography; environmental education and interpretation; and research
- Hailstone NWR to big game hunting

Additionally, in response to public comments and in the interest of this serious safety issue, the Service is proposing to restrict the hunting of elk, deer, and pronghorn on Clark's Fork WPA to using archery only equipment.

Hunting and fishing activities have been determined to be compatible with these units of the District and the mission of the NWRS (Appendix D). However, opening new areas to hunting and requiring archery only for big game hunting on Clark's Fork WPA would not take effect until completion of the federal rulemaking process as part of the NWRS's Hunt/Fish Rule, including the requirement to develop a station-specific Hunt and Fish Step-Down Plan and associated regulatory language. The public will have opportunities to provide additional input during that process.

Alternative B includes new signage and brochures to enhance visitor experience in the District. The Service would install a visitor information sign (with a boundary map) at entrances to each unit to inform visitors of each unit's boundary, travel restrictions and uses allowed by Service policy. Signs would contain specific instructions (for example, prairie dog shooting is prohibited).

Although access would continue to be by foot travel only, the Service proposes the addition of gravel parking areas marked and bordered to contain vehicles. The Service proposes to work with counties to apply gravel to existing two-track dirt roads to provide all-weather access.

The Service proposes to take advantage of anticipated infrastructure improvements that would increase communication (cellphone service) capabilities within the District, enhancing visitor safety.

Management and Operations

The existing staff of one station manager would be maintained under Alternative B.

Mitigation Measures

Any mitigation measures associated with Alternative B are identified in CCP Appendix D.

Alternative C — Implementation of the CCP with Required Use of Lead-free Ammunition and Fishing Tackle

Alternative C has the same basic elements as Alternative B, except that lead-free ammunition and lead-free fishing tackle would be required for all hunting and fishing activities in the District.

As mentioned above, opening new areas to hunting in Alternatives B and C, requiring archery only for big game hunting on Clark's Fork WPA, and requiring lead-free

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ammunition and fishing tackle across the District in Alternative C would not take effect until completion of the federal rulemaking process as part of the NWRS's Hunt/Fish Rule, including the requirement to develop a station-specific Hunt and Fish Step-Down Plan and associated regulatory language. The public will have opportunities to provide additional input during that process.

Mitigation Measures

Mitigation measures associated with Alternative Care identified in CCP Appendix D.

Chapter 4: Affected Environment and Environmental Consequences

This section is organized by affected resource categories. Each section discusses (1) the existing environmental and socioeconomic baseline in the action area and (2) the effects and impacts of the alternatives on each resource. Effects and impacts from the proposed action or alternatives are adverse or beneficial changes to the human environment that are reasonably predictable (e.g., 40 CFR 1508.1(g)). The impact analysis directly follows the affected environment description for a resource and is organized by alternative.

4.1 General Description of Affected Environment Applicable to All Affected Resources

The Service assessed the environmental consequences of implementing Alternatives A, B or C on natural resources, cultural and historic resources, socioeconomics and other resources of the District. The alternatives would have negligible impacts on geology and soils, floodplains, vegetation of special management concern (no federally listed or state listed plants are known to occur in the District), soundscape, aesthetics and visual resources, and land use and planning, so these resource areas were not analyzed in this EA.

4.2 Natural Resources

Upland Vegetation, Wildlife and Habitat — Affected Environment

Upland Vegetation

Upland areas of the District comprise vast expanses of mixed-grass prairie, sagebrush-mixed-grass prairie, greasewood-mixed-grass prairie, three fields of disturbed grasslands replanted to DNC, and a unique 225-acre Great Plains ponderosa pine woodland and savanna. Large, intact native plant communities can still be found, making this area important for native wildlife. A native plant community is an area of previously unbroken, unfarmed sod where the natural soil composition remains intact.

The plant species are similar, whether grass, sagebrush or greasewood dominates a site. Common grasses and grass-like species include western wheatgrass, bluebunch wheatgrass, green needlegrass, needle and thread, prairie junegrass, blue grama and threadleaf sedge. Common native forbs are phlox, salsify, fringed sagewort, western yarrow and American vetch. Shrubs are big sagebrush, greasewood, saltbush spp. and rubber rabbitbrush. Other vegetation includes prickly pear cactus and dense clubmoss.

Some District properties contained croplands when they were purchased — these areas are referred to as disturbed grasslands. These fields were converted to DNC with a seed mixture of cool-season wheatgrasses and legumes. The predominant wheatgrass species were intermediate, tall, pubescent and western. The legumes were alfalfa and yellow sweet clover. These species were chosen based on research conducted in the late 1960s and 1970s that showed they are highly attractive and beneficial to nesting waterfowl (Duebbert 1969). This research found that ducks had higher nesting success in DNC than in surrounding upland habitats (Duebbert 1969; Duebbert and Lokemoen 1976; Kaiser et al. 1979).

Lands adjacent to District properties that were converted from native prairie are generally flatter, with deeper, more productive soil and are now used for grain production. Some croplands are adjacent to or in the vicinity of Lake Mason (Lake Unit), Hailstone WPA and NWR, Grass Lake NWR and all WPAs.

War Horse NWR (War Horse Unit) has 225 acres of native Great Plains ponderosa pine woodland and savanna. This is a unique plant community of plants common to the area. Birds and small mammals consume the seeds of ponderosa pine, and mice, porcupines and other rodents use the bark as nesting material. The trees are important to various bird species for cover, roosting and nesting (Natural Resources Conservation Service [NRCS] 2004).

As discussed above, grazing is currently allowed in certain units of the District in upland grassland, mixed grassland, and stage-steppe habitat on an annual basis. Research indicates that livestock grazing can negatively impact vegetation. For example, livestock graze and trample native plants which clears vegetation and destroys soil crusts. Hoof action prepares the soil for the germination of invasive species. Additionally, livestock can transport and disperse seeds on their coats and through their digestive tracks. Finally, cattle graze more indiscriminately than native grazers and consume grasses and forbs, diminishing the native forb component of an ecosystem. However, grazing can also be used as a tool to improve habitat conditions for specific wildlife or focal bird species, migratory songbirds, and other grassland-obligate species, especially when designed to mimic some of the behaviors and grazing habits of early native grazers on the landscape.

Invasive Plants in Upland Habitat

The primary invasive species in upland habitats are cheatgrass, crested wheatgrass, leafy spurge, black henbane, Russian olive, Japanese brome and whitetop.

Birds

Some common nongame birds in upland areas are horned lark, vesper sparrow, Brewer's sparrow, Savannah sparrow, grasshopper sparrow, lark bunting and western meadowlark. Sharp-tailed grouse, gray partridge, pheasants, and greater sage-grouse occur on most District properties.

In February 2010, the Service deemed the greater sage-grouse "warranted but precluded" for listing under the Endangered Species Act, which means the listing was warranted but other species have a higher priority. Therefore, the greater sage-grouse is listed as a federal candidate species. The Final Management Plan and Conservation Strategies for Sage-Grouse in Montana (Montana Sage-Grouse Work Group [MSGWG] 2005) has a map showing the distribution of greater sage-grouse and sagebrush ecotypes throughout Montana and a table presenting population distribution and trend data. The map confirms that all District properties are in greater sage-grouse habitat range.

A status review conducted by the Service in 2015 found that the greater sage-grouse remained relatively abundant and well-distributed across the species' 173-million-acre range and did not risk extinction now or in the foreseeable future. The Service determined

that protection for the greater sage-grouse under the Endangered Species Act was no longer warranted and withdrew the species from the candidate species list.

All units of War Horse NWR and the west side of the Lake Unit (Lake Mason NWR) are in areas identified as high-priority habitat for greater sage-grouse. Sage-grouse are year-round residents of these properties, which they use for nesting, brood rearing and wintering. Known lek sites are on the Lake Mason NWR (North Unit) and War Horse NWR (Yellow Water Unit). There are also known lek sites within a four-mile radius of the Wild Horse Unit (11 lek sites), War Horse Unit (10), Yellow Water Unit (14), North Unit (one) and Lake Unit (three), indicating the importance of these properties for sage-grouse. Wet areas along intermittent streams, and seepage sites below artificial reservoirs and around wetlands provide the insects and forbs hens and chicks feed on during the summer.

Mammals

Incidental observations confirm the following upland species' presence in the District and on associated NWRs and WPAs: Richardson ground squirrel, thirteen-lined ground squirrel, northern pocket gopher, deer mouse, beaver, muskrat, white-tailed jackrabbit, cottontail rabbit, raccoon, long-tailed weasel, mink, badger, striped skunk, coyote and red fox (see the entire species list [here](#)). Pronghorn and mule deer are the most common big-game species on all units except Clark's Fork WPA. White-tailed deer are common on Clark's Fork WPA and have been sighted on Lake Mason NWR's North Unit.

About 700 head of elk wintered in the North Unit during the winter of 2010-2011, when deep snows forced them from their traditional winter range in the Little Snowy Mountains, which are about 10 miles west of the North Unit. Muskrat, mink, raccoon and beaver are the most common mammals using wetland habitats, and white-tailed deer, beaver, raccoon, porcupine, mink and red fox can be observed in riparian areas.

Colonies of black-tailed prairie dog (a Montana species of concern) are found on flat, open grasslands that have a shrub component and low, sparse vegetation. The most frequently occupied habitat in Montana is dominated by western wheatgrass, blue grama and big sagebrush (Montana Prairie Dog Working Group [MPDWG] 2002). The black-tailed prairie dog is found on War Horse NWR (Yellow Water Unit), Lake Mason NWR (North and Lake Units), Hailstone NWR and Grass Lake NWR. The colonies are small in acreage and distant from other colonies. They also provide habitat for other wildlife species such as mountain plovers and burrowing owls. The black-footed ferret has not been documented in any of these colonies.

Reptiles and Amphibians

Incidental observations and systematic surveys conducted in 1998 and 1999 (Hendricks 1999) have documented eastern racer, western rattlesnake, gopher snake, plains garter snake and greater short-horned lizard. The greater short-horned lizard has been found at Hailstone WPA and studied by the biology department at Montana State University-Billings. Milk snake, western hognose snake, greater short-horned lizard and common sagebrush lizard are included on the species of concern list of Montana reptiles.

Invertebrates

The Service has not inventoried or quantified upland invertebrates (insects), but prairie and tame grasslands produce large numbers of grasshoppers, leafhoppers, butterflies, beetles, spiders and ants.

Species of Special Status or Concern

The monarch butterfly (*Danaus plexippus*), which may be present in the upland habitat, is a candidate species under the Endangered Species Act. Monarch butterfly habitat includes open places, native prairie, foothills, open valley bottoms, open weedy fields, roadsides, pastures, marshes and suburban areas. For breeding, and during the egg through larval stages, the monarch butterfly relies on milkweed (genus *Asclepias*). It is a summer resident of the District and has been documented by the Montana Natural Heritage Program (MTNHP) within the last five years. See attached Section 7 Intra-Service Consultation Form (See CCP Appendix F) for more information.

Some species that use District lands have been designated species of concern by the MFWP, the Montana Natural Heritage Program, the BLM or the U.S. Forest Service (USFS). The Service considers some of these of conservation concern. District management has identified the following species and guilds a priority for upland management: greater sage-grouse, black-tailed prairie dog, pronghorn, waterfowl, shorebirds, wading birds and neotropical migrant birds. A list of species that reside or may travel through the District can be found [here](#).

Upland Vegetation, Wildlife and Habitat — Environmental Consequences

Alternative A

The Service currently manages habitat vegetation on the District by annual grazing for prescribed time periods on the limited acreage controlled by the Service, or conducts no grazing at all, as well as applying chemical and biological controls.

Grazing

Most grazing SUPs in the District have been issued for logistical reasons such as fence boundaries. For example, one 1,000-acre pasture being grazed on War Horse NWR (War Horse and Wild Horse Units) and Lake Mason NWR (Lake Unit) contains only 20 acres that are Service lands; the Service has no controlling interest in the pasture and charges for the small amount of grass that is grazed. Ranchers with annual special use permits for grazing would not be affected by Alternative A.

Prescribed pauses from grazing improve habitat conditions and residual cover for ground-nesting birds in areas of the District that have grazing CAAs. These pauses allow vegetation to recover, which benefits migratory birds and other wildlife that use the habitat for cover, breeding, nesting and forage.

In some cases, cattle enter District lands where fencing is absent or in poor condition. This would not change under Alternative A, so problems caused by trespass livestock would continue; there are some adverse effects from trespass livestock. The Service would

continue to work with ranchers to better monitor the location of their cattle and contain them on private lands.

Prescribed Fire

In absence of planned management, including prescribed fire, invasive plants continue competing with native plants for resources (sunlight, soil nutrients, water) and degrading habitat quality in the long term. District staff have not used prescribed fire and mechanical, biological and chemical controls for habitat improvement in recent years. Current practice is to suppress wildfires.

Other Methods Used to Control Invasive Plants

The Service would continue to monitor for the presence of invasive plants, responding to outbreaks to keep invasive species from establishing and spreading, but without the planned use of management tools, the District's native plant communities and habitats could suffer long-term adverse effects.

Under Alternative A, management will continue to monitor DNC fields but will make no efforts to rejuvenate or convert them to native grasses.

Impacts Associated with the Use of Lead Ammunition and Fishing Tackle

Under Alternative A, the use of lead ammunition is currently and will continue to be prohibited for hunting of upland game birds and migratory game birds (50 CFR 32.2(k)); however, lead ammunition for big game hunting and fishing tackle would continue to be allowed on areas open to big game hunting and angling within the District, consistent with Montana hunting and angling regulations.

Lead has no known biological function in living things. Lead poisoning affects the blood, nervous and immune systems of wildlife (Eisler 1988). According to Fallon et al. (2017) clinical signs may include "... ataxia, impaired mobility, lowered sensory abilities, vomiting, anemia, lethargy, gastrointestinal stasis, weakness and mortality." Exposure to high amounts of lead in a short amount of time severely impairs these systems, causing rapid death (Gill and Langelier 1994; Kelly et al. 1998; Schulz et al. 2006). Exposure to smaller amounts of lead over longer time periods can cause anemia, lethargy, neurological disorders, an impaired ability to fight off disease and other negative effects (Jacobsen et al. 1977; Wobester 1997; Pattee and Pain 2003; Franson and Pain 2011; Pain et al. 2019).

Affected wildlife may be more susceptible to predation. In other words, even sublethal lead poisoning that does not directly kill wildlife can do substantial damage, including on reproduction (Scheuhammer 1987; Kendall et al. 1996; Provencher et al. 2016; Pain et al. 2019, SETAC 2021). The bioavailability of spent lead ammunition (shot and fishing tackle) negatively impacts wildlife, human health and the environment, especially for birds — specifically waterfowl and raptors — and potentially mammals.

Appendix A — Finding of No Significant Impact and Environmental Assessment of the Comprehensive Conservation Plan: Charles M. Russell Wetland Management District and Associated National Wildlife Refuges, Montana

Although hunting and fishing are not inherently damaging, the use of lead ammunition and fishing tackle are. Connections have been drawn between hunting with lead ammunition and effects to scavenger species and humans (Golden et al. 2016; Hunt et al. 2009; Agency for Toxic Substances and Disease Registry 2020). Upland game birds and waterfowl are exposed when they ingest lead through soil, sediment or food (Rattner et al. 2008). This sometimes occurs when they ingest spent shot or ammunition fragments along with the grit or pebbles they need to fill their gizzards, a specialized organ involved in breaking down food (Anderson 1975; Clark and Scheuhammer 2003; Kreager et al. 2008; Franson et al. 2009).

Avian and mammalian predators and scavengers can get lead poisoning when they ingest lead fragments or pellets in the tissues of animals killed or wounded by lead ammunition (Platt 1976; Redig et al. 1980; Pattee et al. 1981; Craig et al. 1990; Church et al. 2006; Hunt et al. 2006; Cade 2007; Pauli and Buskirk 2007; Stroud and Hunt 2009; Finkelstein et al. 2012; Rideout et al. 2012; Warner et al. 2014; Herring et al. 2016).

Lead poisoning reduces raptors' strength and coordination, leading to muscle and weight loss, reducing motor skill function and making them lethargic. This makes them more susceptible to disease, vehicle strikes or power line accidents, potentially increasing mortality rates by leaving them unable to hunt (Kramer and Redig 1997; O'Halloran et al. 1998; Kelly and Kelly 2005; Golden et al. 2016). Raptor nestlings are less likely to survive and grow when parents bring food embedded with lead fragments (Hoffman 1985a, 1985b; Pattee 1984).

Recent modeling indicates that lead poisoning suppresses eagle population growth (Slabe et al. 2022). The extent of elevated lead levels in raptors admitted for rehabilitation is documented in a study of bald eagles and golden eagles in the Raptor Rehabilitation Program at the College of Veterinary Medicine at Washington State University. From 1991 to 2008, 48% of bald eagles and 62% of golden eagles tested had blood lead levels considered toxic by current standards. Of those with toxic lead levels, 91% of bald eagles and 58% of golden eagles were admitted to the rehabilitation facility after the end of the general deer and elk hunting seasons in December (Stauber 2010).

In waters where the lead shot prohibition for migratory waterfowl hunting has protected species from lead, lead fishing tackle still exposes susceptible birds, primarily loons and swans, to lead poisoning (Pokras and Chafel 1992; Rattner et al. 2008; Strom et al. 2009). Diving birds can ingest small lead fragments released into the water and discarded lead sinkers that rest on river and lake bottoms alongside pebbles. Studies have found that ingested lead fishing tackle is a leading cause of death in adult common loons (Pokras and Chafel 1992; Scheuhammer and Norris 1995; Franson et al. 2003; Pokras et al. 2009; Grade et al. 2017; Grade et al. 2019).

Strom (et al.) assessed lead exposure in Wisconsin birds and found that about 25% of trumpeter swan deaths from 1991 through 2007 were caused by ingested lead (Strom et al. 2009). Flint and Schamber (2010) estimated that lead shot pellets in wetland sediment would be available to waterfowl for 25 years or more. This means the risk of exposure to

lead shot pellets from past hunting for most waterfowl species should nearly be eliminated as the ban took effect in 1991. However, swans have long necks and can forage at greater depths within sediment, so they have a higher risk of lead exposure (Haig et al. 2014). Loons are infrequent in the District. Trumpeter and tundra swans have been observed at several units and use these areas seasonally.

Many hunters do not realize that the carcass or gut pile they leave in the field usually contains lead ammunition fragments, and this is the most likely source of lead exposure by avian and mammalian predators (Craighead and Bedrosian 2008; Kelly et al. 2011; Rogers et al. 2012; Bedrosian et al. 2012; Johnson et al. 2013; Legagneux et al. 2014; Warner, et al., 2014). Therefore, the Service educates hunters on this issue and asks them to voluntarily remove carcasses, including entrails (gut piles), from NWRS lands to decrease the risk of lead exposure for wildlife.

Since 1991, when lead shot was banned for hunting waterfowl and coots in North America, these birds' exposure to spent lead shot in wetlands has declined (Samuel et al. 1992; Anderson et al. 2000; Samuel and Bowers 2000; Lewis et al. 2021). However, lead shot and ammunition is still used to hunt big game, so avian scavengers are still at risk for lead exposure (Church et al. 2006; Hunt et al. 2006; Pauli and Buskirk 2007; Herring et al. 2016). Also, diving waterbirds are still exposed to lead fishing tackle that remains in streambed sediments (Pokras and Chafel 1992; Scheuhammer and Norris 1995; Franson et al. 2003; Pokras et al. 2009; Grade et al. 2017; Grade et al. 2019).

Regarding effects of lead on wildlife, hunting and fishing opportunities on District lands occur over a large area and multiple access sites; this reduces lead accumulation and build-up by spreading it over a large area. Fishing opportunities on District lands are limited and occur at just two sites: War Horse NWR –Yellow Water Unit –Yellow Water Reservoir and in the Clark's Fork of the Yellowstone River at Clark's Fork WPA. With limited fishing opportunities on the District and generally low participation in these opportunities, lead accumulation and build-up seems unlikely, particularly when considering that lead tackle only remains in the environment when the tackle gets snagged or otherwise accidentally left behind. Anglers are encouraged to remove derelict fishing tackle and line and voluntary use lead-free tackle alternatives through education and outreach. So long as tackle is removed from the water, there is low chances of lead tackle being taken up by wildlife especially waterfowl or swans while dabbling for aquatic food.

The amount of lead that hunting and fishing activities have added to the District's environment has not been directly quantified as direct measures of this are near impossible to gather data on. However, based on the best professional judgement of District staff and agency hunting and fishing experts, the resulting addition of lead into the environment from current hunting and angling on the District is negligible or minor. Lead is naturally present in all soils. It generally occurs in the range of 15 to 40 parts lead per million parts of soil (ppm), or 15 to 40 milligrams lead per kilogram of soil (mg/kg). Pollution can increase soil lead levels to several thousand ppm (University of Massachusetts Amherst 2022). Soil surveys have not been completed on the Refuge to

determine exact lead concentrations in the soil. However, based upon a map showing the spatial distribution of soil lead concentrations (ppm dry weight) across the continental United States it is estimated that the baseline lead concentrations found in the soil of the refuge is between 15-20 ppm (Haig et al. 2014). This range is within the normal range of lead concentration generally found in soils. There is no single threshold that defines acceptable levels of lead in soil, however, the Environmental Protection Agency defines a soil lead hazard as bare soil on residential real property or on the property of a child-occupied facility that contains total lead equal to or exceeding 400 parts per million (ppm) in a play area, or an average of 1,200 parts per million of bare soil in the rest of the yard based on soil samples (EPA 2020).

The estimated lead levels on the refuge are significantly lower than those thresholds for health concerns and any expected lead that would enter the environment from hunting and fishing is not expected to exceed safe levels. Existing level of big game hunting and fishing on the refuge using lead ammunition and tackle to date has not resulted in documented concerns for wildlife, environmental or human health.

Alternatives B and C

Under Alternatives B and C, the Service would use various tools to manage habitats, including rejuvenating DNC:

- Transition to prescriptive grazing
- Use prescribed fire
- Increase mechanical treatment
- Chemically control invasive plants
- Increase biological control

Transition to Prescriptive Grazing

Under Alternatives B and C, the Service would transition to a prescriptive grazing strategy designed to improve habitat conditions for focal bird species, migratory songbirds, and other grassland-obligate wildlife. This approach may involve short-duration, high-intensity grazing treatments to help manage invasive plant populations, as well as targeted habitat treatments to support specific wildlife species. Additionally, rotational grazing systems would be implemented to allow for extended recovery periods between grazing events, ensuring long-term sustainability.

Prescriptive grazing presents both ecological benefits and short-term trade-offs. While the removal of vegetative cover may lead to localized soil erosion, the limited acreage involved—comprising only a small fraction of the 30,000-plus acres within the District—ensures alternative forage is available, minimizing broader impacts. Highly palatable forbs and shrubs could experience grazing pressure, temporarily affecting wildlife that depend on these plant species, including pollinators and large game species. However, wildlife that thrive in shorter vegetation, such as prairie dogs, mountain plovers, McCown's longspur, and grazing ungulates, would benefit from improved habitat

conditions. While habitat disturbances may temporarily affect some species, the overall ecological benefits of increased habitat heterogeneity would likely outweigh these short-term effects. Additionally, grazing activities may alter visitor experiences, particularly for those seeking uninterrupted wildlife observation opportunities.

Managed disturbance within grassland, wet meadow, and shrub-steppe ecosystems is essential for maintaining plant health and suppressing noxious weeds. The long-term benefits of grazing on plant diversity depend on grazing intensity, the site's evolutionary history, and climatic conditions. Grazing animals help break up capped soils through hoof impact, which improves water infiltration, enhances soil respiration, and stimulates native grass reproduction. Additionally, hoof action aids in plant litter decomposition while also dispersing and trampling seeds into the soil, increasing germination success (Laycock, 1967). Nutrient cycling is another significant benefit, as cattle return approximately 80 to 85 percent of the nitrogen ingested with plant tissue back to the soil through natural waste processes (Laycock, 1967).

The removal of vegetation increases the vigor of grasslands by promoting the tillering and regrowth of desirable grasses and forbs while reducing populations of invasive cool-season grasses, woody encroachers, and noxious weeds. Under typical precipitation conditions, regrowth following grazing can occur within a single season. As vegetation heights recover, habitat suitability may shift, favoring bird species that require dense nesting cover while becoming less suitable for those preferring sparse vegetation. However, because of the regrowth of herbaceous vegetation, no long-term negative impacts are anticipated for waterfowl or other grassland or mixed grass-sagebrush nesting birds. Instead, increased plant diversity and structural heterogeneity are likely to enhance ecological resilience in the long term.

The Service will continue issuing special use permits for grazing, although allocations will be determined based on habitat needs rather than a fixed annual schedule. Under a prescriptive grazing system, annual permits may not always be available, and the number of acres and grazing locations will be dictated by conservation objectives. Alternatives B and C would temporarily reduce available Animal Unit Months (AUMs), affecting permit holders who receive fewer or no grazing allocations during certain cycles.

The Service would continue to maintain and install fencing to keep cattle from entering District lands. Trespass livestock cause some adverse effects, and additional fencing would mitigate those effects. The Service would continue working with ranchers to monitor their cattle and contain them on private lands. Preventing trespass livestock from grazing on Service lands not intended for grazing brings long-term beneficial effects.

Use of Prescribed Fire

The Service would use prescribed fire to restore the role of fire in vegetation communities that are adapted to and benefit from fire. Fire encourages new growth of native vegetation and helps maintain plant and animal species whose habitats depend on periodic fire (e.g.,

silver sagebrush). Fire increases species richness and diversity in the herbaceous layer (USFS 2005), and native grasses and forbs have greater seed production, germination and establishment because burning allows plant nutrients to return to the soil (NWCG 2010). Periodic burning reduces hazardous fuel buildup, opens space for new plant growth and provides better cover and food for wildlife (USFWS 2012a, b).

Fire-adapted vegetation communities (such as mixed-grass prairie) are more fire tolerant; that is, they are sustainable and resilient to the effects of wildfire. Disturbed areas return to their ecosystem function quickly (Millar et al. 2007). For fire-intolerant sagebrush species in the District, like Wyoming big sagebrush, management would carefully consider sage-grouse habitat requirements to prevent adverse impacts on that species.

Prescribed fire used elsewhere in the District would improve habitats and remove invasive plants. Nonnative plants can diminish habitat value and add to fuel loads. Prescribed fire would be used to remove invasive plants, suppress nonnative plant species and prevent woody species from invading native grasslands. Using prescribed fire to remove nonnative invasive plants checks the spread of nonnative plants into native plant communities, protects shrubs and other desirable vegetation, and reduces fuel loads, lessening the potential for large or unusually intense wildfires.

Improving habitat quality would benefit resident wildlife and migrating birds. Conversely, fire could clear the way for fire-tolerant species such as cheatgrass and spotted knapweed to invade. Although some exotic plants proliferate after fire, most studies report only small increases in exotic plants (USFS 2005). Some invasives may be mechanically treated before a fire (e.g., cutting or mowing to prevent seed production) to reduce post-burn establishment. Pre- or post-fire chemical treatments may also suppress invasive species. Invasive species that flourish after fire adversely affect native herbaceous communities (USFS 2005).

Using prescribed fire would benefit the ponderosa pine woodland and savanna on the War Horse WPA in the short and long term by improving habitat for wildlife that depend on forests for nesting, feeding, foraging and roosting. Some adverse effects would be temporary, lasting only as long as it takes to complete the action. Impacts would include temporary disturbance or displacement of large and small mammals and ground-nesting birds — as would occur during a wildfire.

Wildlife would suffer negligible adverse effects during the burns. Wildlife might temporarily disperse but would return after the burn. Prescribed burn ignition patterns provide wildlife escape routes as the burn progresses (Pennsylvania Game Commission 2016) and can be timed to avoid mating and nesting seasons (Gleason and Gillette 2009). Birds and some mammals usually leave the area ahead of the fire (USFWS 2012a, b). Few animals are unable to escape prescribed fire; small mammals and herptiles (reptiles and amphibians) typically find shelter in an underground burrow (Gleason and Gillette 2009). Fish in the District would suffer no adverse effects.

Increased Mechanical Treatment

Increased mechanical treatments under Alternatives B and C would include removing plants by hand by pulling, cutting or using machinery. Removing exotic species prevents nonnative plants from overtaking native plant communities and diminishing habitat quality in upland and wetland areas. Removing such plants also lowers the potential for large or unusually intense fires. Exotic plant seeds and plant parts may inadvertently be spread to uninfected areas during mechanical treatments. Wildlife would suffer negligible adverse effects, temporarily dispersing but returning once activities cease.

Ponderosa pine responds well to mechanical thinning, which is done to develop larger crowns as stands become older, yielding heavier seed crops for wildlife (NRCS 2004). Opening the canopy benefits wildlife: Associated plants produce more forage for deer and elk (NRCS 2004).

Increased Use of Chemical Control

The Service would continue using herbicides to eradicate invasive plants, benefitting native plant species by reducing competition for resources (soil nutrients, sunlight, moisture) and promoting diverse native grassland and wetland plant communities. Few weeds can compete with healthy native grasses for nutrients and water in the soil. Native vegetation would benefit if the Service applied herbicide treatments on District lands when needed.

We have completed intra-Service consultation on the impacts of these management tools on species that have special status under the Endangered Species Act (see CCP Appendix G). The monarch butterfly and Suckley's Cuckoo Bumblebees are the only species that may be impacted by management actions in the upland habitats. We received concurrence on the determination that our actions "May Affect but [are] Not Likely to Adversely Affect" the monarch butterfly and Suckley's Cuckoo Bumblebee.

The Service would not apply pesticides/herbicides, conduct prescribed fires or remove vegetation where there are monarchs in any life stage. The Service would apply treatment buffers as appropriate. The Service would consider monarch habitats before applying spot pesticide/herbicide treatment. The proposed action would be confined to 10 project units and will have no significant impact on monarch butterflies.

Increased Use of Biological Controls

Alternatives B and C would consider all control options, such as releasing spurge beetles to treat leafy spurge. This would prevent exotic (non-native) species from overtaking native plant communities and diminishing habitat quality in upland and wetland areas.

Rejuvenation of DNC

The Service would continue to monitor DNC fields for plant vigor (ability to grow, survive drought, reproduce and compete for resources) and litter accumulation to determine when rejuvenation is needed for health and resilience of the field. The vigor and

productivity of a DNC seeding is about 15 years (Higgins and Barker 1982, Lokemoen 1984). Restoring fields to native grasses depends on funding, climate conditions and the success of establishing native grasses. Improving DNC fields through reseeding and prescribed fire benefits wildlife.

Impacts Associated with the Use of Lead Ammunition and Fishing Tackle

Under Alternative B, big game hunting opportunities would be expanded. Hunters will still be required to use steel or other non-toxic shot for upland and migratory game birds in the District (50 CFR 20.21(j)). Lead ammunition would only be authorized for big game hunting (elk, deer, and pronghorn) consistent with Montana hunting regulations.

Also, as discussed above, the amount of lead that hunting and fishing activities have added to the District's environment has not been directly quantified as direct measures of this are near impossible to gather data on. While lead fishing tackle would still be authorized, as discussed above, angling opportunities on the District is limited and the risk of lead tackle being introduced into the environment is low. Based on the best professional judgement of District staff and agency hunting and fishing experts, the resulting addition of lead into the environment from these expanded hunting opportunities would be negligible or minor for the following reasons:

- As discussed above, lead is naturally present in all soils and it is estimated that the baseline lead concentrations found in the soil of the District is between 15-20 ppm (Haig et al. 2014), which is within the normal range of lead concentration generally found in soils.
- The number of new hunters or anglers expected to use lead ammunition or lead tackle because of new and expanded opportunities within the District is anticipated to be low, especially considering the decreasing trends in hunting (and fishing) generally.
- The estimated lead levels on the District are significantly lower than those thresholds for health concerns and any expected lead that would enter the environment from additional hunting and fishing is not expected to exceed safe levels.
- Existing level of big game hunting on the refuge using lead ammunition has not resulted in documented concerns for wildlife, environmental or human health. The low numbers of additional hunters and anglers are expected to have the same results as prior years.
- Through education and outreach and the refuge brochure, hunters are encouraged to remove the entrails (gut piles) to minimize the risk of wildlife consuming lead fragments from bullets. Big game hunters will also be encouraged to voluntarily use lead-free alternative ammunition to further reduce lead in the environment. Lead-free ammunition alternatives are readily available in the market for hunters to purchase at comparable prices to lead ammunitions.
- Additionally, in response to public comments and in the interest of the serious public safety issue of the use of firearms for big game hunting in close proximity

to neighboring landowners, the Service is proposing to restrict the hunting of elk, deer, and pronghorn on Clark's Fork WPA to using archery only equipment. This would further reduce the introduction of lead into the environment.

- The addition of lead and the associated impacts to the environment resulting from these expanded big game hunting opportunities will have a negligible cumulative impact on lead in the environment when compared to hunting or fishing activities allowed in the local and regional area. Big game hunting (principally deer, elk, and pronghorn) is allowed in the surrounding private, State Trust and BLM lands. The six Montana Hunt Districts that surround the District encompass more than 7.5 million acres. The District comprises less than 8 percent of the Hunt District acreage.
- Furthermore, the availability of this extremely large area for big game hunting reduces the potential for lead accumulation and build-up in any one location (particularly the District) by spreading it over a large area and reducing the risk of humans or wildlife being exposed to toxic levels of lead.

Under Alternative C, lead ammunition and fishing tackle would be prohibited within the District. Areas where lead-free ammunition and tackle are used have seen declines in adversely affected wildlife (Anderson et al. 2000; Samuel and Bowers 2000; Sieg et al. 2009, Kelly et al. 2011; Lewis et al. 2021). Alternatives to lead ammunition include steel, copper, bismuth, tungsten and tungsten alloy. Some of these offer better ballistics than lead and have become cheaper. Copper may be substituted for lead fishing tackle for the District's limited fishing opportunities but has cost considerations and performance limitations. In conclusion, the use of nontoxic ammunition and tackle would benefit the District's wildlife.

Wetlands and Riparian Vegetation, Wildlife, Habitat and Water Resources: Affected Environment

Wetlands and Riparian Vegetation

The District includes two reservoirs on War Horse NWR (War Horse and Yellow Water Units); a semipermanent lake (Lake Mason) on Lake Mason NWR; a reservoir on Hailstone WPA; a segment of the Clark's Fork of the Yellowstone River on Clark's Fork WPA; permanent and intermittent creeks and streams; and natural semipermanent wetlands on Clark's Fork WPA, Grass Lake NWR, Hailstone WPA and NWR, James L. Hansen WPA, Spidel WPA, Tew WPA, War Horse NWR and Lake Mason NWR.

The Service acquired properties with natural wetlands because these are key habitats for wetland-dependent wildlife species. Four of the larger, natural, semipermanent wetlands (Lake Mason, Hailstone Basin, Halfbreed Lake, War Horse) were modified with the addition of dikes and emergency spillways to increase depth and storage capacity. The Service holds water rights in several of the NWRs and WPAs but does not exercise all those rights to modify water flow and availability.

Natural and managed wetlands in the District range from freshwater to moderately saline. Water for District wetlands originates from annual precipitation and surface runoff events.

The amount of water available to a wetland also depends on the size of its watershed. Significant runoff can occur when precipitation falls on frozen or saturated soil during an extremely heavy rainstorm. These major runoff events are the most important water sources for District wetlands.

Water levels typically fluctuate throughout the year based on summer precipitation patterns and evaporation. Levels tend to be the highest in the spring and decline through the summer, occasionally to the point where the basin becomes dry. In consecutive good water years, wetlands may be full all year, as was the case in 2011 – 2012. The opposite occurs during poor water years when the basins are dry the entire year.

These cycles are typical for wetlands and are necessary to maintain their health and productivity. Water fluctuations on Lake Mason NWR were monitored from 1983 to 1997. For 34% of those 14 years, water was present in the lake. About 40% of that time, the lake had water during the spring, but it was dry by midsummer. The lake was dry the entire year about 13% of the time. These fluctuations likely applied to other semipermanent wetlands in the District during those years.

Wetland habitats contain emergent and submergent plants. Emergent plants are those rooted in the substrate, having foliage that grows partially or entirely above the water's surface. The District's emergent plants include hardstem bulrush, alkali bulrush and common cattail. Species that occur along the shores of lakes and marshes include foxtail barley, goosefoot and saltgrass.

Submergent plants have roots in the substrate that do not emerge above the surface of the water (although some have floating leaves). These include northern watermilfoil, widgeon grass and sago pondweed. Many wetland plants have broad salt tolerance and can grow in freshwater and saline wetlands; however, species richness for emergent and submergent vegetation decreases as salinity increases (Johnson 1990).

A riparian area is the interface between land and a river or stream. Riparian areas are important nesting and breeding habitat for migratory songbirds and foraging and brood-rearing habitat for greater sage-grouse. According to Montana's Comprehensive Fish and Wildlife Conservation Strategy (MFWP 2005), riparian areas support the greatest concentration of plants and animals, yet they constitute only four percent of Montana's land cover.

Clark's Fork WPA is the only unit in the District that contains broadleaf riparian habitat (where one and a half miles of the Clark's Fork of the Yellowstone River forms its east boundary). Riparian habitat consisting of grasses and sedges also appears along Cedar Creek on Grass Lake NWR and Jones Creek on the North Unit of Lake Mason NWR.

Invasive Plants in Wetland and Riparian Habitats

Wetland and riparian areas are affected by invasive (native and nonnative) plants such as cattail, Russian olive and willow.

Water Birds

Waterfowl migration begins shortly after ice-out in the spring and usually runs from mid-March through April and again from mid-September through October or until freeze-up. The number of birds using District wetlands is directly related to the quantity of water present. When semipermanent wetlands are in good condition (at least 50% of the basin is wet), bird observations over a 20-year period show that up to 25,000 ducks, 1,000 Canada geese, 50 snow geese, 200 tundra swans and 15,000 American coots use them during spring and fall migrations.

Marsh and waterbird spring migration begins a few weeks after the waterfowl migration. Most species continue north to their nesting areas, although several species remain to nest in the District, including black-necked stilt, American avocet, ring-billed and California gulls, marbled godwit and Wilson's phalarope. The number and diversity of birds using the District is greater during the fall migration than the spring migration. Peak migration use of each of the larger wetlands by marsh and waterbirds has also been documented for eared grebes (5,000), Wilson's phalarope (5,000), Franklin's gull (3,000) and California gull (750).

More shorebirds use the District during the fall migration than in spring. Nesting shorebirds include marbled godwit, willet, upland sandpiper, long-billed curlew and common snipe. Peak migration use was documented for various shorebird species, including long-billed dowitcher (1,000), short-billed dowitcher (250), American avocet (100), semipalmated sandpiper (165), least sandpiper (400), western sandpiper (400) and Baird's sandpiper (200).

These numbers (and those for marsh and waterbirds) are based on nearly 20 years of bird observation data collected from the mid-1980s through 2004 by a refuge volunteer from the Yellowstone Chapter of the Audubon Society, along with field notes by Service staff.

Fish

In most cases, wetlands in the District cannot support fisheries because they are within closed basins, are too intermittent or are too far away from perennial lakes, rivers or streams. The exceptions are Yellow Water and War Horse reservoirs. Additionally, Clark's Fork WPA is in the transition zone between cold and warm water fisheries; species in both fishery types, including rainbow and brown trout, burbot, channel catfish, common carp, several species of suckers and a variety of minnows, are present in low numbers (MFWP 2016).

Reptiles and Amphibians

Nineteen amphibian species have been observed or are likely to be present in wetland habitats based on data from the MTNHP. The surveys conducted in 1989 and 1998 (Hendricks 1999) also documented tiger salamander, western chorus frog, northern leopard frog, plains spadefoot toad, Woodhouse's toad and painted turtle.

Invertebrates

Wetlands normally have high invertebrate populations, and nesting waterfowl, waterfowl broods, marsh birds, waterbirds and shorebirds are highly dependent on these protein food sources for vigorous growth. Common aquatic macroinvertebrates in the District include midges, backswimmers, water boatman, snails, damselflies, dragonflies and scuds. The same insect species may live in fresh and saline wetlands, but diversity decreases with increased salinity (Johnson 1990).

Species of Special Status or Concern

The piping plover (*Charadrius melodus*), which is designated “Threatened” under the Endangered Species Act, appears sporadically in the District. Its habitat is unvegetated sand or pebble beach on shorelines or islands in freshwater and saline wetlands with sparse, scattered clumps of vegetation. Open shorelines and sandbars of rivers and large reservoirs provide prime breeding habitat. It was seen in the District five to 10 years ago, according to the MTNHP. The Suckley’s cuckoo bumblebee, which is “Proposed Endangered” and monarch butterfly, which is “Proposed Threatened” both occur sporadically in the District, yet management actions were found unlikely to jeopardize the existence of these two insect species. See Section 7 Intra-Service Consultation Form (CCP Appendix G) for more information.

Some species that use District lands are designated as species of concern by MFWP, the Montana Natural Heritage Program, the BLM or the USFS. Some are of conservation concern by the Service. Species and guilds that are a priority for District wetland management are: waterfowl, shorebirds, wading birds and neotropical migrant birds.

Wetlands and Riparian Vegetation, Wildlife, Habitat and Water Resources — Environmental Consequences

Alternative A

Continued water quality monitoring would inform Service staff of current conditions but would not include actions to improve problems caused by high salinity and selenium levels. Without active water level management in the District’s wetlands, contaminants and poor water quality would persist, adversely affecting water quality, wetland habitat and wildlife in the long term. The Service would continue to maintain water rights.

Alternatives B and C

The Service would replace nonfunctioning water gauges to monitor water more effectively and efficiently by measuring flows and improving the ability to exercise its water rights. Improving ditches and replacing or maintaining culverts would make water delivery more efficient because more water would be carried to a wetland rather than absorbed into the ground.

Manipulating or removing water control structures would allow for natural flushing of wetlands. Allowing a wetland to flow through during high-water events alleviates the effects of evapoconcentration by promoting the flushing of some contaminants (like salt) and reducing the bioavailability of other contaminants (like selenium) through processes

like volatilization or immobilization within the sediments. This would benefit wetland wildlife and habitat. The duration and magnitude of these benefits to water quality would depend on various factors like the rate of salt and selenium loading between flushing events and local conditions that affect the bioavailability and fate of certain contaminants like selenium.

Brush removal is the most frequently mentioned benefit of wetland burning (Robertson 1997). Prescribed fire with a primary purpose of eradicating undesirable vegetation (Robertson 1997) such as cattails is appropriate for wetlands and riparian areas. The Service would continue to work with partners on monitoring water quality in the District.

For the impacts of lead ammunition and fishing tackle on wetland and riparian vegetation, wildlife, habitat, and water resources, please see the discussion and analyses “Impacts Associated with the Use of Lead Ammunition and Fishing Tackle” above.

We have completed intra-Service consultation on the impacts of these management tools on species with special status under the Endangered Species Act (see CCP Appendix G). The piping plover is the only species that may be impacted by management actions in the wetland habitats. Migratory or other non-breeding individuals including the piping plover may be temporarily disturbed, but because adjacent habitat is available, any disturbance should be insignificant. However, the species is unlikely to be present during management activities.

Air Quality —Affected Environment

Under Title I of the Clean Air Act, the U.S. Environmental Protection Agency (USEPA) established the National Ambient Air Quality Standards (NAAQS) (USEPA 40 CFR 50) to protect public health. NAAQS were developed for six criteria pollutants: particulate matter, sulfur dioxide, nitrogen dioxide, carbon monoxide, ozone and lead. Particulate matter has two associated NAAQS — one for fine particulate matter less than two and a half micrometers in diameter (PM_{2.5}) and one for coarse particulate matter less than 10 micrometers in diameter (PM₁₀).

Threshold limits established under the NAAQS to protect human health are known as primary standards. These are intended to protect the most sensitive members of the human population, including people with respiratory or other chronic health conditions, children and the elderly. Secondary standards established under the NAAQS protect public welfare and the environment.

Attainment status for each criteria pollutant was verified for each county with Service properties. The criteria pollutants include carbon monoxide, nitrogen dioxide, ozone, particulate matter, lead and sulfur dioxide. Current air quality in all counties in the District meets air quality standards (i.e., is in attainment) for all criteria pollutants, except for the Laurel areas in Yellowstone County (USEPA 2023), which exceeded limits for sulfur dioxide.

Air Quality — Environmental Consequences

Alternative A

Under Alternative A, the Service would maintain air quality in the District by cooperating with partner agencies to suppress all wildfires. Wildfires that could occur under Alternative A would produce minor, temporary and local adverse effects on air quality. The Service would apply the mitigation measures in CCP Appendix D before and during each prescribed burn to promote safe conditions for drivers and the public.

Alternatives B and C

Several proposed management activities (use of chainsaws, rejuvenating DNC by reseeding, driving trucks and using other diesel and gas-powered equipment) would produce air emissions. However, prescribed fire is the activity most likely to affect air quality.

Individual burns in the ponderosa pine woodland vary in size depending on habitat management and fuel reduction objectives and control parameters. Although prescribed fire affects air quality by releasing particulates and pollutant gases, this is a sporadic and temporary source of air pollution (lasting several hours to one day). Air impacts are short-lived; a burn plan indicates variables such as wind and dispersion requirements (direction and speed) for igniting a fire.

Wind typically dissipates smoke rapidly. Consequently, prescribed fire as a management activity in the District would not contribute to county air quality standards exceeding acceptable limits. In the case of Yellowstone County, a prescribed burn in the District would not worsen levels of sulfur dioxide in the Laurel area.

Smoke from prescribed fire would not cause long-term adverse public health effects, but sensitive individuals who visit a Service unit during a prescribed burn could suffer temporary minor effects. Nearby private landowners could also be temporarily affected by smoke. Safety could be an issue if smoke settled inside or outside a unit, reducing visibility on roads. Under Alternative B or C, the Service would implement the mitigation measures identified in CCP Appendix D before and during each prescribed burn to minimize air quality impacts.

Climate Change — Affected Environment

Climate change may be relevant to an effects analysis in two ways: (1) an action's contribution to climate change through greenhouse gas emissions and (2) the implications of climate change effects on an action and its environmental effects.

Climate change adaptation is the emerging discipline that focuses on helping people and natural systems prepare for and cope with the effects of climate change. Adaptation refers to measures designed to reduce the vulnerability of systems to the effects of climate change (Glick et al. 2011). Adaptation efforts include: (1) building resistance — an ecosystem, species or population's ability to withstand change without significant ecological loss; (2) building resilience — a system's ability to recover from a disturbance

or change without significant loss and return to a given ecological state; and (3) facilitating ecological transitions.

Promoting and supporting resilience is the most recommended approach, but success relies on reducing existing stressors that climate change would magnify; protecting refugia and habitat connectivity; and proactive management and restoration (Glick et al. 2011).

The Intergovernmental Panel on Climate Change considers global climate warming (IPCC 2007) to be unequivocal. Over the last 100 years, the average global temperature has risen 1.3 degrees Fahrenheit (°F). In the Northern Hemisphere, the temperature has likely risen higher over the last 50 years than in any other 50-year period in the last 500 years.

The climate in central and eastern Montana is “semi-arid continental,” characterized by warm summers and moderately cold winters. Summers feature daytime high temperatures average 80°F with infrequent hot periods that top 100°F. The average winter low temperature is near 0°F; occasional colder periods dip below -20°F.

Observations since the middle of the past century confirm that Montana’s climate has shown consistent change over time. Average temperatures in winter and spring rose by almost 3.14°F between 1950 and 2020 (Brust 2022; Whitlock et al. 2017). Increased temperatures have been associated with decreased mountain glacier and snow cover, earlier spring melt, higher runoff, and warmer lakes and rivers. Precipitation changes in Montana have varied across the state. The Northern Rockies’ average winter snow decreased by 0.69 inches from 1950 to 2015; spring precipitation in the southeastern plains increased by 1.86 inches over the same period (Brust 2022; Whitlock et al. 2017).

Changes projected for Montana’s climate by mid-century indicate that trends observed in the historical record will continue or accelerate. Temperature projections show an upward trend, with increases of 2.93°F to 4.82°F in the average annual temperature expected by mid-century. Over the same time frame, the number of freeze-free days will increase by 17.59 to 27.56 and the number of days exceeding 90°F are expected to increase by 9.93 to 23.32 per year (Brust 2022; Whitlock et al. 2017). This means an earlier start to the growing season and longer growing seasons.

Although precipitation is expected to increase slightly in winter, spring and fall by mid-century, summer precipitation is expected to decrease slightly over the same period (Brust 2022; Whitlock et al. 2017). Intensified drought conditions from warmer temperatures are expected to increase, as well as increased snow to rain conditions changing the availability of water and residency time (MloE 2017; Frankson et al. 2022). We continue to monitor the district’s fish, wildlife, plants, lands and waters to detect early signals of ecological transformation from these changing conditions.

Climate Change — Environmental Consequences

Alternative A

The Service does not conduct activities in the District to offset effects caused by warming temperatures. No actions under Alternative A would contribute to climate change through greenhouse gas emissions.

Alternatives B and C

Alternatives B and C would support climate change adaptation by increasingly monitoring the condition of the District's resources and acting (via prescribed fire) to protect resources, including habitat, from changing climatic conditions (less precipitation and higher temperatures). Planning for and adapting to changing climatic conditions, monitoring resources, and building ecosystem resistance and resilience would benefit habitat, wildlife and other resources in the long term. The use of prescribed fire under Alternatives B and C would not contribute to climate change through greenhouse gas emissions.

4.3 Cultural and Historic Resources

Cultural resources include archeological resources, cultural landscapes, traditional resources, precontact and historic structures, and museum collections. This section summarizes the Cultural Resources Report (USFWS 2017a) for the District, which is available at the CMR NWRC headquarters in Lewiston, Montana.

Cultural and Historic Resources — Affected Environment

The District has hosted few cultural resource investigations and few sites have been discovered. This doesn't mean the District has no cultural resource sites on these units. Digital files and records were searched to determine the numbers and types of previous cultural resource investigations and documented sites within the District. The results are in the CCP.

Cultural and Historic Resources — Environmental Consequences

Treatment of cultural resource sites is informed by environmental factors, the degree of previous ground disturbance and proposed ground-disturbing activities. The Service would review all projects involving ground disturbance and prescribed fire to determine the potential effects on cultural resources. The Service would then consult with the Montana SHPO, Tribes and other interested stakeholders.

Projects with no potential to affect historic properties could proceed; projects with the potential to affect historic properties could require additional review, fieldwork or consultation with the Montana SHPO, Tribes and other stakeholders. Service staff would notify public and local government officials.

The Service protects all known gravesites; in cases (such as active erosion) where known gravesites cannot be protected in place, the Service follows the Native American Graves Protection and Repatriation Act of 1990 and other federal and State laws. Collecting plants

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or other materials for Tribal ceremonial purposes would require a compatibility determination and a special use permit before being authorized.

Alternative A

The Service would continue to consider the presence of known cultural resources in the District and the potential effects of fire suppression and other management activities on those resources (per Section 106 of the National Historic Preservation Act). This could include avoidance and other protections. Surveys and inventories would increase the Service's knowledge of cultural resources. This would benefit known and yet-to-be-discovered cultural resources by ensuring they receive the same protections as known resources.

Unauthorized off-road travel and trespass livestock may damage or destroy cultural resources.

See CCP Appendix D for a list of mitigation measures to protect cultural resources during wildfire suppression and other Service activities.

Alternatives B and C

Activities proposed under Alternatives B and C could affect cultural resources by direct disturbance during management actions such as habitat restoration or prescribed burning. The presence of cultural resources, including historic properties, would not prevent a federal undertaking, but any undertaking would be subject to Section 106 of the National Historic Preservation Act and other laws protecting cultural resources. In accordance with Section 106, potential effects of federal undertakings on cultural resources would be identified and considered, and options to minimize negative effects would be discussed before project implementation.

Grazing

Trespassing cattle could trample and damage or destroy artifacts that are close to the surface. Transitioning to prescriptive grazing would protect cultural resources in areas where grazing is curtailed. However, prescriptive grazing for habitat management could still have minor negative affects on unknown cultural resources due to soil disturbance and trampling in areas where grazing is allowed. All District units have a history of livestock grazing and so the continued use of less intensive grazing will not likely have more than minor, additional adverse impacts to cultural resources.

Prescribed Fire

Prescribed fire offers greater control over the benefits of fire vs. wildfire (Winthrop 2015). The use of prescribed fire to reduce high fuel loads must be weighed against the potential loss of a cultural resource to wildfire. Prescribed fire is less likely to damage cultural resources than wildfire because of the lower intensities of prescribed fire and the high level of planning conducted before each burn.

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Prescribed burn plans allow for advanced clearance and avoidance and protective measures (see CCP Appendix D) on known cultural resource sites. The Service would exclude known cultural resources from prescribed burn units or implement local site-specific avoidance and/or protective measures if prescribed fire use would benefit the District.

The effects of fire on cultural resources depend on temperature and duration of heat exposure. Higher temperatures or longer heat exposure increase the potential for damage (Winthrop 2015). Also, effects are context-dependent and vary from place to place. These include physical factors (type of fuel, fuel load and distribution, moisture content of fuels, soil type and soil moisture, weather, terrain, site type, cultural materials). Management must also consider the significance of the cultural materials (Winthrop 2015).

Mitigation measures (see CCP Appendix D) designed to protect known and unknown archeological resources during prescribed burns would reduce the risk of adverse effects. Creating buffers around archeological sites and reducing hazardous fuels in the vicinity would add protection.

Mechanical Treatments

Mechanical treatments could damage intact cultural deposits exposed during ground disturbance by vehicles or trampling by humans. Mitigation measures (see CCP Appendix D) include avoiding areas that may contain intact archeological resources.

Chemical Control

The use of herbicides would not affect cultural resources; the Service would avoid direct application to known resources.

Visitor Use and Access

District units are walk-in only, which eliminates the potential for vehicles damaging cultural resources. Vandalism or theft are the primary concern for resources exposed in visitor use areas on NWRs and WPAs. However, unauthorized off-road travel could damage or destroy cultural resources. The Service proposes to install visitor information signs at all NWRs and WPA entrances to alert visitors to the policy of no off-road travel. Prohibiting off-road driving would help to protect cultural resources.

Installing and repairing fences, installing visitor information signs, and graveling roads and parking areas would not adversely affect documented cultural resources, which are located elsewhere in the District.

4.4 Socioeconomics¹

Local and Regional Economies — Affected Environment

The District occupies land in five Montana counties: Petroleum, Musselshell, Golden Valley, Yellowstone and Stillwater. Although the Service manages it as part of the District, Clark's Fork WPA (Carbon County) is not inside the District boundary. In 2020, the population of these five counties ranged from 464 (Petroleum County) to 160,000 (Yellowstone County).

The largest industries (by the number of people employed) are health care/social assistance, retail trade, accommodation/food services, mining/oil and gas extraction, agriculture and educational services. Health care and retail trade are the largest industries in the more populated counties of Yellowstone, Stillwater and Musselshell. Agriculture is the largest industry in Golden Valley and Petroleum County.

Outdoor recreation is valuable to Montana residents for its economic and quality-of-life benefits (Montana State Parks [MSP] 2014). Expenditures related to outdoor recreation in the state exceeded \$5.8 billion in 2011 and contributed about \$403 million in state and local tax revenue. Walking for pleasure, hiking, jogging and bicycling were among the most regularly cited outdoor activities by Montana residents (MSP 2014), but hunting, fishing and wildlife viewing are also important uses throughout Montana and on District lands.

According to the National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, approximately 570,000 participants engaged in wildlife-associated recreation activities in Montana during 2011 (USDI-U.S. Department of Commerce [USDC] 2011). Of the total number of participants, 47% fished, 26% hunted and 71% engaged in wildlife viewing. Montana residents and visitors, combined, spent about \$1.4 billion on wildlife-associated recreation activities in 2011. Of this, trip-related expenditures accounted for \$666 million; equipment expenditures accounted for \$569 million; and the remaining \$173 million went to licenses, contributions, land ownership and other items.

The 2017 report "Banking on Nature: The Economic Contributions of National Wildlife Refuge Recreational Visitation to Local Communities" (Caudill and Carver 2019) identified average daily expenditures for visits to NWRs nationwide. These included food, drinks, lodging, transportation, equipment and other expenses. In 2017, 3.3 million recreational visits to NWRs in the Mountain Prairie Region generated almost \$348 million to regional economies. This led to the employment of more than 4,400 people and about \$115 million in employment income.

¹ * The President has revoked Executive Order 12898 which directs federal agencies to consider whether a proposed action would "(h)ave a disproportionately high and adverse effect on low income or minority populations." The draft EA, which was released before the revocation of the Executive Order, determined there were no impacts on low income or minority populations from implementing this CCP, and so, all references related to this topic have been removed in compliance with this Executive Order.

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In 2023, the District had 434 visitors. Hunting and fishing opportunities benefited the local economy through the sales of food, gas, supplies and lodging.

Local and Regional Economies — Environmental Consequences

Alternative A

Under Alternative A, the socioeconomic benefits of the District in the five counties would not change.

Alternative B

For Alternative B, implementing the proposed CCP management activities would rejuvenate the District's grasslands and wetlands, enhancing visitor use and experience. A broader user group may choose to visit the District for hunting, wildlife observation and other activities. Additional visitors would increase the money spent in the local economy on food, supplies and fuel. Hunting and fishing opportunities on District properties could help low-income individuals meet subsistence needs.

As the Service is proposing to transition to prescriptive grazing under Alternatives B and C, ranchers who are not issued a grazing permit may have to offset the reduced AUMs by grazing cattle on lands managed by the State, the BLM or a private landowner. This may reduce the number of cattle a rancher could graze annually and have an adverse economic impact on those ranchers if they cannot find alternative lands for grazing; however, grazing can be less costly on non-Service lands. In 2024, the Service charged \$26.50/AUM for a mature cow. The State's 2024 rate was \$16.53/AUM. The federal grazing fee for 2024 was \$1.35/AUM for public lands administered by the BLM and the USFS.

Alternative C

Although Alternative C would have the same benefits to the natural environment as Alternative B. Like Alternative B, hunting and fishing opportunities on District properties could contribute to the economy and help individuals meet subsistence needs. However, lead-free ammunition for big game hunting and fishing tackle would be required (in addition to the current requirement lead-free ammunition for migratory and upland game birds) and this could adversely affect hunters and anglers. Although some lead-free ammunition is equivalent in price to lead ammunition, certain types of lead-free ammunition cost more than certain types of lead ammunition. There are lead-free alternatives to leaded tackle; however, lead tackle still costs less than lead-free alternatives, which could be an obstacle for low-income anglers. So, requiring visitors to use lead-free ammunition and/or fishing tackle could decrease the number of hunters and anglers recreating on the District versus Alternative B, bringing less benefit to the local economy.

4.5 Public Health and Safety

Public Health and Safety — Affected Environment

The analysis of public health and safety includes exposure to natural hazards (e.g., health risks associated with air quality emissions) and contaminants in the environment (e.g., lead ammunition and fishing tackle). Air quality in the District is in attainment for all

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criteria pollutants, except for the Laurel areas in Yellowstone County (USEPA 2023), which had an exceedance for sulfur dioxide.

Use of chemical and biological controls on invasive plant species in the District may have introduced contaminants to the environment. However, applications have been opportunistic and localized and conducted only in response to complaints about specific outbreaks of invasive plant species.

Over the years, the use of lead shot and lead fishing tackle used in hunting and fishing activities have resulted in lead being present on District lands. The amount of lead these activities have added to the District's environment has not been quantified, but according to District staff, the likelihood is low that the lead is bioavailable given the few known number of big game hunters that typically hunt in the District (four hunters in 2023) and fish (10 fishers in 2023). The District is aware of no known instances or sightings of human or illnesses or fatalities from lead poisoning.

Public Health and Safety — Environmental Consequences

Alternatives A and B

The proposed CCP's public health and safety impacts would include smoke emissions from wildfire and prescribed fire, use of chemical and biological controls for managing invasive plant species, and use of lead and lead-free ammunition and fishing tackle.

Wildfire and Prescribed Fire

The air quality impact analysis in Section 4.2 addresses human exposure to smoke from wildfires and prescribed fire. The public would not suffer long-term health effects, but sensitive individuals (visitors or nearby landowners) during a prescribed burn could suffer temporary minor effects. Safety could be an issue if smoke settled in an area inside or outside a unit and reduced visibility on roads.

Use of Chemical and Biological Controls

Use of chemicals (herbicides) and biological controls to manage invasive plants will continue in accordance with an integrated pest management strategy and annual pesticide use proposals for the CMR NWR Complex to ensure these treatments would not significantly impact public health.

Impacts Associated with the Use of Lead Ammunition and Fishing Tackle

Under Alternatives A and B, lead ammunition for big game hunting and fishing tackle would continue to be allowed within the District and big game hunting opportunities would be expanded. The use of lead ammunition is currently and will continue to be prohibited for hunting of upland game birds and migratory game birds (50 CFR 32.2(k)). Within fee title lands, shotgun hunters may only possess and use nontoxic shot.

The amount of lead that hunters are exposed to from eating harvested big game is likely minor because the lead shot is typically removed and not consumed. Also, hunters on the District are most likely also hunting on adjacent lands where lead ammunition is

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authorized, so the Service is likely only providing additional areas for these same hunters to hunt and not likely increasing the number of hunters exposed to lead in the local or Regional area. Therefore, the Service does not anticipate more than a minor increase in human exposure to lead because of these expanded hunting opportunities. However, the Service continues to educate the public and visitors to refuges on the adverse impacts of lead on human health and encourages the voluntary use of non-lead ammunition.

Alternative C

The public health and safety impacts associated with Alternative C for smoke emissions from wildfire and prescribed fire and the use of chemical and biological treatments to control invasive plant species would be the same as for Alternatives A and B. However, Alternative C would require the use of lead-free ammunition and fishing tackle for all hunting and fishing within the District. The requirement to use of lead-free ammunition and fishing tackle would have minor benefits on the human health.

4.6 Visitor Use and Experience

Visitor Use and Experience — Affected Environment

There were 434 visits to the District in 2023 (based on 2023 USFWS Refuge Annual Performance Plan data). Of those, four were to hunt big game, 30 to hunt upland game, 150 to hunt waterfowl, 100 to observe wildlife, 40 for photography, 100 to hike foot trails and 10 to fish.

Hunting

Hunting is one of the six priority recreational uses identified in the Improvement Act. It has occurred within the District for decades. During this time, the Service has noted no significant adverse effects of the hunting program on the administration of the District and has determined this use compatible with the purposes of the District and the Refuge System's mission statement (Dodd 1996; U.S. FWS 2008a; U.S. FWS 2016; U.S. FWS 2020).

Hunting opportunities for big game, upland game birds and migratory game birds are available on specific District refuges and WPAs including Clark's Fork WPA, James L. Hansen WPA, Spidel WPA and Tew WPA. Grass Lake NWR and the northern portion of the Lake Unit of Lake Mason NWR are closed to public access, and Hailstone NWR has never been open for big game hunting but is open to upland bird and migratory bird hunting.

All other wildlife species in the District are protected, including prairie dogs, coyotes, jackrabbits, cottontail rabbits, badgers and bobcats. Steel or other non-toxic shot must be used to harvest waterfowl and upland game birds. Trapping is permitted on the WPAs. Vehicle travel and parking for hunting is restricted to roads, pullouts and parking areas.

Fishing

The only fishing opportunities in the District are in the Clark's Fork of the Yellowstone River in Clark's Fork WPA (but not in the wetland), and in the reservoirs associated with War Horse NWR (War Horse and Yellow Water Units). However, the public generally does not use Service lands to access these reservoirs.

Other Recreational Activities

Camping is allowed on the North Unit of Lake Mason NWR, although this use may be rescinded due to incompatibility with the Refuge's purposes and disruption to wildlife and other visitors. Hiking is allowed throughout the District except in units and areas that are closed to visitor access (e.g., Grass Lake NWR and the northern portion of Lake Mason NWR, Lake Unit).

Wildlife Observation and Photography; Environmental Education and Interpretation

Wildlife observation and photography as well as environmental education and interpretation are popular activities throughout the District. Most users are bird watchers and nature enthusiasts. The diversity of habitats and species provides year-round opportunities for wildlife observation, photography, education and interpretation.

Research

The District has been open to scientific research by non-Service personnel for decades, even on units closed to public access. This research has improved the Service's knowledge of the District's natural resources and its methods to manage, monitor and protect biological resources and public uses. Acceptable research methods include, but are not limited to, bird banding, mist netting, point count surveys, radio telemetry tracking, cameras, recorders and public surveys.

Visitor Use and Experience — Environmental Consequences

Alternative A

Maintaining current access limitations for hunting big game, upland game birds and migratory game birds; wildlife observation and photography; and environmental education and interpretation would not change the number of visitors to the District. The continued closure of Grass Lake NWR and the northern portion of the Lake Unit of Lake Mason NWR (this portion of the refuge is closed year-round, serving as refugia for wildlife) would not change public access opportunities in the District. Hailstone NWR would continue to bar big game hunting. Fishing opportunities on War Horse NWR and Clark's Fork WPA would not be affected. Camping at the North Unit of Lake Mason NWR would not continue.

Since access into the District would continue to be via foot travel only, as no road improvements are proposed under Alternative A, visitor access to many areas would remain limited, particularly when rainstorms bring poor walking conditions. Visitor experiences would not improve. The Service would continue to maintain current signs, which provide inadequate user information. Although the grassy parking areas benefit visitors, they present a fire hazard when vehicles park on dry grasses and other vegetation.

Alternatives B and C

Hunting (but not fishing) opportunities would expand under Alternatives B and C. This will add approximately 1,783 acres for hunting big game, upland birds and migratory birds. In addition, this acreage would remain open for wildlife observation and photography.

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Fishing opportunities on War Horse NWR and Clark's Fork WPA would not be affected. Additional visitor access would likely boost the volume of visitors.

Additional access for big game hunting on Hailstone NWR would yield long-term benefits to members of the public who are hunting in the area. It would bring consistency to hunting regulations on Service lands in the area, eliminating confusion over where big game hunting is allowed and reducing the risk of violating refuge hunting regulations.

Under Alternative B, the use of lead ammunition for big game hunting and lead fishing tackle would be allowed on all but the District's fee title lands. The impacts of continued use of lead ammunition and fishing tackle were previously described in the impact analysis for Alternative B in Section 4.2 of this EA.

Implementation of Alternative C would result in the prohibition of lead ammunition and fishing tackle within the District. Areas where lead-free ammunition and tackle are used have seen declines in adversely affected wildlife (Anderson et al. 2000; Samuel and Bowers 2000; Sieg et al. 2009, Kelly et al. 2011; Lewis et al. 2021). Alternatives to lead ammunition include steel, copper, bismuth, tungsten and tungsten alloy. Some of these offer better ballistics than lead and have become cheaper. Copper may be substituted for lead fishing tackle for the District's limited fishing opportunities but has cost considerations and performance limitations.

District lands that are open (or proposed to be opened) to hunting and fishing by the Service are near BLM, USFS, State and private lands that are also open to hunting and fishing. Some of these lands allow the use of lead ammunition and fishing tackle. As noted above, District lands, by comparison, constitute an exceptionally small percentage of available acres and hunting and fishing opportunities in central and south-central Montana. Requiring lead-free ammunition and fishing tackle would have a minimal effect on hunting and fishing opportunities in the region surrounding the District. Under Alternatives B and C, camping would not be allowed at the North Unit of Lake Mason NWR. This would cause negligible adverse effects on visitor use and experience as camping opportunities are available nearby on BLM and State of Montana lands.

The road improvements proposed under Alternative B could draw more visitors to the District. Graveling the two-track dirt roads would provide all-weather access to the units, resolving some of the problems visitors cause by driving on the dirt roads — including soil erosion and compaction and, after precipitation, mud holes and gullies. The road improvements would bring long-term benefits to visitors by making the units more accessible for longer periods of the year.

Visitors would also benefit from the construction of gravel parking areas, which would be marked and bordered to contain vehicles and protect adjacent land. Containing the parking areas would benefit habitat and wildlife by reducing the risk of wildfire from vehicles parking on dry vegetation.

In addition, the Service would re-establish the foot path at Clark's Fork WPA, which had been washed away in the 2020-2022 timeframe. The Service would keep the trail mowed

to allow better access for visitors and authorized vehicles (e.g., emergency vehicles). This would benefit visitors to Clark's Fork WPA.

Under Alternative B, the Service would post new signs and produce new brochures explaining the change in access for the hunting and fishing program. The Service will install a visitor information sign (with a boundary map) at each entrance that explains travel restrictions and uses allowed by Service policy and regulations. Habitat could benefit from signs informing visitors that off-road travel is not allowed. Signs would contain specific instructions (e.g., prairie dog shooting is prohibited).

4.7 Management and Operations

Management and Operations — Affected Environment

Staff

Service operations consist of the staff, facilities, equipment and supplies needed to administer resource management and public use programs throughout the District, which crosses five counties and covers more than 9,175 square miles. The Service is responsible for protecting more than 30,000 acres of land and water.

CMR NWRC staff are responsible for managing the District. The level of staffing dictates the type and amount of work that can be accomplished. The District staff consists of one permanent, full-time employee. The NWR Complex's 12 permanent, full-time employees provide limited support to the District. NWR Montana Law Enforcement Patrol Zone staff is responsible for District law enforcement; patrols are conducted as needed.

Facilities

Facilities support habitat and wildlife management programs and wildlife-dependent public use activities. District facilities and real property assets (e.g., signs, fencing, infrastructure) are well supported. The condition of real property assets affects the staff's ability to manage natural resources and visitor access and use. Some interior and exterior fencing and boundary signs should be replaced to help visitors understand unit boundaries, allowed uses and regulations. No District lands have facilities such as comfort stations, boardwalks or kiosks.

From a safety perspective, the remote parts of the District lack radio and cellphone service. The District's radios and repeaters provide coverage for few locations. Cellphone coverage throughout the District is limited, except near population centers such as Lewistown, Roundup, Billings and Laurel. Limited cell reception could pose a problem for visitors or staff in the event of an emergency (such as a medical issue or accident). Although there have been no major incidents caused by lack of communication, someone could be stranded, injured or in need of aid with no way to call for help.

Partnerships and Research

The Service has ongoing partnerships and research efforts in the District:

- MFWP enforces game laws, conducts wildlife research and manages hunting seasons.

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- The Audubon Society helps monitor units and remove invasive plants. Members have also conducted bird counts. A volunteer from the Yellowstone Chapter spent nearly 20 years (mid-1980s through 2004) collecting data from bird observations.
- The Service hires local weed districts; has cooperative relationships with local, State and federal fire agencies; and issues special use permits to academics and researchers for monitoring and educational work.

Management and Operations — Environmental Consequences

Alternative A

Current staffing levels (one station manager) would continue to restrict the District's management capability. Insufficient monitoring and inability to implement management actions means staff cannot maintain good conditions and improve degraded conditions.

Alternative B

Maintaining current staffing (one station manager) would provide slightly more management capability than has been historically provided but would mean insufficient monitoring and an inability to improve degraded conditions. Increased staffing levels and funding, as well as collaborating with partners, would improve management capability, allowing for more than a custodial management strategy. All aspects of District management could be improved, including wildlife and habitat management, visitor use and resource protection. Reducing the fragmentation of District lands through land swaps and consolidation would benefit resource management.

Alternative C

Alternative C would have the same staffing level as Alternative B. Reducing the fragmentation of District lands through land swaps and consolidation would benefit resource management. The new requirement of non-toxic ammunition and fishing tackle would bring management benefits. Eliminating the need to educate hunters and anglers about lead (and other mitigation measures) would allow funds and personnel to be reallocated for other management activities. Installing signage will ensure hunters and fishers understand the requirements of hunting or fishing on District lands.

4.8 Cumulative Impacts

The intent of the CCP is to manage the District's natural resources to best achieve the District's established purposes; fulfill the NWRS's mission; consistently apply sound fish and wildlife management; and ensure that the biological integrity, diversity and environmental health of the NWRS is maintained. Implementing the CCP would bring cumulative benefits to the District's environment through the control of invasive plant species, improved water quality, and enhanced visitor use and experience.

These benefits to the natural environment would lead to improved socioeconomic health in the region as more visitors to the District would mean more supplies and meals purchased in local communities. There would be minimal accumulation of lead in the environment under Alternatives A and B, and Alternative C would eliminate lead

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ammunition and fishing tackle. Alternative C would have beneficial cumulative environmental impacts.

4.9 Summary of Analysis

Alternative A – No-Action Alternative

The No-Action Alternative describes the District's current ongoing management activities. Alternative A might not meet all the CCP goals, but it provides a basis for comparison with the proposed action. Under Alternative A, annual CAAs for livestock grazing will continue and the Service will continue to suppress wildfires and intermittently apply mechanical, chemical and biological treatments in response to spontaneous outbreaks of invasive plant species. In the absence of regular treatment, problems caused by invasive plants would persist, reducing habitat quality.

Water quality management would consist of monitoring water quality and maintaining wetland structures in their current condition. This will not resolve the issues of dissolved solids, salinity and selenium in the District's waterbodies and wetlands. Current public access closures (closed to all hunting) would remain in effect on Grass Lake NWR and Hailstone NWR (also closed to big game hunting). No camping will be allowed at the North Unit of Lake Mason NWR. Visitor experience in the District will still be hampered by access, parking, signage and communications issues.

Alternative B – Implementation of the CCP With Allowed Use of Lead Ammunition for Big Game Hunting and Fishing Tackle

Alternative B would implement planned, structured management of the natural environment by expanding the use of management tools to restore native grasses that provide valuable wildlife habitat. These tools include transition to prescriptive grazing, use of prescribed fire, and increased use of mechanical treatment and chemical and biological controls to treat invasive plant species crop plants and federally and State-listed noxious plant species.

The Service would renovate and seed fields and grasslands with a mix of native grasses and forbs to improve diversity and vigor. It would also expand water quality management to reduce salinity and selenium in District waterbodies and wetlands. The increased management activities would have negligible environment impact.

Opening Grass Lake NWR to visitor uses and Hailstone NWR to big game hunting would improve visitor use and experience in the District. Although the Service would continue to allow the use of lead ammunition for big game hunting and lead fishing tackle, the amount of lead that these activities have added to the District's environment has not been quantified, but according to District staff, the likelihood is low that these activities have had any notable addition to the bioavailability of lead in the area.

Hunting and fishing is done over a large area and multiple access sites, reducing lead accumulation and buildup by spreading it over a larger area. The current use of lead tackle by anglers and single projectile ammunition or buckshot by furbearer and

elk/deer/pronghorn hunters is the only addition of lead currently occurring within the District. Additionally, in response to public comments and in the interest of this serious safety issue, the Service is proposing to restrict the hunting of elk, deer, and pronghorn on Clark's Fork WPA to using archery only equipment. This would further reduce the may introduction of lead into the environment.

Hunters using shotguns for upland game birds and migratory game birds are required to use steel or other non-toxic shot. Tackle typically enters the environment by accident when anglers snag their lines. There have been no reports of wildlife impacted by lead poisoning within the District.

Improving roadways and parking areas would protect habitat and wildlife as well as visitor use and experience. Camping would be eliminated on the North Unit of the Lake Mason NWR, which would benefit the environment.

Alternative C – Implementing the CCP With Required Use of Lead-Free Ammunition and Fishing Tackle

Alternative C has the same basic elements as Alternative B except that lead-free ammunition and fishing tackle would be required for all hunting and fishing in the District. This would yield many of the same environmental impacts as Alternative B. Requiring the use of lead-free ammunition and fishing tackle would benefit the natural environment and human health.

This requirement would not significantly impact hunting and fishing opportunities as District lands are near BLM, USFS, State and private lands that are also open to hunting and fishing; some of these lands allow the use of lead ammunition and fishing tackle. District lands constitute an exceptionally small percentage of available hunting and fishing opportunities. Requiring lead-free ammunition and fishing tackle would have a minimal effect on hunting and fishing opportunities in the region surrounding the District.

Comparison of Alternatives

Alternative A would negatively affect wildlife and habitat in the District with sporadic control of invasive plant species and the continued use of lead ammunition for big game hunting and fishing tackle. Water quality would continue to exhibit high dissolved solids, salinity and selenium. A degraded natural environment would draw fewer visitors to the District.

Alternatives B and C would benefit wildlife and habitat with proactive control of invasive plant species and management activities to improve water quality in District waterbodies and wetlands. Combined with improvements to roadways and parking areas, these would attract more visitors to hunt, fish, observe and photograph wildlife, and engage in environmental education activities. Alternative C would be more protective of the environment than Alternative B as the District would require the use of lead-free ammunition and fishing tackle.

Chapter 5: List of Preparers and Sources

5.1 List of Preparers

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APPENDIX B. NATIVE AND NONNATIVE INVASIVE PLANTS

Introduction

An invasive plant is a species that is nonnative to an ecosystem and whose presence causes, or is likely to cause, economic or environmental harm. According to the Federal Noxious Weed Act (Public Law 93-639), a noxious weed is one that causes disease or has adverse effects on humans or the human environment and, therefore, is detrimental to the agriculture and commerce of the United States and to public health. All noxious weeds are listed as invasive plants, but not all invasive plants are listed as noxious because they are not all detrimental to agriculture and commerce. The state of Montana typically uses the term “noxious plants” unlike the Service, which uses the term “invasive species.” The Service is committed to treating invasive species, including those designated as “noxious” by the state of Montana.

Invasive plants can affect biological diversity, ecological processes and land management in ecosystems ranging from arid grasslands to wetlands and streams (USFS 2005). They displace native plants and change species composition, vegetation structure and soil chemistry. Invasive nonnative plants grow and spread rapidly over large areas, reducing food and shelter for native wildlife, eliminating the host plants of native insects and competing for native plant pollinators.

Some invasives spread so rapidly that they push out most other plants, changing a forest, meadow or wetland into a landscape dominated by one species. Such monocultures (an area with plants of only one species) have little ecological value and greatly reduce the natural biological diversity of an area (Swearingen et al. 2002) and the ecosystem functions associated with a diverse natural community.

Invasive plants such as crested wheatgrass and smooth brome have the greatest impact on native prairie acreage. The state has not designated these plants as noxious since they do provide forage for cattle; however, they do not provide quality wildlife habitat. Once introduced, these plants will quickly outcompete native vegetation for resources (sunlight, nutrients, water), creating a monoculture of minimal value to wildlife. Introduced (nonnative) annual grasses include cheatgrass and Japanese brome. The most dominant nonnative forb is yellow sweetclover.

Land managers are concerned about the impacts of exotic plants on fuel characteristics and fire regimes. Observations and data from bioregions around the country indicate that changes in fuel characteristics brought about by exotic plant invasions can lead to changes in fire behavior and fire regime characteristics such as frequency, intensity, extent, type and seasonality. The negative changes adversely affect native plant and animal communities (Zouhar et al. 2008). The flammable chemicals in the leaves of some plants can alter the intensity and structure of wildfires and facilitate the fire’s spread into the forest canopy, which can make suppression more difficult.

Montana lists noxious weeds under three categories. Only category 1 noxious weeds have been documented in the District, including Canada thistle, whitetop or hoary crest, leafy

spurge, Russian knapweed and houndstongue. Russian olive is another invasive species of management concern. It is not listed as a noxious species in Montana, but in 2010, the state prohibited the sale of this tree. Russian olive trees are only found in Clark Fork's WPA and Spidel WPA. They provide perches for avian predators and fragment native grassland habitats, making nesting birds more vulnerable to predators.

The following distribution data is based on information in District files from 1998.

Category 1: State Noxious Weeds and Problems Caused by Each Species

Canada thistle (Cirsium arvense)

Canada thistle is an aggressive competitor that changes the plant structure of communities and decreases biodiversity. It poses a huge problem on agricultural land as it serves as an alternate host for insects and pathogens that are known to attack certain crops. It is also difficult and expensive to control. Canada thistle has been documented in various locations in Clark's Fork WPA and in the DNC field at Hailstone WPA.

Whitetop or hoary crest (Cardaria draba)

Whitetop reduces biodiversity by displacing plants from plant communities and, ultimately, the animals that depend on those plants for food and habitat. It reduces forage quality and quantity and crop, pasture and rangeland productivity; reduces available soil moisture and nutrients early in the season; and increases management costs of public and private lands. A small population of whitetop is currently (June 2024) located in the Clark's Fork WPA.

Leafy spurge (Euphorbia esula)

Leafy spurge can be toxic to herbivores. It can spread and degrade the integrity of native habitat. Leafy spurge was first documented in 1995 in the North Unit of Lake Mason NWR and has been documented in Clark's Fork WPA. It likely invaded the North Unit prior to 1995 based on the number of mature plants found; however, an abundance of yellow sweetclover in 1993 and 1994 likely camouflaged it, delaying its detection.

Initial control included mapping spurge locations and applying chemicals to contain the population. Continued chemical and biological control (release of leafy spurge beetles — *Apatha nigriscutis* and *Aphthona lacertosa*) has affected, but not eliminated, spurge in the Jones Creek watershed, and populations are now found downstream from the initial detection site. Spurge has also been documented along the Clark's Fork River on the Clark's Fork WPA, and chemical and biological controls have been implemented.

Russian knapweed (Centaurea repens)

Russian knapweed's ability to outcompete resident vegetation allows it to develop into a near monoculture. Such monocultures contribute to reduced wildlife presence and a decline in species diversity. This knapweed is toxic to livestock (especially horses), and its presence reduces forage availability. Russian knapweed has been documented along the Clark's Fork River on the Clark's Fork WPA. The Service has implemented chemical and biological controls (release of *Agapeta zoegana*, a nematode).

Houndstongue (Cynoglossum officinale)

Houndstongue is an early successional species on recently disturbed sites that can reduce livestock and wildlife forage. It contains toxic alkaloids that stop liver cells from reproducing. Houndstongue has been documented in the Clark's Fork WPA, where plants are scattered and of low density around the abandoned gravel pit near the parking area. The Service has implemented biological and chemical control efforts.

Other Invasive Species

Crested wheatgrass (Agropyron cristatum)

Crested wheatgrass is difficult to effectively treat and eradicate and its invasion into native rangeland can negatively affect plant and wildlife diversity (Reynolds and Trost 1981, Christian and Wilson 1999, Davis and Duncan 1999). When it invades native prairie, it often eliminates the native species and can form vast monocultures that create an ecological void for nesting grassland birds (Lloyd 2005). Crested wheatgrass has been documented on most land units. Stands are well-established and dense in some places; in other places, it is less dense but expanding. Crested wheatgrass was often planted to revegetate abandoned homestead sites and has spread widely.

Smooth brome (Bromus inermis)

Mature smooth brome plants spread by rhizomes and can outcompete native grass species. Smooth brome can tolerate a variety of soil conditions. It is difficult to effectively treat and eradicate. Smooth brome was imported in the late 1800s as a forage grass and for erosion control.

Russian olive (Elaeagnus angustifolia L.)

Russian olive spreads quickly in moist soil types. It fragments grassland habitats, causing some nesting grassland birds to avoid these areas. Other effects include increased predation of nests, adults and juvenile grassland-dependent birds (Delisle and Savidge 1996; Gazda et al. 2002; Helzer 1996; Johnson and Temple 1990). Russian olive occurs in Spidel WPA and Clark's Fork WPA.

Russian olive outcompetes native vegetation, interferes with natural plant succession and nutrient cycling, and taxes water reserves. Because it is capable of fixing nitrogen in its roots, it can grow on bare mineral substrates and dominate riparian vegetation where overstory cottonwoods have died. Although Russian olive provides a plentiful source of edible fruits for birds, ecologists have found that bird species richness is higher in riparian areas dominated by native vegetation (Muzika and Swearingen 2005a).

Tamarisk/salt cedar (Tamarix aphylla, T. chinensis, T. gallica, T. parviflora, and T. ramosissima)

Salt cedar occurs in shrublands and riparian and wetland areas. This fire-adapted species has long tap roots that allow it to intercept deep water tables and interfere with natural aquatic systems. Salt cedar disrupts the structure and stability of native plant communities and degrades native wildlife habitat by outcompeting and replacing native plant species, monopolizing limited sources of moisture, and increasing the frequency, intensity, and effect of fires and floods. Although it provides some shelter, its foliage and

flowers provide little food value for native wildlife species that depend on nutrient-rich native plant resources (Muzika and Swearingen 2005b).

Cattail: broad leaf (T. latifolia), narrow leaf (T. angustifolia) and hybrid (T. x glauca)

Cattails are wetland plants with a unique flowering spike and flat, blade-like leaves that reach heights of 3 to 10 feet. They are one of the most common plants in large marshes and at the edges of ponds. Cattails prefer shallow, flooded conditions and easily become established along a pond shoreline or in waters 1 foot to 1.5 feet deep. When unimpeded, cattail beds expand, extending their hefty rhizomes onto the pond surface, where they float above much deeper waters. The pollinated flowers develop into fluffy seed heads that autumn breezes blow across the pond.

Cattails and similar invasive wetland plants outcompete native plants and displace native animals (USFWS 2007). Invasive plants that greatly alter the physical structure of a wetland have a high potential to shift hydrological conditions and animal use (USFWS 2007), which adversely affects native plants and animals in wetlands, riparian zones and marshes.

When invasive plants become dense, they can lower water tables to the disadvantage of native species and dewater wetlands (Zedler and Kercher 2004). The increased density of some flammable invasive woody plants and associated litter increases fire frequency and intensity (Zedler and Kercher 2004).

Cattails tend to grow in thick, nearly impenetrable stands, blocking the view of open water and raising concerns that they will take over and cover a pond. The dense foliage and debris from old-growth cattails makes it difficult for competing plant species to grow (CU CCE 2015).

Conversely, cattails can be desirable in a pond as they provide important wildlife habitat, shelter for birds, and food and cover for fish and the insects they eat. Cattails protect the banks of a pond from erosion. They intercept and reduce the force of small waves and wind on the shore. The stems catch and slow water and help trap sediment and silt. Cattail roots harbor microorganisms that help break down organic materials (CU CCE 2015).

Cattail has been found on Clark's Fork WPA.

Black henbane (Hyoscyamus niger L.)

The full extent of black henbane's ecological, economical and sociological impacts are poorly documented. The plant can form dense infestations, replacing desirable native species, impacting agricultural production and reducing plant biodiversity. Black henbane is narcotic and all parts of the plant are poisonous to humans and livestock. Livestock usually avoid it because of its foul odor and bitter taste unless other forage is unavailable (MSUE 2017).

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APPENDIX C. LANDSCAPE PLANS AND DESIGNS

The North American Waterfowl Management Plan (NAWMP)

This plan dates back to 1986, when the United States and Canada joined in an effort to combat declining waterfowl numbers and dwindling habitat. Mexico joined in 1994. These continental partners have collaborated to protect, restore and enhance habitat for waterfowl and other species that share the same habitat.

Broad conservation measures are implemented within each country at regional levels, where success requires partnerships between federal state, provincial, tribal and local governments, as well as the support of businesses, conservation organizations and individuals. The plan takes a science-based approach to identifying and prioritizing critical waterfowl habitat. The plan has been regularly updated five times, most recently in 2024.

The District fully supports the NAWMP by protecting known critical areas for waterfowl and other water birds, providing these species with areas to stage, rest and feed during spring and autumn migration events. District lands also provide important nesting cover for species that are year-round District residents and those whose spring migration ends in the District.

Montana State Wildlife Action Plan (SWAP) 2015

Created by the Montana Department of Fish, Wildlife and Parks (MFWP), this first-of-its-kind statewide plan is a revision of the 2006 Comprehensive Fish and Wildlife Conservation Strategy approved by the U.S. Fish and Wildlife Service to receive State Wildlife Grant funding from Congress. Without detracting attention from the needs of game species, SWAP provides an avenue to receive federal funding for state conservation efforts for non-game species with critical needs.

The plan provides an in-depth, comprehensive analysis of community types, focal areas and species of conservation concern throughout the state and identifies issues that warrant conservation attention. Numerous conservation entities use the plan, which is designed to guide conservation efforts throughout Montana. The plan identifies 128 Species of Greatest Conservation Concern (SGCN), including 47 that have the most critical conservation need. It also identifies 12 terrestrial and numerous aquatic habitat types that correspond to SGCNs, which are Community Types of Greatest Conservation Need. A number of these species, focal areas and community types are within the District.

The SWAP identifies the Lower Musselshell area as a focal area. Community types identified in the SWAP (those the District has also identified as habitat resources of concern) include wetlands, sage-steppe and grasslands. Within these habitat community types the District has identified priority species and species guilds. Species (and guilds) named by the SWAP and the District include greater sage-grouse, black-tailed prairie dog, pronghorn, waterfowl, shorebirds, wading birds, wetland dependent species and numerous neotropical migrant birds.

As District lands provide critical habitat protection and sanctuary for various breeding, nesting and migrating species, they directly support SWAP's conservation efforts for imperiled species and their habitat requirements. A full list of species, focal areas and community types in Montana can be found in the 2015 Montana SWAP and with the Montana Natural History Program.

Montana Action Plan (MAP) – Update 2022

This plan was created in response to a 2018 Department of Interior Secretarial Order 3362, which states that appropriate Department of Interior federal bureaus shall collaborate with western states' wildlife management agencies, private conservation groups and landowners to identify, improve and conserve winter range and migration corridors for big game – mule deer, elk and pronghorn. Montana is one of the states identified in the order; MFWP is its state wildlife management agency and the author of the plan.

The plan identifies five priority areas and their habitats throughout the state that are winter ranges and migration corridors for big game. In each priority area, MFWP tracks GPS-collared big game animals, conducting spatial analysis of their movements. They work closely with the U.S. Geological Survey, Bureau of Land Management, universities and other partners to identify focal areas within priority areas to make threat assessments that correspond to big game travel patterns and habits.

The plan also identifies current and potential conservation opportunities as well as the possibility of collaboration with landowners. A portion of priority area D in the plan, known as the Canadian Border to Musselshell Plains, lies within the District's boundaries. This priority area contains large swaths of grasslands and sage-steppe areas – both identified as District priority habitats for management. It also contains pronghorn, which is a District priority species.

Montana State Tactical Plan (STP)

This supplement to the 2017 Prairie Pothole Joint Venture (PPJV) Implementation Plan is a voluntary, non-regulatory, self-directed partnership involving federal and state agencies, non-governmental conservation groups, private landowners, scientists, universities, policymakers and others interested in prairie habitat conservation.

The STP is a state version step-down plan that identifies goals, objectives, and strategies for spatially identifying habitat for priority bird species of conservation concern. The plan identifies areas of conservation priority, as well as conservation policy and legislation. The plan emphasizes the human element – notably public access to wetlands and uplands in the form of a hunter constituency and its associated financial and political support for bird conservation. The District supports these human elements of the STP by providing opportunities for hunting and other wildlife-dependent recreation.

Although the District lies outside of the Prairie Pothole Region in Montana, immediately to the south of it, many of the bird species identified in the STP reside in and migrate through District boundaries. These species guilds – waterfowl, shorebirds, and wading birds – represent a priority for the District. The wetlands they use are a habitat resource of

concern for the District. The District plays an integral role in the success of the PPJV and the STP.

North American Waterbird Conservation Plan (NAWCP)

A comprehensive and visionary compilation of waterbird conservation ideas, the NAWCP discusses "... weaving together cultures, opinions, resources, and science to achieve sustainable waterbird populations and appropriately manage waterbird habitats throughout the entirety of their ranges." The plan takes a holistic (continent-side) approach to waterbird conservation; it recognizes 210 species to date. The plan offers thoughtful, insightful, and informative figures and tables that illustrate topics ranging from regions to perils to conservation status and concerns for waterbirds. The District supports the NAWCP by providing critical wetland and associated grassland habitats – priority habitats for various waterbirds, shorebirds, and wading birds, which are also priority species guilds for the District.

Northern Great Plains Joint Venture (NGPJV) Strategic Plan (2022) and Action Plan (2022-27): This endeavor provides a comprehensive design for the broad conservation of grasslands in the Northern Great Plains. The plan represents areas of central and eastern Montana, southwest North Dakota, northeast Wyoming, and western South Dakota. The entire District lies within the Montana portion of the NGPJV's boundaries.

The mission of the NGPJV is "to retain, enhance, restore, and protect grassland, sagebrush-steppe, wetland, and riparian ecosystems, with an emphasis on sustaining and increasing populations of migratory and resident birds while supporting working lands and communities that sustain these habitats." Its goal is "to facilitate conservation efforts in the Northern Great Plains that result in healthy ecosystems and bird populations that benefit communities and private producers and support federal and state agencies and lawmakers as they prioritize grasslands conservation in their budgets, plans, and policies."

A pillar of the NGPJV is incorporating partnerships to build a team ranging from conservation non-governmental organizations to state wildlife agencies, federal agencies and private businesses. The NGPJV's five priorities to achieve its shared vision of resilient grasslands are: 1) communications, education, and outreach, 2) conservation design and implementation, 3) science, monitoring, and research, 4) conservation policy and 5) human dimensions.

The NGPJV recognizes that "resilient grasslands" include other habitat components such as sagebrush-steppe and wetlands, which along with grasslands, the District recognizes as management priorities. Accordingly, the NGPVJ works to conserve imperiled grassland bird species and migratory bird species that use these habitats. Waterfowl, shorebirds, wading birds and neotropical migrant birds are all migratory birds and priority species guilds for the District.

The 2022 NGPJV Strategic Plan is an update of the original 2006 plan and provides a more streamlined and contemporary view of the NGPJV's vision and direction. The 2022-

27 Action Plan is a step-down plan of the strategic plan with specific goals, objectives and corresponding actions, as well as mechanisms to track success and progress.

**APPENDIX D. COMPATIBILITY DETERMINATIONS FOR CHARLES M.
RUSSELL WETLAND MANAGEMENT DISTRICT AND ASSOCIATED
NATIONAL WILDLIFE REFUGES, MONTANA**

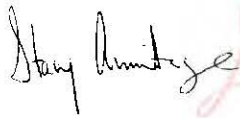
Signature of Determination

**CORTEZ
ROHR**

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Refuge Manager Signature and Date

Signature of Concurrence



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Assistant Regional Director Signature and Date

Compatibility Determination

Title

Compatibility Determination for Grazing: Charles M. Russell Wetland Management District

Refuge Use Category

Agriculture, Aquaculture, and Silviculture

Refuge Use Types

Grazing

Refuge

Charles M. Russell Wetland Management District (District)

Refuge Purpose(s) and Establishing and Acquisition Authorities

... as Waterfowl Production Areas subject to "... all of the provisions of such Act [Migratory Bird Conservation Act] ... except the inviolate sanctuary provisions ..." 16 U.S.C. 718(c) (Migratory Bird Hunting and Conservation Stamp Act) "... for any other management purpose, for migratory birds." 16 U.S.C. § 715d (Migratory Bird Conservation Act).

The Charles M. Russell Wetland Management District includes six waterfowl production areas (WPAs), four satellite national wildlife refuges, multiple flowage easements, five Farmer's Home Administration (FmHA) easements, and three State grazing leases.

The Service acquires WPAs under the authority of the Migratory Bird Hunting and Conservation Stamp Act, which authorizes funds from the sale of Federal Duck Stamps and import duties to be deposited into the Migratory Bird Conservation Fund to purchase or lease wetlands and wildlife habitat for inclusion in the NWRS.

FmHA conservation easements were developed by Congress, under the Consolidated Farm and Rural Development Act of 1985, to establish easements for conservation, recreation, and wildlife purposes on properties that were foreclosed by the federal government.

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System, otherwise known as Refuge System (NWRS), 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?

No.

What is the use?

Prescriptive grazing as a tool to improve habitat conditions for specific wildlife or focal bird species, migratory songbirds, and other grassland-obligate species. Future prescriptive grazing regimens may include short-duration, high-intensity grazing treatments to control invasive plants; habitat management for specific wildlife or focal bird species; or rotation of grazing areas in the District to provide more long-term rest between grazing treatments. The District currently uses cattle livestock (here forth livestock) grazing as a tool to manage grassland and mixed sagebrush grassland habitats. Livestock grazing is designed to mimic some of the behaviors and grazing habits of early native grazers, which were formerly present on the District's landscape around the early-1800s. Grazing by livestock is a preferred management tool because the effect on habitat is controllable, measurable, and can reasonably mimic early grazers' habits. It has the additional benefit of reducing wildfire risk by reducing the amount of light fuels that can carry a fire. Livestock grazing is utilized in a variety of ways including high intensity–short duration, rest rotation, and complete rest.

Is the use a priority public use?

No

Where would the use be conducted?

The use would be implemented across District lands where the U.S. Fish and Wildlife Service (Service) has control over the use; specifically, on grassland and mixed grassland sagebrush areas of WPAs. Habitat management units within areas to be grazed will be established to control grazing treatments and help ensure desired habitat characteristics in accordance with the Charles M. Russell Wetland Management District Comprehensive Conservation Plan (CCP) goals and objectives. Units that are fenced from common pastures would be the first units enrolled into prescriptive grazing. Habitat management units that are not fenced from private or other government owned lands would be managed under existing management plans.

When would the use be conducted?

Grazing may occur during any season depending on the specific objectives to be achieved. Conversion to a prescriptive grazing system means a permit may not always be available annually. Exact times and dates vary per unit in accordance with habitat and management objectives in the CCP.

How would the use be conducted?

Grazing will be administered in accordance with the Service's Cooperative Agriculture Use Policy (620 FW 2) and a Cooperative Agriculture Agreement (CAA) consisting of a Commercial Special Use Permit (SUP) having special conditions, and a detailed Plan of Operations outlining allowable Animal Unit Months (AUMs), on-off dates, unit locations, unit rotations, and specific instructions pertinent to grazing.

Select grazing units may receive annual grazing treatments consisting of high intensity-short duration, extended rest, complete rest, and/or on a rotational grazing schedule for various lengths of time and may then be rested for multiple years to achieve desired CCP objectives and landscape habitat characteristics.

Why is this use being proposed or reevaluated?

With the issuance of a CCP and Environmental Assessment (EA), this use requires a compatibility determination (CD).

The use of prescriptive grazing to achieve desired habitat conditions would result in long-term beneficial effects on a variety of wildlife species that use the District and is included in the CCP and corresponding EA as a management tool for District lands. This use is being proposed in order to move from an annual grazing program to a prescriptive grazing program to meet specific wildlife and habitat management objectives. The District lies within the Great Plains and was known to have native grazers; as such, the landscape's flora and fauna have evolved over millennia with grazing.

The CCP has established goals and objectives for specific habitat types (e.g. grassland, mixed grassland-sagebrush) where prescribed grazing may be utilized. In addition, target wildlife species (e.g. sprague's pipit, mountain plover, chestnut-collared longspur, greater sage-grouse) and their habitat requirements have been identified. This has resulted in objectives that help guide management to meet target wildlife species and their habitat needs. Different grazing strategies may be implemented and assessed in order to determine the best methods for the District to meet the identified habitat goals and objectives of the CCP, as well as combat the spread of invasive graminoids and forbs present in some units.

Availability of Resources

The analysis for administering and managing the use will only include the incremental increase above general operational needs that we can show as being directly caused by the proposed use. The staff time needed for the development and administration of the cooperative grazing program is already committed and available to support the program under current staffing. Most work needed to prepare for this use would continue to be done as part of routine habitat maintenance.

District staff will continue to monitor permittees for violations of permit conditions

and trespass. Biologists and the District manager will monitor habitat conditions. New boundary and temporary fences may need to be constructed to implement prescriptive grazing on common pastures. Temporary water developments may be necessary to facilitate prescriptive grazing in some habitat units in order to meet habitat objectives.

Annual/recurring requirements (i.e., for annual operations and maintenance):

1. Maintenance: Maintenance requirements vary and will be reduced due to the reduction in interior fences necessary to manage prescriptive grazing program according to CCP alternatives. There may be additional needs with the construction and maintenance of temporary and boundary fences which would be constructed anyway in order to manage livestock in common pastures.
2. Annual Operations: District personnel currently spend a small portion of their time issuing permits, monitoring for trespass livestock and habitat conditions.
3. Monitoring: District staff monitor for livestock trespass intermittantly; it thus is not a significant portion of staff time.

Offsetting revenues: District lands receive a percentage of the amount of revenue that is generated from commercial activities occurring on them. These funds aid in costs associated with implementing a prescriptive grazing program.

Anticipated Impacts of the Use

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

Prescribed grazing as a management tool is intended to be utilized to meet habitat and species-specific goals and objectives identified in the CCP, as well as replicate habitat and landscape conditions formerly created by native grazers. This management is intended to maintain and enhance habitat conditions for the benefit of a wide variety of fish and wildlife that utilize the District and includes combating invasive graminoids and forbs. Grazing has the additional benefit of reducing wildfire risk by reducing the amount of light fuels that can carry a fire.

Minimal negative impacts, equal to or perhaps even less than what may have occurred during the former presence of native grazers, are expected through the use of this tool. Landscape character will remain unchanged or may be expected to improve through removal of excessive thatch. Some trampling of areas may occur around watering areas or mineral licks, though no more than what may have occurred with large numbers of native grazers in areas where they congregated or wallowed. Grazing may achieve a mosaic pattern of biomass density throughout the landscape with some areas more intensively grazed than others in certain years to achieve habitat heterogeneity, which could reasonably be expected to have happened when native grazers were present. In addition, while the presence of livestock may disturb some wildlife species, just as with native grazers, and some public visitors, the

benefits of this habitat management tool are felt to outweigh these negative impacts since the landscape evolved with grazing and not without it.

When threatened and endangered species are known or suspected to be on a site, the local Service Ecological Services office will be consulted, and the proper steps will be determined to assess how and what management activities will affect that species and what, if anything, should be pursued.

There will be no negative effects on cultural resources.

Short-term impacts

Short term impacts would include loss of vegetative cover which could result in increased soil erosion. Highly palatable forbs and shrubs would be impacted by grazing affecting a large number of wildlife species from pollinators to big game. However, the benefit would be to the wildlife species that require short cover such as prairie dogs, mountain plovers, McCown's longspur, and grazing ungulates that would graze the fresh growth of grasses. Potential disturbance to some wildlife species and some public users may occur.

Grazing by domestic livestock removes and tramples some or much of the standing vegetation from a tract of grassland. In general, grazing will decrease vegetative heights and litter depths and affect plant composition. The measure of short-term impacts will depend upon the grazing timing (time of year), duration (length of graze), and utilization level (i.e., light, moderate, or full, as it pertains to biomass remaining in a unit). Depending on the latter of the three factors, hoof action is expected to break up litter thereby increasing the rate of litter decomposition, opening up the ground for natives to express, and aid in nutrient cycling. Areas around watering systems, along fence lines, and at the location of mineral blocks may experience heavy trampling and compaction resulting in the mortality of perennial vegetation and the establishment of early successional species, just as could have been expected in areas where large native grazers congregated.

Varying bird species differ in their vegetation height preferences; as such, the management goal is to provide a heterogeneity of vegetation heights across the landscape. Pollinators are similar in their need for heterogeneity of heights and plant species. Following a graze, depending on the remaining vegetation height, a site will be more or less attractive for use by certain wildlife species during the respective growing season. Birds that prefer shorter stature grasslands may benefit from the reduced vegetative height resulting from grazing while others, which typically require taller and more dense nesting structure, may be negatively impacted by grazing in the short-term.

In situations where grazing utilizations are full, there may be less litter available for grassland nesting birds who utilize this material for nest construction. However, grazed areas may attract fewer predators because of low densities of some types of prey, such as small mammals (Grant et al. 1982, Runge 2005); less cover for concealment; or both. Higher nesting success in grazed fields may occur because

predators respond negatively to low prey density (Clark and Nudds 1991, Larivière and Messier 1998). If a site is completely devoid of litter prior to winter, certain pollinator larvae may lack the needed cover to survive for that year. The same could reasonably have been expected to happen with a large herd(s) of native grazers present on the landscape when and where they may have congregated for extended periods of time.

Research conducted on other refuges has found impact from grazing ranging from minimally negative to favorable. Prescribed grazing on Red Rock Lakes National Wildlife Refuge (NWR) have been shown to have little effect on sage-grouse, a noted species of concern (Schroff 2016 MSU). Another study by (Stadum et al. 2016) found that grazing can provide the structure of vegetation heterogeneity that favors nesting long-billed curlews, a species of concern throughout some areas of Montana, to include the District. She also cites (Redmond and Jenni 1986) who observed curlews nesting in previously recent grazed areas. (Stadum et al. 2016) further explains how “prescriptive livestock grazing can be used to provide structurally diverse grassland habitats for species with seemingly disparate structural preferences within the same habitat type. Managing grassland habitat for species that exist on opposite ends of a disturbance preference gradient presumably incorporates the needs of species with intermediate preferences”.

Long-term impacts

Prescriptive grazing will improve habitat conditions for specific wildlife or focal bird species, migratory birds, and other grassland-obligate species. Future prescriptive grazing regimens may include short-duration, high-intensity grazing treatments to control invasive plants; habitat management for specific wildlife or focal bird species; or rotation of grazing areas on District lands to provide long-term rest between grazing treatments.

The beneficial effects of grazing on plant diversity depend on grazing intensity, the evolutionary history of the site, and climatic regimes. Continuous rest without periodic disturbance fails to promote long-term grassland health (Naugle et al. 2000). Hoof impact by grazing animals can break up capped soils, improve the water cycle, stimulate vegetative reproduction of grasses, and enhance the decomposition of old plant material by breaking up plant litter. Hoof action can also distribute and trample seeds into soils, increasing chances of successful germination (Laycock 1967).

Nutrients are returned to the soil in the form of urine and feces. Cattle may return 80%–85% of the nitrogen ingested with plant tissue (Laycock 1967). The use of prescriptive grazing to achieve desired habitat conditions would result in long-term beneficial effects on a variety of wildlife species that use the District.

The effect of removal of vegetation increases the vigor of grasslands by stimulating the tillering and growth of desired species of grasses and forbs and reducing the abundance of targeted species such as cool season exotic grasses, woody species, noxious weeds, and invasive species. During periods of typical precipitation, normal regrowth following grazing activities can occur within a single growing season. Over

time, a strategic prescribed grazing program could effectively alter species composition and improve overall plant diversity. Disturbance of grassland, wet meadow, and some shrub-steppe habitats is essential to maintain plant vigor and reduce infestations of noxious weeds.

As vegetative heights recover following a grazing treatment, habitat conditions will favor birds which prefer denser nesting structure and may become less favorable to species that prefer sparser vegetation. Because of regrowth of herbaceous vegetation, no long-term negative impacts are anticipated for waterfowl or other grassland or mixed grass-sagebrush nesting bird species, though positive impacts of increased diversity and heterogeneity are likely in the long-term.

Public Review and Comment

The draft CCP and accompanying EA and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. CAAs and SUPs will be written in accordance with the Service's Cooperative Agricultural Use Policy (620 FW 2) and the Region 6 Cooperative Agricultural Program Guidance (2022).
2. Cooperators must follow all requirements for the prescribed grazing treatment as specified within the CAA, its stated Plan of Action, and the Special Conditions of the SUP.
3. Insecticides are not permitted for use on District lands.

4. Control and maintenance of livestock is the responsibility of the permittee.
5. Fencing, water supply, and other livestock management infrastructure needs and costs will be outlined in the CAA and SUP.

Justification

Sharp-tailed grouse, pronghorn, sage-grouse, large ungulates, and other wildlife species need a diversity of and abundant group of plants for food and cover. Prescriptive grazing and other adaptive management strategies would permit flexibility necessary for the restoration of these important plant species.

Prescriptive grazing is a valuable management tool that supports District objectives. As outlined in this CD and in accordance with the stipulations outlined above, based on best professional judgement and available science, the Service has determined that continuation of the grazing use on the District will not materially detract from or interfere with the fulfillment of the NWRS mission or the purposes of the District; will contribute to the NWRS mission and District purposes, meeting the standard or threshold established in 50 CFR §29.1 for economic uses of NWRs; and will not conflict with the national policy to maintain the biological integrity, diversity, and environmental health of the District.

To maintain and enhance habitat for migratory birds and other wildlife, some habitat management must occur. Prescribed grazing utilizing livestock is one option that can be used to achieve these desired habitat conditions. Prescribed grazing is a useful tool because it can be controlled, and results of the grazing can be periodically monitored (e.g. vegetation monitoring) so that adjustments in the grazing program can be made to meet habitat goals and objectives.

Mandatory Reevaluation Date

2035

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Compatibility Determination

Title

Compatibility Determination for Research, Scientific Collecting, and Surveys for the Charles M. Russell Wetland Management District

Refuge Use Category

Research and Surveys

Refuge Use Types

Research, Scientific Collecting, Surveys

Refuge

Charles M. Russell Wetland Management District (District)

Refuge Purpose(s) and Establishing and Acquisition Authorities

... as Waterfowl Production Areas subject to "... all of the provisions of such Act [Migratory Bird Conservation Act] ... except the inviolate sanctuary provisions ..." 16 U.S.C. 718(c) (Migratory Bird Hunting and Conservation Stamp Act) "... for any other management purpose, for migratory birds." 16 U.S.C. § 715d (Migratory Bird Conservation Act).

The Charles M. Russell Wetland Management District (District) includes six waterfowl production areas (WPA), four satellite national wildlife refuges (NWR), multiple flowage easements, five Farmer's Home Administration (FmHA) easements, and three State grazing leases.

The Service acquires WPAs under the authority of the Migratory Bird Hunting and Conservation Stamp Act, which authorizes funds from the sale of Federal Duck Stamps and import duties to be deposited into the Migratory Bird Conservation Fund to purchase or lease wetlands and wildlife habitat for inclusion in the NWRS.

FmHA conservation easements were developed by Congress, under the Consolidated Farm and Rural Development Act of 1985, to establish easements for conservation, recreation, and wildlife purposes on properties that were foreclosed by the federal government.

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System (NWRS), otherwise known as 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.

What is the use?

Research. Planned, organized, and systematic investigation of a scientific nature conducted by non-U.S. Fish and Wildlife Service (Service) personnel or authorized agent.

Scientific collecting. Gathering of District natural resources or cultural artifacts for scientific purposes conducted by non- Service personnel or authorized agent.

Surveys. Scientific inventory or monitoring conducted by non- Service personnel or authorized agents.

Research conducted by non-Service personnel includes research conducted by Federal, State, and private entities, such as the U.S. Geological Survey; State departments of natural resources; students and professors at State and private universities; and independent non-governmental researchers and contractors. Research activities will focus on species, habitats and recreational activities as identified in the District's management plan and other stepdown plans or will address research questions that will provide information to better manage the District.

Acceptable research methods include but are not limited to bird banding, mist netting, point count surveys, radio-telemetry tracking, cameras, recorders, and public surveys.

Requests for special use permits (SUP) for research will be considered on a case-by case basis, as staff availability allows. In accordance with 16 U.S.C. 668dd(d) and 50 C.F.R. Part 25, Subpart D, the district manager is responsible for reviewing applications for SUPs and determining whether to authorize a permit.

The District manager will base the decision to issue an SUP for research on their professional judgment and the value of the proposed research. The decision to allow a particular research project will also be consistent with Service regulations and policy, including the Policy on Maintaining the Biological Integrity, Diversity, and Environmental Health of the Refuge System (601 FW 3).

The results of the research should result in better knowledge of our natural resources and improve methods to manage, monitor, and protect the District's biological resources and visitor uses. The District manager will always have the discretion to deny or reevaluate the appropriateness and compatibility of any specific research by non-Service personnel at any time [603 FW 2.1 H(1), (2)].

The District manager may deny a project based on field experiences, knowledge of the District's natural resources, particularly its biological resources, available scientific information, and after consulting with other experts, both inside and

outside the Service. When denying a request for a specific research project, the district manager will explain the rationale and conclusions supporting their decision in writing. The rationale for the denial will be consistent with the principles of sound fish and wildlife management, district administration, and applicable laws. The denial will generally be based on, but not limited to, evidence that the details of a particular research project might: lead to the impairment of our conservation mission; detract from fulfilling the District's purposes; conflict with the conservation goals or objectives in approved District management plans; not be manageable with the available budget or staff time; be inconsistent with public safety; or conflict with maintaining or restoring the biological integrity, diversity, and environmental health of the District's priority habitats.

Is the use a priority public use?

No

Research conducted by non-Service personnel is not a priority public use of the Refuge System under the Refuge System Administration Act of 1966 (16 U.S.C. 668dd-668ee), as amended by the National Wildlife Refuge System Improvement Act of 1997. Although this use is not a priority public use, this activity would allow permitted researchers access to the District to conduct both short-term and long-term research projects.

Where would the use be conducted?

For purposes of this compatibility determination (CD), only WPAs in the District are being considered for this use. District leases are not eligible for consideration of a use and NWRs in the District require their own individual CD. The location of the research will vary depending on the individual research project that is being conducted. The entire District may be considered in a SUP request for scientific research; however, biological research projects are usually focused on a particular habitat type, plant species, or wildlife species.

Occasionally, research projects will encompass an assemblage of habitat types, plants, or wildlife, or may span more than one District land unit or include lands outside the Refuge System. The research location will also be limited only to those areas of the District that are necessary to conduct the research project and access the research location. This may include access to District roads that are closed to the public. The District may limit areas available to research as necessary to ensure the protection of trust resources or reduce conflict with other compatible District uses. Access to study locations will be identified by District staff.

When would the use be conducted?

The timing of the research will depend on the individual research project's approved design. Research may occur on the District throughout the year when there are no conflicts with protection of trust resources or primary public use activities. Special

precautions will be required and enforced to ensure the researchers' health and safety and to minimize or eliminate potential conflicts with a priority public use. An individual research project could be short term in design, requiring one or two visits over the course of a few days. Other research projects could be multiple year studies that require daily visits to the study site. The timing of each individual research project will be limited to the minimum required to complete the project.

How would the use be conducted?

Research methods will depend entirely on the individual research project that is conducted. The methods of each research project will be reviewed and scrutinized before it will be allowed to occur on the District.

No research project will be allowed to occur if:

- It negatively impacts endangered species, migratory birds, and other District trust resources;
- It compromises public health and safety.

A Research and Monitoring Special Use Application and detailed research proposal will be required from parties interested in conducting research on the District. Each request for this use will be considered, and if appropriate, will be issued a SUP by the District manager. Each request will be evaluated on its own merit. The District manager will use sound professional judgment and ensure that the request will have no considerable negative impacts to natural resources, cultural resources, or visitor services and does not violate District regulations. Special needs will be considered on a case-by-case basis and are subject to the district manager's approval. Any approved SUP will outline the framework in which the use can be conducted, and District staff will ensure compliance with the permit. The SUP will provide any needed protection to individual District policies, mission, wildlife populations and natural habitats. In addition, all research projects require the primary investigator to submit written summary reports of all findings and acknowledge the District's participation.

Once approved, projects will be reviewed periodically to ensure that they are meeting their intended purposes, reporting and communicating with District staff, and are fulfilling the mission of the Refuge System and purposes for which the District was established. If the district manager decides to deny, modify, or halt a specific research project, the district manager will explain the rationale and conclusions supporting their decision in writing. The denial or modification to an existing study will generally be based on, but is not limited to, evidence that the details of a particular research project may:

- Negatively affect native fish, wildlife, and habitats or cultural, archaeological, or historical resources,
- Detract from fulfilling the District's purposes or conflict with District goals and objectives,

- Raise public health or safety concerns,
- Conflict with other compatible District uses,
- Not be manageable within the District's available staff or budget time,
- Deviate from the approved study proposal such that impacts to District resources are more severe or extensive than originally anticipated.

Why is this use being proposed or reevaluated?

Research by non-Service personnel is conducted by colleges; universities; federal, State, and local agencies; non-governmental organizations; and qualified members of the public to further the understanding of the natural environment, the utilization of the natural environment by the American people and to improve the management of the District. Much of the information generated by the research is applicable to management on and near the District. In many cases, research by non-Service personnel ensures the perception of un-biased and objective information gathering which can be important when using the research to develop management recommendations for politically sensitive issues. Additionally, universities and other Federal partners can access equipment, resources, and facilities unavailable to District staff for analysis of data or biological samples.

The Service will encourage and support research and management studies on District lands that will improve and strengthen biological and social science management decisions. The district manager will encourage and seek research relative to approved District objectives that clearly improves land management and recreational opportunities and promotes adaptive management. Priority research addresses information that will better manage the Nation's biological resources and is generally considered important to agencies of the Department of the Interior, the Service, the Refuge System, and state fish and game agencies. Priority research also addresses important management issues, demonstrates techniques for management of species or habitats, or analyzes ways to improve access and recreational use by the public.

The District will also consider research for other purposes which may not be directly related to District-specific objectives, but contribute to the broader enhancement, protection, use, preservation, and management of native populations of fish, wildlife, and plants, and their natural diversity within the region or flyway. Prospective researchers or organizations can talk to the district manager or biologist about specific research needs. Similar research could be conducted by potential researchers and organizations on other nearby public and federal lands. However, the research capabilities and support systems, organization goals, habitat, wildlife, hydrology, and geology of each of these locations vary widely. To best account for the research needs, goals, and funding availability of local, state, federal, university, and research specific organizations – the lands where research is permitted should be diverse. Therefore, maintaining and growing the District research program is essential.

Availability of Resources

The analysis of cost for administering and managing each use will only include the incremental increase above general operational costs that we can show as being directly caused by the proposed use. District support of research directly related to District objectives may take the form of funding, in-kind services such as housing or use of other facilities, direct staff assistance with the project in the form of data collection, provision of historical records, conducting management treatments, or other assistance as appropriate. There is currently enough funding and staff available to allow research opportunities. Special equipment, facilities, or improvement costs are expected to be negligible from this use on the District.

One-time costs: None

Annual/recurring expenses (i.e., for annual operations and maintenance):

1. **Maintenance costs:** Maintenance costs are expected to be negligible from this use on the District. There are no expected increased costs to maintaining District infrastructure outside normal use of roads and other developed areas.
2. **Annual Operations:** The bulk of the cost for research is incurred in staff time to review research proposals, coordinate with researchers, and write special use permits. In some cases, a research project may only require one day of staff time to write a special use permit. In other cases, a research project may take an accumulation of weeks, as the District staff must coordinate with the principal researcher and accompany them during site visits. Because research conducted on the District is not constant, there may be fiscal years when little if any time is spent on managing outside research projects by District staff.
3. **Monitoring costs:** None

Offsetting revenues: None

Anticipated Impacts of the Use

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

The effects and impacts of the proposed use to District 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."

Short-term impacts

Research activities may disturb fish and wildlife and their habitats. For example, the presence of researchers can cause birds to flush from resting and feeding areas, cause disruption of birds on nests or breeding territories, or increase predation on

nests and individual animals as predators follow human scent or trails.

Efforts to capture animals, such as for migratory bird banding, can cause disturbance, injury, or death to groups of wildlife or to individuals. To wildlife, the energy cost of disturbance may be appreciable in terms of disruption of feeding, displacement from preferred habitat, and the added energy expended to avoid disturbance. Sampling activities associated with many types of research activities can cause compaction of soils and the trampling of vegetation. Installation of posts, equipment platforms, collection devices, and other research equipment in open water may present a hazard if said items are not adequately marked and/or removed at appropriate times or upon completion of the project. Research efforts may also discover methods that result in a reduction in impacts described above.

The potential for research conducted on the District to conflict with District management activities (e.g., prescribed burning, prescribed grazing, herbicide applications) and visitor use is minimal. Research would be scheduled to minimize conflict with District management activities. Visitors may encounter researchers in the field or observe monitoring plots or other research infrastructure. However, these encounters will be infrequent due to the typically minimal presence of field technicians and interest in maintaining low profile infrastructure to prevent disturbance or vandalism of study sites.

Long-term impacts

Long-term effects should generally be beneficial by gaining information valuable to District management. No long-term negative impacts are expected from the research activities described. The district manager can reduce the likelihood of long-term impacts by denying special use permits for research that is likely to cause long-term, adverse impacts. Permits for multi-year research projects are renewed annually, providing the opportunity for an analysis of any impacts before renewing the SUP.

Cumulative impacts would occur if multiple research projects were occurring on the same resources at the same time or if the duration of the research was excessive. In particular, the District must consider the potential impacts of non-Service research, in conjunction with any Service-sponsored research or management activity also taking place. However, no cumulative impacts are expected because the district manager can control the potential for cumulative impacts through SUPs, prohibiting multiple research projects from affecting any given area or species at one time. The district manager retains the option to deny proposals for research that does not contribute to the mission of the Refuge System or causes undue disturbance or harm to District resources. The district manager also retains the right to revoke or deny renewal for any special use permit if unanticipated short-term, long-term, or cumulative impacts occur.

Project-specific stipulations outlined in each special use permit will act to minimize

anticipated impacts of research projects. These stipulations will prevent impacts to District wetlands, water quality, soils, hydrology, fish, wildlife, habitat, or cultural resources. Projects which occur within the habitat of, or include direct monitoring of, threatened and endangered species will be subject to a Section 7 informal consultation with the Service under the Endangered Species Act (87 Stat. 854, as amended; 16U.S.C. 1531 et seq.). Only with the approval of the Section 7 consultation will the District permit research to be conducted on habitats or individuals of threatened and endangered species. Research that could adversely affect critical habitat, threatened or endangered wildlife, or cultural resources will not be permitted.

Public Review and Comment

The draft Comprehensive Conservation Plan (CCP) and accompanying Environmental Assessment and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. Prior to initiation of any research and/or management studies on the District, the requesting agency or organization is required to meet with District management in person and present a comprehensive proposal of why the research is proposed to be undertaken, all methodologies involved, expected short- and long-term impacts of the activities, duration of the research, and anticipated completion date of the report.
2. The requesting agency or organization must apply for a permit by submitting a NWRS Research and Monitoring Special Use Permit Application and a detailed

research proposal.

3. Researchers must give the District at least 45 days to review proposals and determine if a special use permit will be issued. If the research involves the collection of wildlife, the District must be given 60 days to review the proposal.
4. Researchers must obtain all necessary scientific collecting, banding, or other permits required by State, federal, or Institutional Animal Care and Use Committee entities before starting the research.
5. Priority of approval will be based on studies that contribute to the enhancement, protection, use, preservation, and management of native wildlife populations and their habitat.
6. SUPs may contain specific terms and conditions that the researcher(s) must follow relative to activity, location, duration, and time-of year restrictions to ensure continued compatibility.
7. All District rules and regulations must be followed unless alternatives are otherwise accepted in writing by District management.
8. Any research involving ground disturbance may require historic preservation consultation with the Regional Historic Preservation Officer and/or State Historic Preservation Officer.
9. All research related SUPs will contain a statement regarding the Service's policy regarding disposition of biotic specimen.
10. Upon completion of a project, researchers are required to remove all research apparatus in the field and restore any disturbed lands to their original state.
11. Any research project may be terminated at any time for non-compliance with the SUP conditions. Research projects may also be modified, redesigned, relocated, or terminated at any time upon determination by the district manager that the project is causing unanticipated adverse impacts to wildlife, wildlife habitat, approved priority public uses, or other District management activities. District staff will conduct annual reviews of the research project to monitor researcher activities for potential impacts to the District and for compliance with conditions on the SUP. The district manager may terminate previously approved research and SUPs if adverse impacts are observed or if the researcher is not in compliance with the stated conditions.
12. The Service expects researchers to submit a final report to the District upon completing their work. For long-term studies, we may also require interim progress reports. All reports, presentations, posters, articles, or other publications will acknowledge the Refuge System and the District as partners in the research.

Justification

The Service encourages research on NWRs to collect new information which will improve the quality of refuge and other Service management decisions, to expand the body of scientific knowledge about fish and wildlife, their habitats, the use of these resources, appropriate resource management, and the environment in general, and to provide the opportunity for students and others to learn the principles of field research. In accordance with 50 CFR 26.41, research conducted by non-Service personnel, as described in this CD, will not materially interfere with, or detract from, the fulfillment of the Refuge System mission or the purposes for which the District was established.

Mandatory Reevaluation Date

2035

Compatibility Determination

Title

Compatibility Determination for Grazing: War Horse National Wildlife Refuge

Refuge Use Category

Agriculture, Aquaculture, and Silviculture

Refuge Use Types

Grazing

Refuge

War Horse National Wildlife Refuge (Refuge)

Refuge Purpose(s) and Establishing and Acquisition Authorities

"...purposes of a land-conservation and land-utilization program ... 7 U.S.C. § 1011 (Bankhead-Jones Farm Tenant Act) "... for use and administration under applicable laws as refuges for migratory birds and other wildlife ..." Secretarial Order 2843, dated Nov. 17, 1959."

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System, otherwise known as Refuge System (NWRS), 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.

What is the use?

Prescriptive grazing as a tool to improve habitat conditions for specific wildlife or focal bird species, migratory songbirds, and other grassland-obligate species. Future prescriptive grazing regimens may include short-duration, high-intensity grazing treatments to control invasive plants; habitat management for specific wildlife or focal bird species; or rotation of grazing areas on the Refuge to provide more long-term rest between grazing treatments. The Refuge currently uses cattle livestock (here forth livestock) grazing as a tool to manage grassland and mixed sagebrush

grassland habitats. Livestock grazing is designed to mimic some of the behaviors and grazing habits of early native grazers, which were formerly present on the Refuge's landscape around the early-1800s. Grazing by livestock is a preferred management tool because the effect on habitat is controllable, measurable, and can reasonably mimic early grazers' habits. It has the additional benefit of reducing wildfire risk by reducing the amount of light fuels that can carry a fire. Livestock grazing is utilized in a variety of ways including: high intensity–short duration, rest rotation, and complete rest.

Is the use a priority public use?

No

Where would the use be conducted?

The use would be implemented across the Refuge where the U.S. Fish and Wildlife Service (Service) has control over the use; specifically, on grassland and mixed grassland sagebrush areas. Habitat management units within areas to be grazed will be established to control grazing treatments and help ensure desired habitat characteristics in accordance with the Charles M. Russell Wetland Management District Comprehensive Conservation Plan (CCP) goals and objectives. Units that are fenced from common pastures would be the first units enrolled into prescriptive grazing. Habitat management units that are not fenced from private or other government owned lands would be managed under existing management plans.

When would the use be conducted?

Grazing may occur during any season depending on the specific objectives to be achieved. Conversion to a prescriptive grazing system means a permit may not always be available annually. Exact times and dates vary per unit in accordance with habitat and management objectives in the CCP.

How would the use be conducted?

Grazing will be administered in accordance with the Service's Cooperative Agriculture Use Policy (620 FW 2) and a Cooperative Agriculture Agreement (CAA) consisting of a Commercial Special Use Permit (SUP) having special conditions and a detailed Plan of Operations outlining allowable Animal Unit Months (AUMs), on-off dates, unit locations, unit rotations, and specific instructions pertinent to grazing.

Select grazing units may receive annual grazing treatments consisting of high intensity-short duration, extended rest, complete rest, and/or on a rotational grazing schedule for various lengths of time and may then be rested for multiple years to achieve desired CCP objectives and landscape habitat characteristics.

Why is this use being proposed or reevaluated?

With the issuance of a CCP and Environmental Assessment (EA), this use requires a compatibility determination (CD).

The use of prescriptive grazing to achieve desired habitat conditions would result in long-term beneficial effects on a variety of wildlife species that use the Refuge and is included in the CCP and corresponding EA as a management tool for the District, wherein the Refuge resides. This use is being proposed in order to move from an annual grazing program to a prescriptive grazing program to meet specific wildlife and habitat management objectives. The Refuge lies within the Great Plains and was known to have native grazers; as such, the landscape's flora and fauna have evolved over millennia with grazing.

The CCP has established goals and objectives for specific habitat types (e.g. grassland, mixed grassland-sagebrush) where prescribed grazing may be utilized. In addition, target wildlife species (e.g. sprague's pipit, mountain plover, chestnut-collared longspur, greater sage-grouse) and their habitat requirements have been identified. This has resulted in objectives that help guide management to meet target wildlife species and their habitat needs. Different grazing strategies may be implemented and assessed in order to determine the best methods for the Refuge to meet the identified habitat goals and objectives of the CCP, as well as combat the spread of invasive graminoids and forbs present in some units.

Availability of Resources

The analysis for administering and managing the use will only include the incremental increase above general operational needs that we can show as being directly caused by the proposed use. The staff time needed for the development and administration of the cooperative grazing program is already committed and available to support the program under current staffing. Most work needed to prepare for this use would continue to be done as part of routine habitat maintenance.

District staff will continue to monitor permittees for violations of permit conditions and trespass. Biologists and the District manager will monitor habitat conditions. New boundary and temporary fences may need to be constructed to implement prescriptive grazing on common pastures. Temporary water developments may be necessary to facilitate prescriptive grazing in some habitat units in order to meet habitat objectives.

Annual/recurring requirements (i.e., for annual operations and maintenance):

1. Maintenance: Maintenance requirements vary and will be reduced due to the reduction in interior fences necessary to manage prescriptive grazing program according to CCP alternatives. There may be additional needs with the construction and maintenance of temporary and boundary fences which would be constructed anyway in order to manage livestock in common pastures.
2. Annual Operations: District personnel currently spend a small portion of their time issuing permits, monitoring for trespass livestock and habitat conditions.
3. Monitoring: District staff monitor for livestock trespass intermittently; it thus is not a significant portion of staff time.

Offsetting revenues: Refuges receive a percentage of the amount of revenue that is generated from commercial activities occurring on them. These funds aid in costs associated with implementing a prescriptive grazing program.

Anticipated Impacts of the Use

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

Prescribed grazing as a management tool is intended to be utilized to meet habitat and species-specific goals and objectives identified in the CCP, as well as replicate habitat and landscape conditions formerly created by native grazers. This management is intended to maintain and enhance habitat conditions for the benefit of a wide variety of fish and wildlife that utilize the Refuge and includes combating invasive graminoids and forbs. Grazing has the additional benefit of reducing wildfire risk by reducing the amount of light fuels that can carry a fire.

Minimal negative impacts, equal to or perhaps even less than what may have occurred during the former presence of native grazers, are expected through the use of this tool. Landscape character will remain unchanged or may be expected to improve through removal of excessive thatch. Some trampling of areas may occur around watering areas or mineral licks, though no more than what may have occurred with large numbers of native grazers in areas where they congregated or wallowed. Grazing may achieve a mosaic pattern of biomass density throughout the landscape with some areas more intensively grazed than others in certain years to achieve habitat heterogeneity, which could reasonably be expected to have happened when native grazers were present. In addition, while the presence of livestock may disturb some wildlife species, just as with native grazers, and some public visitors, the benefits of this habitat management tool are felt to outweigh these negative impacts since the landscape evolved with grazing and not without it.

When threatened and endangered species are known or suspected to be on a site, the local Service Ecological Services office will be consulted, and the proper steps will be determined to assess how and what management activities will affect that species and what, if anything, should be pursued.

There will be no negative effects on cultural resources.

Short-term impacts

Short term impacts would include loss of vegetative cover which could result in increased soil erosion. Highly palatable forbs and shrubs would be impacted by grazing affecting a large number of wildlife species from pollinators to big game. However, the benefit would be to the wildlife species that require short cover such as prairie dogs, mountain plovers, McCown's longspur, and grazing ungulates that would graze the fresh growth of grasses. Potential disturbance to some wildlife species and some public users may occur.

Grazing by domestic livestock removes and tramples some or much of the standing vegetation from a tract of grassland. In general, grazing will decrease vegetative heights and litter depths and affect plant composition. The measure of short-term impacts will depend upon the grazing timing (time of year), duration (length of graze), and utilization level (i.e., light, moderate, or full, as it pertains to biomass remaining in a unit). Depending on the latter of the three factors, hoof action is expected to break up litter thereby increasing the rate of litter decomposition, opening up the ground for natives to express, and aid in nutrient cycling. Areas around watering systems, along fence lines, and at the location of mineral blocks may experience heavy trampling and compaction resulting in the mortality of perennial vegetation and the establishment of early successional species, just as could have been expected in areas where large native grazers congregated.

Varying bird species differ in their vegetation height preferences; as such, the management goal is to provide a heterogeneity of vegetation heights across the landscape. Pollinators are similar in their need for heterogeneity of heights and plant species. Following a graze, depending on the remaining vegetation height, a site will be more or less attractive for use by certain wildlife species during the respective growing season. Birds that prefer shorter stature grasslands may benefit from the reduced vegetative height resulting from grazing while others, which typically require taller and more dense nesting structure, may be negatively impacted by grazing in the short-term.

In situations where grazing utilizations are full, there may be less litter available for grassland nesting birds who utilize this material for nest construction. However, grazed areas may attract fewer predators because of low densities of some types of prey, such as small mammals (Grant et al. 1982, Runge 2005); less cover for concealment; or both. Higher nesting success in grazed fields may occur because predators respond negatively to low prey density (Clark and Nudds 1991, Larivière and Messier 1998). If a site is completely devoid of litter prior to winter, certain pollinator larvae may lack the needed cover to survive for that year. The same could reasonably have been expected to happen with a large herd(s) of native grazers present on the landscape when and where they may have congregated for extended periods of time.

Research conducted on other refuges has found impact from grazing ranging from minimally negative to favorable. Prescribed grazing on Red Rock Lakes National Wildlife Refuge (NWR) have been shown to have little effect on sage-grouse, a noted species of concern (Schroff 2016 MSU). Another study by (Stadum et al. 2016) found that grazing can provide the structure of vegetation heterogeneity that favors nesting long-billed curlews, a species of concern throughout some areas of Montana, to include the District wherein the Refuge resides. She also cites (Redmond and Jenni 1986) who observed curlews nesting in previously recent grazed areas. (Stadum et al. 2016) further explains how “prescriptive livestock grazing can be used to provide structurally diverse grassland habitats for species with seemingly disparate structural preferences within the same habitat type. Managing grassland habitat for species that

exist on opposite ends of a disturbance preference gradient presumably incorporates the needs of species with intermediate preferences”.

Long-term impacts

Prescriptive grazing will improve habitat conditions for specific wildlife or focal bird species, migratory birds, and other grassland-obligate species. Future prescriptive grazing regimens may include short-duration, high-intensity grazing treatments to control invasive plants; habitat management for specific wildlife or focal bird species; or rotation of grazing areas on the Refuge to provide long-term rest between grazing treatments.

The beneficial effects of grazing on plant diversity depend on grazing intensity, the evolutionary history of the site, and climatic regimes. Continuous rest without periodic disturbance fails to promote long-term grassland health (Naugle et al. 2000). Hoof impact by grazing animals can break up capped soils, improve the water cycle, stimulate vegetative reproduction of grasses, and enhance the decomposition of old plant material by breaking up plant litter. Hoof action can also distribute and trample seeds into soils, increasing chances of successful germination (Laycock 1967). Nutrients are returned to the soil in the form of urine and feces. Cattle may return 80%–85% of the nitrogen ingested with plant tissue (Laycock 1967). The use of prescriptive grazing to achieve desired habitat conditions would result in long-term beneficial effects on a variety of wildlife species that use the Refuge.

The effect of removal of vegetation increases the vigor of grasslands by stimulating the tillering and growth of desired species of grasses and forbs and reducing the abundance of targeted species such as cool season exotic grasses, woody species, noxious weeds, and invasive species. During periods of typical precipitation, normal regrowth following grazing activities can occur within a single growing season. Over time, a strategic prescribed grazing program could effectively alter species composition and improve overall plant diversity. Disturbance of grassland, wet meadow, and some shrub-steppe habitats is essential to maintain plant vigor and reduce infestations of noxious weeds.

As vegetative heights recover following a grazing treatment, habitat conditions will favor birds which prefer denser nesting structure and may become less favorable to species that prefer sparser vegetation. Because of regrowth of herbaceous vegetation, no long-term negative impacts are anticipated for waterfowl or other grassland or mixed grass-sagebrush nesting bird species, though positive impacts of increased diversity and heterogeneity are likely in the long-term.

Public Review and Comment

The draft CCP and accompanying EA and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex

Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. CAAs and SUPs will be written in accordance with the Service's Cooperative Agricultural Use Policy (620 FW 2) and the Region 6 Cooperative Agricultural Program Guidance (2022).
2. Cooperators must follow all requirements for the prescribed grazing treatment as specified within the CAA, its stated Plan of Action, and the Special Conditions of the SUP.
3. Insecticides are not permitted for use on Refuge lands.
4. Control and maintenance of livestock is the responsibility of the permittee.
5. Fencing, water supply, and other livestock management infrastructure needs and costs will be outlined in the CAA and SUP.

Justification

Sharp-tailed grouse, pronghorn, sage-grouse, large ungulates, and other wildlife species need a diversity of and abundant group of plants for food and cover.

Prescriptive grazing and other adaptive management strategies would permit flexibility necessary for the restoration of these important plant species.

Prescriptive grazing is a valuable management tool that supports refuge objectives. As outlined in this CD and in accordance with the stipulations outlined above, based on best professional judgement and available science, the Service has determined that continuation of the grazing use on the Refuge will not materially detract from or interfere with the fulfillment of the NWRS mission or the purposes of the Refuge; will contribute to the NWRS mission and Refuge purposes, meeting the standard or threshold established in 50 CFR §29.1 for economic uses of NWRs; and will not

conflict with the national policy to maintain the biological integrity, diversity, and environmental health of the Refuge.

To maintain and enhance habitat for migratory birds and other wildlife, some habitat management must occur. Prescribed grazing utilizing livestock is one option that can be used to achieve these desired habitat conditions. Prescribed grazing is a useful tool because it can be controlled, and results of the grazing can be periodically monitored (e.g. vegetation monitoring) so that adjustments in the grazing program can be made to meet habitat goals and objectives.

Mandatory Reevaluation Date

2035

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Compatibility Determination

Title

Compatibility Determination for Environmental Education and Interpretation for War Horse National Wildlife Refuge

Refuge Use Category

Environmental Education and Interpretation

Refuge Use Types

Environmental education (not conducted by National Wildlife Refuge System (NWRS) staff or authorized agents)

Environmental education (NWRS staff and authorized agents)

Environmental education (general)

Interpretation (NWRS staff and authorized agents)

Interpretation (not conducted by NWRS staff or authorized agents)

Refuge

War Horse National Wildlife Refuge (Refuge)

Refuge Purpose(s) and Establishing and Acquisition Authorities

"...purposes of a land-conservation and land-utilization program ... 7 U.S.C. § 1011 (Bankhead-Jones Farm Tenant Act)"... for use and administration under applicable laws as refuges for migratory birds and other wildlife ..." Secretarial Order 2843, dated Nov. 17, 1959."

National Wildlife Refuge System Mission

The mission of the NWRS, otherwise known as 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.

What is the use?

Environmental education (not conducted by NWRS staff or authorized agents). On-Refuge activities not conducted by NWRS staff or authorized agents that use a

planned process to foster awareness, knowledge, understanding, and appreciation in students, teachers, or group leaders about fish, wildlife, plants, ecology, natural sciences (such as astronomy) and Refuge management.

Environmental education (NWRs staff and authorized agents). On-Refuge activities conducted by NWRs staff or authorized agents that use a planned process to foster awareness, knowledge, understanding, and appreciation in students about fish, wildlife, plants, ecology, natural sciences (such as astronomy) and Refuge management.

Environmental education (general). Environmental education activities not specifically defined elsewhere in this category.

Interpretation (NWRs staff and authorized agents). On-Refuge activities for Refuge visitors conducted by NWRs staff or authorized agents that are designed to foster an understanding and appreciation for natural and cultural resources, and associated management.

Interpretation (not conducted by NWRs staff or authorized agents). On-Refuge activities for Refuge visitors not conducted by NWRs staff or authorized agents that are designed to foster an understanding and appreciation for natural and cultural resources, and associated management.

Is the use a priority public use?

Yes

Where would the use be conducted?

All areas open to the public will be open for environmental education and interpretation. These areas do not have trails or built facilities to support these uses. A road runs through the Yellow Water and Wild Horse units and adjacent to War Horse unit. Parking is currently along the roadways for access into these units. All areas are open to the public and are open for walking to achieve these uses. Refuge signs denote Refuge boundaries.

When would the use be conducted?

Environmental education and interpretation occur year-round as guided or self-guided activities. The Refuge is open sunrise to sunset for the public.

How would the use be conducted?

Environmental education programs are scheduled in advance, and include impromptu presentations and discussions of wildlife conservation issues with interested individual visitors and unscheduled groups. Interpretive and environmental education programs may be given by Refuge staff or volunteers. Teachers may give programs after applying for and receiving a special use permit (SUP). Any program that is conducted on Refuge land and not lead by Refuge staff requires a SUP.

Interpretive or environmental education programs focus on wildlife and habitats. These programs may address several wildlife conservation topics including riparian ecosystems, wetland habitats, migratory bird management, and endangered species conservation. Programs may also include the development of outdoor skills, which enhance appreciation of wildlife and the habitats they live in.

Most wildlife observation and photography activities are conducted individually; however, the Refuge may occasionally help facilitate these activities through workshops, planned events, and tours.

Why is this use being proposed or reevaluated?

Environmental education and interpretation are two priority wildlife-dependent recreational uses of the NWRS identified by the National Wildlife Refuge Improvement Act of 1997 (Improvement Act). These uses help promote the understanding, appreciation, and support of the Refuge System mission.

Availability of Resources

The analysis of cost for administering and managing each use will only include the incremental increase above general operational costs that we can show as being directly caused by the proposed use. The present Refuge environmental education and interpretive programs are available upon request, staff time permitting. Refuge personnel review proposals related to these uses and prepare SUPs. A Refuge parking area and an unimproved road allow for public entry and use. There is currently enough funding and staff available to provide opportunities for these activities depending on the time and specific staff services requested. No additional funding is needed.

One-time costs: None

Annual/recurring expenses (i.e., for annual operations and maintenance):

Offsetting revenues: None

Anticipated Impacts of the Use

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

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 compatibility determination (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.”

The overall impacts to the Refuge and its associated wildlife populations from these uses would be minimal. Environmental education and interpretation, and wildlife

observation and photography can have both positive and negative implications on Refuge resources.

Short-term impacts

There may be temporary disturbance to wildlife on the Refuge from the presence of humans engaging in environmental education and interpretation activities, due to noise and temporary displacement. However, the amount of environmental education and interpretation activities occurring on the Refuge should result in very minimal impacts to wildlife. There are many recommendations for reducing impacts to wildlife: provide visitor education, require staying on trails, closing areas during sensitive periods such as nesting, require minimum set back distances for approach to areas such as rookeries, etc. (Boyle et al. 1985, Erwin 1989, Haverra 1992, Klein 1993, Miller 2001, Morton 1989, Rodgers 1995, Taylor 2003).

Human disturbance to avifauna has been thoroughly documented around the world. Several studies have examined the effects of trail-based recreation on birds inhabiting wildlife refuges and coastal habitats in the eastern United States. McNeil et al. (1992) found that many waterfowl species avoid disturbance by feeding at night instead of during the day. Similarly, Martín et al. (2015) found that human presence caused resident shorebird species to spend less time feeding and more time displaying avoidance behavior, and that the number of shorebirds and gulls within their study site dramatically decreased in response to increased recreation of the area. Disturbance can increase the risk of predation when individuals are forced to forage in more dangerous habitats and can increase intraspecific competition when avoiding humans necessitates movement into suboptimal habitats (Frid and Dill 2002).

Some uses, such as bird observation, are directly focused on viewing certain wildlife species and can cause more significant impacts during the breeding season and winter months. Research has shown that as the intensity of human disturbance increased, avoidance response by birds increased, and that out-of-vehicle activity was more disruptive than vehicular traffic (Klein 1993, Freddy et al. 1986, Vaske et al. 1983). Miller et al. (1998) found bird abundance and nesting activities (including nest success) increased as distance from a recreational trail increased, in both grassland and forested habitats. Some studies have found that some songbird species habituate to repeated intrusion. Frequently disturbed individuals of some species vocalize more aggressively, have higher body masses, or tend to remain in place longer (Cairns and McLaren 1980). Disturbance may affect the reproductive fitness of males by hampering territory defense, mate attraction, and other reproductive functions of song (Arcese 1987, Ewald and Carpenter 1978).

Overall, the existing research clearly demonstrates that disturbance from recreation activities always have at least temporary effects on the behavior and movement of birds within a habitat or localized area (Burger 1981, Burger 1986, Klein 1993, Burger et al. 1995, Klein et al. 1995, Rodgers and Smith 1997, Burger and Gochfeld 1998). The location of recreational activities and the size of participating groups are also

important factors affecting the magnitude of disturbance. A number of species have shown greater reactions when pedestrian use occurred off-trail (Miller et al. 2001, Samia et al. 2015), and when pedestrians traveled in large groups (Beale and Monaghan 2004).

The presence of humans on Refuge land would disturb some wildlife causing temporary displacement without long-term effects. There would be some disturbance to wildlife and vegetation at the locations where interpretive programs occur with groups, but at levels that would not interfere with the purposes of the Refuge. Some species may avoid areas with frequent people, while other species would be unaffected by human presence. However, the overall effect of the use on wildlife would not have a population level impact, because most of the Refuge will experience minimal to no daily public use. Vehicles will utilize the designated road and parking area. Self-guided interpretation may be sporadically used by small groups of people at established trails and kiosks. This may cause short-term disturbance to wildlife, but again would have minimal impact.

Long-term impacts

The Refuge anticipates that no negative long-term impacts will occur as a result of environmental education and interpretation, however, these uses could be modified in the future to mitigate unforeseen impacts. The Refuge also anticipates positive long-term benefits for the public. These uses allow the public to engage in and experience the Refuge and the outdoors. The Refuge will continue to gain relevancy to new, broader audiences and therefore have a greater reach to the public. Additionally, these uses benefit the Refuge by promoting a conservation ethic in the local community and a better appreciation and understanding of the Refuge's wildlife and habitats.

People can be vectors for invasive species by moving seeds or other propagules from one area to another. The threat of invasive species will always be an issue requiring annual evaluation and treatment. Refuge staff will work to look for early detection of invasive species and will educate the visiting public on the environmental damage and conservation challenges invasive species present. Impacts may be considered not significant when analyzed alone but may be considered important when they are evaluated cumulatively. The Refuge's primary concern is repeated disturbance of resting, foraging, or nesting birds by visitors. Refuge staff will continually evaluate disturbance to habitat and habitat quality and, if necessary, respond with management actions to conserve wildlife resources being adversely impacted. Refuge staff, volunteers, and researchers will evaluate the effects of these priority uses and respond to any adverse effects.

Based on the best available knowledge and with added use restrictions, the Refuge does not expect these uses would cause adverse effects. Educating the public about conservation issues would enhance the Refuge's purposes by promoting a conservation ethic.

Public Review and Comment

The draft Comprehensive Conservation Plan (CCP) and accompanying Environmental Assessment and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. Visitors are to adhere to all Refuge rules and regulations as found in the regulations section of the Refuge website and brochure unless otherwise approved in advance by the Refuge.
2. Environmental education and interpretation activities not led by Refuge staff require a SUP to minimize conflicts with other groups, safeguard students and resources, and allow tracking of use levels.
3. Disturbing or attempting to disturb, injure, or collect any plant, berries, mushrooms, animal, animal part, horn, antler, bones, skull, or feather is prohibited except by SUP.
4. Disturbance or collection of any cultural resource is prohibited.
5. Interpretive programming and special events will focus on wildlife, conservation, or other environmental attributes of the Refuge including fostering a respect and appreciation of the NWRS and the Refuge.
6. Entry on all or portions of individual areas may be temporarily suspended based on public safety, wildlife health, or natural resource concerns. When possible, the public

will be given notice of closures. However, unforeseen circumstances may require immediate closure without advanced public notice.

Justification

In accordance with the missions of the NWRS and the Improvement Act, the Refuge has determined that the uses are compatible provided the above stipulations are implemented. Environmental education and interpretation are two priority wildlife-dependent recreational uses of the NWRS identified by the Improvement Act. These uses help promote the understanding, appreciation, and support of the Refuge System mission and help promote public awareness and stewardship of the Refuge's natural and cultural resources. The uses not materially interfere with or detract from the Service's ability to meet the mission of the NWRS, and administration of the uses would only require medium amounts of administrative time and funding.

The Refuge's habitats, wildlife, and public use areas provide a unique environmental education and interpretation experience to visitors, helping them connect with nature and natural ecosystems. Environmental education is designed to develop a citizenry that has the awareness, concern, knowledge, attitudes, skills, motivations, and commitment to work toward solutions of current environmental problems and the prevention of new ones. Interpretation is a communication process that forges emotional and intellectual connections between the interests of the audience and the inherent meanings in the resource (i.e. more than information). Both environmental education and interpretation are necessary to form relationships between the Service and the public and improve a joint stewardship of our natural resources.

Wildlife disturbance is a concern and limited use will help to minimize any adverse impacts to wildlife. Refuge staff will evaluate impacts on Refuge federal trust resources to determine if there are appreciable negative implications of the use.

Mandatory Reevaluation Date

2040

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Compatibility Determination

Title

Compatibility Determination for Fishing, War Horse National Wildlife Refuge

Refuge Use Category

Fishing

Refuge Use Types

Recreational fishing for pleasure, leisure, or for subsistence

Refuge

War Horse National Wildlife Refuge (Refuge)

Refuge Purpose(s) and Establishing and Acquisition Authorities

"...purposes of a land-conservation and land-utilization program ... 7 U.S.C. § 1011 (Bankhead-Jones Farm Tenant Act) "... for use and administration under applicable laws as refuges for migratory birds and other wildlife ..." Secretarial Order 2843, dated Nov. 17, 1959."

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System (NWRS), otherwise known as 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.

What is the Use?

Fishing

Is the use a priority public use?

Yes

Where would the use be conducted?

The Refuge brochure will be available at the Charles M. Russell (CMR) Refuge Complex headquarters, of which War Horse NWR is a part of, and online on the Refuge's website to inform the public of Refuge fishing opportunities, regulations, and safety precautions. Maps are also available, which show the location of Refuge units, roads, and boundaries.

Fishing may occur at either reservoir associated with War Horse unit and Yellow Water unit of War Horse NWR, although the public generally does not use U.S. Fish and Wildlife Service (Service) lands to access the reservoirs.

When would the use be conducted?

Recreational fishing will be in accordance with the seasons and regulations established by the State of Montana. The Refuge may further restrict fishing areas by signs and/or brochures.

How would the use be conducted?

Recreational fishing is permitted in accordance with Montana State rules and regulations, Refuge specific regulations, and those published in Title 50, Code of Federal Regulations. Additionally, Alternative C in the Comprehensive Conservation Plan (CCP) and Environmental Assessment (EA) will ban the use of lead tackle on Refuge lands. Fishing may take place from the shore using pole and line or from a boat when water conditions are deep enough to allow for boat usage.

Fishing by boat may occur on the Yellow Water unit, which includes a portion of the State-owned Yellow Water Reservoir. A boat launching site for small craft is available adjacent to the Yellow Water unit.

Why is this use being proposed or reevaluated?

This compatibility determination (CD) considers fishing, which is one of the six priority wildlife-dependent recreation activities. Fishing was a traditional activity that occurred on Refuge lands prior to and since Refuge establishment. Expanding fishing opportunities and aligning regulations with State agencies implements Secretarial Order 3347, Conservation Stewardship and Outdoor Recreation; and Secretarial Order 3356, Hunting, Fishing, Recreational Shooting, and Wildlife Conservation Opportunities and Coordination with States, Tribes, and Territories.

Availability of Resources

Resources involved in the administration and management of the use include personnel time associated with administration and law enforcement.

No special equipment or facilities are necessary to support the uses. Maintenance costs are not directly attributable to the incidental uses on the Refuge. Minimal costs are associated with the uses to monitor the consequences of the public having access to the Refuge, such as the degree of littering and vandalism. Plants and wildlife will be monitored to determine any impacts are a result of public use.

One-time costs: None

Annual/recurring expenses (i.e., for annual operations and maintenance):

1. Maintenance costs: Maintenance costs are expected to be negligible from this use on the Refuge. There are no expected increased costs to maintaining Refuge infrastructure outside normal use of roads and other developed areas.
2. Annual Operations: The bulk of the cost for fishing is incurred in staff time to administration and management of the use include personnel time associated with administration and law enforcement.
3. Monitoring costs: Minimal costs are associated with the uses to monitor the consequences of the public's having access to the Refuge, such as the degree of littering and vandalism.

Offsetting revenues: None

Anticipated Impacts of the Use

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

Refuge System mission

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."

Short-term impacts

The effects of fishing activities on migratory and shore birds include noise, and displacement. Compaction of vegetation may occur along the shores and along creeks from fisherman accessing fishing points. Disturbances caused by fishing do not have an appreciable adverse impact on wildlife resources given that fishing activities are infrequent at best. Shorelines are monitored for erosion. Trash is the single greatest impact on refuges associated with this use.

Long-term impacts

Fishing can cause an increased disturbance of wildlife (or habituation of wildlife) in public use areas and associated changes in wildlife use patterns on the Refuge. Additionally, lead fishing tackle still represents a source of lead poisoning in susceptible birds, primarily loons and swans. Loons are infrequent on the Refuge. Both trumpeter and tundra swans occasionally use the water associated with the Yellow Water unit and War Horse unit seasonally.

The best available science indicates that lead fishing tackle may have negative impacts on wildlife and human health and the environment. This broad potential for adverse impacts is not inherent to fishing, but specifically to the use of lead fishing tackle.

Requiring lead-free fishing tackle will eliminate the increased threat of potentially negative impacts to the human environment and to fish and wildlife species from lead that may be available from lost fishing tackle.

Public Review and Comment

The draft CCP and accompanying EA and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. A Montana fishing license is required to fish on the Refuge.
2. State fishing regulations and limits apply to the Refuge.
3. Any boat use must be in accordance with State regulations.

Justification

The viability of the game species populations proposed to be fished will not be negatively affected by fishing according to state season guidelines, bag limits, and regulations. This use is being permitted because it is a priority public use. It will not diminish the primary purposes for which the Refuge was established. It also meets the mission of the Refuge System by providing renewable resources for the benefit of the

American public while conserving viable populations of fish, wildlife, and plant resources on these lands.

Fishing is a priority public use on the Refuge. By allowing this use, we are providing opportunities and facilitating Refuge programs in a manner and location that offer high quality, wildlife-dependent recreation and maintain the level of current wildlife values. Any new lands purchased as part of the Refuge can be open to fishing depending on the manager's discretion using professional judgment, as long as there is no significant negative impact on natural resources or visitor services.

This activity will not materially interfere with, or detract from, the mission of the Refuge System or the purpose for which the Refuge was established.

Mandatory Reevaluation Date

2040

Compatibility Determination

Title

Compatibility Determination for Hunting at War Horse National Wildlife Refuge

Refuge Use Category

Hunting

Refuge Use Types

Hunting big game; Hunting upland birds; Hunting migratory birds

Refuge

War Horse National Wildlife Refuge (NWR)

Refuge Purpose(s) and Establishing and Acquisition Authorities

"...purposes of a land-conservation and land-utilization program ... 7 U.S.C. § 1011 (Bankhead-Jones Farm Tenant Act)"... for use and administration under applicable laws as refuges for migratory birds and other wildlife ..." Secretarial Order 2843, dated Nov. 17, 1959."

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System (NWRS), otherwise known as 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.

What is the use?

The hunting of migratory birds, upland birds, and big game as an approved wildlife-dependent priority public use and as outlined in the 1997 National Wildlife Refuge System Improvement Act (Improvement Act). Hunting of migratory birds, upland birds, and big game is in accordance with State regulations and seasons accompanied by specific War Horse NWR (Refuge) regulations and restrictions outlined below:

- Hunting for waterfowl, which are classified as migratory birds, is federally mandated to use lead-free ammunition.

- Lead-free ammunition is currently required for upland bird hunting.

Refuge management may further enact, as deemed appropriate at any time, further restrictions or regulations for such reasons as, but not limited to:

- Protection of wildlife.
- Protection of certain specific wildlife species where State regulations are absent, fail to provide reasonable harvest limits, or allow harvest methods not conducive with Refuge values.
- Protection of natural resources.
- Public safety.

Is the use a priority public use?

Yes

Public hunting is a historical wildlife-dependent use of the Refuge and is designated as one of the priority public uses as specified in the Improvement Act.

Where would the use be conducted?

The Refuge brochure will be available at the Charles M. Russell (CMR) Refuge Complex headquarters, of which War Horse NWR is a part of, and online on the Refuge's website to inform the public of Refuge hunting opportunities, regulations, and safety precautions. Maps are also available, which show the location of Refuge units, roads, and boundaries.

Specifically, hunting for big game, upland birds, and migratory birds may occur in accordance with State regulations and specific Refuge regulations and restrictions, on all units of the Refuge. War Horse Waterfowl Production Area, which is adjacent to the Refuge, is also open for hunting according to State regulations.

When would the use be conducted?

Hunting would occur in accordance with State regulated seasons, dates, and times in the State region/zone/area in which the Refuge resides. Additionally, hunting shall be in accordance with any specific Refuge regulations and restrictions regarding units, seasons, dates, and times, and that Refuge management may further enact as deemed appropriate at any time for such reasons as, but not limited to, protection of wildlife; protection of certain specific wildlife species where State regulations are absent, fail to provide reasonable harvest limits, or allow harvest methods not conducive with Refuge values; protection of natural resources; and public safety.

How would the use be conducted?

Hunting will take place in accordance with State regulations pursuant to seasons, zones/regions/areas, bag limits, and take method regulations. Generally, centerfire rifles are used for big game, with occasional shotguns using slugs, while shotguns

with birdshot are used for migratory and upland bird hunting. Additionally, hunting shall be in accordance with any specific Refuge regulations and restrictions regarding seasons, dates, times, and allowable take methods. Refuge management may further enact, at any time, more restrictive regulations such as, but not limited to season dates, times, and take measures where it deems such measures are appropriate.

All other wildlife species outside of big game, upland birds, and migratory birds are protected to include, but not limited to coyotes, prairie dogs, jackrabbits, cottontail rabbits, badgers, and bobcats.

Why is this use being proposed or reevaluated?

With the issuance of a Comprehensive Conservation Plan (CCP) and Environmental Assessment (EA), this use requires a compatibility determination (CD). Recreational public hunting is a historical wildlife dependent use of the CMR Refuge Complex, of which the Refuge is a part of. Hunting is also designated as one of the priority public uses as specified in the Refuge Improvement Act.

Required boundary and informative signage is already in place with more slated for installation to inform the public of the Refuge's specific boundaries and use areas. This same signage will provide the necessary infrastructure to support hunting on the Refuge. Current staffing levels and funding are adequate to support hunting on the Refuge. Special regulations and restrictions will be in place to minimize negative impacts to the Refuge and its associated wildlife. Montana state law further controls hunter activities through State regulations and restrictions.

Hunting is a legitimate wildlife management tool that can be used to control wildlife populations having excess. Hunting harvests a small percentage of the renewable excess population resource(s), which is in accordance with wildlife management objectives and principals.

Availability of Resources

One-time costs: A one-time cost approximately every 10 years associated with purchasing, creating, replacing signage is part of the Refuge's expected budget and thus not additive.

Annual/recurring expenses (i.e., for annual operations and maintenance):

Maintenance costs: Maintenance costs are expected to be negligible from this use on the Refuge. There are no expected increased costs to maintaining Refuge infrastructure outside normal use of roads and other developed areas, such as parking areas. Installation of informative and boundary signage to facilitate hunting on the Refuge is a regular part of staff duties, thus no extra cost from their installation is additive.

Annual Operations: Adequate resources are available to manage the existing hunting

program at the current level of participation.

Offsetting revenues: None

Anticipated Impacts of the Use

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

The Proposed implementation of hunting as a use will produce no appreciable adverse impacts to Refuge purposes or the Refuge System mission for the aforementioned reasons: a) hunting has been a historical wildlife dependent use within the CMR Refuge Complex and b) is an approved wildlife dependent use as specified in the Improvement Act. 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.”

- There will be no negative effects on threatened and endangered species.
- There will be no negative effects on cultural resources.

Short-term impacts

Non-target wildlife may be temporarily displaced by the noise and presence of hunters in the vicinity. There will be mortality to the individual, targeted species. Temporary impacts to the habitat are expected due to possible illegal off-road travel. To mitigate the possible impact, the Refuge will establish parking areas. We also enforce a pack-in, pack-out policy encouraging folks to remove their trash.

Lead ammunition is restricted for use for upland game birds and migratory game birds. Since no additional lead from hunting these species will be added to the environment, results could have some beneficial effect on migratory birds or avian predators that prey upon them that occur on the Refuge, thus reducing the overall effects of lead poisoning from lead reduction in the environment.

Lead hunting ammunition for big game species is currently allowed. Studies have shown that where eagles are present to scavenge carcasses, lead can have a detrimental effect on their health when ingested in sufficient quantity. The Service continues a vigorous campaign of educating all hunters on the effects of lead ammunition in the natural environment to mitigate its future use and subsequent introduction in the environment.

Long-term impacts

Hunting can cause long-term shifts in the behavior and dynamics of the targeted species. However, all hunting must be done in accordance with State regulations. State regulations ensure that hunting is conducted in a manner that maintains healthy populations of wildlife. Hunting can be a necessary tool to protect non-target wildlife and habitat when species become overpopulated, as overpopulation of a species (especially big game species) causes damage to, water resources, soils and vegetation in the vicinity, as well as adversely impacting other wildlife.

As discussed above, hunting is a highly regulated activity, and generally takes place at specific times and seasons when there is a harvestable surplus of game animals, reducing the magnitude of disturbance to refuge wildlife. Managed and regulated hunting will not reduce species populations to levels where other wildlife-dependent uses will be affected.

Regulations and seasons will be designated to minimize any negative impacts to wildlife populations using the Refuge. Harvesting these game animal species would not result in a substantial decrease in biological diversity on the Refuge. Wildlife populations on the Refuge are able to sustain hunting and support other wildlife dependent priority uses. To manage the populations to support hunting, the Refuge adopts harvest regulations set by the State within federal framework guidelines. Recreational hunting will remove individual animals but will not negatively affect wildlife populations.

Lead ammunition is not permitted for migratory game birds or upland game birds. This reduces the potential long-term risk from the introduction of additional lead ammunition in hunting these species on Refuge lands as included in this CCP. Additional lead from hunting these species would no longer enter the environment and potentially impact migratory birds or avian predators that prey upon them and that may occur on the Refuge.

Lead hunting ammunition for big game species is currently allowed. Studies have shown that where eagles are present to scavenge carcasses, lead can have a detrimental effect on their health when ingested in sufficient quantity. The Service continues a vigorous campaign of educating all hunters on the effects of lead ammunition in the natural environment to mitigate its future use and subsequent introduction in the environment.

Public Review and Comment

The draft CCP and accompanying EA and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles->

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During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

Hunting on the Refuge is subject to federal and State regulations and a Montana hunting license is required. Hunting for migratory birds, upland game birds, and big game in compliance with all applicable State and Refuge hunting regulations is permitted on this Refuge.

All other wildlife species outside of big game, migratory birds, and upland birds are protected including, but not limited to coyotes, prairie dogs, jackrabbits, cottontail rabbits, badgers, and bobcats.

1. Visitors are required to park at a designated parking area or immediately adjacent along roads without impeding other through traffic.
2. Target shooting with firearms or archery equipment is prohibited at all times on the Refuge.
3. Collection of antlers, bones, skulls, animal parts, nests, artifacts, and fossils are prohibited.
4. Portable blinds, tree stands, and other personal property used for hunting must be removed each day.
5. Remote trail and or game cameras are not allowed.
6. Vehicles are restricted to open roads and parking areas. Any additional travel on the Refuge is by foot only.
7. Boat use is allowed in accordance with State regulations.
8. Lead-free ammunition is required to hunt migratory game bird and upland game bird species.

Justification

Recreational public hunting is a historical wildlife dependent use of the CMR Refuge Complex, of which War Horse NWR is a part of, and is designated as one of the priority public uses as specified in the Improvement Act. Required infrastructure installation for other uses and public information will directly support the hunting on the Refuge. Current staffing levels and funding are also adequate. Special regulations will be in place to minimize negative impacts to the Refuge and associated wildlife. Montana State law further controls hunter activities. Hunting is a legitimate wildlife management tool that can be used to control excess wildlife populations. Hunting harvests a small percentage of the renewable excess population resource(s), which is in accordance with wildlife management objectives and principals.

Mandatory Reevaluation Date

2040

Figure(s)

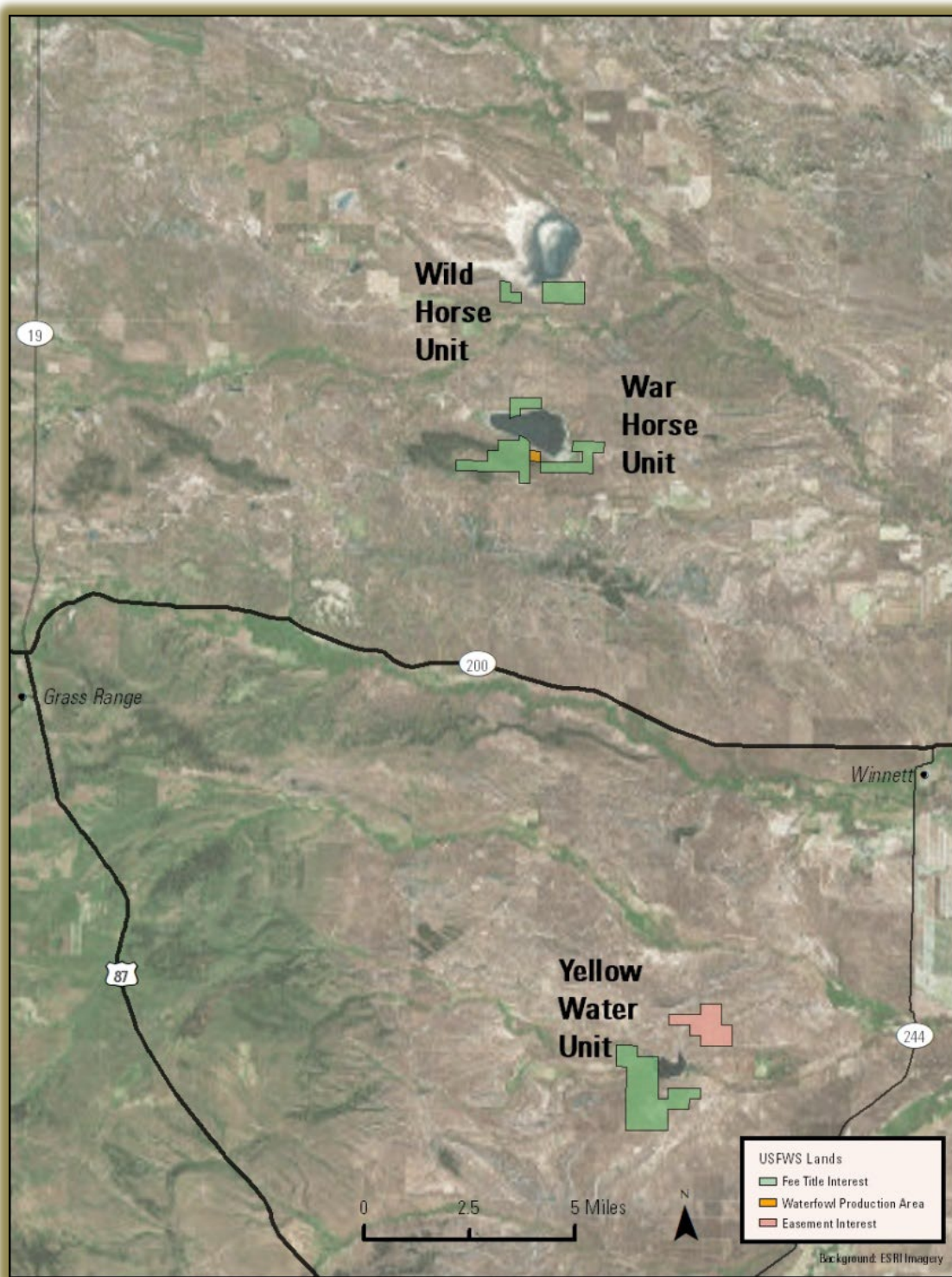


Figure 1. Map of All Three War Horse NWR Units

Compatibility Determination

Title

Compatibility Determination for Research, Scientific Collecting, and Surveys, for War Horse National Wildlife Refuge

Refuge Use Category

Research and Surveys

Refuge Use Types

Research, Scientific Collecting, Surveys

Refuge

War Horse National Wildlife Refuge (Refuge)

Refuge Purpose(s) and Establishing and Acquisition Authorities

"...purposes of a land-conservation and land-utilization program ... 7 U.S.C. § 1011 (Bankhead-Jones Farm Tenant Act) "... for use and administration under applicable laws as refuges for migratory birds and other wildlife ..." Secretarial Order 2843, dated Nov. 17, 1959."

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System (NWRS), otherwise known as 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.

What is the use?

Research. Planned, organized, and systematic investigation of a scientific nature conducted by non- U.S. Fish and Wildlife Service (Service) personnel or authorized agent.

Scientific collecting. Gathering of refuge natural resources or cultural artifacts for scientific purposes conducted by non-Service personnel or authorized agent.

Surveys. Scientific inventory or monitoring conducted by non-Service personnel or authorized agents.

Research conducted by non-Service personnel includes research conducted by Federal, State, and private entities, such as the U.S. Geological Survey; State departments of natural resources; students and professors at State and private universities; and independent non-governmental researchers and contractors. Research activities will focus on species, habitats and recreational activities as identified in the Refuge's management plan and other stepdown plans or will address research questions that will provide information to better manage the Refuge.

Acceptable research methods include but are not limited to bird banding, mist netting, point count surveys, radio-telemetry tracking, cameras, recorders, and public surveys.

Requests for special use permits (SUP) for research will be considered on a case-by-case basis, as staff availability allows. In accordance with 16 U.S.C. 668dd(d) and 50 C.F.R. Part 25, Subpart D, the Refuge manager is responsible for reviewing applications for SUPs and determining whether to authorize a permit.

The Refuge manager will base the decision to issue an SUP for research on their professional judgment and the value of the proposed research. The decision to allow a particular research project will also be consistent with Service regulations and policy, including the Policy on Maintaining the Biological Integrity, Diversity, and Environmental Health of the Refuge System (601 FW 3).

The results of the research should result in better knowledge of our natural resources and improve methods to manage, monitor, and protect the Refuge's biological resources and visitor uses. The Refuge manager will always have the discretion to deny or reevaluate the appropriateness and compatibility of any specific research by non-Service personnel at any time [603 FW 2.1 H(1), (2)].

The Refuge manager may deny a project based on field experiences, knowledge of the Refuge's natural resources, particularly its biological resources, available scientific information, and after consulting with other experts, both inside and outside the Service. When denying a request for a specific research project, the refuge manager will explain the rationale and conclusions supporting their decision in writing. The rationale for the denial will be consistent with the principles of sound fish and wildlife management, Refuge administration, and applicable laws. The denial will generally be based on, but not limited to, evidence that the details of a particular research project might: lead to the impairment of our conservation mission; detract from fulfilling the Refuge's purposes; conflict with the conservation goals or objectives in approved Refuge management plans; not be manageable with the available budget or staff time; be inconsistent with public safety; or conflict with maintaining or restoring the biological integrity, diversity, and environmental health of the Refuge's priority habitats.

Is the use a priority public use?

No

Research conducted by non-Service personnel is not a priority public use of the Refuge System under the Refuge System Administration Act of 1966 (16 U.S.C. 668dd668ee), as amended by the National Wildlife Refuge Improvement Act of 1997. Although this use is not a priority public use, this activity would allow permitted researchers access to the Refuge to conduct both short-term and long-term research projects.

Where would the use be conducted?

The location of the research will vary depending on the individual research project that is being conducted. The entire Refuge may be considered in a SUP request for scientific research; however, biological research projects are usually focused on a particular habitat type, plant species, or wildlife species.

Occasionally, research projects will encompass an assemblage of habitat types, plants, or wildlife, or may span more than one Refuge or include lands outside the Refuge System. The research location will also be limited only to those areas of the Refuge that are necessary to conduct the research project and access the research location. This may include access to Refuge roads that are closed to the public. The Refuge may limit areas available to research as necessary to ensure the protection of trust resources or reduce conflict with other compatible Refuge uses. Access to study locations will be identified by Refuge staff.

When would the use be conducted?

The timing of the research will depend on the individual research project's approved design. Research may occur on the Refuge throughout the year when there are no conflicts with protection of trust resources or primary public use activities. Special precautions will be required and enforced to ensure the researchers' health and safety and to minimize or eliminate potential conflicts with a priority public use. An individual research project could be short term in design, requiring one or two visits over the course of a few days. Other research projects could be multiple year studies that require daily visits to the study site. The timing of each individual research project will be limited to the minimum required to complete the project.

How would the use be conducted?

Research methods will depend entirely on the individual research project that is conducted. The methods of each research project will be reviewed and scrutinized before it will be allowed to occur on the Refuge.

No research project will be allowed to occur if:

- It negatively impacts endangered species, migratory birds, and other Refuge trust resources;

- It compromises public health and safety.

A Research and Monitoring Special Use Application and detailed research proposal will be required from parties interested in conducting research on the Refuge. Each request for this use will be considered, and if appropriate, will be issued a SUP by the refuge manager. Each request will be evaluated on its own merit. The refuge manager will use sound professional judgment and ensure that the request will have no considerable negative impacts to natural resources, cultural resources, or visitor services and does not violate Refuge regulations. Special needs will be considered on a case-by-case basis and are subject to the refuge manager's approval. Any approved SUP will outline the framework in which the use can be conducted, and Refuge staff will ensure compliance with the permit. The SUP will provide any needed protection to individual Refuge policies, mission, wildlife populations and natural habitats. In addition, all research projects require the primary investigator to submit written summary reports of all findings and acknowledge the Refuge's participation.

Once approved, projects will be reviewed annually to ensure that they are meeting their intended purposes, reporting and communicating with Refuge staff, and are fulfilling the mission of the Refuge System and purposes for which the Refuge was established. If the refuge manager decides to deny, modify, or halt a specific research project, the refuge manager will explain the rationale and conclusions supporting their decision in writing. The denial or modification to an existing study will generally be based on evidence that the details of a particular research project may:

- Negatively affect native fish, wildlife, and habitats or cultural, archaeological, or historical resources,
- Detract from fulfilling the Refuge's purposes or conflict with Refuge goals and objectives,
- Raise public health or safety concerns,
- Conflict with other compatible Refuge uses,
- Not be manageable within the Refuge's available staff or budget time,
- Deviate from the approved study proposal such that impacts to Refuge resources are more severe or extensive than originally anticipated.

Why is this use being proposed or reevaluated?

Research by non-Service personnel is conducted by colleges; universities; federal, State, and local agencies; non-governmental organizations; and qualified members of the public to further the understanding of the natural environment, the utilization of the natural environment by the American people and to improve the management of the Refuge. Much of the information generated by the research is applicable to management on and near the Refuge. In many cases, research by non-Service personnel ensures the perception of un-biased and objective information gathering which can be important when using the research to develop management

recommendations for politically sensitive issues. Additionally, universities and other Federal partners can access equipment, resources, and facilities unavailable to Refuge staff for analysis of data or biological samples.

The Service will encourage and support research and management studies on Refuge lands that will improve and strengthen biological and social science management decisions. The refuge manager will encourage and seek research relative to approved Refuge objectives that clearly improves land management and recreational opportunities and promotes adaptive management. Priority research addresses information that will better manage the Nation's biological resources and is generally considered important to agencies of the Department of the Interior, the Service, the Refuge System, and state fish and game agencies. Priority research also addresses important management issues, demonstrates techniques for management of species or habitats, or analyzes ways to improve access and recreational use by the public.

The Refuge will also consider research for other purposes which may not be directly related to Refuge-specific objectives, but contribute to the broader enhancement, protection, use, preservation, and management of native populations of fish, wildlife, and plants, and their natural diversity within the region or flyway. Prospective researchers or organizations can talk to the refuge manager or biologist about specific research needs. Similar research could be conducted by potential researchers and organizations on other nearby public and federal lands. However, the research capabilities and support systems, organization goals, habitat, wildlife, hydrology, and geology of each of these locations vary widely. To best account for the research needs, goals, and funding availability of local, state, federal, university, and research specific organizations, the lands where research is permitted should be diverse. Therefore, maintaining and growing the Refuge research program is essential.

Availability of Resources

The analysis of cost for administering and managing each use will only include the incremental increase above general operational costs that we can show as being directly caused by the proposed use. Refuge support of research directly related to Refuge objectives may take the form of funding, in-kind services such as housing or use of other facilities, direct staff assistance with the project in the form of data collection, provision of historical records, conducting management treatments, or other assistance as appropriate. There is currently enough funding and staff available to allow research opportunities. Special equipment, facilities, or improvement costs are expected to be negligible from this use on the Refuge.

One-time costs: None

Annual/recurring expenses (i.e., for annual operations and maintenance):

1. Maintenance costs: Maintenance costs are expected to be negligible from this use on the Refuge. There are no expected increased costs to maintaining Refuge

infrastructure outside normal use of roads and other developed areas.

2. Annual Operations: The bulk of the cost for research is incurred in staff time to review research proposals, coordinate with researchers, and write special use permits. In some cases, a research project may only require one day of staff time to write a special use permit. In other cases, a research project may take an accumulation of weeks, as the Refuge staff must coordinate with the principal researcher and accompany them during site visits. Because research conducted on the Refuge is not constant, there may be fiscal years when little if any time is spent on managing outside research projects by Refuge staff.

3. Monitoring costs: None

Offsetting revenues: None

Anticipated Impacts of the Use

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

Refuge System mission

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 compatibility determination (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."

Short-term impacts

Research activities may disturb fish and wildlife and their habitats. For example, the presence of researchers can cause birds to flush from resting and feeding areas, cause disruption of birds on nests or breeding territories, or increase predation on nests and individual animals as predators follow human scent or trails.

Efforts to capture animals, such as for migratory bird banding, can cause disturbance, injury, or death to groups of wildlife or to individuals. To wildlife, the energy cost of disturbance may be appreciable in terms of disruption of feeding, displacement from preferred habitat, and the added energy expended to avoid disturbance. Sampling activities associated with many types of research activities can cause compaction of soils and the trampling of vegetation. Installation of posts, equipment platforms, collection devices, and other research equipment in open water may present a hazard if said items are not adequately marked and/or removed at appropriate times or upon completion of the project. Research efforts may also discover methods that result in a reduction in impacts described above.

The potential for research conducted on the Refuge to conflict with Refuge management activities (e.g., prescribed burning, prescribed grazing, herbicide

applications) and visitor use on the Refuge is minimal. Research would be scheduled to minimize conflict with Refuge management activities. Visitors may encounter researchers in the field or observe monitoring plots or other research infrastructure. However, these encounters will be infrequent due to the typically minimal presence of field technicians and interest in maintaining low profile infrastructure to prevent disturbance or vandalism of study sites.

Long-term impacts

Long-term effects should generally be beneficial by gaining information valuable to Refuge management. No long-term negative impacts are expected from the research activities described. The refuge manager can reduce the likelihood of long-term impacts by denying special use permits for research that is likely to cause long-term, adverse impacts. Permits for multi-year research projects are renewed annually, providing the opportunity for an analysis of any impacts before renewing the SUP.

Cumulative impacts would occur if multiple research projects were occurring on the same resources at the same time or if the duration of the research was excessive. In particular, the Refuge must consider the potential impacts of non-Service research, in conjunction with any Service-sponsored research or management activity also taking place. However, no cumulative impacts are expected because the refuge manager can control the potential for cumulative impacts through SUPs, prohibiting multiple research projects from affecting any given area or species at one time. The refuge manager retains the option to deny proposals for research that does not contribute to the mission of the Refuge System or causes undue disturbance or harm to Refuge resources. The refuge manager also retains the right to revoke or deny renewal for any special use permit if unanticipated short-term, long-term, or cumulative impacts occur.

Project-specific stipulations outlined in each will act to minimize anticipated impacts of research projects. These stipulations will prevent impacts to Refuge wetlands, water quality, soils, hydrology, fish, wildlife, habitat, or cultural resources. Projects which occur within the habitat of, or include direct monitoring of, threatened and endangered species will be subject to a Section 7 informal consultation with the Service under the Endangered Species Act (87 Stat. 854, as amended; 16U.S.C. 1531 et seq.). Only with the approval of the Section 7 consultation will the Refuge permit research to be conducted on habitats or individuals of threatened and endangered species. Research that could adversely affect critical habitat, threatened or endangered wildlife, or cultural resources will not be permitted.

Public Review and Comment

The draft Comprehensive Conservation Plan (CCP) and accompanying Environmental Assessment and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box

110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. Prior to initiation of any research and/or management studies on the Refuge, the requesting agency or organization is required to meet with Refuge management in person and present a comprehensive proposal of why the research is proposed to be undertaken, all methodologies involved, expected short- and long-term impacts of the activities, duration of the research, and anticipated completion date of the report.
2. The requesting agency or organization must apply for a permit by submitting a NWRS Research and Monitoring Special Use Permit Application and a detailed research proposal.
3. Researchers must give the District at least 45 days to review proposals and determine if a special use permit will be issued. If the research involves the collection of wildlife, the District must be given 60 days to review the proposal.
4. Researchers must obtain all necessary scientific collecting, banding, or other permits required by State, federal, or Institutional Animal Care and Use Committee entities before starting the research.
5. Priority of approval will be based on studies that contribute to the enhancement, protection, use, preservation, and management of native wildlife populations and their habitat.
6. SUPs may contain specific terms and conditions that the researcher(s) must follow relative to activity, location, duration, and time-of year restrictions to ensure continued compatibility.
7. All Refuge rules and regulations must be followed unless alternatives are otherwise accepted in writing by Refuge management.
8. Any research involving ground disturbance may require historic preservation

consultation with the Regional Historic Preservation Officer and/or State Historic Preservation Officer.

9. All research related SUPs will contain a statement regarding the Service's policy regarding disposition of biotic specimen.

10. Upon completion of a project, researchers are required to remove all research apparatus in the field and restore any disturbed lands to their original state.

11. Any research project may be terminated at any time for non-compliance with the SUP conditions. Research projects may also be modified, redesigned, relocated, or terminated at any time upon determination by the Refuge manager that the project is causing unanticipated adverse impacts to wildlife, wildlife habitat, approved priority public uses, or other Refuge management activities. Refuge staff will conduct annual reviews of the research project to monitor researcher activities for potential impacts to the Refuge and for compliance with conditions on the SUP. The Refuge manager may terminate previously approved research and SUPs if adverse impacts are observed or if the researcher is not in compliance with the stated conditions.

12. The Service expects researchers to submit a final report to the Refuge upon completing their work. For long-term studies, we may also require interim progress reports. All reports, presentations, posters, articles, or other publications will acknowledge the Refuge System and the Refuge as partners in the research.

Justification

The Service encourages research on national wildlife refuges to collect new information which will improve the quality of Refuge and other Service management decisions, to expand the body of scientific knowledge about fish and wildlife, their habitats, the use of these resources, appropriate resource management, and the environment in general, and to provide the opportunity for students and others to learn the principles of field research. In accordance with 50 CFR 26.41, research conducted by non-Service personnel, as described in this CD, will not materially interfere with, or detract from, the fulfillment of the Refuge System mission or the purposes for which the Refuge was established.

Mandatory Reevaluation Date

2035

Compatibility Determination

Title

Compatibility Determination for Wildlife Observation and Photography for War Horse National Wildlife Refuge

Refuge Use Category

Wildlife Observation and Photography

Refuge Use Types

Photography* (filming, still photography, and audio recording)

Wildlife observation

** In accordance with Public Law 118-234 the Expanding Public Lands Outdoor Recreation Experiences Act (EXPLORE Act), enacted on January 4, 2025, the Service will not differentiate between commercial and non-commercial filming use.*

Refuge

War Horse National Wildlife Refuge (Refuge)

Refuge Purpose(s) and Establishing and Acquisition Authorities

"...purposes of a land-conservation and land-utilization program ... 7 U.S.C. § 1011 (Bankhead-Jones Farm Tenant Act)"... for use and administration under applicable laws as refuges for migratory birds and other wildlife ..." Secretarial Order 2843, dated Nov. 17, 1959."

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System (NWRS), otherwise known as 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.

What is the use?

Photography (filming, still photography, or audio recording). Activity involving photography, videography, filming, or other recording of sight or sound of natural or cultural resources (e.g., fish, wildlife, plants, and their habitats) or public uses of those

resources by Refuge visitors.

Wildlife observation. Viewing of fish, wildlife, plants, or their habitats by Refuge visitors.

Is the use a priority public use?

Yes

Where would the use be conducted?

All areas open to the public will be open for wildlife observation and photography. These areas do not have trails or built facilities to support these uses. A road runs through the Yellow Water and Wild Horse units and adjacent to War Horse unit. Parking is currently along the roadways for access into these units. All areas are open to the public and are open for walking to achieve these uses. Refuge signs denote Refuge boundaries.

When would the use be conducted?

Wildlife observation and photography occur year-round as guided or self-guided activities. The Refuge is open sunrise to sunset for the public.

How would the use be conducted?

Most wildlife observation and photography activities are conducted individually; however, the Refuge may occasionally help facilitate these activities through workshops, planned events, and tours.

Why is this use being proposed or reevaluated?

Wildlife observation, and photography are two priority wildlife-dependent recreational uses of the NWRS identified by the National Wildlife Refuge Improvement Act of 1997 (Improvement Act). These uses help promote the understanding, appreciation, and support of the Refuge System mission.

Availability of Resources

The analysis of cost for administering and managing the use will only include the incremental increase above general operational costs that we can show as being directly caused by the proposed use. Wildlife observation and photography are self-led activities. A Refuge parking area and an unimproved road allow for public entry and use. There is currently enough funding and staff available to provide opportunities for these activities depending on the time and specific staff services requested. No additional funding is needed.

One-time costs: None

Annual/recurring expenses (i.e., for annual operations and maintenance):

Offsetting revenues: None

Anticipated Impacts of the Use

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

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 compatibility determination (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.”

The overall impacts to the Refuge and its associated wildlife populations from these uses would be minimal. Wildlife observation and photography can have both positive and negative implications on Refuge resources.

Short-term impacts

Human disturbance to migratory birds and other wildlife has been documented in many studies. Among activities considered as disturbing to wildlife, Korschen (1992) determined that bird watching was among the least disturbing, but Klein (1993) noted that approaching birds on foot was the most disruptive of usual refuge activities. Some photographers are more likely to cause disturbance by lingering in a sensitive area, using recorded calls, and even altering the vegetation at a site to gain a better view (Glinski 1976). However, photography can be useful as a tool to engage others and develop support for wildlife with images that appeal to people's emotions (Hanisch 2017). There are many recommendations for reducing impacts to wildlife: provide visitor education, require staying on trails, closing areas during sensitive periods such as nesting, require minimum set back distances for approach to areas such as rookeries, etc. (Boyle et al. 1985, Erwin 1989, Haverra 1992, Klein 1993, Miller 2001, Morton 1989, Rodgers 1995, Taylor 2003).

Human disturbance to avifauna has been thoroughly documented around the world. Several studies have examined the effects of trail-based recreation on birds inhabiting wildlife refuges and coastal habitats in the eastern United States. McNeil et al. (1992) found that many waterfowl species avoid disturbance by feeding at night instead of during the day. Similarly, Martin et al. (2015) found that human presence caused resident shorebird species to spend less time feeding and more time displaying avoidance behavior, and that the number of shorebirds and gulls within their study site dramatically decreased in response to increased recreation of the area. Disturbance can increase the risk of predation when individuals are forced to forage in more dangerous habitats and can increase intraspecific competition when avoiding humans necessitates movement into suboptimal habitats (Frid and Dill 2002).

Some uses, such as bird observation, are directly focused on viewing certain wildlife species and can cause more significant impacts during the breeding season and winter months. Research has shown that as the intensity of human disturbance

increased, avoidance response by birds increased, and that out-of-vehicle activity was more disruptive than vehicular traffic (Klein 1993, Freddy et al. 1986, Vaske et al. 1983). Miller et al. (1998) found bird abundance and nesting activities (including nest success) increased as distance from a recreational trail increased, in both grassland and forested habitats. Some studies have found that some songbird species habituate to repeated intrusion. Frequently disturbed individuals of some species vocalize more aggressively, have higher body masses, or tend to remain in place longer (Cairns and McLaren 1980). Disturbance may affect the reproductive fitness of males by hampering territory defense, mate attraction, and other reproductive functions of song (Arcese 1987, Ewald and Carpenter 1978).

Overall, the existing research clearly demonstrates that disturbance from recreation activities always have at least temporary effects on the behavior and movement of birds within a habitat or localized area (Burger 1981, Burger 1986, Klein 1993, Burger et al. 1995, Klein et al. 1995, Rodgers and Smith 1997, Burger and Gochfeld 1998). The location of recreational activities and the size of participating groups are also important factors affecting the magnitude of disturbance. A number of species have shown greater reactions when pedestrian use occurred off-trail (Miller et al. 2001, Samia et al. 2015), and when pedestrians traveled in large groups (Beale and Monaghan 2004).

The presence of humans on Refuge land would disturb some wildlife causing temporary displacement without long-term effects. There would be some disturbance to wildlife and vegetation at the locations where interpretive programs occur with groups, but at levels that would not interfere with the purposes of the Refuge. Some species may avoid areas with frequent people, while other species would be unaffected by human presence. However, the overall effect of the use on wildlife would not have a population level impact, because most of the Refuge will experience minimal to no daily public use. Vehicles will utilize the designated road and parking area. Self-guided interpretation may be sporadically used by small groups of people at established trails and kiosks. This may cause short-term disturbance to wildlife, but again would have minimal impact.

Long-term impacts

Engaging in activity associated with wildlife observation and photography can be done with very little impact to wildlife (Burger et al. 1995). However, if measures are not taken to reduce disturbance, wildlife can suffer from being displaced to less desirable habitat, forced to use important energy reserves, cause the animal to change behaviors from, for example, breeding to seeking cover, and much more (Arcese 1987, Belanger et al. 1990, Burger et al. 1995, Burger 1996, Burger and Gochfeld 1998, Henson et al. 1991, Kaiser et al. 1984, Korschen 1992, Taylor et al. 2003, Yalden et al. 1990).

The Refuge anticipates that no negative long-term impacts will occur as a result of environmental education and interpretation, however, these uses could be modified

in the future to mitigate unforeseen impacts. The Refuge also anticipates positive long-term benefits for the public. These uses allow the public to engage in and experience the Refuge and the outdoors. The Refuge will continue to gain relevancy to new, broader audiences and therefore have a greater reach to the public. Additionally, these uses benefit the Refuge by promoting a conservation ethic in the local community and a better appreciation and understanding of the Refuge's wildlife and habitats.

People can be vectors for invasive species by moving seeds or other propagules from one area to another. The threat of invasive species will always be an issue requiring annual evaluation and treatment. Refuge staff will work to look for early detection of invasive species and will educate the visiting public on the environmental damage and conservation challenges invasive species present. Impacts may be considered not significant when analyzed alone but may be considered important when they are evaluated cumulatively. The Refuge's primary concern is repeated disturbance of resting, foraging, or nesting birds by visitors. Refuge staff will continually evaluate disturbance to habitat and habitat quality and, if necessary, respond with management actions to conserve wildlife resources being adversely impacted. Refuge staff, volunteers, and researchers will evaluate the effects of these priority uses and respond to any adverse effects.

Based on the best available knowledge and with added use restrictions, the Refuge does not expect these uses would cause adverse effects. Educating the public about conservation issues would enhance the Refuge's purposes by promoting a conservation ethic.

Public Review and Comment

The draft Comprehensive Conservation Plan (CCP) and accompanying Environmental Assessment and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. Visitors are to adhere to all Refuge rules and regulations as found in the regulations section of the Refuge website and brochure unless otherwise approved in advance by the Refuge.
2. Disturbing or attempting to disturb, injure, or collect any plant, berries, mushrooms, animal, animal part, horn, antler, bones, skull, or feather is prohibited except by special use permit.
3. Disturbance or collection of any cultural resource is prohibited.
4. Entry on all or portions of individual areas may be temporarily suspended based on public safety, wildlife health, or natural resource concerns. When possible, the public will be given notice of closures. However, unforeseen circumstances may require immediate closure without advanced public notice.
5. In general, special use permits (SUP) are not required for photography parties of eight or fewer individuals, providing that the user conducts the photography activity in a manner that:
 - does not impede or intrude on the experience of other visitors to the Federal land management unit;
 - except as otherwise authorized, does not disturb or negatively impact a natural or cultural resource or an environmental or scenic value; and
 - allows for equitable allocation or use of facilities of the Federal land management unit.
6. Parties of eight or fewer individuals participating in photography must meet the following conditions:
 - Conduct the filming or still photography activity at a location in which the public is allowed.
 - Not require the exclusive use of a site or area.
 - Not conduct the filming or still photography activity in a localized area that receives a very high volume of visitation.
 - Not use a set or staging equipment, subject to the limitation that handheld equipment (such as a tripod, monopod, and handheld lighting equipment)

shall not be considered staging equipment.

- Adhere to visitor use policies, practices, and regulations applicable to the Service land management unit.
- Comply with other applicable Federal, State (as defined in section 2 of the EXPLORE Act), and local laws (including regulations), including laws relating to the use of unmanned aerial equipment.
- The filming or still photography activity is not likely to result in additional administrative costs incurred by the Service.

7. In accordance with the EXPLORE Act, photography parties of more than eight individuals should submit a General Activity SUP application to the Charles M. Russell Wetland Management District staff for filming or still photography by parties of more than eight individuals. In addition, parties of any size that do not meet the requirements for photography described above should submit a General Activity SUP application to the Charles M. Russell Wetland Management District staff. When an SUP is required, the District Manager may require the permittee to pay cost recovery fees for permit administration costs.

8. Pursuant to 50 C.F.R. 27.34 (Aircraft) and where applicable 50 C.F.R. 27.51 (Disturbing, injuring, and damaging plants and animals), drones are not permitted on NWRS lands.

Justification

In accordance with the missions of the NWRS and the Improvement Act, the Refuge has determined that the uses are compatible provided the above stipulations are implemented. Wildlife observation and photography are two of the priority wildlife-dependent recreational uses of the NWRS identified by the Improvement Act. These uses help promote the understanding, appreciation, and support of the Refuge System mission and help promote public awareness and stewardship of the Refuge's natural and cultural resources. The uses do not materially interfere with or detract from the Service's ability to meet the mission of the NWRS, and administration of the uses would only require medium amounts of administrative time and funding.

The Refuge's habitats, wildlife, and public use areas provide a unique wildlife observation, and/or photography experience to visitors, helping them connect with nature and natural ecosystems. Wildlife observation and photography facilitate the connection to nature and the need for conservation. These activities may also enhance environmental education and interpretation programs by allowing visitors experience nature in a more immersive way.

Wildlife disturbance is a concern and limited use will help to minimize any adverse impacts to wildlife. Refuge staff will evaluate impacts on Refuge federal trust resources to determine if there are appreciable negative implications of the use.

Mandatory Reevaluation Date

2040

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Compatibility Determination

Title

Compatibility Determination for Grazing: Lake Mason National Wildlife Refuge

Refuge Use Category

Agriculture, Aquaculture, and Silviculture

Refuge Use Types

Grazing

Refuge

Lake Mason National Wildlife Refuge (Refuge)

Refuge Purpose(s) and Establishing and Acquisition Authorities

"... purposes of a land-conservation and land-utilization program ... 7 U.S.C. § 1011 (Bankhead-Jones Farm Tenant Act) "... for use and administration under applicable laws as refuges for migratory birds and other wildlife ..." Secretarial Order 2843, dated Nov. 17, 1959. "... as a refuge and breeding ground for migratory birds and other wildlife: ..." Executive Order 8770, dated June 3, 1941. "... 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 U.S.C. § 460k-1 "... 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 U.S.C. § 460k-2 (Refuge Recreation Act (16 U.S.C. § 460k-460k-4), as amended). "... 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), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986) "... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. § 715d (Migratory Bird Conservation Act) "... conservation, management, and ... restoration of the fish, wildlife, and plant resources and their habitats ... for the benefit of present and future generations of Americans..." 16 U.S.C. § 668dd(a)(2) (National Wildlife Refuge System Administration Act)"

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System, otherwise known as Refuge System (NWRS), 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.

What is the use?

Prescriptive grazing as a tool to improve habitat conditions for specific wildlife or focal bird species, migratory songbirds, and other grassland-obligate species. Future prescriptive grazing regimens may include short-duration, high-intensity grazing treatments to control invasive plants; habitat management for specific wildlife or focal bird species; or rotation of grazing areas on the Refuge to provide more long-term rest between grazing treatments. The Refuge currently uses cattle livestock (here forth livestock) grazing as a tool to manage grassland and mixed sagebrush grassland habitats. Livestock grazing is designed to mimic some of the behaviors and grazing habits of early native grazers, which were formerly present on the Refuge's landscape around the early-1800s. Grazing by livestock is a preferred management tool because the effect on habitat is controllable, measurable, and can reasonably mimic early grazers' habits. It has the additional benefit of reducing wildfire risk by reducing the amount of light fuels that can carry a fire. Livestock grazing is utilized in a variety of ways including: high intensity-short duration, rest rotation, and complete rest.

Is the use a priority public use?

No

Where would the use be conducted?

The use would be implemented across the Refuge where the U.S. Fish and Wildlife Service (Service) has control over the use; specifically, on grassland and mixed grassland sagebrush areas. Habitat management units within areas to be grazed will be established to control grazing treatments and help ensure desired habitat characteristics in accordance with the Charles M. Russell Wetland Management District Comprehensive Conservation Plan (CCP) goals and objectives. Units that are fenced from common pastures would be the first units enrolled into prescriptive grazing. Habitat management units that are not fenced from private or other government owned lands would be managed under existing management plans.

When would the use be conducted?

Grazing may occur during any season depending on the specific objectives to be achieved. Conversion to a prescriptive grazing system means a permit may not always be available annually. Exact times and dates vary per unit in accordance with habitat and management objectives in the CCP.

How would the use be conducted?

Grazing will be administered in accordance with the Service's Cooperative Agriculture Use Policy (620 FW 2) and a Cooperative Agriculture Agreement (CAA) consisting of a Commercial Special Use Permit (SUP) having special conditions and a detailed Plan of Operations outlining allowable Animal Unit Months (AUMs), on-off dates, unit locations, unit rotations, and specific instructions pertinent to grazing.

Select grazing units may receive annual grazing treatments consisting of high intensity-short duration, extended rest, complete rest, and/or on a rotational grazing schedule for various lengths of time and may then be rested for multiple years to achieve desired CCP objectives and landscape habitat characteristics.

Why is this use being proposed or reevaluated?

With the issuance of a CCP and Environmental Assessment (EA), this use requires a compatibility determination (CD).

The use of prescriptive grazing to achieve desired habitat conditions would result in long-term beneficial effects on a variety of wildlife species that use the Refuge and is included in the CCP and corresponding EA as a management tool for the District, wherein the Refuge resides. This use is being proposed in order to move from an annual grazing program to a prescriptive grazing program to meet specific wildlife and habitat management objectives. The Refuge lies within the Great Plains and was known to have native grazers; as such, the landscape's flora and fauna have evolved over millennia with grazing.

The CCP has established goals and objectives for specific habitat types (e.g. grassland, mixed grassland-sagebrush) where prescribed grazing may be utilized. In addition, target wildlife species (e.g. sprague's pipit, mountain plover, chestnut-collared longspur, greater sage-grouse) and their habitat requirements have been identified. This has resulted in objectives that help guide management to meet target wildlife species and their habitat needs. Different grazing strategies may be implemented and assessed in order to determine the best methods for the Refuge to meet the identified habitat goals and objectives of the CCP, as well as combat the spread of invasive graminoids and forbs present in some units.

Availability of Resources

The analysis for administering and managing the use will only include the incremental increase above general operational needs that we can show as being directly caused by the proposed use. The staff time needed for the development and administration of the cooperative grazing program is already committed and available to support the program under current staffing. Most work needed to prepare for this use would continue to be done as part of routine habitat maintenance.

District staff will continue to monitor permittees for violations of permit conditions and trespass. Biologists and the District manager will monitor habitat conditions.

New boundary and temporary fences may need to be constructed to implement prescriptive grazing on common pastures. Temporary water developments may be necessary to facilitate prescriptive grazing in some habitat units in order to meet habitat objectives.

Annual/recurring requirements (i.e., for annual operations and maintenance):

1. Maintenance: Maintenance requirements vary and will be reduced due to the reduction in interior fences necessary to manage prescriptive grazing program according to CCP alternatives. There may be additional needs with the construction and maintenance of temporary and boundary fences which would be constructed anyway in order to manage livestock in common pastures.
2. Annual Operations: District personnel currently spend a small portion of their time issuing permits, monitoring for trespass livestock and habitat conditions.
3. Monitoring: District staff monitor for livestock trespass intermittently; it thus is not a significant portion of staff time.

Offsetting revenues: Refuges receive a percentage of the amount of revenue that is generated from commercial activities occurring on them. These funds aid in costs associated with implementing a prescriptive grazing program.

Anticipated Impacts of the Use

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

Prescribed grazing as a management tool is intended to be utilized to meet habitat and species-specific goals and objectives identified in the CCP, as well as replicate habitat and landscape conditions formerly created by native grazers. This management is intended to maintain and enhance habitat conditions for the benefit of a wide variety of fish and wildlife that utilize the Refuge and includes combating invasive graminoids and forbs. Grazing has the additional benefit of reducing wildfire risk by reducing the amount of light fuels that can carry a fire.

Minimal negative impacts, equal to or perhaps even less than what may have occurred during the former presence of native grazers, are expected through the use of this tool. Landscape character will remain unchanged or may be expected to improve through removal of excessive thatch. Some trampling of areas may occur around watering areas or mineral licks, though no more than what may have occurred with large numbers of native grazers in areas where they congregated or wallowed. Grazing may achieve a mosaic pattern of biomass density throughout the landscape with some areas more intensively grazed than others in certain years to achieve habitat heterogeneity, which could reasonably be expected to have happened when native grazers were present. In addition, while the presence of livestock may disturb some wildlife species, just as with native grazers, and some public visitors, the benefits of this habitat management tool are felt to outweigh these negative impacts

since the landscape evolved with grazing and not without it.

When threatened and endangered species are known or suspected to be on a site, the local Service Ecological Services office will be consulted, and the proper steps will be determined to assess how and what management activities will affect that species and what, if anything, should be pursued.

There will be no negative effects on cultural resources.

Short-term impacts

Short term impacts would include loss of vegetative cover which could result in increased soil erosion. Highly palatable forbs and shrubs would be impacted by grazing affecting a large number of wildlife species from pollinators to big game. However, the benefit would be to the wildlife species that require short cover such as prairie dogs, mountain plovers, McCown's longspur, and grazing ungulates that would graze the fresh growth of grasses. Potential disturbance to some wildlife species and some public users may occur.

Grazing by domestic livestock removes and tramples some or much of the standing vegetation from a tract of grassland. In general, grazing will decrease vegetative heights and litter depths and affect plant composition. The measure of short-term impacts will depend upon the grazing timing (time of year), duration (length of graze), and utilization level (i.e., light, moderate, or full, as it pertains to biomass remaining in a unit). Depending on the latter of the three factors, hoof action is expected to break up litter thereby increasing the rate of litter decomposition, opening up the ground for natives to express, and aid in nutrient cycling. Areas around watering systems, along fence lines, and at the location of mineral blocks may experience heavy trampling and compaction resulting in the mortality of perennial vegetation and the establishment of early successional species, just as could have been expected in areas where large native grazers congregated.

Varying bird species differ in their vegetation height preferences; as such, the management goal is to provide a heterogeneity of vegetation heights across the landscape. Pollinators are similar in their need for heterogeneity of heights and plant species. Following a graze, depending on the remaining vegetation height, a site will be more or less attractive for use by certain wildlife species during the respective growing season. Birds that prefer shorter stature grasslands may benefit from the reduced vegetative height resulting from grazing while others, which typically require taller and more dense nesting structure, may be negatively impacted by grazing in the short-term.

In situations where grazing utilizations are full, there may be less litter available for grassland nesting birds who utilize this material for nest construction. However, grazed areas may attract fewer predators because of low densities of some types of prey, such as small mammals (Grant et al. 1982, Runge 2005); less cover for concealment; or both. Higher nesting success in grazed fields may occur because predators respond negatively to low prey density (Clark and Nudds 1991, Larivière and

Messier 1998). If a site is completely devoid of litter prior to winter, certain pollinator larvae may lack the needed cover to survive for that year. The same could reasonably have been expected to happen with a large herd(s) of native grazers present on the landscape when and where they may have congregated for extended periods of time.

Research conducted on other refuges has found impact from grazing ranging from minimally negative to favorable. Prescribed grazing on Red Rock Lakes National Wildlife Refuge (NWR) have been shown to have little effect on sage-grouse, a noted species of concern (Schroff 2016 MSU). Another study by (Stadum et al. 2016) found that grazing can provide the structure of vegetation heterogeneity that favors nesting long-billed curlews, a species of concern throughout some areas of Montana, to include the District wherein the Refuge resides. She also cites (Redmond and Jenni 1986) who observed curlews nesting in previously recent grazed areas. (Stadum et al. 2016) further explains how “prescriptive livestock grazing can be used to provide structurally diverse grassland habitats for species with seemingly disparate structural preferences within the same habitat type. Managing grassland habitat for species that exist on opposite ends of a disturbance preference gradient presumably incorporates the needs of species with intermediate preferences”.

Long-term impacts

Prescriptive grazing will improve habitat conditions for specific wildlife or focal bird species, migratory birds, and other grassland-obligate species. Future prescriptive grazing regimens may include short-duration, high-intensity grazing treatments to control invasive plants; habitat management for specific wildlife or focal bird species; or rotation of grazing areas on the Refuge to provide long-term rest between grazing treatments.

The beneficial effects of grazing on plant diversity depend on grazing intensity, the evolutionary history of the site, and climatic regimes. Continuous rest without periodic disturbance fails to promote long-term grassland health (Naugle et al. 2000). Hoof impact by grazing animals can break up capped soils, improve the water cycle, stimulate vegetative reproduction of grasses, and enhance the decomposition of old plant material by breaking up plant litter. Hoof action can also distribute and trample seeds into soils, increasing chances of successful germination (Laycock 1967). Nutrients are returned to the soil in the form of urine and feces. Cattle may return 80%–85% of the nitrogen ingested with plant tissue (Laycock 1967). The use of prescriptive grazing to achieve desired habitat conditions would result in long-term beneficial effects on a variety of wildlife species that use the Refuge.

The effect of removal of vegetation increases the vigor of grasslands by stimulating the tillering and growth of desired species of grasses and forbs and reducing the abundance of targeted species such as cool season exotic grasses, woody species, noxious weeds, and invasive species. During periods of typical precipitation, normal regrowth following grazing activities can occur within a single growing season. Over time, a strategic prescribed grazing program could effectively alter species

composition and improve overall plant diversity. Disturbance of grassland, wet meadow, and some shrub-steppe habitats is essential to maintain plant vigor and reduce infestations of noxious weeds.

As vegetative heights recover following a grazing treatment, habitat conditions will favor birds which prefer denser nesting structure and may become less favorable to species that prefer sparser vegetation. Because of regrowth of herbaceous vegetation, no long-term negative impacts are anticipated for waterfowl or other grassland or mixed grass-sagebrush nesting bird species, though positive impacts of increased diversity and heterogeneity are likely in the long-term.

Public Review and Comment

The draft CCP and accompanying EA and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. CAAs and SUPs will be written in accordance with the Service's Cooperative Agricultural Use Policy (620 FW 2) and the Region 6 Cooperative Agricultural Program Guidance (2022).
2. Cooperators must follow all requirements for the prescribed grazing treatment as specified within the CAA, its stated Plan of Action, and the Special Conditions of the SUP.
3. Insecticides are not permitted for use on Refuge lands.
4. Control and maintenance of livestock is the responsibility of the permittee.

5. Fencing, water supply, and other livestock management infrastructure needs and costs will be outlined in the CAA and SUP.

Justification

Sharp-tailed grouse, pronghorn, sage-grouse, large ungulates, and other wildlife species need a diversity of and abundant group of plants for food and cover. Prescriptive grazing and other adaptive management strategies would permit flexibility necessary for the restoration of these important plant species.

Prescriptive grazing is a valuable management tool that supports refuge objectives. As outlined in this CD and in accordance with the stipulations outlined above, based on best professional judgement and available science, the Service has determined that continuation of the grazing use on the Refuge will not materially detract from or interfere with the fulfillment of the NWRS mission or the purposes of the Refuge; will contribute to the NWRS mission and Refuge purposes, meeting the standard or threshold established in 50 CFR §29.1 for economic uses of NWRs; and will not conflict with the national policy to maintain the biological integrity, diversity, and environmental health of the Refuge.

To maintain and enhance habitat for migratory birds and other wildlife, some habitat management must occur. Prescribed grazing utilizing livestock is one option that can be used to achieve these desired habitat conditions. Prescribed grazing is a useful tool because it can be controlled, and results of the grazing can be periodically monitored (e.g. vegetation monitoring) so that adjustments in the grazing program can be made to meet habitat goals and objectives.

Mandatory Reevaluation Date

2035

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Compatibility Determination

Title

Compatibility Determination for Camping on Lake Mason National Wildlife Refuge – North Unit

Refuge Use Category

Outdoor Recreation (General)

Refuge Use Types

Camping

Refuge

Lake Mason National Wildlife Refuge (Refuge)

Refuge Purpose(s) and Establishing and Acquisition Authorities

“... purposes of a land-conservation and land-utilization program ... 7 U.S.C. § 1011 (Bankhead-Jones Farm Tenant Act) “... for use and administration under applicable laws as refuges for migratory birds and other wildlife ...” Secretarial Order 2843, dated Nov. 17, 1959. “... as a refuge and breeding ground for migratory birds and other wildlife: ...” Executive Order 8770, dated June 3, 1941. “... 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 U.S.C. § 460k-1 “... 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 U.S.C. § 460k-2 (Refuge Recreation Act (16 U.S.C. § 460k-460k-4), as amended). “... 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), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986) “... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” 16 U.S.C. § 715d (Migratory Bird Conservation Act) “... conservation, management, and ... restoration of the fish, wildlife, and plant resources and their habitats ... for the benefit of present and future generations of Americans...” 16 U.S.C. § 668dd(a)(2) (National Wildlife Refuge System Administration Act)”

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System (NWRS), otherwise known as 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.

What is the use?

Camping by primitive means (tents) or vehicularly (truck, camper, etc.) currently occurs in the parking area of area of Lake Mason National Wildlife Refuge – North Unit.

Is the use a priority public use?

No

Where would the use be conducted?

Camping on the North Unit of Lake Mason NWR.

When would the use be conducted?

All seasons.

How would the use be conducted?

Camping currently may occur by primitive means (tents) or vehicularly (truck, camper, etc.).

Why is this use being proposed or reevaluated?

Camping as a use is being reevaluated because 603 FW 1.9 (A) states:

We will manage all refuges in accordance with an approved comprehensive conservation plan (CCP). The CCP describes the desired future conditions of the refuge or refuge planning unit and provides long-range guidance and management direction to accomplish the purpose(s) of the refuge and Refuge System mission. We prepare CCPs with State fish and wildlife agencies and with public involvement and include a review of the appropriateness and compatibility of existing refuge uses and of any planned future public uses. If, during preparation of the CCP, we identify previously approved uses we can no longer consider appropriate on the refuge, we will clearly explain our reasons to the public and describe how we will eliminate or modify the use. When uses are reviewed during the CCP process, the appropriateness finding will be documented using the form provided as FWS Form 3-2319 for the refuge files.

Because a CCP is currently being prepared for the CMR Wetland Management District and the associated NWRs within the District, Lake Mason NWR and its North Unit being one of the associated Refuges, camping as a use is being reevaluated.

Availability of Resources

The District wherein the Refuge and its North Unit lies covers in excess of 9,175 sq miles spread over five counties and is comprised of three other Refuges, six Waterfowl Production Areas, and numerous easements; as such, there is not adequate staffing or resources to monitor, control, regulate, or maintain camping as a use.

Anticipated Impacts of the Use

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

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 or its revocation. This compatibility determination (CD) includes the written analyses of impacts to visitors and the environmental consequences on a resource only when the impacts on that resource could be more than negligible and therefore considered an “affected resource.”

Short-term impacts

Currently, with camping as a use, temporary disturbance exists to all wildlife in the vicinity of the activity, both game and non-game species, such that their immediate behaviors are altered from how they would normally behave and the routes of travel they would take to hunt, seek shelter, or move to other areas for various purposes. Revocation of this use may restore the natural behaviors of North Unit Refuge animals in the vicinity by removing the human presence element, thereby removing unnatural human stressors that in some cases, may impact survivability during nesting, breeding, calving, fawning, staging, and times of migration. Additionally, camping has resulted in trash left behind by campers, including presence of non-decomposing trash, i.e., plastics and metal, which in some cases could be detrimental to wildlife from their ingestion of small pieces of trash, and, in call cases, impacts the aesthetics of the area. Camping has also resulted in visitors who choose to create campfires despite their illegality, increasing the risk of fire to the area and destruction to the habitat and wildlife of the Refuge.

Additionally, camping is disruptive to other North Unit Refuge visitors who seek to recreate in accordance with the priority compatible wildlife-dependent recreational activities that the Refuge System is directed to provide as outlined in the Refuge Improvement Act of 1997 (hunting, wildlife observation, wildlife photography, environmental education, and interpretation). An increased positive visitor experience would be achieved through the absence of campers and temporary camping infrastructure. Visitors could reasonably be expected to achieve a closer connection to nature which could in turn reasonably parallel the sense of solidarity similar to that found in wilderness areas.

Long-term impacts

Long-term effects from camping include disruption to normal wildlife behaviors and travel routes, as well as occupancy of wildlife to the habitat nearer to camping areas. Camping disrupts other opportunities for wildlife-dependent recreation in the area, because of the absence of wildlife in the area. Trash and human effects on the landscape can alter the natural state of the area and impact aesthetics in, near, and around the area. Continued leaving of trash in the area can lead to greater chances of animals ingesting plastic or metal waste. And the longer camping continues, the greater the chances of illegal campfires that could get out of control and thus leave long lasting scars on the landscape or move off the Refuge's North Unit lands and cause damage to neighboring landowner resources.

Public Review and Comment

The draft CCP and accompanying Environmental Assessment and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Determination

Is the use compatible?

No

Stipulations Necessary to Ensure Compatibility

Stipulations to ensure compatibility are non-applicable as we have determined the use is not a compatible of the Refuge.

Justification

The Refuge Manager will not initiate or permit a new use of a NWR or expand, renew, or extend an existing use of a NWR, unless the Refuge Manager has determined that

the use is a compatible use.” (50 CFR 26.41) Camping in the parking area of area of Lake Mason National Wildlife Refuge – North Unit is impacting the Refuge’s purposes and the mission of the Refuge System. The use is disruptive to other public users of the Refuge seeking to recreate in accordance with approved wildlife dependent recreational activities outlined in the NWRS Improvement Act of 1997 (hunting, wildlife viewing, wildlife photography, environmental education, interpretation). Further, the use is disruptive to wildlife who use the area in close proximity to the parking area where camping occurs. The Service therefore finds that camping is not a compatible use of the Refuge because the use is inconsistent with the Refuge’s purpose, establishing and acquisition authorities, and the directives in the Improvement Act.

Lastly, but importantly, accessible public lands permitting camping are located immediately nearby and adjacent to the Refuge’s North Unit. We believe that there are other camping opportunities in the area for those who have camped there in the past or seek to camp there in the future.

Mandatory Reevaluation Date

N/A

Compatibility Determination

Title

Compatibility Determination for Environmental Education and Interpretation for Lake Mason National Wildlife Refuge

Refuge Use Category

Environmental Education and Interpretation

Refuge Use Types

Environmental education (not conducted by National Wildlife Refuge System (NWRS) staff or authorized agents)

Environmental education (NWRS staff and authorized agents)

Environmental education (general)

Interpretation (NWRS staff and authorized agents)

Interpretation (not conducted by NWRS staff or authorized agents)

Refuge

Lake Mason National Wildlife Refuge (Refuge)

Refuge Purpose(s) and Establishing and Acquisition Authorities

"... purposes of a land-conservation and land-utilization program ... 7 U.S.C. § 1011 (Bankhead-Jones Farm Tenant Act) "... for use and administration under applicable laws as refuges for migratory birds and other wildlife ..." Secretarial Order 2843, dated Nov. 17, 1959. "... as a refuge and breeding ground for migratory birds and other wildlife: ..." Executive Order 8770, dated June 3, 1941. "... 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 U.S.C. § 460k-1 "... 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 U.S.C. § 460k-2 (Refuge Recreation Act (16 U.S.C. § 460k-460k-4), as amended). "... 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), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986) "... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. § 715d (Migratory Bird Conservation Act) "... conservation, management, and ... restoration of the fish, wildlife, and plant resources and their habitats ... for the benefit of present and future generations of Americans..." 16 U.S.C. § 668dd(a)(2) (National Wildlife Refuge System Administration Act)"

National Wildlife Refuge System Mission

The mission of the NWRS, otherwise known as 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.

What is the use?

Environmental education (not conducted by NWRS staff or authorized agents). On-Refuge activities not conducted by NWRS staff or authorized agents that use a planned process to foster awareness, knowledge, understanding, and appreciation in students, teachers, or group leaders about fish, wildlife, plants, ecology, natural sciences (such as astronomy) and Refuge management.

Environmental education (NWRS staff and authorized agents). On-Refuge activities conducted by NWRS staff or authorized agents that use a planned process to foster awareness, knowledge, understanding, and appreciation in students about fish, wildlife, plants, ecology, natural sciences (such as astronomy) and Refuge management.

Environmental education (general). Environmental education activities not specifically defined elsewhere in this category.

Interpretation (NWRS staff and authorized agents). On-Refuge activities for Refuge visitors conducted by NWRS staff or authorized agents that are designed to foster an understanding and appreciation for natural and cultural resources, and associated management.

Interpretation (not conducted by NWRS staff or authorized agents). On-Refuge activities for Refuge visitors not conducted by NWRS staff or authorized agents that are designed to foster an understanding and appreciation for natural and cultural resources, and associated management.

Is the use a priority public use?

Yes

Where would the use be conducted?

All areas open to the public will be open for environmental education and interpretation. These areas do not have trails or built facilities to support these uses. An unimproved road into the Refuge (Lake Mason unit & North unit) and a parking

area is present. An improved road runs through the Willow Creek unit. All areas open to the public are open for walking to achieve these uses. Refuge signs denote Refuge boundaries and closed areas designated as refugia for wildlife and that are thus closed to all public entry and access.

When would the use be conducted?

Environmental education and interpretation occur year-round as guided or self-guided activities. The Refuge is open sunrise to sunset for the public.

How would the use be conducted?

Environmental education programs are scheduled in advance, and include impromptu presentations and discussions of wildlife conservation issues with interested individual visitors and unscheduled groups. Interpretive and environmental education programs may be given by Refuge staff or volunteers. Teachers may give programs after applying for and receiving a special use permit (SUP). Any program that is conducted on Refuge land and not lead by Refuge staff requires a SUP.

Interpretive or environmental education programs focus on wildlife and habitats. These programs may address several wildlife conservation topics including riparian ecosystems, wetland habitats, migratory bird management, and endangered species conservation. Programs may also include the development of outdoor skills, which enhance appreciation of wildlife and the habitats they live in.

Most wildlife observation and photography activities are conducted individually; however, the Refuge may occasionally help facilitate these activities through workshops, planned events, and tours.

Why is this use being proposed or reevaluated?

Environmental education and interpretation are two priority wildlife-dependent recreational uses of the NWRS identified by the National Wildlife Improvement Act of 1997 (Improvement Act). These uses help promote the understanding, appreciation, and support of the Refuge System mission.

Availability of Resources

The analysis of cost for administering and managing each use will only include the incremental increase above general operational costs that we can show as being directly caused by the proposed use. The present Refuge environmental education and interpretive programs are available upon request, staff time permitting if staff are requested. Refuge personnel review proposals related to this use and prepare SUPs. A Refuge parking area and an unimproved road allow for public entry and use. There is currently enough funding and staff available to provide opportunities for these activities depending on the time and specific staff services requested. No additional funding is needed.

One-time costs: None

Annual/recurring expenses (i.e., for annual operations and maintenance):

Offsetting revenues: None

Anticipated Impacts of the Use

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

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 compatibility determination (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.”

The overall impacts to the Refuge and its associated wildlife populations from these uses would be minimal. Environmental education and interpretation, and wildlife observation and photography can have both positive and negative implications on Refuge resources.

Short-term impacts

There may be temporary disturbance to wildlife on the Refuge from the presence of humans engaging in environmental education and interpretation activities, due to noise and temporary displacement. However, the amount of environmental education and interpretation activities occurring on the Refuge should result in very minimal impacts to wildlife. There are many recommendations for reducing impacts to wildlife: provide visitor education, require staying on trails, closing areas during sensitive periods such as nesting, require minimum set back distances for approach to areas such as rookeries, etc. (Boyle et al. 1985, Erwin 1989, Haverra 1992, Klein 1993, Miller 2001, Morton 1989, Rodgers 1995, Taylor 2003).

Human disturbance to avifauna has been thoroughly documented around the world. Several studies have examined the effects of trail-based recreation on birds inhabiting wildlife refuges and coastal habitats in the eastern United States. McNeil et al. (1992) found that many waterfowl species avoid disturbance by feeding at night instead of during the day. Similarly, Martín et al. (2015) found that human presence caused resident shorebird species to spend less time feeding and more time displaying avoidance behavior, and that the number of shorebirds and gulls within their study site dramatically decreased in response to increased recreation of the area. Disturbance can increase the risk of predation when individuals are forced to forage in more dangerous habitats and can increase intraspecific competition when avoiding humans necessitates movement into suboptimal habitats (Frid and Dill 2002).

Some uses, such as bird observation, are directly focused on viewing certain wildlife species and can cause more significant impacts during the breeding season and winter months. Research has shown that as the intensity of human disturbance increased, avoidance response by birds increased, and that out-of-vehicle activity was more disruptive than vehicular traffic (Klein 1993, Freddy et al. 1986, Vaske et al. 1983). Miller et al. (1998) found bird abundance and nesting activities (including nest success) increased as distance from a recreational trail increased, in both grassland and forested habitats. Some studies have found that some songbird species habituate to repeated intrusion. Frequently disturbed individuals of some species vocalize more aggressively, have higher body masses, or tend to remain in place longer (Cairns and McLaren 1980). Disturbance may affect the reproductive fitness of males by hampering territory defense, mate attraction, and other reproductive functions of song (Arcese 1987, Ewald and Carpenter 1978).

Overall, the existing research clearly demonstrates that disturbance from recreation activities always have at least temporary effects on the behavior and movement of birds within a habitat or localized area (Burger 1981, Burger 1986, Klein 1993, Burger et al. 1995, Klein et al. 1995, Rodgers and Smith 1997, Burger and Gochfeld 1998). The location of recreational activities and the size of participating groups are also important factors affecting the magnitude of disturbance. A number of species have shown greater reactions when pedestrian use occurred off-trail (Miller et al. 2001, Samia et al. 2015), and when pedestrians traveled in large groups (Beale and Monaghan 2004).

The presence of humans on Refuge land would disturb some wildlife causing temporary displacement without long-term effects. There would be some disturbance to wildlife and vegetation at the locations where interpretive programs occur with groups, but at levels that would not interfere with the purposes of the Refuge. Some species may avoid areas with frequent people, while other species would be unaffected by human presence. However, the overall effect of the use on wildlife would not have a population level impact, because most of the Refuge will experience minimal to no daily public use. Vehicles will utilize the designated road and parking area. Self-guided interpretation may be sporadically used by small groups of people at established trails and kiosks. This may cause short-term disturbance to wildlife, but again would have minimal impact.

Long-term impacts

The Refuge anticipates that no negative long-term impacts will occur as a result of environmental education and interpretation, however, these uses could be modified in the future to mitigate unforeseen impacts. The Refuge also anticipates positive long-term benefits for the public. These uses allow the public to engage in and experience the Refuge and the outdoors. The Refuge will continue to gain relevancy to new, broader audiences and therefore have a greater reach to the public. Additionally, these uses benefit the Refuge by promoting a conservation ethic in the local community and a better appreciation and understanding of the Refuge's wildlife

and habitats.

People can be vectors for invasive species by moving seeds or other propagules from one area to another. The threat of invasive species will always be an issue requiring annual evaluation and treatment. Refuge staff will work to look for early detection of invasive species and will educate the visiting public on the environmental damage and conservation challenges invasive species present. Impacts may be considered not significant when analyzed alone but may be considered important when they are evaluated cumulatively. The Refuge's primary concern is repeated disturbance of resting, foraging, or nesting birds by visitors. Refuge staff will continually evaluate disturbance to habitat and habitat quality and, if necessary, respond with management actions to conserve wildlife resources being adversely impacted. Refuge staff, volunteers, and researchers will evaluate the effects of these priority uses and respond to any adverse effects.

Based on the best available knowledge and with added use restrictions, the Refuge does not expect these uses would cause adverse effects. Educating the public about conservation issues would enhance the Refuge's purposes by promoting a conservation ethic.

Public Review and Comment

The draft Comprehensive Conservation Plan (CCP) and accompanying Environmental Assessment and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. Visitors are to adhere to all Refuge rules and regulations as found in the regulations section of the Refuge website and brochure unless otherwise approved in advance by the Refuge.
2. Environmental education and interpretation activities not led by Refuge staff require a SUP to minimize conflicts with other groups, safeguard students and resources, and allow tracking of use levels.
3. Disturbing or attempting to disturb, injure, or collect any plant, berries, mushrooms, animal, animal part, horn, antler, bones, skull, or feather is prohibited except by SUP.
4. Disturbance or collection of any cultural resource is prohibited.
5. Interpretive programming and special events will focus on wildlife, conservation, or other environmental attributes of the Refuge including fostering a respect and appreciation of the NWRS and the Refuge.
6. Entry on all or portions of individual areas may be temporarily suspended based on public safety, wildlife health, or natural resource concerns. When possible, the public will be given notice of closures. However, unforeseen circumstances may require immediate closure without advanced public notice.

Justification

In accordance with the missions of the NWRS and the Improvement Act, the Refuge has determined that the uses are compatible provided the above stipulations are implemented. Environmental education and interpretation are two priority wildlife-dependent recreational uses of the NWRS identified by the Improvement Act. These uses help promote the understanding, appreciation, and support of the Refuge System mission and help promote public awareness and stewardship of the Refuge's natural and cultural resources. The uses not materially interfere with or detract from the Service's ability to meet the mission of the NWRS, and administration of the uses would only require medium amounts of administrative time and funding.

The Refuge's habitats, wildlife, and public use areas provide a unique environmental education and interpretation experience to visitors, helping them connect with nature and natural ecosystems. Environmental education is designed to develop a citizenry that has the awareness, concern, knowledge, attitudes, skills, motivations, and commitment to work toward solutions of current environmental problems and the prevention of new ones. Interpretation is a communication process that forges

emotional and intellectual connections between the interests of the audience and the inherent meanings in the resource (i.e. more than information). Both environmental education and interpretation are necessary to form relationships between the Service and the public and improve a joint stewardship of our natural resources.

Wildlife disturbance is a concern and limited use will help to minimize any adverse impacts to wildlife. Refuge staff will evaluate impacts on Refuge federal trust resources to determine if there are appreciable negative implications of the use.

Mandatory Reevaluation Date

2040

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Compatibility Determination

Title

Compatibility Determination for Hunting at Lake Mason National Wildlife Refuge

Refuge Use Category

Hunting

Refuge Use Types

Hunting big game; Hunting upland birds; Hunting migratory birds

Refuge

Lake Mason National Wildlife Refuge (NWR)

Refuge Purpose(s) and Establishing and Acquisition Authorities

"... purposes of a land-conservation and land-utilization program ... 7 U.S.C. § 1011 (Bankhead-Jones Farm Tenant Act) "... for use and administration under applicable laws as refuges for migratory birds and other wildlife ..." Secretarial Order 2843, dated Nov. 17, 1959. "... as a refuge and breeding ground for migratory birds and other wildlife: ..." Executive Order 8770, dated June 3, 1941. "... 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 U.S.C. § 460k-1 "... 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 U.S.C. § 460k-2 (Refuge Recreation Act (16 U.S.C. § 460k-460k-4), as amended). "... 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), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986) "... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. § 715d (Migratory Bird Conservation Act) "... conservation, management, and ... restoration of the fish, wildlife, and plant resources and their habitats ... for the benefit of present and future generations of Americans..." 16 U.S.C. § 668dd(a)(2) (National Wildlife Refuge System Administration Act)"

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System (NWRS), otherwise known as 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.

What is the use?

The hunting of migratory birds, upland birds, and big game as an approved wildlife-dependent priority public use as outlined in the 1997 National Wildlife Refuge System Improvement Act (Improvement Act). Hunting of migratory birds, upland birds, and big game is proposed in accordance with State regulations and seasons accompanied by specific Lake Mason NWR (Refuge) regulations and restrictions outlined below:

- Hunting will be restricted to only those areas specifically open to hunting on the Refuge and excludes areas designated as refugia for wildlife and thus closed to all public entry and access.
- Hunting for waterfowl, which are classified as migratory birds, is federally mandated to use lead-free ammunition.
- Lead-free ammunition is currently required for upland bird hunting.

Refuge management may further enact, as deemed appropriate at any time, further restrictions or regulations for such reasons as, but not limited to:

- Protection of wildlife.
- Protection of certain specific wildlife species where State regulations are absent, fail to provide reasonable harvest limits, or allow harvest methods not conducive with Refuge values.
- Protection of natural resources.
- Public safety.

Is the use a priority public use?

Yes.

Public hunting is a historical wildlife-dependent use of the Refuge and is designated as one of the priority public uses as specified in the Improvement Act.

Where would the use be conducted?

The Refuge brochure will be available at the Charles M. Russell (CMR) Refuge Complex headquarters, of which Lake Mason NWR is a part of, and online on the Refuge's website to inform the public of Refuge hunting opportunities, regulations, and safety precautions. Maps are also available, which show the location of Refuge units, roads, boundaries, and those areas open and closed to hunting.

Specifically, hunting for big game, upland birds, and migratory birds may occur in

accordance with State regulations and specific Refuge regulations and restrictions, on all areas of the Refuge except the current signed and posted closed area covering the northern half of the Lake Mason unit, in which said area has been designated as refugia for all wildlife and as such, closed to all public entry and access.

When would the use be conducted?

Hunting would occur in accordance with State regulated seasons, dates, and times in the State region/zone/area in which the Refuge resides. Additionally, hunting shall be in accordance with any specific Refuge regulations and restrictions regarding units, seasons, dates, times, and that Refuge management may further enact as deemed appropriate at any time for such reasons as, but not limited to, protection of wildlife; protection of certain specific wildlife species where State regulations are absent, fail to provide reasonable harvest limits, or allow harvest methods not conducive with Refuge values; protection of natural resources; and public safety.

How would the use be conducted?

Hunting will take place in accordance with State regulations pursuant to seasons, zones/regions/areas, bag limits, and take method regulations. Generally, centerfire rifles are used for big game, with occasional shotguns using slugs, while shotguns with birdshot are used for migratory and upland bird hunting. Additionally, hunting shall be in accordance with any specific Refuge regulations and restrictions regarding seasons, dates, times, and allowable take methods. Refuge management may further enact, at any time, more restrictive regulations such as, but not limited to season dates, times, and take measures where it deems such measures are appropriate.

All other wildlife species outside of big game, upland birds, and migratory birds are protected to include, but not limited to coyotes, prairie dogs, jackrabbits, cottontail rabbits, badgers, and bobcats. The use of stock (horses, mules, donkeys) is permitted on the Refuge's north unit.

Why is this use being proposed or reevaluated?

With the issuance of a Comprehensive Conservation Plan (CCP) and Environmental Assessment (EA), this use requires a compatibility determination (CD). Recreational public hunting is a historical wildlife dependent use of the CMR Refuge Complex, of which Lake Mason NWR is a part of. Hunting is also designated as one of the priority public uses as specified in the Refuge Improvement Act.

Required boundary and informative signage is already in place with more slated for installation to inform the public of the Refuge's specific boundaries and use areas. This same signage will provide the necessary infrastructure to support hunting on the Refuge. Current staffing levels and funding are adequate to support hunting on the Refuge. Special regulations and restrictions will be in place to minimize negative

impacts to the Refuge and its associated wildlife. Montana state law further controls hunter activities through State regulations and restrictions.

Hunting is a legitimate wildlife management tool that can be used to control wildlife populations having excess. Hunting harvests a small percentage of the renewable excess population resource(s), which is in accordance with wildlife management objectives and principals.

Availability of Resources

One-time costs: A one-time cost approximately every 10 years associated with purchasing, creating, replacing signage is part of the Refuge's expected budget and thus not additive.

Annual/recurring expenses (i.e., for annual operations and maintenance):

Maintenance costs: Maintenance costs are expected to be negligible from this use on the Refuge. There are no expected increased costs to maintaining Refuge infrastructure outside normal use of roads and other developed areas. Installation of informative and boundary signage to facilitate hunting on the Refuge is a regular part of staff duties, thus no extra cost from their installation is additive.

Annual Operations: Adequate resources are available to manage the existing hunting program at the current level of participation.

Offsetting revenues: None

Anticipated Impacts of the Use

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

The Proposed implementation of hunting as a use will produce no appreciable adverse impacts to Refuge purposes or the Refuge System mission for the aforementioned reasons: a) hunting has been a historical wildlife dependent use within the CMR Refuge Complex and b) is an approved wildlife dependent use as specified in the Improvement Act. 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."

- There will be no negative effects on threatened and endangered species.
- There will be no negative effects on cultural resources.

Short-term impacts

Temporary disturbance will exist to wildlife in the vicinity of the activity. Animals surplus to populations will be removed by hunting. A temporary decrease in populations of wildlife might help ensure that carrying capacity (especially for big-game species) is not exceeded. Closed areas will provide sanctuary for game and nongame species, minimize conflicts between hunters and other visitors, and provide a safety zone around communities and administrative areas. The harvest of these species will be compensatory mortality, with minimal impact to the overall health of their populations.

Temporary impacts to the habitat are expected due to possible illegal off-road travel. To mitigate the possible impact, the Refuge has established parking areas. We also enforce a pack-in, pack-out policy encouraging folks to remove their trash.

Lead ammunition is restricted for use for upland game birds and migratory game birds. Since no additional lead from hunting these species will be added to the environment, results could have some beneficial effect on migratory birds or avian predators that prey upon them that occur on the Refuge, thus reducing the overall effects of lead poisoning from lead reduction in the environment.

Lead hunting ammunition for big game species is currently allowed. Studies have shown that where eagles are present to scavenge carcasses, lead can have a detrimental effect on their health when ingested in sufficient quantity. The Service continues a vigorous campaign of educating all hunters on the effects of lead ammunition in the natural environment to mitigate its future use and subsequent introduction in the environment.

Long-term impacts

Hunting is a highly regulated activity, and generally takes place at specific times and seasons when there is a harvestable surplus of game animals, reducing the magnitude of disturbance to Refuge wildlife. Managed and regulated hunting will not reduce species populations to levels where other wildlife-dependent uses will be affected. Hunting is an appropriate wildlife management tool that can be used to manage wildlife populations. Some wildlife disturbance will occur during the hunting seasons.

Regulations and seasons will be designated to minimize any negative impacts to wildlife populations using the Refuge. Harvesting these game animal species would not result in a substantial decrease in biological diversity on the Refuge. Wildlife populations on the Refuge are able to sustain hunting and support other wildlife dependent priority uses. To manage the populations to support hunting, the Refuge adopts harvest regulations set by the State within federal framework guidelines. Recreational hunting will remove individual animals but will not negatively affect wildlife populations.

Lead ammunition is not permitted for migratory game birds or upland game birds. This reduces the potential long-term risk from the introduction of additional lead

ammunition in hunting these species on Refuge lands as included in this CCP. Additional lead from hunting these species would no longer enter the environment and potentially impact migratory birds or avian predators that prey upon them and that may occur on the Refuge.

Lead hunting ammunition for big game species is still currently allowed. Studies have shown that where eagles are present to scavenge carcasses, lead can have a detrimental effect on their health when ingested in sufficient quantity. The Service continues a vigorous campaign of educating all hunters on the effects of lead ammunition in the natural environment to mitigate its future use and subsequent introduction in the environment.

Public Review and Comment

The draft CCP and accompanying EA and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

Hunting on the Refuge is subject to federal and State regulations and a Montana hunting license is required. Hunting for migratory birds, upland game birds, and big game in compliance with all applicable State and Refuge hunting regulations is permitted on this Refuge.

All other wildlife species outside of big game, migratory birds, and upland birds are protected including, but not limited to coyotes, prairie dogs, jackrabbits, cottontail rabbits, badgers, and bobcats.

1. Visitors are required to park in designated parking areas. Off road or shoreline travel is not allowed.
2. Access into Willow Creek and North Units is by foot only.
3. Lake Mason Unit-The north half of the Lake Mason Unit is designated as refugia for wildlife and is thus closed to hunting and all public access.
4. Target shooting with firearms or archery equipment is prohibited at all times on the Refuge.
5. Collection of antlers, bones, skulls, animal parts, nests, artifacts, and fossils are prohibited.
6. Non-motorized boat operation is allowed in accordance with State regulations and in the open area on the south half of Lake Mason for hunting only. Due to fluctuating water levels, use of motor vehicles to launch boats is prohibited. Boat access by portage only.
7. Portable blinds and other personal property used for hunting must be removed each day.
8. Remote trail and or game cameras are not allowed.
9. Stock (horses, mules, donkeys) use is permitted in the North unit only. Certified weed free hay is required.
10. Lead-free ammunition is required to hunt migratory game bird and upland game bird species.

Justification

Recreational public hunting is a historical wildlife dependent use of the CMR Refuge Complex, of which Lake Mason NWR is a part of, and is designated as one of the priority public uses as specified in the Improvement Act. Required infrastructure installation for other uses and public information will directly support the hunting on the Refuge. Current staffing levels and funding are also adequate. Special regulations will be in place to minimize negative impacts to the Refuge and associated wildlife. Montana State law further controls hunter activities. Hunting is a legitimate wildlife management tool that can be used to control excess wildlife populations. Hunting harvests a small percentage of the renewable excess population resource(s), which is in accordance with wildlife management objectives and principals.

Mandatory Reevaluation Date

2040

Figure(s)

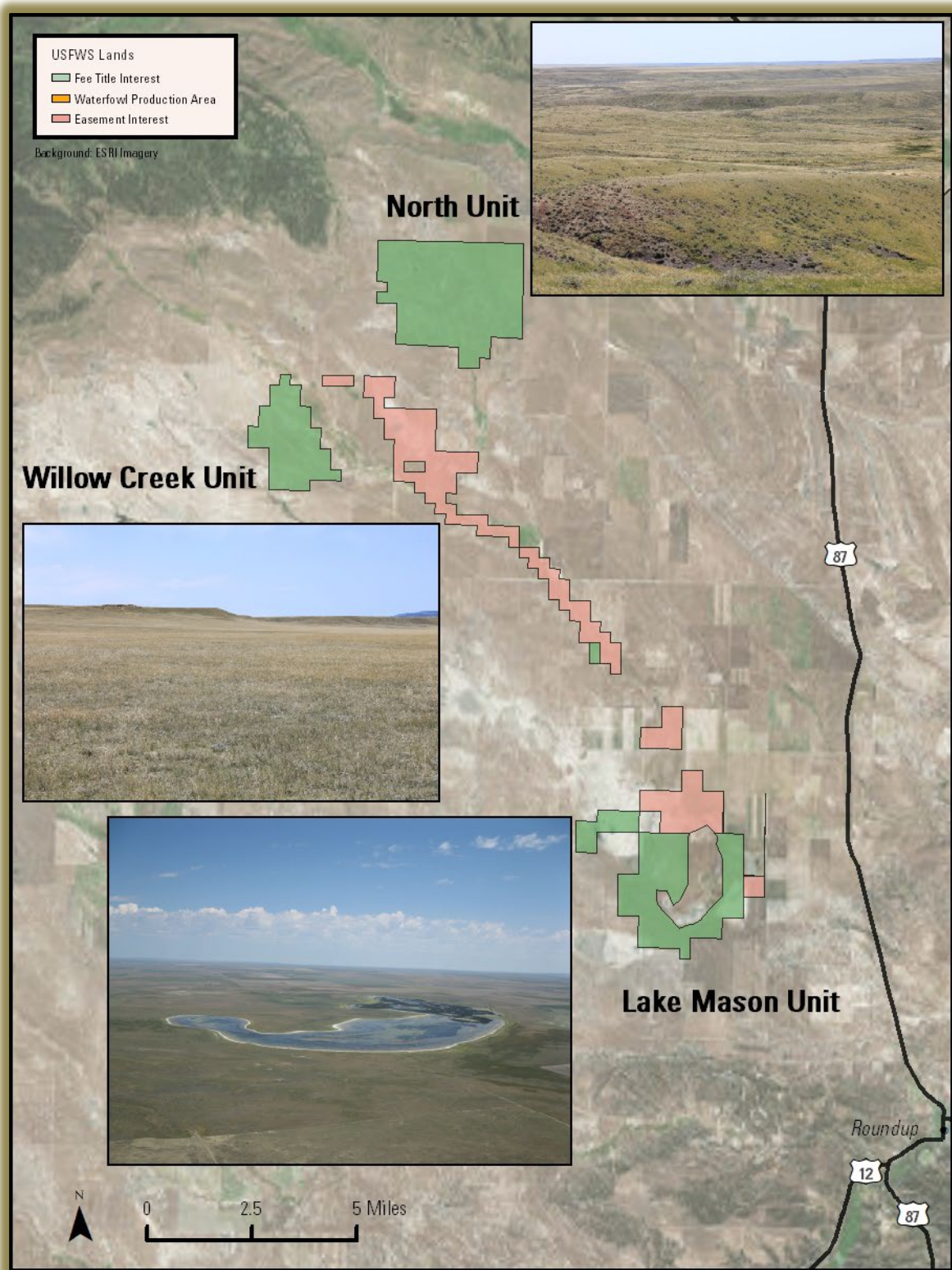


Figure 1. Map of All Three Lake Mason NWR Units

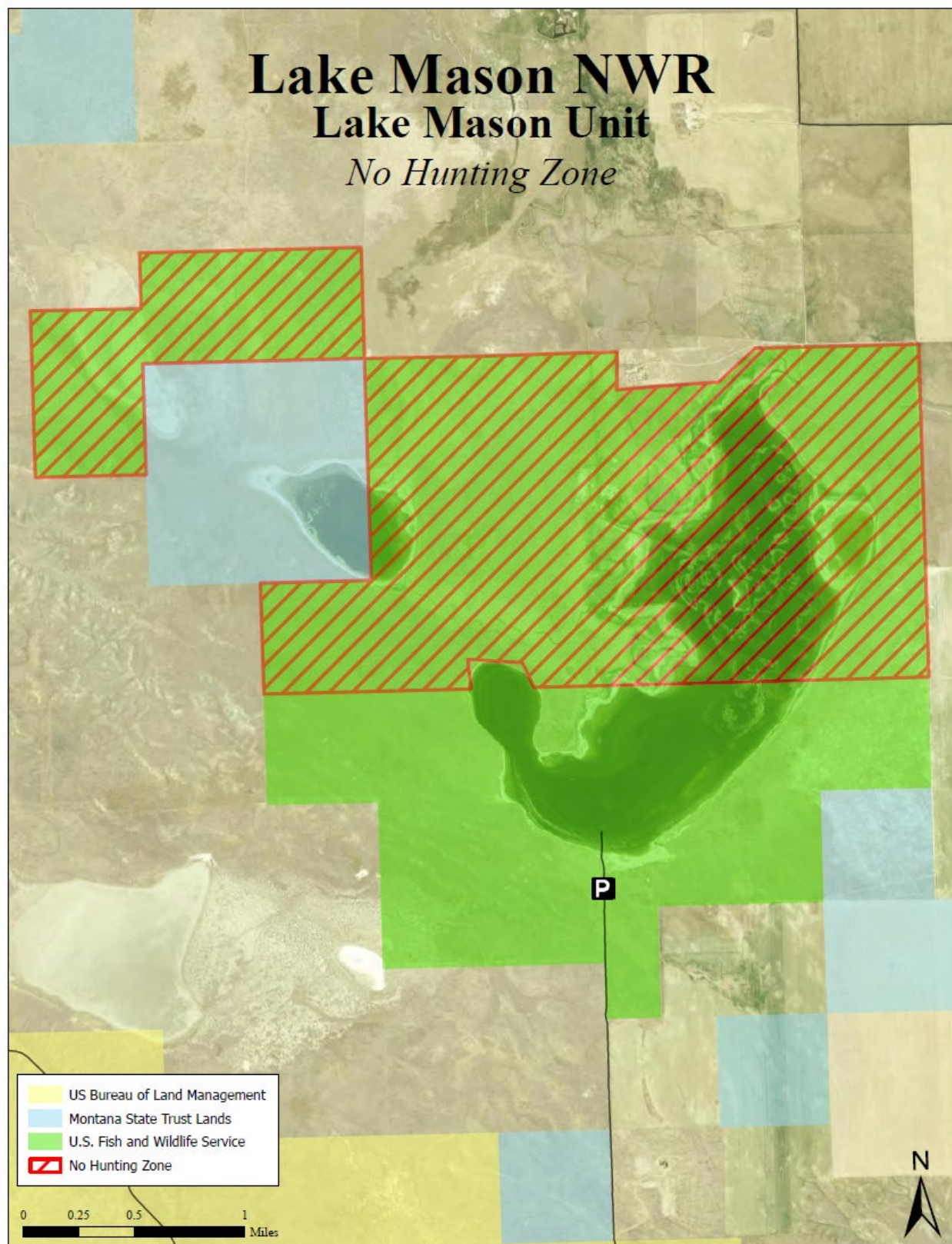


Figure 2. Map of Lake Mason NWR - Lake Mason Unit No Hunting Zone

Compatibility Determination

Title

Compatibility Determination for Research, Scientific Collecting, and Surveys, for Lake Mason National Wildlife Refuge

Refuge Use Category

Research and Surveys

Refuge Use Types

Research, Scientific Collecting, Surveys

Refuge

Lake Mason National Wildlife Refuge (Refuge)

Refuge Purpose(s) and Establishing and Acquisition Authorities

"... purposes of a land-conservation and land-utilization program ... 7 U.S.C. § 1011 (Bankhead-Jones Farm Tenant Act) "... for use and administration under applicable laws as refuges for migratory birds and other wildlife ..." Secretarial Order 2843, dated Nov. 17, 1959. "... as a refuge and breeding ground for migratory birds and other wildlife: ..." Executive Order 8770, dated June 3, 1941. "... 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 U.S.C. § 460k-1 "... 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 U.S.C. § 460k-2 (Refuge Recreation Act (16 U.S.C. § 460k-460k-4), as amended). "... 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), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986) "... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. § 715d (Migratory Bird Conservation Act) "... conservation, management, and ... restoration of the fish, wildlife, and plant resources and their habitats ... for the benefit of present and future generations of Americans..." 16 U.S.C. § 668dd(a)(2) (National Wildlife Refuge System Administration Act)"

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System (NWRS), otherwise known as 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.

What is the use?

Research. Planned, organized, and systematic investigation of a scientific nature conducted by non-U.S. Fish and Wildlife Service (Service) personnel or authorized agent.

Scientific collecting. Gathering of refuge natural resources or cultural artifacts for scientific purposes conducted by non-Service personnel or authorized agent.

Surveys. Scientific inventory or monitoring conducted by non-Service personnel or authorized agents.

Research conducted by non-Service personnel includes research conducted by Federal, State, and private entities, such as the U.S. Geological Survey; State departments of natural resources; students and professors at State and private universities; and independent non-governmental researchers and contractors. Research activities will focus on species, habitats and recreational activities as identified in the Refuge's management plan and other stepdown plans or will address research questions that will provide information to better manage the Refuge.

Acceptable research methods include but are not limited to bird banding, mist netting, point count surveys, radio-telemetry tracking, cameras, recorders, and public surveys.

Requests for special use permits (SUP) for research will be considered on a case-by case basis, as staff availability allows. In accordance with 16 U.S.C. 668dd(d) and 50 C.F.R. Part 25, Subpart D, the refuge manager is responsible for reviewing applications for SUPs and determining whether to authorize a permit.

The Refuge manager will base the decision to issue an SUP for research on their professional judgment and the value of the proposed research. The decision to allow a particular research project will also be consistent with Service regulations and policy, including the Policy on Maintaining the Biological Integrity, Diversity, and Environmental Health of the Refuge System (601 FW 3).

The results of the research should result in better knowledge of our natural resources

and improve methods to manage, monitor, and protect the Refuge's biological resources and visitor uses. The Refuge manager will always have the discretion to deny or reevaluate the appropriateness and compatibility of any specific research by non-Service personnel at any time [603 FW 2.1 H(1), (2)].

The Refuge manager may deny a project based on field experiences, knowledge of the Refuge's natural resources, particularly its biological resources, available scientific information, and after consulting with other experts, both inside and outside the Service. When denying a request for a specific research project, the refuge manager will explain the rationale and conclusions supporting their decision in writing. The rationale for the denial will be consistent with the principles of sound fish and wildlife management, Refuge administration, and applicable laws. The denial will generally be based on, but not limited to, evidence that the details of a particular research project might: lead to the impairment of our conservation mission; detract from fulfilling the Refuge's purposes; conflict with the conservation goals or objectives in approved Refuge management plans; not be manageable with the available budget or staff time; be inconsistent with public safety; or conflict with maintaining or restoring the biological integrity, diversity, and environmental health of the Refuge's priority habitats.

Is the use a priority public use?

No

Research conducted by non-Service personnel is not a priority public use of the Refuge System under the Refuge System Administration Act of 1966 (16 U.S.C. 668dd668ee), as amended by the National Wildlife Refuge System Improvement Act of 1997. Although this use is not a priority public use, this activity would allow permitted researchers access to the Refuge to conduct both short-term and long-term research projects.

Where would the use be conducted?

The location of the research will vary depending on the individual research project that is being conducted. The entire Refuge may be considered in a SUP request for scientific research; however, biological research projects are usually focused on a particular habitat type, plant species, or wildlife species.

Occasionally, research projects will encompass an assemblage of habitat types, plants, or wildlife, or may span more than one Refuge or include lands outside the Refuge System. The research location will also be limited only to those areas of the Refuge that are necessary to conduct the research project and access the research location. This may include access to Refuge roads that are closed to the public. The Refuge may limit areas available to research as necessary to ensure the protection of trust resources or reduce conflict with other compatible Refuge uses. Access to study locations will be identified by Refuge staff.

When would the use be conducted?

The timing of the research will depend on the individual research project's approved design. Research may occur on the Refuge throughout the year when there are no conflicts with protection of trust resources or primary public use activities. Special precautions will be required and enforced to ensure the researchers' health and safety and to minimize or eliminate potential conflicts with a priority public use. An individual research project could be short term in design, requiring one or two visits over the course of a few days. Other research projects could be multiple year studies that require daily visits to the study site. The timing of each individual research project will be limited to the minimum required to complete the project.

How would the use be conducted?

Research methods will depend entirely on the individual research project that is conducted. The methods of each research project will be reviewed and scrutinized before it will be allowed to occur on the Refuge.

No research project will be allowed to occur if:

- It negatively impacts endangered species, migratory birds, and other Refuge trust resources;
- It compromises public health and safety.

A Research and Monitoring Special Use Application and detailed research proposal will be required from parties interested in conducting research on the Refuge. Each request for this use will be considered, and if appropriate, will be issued a SUP by the refuge manager. Each request will be evaluated on its own merit. The refuge manager will use sound professional judgment and ensure that the request will have no considerable negative impacts to natural resources, cultural resources, or visitor services and does not violate Refuge regulations. Special needs will be considered on a case-by-case basis and are subject to the refuge manager's approval. Any approved SUP will outline the framework in which the use can be conducted, and Refuge staff will ensure compliance with the permit. The SUP will provide any needed protection to individual Refuge policies, mission, wildlife populations and natural habitats. In addition, all research projects require the primary investigator to submit written summary reports of all findings and acknowledge the Refuge's participation.

Once approved, projects will be reviewed annually to ensure that they are meeting their intended purposes, reporting and communicating with Refuge staff, and are fulfilling the mission of the Refuge System and purposes for which the Refuge was established. If the refuge manager decides to deny, modify, or halt a specific research project, the refuge manager will explain the rationale and conclusions supporting their decision in writing. The denial or modification to an existing study will generally be based on evidence that the details of a particular research project may:

- Negatively affect native fish, wildlife, and habitats or cultural, archaeological, or

historical resources,

- Detract from fulfilling the Refuge's purposes or conflict with Refuge goals and objectives,
- Raise public health or safety concerns,
- Conflict with other compatible Refuge uses,
- Not be manageable within the Refuge's available staff or budget time,
- Deviate from the approved study proposal such that impacts to Refuge resources are more severe or extensive than originally anticipated.

Why is this use being proposed or reevaluated?

Research by non-Service personnel is conducted by colleges; universities; federal, State, and local agencies; non-governmental organizations; and qualified members of the public to further the understanding of the natural environment, the utilization of the natural environment by the American people and to improve the management of the Refuge. Much of the information generated by the research is applicable to management on and near the Refuge. In many cases, research by non-Service personnel ensures the perception of un-biased and objective information gathering which can be important when using the research to develop management recommendations for politically sensitive issues. Additionally, universities and other Federal partners can access equipment, resources, and facilities unavailable to Refuge staff for analysis of data or biological samples.

The Service will encourage and support research and management studies on refuge lands that will improve and strengthen biological and social science management decisions. The refuge manager will encourage and seek research relative to approved Refuge objectives that clearly improves land management and recreational opportunities and promotes adaptive management. Priority research addresses information that will better manage the Nation's biological resources and is generally considered important to agencies of the Department of the Interior, the Service, the Refuge System, and state fish and game agencies. Priority research also addresses important management issues, demonstrates techniques for management of species or habitats, or analyzes ways to improve access and recreational use by the public.

The Refuge will also consider research for other purposes which may not be directly related to Refuge-specific objectives, but contribute to the broader enhancement, protection, use, preservation, and management of native populations of fish, wildlife, and plants, and their natural diversity within the region or flyway. Prospective researchers or organizations can talk to the refuge manager or biologist about specific research needs. Similar research could be conducted by potential researchers and organizations on other nearby public and federal lands. However, the research capabilities and support systems, organization goals, habitat, wildlife, hydrology, and geology of each of these locations vary widely. To best account for the research needs, goals, and funding availability of local, state, federal, university, and

research specific organizations – the lands where research is permitted should be diverse. Therefore, maintaining and growing the Refuge research program is essential.

Availability of Resources

The analysis of cost for administering and managing each use will only include the incremental increase above general operational costs that we can show as being directly caused by the proposed use. Refuge support of research directly related to Refuge objectives may take the form of funding, in-kind services such as housing or use of other facilities, direct staff assistance with the project in the form of data collection, provision of historical records, conducting management treatments, or other assistance as appropriate. There is currently enough funding and staff available to allow research opportunities. Special equipment, facilities, or improvement costs are expected to be negligible from this use on the Refuge.

One-time costs: None

Annual/recurring expenses (i.e., for annual operations and maintenance):

1. Maintenance costs: Maintenance costs are expected to be negligible from this use on the Refuge. There are no expected increased costs to maintaining Refuge infrastructure outside normal use of roads and other developed areas.
2. Annual Operations: The bulk of the cost for research is incurred in staff time to review research proposals, coordinate with researchers, and write special use permits. In some cases, a research project may only require one day of staff time to write a special use permit. In other cases, a research project may take an accumulation of weeks, as the Refuge staff must coordinate with the principal researcher and accompany them during site visits. Because research conducted on the Refuge is not constant, there may be fiscal years when little if any time is spent on managing outside research projects by Refuge staff.
3. Monitoring costs: None

Offsetting revenues: None

Anticipated Impacts of the Use

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

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 compatibility determination (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.”

Short-term impacts

Research activities may disturb fish and wildlife and their habitats. For example, the presence of researchers can cause birds to flush from resting and feeding areas, cause disruption of birds on nests or breeding territories, or increase predation on nests and individual animals as predators follow human scent or trails.

Efforts to capture animals, such as for migratory bird banding, can cause disturbance, injury, or death to groups of wildlife or to individuals. To wildlife, the energy cost of disturbance may be appreciable in terms of disruption of feeding, displacement from preferred habitat, and the added energy expended to avoid disturbance. Sampling activities associated with many types of research activities can cause compaction of soils and the trampling of vegetation. Installation of posts, equipment platforms, collection devices, and other research equipment in open water may present a hazard if said items are not adequately marked and/or removed at appropriate times or upon completion of the project. Research efforts may also discover methods that result in a reduction in impacts described above.

The potential for research conducted on the Refuge to conflict with Refuge management activities (e.g., prescribed burning, prescribed grazing, herbicide applications) and visitor use on the Refuge is minimal. Research would be scheduled to minimize conflict with Refuge management activities. Visitors may encounter researchers in the field or observe monitoring plots or other research infrastructure. However, these encounters will be infrequent due to the typically minimal presence of field technicians and interest in maintaining low profile infrastructure to prevent disturbance or vandalism of study sites.

Long-term impacts

Long-term effects should generally be beneficial by gaining information valuable to Refuge management. No long-term negative impacts are expected from the research activities described. The refuge manager can reduce the likelihood of long-term impacts by denying special use permits for research that is likely to cause long-term, adverse impacts. Permits for multi-year research projects are renewed annually, providing the opportunity for an analysis of any impacts before renewing the SUP.

Cumulative impacts would occur if multiple research projects were occurring on the same resources at the same time or if the duration of the research was excessive. In particular, the Refuge must consider the potential impacts of non-Service research, in conjunction with any Service-sponsored research or management activity also taking place. However, no cumulative impacts are expected because the refuge manager can control the potential for cumulative impacts through SUPs, prohibiting multiple research projects from affecting any given area or species at one time. The refuge manager retains the option to deny proposals for research that does not contribute to the mission of the Refuge System or causes undue disturbance or harm to Refuge resources. The refuge manager also retains the right to revoke or deny renewal for any special use permit if unanticipated short-term, long-term, or

cumulative impacts occur.

Project-specific stipulations outlined in each special use permit will act to minimize anticipated impacts of research projects. These stipulations will prevent impacts to Refuge wetlands, water quality, soils, hydrology, fish, wildlife, habitat, or cultural resources. Projects which occur within the habitat of, or include direct monitoring of, threatened and endangered species will be subject to a Section 7 informal consultation with the Service under the Endangered Species Act (87 Stat. 854, as amended; 16U.S.C. 1531 et seq.). Only with the approval of the Section 7 consultation will the Refuge permit research to be conducted on habitats or individuals of threatened and endangered species. Research that could adversely affect critical habitat, threatened or endangered wildlife, or cultural resources will not be permitted.

Public Review and Comment

The draft Comprehensive Conservation Plan (CCP) and accompanying Environmental Assessment and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. Prior to initiation of any research and/or management studies on the Refuge, the requesting agency or organization is required to meet with Refuge management in person and present a comprehensive proposal of why the research is proposed to be undertaken, all methodologies involved, expected short- and long-term impacts of the activities, duration of the research, and anticipated completion date of the report.
2. The requesting agency or organization must apply for a permit by submitting a

NWRS Research and Monitoring Special Use Permit Application and a detailed research proposal.

3. Researchers must give the District at least 45 days to review proposals and determine if a special use permit will be issued. If the research involves the collection of wildlife, the District must be given 60 days to review the proposal.

4. Researchers must obtain all necessary scientific collecting, banding, or other permits required by State, federal, or Institutional Animal Care and Use Committee entities before starting the research.

5. Priority of approval will be based on studies that contribute to the enhancement, protection, use, preservation, and management of native wildlife populations and their habitat.

6. SUPs may contain specific terms and conditions that the researcher(s) must follow relative to activity, location, duration, and time-of year restrictions to ensure continued compatibility.

7. All Refuge rules and regulations must be followed unless alternatives are otherwise accepted in writing by Refuge management.

8. Any research involving ground disturbance may require historic preservation consultation with the Regional Historic Preservation Officer and/or State Historic Preservation Officer.

9. All research related SUPs will contain a statement regarding the Service's policy regarding disposition of biotic specimen.

10. Upon completion of a project, researchers are required to remove all research apparatus in the field and restore any disturbed lands to their original state.

11. Any research project may be terminated at any time for non-compliance with the SUP conditions. Research projects may also be modified, redesigned, relocated, or terminated at any time upon determination by the Refuge manager that the project is causing unanticipated adverse impacts to wildlife, wildlife habitat, approved priority public uses, or other Refuge management activities. Refuge staff will conduct annual reviews of the research project to monitor researcher activities for potential impacts to the Refuge and for compliance with conditions on the SUP. The Refuge manager may terminate previously approved research and SUPs if adverse impacts are observed or if the researcher is not in compliance with the stated conditions.

12. The Service expects researchers to submit a final report to the Refuge upon completing their work. For long-term studies, we may also require interim progress reports. All reports, presentations, posters, articles, or other publications will acknowledge the Refuge System and the Refuge as partners in the research.

Justification

The Service encourages research on national wildlife refuges to collect new information which will improve the quality of Refuge and other Service management decisions, to expand the body of scientific knowledge about fish and wildlife, their habitats, the use of these resources, appropriate resource management, and the environment in general, and to provide the opportunity for students and others to learn the principles of field research. In accordance with 50 CFR 26.41, research conducted by non-Service personnel, as described in this CD, will not materially interfere with, or detract from, the fulfillment of the Refuge System mission or the purposes for which the Refuge was established.

Mandatory Reevaluation Date

2035

Compatibility Determination

Title

Compatibility Determination for Wildlife Observation and Photography for Lake Mason National Wildlife Refuge

Refuge Use Category

Wildlife Observation and Photography

Refuge Use Types

Photography* (filming, still photography, and audio recording)

Wildlife observation

** In accordance with Public Law 118-234 the Expanding Public Lands Outdoor Recreation Experiences Act (EXPLORE Act), enacted on January 4, 2025, the Service will not differentiate between commercial and non-commercial filming use.*

Refuge

Lake Mason National Wildlife Refuge (Refuge)

Refuge Purpose(s) and Establishing and Acquisition Authorities

"... purposes of a land-conservation and land-utilization program ... 7 U.S.C. § 1011 (Bankhead-Jones Farm Tenant Act) "... for use and administration under applicable laws as refuges for migratory birds and other wildlife ..." Secretarial Order 2843, dated Nov. 17, 1959. "... as a refuge and breeding ground for migratory birds and other wildlife: ..." Executive Order 8770, dated June 3, 1941. "... 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 U.S.C. § 460k-1 "... 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 U.S.C. § 460k-2 (Refuge Recreation Act (16 U.S.C. § 460k-460k-4), as amended). "... 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), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986) "... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. § 715d (Migratory Bird Conservation Act) "... conservation, management, and ... restoration of the fish, wildlife, and plant resources and their habitats ... for the benefit of present and future generations of Americans..." 16 U.S.C. § 668dd(a)(2) (National Wildlife Refuge System Administration Act)"

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System (NWRS), otherwise known as 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.

What is the use?

Photography (filming, still photography, or audio recording). Activity involving photography, videography, filming, or other recording of sight or sound of natural or cultural resources (e.g., fish, wildlife, plants, and their habitats) or public uses of those resources by Refuge visitors.

Wildlife observation. Viewing of fish, wildlife, plants, or their habitats by Refuge visitors.

Is the use a priority public use?

Yes

Where would the use be conducted?

All areas open to the public will be open for wildlife observation and photography. These areas do not have trails or built facilities to support these uses. An unimproved road into the Refuge (Lake Mason unit & North unit) and a parking area is present. An improved road runs through the Willow Creek unit. All areas open to the public are open for walking to achieve these uses. Refuge signs denote Refuge boundaries and closed areas designated as refugia for wildlife and that are thus closed to all public entry and access.

When would the use be conducted?

Wildlife observation and photography occur year-round as guided or self-guided activities. The Refuge is open sunrise to sunset for the public.

How would the use be conducted?

Most wildlife observation and photography activities are conducted individually; however, the Refuge may occasionally help facilitate these activities through workshops, planned events, and tours.

Why is this use being proposed or reevaluated?

Wildlife observation, and photography are two priority wildlife-dependent recreational uses of the NWRS identified by the National Wildlife Refuge Improvement Act of 1997 (Improvement Act). These uses help promote the understanding, appreciation, and support of the Refuge System mission.

Availability of Resources

The analysis of cost for administering and managing each use will only include the incremental increase above general operational costs that we can show as being directly caused by the proposed use. Wildlife observation and photography are self-led activities. A Refuge parking area and an unimproved road allow for public entry and use. There is currently enough funding and staff available to provide opportunities for these activities depending on the time and specific staff services requested. No additional funding is needed.

One-time costs: None

Annual/recurring expenses (i.e., for annual operations and maintenance):

Offsetting revenues: None

Anticipated Impacts of the Use

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

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 compatibility determination (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.”

The overall impacts to the Refuge and its associated wildlife populations from these uses would be minimal. Wildlife observation and photography can have both positive and negative implications on Refuge resources.

Short-term impacts

Human disturbance to migratory birds and other wildlife has been documented in many studies. Among activities considered as disturbing to wildlife, Korschen (1992) determined that bird watching was among the least disturbing, but Klein (1993) noted that approaching birds on foot was the most disruptive of usual refuge activities. Some photographers are more likely to cause disturbance by lingering in a sensitive area, using recorded calls, and even altering the vegetation at a site to gain a better view (Glinski 1976). However, photography can be useful as a tool to engage others and develop support for wildlife with images that appeal to people's emotions

(Hanisch 2017). There are many recommendations for reducing impacts to wildlife: provide visitor education, require staying on trails, closing areas during sensitive periods such as nesting, require minimum set back distances for approach to areas such as rookeries, etc. (Boyle et al. 1985, Erwin 1989, Haverra 1992, Klein 1993, Miller 2001, Morton 1989, Rodgers 1995, Taylor 2003).

Human disturbance to avifauna has been thoroughly documented around the world. Several studies have examined the effects of trail-based recreation on birds inhabiting wildlife refuges and coastal habitats in the eastern United States. McNeil et al. (1992) found that many waterfowl species avoid disturbance by feeding at night instead of during the day. Similarly, Martín et al. (2015) found that human presence caused resident shorebird species to spend less time feeding and more time displaying avoidance behavior, and that the number of shorebirds and gulls within their study site dramatically decreased in response to increased recreation of the area. Disturbance can increase the risk of predation when individuals are forced to forage in more dangerous habitats and can increase intraspecific competition when avoiding humans necessitates movement into suboptimal habitats (Frid and Dill 2002).

Some uses, such as bird observation, are directly focused on viewing certain wildlife species and can cause more significant impacts during the breeding season and winter months. Research has shown that as the intensity of human disturbance increased, avoidance response by birds increased, and that out-of-vehicle activity was more disruptive than vehicular traffic (Klein 1993, Freddy et al. 1986, Vaske et al. 1983). Miller et al. (1998) found bird abundance and nesting activities (including nest success) increased as distance from a recreational trail increased, in both grassland and forested habitats. Some studies have found that some songbird species habituate to repeated intrusion. Frequently disturbed individuals of some species vocalize more aggressively, have higher body masses, or tend to remain in place longer (Cairns and McLaren 1980). Disturbance may affect the reproductive fitness of males by hampering territory defense, mate attraction, and other reproductive functions of song (Arcese 1987, Ewald and Carpenter 1978).

Overall, the existing research clearly demonstrates that disturbance from recreation activities always have at least temporary effects on the behavior and movement of birds within a habitat or localized area (Burger 1981, Burger 1986, Klein 1993, Burger et al. 1995, Klein et al. 1995, Rodgers and Smith 1997, Burger and Gochfeld 1998). The location of recreational activities and the size of participating groups are also important factors affecting the magnitude of disturbance. A number of species have shown greater reactions when pedestrian use occurred off-trail (Miller et al. 2001, Samia et al. 2015), and when pedestrians traveled in large groups (Beale and Monaghan 2004).

The presence of humans on Refuge land would disturb some wildlife causing temporary displacement without long-term effects. There would be some disturbance to wildlife and vegetation at the locations where interpretive programs occur with groups, but at levels that would not interfere with the purposes of the

Refuge. Some species may avoid areas with frequent people, while other species would be unaffected by human presence. However, the overall effect of the use on wildlife would not have a population level impact, because most of the Refuge will experience minimal to no daily public use. Vehicles will utilize the designated road and parking area. Self-guided interpretation may be sporadically used by small groups of people at established trails and kiosks. This may cause short-term disturbance to wildlife, but again would have minimal impact.

Long-term impacts

Engaging in activity associated with wildlife observation and photography can be done with very little impact to wildlife (Burger et al. 1995). However, if measures are not taken to reduce disturbance, wildlife can suffer from being displaced to less desirable habitat, forced to use important energy reserves, cause the animal to change behaviors from, for example, breeding to seeking cover, and much more (Arcese 1987, Belanger et al. 1990, Burger et al. 1995, Burger 1996, Burger and Gochfeld 1998, Henson et al. 1991, Kaiser et al. 1984, Korschen 1992, Taylor et al. 2003, Yalden et al. 1990).

The Refuge anticipates that no negative long-term impacts will occur as a result of environmental education and interpretation, however, these uses could be modified in the future to mitigate unforeseen impacts. The Refuge also anticipates positive long-term benefits for the public. These uses allow the public to engage in and experience the Refuge and the outdoors. The Refuge will continue to gain relevancy to new, broader audiences and therefore have a greater reach to the public. Additionally, these uses benefit the Refuge by promoting a conservation ethic in the local community and a better appreciation and understanding of the Refuge's wildlife and habitats.

People can be vectors for invasive species by moving seeds or other propagules from one area to another. The threat of invasive species will always be an issue requiring annual evaluation and treatment. Refuge staff will work to look for early detection of invasive species and will educate the visiting public on the environmental damage and conservation challenges invasive species present. Impacts may be considered not significant when analyzed alone but may be considered important when they are evaluated cumulatively. The Refuge's primary concern is repeated disturbance of resting, foraging, or nesting birds by visitors. Refuge staff will continually evaluate disturbance to habitat and habitat quality and, if necessary, respond with management actions to conserve wildlife resources being adversely impacted. Refuge staff, volunteers, and researchers will evaluate the effects of these priority uses and respond to any adverse effects.

Based on the best available knowledge and with added use restrictions, the Refuge does not expect these uses would cause adverse effects. Educating the public about conservation issues would enhance the Refuge's purposes by promoting a conservation ethic.

Public Review and Comment

The draft Comprehensive Conservation Plan (CCP) and accompanying Environmental Assessment and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. Visitors are to adhere to all Refuge rules and regulations as found in the regulations section of the Refuge website and brochure unless otherwise approved in advance by the Refuge.
2. Disturbing or attempting to disturb, injure, or collect any plant, berries, mushrooms, animal, animal part, horn, antler, bones, skull, or feather is prohibited except by special use permit.
3. Disturbance or collection of any cultural resource is prohibited.
4. Entry on all or portions of individual areas may be temporarily suspended based on public safety, wildlife health, or natural resource concerns. When possible, the public will be given notice of closures. However, unforeseen circumstances may require immediate closure without advanced public notice.
5. In general, special use permits (SUP) are not required for photography parties of eight or fewer individuals, providing that the user conducts the photography activity in a manner that:
 - does not impede or intrude on the experience of other visitors to the Federal land management unit;

- except as otherwise authorized, does not disturb or negatively impact a natural or cultural resource or an environmental or scenic value; and
- allows for equitable allocation or use of facilities of the Federal land management unit.

6. Parties of eight or fewer individuals participating in photography must meet the following conditions:

- Conduct the filming or still photography activity at a location in which the public is allowed.
- Not require the exclusive use of a site or area.
- Not conduct the filming or still photography activity in a localized area that receives a very high volume of visitation.
- Not use a set or staging equipment, subject to the limitation that handheld equipment (such as a tripod, monopod, and handheld lighting equipment) shall not be considered staging equipment.
- Adhere to visitor use policies, practices, and regulations applicable to the Service land management unit.
- Comply with other applicable Federal, State (as defined in section 2 of the EXPLORE Act), and local laws (including regulations), including laws relating to the use of unmanned aerial equipment.
- The filming or still photography activity is not likely to result in additional administrative costs incurred by the Service.

7. In accordance with the EXPLORE Act, photography parties of more than eight individuals should submit a General Activity SUP application to the Charles M. Russell Wetland Management District staff for filming or still photography by parties of more than eight individuals. In addition, parties of any size that do not meet the requirements for photography described above should submit a General Activity SUP application to the Charles M. Russell Wetland Management District staff. When an SUP is required, the District Manager may require the permittee to pay cost recovery fees for permit administration costs.

8. Pursuant to 50 C.F.R. 27.34 (Aircraft) and where applicable 50 C.F.R. 27.51 (Disturbing, injuring, and damaging plants and animals), drones are not permitted on NWRS lands.

Justification

In accordance with the missions of the NWRS and the Improvement Act, the Refuge has determined that the uses are compatible provided the above stipulations are implemented. Wildlife observation and photography are two of the priority wildlife-dependent recreational uses of the NWRS identified by the Improvement Act. These

uses help promote the understanding, appreciation, and support of the Refuge System mission and help promote public awareness and stewardship of the Refuge's natural and cultural resources. The uses do not materially interfere with or detract from the Service's ability to meet the mission of the NWRS, and administration of the uses would only require medium amounts of administrative time and funding.

The Refuge's habitats, wildlife, and public use areas provide a unique wildlife observation, and/or photography experience to visitors, helping them connect with nature and natural ecosystems. Wildlife observation and photography facilitate the connection to nature and the need for conservation. These activities may also enhance environmental education and interpretation programs by allowing visitors experience nature in a more immersive way.

Wildlife disturbance is a concern and limited use will help to minimize any adverse impacts to wildlife. Refuge staff will evaluate impacts on Refuge federal trust resources to determine if there are appreciable negative implications of the use.

Mandatory Reevaluation Date

2040

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Compatibility Determination

Title

Compatibility Determination for Grazing: Grass Lake National Wildlife Refuge

Refuge Use Category

Agriculture, Aquaculture, and Silviculture

Refuge Use Types

Grazing

Refuge

Grass Lake National Wildlife Refuge (Refuge)

Refuge Purpose(s) and Establishing and Acquisition Authorities

"... as a refuge and breeding ground for migratory birds and other wildlife ... Executive Order 9167, dated May 19, 1942 "... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. § 715d (Migratory Bird Conservation Act)"

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System, otherwise known as Refuge System (NWRS), 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?

No.

What is the use?

Prescriptive grazing as a tool to improve habitat conditions for specific wildlife or focal bird species, migratory songbirds, and other grassland-obligate species. Future prescriptive grazing regimens may include short-duration, high-intensity grazing treatments to control invasive plants; habitat management for specific wildlife or focal bird species; or rotation of grazing areas on the Refuge to provide more long-term rest between grazing treatments. The Refuge currently uses cattle livestock (here forth livestock) grazing as a tool to manage grassland and mixed sagebrush grassland habitats. Livestock grazing is designed to mimic some of the behaviors and

grazing habits of early native grazers, which were formerly present on the Refuge's landscape around the early-1800s. Grazing by livestock is a preferred management tool because the effect on habitat is controllable, measurable, and can reasonably mimic early grazers' habits. It has the additional benefit of reducing wildfire risk by reducing the amount of light fuels that can carry a fire. Livestock grazing is utilized in a variety of ways including: high intensity–short duration, rest rotation, and complete rest.

Is the use a priority public use?

No

Where would the use be conducted?

The use would be implemented across the Refuge where the U.S. Fish and Wildlife Service (Service) has control over the use; specifically, on grassland and mixed grassland sagebrush areas. Habitat management units within areas to be grazed will be established to control grazing treatments and help ensure desired habitat characteristics in accordance with the Charles M. Russell Wetland Management District Comprehensive Conservation Plan (CCP) goals and objectives. Units that are fenced from common pastures would be the first units enrolled into prescriptive grazing. Habitat management units that are not fenced from private or other government owned lands would be managed under existing management plans.

When would the use be conducted?

Grazing may occur during any season depending on the specific objectives to be achieved. Conversion to a prescriptive grazing system means a permit may not always be available annually. Exact times and dates vary per unit in accordance with habitat and management objectives in the CCP.

How would the use be conducted?

Grazing will be administered in accordance with the Service's Cooperative Agriculture Use Policy (620 FW 2) and a Cooperative Agriculture Agreement (CAA) consisting of a Commercial Special Use Permit (SUP) having special conditions and a detailed Plan of Operations outlining allowable Animal Unit Months (AUMs), on-off dates, unit locations, unit rotations, and specific instructions pertinent to grazing.

Select grazing units may receive annual grazing treatments consisting of high intensity-short duration, extended rest, complete rest, and/or on a rotational grazing schedule for various lengths of time and may then be rested for multiple years to achieve desired CCP objectives and landscape habitat characteristics.

Why is this use being proposed or reevaluated?

With the issuance of a CCP and Environmental Assessment (EA), this use requires a compatibility determination (CD).

The use of prescriptive grazing to achieve desired habitat conditions would result in long-term beneficial effects on a variety of wildlife species that use the Refuge and is included in the CCP and corresponding EA as a management tool for the District, wherein the Refuge resides. This use is being proposed in order to move from an annual grazing program to a prescriptive grazing program to meet specific wildlife and habitat management objectives. The Refuge lies within the Great Plains and was known to have native grazers ; as such, the landscape's flora and fauna have evolved over millennia with grazing.

The CCP has established goals and objectives for specific habitat types (e.g. grassland, mixed grassland-sagebrush) where prescribed grazing may be utilized. In addition, target wildlife species (e.g. sprague's pipit, mountain plover, chestnut-collared longspur, greater sage-grouse) and their habitat requirements have been identified. This has resulted in objectives that help guide management to meet target wildlife species and their habitat needs. Different grazing strategies may be implemented and assessed in order to determine the best methods for the Refuge to meet the identified habitat goals and objectives of the CCP, as well as combat the spread of invasive graminoids and forbs present in some units.

Availability of Resources

The analysis for administering and managing the use will only include the incremental increase above general operational needs that we can show as being directly caused by the proposed use. The staff time needed for the development and administration of the cooperative grazing program is already committed and available to support the program under current staffing. Most work needed to prepare for this use would continue to be done as part of routine habitat maintenance.

District staff will continue to monitor permittees for violations of permit conditions and trespass. Biologists and the District manager will monitor habitat conditions. New boundary and temporary fences may need to be constructed to implement prescriptive grazing on common pastures. Temporary water developments may be necessary to facilitate prescriptive grazing in some habitat units in order to meet habitat objectives.

Annual/recurring requirements (i.e., for annual operations and maintenance):

1. Maintenance: Maintenance requirements vary and will be reduced due to the reduction in interior fences necessary to manage prescriptive grazing program according to CCP alternatives. There may be additional needs with the construction and maintenance of temporary and boundary fences which would be constructed anyway in order to manage livestock in common pastures.
2. Annual Operations: District personnel currently spend a small portion of their time issuing permits, monitoring for trespass livestock and habitat conditions.
3. Monitoring: District staff monitor for livestock trespass intermittantly; it thus is not a significant portion of staff time.

Offsetting revenues: Refuges receive a percentage of the amount of revenue that is generated from commercial activities occurring on them. These funds aid in costs associated with implementing a prescriptive grazing program.

Anticipated Impacts of the Use

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

Prescribed grazing as a management tool is intended to be utilized to meet habitat and species-specific goals and objectives identified in the CCP, as well as replicate habitat and landscape conditions formerly created by native grazers. This management is intended to maintain and enhance habitat conditions for the benefit of a wide variety of fish and wildlife that utilize the Refuge and includes combating invasive graminoids and forbs. Grazing has the additional benefit of reducing wildfire risk by reducing the amount of light fuels that can carry a fire.

Minimal negative impacts, equal to or perhaps even less than what may have occurred during the former presence of native grazers, are expected through the use of this tool. Landscape character will remain unchanged or may be expected to improve through removal of excessive thatch. Some trampling of areas may occur around watering areas or mineral licks, though no more than what may have occurred with large numbers of native grazers in areas where they congregated or wallowed. Grazing may achieve a mosaic pattern of biomass density throughout the landscape with some areas more intensively grazed than others in certain years to achieve habitat heterogeneity, which could reasonably be expected to have happened when native grazers were present. In addition, while the presence of livestock may disturb some wildlife species, just as with native grazers, and some public visitors, the benefits of this habitat management tool are felt to outweigh these negative impacts since the landscape evolved with grazing and not without it.

When threatened and endangered species are known or suspected to be on a site, the local Service Ecological Services office will be consulted, and the proper steps will be determined to assess how and what management activities will affect that species and what, if anything, should be pursued.

There will be no negative effects on cultural resources.

Short-term impacts

Short term impacts would include loss of vegetative cover which could result in increased soil erosion. Highly palatable forbs and shrubs would be impacted by grazing affecting a large number of wildlife species from pollinators to big game. However, the benefit would be to the wildlife species that require short cover such as prairie dogs, mountain plovers, McCown's longspur, and grazing ungulates that would graze the fresh growth of grasses. Potential disturbance to some wildlife species and some public users may occur.

Grazing by domestic livestock removes and tramples some or much of the standing vegetation from a tract of grassland. In general, grazing will decrease vegetative heights and litter depths and affect plant composition. The measure of short-term impacts will depend upon the grazing timing (time of year), duration (length of graze), and utilization level (i.e., light, moderate, or full, as it pertains to biomass remaining in a unit). Depending on the latter of the three factors, hoof action is expected to break up litter thereby increasing the rate of litter decomposition, opening up the ground for natives to express, and aid in nutrient cycling. Areas around watering systems, along fence lines, and at the location of mineral blocks may experience heavy trampling and compaction resulting in the mortality of perennial vegetation and the establishment of early successional species, just as could have been expected in areas where large native grazers congregated.

Varying bird species differ in their vegetation height preferences; as such, the management goal is to provide a heterogeneity of vegetation heights across the landscape. Pollinators are similar in their need for heterogeneity of heights and plant species. Following a graze, depending on the remaining vegetation height, a site will be more or less attractive for use by certain wildlife species during the respective growing season. Birds that prefer shorter stature grasslands may benefit from the reduced vegetative height resulting from grazing while others, which typically require taller and more dense nesting structure, may be negatively impacted by grazing in the short-term.

In situations where grazing utilizations are full, there may be less litter available for grassland nesting birds who utilize this material for nest construction. However, grazed areas may attract fewer predators because of low densities of some types of prey, such as small mammals (Grant et al. 1982, Runge 2005); less cover for concealment; or both. Higher nesting success in grazed fields may occur because predators respond negatively to low prey density (Clark and Nudds 1991, Larivière and Messier 1998). If a site is completely devoid of litter prior to winter, certain pollinator larvae may lack the needed cover to survive for that year. The same could reasonably have been expected to happen with a large herd(s) of native grazers present on the landscape when and where they may have congregated for extended periods of time.

Research conducted on other refuges has found impact from grazing ranging from minimally negative to favorable. Prescribed grazing on Red Rock Lakes National Wildlife Refuge (NWR) have been shown to have little effect on sage-grouse, a noted species of concern (Schroff 2016 MSU). Another study by (Stadum et al. 2016) found that grazing can provide the structure of vegetation heterogeneity that favors nesting long-billed curlews, a species of concern throughout some areas of Montana, to include the District wherein the Refuge resides. She also cites (Redmond and Jenni 1986) who observed curlews nesting in previously recent grazed areas. (Stadum et al. 2016) further explains how “prescriptive livestock grazing can be used to provide structurally diverse grassland habitats for species with seemingly disparate structural preferences within the same habitat type. Managing grassland habitat for species that

exist on opposite ends of a disturbance preference gradient presumably incorporates the needs of species with intermediate preferences”.

Long-term impacts

Prescriptive grazing will improve habitat conditions for specific wildlife or focal bird species, migratory birds, and other grassland-obligate species. Future prescriptive grazing regimens may include short-duration, high-intensity grazing treatments to control invasive plants; habitat management for specific wildlife or focal bird species; or rotation of grazing areas on the Refuge to provide long-term rest between grazing treatments.

The beneficial effects of grazing on plant diversity depend on grazing intensity, the evolutionary history of the site, and climatic regimes. Continuous rest without periodic disturbance fails to promote long-term grassland health (Naugle et al. 2000). Hoof impact by grazing animals can break up capped soils, improve the water cycle, stimulate vegetative reproduction of grasses, and enhance the decomposition of old plant material by breaking up plant litter. Hoof action can also distribute and trample seeds into soils, increasing chances of successful germination (Laycock 1967). Nutrients are returned to the soil in the form of urine and feces. Cattle may return 80%–85% of the nitrogen ingested with plant tissue (Laycock 1967). The use of prescriptive grazing to achieve desired habitat conditions would result in long-term beneficial effects on a variety of wildlife species that use the Refuge.

The effect of removal of vegetation increases the vigor of grasslands by stimulating the tillering and growth of desired species of grasses and forbs and reducing the abundance of targeted species such as cool season exotic grasses, woody species, noxious weeds, and invasive species. During periods of typical precipitation, normal regrowth following grazing activities can occur within a single growing season. Over time, a strategic prescribed grazing program could effectively alter species composition and improve overall plant diversity. Disturbance of grassland, wet meadow, and some shrub-steppe habitats is essential to maintain plant vigor and reduce infestations of noxious weeds.

As vegetative heights recover following a grazing treatment, habitat conditions will favor birds which prefer denser nesting structure and may become less favorable to species that prefer sparser vegetation. Because of regrowth of herbaceous vegetation, no long-term negative impacts are anticipated for waterfowl or other grassland or mixed grass-sagebrush nesting bird species, though positive impacts of increased diversity and heterogeneity are likely in the long-term.

Public Review and Comment

The draft CCP and accompanying EA and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex

Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. CAAs and SUPs will be written in accordance with the Service's Cooperative Agricultural Use Policy (620 FW 2) and the Region 6 Cooperative Agricultural Program Guidance (2022).
2. Cooperators must follow all requirements for the prescribed grazing treatment as specified within the CAA, its stated Plan of Action, and the Special Conditions of the SUP.
3. Insecticides are not permitted for use on Refuge lands.
4. Control and maintenance of livestock is the responsibility of the permittee.
5. Fencing, water supply, and other livestock management infrastructure needs and costs will be outlined in the CAA and SUP.

Justification

Sharp-tailed grouse, pronghorn, sage-grouse, large ungulates, and other wildlife species need a diversity of and abundant group of plants for food and cover.

Prescriptive grazing and other adaptive management strategies would permit flexibility necessary for the restoration of these important plant species.

Prescriptive grazing is a valuable management tool that supports refuge objectives. As outlined in this CD and in accordance with the stipulations outlined above, based on best professional judgement and available science, the Service has determined that continuation of the grazing use on the Refuge will not materially detract from or interfere with the fulfillment of the NWRS mission or the purposes of the Refuge; will contribute to the NWRS mission and Refuge purposes, meeting the standard or threshold established in 50 CFR §29.1 for economic uses of NWRs; and will not

conflict with the national policy to maintain the biological integrity, diversity, and environmental health of the Refuge.

To maintain and enhance habitat for migratory birds and other wildlife, some habitat management must occur. Prescribed grazing utilizing livestock is one option that can be used to achieve these desired habitat conditions. Prescribed grazing is a useful tool because it can be controlled, and results of the grazing can be periodically monitored (e.g. vegetation monitoring) so that adjustments in the grazing program can be made to meet habitat goals and objectives.

Mandatory Reevaluation Date

2035

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Compatibility Determination

Title

Compatibility Determination for Environmental Education and Interpretation for Grass Lake National Wildlife Refuge

Refuge Use Category

Environmental Education and Interpretation

Refuge Use Types

Environmental education (not conducted by National Wildlife Refuge System (NWRS) staff or authorized agents)

Environmental education (NWRS staff and authorized agents)

Environmental education (general)

Interpretation (NWRS staff and authorized agents)

Interpretation (not conducted by NWRS staff or authorized agents)

Refuge

Grass Lake National Wildlife Refuge (Refuge)

Refuge Purpose(s) and Establishing and Acquisition Authorities

"... as a refuge and breeding ground for migratory birds and other wildlife ... Executive Order 9167, dated May 19, 1942 "... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. § 715d (Migratory Bird Conservation Act)"

National Wildlife Refuge System Mission

The mission of the NWRS, otherwise known as 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?

No.

What is the use?

Environmental education (not conducted by NWRS staff or authorized agents). On-Refuge activities not conducted by NWRS staff or authorized agents that use a

planned process to foster awareness, knowledge, understanding, and appreciation in students, teachers, or group leaders about fish, wildlife, plants, ecology, natural sciences (such as astronomy) and Refuge management.

Environmental education (NWRs staff and authorized agents). On-Refuge activities conducted by NWRs staff or authorized agents that use a planned process to foster awareness, knowledge, understanding, and appreciation in students about fish, wildlife, plants, ecology, natural sciences (such as astronomy) and Refuge management.

Environmental education (general). Environmental education activities not specifically defined elsewhere in this category.

Interpretation (NWRs staff and authorized agents). On-Refuge activities for Refuge visitors conducted by NWRs staff or authorized agents that are designed to foster an understanding and appreciation for natural and cultural resources, and associated management.

Interpretation (not conducted by NWRs staff or authorized agents). On-Refuge activities for Refuge visitors not conducted by NWRs staff or authorized agents that are designed to foster an understanding and appreciation for natural and cultural resources, and associated management.

Is the use a priority public use?

Yes

Where would the use be conducted?

All areas open to the public will be open for environmental education and interpretation. These areas do not have trails or built facilities to support these uses. An unimproved road into the Refuge and a parking area is present. All areas open to the public are open for walking to achieve these uses. Refuge signs denote Refuge boundaries and closed areas designated as refugia for wildlife and that are thus closed to all public entry and access.

When would the use be conducted?

Environmental education, interpretation, wildlife observation, and photography occur year-round as guided or self-guided activities. The Refuge is open sunrise to sunset for the public.

How would the use be conducted?

Environmental education programs are scheduled in advance, and include impromptu presentations and discussions of wildlife conservation issues with interested individual visitors and unscheduled groups. Interpretive and environmental education programs may be given by Refuge staff or volunteers. Teachers may give programs

after applying for and receiving a special use permit (SUP). Any program that is conducted on Refuge land and not lead by Refuge staff requires a SUP.

Interpretive or environmental education programs focus on wildlife and habitats. These programs may address several wildlife conservation topics including riparian ecosystems, wetland habitats, migratory bird management, and endangered species conservation. Programs may also include the development of outdoor skills, which enhance appreciation of wildlife and the habitats they live in.

Most wildlife observation and photography activities are conducted individually; however, the Refuge may occasionally help facilitate these activities through workshops, planned events, and tours.

Why is this use being proposed or reevaluated?

Environmental education and interpretation are two priority wildlife-dependent recreational uses of the NWRS identified by the National Wildlife Refuge Improvement Act of 1997 (Improvement Act). These uses help promote the understanding, appreciation, and support of the Refuge System mission.

Availability of Resources

The analysis of cost for administering and managing each use will only include the incremental increase above general operational costs that we can show as being directly caused by the proposed use. The present Refuge environmental education and interpretive programs are available upon request, staff time permitting if staff are requested. Refuge personnel review proposals related to this use and prepare SUPs. A Refuge parking area and an unimproved road allow for public entry and use. There is currently enough funding and staff available to provide opportunities for these activities depending on the time and specific staff services requested. No additional funding is needed.

One-time costs: None

Annual/recurring expenses (i.e., for annual operations and maintenance):

Offsetting revenues: None

Anticipated Impacts of the Use

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

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 compatibility determination (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.”

The overall impacts to the Refuge and its associated wildlife populations from this use would be minimal. Environmental education and interpretation, and wildlife observation and photography can have both positive and negative implications on Refuge resources.

Short-term impacts

There may be temporary disturbance to wildlife on the Refuge from the presence of humans engaging in environmental education and interpretation activities, due to noise and temporary displacement. However, the amount of environmental education and interpretation activities occurring on the Refuge should result in very minimal impacts to wildlife. There are many recommendations for reducing impacts to wildlife: provide visitor education, require staying on trails, closing areas during sensitive periods such as nesting, require minimum set back distances for approach to areas such as rookeries, etc. (Boyle et al. 1985, Erwin 1989, Haverra 1992, Klein 1993, Miller 2001, Morton 1989, Rodgers 1995, Taylor 2003).

Human disturbance to avifauna has been thoroughly documented around the world. Several studies have examined the effects of trail-based recreation on birds inhabiting wildlife refuges and coastal habitats in the eastern United States. McNeil et al. (1992) found that many waterfowl species avoid disturbance by feeding at night instead of during the day. Similarly, Martín et al. (2015) found that human presence caused resident shorebird species to spend less time feeding and more time displaying avoidance behavior, and that the number of shorebirds and gulls within their study site dramatically decreased in response to increased recreation of the area. Disturbance can increase the risk of predation when individuals are forced to forage in more dangerous habitats and can increase intraspecific competition when avoiding humans necessitates movement into suboptimal habitats (Frid and Dill 2002).

Some uses, such as bird observation, are directly focused on viewing certain wildlife species and can cause more significant impacts during the breeding season and winter months. Research has shown that as the intensity of human disturbance increased, avoidance response by birds increased, and that out-of-vehicle activity was more disruptive than vehicular traffic (Klein 1993, Freddy et al. 1986, Vaske et al. 1983). Miller et al. (1998) found bird abundance and nesting activities (including nest success) increased as distance from a recreational trail increased, in both grassland and forested habitats. Some studies have found that some songbird species habituate to repeated intrusion. Frequently disturbed individuals of some species vocalize more aggressively, have higher body masses, or tend to remain in place longer (Cairns and McLaren 1980). Disturbance may affect the reproductive fitness of males by hampering territory defense, mate attraction, and other reproductive functions of song (Arcese 1987, Ewald and Carpenter 1978).

Overall, the existing research clearly demonstrates that disturbance from recreation activities always have at least temporary effects on the behavior and movement of birds within a habitat or localized area (Burger 1981, Burger 1986, Klein 1993, Burger et

al. 1995, Klein et al. 1995, Rodgers and Smith 1997, Burger and Gochfeld 1998). The location of recreational activities and the size of participating groups are also important factors affecting the magnitude of disturbance. A number of species have shown greater reactions when pedestrian use occurred off-trail (Miller et al. 2001, Samia et al. 2015), and when pedestrians traveled in large groups (Beale and Monaghan 2004).

The presence of humans on Refuge land would disturb some wildlife causing temporary displacement without long-term effects. There would be some disturbance to wildlife and vegetation at the locations where interpretive programs occur with groups, but at levels that would not interfere with the purposes of the Refuge. Some species may avoid areas with frequent people, while other species would be unaffected by human presence. However, the overall effect of the use on wildlife would not have a population level impact, because most of the Refuge will experience minimal to no daily public use. Vehicles will utilize the designated road and parking area. Self-guided interpretation may be sporadically used by small groups of people at established trails and kiosks. This may cause short-term disturbance to wildlife, but again would have minimal impact.

Long-term impacts

The Refuge anticipates that no negative long-term impacts will occur as a result of environmental education and interpretation, however, these uses could be modified in the future to mitigate unforeseen impacts. The Refuge also anticipates positive long-term benefits for the public. These uses allow the public to engage in and experience the Refuge and the outdoors. The Refuge will continue to gain relevancy to new, broader audiences and therefore have a greater reach to the public. Additionally, these uses benefit the Refuge by promoting a conservation ethic in the local community and a better appreciation and understanding of the Refuge's wildlife and habitats.

People can be vectors for invasive species by moving seeds or other propagules from one area to another. The threat of invasive species will always be an issue requiring annual evaluation and treatment. Refuge staff will work to look for early detection of invasive species and will educate the visiting public on the environmental damage and conservation challenges invasive species present. Impacts may be considered not significant when analyzed alone but may be considered important when they are evaluated cumulatively. The Refuge's primary concern is repeated disturbance of resting, foraging, or nesting birds by visitors. Refuge staff will continually evaluate disturbance to habitat and habitat quality and, if necessary, respond with management actions to conserve wildlife resources being adversely impacted. Refuge staff, volunteers, and researchers will evaluate the effects of these priority uses and respond to any adverse effects.

Based on the best available knowledge and with added use restrictions, the Refuge does not expect these uses would cause adverse effects. Educating the public about

conservation issues would enhance the Refuge's purposes by promoting a conservation ethic.

Public Review and Comment

The draft Comprehensive Conservation Plan (CCP) and accompanying Environmental Assessment and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. Visitors are to adhere to all Refuge rules and regulations as found in the regulations section of the Refuge website and brochure unless otherwise approved in advance by the Refuge.
2. Environmental education and interpretation activities not led by Refuge staff require a SUP to minimize conflicts with other groups, safeguard students and resources, and allow tracking of use levels.
3. Disturbing or attempting to disturb, injure, or collect any plant, berries, mushrooms, animal, animal part, horn, antler, bones, skull, or feather is prohibited except by SUP.
4. Disturbance or collection of any cultural resource is prohibited.
5. Interpretive programming and special events will focus on wildlife, conservation, or other environmental attributes of the Refuge including fostering a respect and appreciation of the NWRS and the Refuge.

6. Entry on all or portions of individual areas may be temporarily suspended based on public safety, wildlife health, or natural resource concerns. When possible, the public will be given notice of closures. However, unforeseen circumstances may require immediate closure without advanced public notice.

Justification

In accordance with the missions of the NWRS and the Improvement Act, the Refuge has determined that the uses are compatible provided the above stipulations are implemented. Environmental education and interpretation are two priority wildlife-dependent recreational uses of the NWRS identified by the Improvement Act. These uses help promote the understanding, appreciation, and support of the Refuge System mission and help promote public awareness and stewardship of the Refuge's natural and cultural resources. The uses not materially interfere with or detract from the Service's ability to meet the mission of the NWRS, and administration of the uses would only require medium amounts of administrative time and funding.

The Refuge's habitats, wildlife, and public use areas provide a unique environmental education and interpretation experience to visitors, helping them connect with nature and natural ecosystems. Environmental education is designed to develop a citizenry that has the awareness, concern, knowledge, attitudes, skills, motivations, and commitment to work toward solutions of current environmental problems and the prevention of new ones. Interpretation is a communication process that forges emotional and intellectual connections between the interests of the audience and the inherent meanings in the resource (i.e. more than information). Both environmental education and interpretation are necessary to form relationships between the Service and the public and improve a joint stewardship of our natural resources.

Wildlife disturbance is a concern and limited use will help to minimize any adverse impacts to wildlife. Refuge staff will evaluate impacts on Refuge federal trust resources to determine if there are appreciable negative implications of the use.

Mandatory Reevaluation Date

2040

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Compatibility Determination

Title

Compatibility Determination for Hunting at Grass Lake National Wildlife Refuge

Refuge Use Category

Hunting

Refuge Use Types

Hunting big game; Hunting upland birds; Hunting migratory birds

Refuge

Grass Lake National Wildlife Refuge (NWR)

Refuge Purpose(s) and Establishing and Acquisition Authorities

"... as a refuge and breeding ground for migratory birds and other wildlife ... Executive Order 9167, dated May 19, 1942 "... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. § 715d (Migratory Bird Conservation Act)"

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System, otherwise known as 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?

No.

What is the use?

The hunting of migratory birds, upland birds, and big game is proposed as an approved wildlife-dependent priority public use as outlined in the 1997 National Wildlife Refuge System Improvement Act (Improvement Act). Hunting of migratory birds, upland birds, and big game is proposed in accordance with State regulations and seasons accompanied by specific Grass Lake NWR (Refuge) regulations and restrictions outlined in a Refuge hunt plan including the below:

- Hunting will be restricted to only those areas specifically open to hunting on the

Refuge and excludes areas designated as refugia for wildlife and thus closed to all public entry and access.

- Hunting for waterfowl, which are classified as migratory birds, is already federally mandated to use lead-free ammunition.

Refuge management may further enact, as deemed appropriate at any time, further restrictions or regulations for such reasons as, but not limited to:

- Protection of wildlife.
- Protection of certain specific wildlife species where State regulations are absent, fail to provide reasonable harvest limits, or allow harvest methods not conducive with Refuge values.
- Protection of natural resources.
- Public safety.

Is the use a priority public use?

Yes.

Public hunting is a historical wildlife-dependent use of the Refuge and is designated as one of the priority public uses as specified in the Improvement Act.

Where would the use be conducted?

The Refuge brochure will be available at the Charles M. Russell (CMR) Refuge Complex headquarters, of which Grass Lake NWR is a part of, and online on the Refuge's website to inform the public of Refuge hunting opportunities, regulations, and safety precautions. Maps are also available, which show the location of roads, boundaries, and those areas open and closed to hunting.

Specifically, hunting for big game, upland birds, and migratory birds may occur in accordance with State regulations and specific Refuge regulations and restrictions, on all areas of the Refuge except those areas south of the railroad right-of-way, in which said area has been designated as refugia for all wildlife and as such, closed to all public entry and access.

When would the use be conducted?

Hunting would occur in accordance with State regulated seasons, dates, and times in the State region/zone/area in which the Refuge resides. Additionally, hunting shall be in accordance with any specific Refuge regulations and restrictions in the Refuge hunt plan regarding seasons, dates, and times, and that Refuge management may further enact as deemed appropriate at any time for such reasons as, but not limited to, protection of wildlife; protection of certain specific wildlife species where State regulations are absent, fail to provide reasonable harvest limits, or allow harvest

methods not conducive with Refuge values; protection of natural resources; and public safety.

How would the use be conducted?

Hunting will take place in accordance with State regulations pursuant to seasons, zones/regions/areas, bag limits, and take method regulations. Generally, centerfire rifles are used for big game, with occasional shotguns using slugs, while shotguns with birdshot are used for migratory and upland bird hunting. Additionally, hunting shall be in accordance with any specific Refuge regulations and restrictions in the Refuge hunt plan regarding seasons, dates, times, and allowable take methods. Refuge management may further enact, at any time, more restrictive regulations such as, but not limited to season dates, times, and take measures where it deems such measures are appropriate.

All other wildlife species outside of big game, upland birds, and migratory birds are protected to include, but not limited to coyotes, prairie dogs, jackrabbits, cottontail rabbits, badgers, and bobcats.

Why is this use being proposed or reevaluated?

With the issuance of a Comprehensive Conservation Plan (CCP) and Environmental Assessment (EA), this use requires a hunt plan and a compatibility determination (CD). Recreational public hunting is a historical wildlife dependent use of the CMR Refuge Complex, of which Grass Lake NWR is a part of. Hunting is also designated as one of the priority public uses as specified in the Refuge Improvement Act.

Required boundary and informative signage is already slated for installation to inform the public of the Refuge's specific boundaries and use areas. This same signage will provide the necessary infrastructure to support the Refuge hunt program. Current staffing levels and funding are adequate to support the Refuge's hunt program. Special regulations and restrictions will be in place to minimize negative impacts to the Refuge and its associated wildlife. Montana state law further controls hunter activities through State regulations and restrictions.

Hunting is a legitimate wildlife management tool that can be used to control wildlife populations having excess. Hunting harvests a small percentage of the renewable excess population resource(s), which is in accordance with wildlife management objectives and principals.

Availability of Resources

One-time costs: A one-time cost approximately every 10 years associated with purchasing, creating, replacing signage is part of the Refuge's expected budget and thus not additive.

Annual/recurring expenses (i.e., for annual operations and maintenance):

Maintenance costs: Maintenance costs are expected to be negligible from this use on the Refuge. There are no expected increased costs to maintaining Refuge infrastructure outside normal use of roads and other developed areas, such as parking areas. Installation of informative and boundary signage to facilitate hunting on the Refuge is a regular part of staff duties, thus no extra cost from their installation is additive.

Annual Operations: Adequate resources are available to manage a hunting program at the current projected level of participation.

Offsetting revenues: None

Anticipated Impacts of the Use

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

Proposed implementation of hunting as a use will produce no appreciable adverse impacts to Refuge purposes or the Refuge System mission for the aforementioned reasons: a) hunting has been a historical wildlife dependent use within the CMR Refuge Complex and b) is an approved wildlife dependent use as specified in the Improvement Act. 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."

- There will be no negative effects on threatened and endangered species.
- There will be no negative effects on cultural resources.

Short-term impacts

Temporary disturbance will exist to wildlife in the vicinity of the activity. Animals surplus to populations will be removed by hunting. A temporary decrease in populations of wildlife might help ensure that carrying capacity (especially for big-game species) is not exceeded. Closed areas will provide sanctuary for game and nongame species, minimize conflicts between hunters and other visitors, and provide a safety zone around communities and administrative areas. The harvest of these species will be compensatory mortality, with minimal impact to the overall health of their populations.

Temporary impacts to the habitat are expected due to possible illegal off-road travel. To mitigate the possible impact, the Refuge will establish a parking area. We also enforce a pack-in, pack-out policy encouraging folks to remove their trash.

Lead ammunition is restricted for use for migratory and upland game birds. Since no additional lead from hunting these species will be added to the environment, results could have some beneficial effect on migratory birds or avian predators that prey upon them that occur on the Refuge, thus reducing the overall effects of lead poisoning from lead reduction in the environment.

Lead hunting ammunition for big game species may be prohibited. Studies have shown that where eagles are present to scavenge carcasses, lead can have a detrimental effect on their health when ingested in sufficient quantity. The Service continues a vigorous campaign of educating all hunters on the effects of lead ammunition in the natural environment to mitigate its future use and subsequent introduction in the environment.

Long-term impacts

Hunting is a highly regulated activity, and generally takes place at specific times and seasons when there is a harvestable surplus of game animals, reducing the magnitude of disturbance to Refuge wildlife. Managed and regulated hunting will not reduce species populations to levels where other wildlife-dependent uses will be affected. Hunting is an appropriate wildlife management tool that can be used to manage wildlife populations. Some wildlife disturbance will occur during the hunting seasons.

Regulations and seasons will be designated to minimize any negative impacts to wildlife populations using the Refuge. Harvesting these game animal species would not result in a substantial decrease in biological diversity on the Refuge. Wildlife populations on the Refuge are able to sustain hunting and support other wildlife dependent priority uses. To manage the populations to support hunting, the Refuge adopts harvest regulations set by the State within federal framework guidelines. Recreational hunting will remove individual animals but will not negatively affect wildlife populations.

Lead ammunition is not permitted for migratory and upland game birds. This reduces the potential long-term risk from the introduction of additional lead ammunition in hunting these species on Refuge lands as included in this CCP. Additional lead from hunting these species would no longer enter the environment and potentially impact migratory birds or avian predators that prey upon them and that may occur on the Refuge.

Lead hunting ammunition for big game may be allowed. Studies have shown that where eagles are present to scavenge carcasses, lead can have a detrimental effect on their health when ingested in sufficient quantity. The Service continues a vigorous campaign of educating all hunters on the effects of lead ammunition in the natural environment to mitigate its future use and subsequent introduction in the environment.

Public Review and Comment

The draft CCP and accompanying EA and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

Hunting on the refuge is subject to federal and State regulations and a Montana hunting license is required. Hunting for migratory birds, upland game birds, and big game in compliance with all applicable State and Refuge hunting regulations is permitted on this Refuge.

All other wildlife species outside of big game, migratory birds, and upland birds are protected including, but not limited to coyotes, prairie dogs, jackrabbits, cottontail rabbits, badgers, and bobcats.

1. Visitors are required to park at the designated parking area.
2. Target shooting with firearms or archery equipment is prohibited at all times on the Refuge.
3. Collection of antlers, bones, skulls, animal parts, nests, artifacts, and fossils are prohibited.
4. Portable blinds and other personal property used for hunting must be removed each day.
5. Trail and or game cameras are not allowed.

6. Vehicles are restricted to open roads and parking areas. Any additional travel on the Refuge is by foot only.
7. Non-motorized boat use only is allowed for hunting only in areas open for hunting and operated in accordance with State regulations.
8. Lead-free ammunition is required to hunt migratory game bird species.

Justification

Recreational public hunting is a historical wildlife dependent use of the CMR Refuge Complex, of which Grass Lake NWR is a part of, and is designated as one of the priority public uses as specified in the Improvement Act. Required infrastructure installation for other uses and public information will directly support the hunting program. Current staffing levels and funding are also adequate. Special regulations will be in place to minimize negative impacts to the Refuge and associated wildlife. Montana State law further controls hunter activities. Hunting is a legitimate wildlife management tool that can be used to control excess wildlife populations. Hunting harvests a small percentage of the renewable excess population resource(s), which is in accordance with wildlife management objectives and principals.

Mandatory Reevaluation Date

2040

Figure(s)

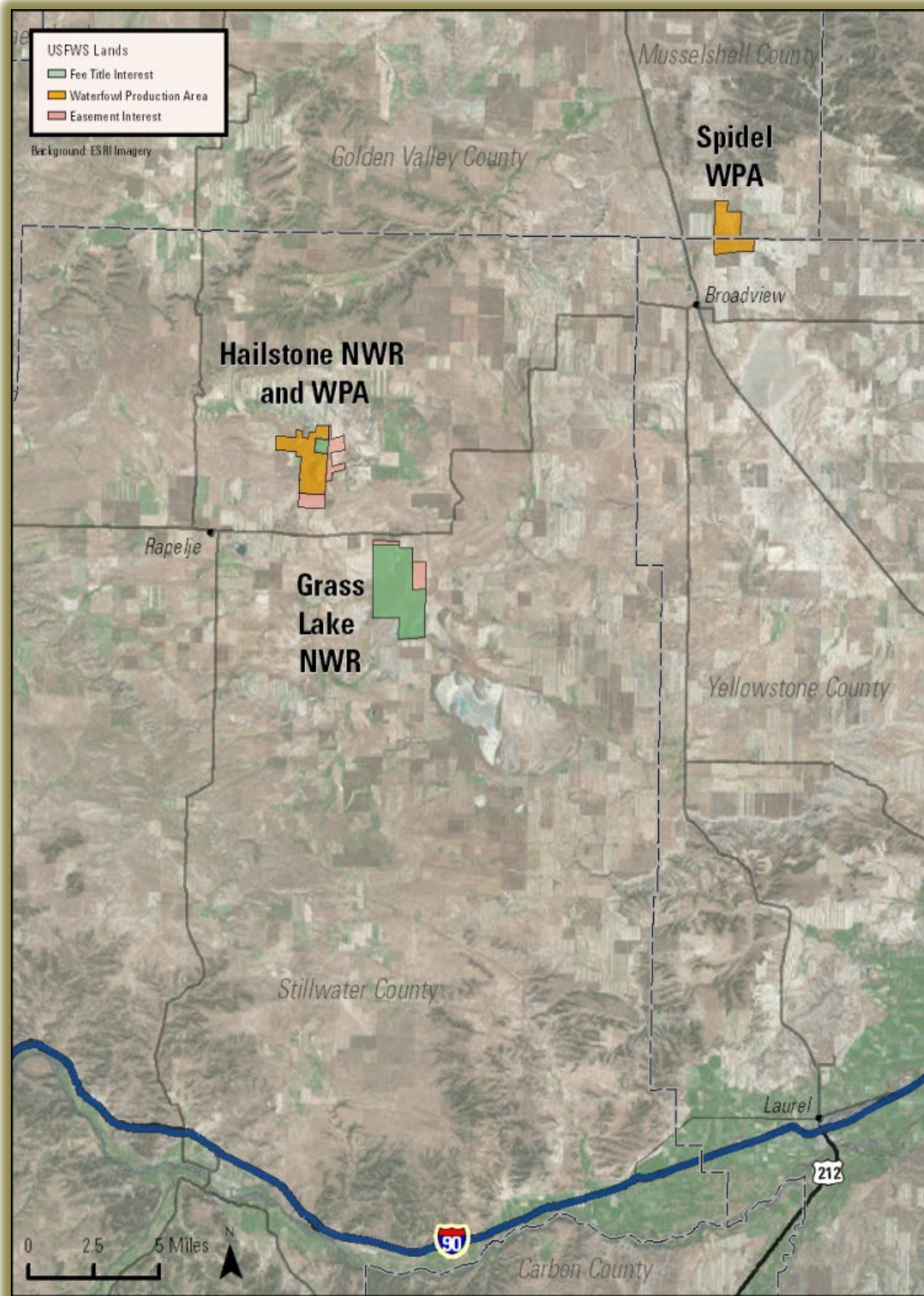


Figure 1. Map of Spidel WPA, Hailstone NWR and WPA, and Grass Lake NWR

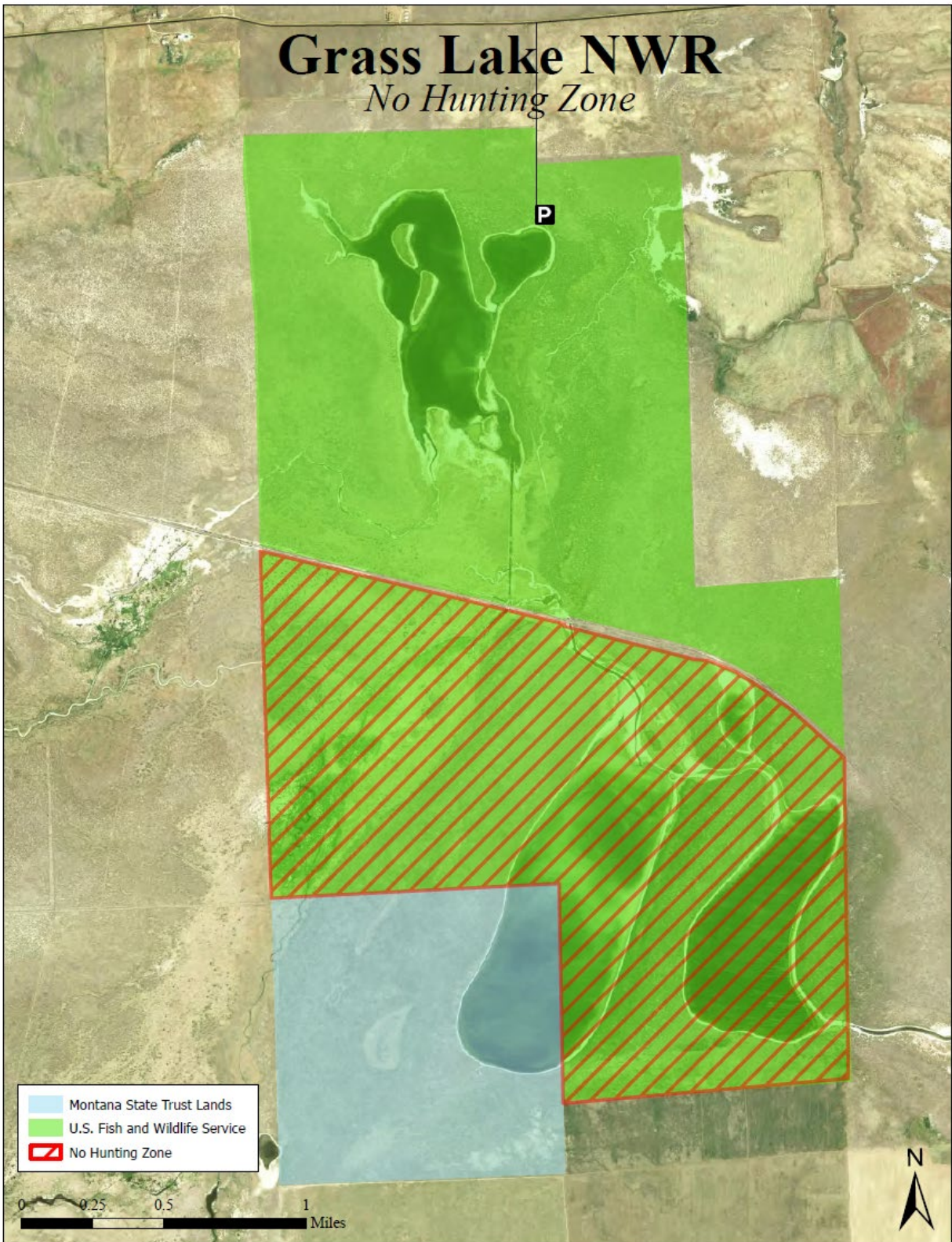


Figure 2. Map of Grass Lake NWR No Hunting Zone

Compatibility Determination

Title

Compatibility Determination for Research, Scientific Collecting, and Surveys, for Grass Lake National Wildlife Refuge

Refuge Use Category

Research and Surveys

Refuge Use Types

Research, Scientific Collecting, Surveys

Refuge

Grass Lake National Wildlife Refuge (Refuge)

Refuge Purpose(s) and Establishing and Acquisition Authorities

“... as a refuge and breeding ground for migratory birds and other wildlife ... Executive Order 9167, dated May 19, 1942 “... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” 16 U.S.C. § 715d (Migratory Bird Conservation Act)”

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System (NWRS), otherwise known as 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?

No.

Grass Lake NWR has not been open to the public.

What is the use?

Research. Planned, organized, and systematic investigation of a scientific nature conducted by non-U.S. Fish and Wildlife Service (Service) personnel or authorized agent.

Scientific collecting. Gathering of refuge natural resources or cultural artifacts for

scientific purposes conducted by non-Service personnel or authorized agent.

Surveys. Scientific inventory or monitoring conducted by non-Service personnel or authorized agents.

Research conducted by non-Service personnel includes research conducted by Federal, State, and private entities, such as the U.S. Geological Survey; State departments of natural resources; students and professors at State and private universities; and independent non-governmental researchers and contractors. Research activities will focus on species, habitats and recreational activities as identified in the Refuge's management plan and other stepdown plans or will address research questions that will provide information to better manage the Refuge.

Acceptable research methods include but are not limited to bird banding, mist netting, point count surveys, radio-telemetry tracking, cameras, recorders, and public surveys.

Requests for special use permits (SUP) for research will be considered on a case-by-case basis, as staff availability allows. In accordance with 16 U.S.C. 668dd(d) and 50 C.F.R. Part 25, Subpart D, the refuge manager is responsible for reviewing applications for SUPs and determining whether to authorize a permit.

The Refuge manager will base the decision to issue an SUP for research on their professional judgment and the value of the proposed research. The decision to allow a particular research project will also be consistent with Service regulations and policy, including the Policy on Maintaining the Biological Integrity, Diversity, and Environmental Health of the Refuge System (601 FW 3).

The results of the research should result in better knowledge of our natural resources and improve methods to manage, monitor, and protect the refuge's biological resources and visitor uses. The Refuge manager will always have the discretion to deny or reevaluate the appropriateness and compatibility of any specific research by non-Service personnel at any time [603 FW 2.1 H(1), (2)].

The Refuge manager may deny a project based on field experiences, knowledge of the Refuge's natural resources, particularly its biological resources, available scientific information, and after consulting with other experts, both inside and outside the Service. When denying a request for a specific research project, the refuge manager will explain the rationale and conclusions supporting their decision in writing. The rationale for the denial will be consistent with the principles of sound fish and wildlife management, Refuge administration, and applicable laws. The denial will generally be based on, but not limited to, evidence that the details of a particular research project might: lead to the impairment of our conservation mission; detract from fulfilling the Refuge's purposes; conflict with the conservation goals or objectives in approved Refuge management plans; not be manageable with the available budget or staff time; be inconsistent with public safety; or conflict with maintaining or restoring the biological integrity, diversity, and environmental health of the Refuge's priority habitats.

Is the use a priority public use?

No

Research conducted by non-Service personnel is not a priority public use of the Refuge System under the Refuge System Administration Act of 1966 (16 U.S.C. 668dd668ee), as amended by the National Wildlife Refuge System Improvement Act of 1997. Although this use is not a priority public use, this activity would allow permitted researchers access to the Refuge to conduct both short-term and long-term research projects.

Where would the use be conducted?

The location of the research will vary depending on the individual research project that is being conducted. The entire Refuge may be considered in a SUP request for scientific research; however, biological research projects are usually focused on a particular habitat type, plant species, or wildlife species.

Occasionally, research projects will encompass an assemblage of habitat types, plants, or wildlife, or may span more than one Refuge or include lands outside the Refuge System. The research location will also be limited only to those areas of the Refuge that are necessary to conduct the research project and access the research location. This may include access to Refuge roads that are closed to the public. The Refuge may limit areas available to research as necessary to ensure the protection of trust resources or reduce conflict with other compatible Refuge uses. Access to study locations will be identified by Refuge staff.

When would the use be conducted?

The timing of the research will depend on the individual research project's approved design. Research may occur on the Refuge throughout the year when there are no conflicts with protection of trust resources or primary public use activities. Special precautions will be required and enforced to ensure the researchers' health and safety and to minimize or eliminate potential conflicts with a priority public use. An individual research project could be short term in design, requiring one or two visits over the course of a few days. Other research projects could be multiple year studies that require daily visits to the study site. The timing of each individual research project will be limited to the minimum required to complete the project.

How would the use be conducted?

Research methods will depend entirely on the individual research project that is conducted. The methods of each research project will be reviewed and scrutinized before it will be allowed to occur on the Refuge.

No research project will be allowed to occur if:

- It negatively impacts endangered species, migratory birds, and other Refuge trust resources;

- It compromises public health and safety.

A Research and Monitoring Special Use Application and detailed research proposal will be required from parties interested in conducting research on the Refuge. Each request for this use will be considered, and if appropriate, will be issued a SUP by the refuge manager. Each request will be evaluated on its own merit. The refuge manager will use sound professional judgment and ensure that the request will have no considerable negative impacts to natural resources, cultural resources, or visitor services and does not violate Refuge regulations. Special needs will be considered on a case-by-case basis and are subject to the refuge manager's approval. Any approved SUP will outline the framework in which the use can be conducted, and Refuge staff will ensure compliance with the permit. The SUP will provide any needed protection to individual Refuge policies, mission, wildlife populations and natural habitats. In addition, all research projects require the primary investigator to submit written summary reports of all findings and acknowledge the Refuge's participation.

Once approved, projects will be reviewed annually to ensure that they are meeting their intended purposes, reporting and communicating with Refuge staff, and are fulfilling the mission of the Refuge System and purposes for which the Refuge was established. If the refuge manager decides to deny, modify, or halt a specific research project, the refuge manager will explain the rationale and conclusions supporting their decision in writing. The denial or modification to an existing study will generally be based on evidence that the details of a particular research project may:

- Negatively affect native fish, wildlife, and habitats or cultural, archaeological, or historical resources,
- Detract from fulfilling the Refuge's purposes or conflict with Refuge goals and objectives,
- Raise public health or safety concerns,
- Conflict with other compatible Refuge uses,
- Not be manageable within the Refuge's available staff or budget time,
- Deviate from the approved study proposal such that impacts to Refuge resources are more severe or extensive than originally anticipated.

Why is this use being proposed or reevaluated?

With the issuance of a Comprehensive Conservation Plan (CCP) and Environmental Assessment (EA), this use requires a compatibility determination (CD).

Research by non-Service personnel is conducted by colleges; universities; federal, State, and local agencies; non-governmental organizations; and qualified members of the public to further the understanding of the natural environment, the utilization of the natural environment by the American people and to improve the management of the Refuge. Much of the information generated by the research is applicable to management on and near the Refuge. In many cases, research by non-Service

personnel ensures the perception of un-biased and objective information gathering which can be important when using the research to develop management recommendations for politically sensitive issues. Additionally, universities and other Federal partners can access equipment, resources, and facilities unavailable to Refuge staff for analysis of data or biological samples.

The Service will encourage and support research and management studies on refuge lands that will improve and strengthen biological and social science management decisions. The refuge manager will encourage and seek research relative to approved Refuge objectives that clearly improves land management and recreational opportunities and promotes adaptive management. Priority research addresses information that will better manage the Nation's biological resources and is generally considered important to agencies of the Department of the Interior, the Service, the Refuge System, and state fish and game agencies. Priority research also addresses important management issues, demonstrates techniques for management of species or habitats, or analyzes ways to improve access and recreational use by the public.

The Refuge will also consider research for other purposes which may not be directly related to Refuge-specific objectives, but contribute to the broader enhancement, protection, use, preservation, and management of native populations of fish, wildlife, and plants, and their natural diversity within the region or flyway. Prospective researchers or organizations can talk to the refuge manager or biologist about specific research needs. Similar research could be conducted by potential researchers and organizations on other nearby public and federal lands. However, the research capabilities and support systems, organization goals, habitat, wildlife, hydrology, and geology of each of these locations vary widely. To best account for the research needs, goals, and funding availability of local, state, federal, university, and research specific organizations – the lands where research is permitted should be diverse. Therefore, maintaining and growing the Refuge research program is essential.

Availability of Resources

The analysis of cost for administering and managing each use will only include the incremental increase above general operational costs that we can show as being directly caused by the proposed use. Refuge support of research directly related to Refuge objectives may take the form of funding, in-kind services such as housing or use of other facilities, direct staff assistance with the project in the form of data collection, provision of historical records, conducting management treatments, or other assistance as appropriate. There is currently enough funding and staff available to allow research opportunities. Special equipment, facilities, or improvement costs are expected to be negligible from this use on the Refuge.

One-time costs: None

Annual/recurring expenses (i.e., for annual operations and maintenance):

1. Maintenance costs: Maintenance costs are expected to be negligible from this use on the Refuge. There are no expected increased costs to maintaining Refuge infrastructure outside normal use of roads and other developed areas.
2. Annual Operations: The bulk of the cost for research is incurred in staff time to review research proposals, coordinate with researchers, and write special use permits. In some cases, a research project may only require 1 day of staff time to write a special use permit. In other cases, a research project may take an accumulation of weeks, as the Refuge staff must coordinate with the principal researcher and accompany them during site visits. Because research conducted on the Refuge is not constant, there may be fiscal years when little if any time is spent on managing outside research projects by Refuge staff.
3. Monitoring costs: None

Offsetting revenues: None

Anticipated Impacts of the Use

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

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 compatibility determination (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."

Short-term impacts

Research activities may disturb fish and wildlife and their habitats. For example, the presence of researchers can cause birds to flush from resting and feeding areas, cause disruption of birds on nests or breeding territories, or increase predation on nests and individual animals as predators follow human scent or trails.

Efforts to capture animals, such as for migratory bird banding, can cause disturbance, injury, or death to groups of wildlife or to individuals. To wildlife, the energy cost of disturbance may be appreciable in terms of disruption of feeding, displacement from preferred habitat, and the added energy expended to avoid disturbance. Sampling activities associated with many types of research activities can cause compaction of soils and the trampling of vegetation. Installation of posts, equipment platforms, collection devices, and other research equipment in open water may present a hazard if said items are not adequately marked and/or removed at appropriate times or upon completion of the project. Research efforts may also discover methods that result in a reduction in impacts described above.

The potential for research conducted on the Refuge to conflict with Refuge

management activities (e.g., prescribed burning, prescribed grazing, herbicide applications) and visitor use on the Refuge is minimal. Research would be scheduled to minimize conflict with Refuge management activities. Visitors may encounter researchers in the field or observe monitoring plots or other research infrastructure. However, these encounters will be infrequent due to the typically minimal presence of field technicians and interest in maintaining low profile infrastructure to prevent disturbance or vandalism of study sites.

Long-term impacts

Long-term effects should generally be beneficial by gaining information valuable to Refuge management. No long-term negative impacts are expected from the research activities described. The refuge manager can reduce the likelihood of long-term impacts by denying special use permits for research that is likely to cause long-term, adverse impacts. Permits for multi-year research projects are renewed annually, providing the opportunity for an analysis of any impacts before renewing the SUP.

Cumulative impacts would occur if multiple research projects were occurring on the same resources at the same time or if the duration of the research was excessive. In particular, the Refuge must consider the potential impacts of non-Service research, in conjunction with any Service-sponsored research or management activity also taking place. However, no cumulative impacts are expected because the refuge manager can control the potential for cumulative impacts through SUPs, prohibiting multiple research projects from affecting any given area or species at one time. The refuge manager retains the option to deny proposals for research that does not contribute to the mission of the Refuge System or causes undue disturbance or harm to Refuge resources. The refuge manager also retains the right to revoke or deny renewal for any special use permit if unanticipated short-term, long-term, or cumulative impacts occur.

Project-specific stipulations outlined in each special use permit will act to minimize anticipated impacts of research projects. These stipulations will prevent impacts to Refuge wetlands, water quality, soils, hydrology, fish, wildlife, habitat, or cultural resources. Projects which occur within the habitat of, or include direct monitoring of, threatened and endangered species will be subject to a Section 7 informal consultation with the Service under the Endangered Species Act (87 Stat. 854, as amended; 16U.S.C. 1531 et seq.). Only with the approval of the Section 7 consultation will the Refuge permit research to be conducted on habitats or individuals of threatened and endangered species. Research that could adversely affect critical habitat, threatened or endangered wildlife, or cultural resources will not be permitted.

Public Review and Comment

The draft Comprehensive Conservation Plan (CCP) and accompanying Environmental Assessment and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal

Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. Prior to initiation of any research and/or management studies on the Refuge, the requesting agency or organization is required to meet with Refuge management in person and present a comprehensive proposal of why the research is proposed to be undertaken, all methodologies involved, expected short- and long-term impacts of the activities, duration of the research, and anticipated completion date of the report.
2. The requesting agency or organization must apply for a permit by submitting a NWRS Research and Monitoring Special Use Permit Application and a detailed research proposal.
3. Researchers must give the District at least 45 days to review proposals and determine if a special use permit will be issued. If the research involves the collection of wildlife, the District must be given 60 days to review the proposal.
4. Researchers must obtain all necessary scientific collecting, banding, or other permits required by State, federal, or Institutional Animal Care and Use Committee entities before starting the research.
5. Priority of approval will be based on studies that contribute to the enhancement, protection, use, preservation, and management of native wildlife populations and their habitat.
6. SUPs may contain specific terms and conditions that the researcher(s) must follow relative to activity, location, duration, and time-of year restrictions to ensure continued compatibility.
7. All Refuge rules and regulations must be followed unless alternatives are otherwise accepted in writing by Refuge management.

8. Any research involving ground disturbance may require historic preservation consultation with the Regional Historic Preservation Officer and/or State Historic Preservation Officer.
9. All research related SUPs will contain a statement regarding the Service's policy regarding disposition of biotic specimen.
10. Upon completion of a project, researchers are required to remove all research apparatus in the field and restore any disturbed lands to their original state.
11. Any research project may be terminated at any time for non-compliance with the SUP conditions. Research projects may also be modified, redesigned, relocated, or terminated at any time upon determination by the Refuge manager that the project is causing unanticipated adverse impacts to wildlife, wildlife habitat, approved priority public uses, or other Refuge management activities. Refuge staff will conduct annual reviews of the research project to monitor researcher activities for potential impacts to the Refuge and for compliance with conditions on the SUP. The Refuge manager may terminate previously approved research and SUPs if adverse impacts are observed or if the researcher is not in compliance with the stated conditions.
12. The Service expects researchers to submit a final report to the Refuge upon completing their work. For long-term studies, we may also require interim progress reports. All reports, presentations, posters, articles, or other publications will acknowledge the Refuge System and the Refuge as partners in the research.

Justification

The Service encourages research on national wildlife refuges to collect new information which will improve the quality of Refuge and other Service management decisions, to expand the body of scientific knowledge about fish and wildlife, their habitats, the use of these resources, appropriate resource management, and the environment in general, and to provide the opportunity for students and others to learn the principles of field research. In accordance with 50 CFR 26.41, research conducted by non-Service personnel, as described in this CD, will not materially interfere with, or detract from, the fulfillment of the Refuge System mission or the purposes for which the Refuge was established.

Mandatory Reevaluation Date

2035

Compatibility Determination

Title

Compatibility Determination for Wildlife Observation and Photography for Grass Lake National Wildlife Refuge

Refuge Use Category

Wildlife Observation and Photography

Refuge Use Types

Photography* (filming, still photography, and audio recording)

Wildlife observation

** In accordance with Public Law 118-234 the Expanding Public Lands Outdoor Recreation Experiences Act (EXPLORE Act), enacted on January 4, 2025, the Service will not differentiate between commercial and non-commercial filming use.*

Refuge

Grass Lake National Wildlife Refuge (Refuge)

Refuge Purpose(s) and Establishing and Acquisition Authorities

“... as a refuge and breeding ground for migratory birds and other wildlife ... Executive Order 9167, dated May 19, 1942 “... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds.” 16 U.S.C. § 715d (Migratory Bird Conservation Act)”

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System (NWRS), otherwise known as 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?

No.

What is the use?

Photography (filming, still photography, or audio recording). Activity involving photography, videography, filming, or other recording of sight or sound of natural or cultural resources (e.g., fish, wildlife, plants, and their habitats) or public uses of those

resources by Refuge visitors.

Wildlife observation. Viewing of fish, wildlife, plants, or their habitats by Refuge visitors.

Is the use a priority public use?

Yes

Where would the use be conducted?

All areas open to the public will be open for wildlife observation and photography. These areas do not have trails or built facilities to support these uses. An unimproved road into the Refuge and a parking area is present. All areas open to the public are open for walking to achieve these uses. Refuge signs denote Refuge boundaries and closed areas designated as refugia for wildlife and that are thus closed to all public entry and access.

When would the use be conducted?

Wildlife observation and photography occur year-round as guided or self-guided activities. The Refuge is open sunrise to sunset for the public.

How would the use be conducted?

Most wildlife observation and photography activities are conducted individually; however, the Refuge may occasionally help facilitate these activities through workshops, planned events, and tours.

Why is this use being proposed or reevaluated?

Wildlife observation, and photography are two priority wildlife-dependent recreational uses of the NWRS identified by the National Wildlife Refuge Improvement Act of 1997 (Improvement Act). These uses help promote the understanding, appreciation, and support of the Refuge System mission.

Availability of Resources

The analysis of cost for administering and managing each use will only include the incremental increase above general operational costs that we can show as being directly caused by the proposed use. Wildlife observation and photography are self-led activities. A Refuge parking area and an unimproved road allow for public entry and use. There is currently enough funding and staff available to provide opportunities for these activities depending on the time and specific staff services requested. No additional funding is needed.

One-time costs: None

Annual/recurring expenses (i.e., for annual operations and maintenance):

Offsetting revenues: None

Anticipated Impacts of the Use

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

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 compatibility determination (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.”

The overall impacts to the Refuge and its associated wildlife populations from this use would be minimal. Wildlife observation and photography can have both positive and negative implications on Refuge resources.

Short-term impacts

Human disturbance to migratory birds and other wildlife has been documented in many studies. Among activities considered as disturbing to wildlife, Korschen (1992) determined that bird watching was among the least disturbing, but Klein (1993) noted that approaching birds on foot was the most disruptive of usual refuge activities. Some photographers are more likely to cause disturbance by lingering in a sensitive area, using recorded calls, and even altering the vegetation at a site to gain a better view (Glinski 1976). However, photography can be useful as a tool to engage others and develop support for wildlife with images that appeal to people's emotions (Hanisch 2017). There are many recommendations for reducing impacts to wildlife: provide visitor education, require staying on trails, closing areas during sensitive periods such as nesting, require minimum set back distances for approach to areas such as rookeries, etc. (Boyle et al. 1985, Erwin 1989, Haverra 1992, Klein 1993, Miller 2001, Morton 1989, Rodgers 1995, Taylor 2003).

Human disturbance to avifauna has been thoroughly documented around the world. Several studies have examined the effects of trail-based recreation on birds inhabiting wildlife refuges and coastal habitats in the eastern United States. McNeil et al. (1992) found that many waterfowl species avoid disturbance by feeding at night instead of during the day. Similarly, Martin et al. (2015) found that human presence caused resident shorebird species to spend less time feeding and more time displaying avoidance behavior, and that the number of shorebirds and gulls within their study site dramatically decreased in response to increased recreation of the area. Disturbance can increase the risk of predation when individuals are forced to forage in more dangerous habitats and can increase intraspecific competition when avoiding humans necessitates movement into suboptimal habitats (Frid and Dill 2002).

Some uses, such as bird observation, are directly focused on viewing certain wildlife species and can cause more significant impacts during the breeding season and winter months. Research has shown that as the intensity of human disturbance

increased, avoidance response by birds increased, and that out-of-vehicle activity was more disruptive than vehicular traffic (Klein 1993, Freddy et al. 1986, Vaske et al. 1983). Miller et al. (1998) found bird abundance and nesting activities (including nest success) increased as distance from a recreational trail increased, in both grassland and forested habitats. Some studies have found that some songbird species habituate to repeated intrusion. Frequently disturbed individuals of some species vocalize more aggressively, have higher body masses, or tend to remain in place longer (Cairns and McLaren 1980). Disturbance may affect the reproductive fitness of males by hampering territory defense, mate attraction, and other reproductive functions of song (Arcese 1987, Ewald and Carpenter 1978).

Overall, the existing research clearly demonstrates that disturbance from recreation activities always have at least temporary effects on the behavior and movement of birds within a habitat or localized area (Burger 1981, Burger 1986, Klein 1993, Burger et al. 1995, Klein et al. 1995, Rodgers and Smith 1997, Burger and Gochfeld 1998). The location of recreational activities and the size of participating groups are also important factors affecting the magnitude of disturbance. A number of species have shown greater reactions when pedestrian use occurred off-trail (Miller et al. 2001, Samia et al. 2015), and when pedestrians traveled in large groups (Beale and Monaghan 2004).

The presence of humans on Refuge land would disturb some wildlife causing temporary displacement without long-term effects. There would be some disturbance to wildlife and vegetation at the locations where interpretive programs occur with groups, but at levels that would not interfere with the purposes of the Refuge. Some species may avoid areas with frequent people, while other species would be unaffected by human presence. However, the overall effect of the use on wildlife would not have a population level impact, because most of the Refuge will experience minimal to no daily public use. Vehicles will utilize the designated road and parking area. Self-guided interpretation may be sporadically used by small groups of people at established trails and kiosks. This may cause short-term disturbance to wildlife, but again would have minimal impact.

Long-term impacts

Engaging in activity associated with wildlife observation and photography can be done with very little impact to wildlife (Burger et al. 1995). However, if measures are not taken to reduce disturbance, wildlife can suffer from being displaced to less desirable habitat, forced to use important energy reserves, cause the animal to change behaviors from, for example, breeding to seeking cover, and much more (Arcese 1987, Belanger et al. 1990, Burger et al. 1995, Burger 1996, Burger and Gochfeld 1998, Henson et al. 1991, Kaiser et al. 1984, Korschen 1992, Taylor et al. 2003, Yalden et al. 1990).

The Refuge anticipates that no negative long-term impacts will occur as a result of environmental education and interpretation, however, these uses could be modified

in the future to mitigate unforeseen impacts. The Refuge also anticipates positive long-term benefits for the public. These uses allow the public to engage in and experience the Refuge and the outdoors. The Refuge will continue to gain relevancy to new, broader audiences and therefore have a greater reach to the public. Additionally, these uses benefit the Refuge by promoting a conservation ethic in the local community and a better appreciation and understanding of the Refuge's wildlife and habitats.

People can be vectors for invasive species by moving seeds or other propagules from one area to another. The threat of invasive species will always be an issue requiring annual evaluation and treatment. Refuge staff will work to look for early detection of invasive species and will educate the visiting public on the environmental damage and conservation challenges invasive species present. Impacts may be considered not significant when analyzed alone but may be considered important when they are evaluated cumulatively. The Refuge's primary concern is repeated disturbance of resting, foraging, or nesting birds by visitors. Refuge staff will continually evaluate disturbance to habitat and habitat quality and, if necessary, respond with management actions to conserve wildlife resources being adversely impacted. Refuge staff, volunteers, and researchers will evaluate the effects of these priority uses and respond to any adverse effects.

Based on the best available knowledge and with added use restrictions, the Refuge does not expect these uses would cause adverse effects. Educating the public about conservation issues would enhance the Refuge's purposes by promoting a conservation ethic.

Public Review and Comment

The draft Comprehensive Conservation Plan (CCP) and accompanying Environmental Assessment and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. Visitors are to adhere to all Refuge rules and regulations as found in the regulations section of the Refuge website and brochure unless otherwise approved in advance by the Refuge.
2. Disturbing or attempting to disturb, injure, or collect any plant, berries, mushrooms, animal, animal part, horn, antler, bones, skull, or feather is prohibited except by special use permit.
3. Disturbance or collection of any cultural resource is prohibited.
4. Entry on all or portions of individual areas may be temporarily suspended based on public safety, wildlife health, or natural resource concerns. When possible, the public will be given notice of closures. However, unforeseen circumstances may require immediate closure without advanced public notice.
5. In general, special use permits (SUP) are not required for photography parties of eight or fewer individuals, providing that the user conducts the photography activity in a manner that:
 - does not impede or intrude on the experience of other visitors to the Federal land management unit;
 - except as otherwise authorized, does not disturb or negatively impact a natural or cultural resource or an environmental or scenic value; and
 - allows for equitable allocation or use of facilities of the Federal land management unit.
6. Parties of eight or fewer individuals participating in photography must meet the following conditions:
 - Conduct the filming or still photography activity at a location in which the public is allowed.
 - Not require the exclusive use of a site or area.
 - Not conduct the filming or still photography activity in a localized area that receives a very high volume of visitation.
 - Not use a set or staging equipment, subject to the limitation that handheld equipment (such as a tripod, monopod, and handheld lighting equipment)

shall not be considered staging equipment.

- Adhere to visitor use policies, practices, and regulations applicable to the Service land management unit.
- Comply with other applicable Federal, State (as defined in section 2 of the EXPLORE Act), and local laws (including regulations), including laws relating to the use of unmanned aerial equipment.
- The filming or still photography activity is not likely to result in additional administrative costs incurred by the Service.

7. In accordance with the EXPLORE Act, photography parties of more than eight individuals should submit a General Activity SUP application to the Charles M. Russell Wetland Management District staff for filming or still photography by parties of more than eight individuals. In addition, parties of any size that do not meet the requirements for photography described above should submit a General Activity SUP application to the Charles M. Russell Wetland Management District staff. When an SUP is required, the District Manager may require the permittee to pay cost recovery fees for permit administration costs.

8. Pursuant to 50 C.F.R. 27.34 (Aircraft) and where applicable 50 C.F.R. 27.51 (Disturbing, injuring, and damaging plants and animals), drones are not permitted on NWRS lands.

Justification

In accordance with the missions of the NWRS and the Improvement Act, the Refuge has determined that the uses are compatible provided the above stipulations are implemented. Wildlife observation and photography are two of the priority wildlife-dependent recreational uses of the NWRS identified by the Improvement Act. These uses help promote the understanding, appreciation, and support of the Refuge System mission and help promote public awareness and stewardship of the Refuge's natural and cultural resources. The uses do not materially interfere with or detract from the Service's ability to meet the mission of the NWRS, and administration of the uses would only require medium amounts of administrative time and funding.

The Refuge's habitats, wildlife, and public use areas provide a unique wildlife observation, and/or photography experience to visitors, helping them connect with nature and natural ecosystems. Wildlife observation and photography facilitate the connection to nature and the need for conservation. These activities may also enhance environmental education and interpretation programs by allowing visitors experience nature in a more immersive way.

Wildlife disturbance is a concern and limited use will help to minimize any adverse impacts to wildlife. Refuge staff will evaluate impacts on Refuge federal trust resources to determine if there are appreciable negative implications of the use.

Mandatory Reevaluation Date

2040

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Compatibility Determination

Title

Compatibility Determination for Grazing: Hailstone National Wildlife Refuge

Refuge Use Category

Agriculture, Aquaculture, and Silviculture

Refuge Use Types

Grazing

Refuge

Hailstone National Wildlife Refuge (Refuge)

Refuge Purpose(s) and Establishing and Acquisition Authorities

“.. as a refuge and breeding ground for migratory birds and other wildlife ... Provided, that as to any lands included in Petroleum Reserve No. 40, Montana No.1, their reservation ... shall be subject to their primary use for the purpose of oil and gas development ... Executive Order 9292, dated Dec. 31, 1942.”

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System, otherwise known as Refuge System (NWRS), 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?

No.

What is the use?

Prescriptive grazing as a tool to improve habitat conditions for specific wildlife or focal bird species, migratory songbirds, and other grassland-obligate species. Future prescriptive grazing regimens may include short-duration, high-intensity grazing treatments to control invasive plants; habitat management for specific wildlife or focal bird species; or rotation of grazing areas on the Refuge to provide more long-term rest between grazing treatments. The Refuge currently uses cattle livestock

(here forth livestock) grazing as a tool to manage grassland and mixed sagebrush grassland habitats. Livestock grazing is designed to mimic some of the behaviors and grazing habits of early native grazers, which were formerly present on the Refuge's landscape around the early-1800s. Grazing by livestock is a preferred management tool because the effect on habitat is controllable, measurable, and can reasonably mimic early grazers' habits. It has the additional benefit of reducing wildfire risk by reducing the amount of light fuels that can carry a fire. Livestock grazing is utilized in a variety of ways including: high intensity-short duration, rest rotation, and complete rest.

Is the use a priority public use?

No

Where would the use be conducted?

The use would be implemented across the Refuge where the U.S. Fish and Wildlife Service (Service) has control over the use; specifically, on grassland and mixed grassland sagebrush areas. Habitat management units within areas to be grazed will be established to control grazing treatments and help ensure desired habitat characteristics in accordance with the Charles M. Russell Wetland Management District Comprehensive Conservation Plan (CCP) goals and objectives. Units that are fenced from common pastures would be the first units enrolled into prescriptive grazing. Habitat management units that are not fenced from private or other government owned lands would be managed under existing management plans.

When would the use be conducted?

Grazing may occur during any season depending on the specific objectives to be achieved. Conversion to a prescriptive grazing system means a permit may not always be available annually. Exact times and dates vary per unit in accordance with habitat and management objectives in the CCP.

How would the use be conducted?

Grazing will be administered in accordance with the Service's Cooperative Agriculture Use Policy (620 FW 2) and a Cooperative Agriculture Agreement (CAA) consisting of a Commercial Special Use Permit (SUP) having special conditions and a detailed Plan of Operations outlining allowable Animal Unit Months (AUMs), on-off dates, unit locations, unit rotations, and specific instructions pertinent to grazing.

Select grazing units may receive annual grazing treatments consisting of high intensity-short duration, extended rest, complete rest, and/or on a rotational grazing schedule for various lengths of time and may then be rested for multiple years to achieve desired CCP objectives and landscape habitat characteristics.

Why is this use being proposed or reevaluated?

With the issuance of a CCP and Environmental Assessment (EA), this use requires a

compatibility determination (CD).

The use of prescriptive grazing to achieve desired habitat conditions would result in long-term beneficial effects on a variety of wildlife species that use the Refuge and is included in the CCP and corresponding EA as a management tool for the District, wherein the Refuge resides. This use is being proposed in order to move from an annual grazing program to a prescriptive grazing program to meet specific wildlife and habitat management objectives. The Refuge lies within the Great Plains and was known to have native grazers ; as such, the landscape's flora and fauna have evolved over millennia with grazing.

The CCP has established goals and objectives for specific habitat types (e.g. grassland, mixed grassland-sagebrush) where prescribed grazing may be utilized. In addition, target wildlife species (e.g. sprague's pipit, mountain plover, chestnut-collared longspur, greater sage-grouse) and their habitat requirements have been identified. This has resulted in objectives that help guide management to meet target wildlife species and their habitat needs. Different grazing strategies may be implemented and assessed in order to determine the best methods for the Refuge to meet the identified habitat goals and objectives of the CCP, as well as combat the spread of invasive graminoids and forbs present in some units.

Availability of Resources

The analysis for administering and managing the use will only include the incremental increase above general operational needs that we can show as being directly caused by the proposed use. The staff time needed for the development and administration of the cooperative grazing program is already committed and available to support the program under current staffing. Most work needed to prepare for this use would continue to be done as part of routine habitat maintenance.

District staff will continue to monitor permittees for violations of permit conditions and trespass. Biologists and the District manager will monitor habitat conditions. New boundary and temporary fences may need to be constructed to implement prescriptive grazing on common pastures. Temporary water developments may be necessary to facilitate prescriptive grazing in some habitat units in order to meet habitat objectives.

Annual/recurring requirements (i.e., for annual operations and maintenance):

1. Maintenance: Maintenance requirements vary and will be reduced due to the reduction in interior fences necessary to manage prescriptive grazing program according to CCP alternatives. There may be additional needs with the construction and maintenance of temporary and boundary fences which would be constructed anyway in order to manage livestock in common pastures.
2. Annual Operations: District personnel currently spend a small portion of their time issuing permits, monitoring for trespass livestock and habitat conditions.

3. Monitoring: District staff monitor for livestock trespass intermittantly; it thus is not a significant portion of staff time.

Offsetting revenues: Refuges receive a percentage of the amount of revenue that is generated from commercial activities occurring on them. These funds aid in costs associated with implementing a prescriptive grazing program.

Anticipated Impacts of the Use

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

Prescribed grazing as a management tool is intended to be utilized to meet habitat and species-specific goals and objectives identified in the CCP, as well as replicate habitat and landscape conditions formerly created by native grazers. This management is intended to maintain and enhance habitat conditions for the benefit of a wide variety of fish and wildlife that utilize the Refuge and includes combating invasive graminoids and forbs. Grazing has the additional benefit of reducing wildfire risk by reducing the amount of light fuels that can carry a fire.

Minimal negative impacts, equal to or perhaps even less than what may have occurred during the former presence of native grazers, are expected through the use of this tool. Landscape character will remain unchanged or may be expected to improve through removal of excessive thatch. Some trampling of areas may occur around watering areas or mineral licks, though no more than what may have occurred with large numbers of native grazers in areas where they congregated or wallowed. Grazing may achieve a mosaic pattern of biomass density throughout the landscape with some areas more intensively grazed than others in certain years to achieve habitat heterogeneity, which could reasonably be expected to have happened when native grazers were present. In addition, while the presence of livestock may disturb some wildlife species, just as with native grazers, and some public visitors, the benefits of this habitat management tool are felt to outweigh these negative impacts since the landscape evolved with grazing and not without it.

When threatened and endangered species are known or suspected to be on a site, the local Service Ecological Services office will be consulted, and the proper steps will be determined to assess how and what management activities will affect that species and what, if anything, should be pursued.

There will be no negative effects on cultural resources.

Short-term impacts

Short term impacts would include loss of vegetative cover which could result in increased soil erosion. Highly palatable forbs and shrubs would be impacted by grazing affecting a large number of wildlife species from pollinators to big game. However, the benefit would be to the wildlife species that require short cover such as prairie dogs, mountain plovers, McCown's longspur, and grazing ungulates that would

graze the fresh growth of grasses. Potential disturbance to some wildlife species and some public users may occur.

Grazing by domestic livestock removes and tramples some or much of the standing vegetation from a tract of grassland. In general, grazing will decrease vegetative heights and litter depths and affect plant composition. The measure of short-term impacts will depend upon the grazing timing (time of year), duration (length of graze), and utilization level (i.e., light, moderate, or full, as it pertains to biomass remaining in a unit). Depending on the latter of the three factors, hoof action is expected to break up litter thereby increasing the rate of litter decomposition, opening up the ground for natives to express, and aid in nutrient cycling. Areas around watering systems, along fence lines, and at the location of mineral blocks may experience heavy trampling and compaction resulting in the mortality of perennial vegetation and the establishment of early successional species, just as could have been expected in areas where large native grazers congregated.

Varying bird species differ in their vegetation height preferences; as such, the management goal is to provide a heterogeneity of vegetation heights across the landscape. Pollinators are similar in their need for heterogeneity of heights and plant species. Following a graze, depending on the remaining vegetation height, a site will be more or less attractive for use by certain wildlife species during the respective growing season. Birds that prefer shorter stature grasslands may benefit from the reduced vegetative height resulting from grazing while others, which typically require taller and more dense nesting structure, may be negatively impacted by grazing in the short-term.

In situations where grazing utilizations are full, there may be less litter available for grassland nesting birds who utilize this material for nest construction. However, grazed areas may attract fewer predators because of low densities of some types of prey, such as small mammals (Grant et al. 1982, Runge 2005); less cover for concealment; or both. Higher nesting success in grazed fields may occur because predators respond negatively to low prey density (Clark and Nudds 1991, Larivière and Messier 1998). If a site is completely devoid of litter prior to winter, certain pollinator larvae may lack the needed cover to survive for that year. The same could reasonably have been expected to happen with a large herd(s) of native grazers present on the landscape when and where they may have congregated for extended periods of time.

Research conducted on other refuges has found impact from grazing ranging from minimally negative to favorable. Prescribed grazing on Red Rock Lakes National Wildlife Refuge (NWR) have been shown to have little effect on sage-grouse, a noted species of concern (Schroff 2016 MSU). Another study by (Stadum et al. 2016) found that grazing can provide the structure of vegetation heterogeneity that favors nesting long-billed curlews, a species of concern throughout some areas of Montana, to include the District wherein the Refuge resides. She also cites (Redmond and Jenni 1986) who observed curlews nesting in previously recent grazed areas. (Stadum et al. 2016) further explains how “prescriptive livestock grazing can be used to provide

structurally diverse grassland habitats for species with seemingly disparate structural preferences within the same habitat type. Managing grassland habitat for species that exist on opposite ends of a disturbance preference gradient presumably incorporates the needs of species with intermediate preferences”.

Long-term impacts

Prescriptive grazing will improve habitat conditions for specific wildlife or focal bird species, migratory birds, and other grassland-obligate species. Future prescriptive grazing regimens may include short-duration, high-intensity grazing treatments to control invasive plants; habitat management for specific wildlife or focal bird species; or rotation of grazing areas on the Refuge to provide long-term rest between grazing treatments.

The beneficial effects of grazing on plant diversity depend on grazing intensity, the evolutionary history of the site, and climatic regimes. Continuous rest without periodic disturbance fails to promote long-term grassland health (Naugle et al. 2000). Hoof impact by grazing animals can break up capped soils, improve the water cycle, stimulate vegetative reproduction of grasses, and enhance the decomposition of old plant material by breaking up plant litter. Hoof action can also distribute and trample seeds into soils, increasing chances of successful germination (Laycock 1967).

Nutrients are returned to the soil in the form of urine and feces. Cattle may return 80%–85% of the nitrogen ingested with plant tissue (Laycock 1967). The use of prescriptive grazing to achieve desired habitat conditions would result in long-term beneficial effects on a variety of wildlife species that use the Refuge.

The effect of removal of vegetation increases the vigor of grasslands by stimulating the tillering and growth of desired species of grasses and forbs and reducing the abundance of targeted species such as cool season exotic grasses, woody species, noxious weeds, and invasive species. During periods of typical precipitation, normal regrowth following grazing activities can occur within a single growing season. Over time, a strategic prescribed grazing program could effectively alter species composition and improve overall plant diversity. Disturbance of grassland, wet meadow, and some shrub-steppe habitats is essential to maintain plant vigor and reduce infestations of noxious weeds.

As vegetative heights recover following a grazing treatment, habitat conditions will favor birds which prefer denser nesting structure and may become less favorable to species that prefer sparser vegetation. Because of regrowth of herbaceous vegetation, no long-term negative impacts are anticipated for waterfowl or other grassland or mixed grass-sagebrush nesting bird species, though positive impacts of increased diversity and heterogeneity are likely in the long-term.

Public Review and Comment

The draft CCP and accompanying EA and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was

notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. CAAs and SUPs will be written in accordance with the Service's Cooperative Agricultural Use Policy (620 FW 2) and the Region 6 Cooperative Agricultural Program Guidance (2022).
2. Cooperators must follow all requirements for the prescribed grazing treatment as specified within the CAA, its stated Plan of Action, and the Special Conditions of the SUP.
3. Insecticides are not permitted for use on Refuge lands.
4. Control and maintenance of livestock is the responsibility of the permittee.
5. Fencing, water supply, and other livestock management infrastructure needs and costs will be outlined in the CAA and SUP.

Justification

Sharp-tailed grouse, pronghorn, sage-grouse, large ungulates, and other wildlife species need a diversity of and abundant group of plants for food and cover. Prescriptive grazing and other adaptive management strategies would permit flexibility necessary for the restoration of these important plant species.

Prescriptive grazing is a valuable management tool that supports refuge objectives. As outlined in this CD and in accordance with the stipulations outlined above, based on best professional judgement and available science, the Service has determined that continuation of the grazing use on the Refuge will not materially detract from or interfere with the fulfillment of the NWRS mission or the purposes of the Refuge; will contribute to the NWRS mission and Refuge purposes, meeting the standard or

threshold established in 50 CFR §29.1 for economic uses of NWRs; and will not conflict with the national policy to maintain the biological integrity, diversity, and environmental health of the Refuge.

To maintain and enhance habitat for migratory birds and other wildlife, some habitat management must occur. Prescribed grazing utilizing livestock is one option that can be used to achieve these desired habitat conditions. Prescribed grazing is a useful tool because it can be controlled, and results of the grazing can be periodically monitored (e.g. vegetation monitoring) so that adjustments in the grazing program can be made to meet habitat goals and objectives.

Mandatory Reevaluation Date

2035

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Compatibility Determination

Title

Compatibility Determination for Environmental Education and Interpretation for Hailstone National Wildlife Refuge

Refuge Use Category

Environmental Education and Interpretation

Refuge Use Types

Environmental education (not conducted by National Wildlife Refuge System (NWRS) staff or authorized agents)

Environmental education (NWRS staff and authorized agents)

Environmental education (general)

Interpretation (NWRS staff and authorized agents)

Interpretation (not conducted by NWRS staff or authorized agents)

Refuge

Hailstone National Wildlife Refuge (Refuge)

Refuge Purpose(s) and Establishing and Acquisition Authorities

“.. as a refuge and breeding ground for migratory birds and other wildlife ... Provided, That as to any lands included in Petroleum Reserve No. 40, Montana No.1, their reservation ... shall be subject to their primary use for the purpose of oil and gas development ... Executive Order 9292, dated Dec. 31, 1942.”

National Wildlife Refuge System Mission

The mission of the NWRS, otherwise known as 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.

What is the use?

Environmental education (not conducted by NWRS staff or authorized agents). On-Refuge activities not conducted by NWRS staff or authorized agents that use a

planned process to foster awareness, knowledge, understanding, and appreciation in students, teachers, or group leaders about fish, wildlife, plants, ecology, natural sciences (such as astronomy) and Refuge management.

Environmental education (NWRS staff and authorized agents). On-Refuge activities conducted by NWRS staff or authorized agents that use a planned process to foster awareness, knowledge, understanding, and appreciation in students about fish, wildlife, plants, ecology, natural sciences (such as astronomy) and Refuge management.

Environmental education (general). Environmental education activities not specifically defined elsewhere in this category.

Interpretation (NWRS staff and authorized agents). On-Refuge activities for Refuge visitors conducted by NWRS staff or authorized agents that are designed to foster an understanding and appreciation for natural and cultural resources, and associated management.

Interpretation (not conducted by NWRS staff or authorized agents). On-Refuge activities for Refuge visitors not conducted by NWRS staff or authorized agents that are designed to foster an understanding and appreciation for natural and cultural resources, and associated management.

Is the use a priority public use?

Yes

Where would the use be conducted?

All areas open to the public will be open for environmental education and interpretation. These areas do not have trails or built facilities to support these uses. An unimproved road into the Refuge area is present. All areas are open for walking to achieve these uses. Refuge signs denote Refuge boundaries.

When would the use be conducted?

Environmental education, interpretation, wildlife observation, and photography occur year-round as guided or self-guided activities. The Refuge is open sunrise to sunset for the public.

How would the use be conducted?

Environmental education programs are scheduled in advance, and include impromptu presentations, and discussions of wildlife conservation issues with interested individual visitors and unscheduled groups. Interpretive and environmental education programs may be given by Refuge staff or volunteers. Teachers may give programs after applying for and receiving a special use permit (SUP). Any program that is conducted on Refuge land and not lead by Refuge staff requires a SUP.

Interpretive or environmental education programs focus on wildlife and habitats. These programs may address several wildlife conservation topics including riparian ecosystems, wetland habitats, migratory bird management, and endangered species conservation. Programs may also include the development of outdoor skills, which enhance appreciation of wildlife and the habitats they live in.

Most wildlife observation and photography activities are conducted individually; however, the Refuge may occasionally help facilitate these activities through workshops, planned events, and tours.

Why is this use being proposed or reevaluated?

Environmental education and interpretation are two priority wildlife-dependent recreational uses of the NWRS identified by the National Wildlife Refuge Improvement Act of 1997. These uses help promote the understanding, appreciation, and support of the Refuge System mission.

Availability of Resources

The analysis of cost for administering and managing each use will only include the incremental increase above general operational costs that we can show as being directly caused by the proposed use. The present Refuge environmental education and interpretive programs are available upon request, staff time permitting if staff are requested. Refuge personnel review proposals related to this use and prepare SUPs. A Refuge parking area and an unimproved road allow for public entry and use. There is currently enough funding and staff available to provide opportunities for these activities depending on the time and specific staff services requested. No additional funding is needed.

One-time costs: None

Annual/recurring expenses (i.e., for annual operations and maintenance): None

Offsetting revenues: None

Anticipated Impacts of the Use

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

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 compatibility determination (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."

The overall impacts to the Refuge and its associated wildlife populations from this use would be minimal. Environmental education and interpretation, and wildlife

observation and photography can have both positive and negative implications on Refuge resources.

Short-term impacts

There may be temporary disturbance to wildlife on the Refuge from the presence of humans engaging in environmental education and interpretation activities, due to noise and temporary displacement. However, the amount of environmental education and interpretation activities occurring on the Refuge should result in very minimal impacts to wildlife. There are many recommendations for reducing impacts to wildlife: provide visitor education, require staying on trails, closing areas during sensitive periods such as nesting, require minimum set back distances for approach to areas such as rookeries, etc. (Boyle et al. 1985, Erwin 1989, Haverra 1992, Klein 1993, Miller 2001, Morton 1989, Rodgers 1995, Taylor 2003).

Human disturbance to avifauna has been thoroughly documented around the world. Several studies have examined the effects of trail-based recreation on birds inhabiting wildlife refuges and coastal habitats in the eastern United States. McNeil et al. (1992) found that many waterfowl species avoid disturbance by feeding at night instead of during the day. Similarly, Martín et al. (2015) found that human presence caused resident shorebird species to spend less time feeding and more time displaying avoidance behavior, and that the number of shorebirds and gulls within their study site dramatically decreased in response to increased recreation of the area. Disturbance can increase the risk of predation when individuals are forced to forage in more dangerous habitats and can increase intraspecific competition when avoiding humans necessitates movement into suboptimal habitats (Frid and Dill 2002).

Some uses, such as bird observation, are directly focused on viewing certain wildlife species and can cause more significant impacts during the breeding season and winter months. Research has shown that as the intensity of human disturbance increased, avoidance response by birds increased, and that out-of-vehicle activity was more disruptive than vehicular traffic (Klein 1993, Freddy et al. 1986, Vaske et al. 1983). Miller et al. (1998) found bird abundance and nesting activities (including nest success) increased as distance from a recreational trail increased, in both grassland and forested habitats. Some studies have found that some songbird species habituate to repeated intrusion. Frequently disturbed individuals of some species vocalize more aggressively, have higher body masses, or tend to remain in place longer (Cairns and McLaren 1980). Disturbance may affect the reproductive fitness of males by hampering territory defense, mate attraction, and other reproductive functions of song (Arcese 1987, Ewald and Carpenter 1978).

Overall, the existing research clearly demonstrates that disturbance from recreation activities always have at least temporary effects on the behavior and movement of birds within a habitat or localized area (Burger 1981, Burger 1986, Klein 1993, Burger et al. 1995, Klein et al. 1995, Rodgers and Smith 1997, Burger and Gochfeld 1998). The location of recreational activities and the size of participating groups are also

important factors affecting the magnitude of disturbance. A number of species have shown greater reactions when pedestrian use occurred off-trail (Miller et al. 2001, Samia et al. 2015), and when pedestrians traveled in large groups (Beale and Monaghan 2004).

The presence of humans on Refuge land would disturb some wildlife causing temporary displacement without long-term effects. There would be some disturbance to wildlife and vegetation at the locations where interpretive programs occur with groups, but at levels that would not interfere with the purposes of the Refuge. Some species may avoid areas with frequent people, while other species would be unaffected by human presence. However, the overall effect of the use on wildlife would not have a population level impact, because most of the Refuge will experience minimal to no daily public use. Vehicles will utilize the designated road and parking area. Self-guided interpretation may be sporadically used by small groups of people at established trails and kiosks. This may cause short-term disturbance to wildlife, but again would have minimal impact.

Long-term impacts

The Refuge anticipates that no negative long-term impacts will occur as a result of environmental education and interpretation, however, these uses could be modified in the future to mitigate unforeseen impacts. The Refuge also anticipates positive long-term benefits for the public. These uses allow the public to engage in and experience the Refuge and the outdoors. The Refuge will continue to gain relevancy to new, broader audiences and therefore have a greater reach to the public. Additionally, these uses benefit the Refuge by promoting a conservation ethic in the local community and a better appreciation and understanding of the Refuge's wildlife and habitats.

People can be vectors for invasive species by moving seeds or other propagules from one area to another. The threat of invasive species will always be an issue requiring annual evaluation and treatment. Refuge staff will work to look for early detection of invasive species and will educate the visiting public on the environmental damage and conservation challenges invasive species present. Impacts may be considered not significant when analyzed alone but may be considered important when they are evaluated cumulatively. The Refuge's primary concern is repeated disturbance of resting, foraging, or nesting birds by visitors. Refuge staff will continually evaluate disturbance to habitat and habitat quality and, if necessary, respond with management actions to conserve wildlife resources being adversely impacted. Refuge staff, volunteers, and researchers will evaluate the effects of these priority uses and respond to any adverse effects.

Based on the best available knowledge and with added use restrictions, the Refuge does not expect these uses would cause adverse effects. Educating the public about conservation issues would enhance the Refuge's purposes by promoting a conservation ethic.

Public Review and Comment

The draft Comprehensive Conservation Plan (CCP) and accompanying Environmental Assessment and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. Visitors are to adhere to all Refuge rules and regulations as found in the regulations section of the Refuge website and brochure unless otherwise approved in advance by the Refuge.
2. Environmental education and interpretation activities not led by Refuge staff require a SUP to minimize conflicts with other groups, safeguard students and resources, and allow tracking of use levels.
3. Disturbing or attempting to disturb, injure, or collect any plant, berries, mushrooms, animal, animal part, horn, antler, bones, skull, or feather is prohibited except by SUP.
4. Disturbance or collection of any cultural resource is prohibited.
5. Interpretive programming and special events will focus on wildlife, conservation, or other environmental attributes of the Refuge including fostering a respect and appreciation of the NWRS and the Refuge.

6. Entry on all or portions of individual areas may be temporarily suspended based on public safety, wildlife health, or natural resource concerns. When possible, the public will be given notice of closures. However, unforeseen circumstances may require immediate closure without advanced public notice.

Justification

In accordance with the missions of the NWRS and the Improvement Act, the Refuge has determined that the uses are compatible provided the above stipulations are implemented. Environmental education and interpretation are two priority wildlife-dependent recreational uses of the NWRS identified by the Improvement Act. These uses help promote the understanding, appreciation, and support of the Refuge System mission and help promote public awareness and stewardship of the Refuge's natural and cultural resources. The uses not materially interfere with or detract from the Service's ability to meet the mission of the NWRS, and administration of the uses would only require medium amounts of administrative time and funding.

The Refuge's habitats, wildlife, and public use areas provide a unique environmental education and interpretation experience to visitors, helping them connect with nature and natural ecosystems. Environmental education is designed to develop a citizenry that has the awareness, concern, knowledge, attitudes, skills, motivations, and commitment to work toward solutions of current environmental problems and the prevention of new ones. Interpretation is a communication process that forges emotional and intellectual connections between the interests of the audience and the inherent meanings in the resource (i.e. more than information). Both environmental education and interpretation are necessary to form relationships between the Service and the public and improve a joint stewardship of our natural resources.

Wildlife disturbance is a concern and limited use will help to minimize any adverse impacts to wildlife. Refuge staff will evaluate impacts on Refuge federal trust resources to determine if there are appreciable negative implications of the use.

Mandatory Reevaluation Date

2040

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Compatibility Determination

Title

Compatibility Determination for Hunting at Hailstone National Wildlife Refuge

Refuge Use Category

Hunting

Refuge Use Types

Hunting big game; Hunting upland birds; Hunting migratory birds

Refuge

Hailstone National Wildlife Refuge (NWR)

Refuge Purpose(s) and Establishing and Acquisition Authorities

“.. as a refuge and breeding ground for migratory birds and other wildlife ... Provided, That as to any lands included in Petroleum Reserve No. 40, Montana No.1, their reservation ... shall be subject to their primary use for the purpose of oil and gas development ... Executive Order 9292, dated Dec. 31, 1942.”

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System (NWRS), otherwise known as 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

What is the Use?

The hunting of migratory birds, upland birds, and big game as an approved wildlife-dependent priority public use and as outlined in the 1997 National Wildlife Refuge System Improvement Act (Improvement Act). Hunting of migratory birds, upland birds, and big game is proposed in accordance with State regulations and seasons accompanied by specific Hailstone NWR (Refuge) regulations and restrictions outlined below:

- Hunting for waterfowl, which are classified as migratory birds, is federally

mandated to use lead-free ammunition.

- Lead-free ammunition is currently required for upland bird hunting.

Refuge management may further enact, as deemed appropriate at any time, further restrictions or regulations for such reasons as, but not limited to:

- Protection of wildlife.
- Protection of certain specific wildlife species where State regulations are absent, fail to provide reasonable harvest limits, or allow harvest methods not conducive with Refuge values.
- Protection of natural resources.
- Public safety.

Is the use a priority public use?

Yes.

Public hunting is a historical wildlife-dependent use of the Refuge and is designated as one of the priority public uses as specified in the Improvement Act.

Where would the use be conducted?

The Refuge brochure will be available at the Charles M. Russell (CMR) Refuge Complex headquarters, of which Hailstone NWR is a part of, and online on the Refuge's website to inform the public of Refuge hunting opportunities, regulations, and safety precautions. Maps are also available, which show the location of roads and boundaries.

Specifically, hunting for big game, upland birds, and migratory birds may occur in accordance with State regulations and specific Refuge regulations and restrictions, on all areas of the Refuge. Hailstone Waterfowl Production Area, which is adjacent to the Refuge, is also open for hunting according to State regulations.

When would the use be conducted?

Hunting would occur in accordance with State regulated seasons, dates, and times in the State region/zone/area in which the Refuge resides. Additionally, hunting shall be in accordance with any specific Refuge regulations and restrictions regarding seasons, dates, and times, and that Refuge management may further enact as deemed appropriate at any time for such reasons as, but not limited to, protection of wildlife; protection of certain specific wildlife species where State regulations are absent, fail to provide reasonable harvest limits, or allow harvest methods not conducive with Refuge values; protection of natural resources; and public safety.

How would the use be conducted?

Hunting will take place in accordance with State regulations pursuant to seasons, zones/regions/areas, bag limits, and take method regulations. Generally, centerfire rifles are used for big game, with occasional shotguns using slugs, while shotguns with birdshot are used for migratory and upland bird hunting. Additionally, hunting shall be in accordance with any specific Refuge regulations and restrictions regarding seasons, dates, times, and allowable take methods. Refuge management may further enact, at any time, more restrictive regulations such as, but not limited to season dates, times, and take measures where it deems such measures are appropriate.

All other wildlife species outside of big game, upland birds, and migratory birds are protected to include, but not limited to coyotes, prairie dogs, jackrabbits, cottontail rabbits, badgers, and bobcats.

Why is this use being proposed or reevaluated?

With the issuance of a Comprehensive Conservation Plan (CCP) and Environmental Assessment (EA), this use requires a compatibility determination (CD). Recreational public hunting is a historical wildlife dependent use of the CMR Refuge Complex, of which Hailstone NWR is a part of. Hunting is also designated as one of the priority public uses as specified in the Refuge Improvement Act.

Required boundary and informative signage is already in place with more slated for installation to inform the public of the Refuge's specific boundaries and use areas. This same signage will provide the necessary infrastructure to support hunting on the Refuge. Current staffing levels and funding are adequate to support hunting on the Refuge. Special regulations and restrictions will be in place to minimize negative impacts to the Refuge and its associated wildlife. Montana state law further controls hunter activities through State regulations and restrictions.

Hunting is a legitimate wildlife management tool that can be used to control wildlife populations having excess. Hunting harvests a small percentage of the renewable excess population resource(s), which is in accordance with wildlife management objectives and principals.

Availability of Resources

One-time costs: A one-time cost approximately every 10 years associated with purchasing, creating, replacing signage is part of the Refuge's expected budget and thus not additive.

Annual/recurring expenses (i.e., for annual operations and maintenance):

Maintenance costs: Maintenance costs are expected to be negligible from this use on the Refuge. There are no expected increased costs to maintaining Refuge infrastructure outside normal use of roads and other developed areas, such as parking areas. Installation of informative and boundary signage to facilitate hunting on the Refuge is a regular part of staff duties, thus no extra cost from their installation is additive.

Annual Operations: Adequate resources are available to manage the existing hunting program at the current projected level of participation.

Offsetting revenues: None

Anticipated Impacts of the Use

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

Proposed implementation of hunting as a use will produce no appreciable adverse impacts to Refuge purposes or the Refuge System mission for the aforementioned reasons: a) hunting has been a historical wildlife dependent use within the CMR Refuge Complex and b) is an approved wildlife dependent use as specified in the Improvement Act. 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."

- There will be no negative effects on threatened and endangered species.
- There will be no negative effects on cultural resources.

Short-term impacts

Temporary disturbance will exist to wildlife in the vicinity of the activity. Animals surplus to populations will be removed by hunting. A temporary decrease in populations of wildlife might help ensure that carrying capacity (especially for big-game species) is not exceeded. The harvest of these species will be compensatory mortality, with minimal impact to the overall health of their populations.

Temporary impacts to the habitat are expected due to possible illegal off-road travel. To mitigate the possible impact, the Refuge will establish a parking area. We also enforce a pack-in, pack-out policy encouraging folks to remove their trash.

Lead ammunition is restricted for use for upland game birds and migratory game birds. Since no additional lead from hunting these species will be added to the environment, results could have some beneficial effect on migratory birds or avian predators that prey upon them that occur on the Refuge, thus reducing the overall effects of lead poisoning from lead reduction in the environment.

Lead hunting ammunition for big game species is may be allowed. Studies have shown that where eagles are present to scavenge carcasses, lead can have a detrimental effect on their health when ingested in sufficient quantity. The Service continues a vigorous campaign of educating all hunters on the effects of lead ammunition in the natural environment to mitigate its future use and subsequent introduction in the environment.

Long-term impacts

Hunting is a highly regulated activity, and generally takes place at specific times and seasons when there is a harvestable surplus of game animals, reducing the magnitude of disturbance to Refuge wildlife. Managed and regulated hunting will not reduce species populations to levels where other wildlife-dependent uses will be affected. Hunting is an appropriate wildlife management tool that can be used to manage wildlife populations. Some wildlife disturbance will occur during the hunting seasons.

Regulations and seasons will be designated to minimize any negative impacts to wildlife populations using the Refuge. Harvesting these game animal species would not result in a substantial decrease in biological diversity on the Refuge. Wildlife populations on the Refuge are able to sustain hunting and support other wildlife dependent priority uses. To manage the populations to support hunting, the Refuge adopts harvest regulations set by the State within federal framework guidelines. Recreational hunting will remove individual animals but will not negatively affect wildlife populations.

Lead ammunition is not permitted for migratory game birds or upland game birds. This reduces the potential long-term risk from the introduction of additional lead ammunition in hunting these species on Refuge lands as included in this CCP. Additional lead from hunting these species would no longer enter the environment and potentially impact migratory birds or avian predators that prey upon them and that may occur on the Refuge.

Lead hunting ammunition for big game species may be allowed. Studies have shown that where eagles are present to scavenge carcasses, lead can have a detrimental effect on their health when ingested in sufficient quantity. The Service continues a vigorous campaign of educating all hunters on the effects of lead ammunition in the natural environment to mitigate its future use and subsequent introduction in the environment.

Public Review and Comment

The draft CCP and accompanying EA and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

Hunting on the Refuge is subject to federal and State regulations and a Montana hunting license is required. Hunting for migratory birds, upland game birds, and big game in compliance with all applicable State and Refuge hunting regulations is permitted on this Refuge.

All other wildlife species outside of big game, migratory birds, and upland birds are protected including, but not limited to coyotes, prairie dogs, jackrabbits, cottontail rabbits, badgers, and bobcats.

1. Visitors are required to park at the designated parking area.
2. Target shooting with firearms or archery equipment is prohibited at all times on the Refuge.
3. Collection of antlers, bones, skulls, animal parts, nests, artifacts, and fossils is prohibited.
4. Portable blinds and other personal property used for hunting must be removed each day.
5. Trail and or game cameras are not allowed.
6. Vehicles are restricted to open roads and parking areas. Any additional travel on the Refuge is by foot only.

7. Lead-free ammunition is required to hunt migratory game bird and upland game bird species.

Justification

Recreational public hunting is a historical wildlife dependent use of the CMR Refuge Complex, of which Hailstone NWR is a part of, and is designated as one of the priority public uses as specified in the National Wildlife Refuge System Improvement Act. Required infrastructure installation for other uses and public information will directly support the hunting on the Refuge. Current staffing levels and funding are also adequate. Special regulations will be in place to minimize negative impacts to the Refuge and associated wildlife. Montana State law further controls hunter activities. Hunting is a legitimate wildlife management tool that can be used to control excess wildlife populations. Hunting harvests a small percentage of the renewable excess population resource(s), which is in accordance with wildlife management objectives and principals.

Mandatory Reevaluation Date

2040

Figure(s)

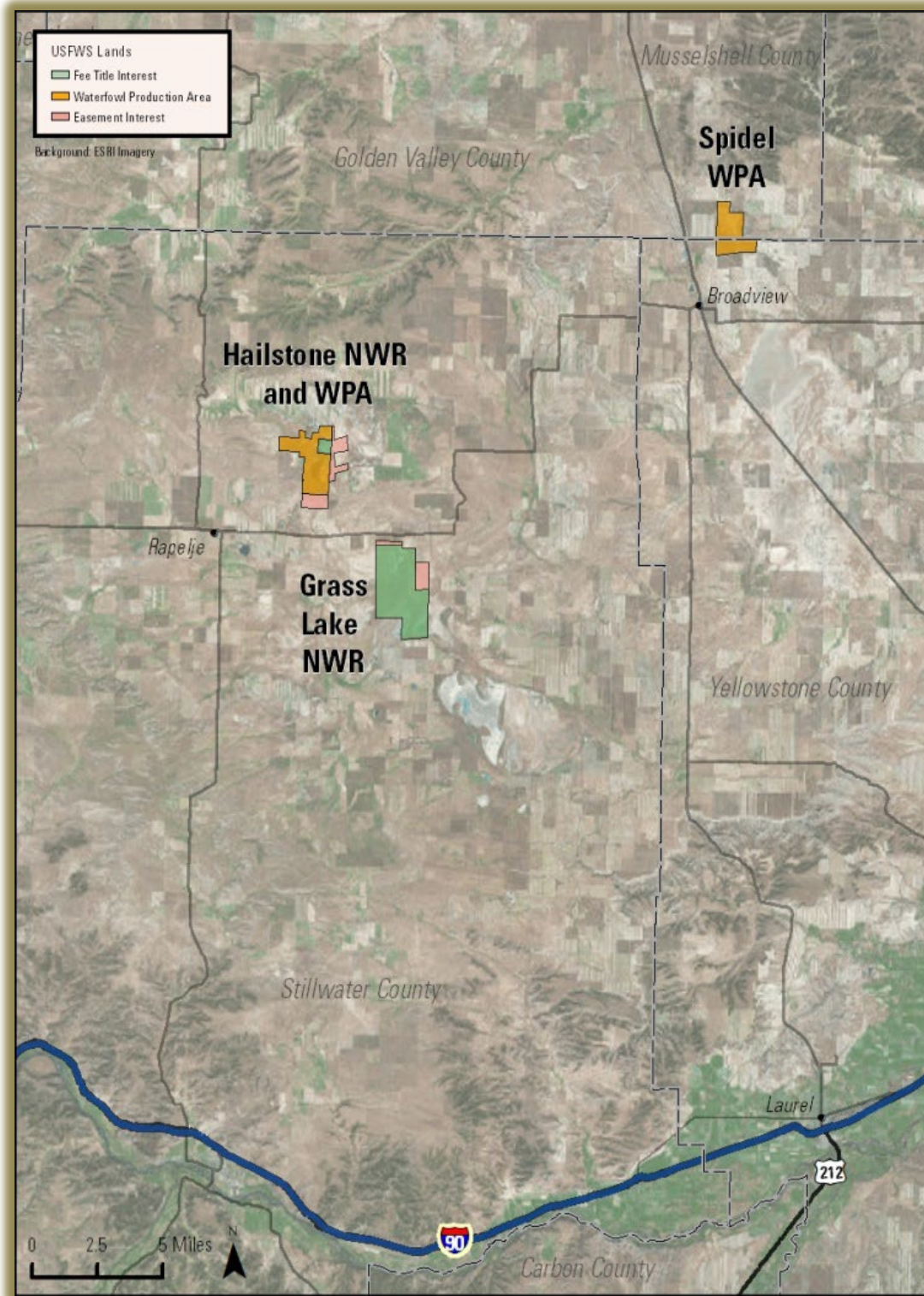


Figure 1. Map of Spidel WPA, Hailstone NWR and WPA, and Grass Lake NWR

Compatibility Determination

Title

Compatibility Determination for Research, Scientific Collecting, and Surveys, for Hailstone National Wildlife Refuge

Refuge Use Category

Research and Surveys

Refuge Use Types

Research, Scientific Collecting, Surveys

Refuge

Hailstone National Wildlife Refuge (Refuge)

Refuge Purpose(s) and Establishing and Acquisition Authorities

“.. as a refuge and breeding ground for migratory birds and other wildlife ... Provided, that as to any lands included in Petroleum Reserve No. 40, Montana No.1, their reservation ... shall be subject to their primary use for the purpose of oil and gas development ... Executive Order 9292, dated Dec. 31, 1942.”

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System (NWRS), otherwise known as 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.

What is the use?

Research. Planned, organized, and systematic investigation of a scientific nature conducted by non-U.S. Fish and Wildlife Service (Service) personnel or authorized agent.

Scientific collecting. Gathering of refuge natural resources or cultural artifacts for scientific purposes conducted by non-Service personnel or authorized agent.

Surveys. Scientific inventory or monitoring conducted by non-Service personnel or authorized agents.

Research conducted by non-Service personnel includes research conducted by Federal, State, and private entities, such as the U.S. Geological Survey; State departments of natural resources; students and professors at State and private universities; and independent non-governmental researchers and contractors. Research activities will focus on species, habitats and recreational activities as identified in the Refuge's management plan and other stepdown plans or will address research questions that will provide information to better manage the Refuge.

Acceptable research methods include but are not limited to bird banding, mist netting, point count surveys, radio-telemetry tracking, cameras, recorders, and public surveys.

Requests for special use permits (SUP) for research will be considered on a case-by-case basis, as staff availability allows. In accordance with 16 U.S.C. 668dd(d) and 50 C.F.R. Part 25, Subpart D, the refuge manager is responsible for reviewing applications for SUPs and determining whether to authorize a permit.

The Refuge manager will base the decision to issue an SUP for research on their professional judgment and the value of the proposed research. The decision to allow a particular research project will also be consistent with Service regulations and policy, including the Policy on Maintaining the Biological Integrity, Diversity, and Environmental Health of the Refuge System (601 FW 3).

The results of the research should result in better knowledge of our natural resources and improve methods to manage, monitor, and protect the refuge's biological resources and visitor uses. The Refuge manager will always have the discretion to deny or reevaluate the appropriateness and compatibility of any specific research by non-Service personnel at any time [603 FW 2.1 H(1), (2)].

The Refuge manager may deny a project based on field experiences, knowledge of the Refuge's natural resources, particularly its biological resources, available scientific information, and after consulting with other experts, both inside and outside the Service. When denying a request for a specific research project, the refuge manager will explain the rationale and conclusions supporting their decision in writing. The rationale for the denial will be consistent with the principles of sound fish and wildlife management, Refuge administration, and applicable laws. The denial will generally be based on, but not limited to, evidence that the details of a particular research project might: lead to the impairment of our conservation mission; detract from fulfilling the Refuge's purposes; conflict with the conservation goals or objectives in approved Refuge management plans; not be manageable with the available budget or staff time; be inconsistent with public safety; or conflict with maintaining or restoring the biological integrity, diversity, and environmental health of the Refuge's priority habitats.

Is the use a priority public use?

No

Research conducted by non-Service personnel is not a priority public use of the Refuge System under the Refuge System Administration Act of 1966 (16 U.S.C. 668dd668ee), as amended by the National Wildlife Refuge System Improvement Act of 1997. Although this use is not a priority public use, this activity would allow permitted researchers access to the Refuge to conduct both short-term and long-term research projects.

Where would the use be conducted?

The location of the research will vary depending on the individual research project that is being conducted. The entire Refuge may be considered in a permit request for scientific research; however, biological research projects are usually focused on a particular habitat type, plant species, or wildlife species.

Occasionally, research projects will encompass an assemblage of habitat types, plants, or wildlife, or may span more than one Refuge or include lands outside the Refuge System. The research location will also be limited only to those areas of the Refuge that are necessary to conduct the research project and access the research location. This may include access to Refuge roads that are closed to the public. The Refuge may limit areas available to research as necessary to ensure the protection of trust resources or reduce conflict with other compatible Refuge uses. Access to study locations will be identified by Refuge staff.

When would the use be conducted?

The timing of the research will depend on the individual research project's approved design. Research may occur on the Refuge throughout the year when there are no conflicts with protection of trust resources or primary public use activities. Special precautions will be required and enforced to ensure the researchers' health and safety and to minimize or eliminate potential conflicts with a priority public use. An individual research project could be short term in design, requiring one or two visits over the course of a few days. Other research projects could be multiple year studies that require daily visits to the study site. The timing of each individual research project will be limited to the minimum required to complete the project.

How would the use be conducted?

Research methods will depend entirely on the individual research project that is conducted. The methods of each research project will be reviewed and scrutinized before it will be allowed to occur on the Refuge.

No research project will be allowed to occur if:

- It negatively impacts endangered species, migratory birds, and other Refuge trust resources;

- It compromises public health and safety.

A Research and Monitoring Special Use Application and detailed research proposal will be required from parties interested in conducting research on the Refuge. Each request for this use will be considered, and if appropriate, will be issued a SUP by the refuge manager. Each request will be evaluated on its own merit. The refuge manager will use sound professional judgment and ensure that the request will have no considerable negative impacts to natural resources, cultural resources, or visitor services and does not violate Refuge regulations. Special needs will be considered on a case-by-case basis and are subject to the refuge manager's approval. Any approved SUP will outline the framework in which the use can be conducted, and Refuge staff will ensure compliance with the permit. The SUP will provide any needed protection to individual Refuge policies, mission, wildlife populations and natural habitats. In addition, all research projects require the primary investigator to submit written summary reports of all findings and acknowledge the Refuge's participation.

Once approved, projects will be reviewed annually to ensure that they are meeting their intended purposes, reporting and communicating with Refuge staff, and are fulfilling the mission of the Refuge System and purposes for which the Refuge was established. If the refuge manager decides to deny, modify, or halt a specific research project, the refuge manager will explain the rationale and conclusions supporting their decision in writing. The denial or modification to an existing study will generally be based on evidence that the details of a particular research project may:

- Negatively affect native fish, wildlife, and habitats or cultural, archaeological, or historical resources,
- Detract from fulfilling the Refuge's purposes or conflict with Refuge goals and objectives,
- Raise public health or safety concerns,
- Conflict with other compatible Refuge uses,
- Not be manageable within the Refuge's available staff or budget time,
- Deviate from the approved study proposal such that impacts to Refuge resources are more severe or extensive than originally anticipated.

Why is this use being proposed or reevaluated?

Research by non-Service personnel is conducted by colleges; universities; Federal, State, and local agencies; non-governmental organizations; and qualified members of the public to further the understanding of the natural environment, the utilization of the natural environment by the American people and to improve the management of the Refuge. Much of the information generated by the research is applicable to management on and near the Refuge. In many cases, research by non-Service personnel ensures the perception of un-biased and objective information gathering which can be important when using the research to develop management

recommendations for politically sensitive issues. Additionally, universities and other Federal partners can access equipment, resources, and facilities unavailable to Refuge staff for analysis of data or biological samples.

The Service will encourage and support research and management studies on refuge lands that will improve and strengthen biological and social science management decisions. The refuge manager will encourage and seek research relative to approved Refuge objectives that clearly improves land management and recreational opportunities and promotes adaptive management. Priority research addresses information that will better manage the Nation's biological resources and is generally considered important to agencies of the Department of Interior, the Service, the Refuge System, and state fish and game agencies. Priority research also addresses important management issues, demonstrates techniques for management of species or habitats, or analyzes ways to improve access and recreational use by the public.

The Refuge will also consider research for other purposes which may not be directly related to Refuge-specific objectives, but contribute to the broader enhancement, protection, use, preservation, and management of native populations of fish, wildlife, and plants, and their natural diversity within the region or flyway. Prospective researchers or organizations can talk to the refuge manager or biologist about specific research needs. Similar research could be conducted by potential researchers and organizations on other nearby public and federal lands. However, the research capabilities and support systems, organization goals, habitat, wildlife, hydrology, and geology of each of these locations vary widely. To best account for the research needs, goals, and funding availability of local, state, federal, university, and research specific organizations – the lands where research is permitted should be diverse. Therefore, maintaining and growing the Refuge research program is essential.

Availability of Resources

The analysis of cost for administering and managing each use will only include the incremental increase above general operational costs that we can show as being directly caused by the proposed use. Refuge support of research directly related to Refuge objectives may take the form of funding, in-kind services such as housing or use of other facilities, direct staff assistance with the project in the form of data collection, provision of historical records, conducting management treatments, or other assistance as appropriate. There is currently enough funding and staff available to allow research opportunities. Special equipment, facilities, or improvement costs are expected to be negligible from this use on the Refuge.

One-time costs: None

Annual/recurring expenses (i.e., for annual operations and maintenance):

1. Maintenance costs: Maintenance costs are expected to be negligible from this use on the Refuge. There are no expected increased costs to maintaining Refuge

infrastructure outside normal use of roads and other developed areas.

2. Annual Operations: The bulk of the cost for research is incurred in staff time to review research proposals, coordinate with researchers, and write special use permits. In some cases, a research project may only require 1 day of staff time to write a special use permit. In other cases, a research project may take an accumulation of weeks, as the Refuge staff must coordinate with the principal researcher and accompany them during site visits. Because research conducted on the Refuge is not constant, there may be fiscal years when little if any time is spent on managing outside research projects by Refuge staff.

3. Monitoring costs: None

Offsetting revenues: None

Anticipated Impacts of the Use

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

Refuge System mission

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 compatibility determination (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.”

Short-term impacts

Research activities may disturb fish and wildlife and their habitats. For example, the presence of researchers can cause birds to flush from resting and feeding areas, cause disruption of birds on nests or breeding territories, or increase predation on nests and individual animals as predators follow human scent or trails.

Efforts to capture animals, such as for migratory bird banding, can cause disturbance, injury, or death to groups of wildlife or to individuals. To wildlife, the energy cost of disturbance may be appreciable in terms of disruption of feeding, displacement from preferred habitat, and the added energy expended to avoid disturbance. Sampling activities associated with many types of research activities can cause compaction of soils and the trampling of vegetation. Installation of posts, equipment platforms, collection devices, and other research equipment in open water may present a hazard if said items are not adequately marked and/or removed at appropriate times or upon completion of the project. Research efforts may also discover methods that result in a reduction in impacts described above.

The potential for research conducted on the Refuge to conflict with Refuge management activities (e.g., prescribed burning, prescribed grazing, herbicide

applications) and visitor use on the Refuge is minimal. Research would be scheduled to minimize conflict with Refuge management activities. Visitors may encounter researchers in the field or observe monitoring plots or other research infrastructure. However, these encounters will be infrequent due to the typically minimal presence of field technicians and interest in maintaining low profile infrastructure to prevent disturbance or vandalism of study sites.

Long-term impacts

Long-term effects should generally be beneficial by gaining information valuable to Refuge management. No long-term negative impacts are expected from the research activities described. The refuge manager can reduce the likelihood of long-term impacts by denying special use permits for research that is likely to cause long-term, adverse impacts. Permits for multi-year research projects are renewed annually, providing the opportunity for an analysis of any impacts before renewing the SUP.

Cumulative impacts would occur if multiple research projects were occurring on the same resources at the same time or if the duration of the research was excessive. In particular, the Refuge must consider the potential impacts of non-Service research, in conjunction with any Service-sponsored research or management activity also taking place. However, no cumulative impacts are expected because the refuge manager can control the potential for cumulative impacts through SUPs, prohibiting multiple research projects from affecting any given area or species at one time. The refuge manager retains the option to deny proposals for research that does not contribute to the mission of the Refuge System or causes undue disturbance or harm to Refuge resources. The refuge manager also retains the right to revoke or deny renewal for any special use permit if unanticipated short-term, long-term, or cumulative impacts occur.

Project-specific stipulations outlined in each special use permit will act to minimize anticipated impacts of research projects. These stipulations will prevent impacts to Refuge wetlands, water quality, soils, hydrology, fish, wildlife, habitat, or cultural resources. Projects which occur within the habitat of, or include direct monitoring of, threatened and endangered species will be subject to a Section 7 informal consultation with the Service under the Endangered Species Act (87 Stat. 854, as amended; 16U.S.C. 1531 et seq.). Only with the approval of the Section 7 consultation will the Refuge permit research to be conducted on habitats or individuals of threatened and endangered species. Research that could adversely affect critical habitat, threatened or endangered wildlife, or cultural resources will not be permitted.

Public Review and Comment

The draft Comprehensive Conservation Plan (CCP) and accompanying Environmental Assessment and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft

documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Determination

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. Prior to initiation of any research and/or management studies on the Refuge, the requesting agency or organization is required to meet with Refuge management in person and present a comprehensive proposal of why the research is proposed to be undertaken, all methodologies involved, expected short- and long-term impacts of the activities, duration of the research, and anticipated completion date of the report.
2. The requesting agency or organization must apply for a permit by submitting a NWRS Research and Monitoring Special Use Permit Application and a detailed research proposal.
3. Researchers must give the District at least 45 days to review proposals and determine if a special use permit will be issued. If the research involves the collection of wildlife, the District must be given 60 days to review the proposal.
4. Researchers must obtain all necessary scientific collecting, banding, or other permits required by State, federal, or Institutional Animal Care and Use Committee entities before starting the research.
5. Priority of approval will be based on studies that contribute to the enhancement, protection, use, preservation, and management of native wildlife populations and their habitat.
6. SUPs may contain specific terms and conditions that the researcher(s) must follow relative to activity, location, duration, and time-of year restrictions to ensure continued compatibility.
7. All Refuge rules and regulations must be followed unless alternatives are otherwise accepted in writing by Refuge management.

8. Any research involving ground disturbance may require historic preservation consultation with the Regional Historic Preservation Officer and/or State Historic Preservation Officer.
9. All research related SUPs will contain a statement regarding the Service's policy regarding disposition of biotic specimen.
10. Upon completion of a project, researchers are required to remove all research apparatus in the field and restore any disturbed lands to their original state.
11. Any research project may be terminated at any time for non-compliance with the SUP conditions. Research projects may also be modified, redesigned, relocated, or terminated at any time upon determination by the Refuge manager that the project is causing unanticipated adverse impacts to wildlife, wildlife habitat, approved priority public uses, or other Refuge management activities. Refuge staff will conduct annual reviews of the research project to monitor researcher activities for potential impacts to the Refuge and for compliance with conditions on the SUP. The Refuge manager may terminate previously approved research and SUPs if adverse impacts are observed or if the researcher is not in compliance with the stated conditions.
12. The Service expects researchers to submit a final report to the Refuge upon completing their work. For long-term studies, we may also require interim progress reports. All reports, presentations, posters, articles, or other publications will acknowledge the Refuge System and the Refuge as partners in the research.

Justification

The Service encourages research on national wildlife refuges to collect new information which will improve the quality of Refuge and other Service management decisions, to expand the body of scientific knowledge about fish and wildlife, their habitats, the use of these resources, appropriate resource management, and the environment in general, and to provide the opportunity for students and others to learn the principles of field research. In accordance with 50 CFR 26.41, research conducted by non-Service personnel, as described in this CD, will not materially interfere with, or detract from, the fulfillment of the Refuge System mission or the purposes for which the Refuge was established.

Mandatory Reevaluation Date

2035

Compatibility Determination

Title

Compatibility Determination for Wildlife Observation and Photography for Hailstone National Wildlife Refuge

Refuge Use Category

Wildlife Observation and Photography

Refuge Use Types

Photography* (filming, still photography, and audio recording)

Wildlife observation

** In accordance with Public Law 118-234 the Expanding Public Lands Outdoor Recreation Experiences Act (EXPLORE Act), enacted on January 4, 2025, the Service will not differentiate between commercial and non-commercial filming use.*

Refuge

Hailstone National Wildlife Refuge (Refuge)

Refuge Purpose(s) and Establishing and Acquisition Authorities

“.. as a refuge and breeding ground for migratory birds and other wildlife ... Provided, That as to any lands included in Petroleum Reserve No. 40, Montana No.1, their reservation ... shall be subject to their primary use for the purpose of oil and gas development ... Executive Order 9292, dated Dec. 31, 1942.”

National Wildlife Refuge System Mission

The mission of the National Wildlife Refuge System (NWRS), otherwise known as 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.

What is the use?

Photography (filming, still photography, or audio recording). Activity involving photography, videography, filming, or other recording of sight or sound of natural or cultural resources (e.g., fish, wildlife, plants, and their habitats) or public uses of those

resources by Refuge visitors.

Wildlife observation. Viewing of fish, wildlife, plants, or their habitats by Refuge visitors.

Is the use a priority public use?

Yes

Where would the use be conducted?

All areas open to the public will be open for wildlife observation, and photography. These areas do not have trails or built facilities to support these uses. An unimproved road into the Refuge area is present. All areas are open for walking to achieve these uses. Refuge signs denote Refuge boundaries.

When would the use be conducted?

Wildlife observation and photography occur year-round as guided or self-guided activities. The Refuge is open sunrise to sunset for the public.

How would the use be conducted?

Most wildlife observation and photography activities are conducted individually; however, the Refuge may occasionally help facilitate these activities through workshops, planned events, and tours.

Why is this use being proposed or reevaluated?

Wildlife observation and photography are two priority wildlife-dependent recreational uses of the NWRS identified by the National Wildlife Refuge Improvement Act of 1997 (Improvement Act). These uses help promote the understanding, appreciation, and support of the Refuge System mission.

Availability of Resources

The analysis of cost for administering and managing each use will only include the incremental increase above general operational costs that we can show as being directly caused by the proposed use. Wildlife observation and photography are self-led activities. A Refuge parking area and an unimproved road allow for public entry and use. There is currently enough funding and staff available to provide opportunities for these activities depending on the time and specific staff services requested. No additional funding is needed.

One-time costs: None

Annual/recurring expenses (i.e., for annual operations and maintenance): None

Offsetting revenues: None

Anticipated Impacts of the Use

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

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 compatibility determination (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.”

The overall impacts to the Refuge and its associated wildlife populations from this use would be minimal. Wildlife observation and photography can have both positive and negative implications on Refuge resources.

Short-term impacts

Human disturbance to migratory birds and other wildlife has been documented in many studies. Among activities considered as disturbing to wildlife, Korschen (1992) determined that bird watching was among the least disturbing, but Klein (1993) noted that approaching birds on foot was the most disruptive of usual refuge activities. Some photographers are more likely to cause disturbance by lingering in a sensitive area, using recorded calls, and even altering the vegetation at a site to gain a better view (Glinski 1976). However, photography can be useful as a tool to engage others and develop support for wildlife with images that appeal to people's emotions (Hanisch 2017). There are many recommendations for reducing impacts to wildlife: provide visitor education, require staying on trails, closing areas during sensitive periods such as nesting, require minimum set back distances for approach to areas such as rookeries, etc. (Boyle et al. 1985, Erwin 1989, Haverra 1992, Klein 1993, Miller 2001, Morton 1989, Rodgers 1995, Taylor 2003).

Human disturbance to avifauna has been thoroughly documented around the world. Several studies have examined the effects of trail-based recreation on birds inhabiting wildlife refuges and coastal habitats in the eastern United States. McNeil et al. (1992) found that many waterfowl species avoid disturbance by feeding at night instead of during the day. Similarly, Martín et al. (2015) found that human presence caused resident shorebird species to spend less time feeding and more time displaying avoidance behavior, and that the number of shorebirds and gulls within their study site dramatically decreased in response to increased recreation of the area. Disturbance can increase the risk of predation when individuals are forced to forage in more dangerous habitats and can increase intraspecific competition when avoiding humans necessitates movement into suboptimal habitats (Frid and Dill 2002).

Some uses, such as bird observation, are directly focused on viewing certain wildlife species and can cause more significant impacts during the breeding season and

winter months. Research has shown that as the intensity of human disturbance increased, avoidance response by birds increased, and that out-of-vehicle activity was more disruptive than vehicular traffic (Klein 1993, Freddy et al. 1986, Vaske et al. 1983). Miller et al. (1998) found bird abundance and nesting activities (including nest success) increased as distance from a recreational trail increased, in both grassland and forested habitats. Some studies have found that some songbird species habituate to repeated intrusion. Frequently disturbed individuals of some species vocalize more aggressively, have higher body masses, or tend to remain in place longer (Cairns and McLaren 1980). Disturbance may affect the reproductive fitness of males by hampering territory defense, mate attraction, and other reproductive functions of song (Arcese 1987, Ewald and Carpenter 1978).

Overall, the existing research clearly demonstrates that disturbance from recreation activities always have at least temporary effects on the behavior and movement of birds within a habitat or localized area (Burger 1981, Burger 1986, Klein 1993, Burger et al. 1995, Klein et al. 1995, Rodgers and Smith 1997, Burger and Gochfeld 1998). The location of recreational activities and the size of participating groups are also important factors affecting the magnitude of disturbance. A number of species have shown greater reactions when pedestrian use occurred off-trail (Miller et al. 2001, Samia et al. 2015), and when pedestrians traveled in large groups (Beale and Monaghan 2004).

The presence of humans on Refuge land would disturb some wildlife causing temporary displacement without long-term effects. There would be some disturbance to wildlife and vegetation at the locations where interpretive programs occur with groups, but at levels that would not interfere with the purposes of the Refuge. Some species may avoid areas with frequent people, while other species would be unaffected by human presence. However, the overall effect of the use on wildlife would not have a population level impact, because most of the Refuge will experience minimal to no daily public use. Vehicles will utilize the designated road and parking area. Self-guided interpretation may be sporadically used by small groups of people at established trails and kiosks. This may cause short-term disturbance to wildlife, but again would have minimal impact.

Long-term impacts

Engaging in activity associated with wildlife observation and photography can be done with very little impact to wildlife (Burger et al. 1995). However, if measures are not taken to reduce disturbance, wildlife can suffer from being displaced to less desirable habitat, forced to use important energy reserves, cause the animal to change behaviors from, for example, breeding to seeking cover, and much more (Arcese 1987, Belanger et al. 1990, Burger et al. 1995, Burger 1996, Burger and Gochfeld 1998, Henson et al. 1991, Kaiser et al. 1984, Korschen 1992, Taylor et al. 2003, Yalden et al. 1990).

The Refuge anticipates that no negative long-term impacts will occur as a result of

environmental education and interpretation, however, these uses could be modified in the future to mitigate unforeseen impacts. The Refuge also anticipates positive long-term benefits for the public. These uses allow the public to engage in and experience the Refuge and the outdoors. The Refuge will continue to gain relevancy to new, broader audiences and therefore have a greater reach to the public. Additionally, these uses benefit the Refuge by promoting a conservation ethic in the local community and a better appreciation and understanding of the Refuge's wildlife and habitats.

People can be vectors for invasive species by moving seeds or other propagules from one area to another. The threat of invasive species will always be an issue requiring annual evaluation and treatment. Refuge staff will work to look for early detection of invasive species and will educate the visiting public on the environmental damage and conservation challenges invasive species present. Impacts may be considered not significant when analyzed alone but may be considered important when they are evaluated cumulatively. The Refuge's primary concern is repeated disturbance of resting, foraging, or nesting birds by visitors. Refuge staff will continually evaluate disturbance to habitat and habitat quality and, if necessary, respond with management actions to conserve wildlife resources being adversely impacted. Refuge staff, volunteers, and researchers will evaluate the effects of these priority uses and respond to any adverse effects.

Based on the best available knowledge and with added use restrictions, the Refuge does not expect these uses would cause adverse effects. Educating the public about conservation issues would enhance the Refuge's purposes by promoting a conservation ethic.

Public Review and Comment

The draft Comprehensive Conservation Plan (CCP) and accompanying Environmental Assessment and CDs were made available for public review and comment for 30 days from January 14, 2025 to February 13, 2025. The public was notified in the Federal Register (90 FR 3240) and through a press release on January 14, 2025. The draft documents were made available at the CMR NWR Complex Headquarters [P.O. Box 110, 333 Airport Rd., Lewistown, MT 59457], via email [cmr@fws.gov] and on the District website [<https://www.fws.gov/refuge/charles-m-russell-wetland-management-district>]. Tribes and the State of Montana were asked to review and comment on the draft documents.

During the public review period, we received five comment letters from 10 private citizens, two comment letters from non-government organizations, and one comment from a university. The Service also received one comment letter from two U.S. Senators and two U.S. Congressmen and comments from Montana Fish, Wildlife and Parks. The comments received and the Service's responses are included in the final CCP (Appendix I of the CCP).

Is the use compatible?

Yes

Stipulations Necessary to Ensure Compatibility

1. Visitors are to adhere to all Refuge rules and regulations as found in the regulations section of the Refuge website and brochure unless otherwise approved in advance by the Refuge.

2. Disturbing or attempting to disturb, injure, or collect any plant, berries, mushrooms, animal, animal part, horn, antler, bones, skull, or feather is prohibited except by special use permit.

3. Disturbance or collection of any cultural resource is prohibited.

4. Entry on all or portions of individual areas may be temporarily suspended based on public safety, wildlife health, or natural resource concerns. When possible, the public will be given notice of closures. However, unforeseen circumstances may require immediate closure without advanced public notice.

5. In general, special use permits (SUP) are not required for photography parties of eight or fewer individuals, providing that the user conducts the photography activity in a manner that:

- does not impede or intrude on the experience of other visitors to the Federal land management unit;
- except as otherwise authorized, does not disturb or negatively impact a natural or cultural resource or an environmental or scenic value; and
- allows for equitable allocation or use of facilities of the Federal land management unit.

6. Parties of eight or fewer individuals participating in photography must meet the following conditions:

- Conduct the filming or still photography activity at a location in which the public is allowed.
- Not require the exclusive use of a site or area.
- Not conduct the filming or still photography activity in a localized area that receives a very high volume of visitation.
- Not use a set or staging equipment, subject to the limitation that handheld

equipment (such as a tripod, monopod, and handheld lighting equipment) shall not be considered staging equipment.

- Adhere to visitor use policies, practices, and regulations applicable to the Service land management unit.
- Comply with other applicable Federal, State (as defined in section 2 of the EXPLORE Act), and local laws (including regulations), including laws relating to the use of unmanned aerial equipment.
- The filming or still photography activity is not likely to result in additional administrative costs incurred by the Service.

7. In accordance with the EXPLORE Act, photography parties of more than eight individuals should submit a General Activity SUP application to the Charles M. Russell Wetland Management District staff for filming or still photography by parties of more than eight individuals. In addition, parties of any size that do not meet the requirements for photography described above should submit a General Activity SUP application to the Charles M. Russell Wetland Management District staff. When an SUP is required, the District Manager may require the permittee to pay cost recovery fees for permit administration costs.

8. Pursuant to 50 C.F.R. 27.34 (Aircraft) and where applicable 50 C.F.R. 27.51 (Disturbing, injuring, and damaging plants and animals), drones are not permitted on NWRS lands.

Justification

In accordance with the missions of the NWRS and the Improvement Act, the Refuge has determined that the uses are compatible provided the above stipulations are implemented. Wildlife observation and photography are two of the priority wildlife-dependent recreational uses of the NWRS identified by the Improvement Act. These uses help promote the understanding, appreciation, and support of the Refuge System mission and help promote public awareness and stewardship of the Refuge's natural and cultural resources. The uses do not materially interfere with or detract from the Service's ability to meet the mission of the NWRS, and administration of the uses would only require medium amounts of administrative time and funding.

The Refuge's habitats, wildlife, and public use areas provide a unique wildlife observation, and/or photography experience to visitors, helping them connect with nature and natural ecosystems. Wildlife observation and photography facilitate the connection to nature and the need for conservation. These activities may also enhance environmental education and interpretation programs by allowing visitors experience nature in a more immersive way.

Wildlife disturbance is a concern and limited use will help to minimize any adverse impacts to wildlife. Refuge staff will evaluate impacts on Refuge federal trust

resources to determine if there are appreciable negative implications of the use.

Mandatory Reevaluation Date

2040

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APPENDIX E. MITIGATION MEASURES FOR MANAGEMENT ACTIVITIES IN THE DISTRICT/COMPREHENSIVE CONSERVATION PLAN

Public Health and Safety

The Service is dedicated to ensuring the safety of all visitors, residents and properties adjacent to FWS boundaries. The following steps will help ensure public safety:

- Public access will be restricted during prescribed and wildfire operations.
- All visitors will be accounted for before treatments are implemented.
- The Service will attempt to notify residents who live adjacent to Service lands in advance of any prescribed burn, or if a wildfire on service lands poses a threat to private property.

Wildfire Response

- Protecting human life is the single, overriding priority. The Service will set priorities for protecting human communities and community infrastructure, other property and improvements, and natural and cultural resources. Human health and safety and the costs of protection will be factors in setting priority levels.
- Minimum Impact Suppression Tactics (MIST) will be included in the fire management plan (FMP) and employed during each wildfire response.
- Natural resource and cultural resource staff will be included, to the extent possible, during all stages of wildfire responses (planning, implementation, restoration).
- Fireline location will avoid sensitive areas wherever possible. Sensitive areas identified by Service staff may include cultural or natural resources, utility infrastructure, and other resources or facilities that may be damaged by fire suppression efforts.
- Firelines will be recontoured and water-barred as needed after the end of fire suppression activities.
- No modifications will be made to roadways, trails, water sources or clearings except for spot maintenance to remove obstructions. All sites where modifications are made or obstructions are removed will be rehabilitated to pre-fire conditions.
- Burned areas will not be reseeded unless there is concern about invasive nonnative plant species. Reseeding will be with native species and will require the project leader's prior approval.
- Fire-intolerant plant communities (such as those in wetlands) will be protected from the adverse impacts of wildfire to the extent possible.
- Surfactant chemicals (foams or other fire retardants) will not be used within 300 feet of all water sources (wetlands, canals, creeks, lakes, ponds).
- Heavy equipment use will be closely monitored in designated areas to prevent adverse impacts to cultural resources. The potential for disturbing archeological

sites will be minimized using water and/or natural barriers to the extent feasible instead of the construction of hand lines to contain wildfires.

- Firelines/firebreaks will be plotted to minimize impacts to known cultural resources and the potential to disturb previously unidentified resources.
- Control lines will be located away from sites when more damage may be anticipated from line construction than from fire impacts.
- Suppression personnel will be briefed about protecting cultural resources.

Prescribed Fire

- Prescribed fires will comply with Montana's Department of Environmental Quality (MTDEQ) regulations and carried out in accordance with the District's Comprehensive Conservation Plan (CCP), FMP and maps.
- Local fire departments, county sheriffs' offices, and other parties identified in the individual burn plan will be notified before prescribed burns.
- Prescribed fires will not be started until all contingency forces are confirmed to be available, per each prescribed burn plan.
- Prescribed burns will not occur during extended inversions or if not approved through the Montana/Idaho Airshed Management System (including MTDEQ).
- Agency or local law enforcement may be requested for traffic control if smoke could impact visibility on roads.
- Warning signs will be posted to advise motorists of a prescribed burn in progress and the potential for reduced visibility.
- The Service will notify municipalities and those whose lands border Service lands. This may include notices posted physically and electronically to inform nearby communities of prescribed fires.
- Each prescribed burn area will be checked for hazardous material, and hazards will be identified, marked and mitigated prior to ignition.

Smoke Management

The Service will use the following smoke management mitigations if a smoke-sensitive area will be impacted (hospital, highway, recreation area, any populated area):

- Smoke management forecast will be verified with the National Weather Service. Smoke characteristics will be evaluated.
- Burning will only occur when fuel conditions will not adversely impact identified smoke-sensitive areas.
- The Service will choose ignition techniques that minimize impacts to smoke sensitive receptors.
- All ignition operations will be completed during one burn period, and the Service will ensure that heavy fuels burn out before the end of the day to minimize overnight smoldering and smoke production. Smoldering of interior fuels overnight in burn units will be allowed.

- The Service will get approval from MTDEQ before all prescribed burning through the Montana/Idaho Airshed Management System.

Wildfire Prevention and Education

The Service may provide printed and electronic prevention material to employees, cooperators and the public to increase prevention awareness through formal presentations, training and practice.

Firefighter Safety

- Hazardous snags that may cause safety or control issues will be identified before burn day and flagged so fire personnel can avoid them. If snags cannot be mitigated and pose a threat to firefighters or cause control problems, they may be removed with FWS management approval.
- All holding lines will be easily identifiable for incident personnel.
- The Service will monitor weather and fuel conditions in the burn area.
- The Service will conduct final checks of control lines to ensure the burn unit is clear of unauthorized personnel.
- All notifications will be completed before ignition.

Mechanical Treatments

- Before any mechanical treatment and throughout the planning process, FWS management will identify listed plants to avoid and animals and the habitats where they are commonly found. In more pristine areas and those with special status, invasive species control will be done carefully and manually when possible.
- Heavy equipment use will be minimal in wetland communities.
- Mechanical treatment of invasive/exotic plants should include best practices to minimize the potential of spreading seed sources or plant parts to native plant communities or elsewhere on Service lands. These practices include cleaning equipment before leaving a treatment area and completing a boot, clothing and equipment check. Equipment brought in from outside or from another part of the district should be washed and inspected to ensure invasive/exotic plant seeds and parts are not being transported.

Chemical Treatments

- The Service will take measures to minimize exposure to refuge staff and visitors. FWS personnel will be, or will be managed by, trained pesticide applicators. They will follow standard safety procedures.
- All products will be used according to label instructions, and the Service will select the chemical application that is most effective for the target species and least harmful to nontarget species. Application crews will avoid chemical drift damage during application by:

- Choosing optimal times of year to apply herbicides
 - Using the lowest effective application rate — the minimum amount needed to control the target species
 - Spraying on days when the wind speed is less than 10 mph to avoid drift spray, which can impact a wider area than is targeted
 - Using nozzles that reduce drift potential. Carefully calibrating spray nozzles to achieve the correct droplet size and application rate, minimizing spray drift (USFWS 2009)
 - Using alternative application methods if necessary.
- The Service will take other precautions such as:
 - Creating herbicide-free buffers around nontarget plants, known sensitive and rare plants, and sensitive areas
 - Shielding nontarget and sensitive plants with suitable material such as a tree shelter or bucket

Wildlife

- Refuge management and biological staff will be included at all stages of mechanical treatments, prescribed fire and wildfire response.
- Adverse effects on wildlife will be minimized by timing prescribed burns to avoid the active periods of wildlife that cannot escape a prescribed burn, such as turtles.
- Timing of mechanical treatments and prescribed burns will be considered on a case-by-case basis for other wildlife species and incorporated into burn plans. For example, a prescribed fire in a wooded area will be avoided during the peak bird-nesting period and bat maternity season.
- Prescribed fires in grasslands will be timed to avoid the nesting season for birds and other wildlife (including reptiles and amphibians), unless benefits gained, such as woody vegetation control, is considered essential.
- Snags will be retained after the fire for wildlife benefits unless they must be removed for suppression or safety reasons.

Invasive/Exotic Plants

Prevention

- MIST will be used to minimize soil disturbance in fireline construction, off-road vehicle use and other conditions favorable for the spread of invasive plants.
- FWS staff will be consulted before fireline construction to identify known exotic plant and noxious weed areas.
- Fire management operations will be staged away from known exotic plant and noxious weed infestations to the greatest extent possible.
- Firefighting equipment and firefighter personal gear will be checked for invasive weed seeds and plant parts and cleaned before fire crews are moved.

- Prescribed burns will be timed so they occur during a time of year when introducing or spreading invasive plants will be less likely, and mortality of invasive plant species will be more likely. If not possible, additional invasive plant species management actions (herbicide, mechanical removal) may be considered along with prescribed burning.
- Vehicles will avoid driving in areas infested with invasive/exotic plants at times when movement of seeds is likely. When this is not possible, vehicles and equipment will be cleaned after leaving an infested area. Vehicles, boots, and equipment will be considered clean when a visual inspection does not disclose seeds, soil, vegetative matter and other debris that could contain seeds.
- A designated location will be identified for the cleaning described above. This will be in a spot where exotic weeds are not likely to become established. This area will be monitored for incipient weed populations.

Control and Monitor

- The Service may conduct hazardous fuels management monitoring pre- and post-treatment to assess effectiveness and evaluate whether further management actions are necessary.
- The Service will conduct post-treatment surveys in treated areas and site-specific evaluations to determine how to control any invasive/exotic plants that are located.
- Mechanically treated and burned areas will be monitored for invasive/exotic plants.
- The Service will treat and monitor new noxious weed populations resulting from project implementation.

Cultural Resources

- The fire management plan will include provision for archeological surveys to precede fireline construction.
- Service staff will complete National Historic Preservation Act section 106 compliance before implementing hazard fuel reduction projects if the treated areas could contain cultural resources.
- Service staff will participate in the planning stages of hazard fuels reduction projects if the treated areas could contain cultural resources.
- Creating buffers around archeological sites and reducing hazardous fuels in the vicinity could be used to protect sites.
- Before treatments, an inventory may be conducted of non-surveyed areas by an archeologist who meets the Secretary of the Interior's standards for conducting archeological surveys.
- Wildland firefighters will be briefed about protecting cultural resources. If archeological sites are discovered during surveys, they may be excluded from prescribed burns, and mechanical/chemical treatments in those areas may be limited.

Appendix E – Mitigation Measures for Management Activities in the District/Comprehensive Conservation Plan: Charles M. Russell Wetland Management District and Associated National Wildlife Refuges, Montana

- Service staff will be contacted immediately if previously unrecorded cultural resources are discovered before, during or after treatments. The cultural resources will be recorded, delineated and protected.
- Service staff will be contacted when a wildfire is detected in an area that could contain unrecorded cultural resources.
- Protecting structures and features is more important than minimizing acres burned.

The U.S. Fish and Wildlife Service (Service) routinely follows the best management practices outlined in this appendix as it implements management activities on Service lands. Mitigation measures are designed to avoid or substantially reduce adverse effects of mechanical and chemical treatments, prescribed fire, and wildfire response decisions. The Service may design additional mitigation measures in its fire management plan to better protect wildlife and habitat areas, cultural resources, and the public. The Service recommits to its implementation of these routine mitigation practices by including this appendix as part of the environmental assessment for the Fire Management Plan (FMP) developed for the Charles M. Russell Wetland Management District.

Bibliography

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APPENDIX F. APPLICABLE LAWS AND EXECUTIVE ORDERS

This Appendix lists all applicable statutes, regulations, and executive orders not otherwise addressed in this CCP or EA.

Cultural Resources

- American Indian Religious Freedom Act, as amended, 42 U.S.C. 1996- 1996a; 43 CFR Part 7
- Antiquities Act of 1906, 16 U.S.C. 431-433; 43 CFR Part 3
- Archaeological Resources Protection Act of 1979, 16 U.S.C. 470aa-470mm; 18 CFR Part 1312; 32 CFR Part 229; 36 CFR Part 296; 43 CFR Part 7
- Native American Graves Protection and Repatriation Act, 25 U.S.C. 3001-3013; 43 CFR Part 10
- Executive Order 11593 – Protection and Enhancement of the Cultural Environment, 36 Fed. Reg. 8921 (1971)
- Executive Order 13007 – Indian Sacred Sites, 61 Fed. Reg. 26771 (1996)

Fish and Wildlife

- Bald and Golden Eagle Protection Act, as amended, 16 U.S.C. 668-668c, 50 CFR 22
- Fish and Wildlife Act of 1956, 16 U.S.C. 742a-m
- Migratory Bird Treaty Act, as amended, 16 U.S.C. 703-712; 50 CFR Parts 10, 12, 20, and 21
- Executive Order 13186 – Responsibilities of Federal Agencies to Protect Migratory Birds, 66 Fed. Reg. 3853 (2001)

Natural Resources

Executive Order 13112 – Invasive Species, 64 Fed. Reg. 6183 (1999)

United States Fish and Wildlife Service, Region 6

Section 7 Intra-Service Consultation Form

Station Name: Charles M. Russell Wetland Management District; Lake Mason NWR; Grass Lake NWR; Hailstone NWR; War Horse NWR

Project Name: Comprehensive Conservation Plan

Date Submitted: April 21st, 2025

Phone Number: 406-538-8706

A. Project or Action Information

I. **Region:** Mountain-Prairie Region 6

II. **Service Program, Geographic Area or Station Name:**

IPaC Project Code: 2025-0085012 The proposed management actions will take place on four national wildlife refuges and six waterfowl production areas in Petroleum, Musselshell, Golden Valley, Yellowstone, Stillwater, and Carbon Counties, Montana (see attached map).

III. **List federally endangered, threatened, proposed and candidate species or designated or proposed critical habitat that may occur within the action area. Use IPaC to receive an official list (pursuant to 50 CFR 402.12) of species that should be considered when evaluating the potential impacts of the project:**

- Black-footed Ferret (*Mustela nigripes*) – Endangered
- Canada Lynx (*Lynx Canadensis*) – Threatened
- Grizzly Bear (*Ursus arctos horribilis*) – Threatened
- North American Wolverine (*Gulo gulo luscus*) - Proposed Threatened
- Piping Plover (*Charadrius melodus*) - Threatened
- Red Knot (*Calidris canutus rufa*) – Threatened
- Pallid Sturgeon (*Scaphirhynchus albus*) – Endangered
- Monarch Butterfly (*Danaus plexippus*) – Candidate (treated as proposed species for purposes of internal FWS conferencing)
- Whitebark Pine (*Pinus albicaulis*) - Threatened

IV. **Describe location including State, County, Township, Section and Range as well as any other specific location information (attach map from IPaC with appropriate legend and orientation elements to this document):**

The proposed management actions will take place on Service lands within the Charles M. Russell Wetland Management District - four national wildlife refuges (Lake Mason NWR, Grass Lake NWR, Hailstone NWR, War Horse NWR) and six waterfowl production areas (War Horse WPA, Tew WPA Spidel WPA, Hailstone WPA, James L. Hansen WPA, Clark's Fork WPA) in Petroleum, Musselshell, Golden Valley, Yellowstone, Stillwater, and Carbon Counties, Montana (see attached map).

V. Description of proposed project or action – if referencing other documents, provide the reference and executive summary:

The Comprehensive Conservation Plan and Environmental Assessment for Charles M. Russell Wetland Management District and associated National Wildlife Refuges outlines managing the District for the next 15 years. Management actions will take place on four national wildlife refuges and six waterfowl production areas.

Alternative B and the focus of this consultation expands the Service's suite of tools for managing uplands, wetlands, and fuels to meet the goals for the District, including prescribed fire, prescriptive grazing, mechanical treatment, chemical control, biological control and reseeding to native grasses.

Mechanical treatments may include using hand-held tools, chain saws, bulldozers, tractors, masticators, excavators, forestry cutters, chippers, and other specialty equipment to reduce fuels and remove invasive plants. Biological control of insect pests or invasive plants may include predators, parasitoids, and pathogens.

The proposed action would improve water quality by flushing or draining wetland systems and improve effectiveness of existing structures to achieve wetland habitat goals, including restoring natural hydrology. This may include improving existing ditches, replacing culverts, and removing water control structures.

It also expands visitor services and access as well as increases capacity for refuge operations and administration. This includes opening two previously closed areas to hunting, installing information signs on all units, improving roads and parking areas and repair or install fencing. The two areas which will be opened to hunting using current take methods are Grass Lake NWR and Hailstone NWR.

VI. Description of effects – explain the anticipated effects of the action on species and critical habitats listed in item III. Beneficial and adverse effects, as well as actions to avoid or minimize adverse effects should be identified. If the action may affect critical habitat, analysis should be based on likely effects to the critical habitat essential physical and biological features (PBFs) – these features may have been referred to as “primary constituent elements” in prior critical habitat designations. Request PBFs from field office if unknown. Attach an official Determination Key letter if one is available on IPaC:

Black-footed Ferret - The black-footed ferret has not been reintroduced nor documented in any prairie dog colonies located on the eight District units. In the wake of the rediscovery of the species in the wild in 1981 near Meeteetse, Wyoming, in 1989, the Service instituted the survey protocol Black-footed Ferret Survey Guidelines for Compliance with the Endangered Species Act, designed to detect ferrets in potentially suitable habitats. Despite the fact that thousands of hours of survey effort have been expended throughout the historic range of the species since 1981 in an attempt to locate additional extant populations, to date no other wild populations have ever been detected. The failure to locate additional extant black-footed ferret populations, coupled with the ubiquity of sylvatic plague throughout the historic range of the species, has prompted the FWS to determine that the black-footed ferret has been extirpated throughout its range, except where it has been purposely reintroduced using captive-reared or translocated wild individuals. No project-related effects are anticipated to the black-footed ferret.

Pallid Sturgeon - District wetlands are either within closed basins, are too intermittent in nature, or are too far away from perennial lakes, rivers, or streams to support fisheries. The Clarks Fork River which forms the boundary of Clark's Fork WPA is not suitable habitat for pallid sturgeon. The current pallid sturgeon range in the Yellowstone River in Montana extends from the North Dakota border upstream to Cartersville,

approximately 140 miles downstream of the Clark's Fork WPA. Given this distance, no project-related effects are anticipated to the pallid sturgeon.

Whitebark Pine – All units in the District are outside the current known/expected range of whitebark pine. No project-related effects are anticipated to the whitebark pine.

Red Knot – Migratory stopovers are rare in Montana but have occurred at wetlands across the state. This species has been most recently observed in the project area during migration at War Horse NWR (1982) and Spidel WPA (1995). Temporary disturbance to migratory individuals is possible but anticipated to be insignificant and/or discountable due to the availability of adjacent habitat. No effects to nesting would occur.

Canada Lynx, Grizzly Bear, Wolverine - While most units in the District are outside the range of Canada lynx, grizzly bear, and wolverine, they are wide ranging species which could move through portions of the District. Grizzly bears may be present as transients in the Clarks' Fork WPA, which occurs near the eastern extent of the grizzly bear "may be present" range maintained by the FWS Grizzly Bear Recovery Program. Clark's Fork WPA is day use only with no trash cans or food storage. Food, trash, and other attractant management measures would be implemented at this site to minimize the potential for bear/human conflict. . Prescriptive grazing may be used as a management tool in the Clark's Fork WPA. To reduce the potential of grizzly bear/livestock/human conflict, measures would be included as terms and conditions of all grazing permits in the WPA. These would include removing carcasses, removing attractants and reporting any conflicts between grizzly bears and livestock or human. Significant effects to grizzly bears associated with human conflict or habituation potential are not anticipated. Similarly, although Canada lynx and wolverine range generally occurs outside of proposed project areas, they may occur as rare transients in the Clark's Fork WPA. No designated Canada lynx critical habitat occurs in the project area. Temporary disturbance to transient individuals is possible for all three species but anticipated to be insignificant and/or discountable due to the availability of adjacent habitat.

Piping Plover, Monarch Butterfly, Suckley's Cuckoo Bumblebee - The District is within the migratory range of the piping plover and the summer range of the monarch butterfly. A non-breeding piping plover observation was recorded at Hailstone NWR in 1999 and comprises the only known occurrence at the project sites. No designated critical habitat occurs at any project sites. Temporary disturbance to migratory or other non-breeding individuals is possible but anticipated to be insignificant and/or discountable due to the availability of adjacent habitat. No effects to piping plover nesting are anticipated. Monarchs were recorded in 2018 in Musselshell County several miles east of Lake Mason NWR, but could occur, along with bumblebees, in suitable habitat (native prairie, marshes, pastures; especially those containing milkweed, etc.) at units project-wide. Pesticides/herbicides would not be applied (nor prescribed fires or other vegetation removal be conducted) where any life stage of monarchs are observed and present; treatment buffers would also be implemented as appropriate. For bumblebees, any prescribed fires conducted would be in accordance with replication of naturally occurring fire intervals that bumblebees evolved with; multiple years of rest between prescribed fire events would ensue in order to promote native vegetation and habitat conducive to this species and the species they parasitize for survival. Pesticide/herbicide treatment would be implemented via spot treatment to invasive plants where appropriate based on monarch and bumblebee habitat considerations. The proposed action would be confined to ten discrete project units and is not likely to jeopardize the existence of the monarch butterfly or Suckley's Cuckoo Bumblebee.

Alternative B expands the suite of tools for managing and improving habitat and will increase habitat

diversity and resiliency.

Effects on listed species from disturbance during prescribed fires or mechanical treatment are expected to be insignificant in the short term and beneficial in the long term— wildlife might temporarily disperse but would return to the area once activities cease. Otherwise, fire increases the diversity of plant species and structure and can suppress the encroachment of woody species into native grasslands. Prescribed burns will be timed to avoid critical mating, nesting or egg laying seasons such as for monarch butterflies.

Opening previously closed areas and improving access may bring more visitors to the District. Any public use activities would be monitored to ensure adverse effects to special status species do not occur. Improved signage and infrastructure such as fences and parking areas would lessen the impact visitors have on habitat.

Opening new areas for hunting is not expected to introduce any significant amounts of lead into the environment. The number of new hunters expected to use lead bullets for big game as a result of expanded hunting opportunities within the District is anticipated to be low, especially considering the decreasing trends in hunting generally, thus the resulting addition of lead into the environment is expected to be negligible or minor. District lands comprise a small percentage of the land area available for hunting in the counties wherein these lands reside. The availability of this extremely large area for hunting reduces the potential for lead accumulation and build-up in any one location, in particular on District lands. Further, hunters on the District are most likely also hunting on adjacent lands where lead ammunition is authorized, so the Service is likely only providing additional areas for these same hunters to hunt and not likely increasing lead in the local or Regional area. Given this, the Service does not anticipate more than a minor increase in environmental lead because of these expanded hunting opportunities. Importantly, over the years, District staff have observed no known instances or sightings of animal species illnesses or fatalities from lead exposure. Migratory bird and upland bird hunting in newly opened areas are required to use lead-free shot, thus mitigating any new lead introduction into the environment from those activities.

With limited fishing opportunities on the District (Clark's Fork WPA and Yellow Water Unit of War Horse NWR) and generally low participation in these opportunities, lead accumulation and build-up is unlikely, particularly when considering that lead tackle only remains in the environment when the tackle gets snagged or otherwise accidentally left behind. While lead is a known toxin in variable concentrations for various species as discussed above, the District has no known instances or sightings of human or animal species illnesses or fatalities from lead exposure.

B. Determination (attach the Determination Key letter if one is available on IPaC)

- **No Effect on species/critical habitat.** This determination is appropriate when the proposed project will not directly or indirectly affect (neither negatively or beneficially) individuals of listed/proposed/candidate species or designated/proposed critical habitat of such species.
 - Black-footed ferret
 - Pallid sturgeon
 - Whitebark Pine

Has optional concurrence from Ecological Services or a Determination Key letter from IPaC been received?

Yes

- **May Affect, Not Likely to Adversely Affect species/critical habitat.** This determination is appropriate when

the proposed project is likely to cause insignificant, discountable, or wholly beneficial effects to individuals of listed species and/or designated critical habitat.

- Red Knot
- Piping Plover
- Grizzly Bear
- Canada Lynx
- Wolverine

Has required concurrence from Ecological Services or a Determination Key letter from IPaC been received?

Yes

- **May Affect, Likely to Adversely Affect species/critical habitat.** This determination is appropriate when the proposed project is likely to adversely impact individuals of listed species and/or designated critical habitat.

None

Has required formal consultation from Ecological Services been completed?

N/A

- **May Affect, Not Likely to Jeopardize candidate or proposed species/critical habitat.** This determination is appropriate when the proposed project may affect but is not likely to jeopardize the continued existence of a species proposed for listing or a candidate species or result in the destruction or adverse modification of proposed critical habitat.

- Suckley's Cuckoo Bumble Bee
- Monarch Butterfly

Has optional concurrence from Ecological Services or a Determination Key letter from IPaC been received?

Yes

- **Likely to Jeopardize candidate or proposed species/critical habitat.** This determination is appropriate when the proposed project is likely to jeopardize the continued existence of a species proposed for listing or a candidate species or result in the destruction or adverse modification of proposed critical habitat.

None

Has required conference with Ecological Services been completed?

N/A

C. Reviewing Ecological Services Office Evaluation (check all that apply):

- Concurrence **X** Nonconcurrence
- Formal Consultation Required

(List species or critical habitat unit)

- **Effects are addressed in the Programmatic Consultation on R6's Recovery Program** (no further consultation needed)

- **Conference Required**
(List species or critical habitat unit)

Name of Reviewing ES Office: MT Ecological Field Office

Reviewing ES Signature: **JACOB MARTIN** _____
Digitally signed by JACOB MARTIN
Date: 2025.05.08 09:06:45 -06'00'

Date: _____

Project Leader Signature: **PAUL SANTAVY** _____
Digitally signed by PAUL SANTAVY
Date: 2025.05.08 08:55:28 -06'00'

Date: _____

APPENDIX H. CONSERVATION MEASURES FOR SPECIFIC SPECIES

Greater Sage-Grouse

The greater sage-grouse was listed as a candidate species in March 2010, meaning it warrants protection under the Endangered Species Act but is precluded by higher-priority species.

Greater sage-grouse require a variety of habitat conditions, often across broad landscapes, to meet their yearlong needs for breeding, nesting, brood-rearing and wintering. Regardless of the season, they require large expanses of sagebrush with healthy, diverse understories of grasses and forbs. In the spring, displaying males require relatively open areas for lek sites, or dancing grounds, where breeding takes place.

Females nest in a variety of cover types, but the most suitable nesting habitat is a mosaic of sagebrush with horizontal and vertical structural diversity (Rowland 2004). They most commonly nest in sagebrush with shrub heights ranging from 11.5 to 31 inches, a grass-canopy height greater than 7.2 inches and a diversity of forbs (MSGWG 2005).

Brood-rearing habitats for sage-grouse are typically mosaics of upland sagebrush and other habitats such as wet meadows and riparian areas that, together, provide abundant insects and forbs for hens and chicks (Schroeder et al. 1999, Connelly et al. 2000). Succulent forbs, a preferred food source for sage-grouse broods, are a key component of summer habitat (MSGWG 2005). Although sage-grouse are associated with sagebrush throughout the year, this habitat is essential during winter when the birds mostly occupy sagebrush habitats with greater than 20% canopy cover (MSGWG 2005).

Conserving sagebrush habitats on private and public lands is by far the most effective approach to maintaining long-term sage-grouse abundance and distribution (MSGWG 2005). Rowland 2004 summarized management recommendations for sage grouse as follows:

- Maintain, conserve, and restore large blocks of intact sagebrush with a healthy understory of native grasses and forbs.
- Protect lek sites and adjacent habitat (up to 11 miles from the lek) from alteration.
- Manage breeding habitats to maintain sagebrush canopy cover of 15%–25% and perennial herbaceous cover of at least 15% grasses or at least 10% forbs with grasses and forbs at least 7 inches tall.
- Eliminate or control invasive nonnative plants in sagebrush-steppe.
- Use prescribed fire in sagebrush-steppe with caution, especially in the more arid portions of sage-grouse range. Attempt to maintain a mosaic of habitats following the burn.

- Manage livestock grazing through varying and restricting the numbers of livestock in an area and the season of use on all seasonal sage-grouse ranges to avoid habitat degradation.
- Minimize human disturbance in sage-grouse habitats, especially around leks and nesting habitat. For example, reduce or avoid the development of mining and other resource extraction industries such as coal-bed methane, and avoid power line construction, especially within 1.5 miles of seasonal habitats.

Sprague's Pipit

Minimal information has been collected on the distribution and occurrence of Sprague's pipit (a federal candidate species) in the District. Bird observations collected over 20 years by members of the Yellowstone Audubon Society confirmed two sightings of juvenile birds, one on Hailstone Refuge and one on Grass Lake Refuge. The Montana Natural Heritage Program Website indicates that this species has been observed and documented as breeding in areas around War Horse NWR, Spidel WPA and Tew WPA.

Sprague's pipit breeds only in the northern mixed-grass prairie. Numbers have continued to decline, causing it to be listed in 2010 as a candidate species. It nests in native prairie with high plant species diversity and few shrubs and prefers lightly to moderately grazed pastures throughout much of its breeding range (Jones 2010). However, grazing can have a dramatic negative effect in drier, less densely vegetated, mixed-grass prairie (Robbins et al. 1999).

Burning can have short-term, adverse effects on the abundance of Sprague's pipit; however, burning may provide long-term benefits through improved habitat quality if it occurs at an appropriate frequency (Jones 2010). In drier portions of their range, pipits were common on native grassland that had not been burned for more than 15–32 years (Jones 2010, Robbins et al. 1999). Sprague's pipits are uncommon in tame pasture and have not been documented as nesting in cropland, Conservation Reserve Program land or dense nesting cover planted for waterfowl habitat (Jones 2010).

A long-term study of grassland birds at Bowdoin Refuge (in northcentral Montana) found that pipits used nest sites with intermediately tall (averaging 12 inches), vertically dense vegetation and nest patches (16-foot-radius plot around the nest) with greater litter cover and depth, while avoiding areas with prickly pear cactus (Dieni and Jones 2003). This is similar to other published studies such as that by Sutter (1997): The pipits selected areas with less than 20% clubmoss cover, few shrubs and little bare ground (Dieni and Jones 2003).

According to the Sprague's Pipit Conservation Plan (Jones 2010), management should consist of the following:

- Keep large native prairie grasslands intact.
- Remove woody vegetation from the interior of grassland patches.
- Increase patch size and minimize the amount of edge habitat.

- Remove exotic plant species from native prairie.
- Apply prescribed fire (with frequency highly dependent on soil productivity, geographic area and climate, particularly in the drier portions of their range).
- Use low-intensity or no grazing in the semiarid mixed-grass prairie.

Species of concern are native animals breeding in Montana that are considered at risk due to their declining population trends, threats to their habitats or restricted distribution (Montana Natural Heritage Program 2009). The Service identifies birds of conservation concern as migratory and nonmigratory birds of the United States and its territories that have declining populations, naturally or human-caused small ranges or population sizes, threats to habitat or other factors.

This designation helps stimulate coordinated and proactive conservation actions among federal, state, tribal and private partners. Bird species considered for inclusion on this list include nongame birds, game birds without hunting seasons, subsistence-hunted nongame birds in Alaska, birds that are candidates or proposed as threatened or endangered under the Endangered Species Act, and birds recently removed from a federal listing (USFWS 2008).

The Montana Natural Heritage Program website database for species of concern includes information on where these species have been documented and their breeding status. Based on this information, 53 species of concern (see appendix H) have been confirmed on or near District properties. Many of the species on this list are routinely observed by employees and the public. They include black-tailed prairie dog, burrowing owl, chestnut-collared longspur, McCown's longspur, greater sage-grouse, long-billed curlew and sharp-tailed grouse.

Two species with a state ranking of S2 (at risk because of very limited and/or potentially declining population numbers, range or habitat, making it vulnerable to global extinction or extirpation in the state) that have been documented on District properties are the mountain plover and chestnut-collared longspur. All black-tailed prairie dog colonies on the District have been inventoried for mountain plover occupancy. Only the colony on the Willow Creek Unit of Lake Mason was found to support mountain plovers with the first documented sighting in 1992. In 1996, a follow-up investigation confirmed 11 mountain plovers: six adults and five juvenile birds. Chestnut-collared longspurs have been documented on the Lake Mason Unit and Willow Creek Unit.

Mountain Plover

Mountain plovers breed from southeastern Alberta and southwestern Saskatchewan through central Montana, south to south-central Wyoming, east-central Colorado and northeastern New Mexico, and east to northern Texas and western Kansas (NGS 1987). They prefer large, flat grassland expanses with sparse, short vegetation and bare ground (Knowles et al. 1982; Olson 1984). Generally, mountain plovers arrive on the breeding

grounds from mid-March to mid-April and depart for fall migration in early August to late October (Olson 1984).

In central Montana, mountain plovers are usually associated with prairie dog towns (Knowles 1996). Mountain plovers in Montana occurred at highest densities on towns 6-50 hectares and were less abundant on smaller towns (Knowles et al. 1982, Olson 1984). In Montana, mountain plovers were rarely seen outside of prairie dog towns and towns less than 24 acres were considered marginal habitat (Knowles et al. 1982, Olson 1984). On a northern Montana shrub-grassland, cattle grazing alone, without prairie dog towns, did not provide suitable habitat (Olson and Edge 1985). Within prairie dog towns, mountain plovers chose nest sites with shorter vegetation, more bare ground and higher forb density (Olson 1984, Olson and Edge 1985).

The following are management recommendations for mountain plovers:

- Maintain prairie dog towns in areas where Mountain Plovers require them, such as in Montana (Knowles et al. 1982, Olson and Edge 1985). Cattle grazing in these areas should be encouraged, as prairie dog towns often are associated with grazed areas (Knowles et al. 1982, Olson and Edge 1985).
- Maintain large areas of short grass within native mixed-grass areas.
- Disturbances such as prairie dog towns, grazing or burning can provide these areas (Knowles and Knowles 1984).
- Graze shortgrass or mixed-grass pastures at moderate to heavy intensities (Knowles et al. 1982).
- Graze at heavy intensities in summer or late winter (Wallis and Wershler 1981).

Chestnut-Collared Longspur

Chestnut-collared longspurs breed only in short- and mixed-grass prairie of the western and northern Great Plains. Longspurs nest in open prairie with minimal shrubs and litter. They prefer native grasslands that have been recently disturbed by fire, grazing or mowing (Hill and Gould 1997). Optimal grazing intensity is dependent on soil productivity, geographic area and climate. In dry, sparse, mixed-grass prairie, light to moderate grazing is more appropriate, and heavy grazing or overgrazing may be detrimental (Dechant et al. 2003).

Longspurs nest in tame grass pastures but in lower abundance than in native prairie; they do not nest in cropland (Hill and Gould 1997). A long-term study of grassland birds at the Bowdoin Refuge in north-central Montana found that longspurs nest in sparser areas than Sprague's pipits or Baird's sparrows, with less grass and litter cover and more clubmoss cover than the other two species (Dieni and Jones 2003).

Dechant et al. (2003) made the following management recommendations for chestnut-collared longspurs:

- Protect native prairie from plowing and cultivation.
- Avoid managing for idle, dense vegetation, as longspur densities decrease with increased vertical density, diversity and litter depth.

- Graze at light to moderate intensity in dry, mixed-grass prairie and avoid overgrazing.
- Use mowing to improve habitat by decreasing vegetation height and density.

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Appendix I. Public Involvement

Summary

Preplanning for the U.S. Fish and Wildlife Service (Service) Comprehensive Conservation Plan (CCP) for the Charles M. Russell (CMR) Wetland Management District (District) and associated National Wildlife Refuges (NWRs) began in fall of 2016. A planning team was created, primarily comprising Service staff from the Charles M. Russell National Wildlife Refuge Complex and the Mountain-Prairie Region's Branch of Conservation Planning. Federal and State agencies represented on the team included the Bureau of Land Management (BLM), the Montana Department of Natural Resources and Conservation, and Montana Fish, Wildlife and Parks (FWP).

The team developed a draft vision and goals statements based primarily on the mission of the National Wildlife Refuge System (NWRS) and the legislative purposes of the refuges and Waterfowl Production Areas (WPAs) in the District. The planning process was put on hold in 2017 and reinitiated in 2022. On January 14, 2025, the Service announced the Notice of Availability (NOA) of a draft CCP and associated environmental assessment (EA) in the Federal Register. Publication of the NOA began the 30-day formal public comment period for the CCP. This Appendix describes the public notification and engagement opportunities offered throughout the planning process. It also summarizes all public comments received in both the public scoping period and on the draft CCP and EA, as well as the Service's responses to those comments.

Public Scoping Period

Public scoping is an important component of the planning process for the CCP and EA. During this phase of the project, which began in February 2017, the Service sought input from the public, interested organizations and federal, state, and local agencies to inform the CCP and EA process. Public input helped identify specific opportunities, issues, concerns, and ideas related to the management of the District. The scoping comment period ended on March 31, 2017.

Early Scoping Meetings

Meeting Schedule and Locations

Three public scoping meetings were held during the scoping process.

Winnet, MT

February 28, 2017, 5 p.m. to 7 p.m.
Petroleum County Courthouse
302 East Main Street

Roundup, MT

March 1, 2017, 5 p.m. to 7 p.m.

Montana State University Extension Office
204 8th Avenue East

Laurel, MT

March 2, 2017, 5 p.m. to 7 p.m.
Laurel Public Library
720 West 3rd Street

Meeting Format

Service staff gave a brief welcome and introduction. The Service had prepared a 15-minute presentation, but due to low attendance at each meeting, attendees chose to instead have informal discussions. Attendees informed the Service about their issues, concerns, and suggestions for management of the District.

Scoping Comments

The objective of the scoping process was to gather the public's full range of comments, questions, and concerns about management of the District and its associated refuges and WPAs as well as questions about the planning process. Every substantive comment is given equal consideration by the Service. All comments, questions, or issues, whether from written submissions or recorded at the scoping meetings, are described below, along with the Service's response.

All comments received from individuals on the Service's National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*) documents become part of the official public record. Requests for information contained in comments are handled in accordance with the Freedom of Information Act, NEPA (40 CFR 1506.6(f), and other Department of the Interior and Service policies and procedures. In compliance with Service policies regarding disclosure of personal information, the names, addresses, or other personal information of individuals (does not apply to agencies or organizations) who commented have not been published in this document.

Theme of Comments at 2017 Public Scoping Meetings

The following themes were discussed at the 2017 public scoping meetings:

- Need for livestock water development for cattle grazing and wildlife.
- Request for continued camping opportunities at the Lake Mason NWR
- Request for durable right of access at Grass Lake NWR to include access to the North Side.
- Need for improvements, such as cattail management, on the 271-acre Clark's Fork WPA
- Suggestion for the construction of dirt islands with rock rip-rap piles on Lake Mason NWR
- Request for convenient canoe access to the east end of Lake Mason.
- Suggestion to improve access with Federal Highways Administration funds.

- Observation that the Yellow Water unit at War Horse NWR has a big prairie dog colony and good sage grouse habitat.

Notice of Intent to Prepare a Draft CCP

Public notification that the Service would resume the preparation of a draft CCP began with a Notice of Intent (NOI) published in the Federal Register on June 29, 2022.

Publication of the NOI began the formal public scoping period of 30 days for the CCP. The Service also published a news release in local print media to notify the public of the Service's intent to begin the CCP and EA process and to solicit public comments. In June 2022, a public notice was distributed to the newspapers Lewistown News-Argus, Billings Gazette, and elsewhere in south-central Montana on the reinitiation of the planning process.

A planning webpage for this project established in February 2017 contained information about the public scoping meetings, as well as downloadable versions of all available public information materials. In addition, the CMR Complex's Facebook page and the Mountain-Prairie Region Twitter account announced the NOI and encouraged additional scoping comments.

Federal, State, and Local Agencies' Involvement

In accordance with the Service's planning policy, the preplanning and scoping process began with formal notification to other federal and state agencies with land management interest. These groups were invited to participate as cooperating agencies and members of the planning team. Congressional members were also notified of the NOI publication.

Native American Tribes

The Service sent letters of notification about the planning process, including an invitation to participate on the planning team, to the following Tribes:

- Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation, Montana
- Blackfeet Tribe of the Blackfeet Indian Reservation of Montana
- Cheyenne River Sioux of the Cheyenne River Reservation, South Dakota
- Crow Creek Sioux Tribe of the Crow Creek Reservation, South Dakota
- Crow Tribe of Montana
- Flandreau Santee Sioux Tribe of South Dakota
- Fort Belknap Indian Community of the Fort Belknap Reservation of Montana Oglala Sioux
- Lower Brule Sioux Tribe of the Lower Brule Reservation, South Dakota
- Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, Montana
- Rosebud Sioux Tribe of the Rosebud Indian Reservation, South Dakota
- Standing Rock Sioux Tribe of North and South Dakota
- Three Affiliated Tribes of the Fort Berthold Reservation, North Dakota

Summary of Written Comments Received During Public Scoping

Access, Roads, Parking, and Signage

Comment 1 – Several commenters suggested site-specific improvements to roads, parking areas, fencing, and information signage.

Response 1. The Service appreciates these comments and considered them when developing the draft CCP: Goal 4: Objective 3 and associated strategies. For example, the Service is proposing to improve current two-track dirt roads into units to all-weather gravel roads, and as applicable, proposes to work with counties to improve the access roads; repair or install fencing, where necessary, to help prevent off-road vehicle travel; and install public information signs at entrances to refuge units and WPAs. The signs would contain a unit boundary map, unit-specific regulations, and as applicable, other instructions such as no prairie dog hunting and no off-road travel.

Acquisition or Consolidation of Adjacent Lands

Comment 2 – Commenters suggested site-specific acquisition through ownership consolidations and agreements for the purpose of improved public access and grassland bird conservation.

Response 2. The Service appreciates these comments. While acquisition and consolidation of specific parcels of lands is outside the scope of the CCP, the Service will continue to pursue opportunities to increase access and conservation as funding is available.

Biological Resources

Habitat, Wildlife, and Ecosystems Management

Comment 3 – Commenters suggested the creation of islands and limited-access areas to benefit migratory birds. Other commenters support management to benefit the greater sage-grouse.

Response 3. The Service appreciates these comments and considered them when developing the draft CCP: Goals 1 and 2 and associated objectives and strategies. The Service is proposing to use a variety of tools to protect, improve, restore, and maintain priority habitats of the District, including wetlands, stage-steppe, and grasslands. Conservation of the greater sage-grouse and its habitat is one of the priorities of the Service.

Invasive Native and Nonnative Plants

Comment 4 – A commenter supports the control of cattail and Russian olive trees on the District.

Response 4. Thank you for your comment. The Service is proposing to increase mechanical treatments in the District to remove invasive plants; increase prescribed fire (other than in sagebrush uplands) for invasive plant control; continue to monitor for nonnative plant presence and conduct chemical application in accordance with the District's annual pesticide use proposals (the Service's process for authorizing use of pesticides on NWRS lands and waters); and pursue opportunities to increase use of biological controls for invasive plant management.

CCP Goals

Comment 5 – A commenter supports the vision and goals of the CCP.

Response 5. Thank you for your comment. These goals will provide long-term guidance on management of the District.

Enforcement

Comment 6 – One commenter wanted to see punitive actions taken with landowners who refuse to cooperate with the people's legal desires.

Response 6. Thank you for your comment; however, this is outside the scope of this CCP and associated EA.

Fire and Fuels Management

Comment 7 – Commenters suggested mowing and other types of vegetation management to reduce wildfire danger.

Response 7. We appreciate the comments and considered them when developing the draft CCP: Goals 1 and 2. The Service is proposing to cooperate with partner agencies to suppress all wildfires; use mechanical treatments to reduce fuels; and conduct prescribed fire, where applicable, except in sagebrush uplands, to reduce fuel loads and restore the natural fire return interval. Within five years of finalization of the CCP, the Service is also proposing to develop a fire management plan for the District that is consistent with the CCP's goals, objectives and strategies related to fire and fuels management.

Districtwide Planning and Management/CCP Process

Comment 8 – Commenter suggested that the District be classified as Wilderness.

Response 8. District lands do not meet the requirements to be considered Wilderness.

Livestock Grazing

Comment 9 – Several commenters expressed concerns about livestock grazing impacts on public access and on the environment.

Response 9. We appreciate the concerns of the commenters and the information provided on the potential impacts of grazing, and we have considered these comments and information in our analysis of these impacts in the EA associated with this CCP (Appendix

A) and the Grazing Compatibility Determinations for the District (Appendix D). The Service is proposing, as part of this CCP, to move from a grazing program that was permitted on an annual basis for the same parcels of land to a prescriptive grazing program that may open new areas to grazing but also allowing areas grazed longer periods of rest between grazing, resulting in less intensive grazing pressure on District lands and more habitat benefits.

The Service may authorize grazing on NWRS lands when: it is found to be an appropriate and compatible use of the NWRS lands, in accordance with Service procedures described in Service Manual chapters 603 FW 1 (Appropriate Refuge Uses) and 603 FW 2 (Compatibility) (i.e. Appendix D); it is described as a management action in an approved plan (i.e., the proposed CCP); complies with NEPA and other applicable laws and regulations (i.e., the EA for the CCP); and sets explicit objectives for target species or their associated habitats that represent the biological outcomes the Service desires and to meet wildlife or habitat management objectives (as proposed in the CCP).

The Service can only authorize grazing on NWRS lands when we cannot meet our resource management objectives through maintenance, management, or mimicking natural ecosystem processes or functions (Biological Integrity, Diversity, and Environmental Health Policy, 601 FW 3). Grazing is a historic and natural part of the ecosystem that includes the District, so prescriptive grazing authorized by the District mimics these historic and natural habitat conditions. Therefore, the Service has met all these requirements for authorizing grazing on the District.

The prescriptive manner in which the Service authorizes grazing on the District ensures grazing helps meet the District's conservation purposes. For example, the Service prescribes extended periods of rest between prescribed grazes to allow habitat conditions to fully recover for wildlife. Given that regular and rotational grazing is prevalent on the entire surrounding landscape in some areas, the District reduces grazing on certain District lands, such as the North Unit of Lake Mason NWR, so these lands can provide a unique habitat structure for wildlife species that is not found in other areas of the District. The Service monitors District lands to determine which areas would benefit from prescriptive livestock grazing; it reevaluates this annually.

Partnerships

Comment 10 – Several commenters offered assistance for activities related to management, monitoring, and administration.

Response 10. The Service appreciates commenters' offers to support the District and looks forward to continued communication about how to leverage partnerships to assist with inventory and monitoring habitat management and protection efforts. Goal 5 of the CCP reflects the importance of partnerships to the work of the District: "Collaborate with partners to protect, enhance and manage for healthy, productive and diverse habitats and wildlife populations on District and surrounding lands." The CCP emphasizes the importance of partnerships in District operations.

Pesticide Use

Comment 11 – Commenters identified concerns about the potential for pesticide drift from adjacent private property and impacts to the District as a result, particularly concerns about impacts to insects that are food sources for sage-grouse and other birds.

Response 11. We appreciate commenters concerns. As pesticide drift originates from lands outside Service jurisdiction, the Service is unable to consider an alternative of limiting spraying on adjacent lands. We have made no changes to the CCP or associated EA as a result of these comments.

Public Information, Education, Outreach, and Involvement

Comment 12 – Public comments supported the public engagement component of the wetlands program. Commenters also supported District efforts to maintain biological information for refuge properties.

Response 12. The Service appreciates these comments. Inventorying and monitoring the District's resources and offering environmental education fulfill one of the five priority wildlife-dependent recreational opportunities — both responsibilities of the Service for administering the NWRS as outlined by the Improvement Act (16 USC 668dd(a)(3) (Improvement Act). Staff and capacity for managing the District are limited, so as proposed in the CCP, the Service seeks opportunities for partnerships to help the Service meet these responsibilities (CCP Goal 5 and associated strategies).

Wildlife-Dependent Recreation

Hunting

Comment 13 – One commenter requested a reduction in public use and access at Grass Lake NWR during hunting seasons, so those lands serve as a refuge to migrating birds, waterfowl, and other wildlife from local hunting pressures adjacent to Grass Lake NWR.

Response 13. The Service prioritizes facilitating wildlife-dependent recreational opportunities, including hunting and fishing, on Service land in compliance with Service law and policy. For refuges, the Administration Act, as amended, stipulates that hunting (along with fishing, wildlife observation and photography, and environmental education and interpretation), if found compatible, is a legitimate and priority general public use of a refuge and should be facilitated (16 U.S.C. 668dd(a)(3)(D)).

We only allow hunting of resident wildlife on NWRS lands if such activity has been determined compatible with the established purpose(s) of the refuge and the mission of the NWRS as required by the Administration Act (Hunting Compatibility Determinations – Appendix D), we have consulted and coordinated with States and Tribes, and complied with the NEPA and Section 7 of the Endangered Species Act of 1973, as amended (ESA; 16 U.S.C. 1531 et seq.), as well as other applicable laws and regulations.

The District still needs to develop a Hunt and Fish Step-Down Plan to finalize opening additional eligible District lands for big game, migratory game birds and upland game

bird hunting as analyzed in the EA (Appendix A – “Alternative B”) for the 2026-2027 hunting season. Opening new areas to hunting would not take effect until the federal rulemaking process is completed as part of the NWRS’s Hunt/Fish Rule. The public will have opportunities to provide additional input during that process. The many steps taken before a station opens or expands a hunting or fishing opportunity on the refuge ensure that the Service allows no opportunity that would compromise the purpose of the station or the mission of the NWRS.

Hunting of resident wildlife on Service lands is generally consistent with State regulations, including seasons and bag limits. Station-specific hunting regulations can be more restrictive (but not more liberal) than State regulations and often are more restrictive to help meet specific refuge objectives. These objectives include resident wildlife population and habitat objectives, minimizing disturbance impacts to wildlife, maintaining high-quality opportunities for hunting and other wildlife-dependent recreation, minimizing conflicts with other public uses and/or refuge management activities, and protecting public safety.

The word “refuge” includes the idea of providing a haven of safety as one of its definitions; as such, hunting might seem an inconsistent use of the NWRS. However, the Administration Act stipulates that hunting, if found compatible, is a legitimate and priority general public use of a wildlife refuge. We manage refuges to support healthy wildlife populations that in many cases produce harvestable surpluses that are a renewable resource. As practiced on refuges, hunting and fishing do not pose a threat to wildlife populations.

It is important to note that taking certain individuals through hunting does not necessarily reduce a population overall, as hunting can simply replace other types of mortality. In some cases, however, we use hunting as a management tool with the explicit goal of reducing a population; this is often the case with exotic and/or invasive species that threaten ecosystem stability. Therefore, facilitating hunting opportunities is an important aspect of the Service’s roles and responsibilities as outlined in the legislation establishing the NWRS, and the Service will continue to facilitate these opportunities where compatible with the purpose of a specific refuge and the mission of the NWRS.

We did not make any changes as a result of these comments.

Comment 14 – Commenters expressed concern about public use of lead ammunition and fishing tackle on refuge property.

Response 14. We appreciate the comments and concerns related to the public use of lead ammunition and fish tackle and considered this issue thoroughly in the draft CCP and associated EA (Appendix A), including considering two alternatives related to this issue. The Service shares the commenters’ concerns regarding the bioavailability of lead in the environment. See Nancy Golden et al. [“A Review and Assessment of Spent Lead Ammunition and Its Exposure and Effects to Scavenging Birds in the United States.”](#)

Historically, the principal cause of lead poisoning in waterfowl was collection of high densities of lead shot in wetland sediments associated with migratory bird hunting activities (Kendall et al. 1996). In 1991, as a result of high bird mortality, the Service instituted a nationwide ban on the use of lead shot for hunting waterfowl and coots ([50 CFR 32.2\(k\)](#)). Hunters must use non-toxic shot while hunting for migratory birds and upland game on the District per Service and Montana State hunting regulations.

The Service requires any new shot types for waterfowl and coot hunting to undergo rigorous testing in a three-tier approval process that involves an ecological risk assessment and an evaluation of the candidate shot's physical and chemical characteristics, short- and long-term impacts on reproduction in waterbirds, and potential toxic impacts on invertebrates ([50 CFR 20.134](#)). Because of this rigorous testing, the shot toxicity issue of the past is now substantially less of an ecological concern.

However, concern remains about the bioavailability of spent lead ammunition (bullets) and tackle (sinkers) on the environment as described further in the EA (Appendix A), including endangered and threatened species, birds, mammals, humans, and other fish and wildlife susceptible to biomagnification. The impacts of lead on human health and safety have been a focus of several scientific studies. As related to hunting and fishing, studies have found the ingestion of animals harvested via the use of lead ammunition increased levels of lead in the human body [e.g., Buenz, E. (2016). Lead exposure through eating wild game. *American Journal of Medicine*, 128: 458.].

The Service continues to educate hunters and anglers on the impacts of lead on the environment, and particularly on human health and safety concerns of ingesting animals harvested with lead ammunition. We always encourage hunters and fishers to voluntarily use nontoxic ammunition and tackle for all harvest activities. Lead alternatives to both ammunition and tackle are becoming more widely available and used by hunters and anglers; however, they remain more expensive.

The Service believes it is important to encourage refuge-State partnerships to reach decisions on lead usage. We continue to research this issue and engage with States and other partners to promote the use of non-lead ammunition and tackle. The use of lead tackle by anglers and single projectile ammunition from by big game hunters are the only additions of lead still authorized on the District, which is consistent with the State of Montana's regulations.

The number of new hunters or anglers expected to use lead bullets or lead tackle as a result of the new or expanded opportunities proposed in this CCP are anticipated to be very low, so the resulting addition of lead into the environment should be negligible or minor. Where lead ammunition or tackle is still allowed (although discouraged) on Service lands, the addition of lead and the associated impacts to the environment are negligible when compared to the lead in the environment as a result from other fishing, hunting, or other activities in the local, regional, and national area.

As documented in our Section 7 Consultation (Appendix G), we determined that the proposed action is unlikely to adversely affect any listed species. The Service believes that these big game hunting and fishing opportunities on the District will result in no more than minor additions of lead into the environment. For more information on the impacts of introducing lead into the environment as a result of hunting and angling opportunities in the District, see the EA (Appendix A).

Visitor Use and Experience

Comment 15 – Several commenters requested canoe launches at Lake Mason NWR, construction of islands for hunting at Lake Mason NWR, and expanded recreational opportunities for Grass Lake NWR.

Response 15. The Service is proposing several strategies to increase wildlife-dependent recreation on the District within the bounds of staff, capacity, and funding availability in response to these public comments captured in the CCP and associated EA. For example, the Service is proposing to open Grass Lake NWR to public use for hunting big game, upland game birds, and migratory game birds, as well as wildlife observation and photography.

Before authorizing any public use, the Service must ensure those uses are compatible with the conservation purposes of the District and the mission of the NWRS (16 USC 668d(d)). You can find the compatibility determinations for all public uses proposed on the District in Appendix D.

In addition to opening additional District lands to wildlife-dependent recreation, the Service is proposing strategies to ensure better access, information, and health safety. For example, based on public comments, the Service is now proposing opening archery-only big game hunting on Clark's Fork WPA to address serious public health and safety concerns presented by the proximity of the unit to housing on adjacent lands.

Water Resources and Water Rights

Comment 16 – A commenter identified the importance of the Service maintaining and potentially obtaining more water rights for wildlife conservation.

Response 16. The Service appreciates the comment and agrees that the Service has a responsibility under the NWRS Improvement Act to maintain adequate water quantity and quality to meet the mission of the NWRS and the purposes of the refuges and WPAs in the District (16 USC 668dd(a)(4)(F)) through maintaining and exercising its water rights. As proposed in the CCP, the Service will continue working with partners on monitoring water quality. The Service will also attempt to improve water quality by flushing or draining wetland systems and will improve wetland structures.

In addition to maintaining water rights, the Service proposes to exercise water rights to benefit resources in specific District NWRs and WPAs. The Service does not believe the acquisition of more water rights is necessary to meet the conservation purposes of the

District, so we have not made any changes to the proposed CCP or associated EA as a result of this comment.

Table 1. Full Comments from Public Scoping

Topic	Comment
Access, Roads, Parking, and Signage	One of the most important [issues with public access] is making all-weather, all-vehicle access into the Lake Unit of Lake Mason NWR . . . We encourage you to work with Musselshell County to accomplish some improvements.
Access, Roads, Parking, and Signage	Regarding additional access at Grass Lake NWR: This could be facilitated by an improved access road and primitive parking area near the current refuge boundary.
Access, Roads, Parking, and Signage	Items related to public access we'd like to see addressed in the plan include <ul style="list-style-type: none"> • an additional parking area at the NW corner of Spidel WPA; • a slight enlargement of the current parking area [at Spidel WPA]; • and mowing into the Tew WPA access to make it more user-friendly.
Access, Roads, Parking, and Signage	Improved signage on several of the areas would help greatly, so people know where they can go and what they can do.
Access, Roads, Parking, and Signage	The ease of access is primary. So, decent roads and parking are essential.
Access, Roads, Parking, and Signage	I would tolerate a registration or reservation if necessary to control over access . . . A study or survey of what constitutes "over access" would help.
Access, Roads, Parking, and Signage	Durable access roads with right-of-way for District wildlife viewing; e.g., Grass Lake NWR from the north and south. Legal right-of-way and durable surface allowing at least three season access for Lake Mason NWR.
Access, Roads, Parking, and Signage	Good parking at District wildlife viewing areas with managed plant cover . . . for ease of access by elderly or disabled wildlife observers . . . Include, as reasonable and prudent, accommodations for visitors with disabilities and for "walk-in only" areas.
Access, Roads, Parking, and Signage	We encourage the District to consider additional trails at Refuges in the future.
Access, Roads, Parking, and Signage	Motor vehicle use for management purposes, with possible exceptions: Non-governmental organization or other public vehicle use within defined limits – including District sanctioned wildlife observers and data surveyors, and other activities within the USFWS goals, regulation, guidelines, and policies.
Access, Roads, Parking, and Signage	(Lake Mason NWR) The general road issue is mentioned elsewhere, but it deserves emphasis here, too. One or more good roads at Lake Mason NWR should be near the top of the District's list here and at all District areas . . . It should be a high priority to get that road up to an all-weather, all-vehicle access road, including a parking area.)

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Access, Roads, Parking, and Signage	(Lake Mason NWR) You might also consider whether there is a way to provide an easier access for canoes or small boats at Lake Mason.
Access, Roads, Parking, and Signage	(Spidel WPA) Slightly enlarge the one-vehicle parking area on the county line. Add a new parking area at the far NW corner of the WPA to encourage public access to the north and northeast parts of the area. This is an interesting area, rich in bird-life when it has water, but hardly anyone goes there because access is difficult and because they don't want to park on a public road. Consider working with Golden Valley County to see if it is practical to make the road along the west side more of an all-weather road.
Access, Roads, Parking, and Signage	(Tew WPA) Try to get the access road on the west end and a parking area at the end of it mowed in late summer to encourage access and reduce fire danger. A neighbor might be willing to do this for little or nothing. Consider establishing a small parking area at the east end of the area.
Access, Roads, Parking, and Signage	Site identification and informational signs are lacking, in a state of disrepair, or misleading in several places. Establishing and/or upgrading signs would be very beneficial.
Access, Roads, Parking, and Signage	Conservation would mean the restriction of private vehicles and protection of the natural state and surroundings . . . I would tolerate a restriction on amount of people using said lands per day (or hours).
Access, Roads, Parking, and Signage	(Clark's Fork WPA) Public experiences enhance public support. We, the Clarks Fork Yellowstone Partnership, support appropriate improvements for public utilization. We support full-access hiking trails (non-motorized), rest benches, informational signage, student and adult field trips and other compatible uses. To this end, we are willing to form a committee and partner to improve the human, and wildlife, experience at Clark's Fork WPA for the benefit of the watershed.
Acquisition or Consolidation of Adjacent Lands	Regarding opening additional lands for public use on Grass Lake NWR: This could be facilitated by acquisition of some land at the north end of the refuge.
Acquisition or Consolidation of Adjacent Lands	Acquiring additional habitat [at Grass Lake NWR] would benefit the public.
Acquisition or Consolidation of Adjacent Lands	We encourage the District to give high priority to trying to acquire some additional property (as much as possible) at the north end of the refuge [Grass Lake NWR] for both public access and for additional wildlife habitat. If that happens, also add a primitive parking area for several vehicles in that area, preferably back from the road, closer to the current boundary.
Acquisition or Consolidation of Adjacent Lands	(War Horse NWR) Consider ownership consolidations and agreements with emphasis on terrestrial as well as wetland wildlife species habitat enhancements and conservation, with special emphasis on grassland birds (e.g. species of special concern).
Biological Resources: Habitat, Wildlife, and Ecosystems Management	At Lake Mason NWR, we think that at least some of the small constructed islands should be built up again to provide nesting sites for cormorants or other birds.

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Biological Resources: Habitat, Wildlife, and Ecosystems Management	Of great value also is the fact that the District has a diversity of vegetation and habitats providing for a rich wildlife community. The District is exceptionally valuable as great resting areas for migrating birds and also as bird production areas.
Biological Resources: Habitat, Wildlife, and Ecosystems Management	Enhance focus on and protection of nongame species in the District (e.g. mammals, birds, reptiles, amphibians). Limited access to these areas during wildlife breeding season as determined necessary by biologist.
Biological Resources: Habitat, Wildlife, and Ecosystems Management	We suggest you maintain or rebuild at least some of the small man-made islands for nesting birds.
Biological Resources: Habitat, Wildlife, and Ecosystems Management	Sage-Grouse habitat has been repeatedly identified as a priority for CMRC. Livestock grazing has been identified as a serious concern within CMRC due to its landscape-altering effects, with Greater Sage-Grouse as one of the primary targets. We ask that the CCP take protection of Greater Sage-Grouse habitat into special consideration during the scoping and planning processes.
Biological Resources: Habitat, Wildlife, and Ecosystems Management	<p>The CMRC lands identified in the scoping notice provide important habitat for the Greater Sage-Grouse. Sage-grouse have been identified as an imperiled bird species with a trendline towards extinction due to habitat loss and predation. Livestock grazing are one of the largest contributors to habitat loss as they compete with Sage-grouse for important brood-rearing food sources and alter the native biodiversity of sagebrush ecosystems as described in the above section. Sage-grouse are currently exempted from endangered species protections despite its low and declining population numbers due to a Congressional rider so it is essential for the USFWS to extend protections to these birds on their lands by excluding uses that may harm the birds.</p> <p>Sage-grouse habitat has been repeatedly identified as a priority for CMRC. Additionally, the Montana Sage Grouse Oversight Team had a recent meeting where they identified the central Montana service area as one that was operating at a significant deficit, meaning that more Sage-grouse habitat had been altered by development than protected. In fact, the central service area was operating at the largest deficit with a deficit of approximately 7,000 credits per year for the next 50 years. The USFWS has a responsibility to do manage the CMRC lands in a way that will provide good habitat for these species that they are clearly losing in other parts of central Montana.</p> <p>Livestock grazing is a serious concern within the CMRC lands due to its landscape-altering effects, with Greater Sage-Grouse as one of the primary targets. We ask that the CCP take protection of Greater Sage-Grouse habitat into special consideration during the scoping and planning processes.</p>
Biological Resources: Invasive Native and Nonnative Plants	A high priority should be cattail management at Clark's Fork WPA. Cattail management would start with totally draining the wetland for a year or two. Some "before and after" bird surveys on the WPA would be useful in monitoring success.

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Biological Resources: Invasive Native and Nonnative Plants	At Clark's Fork WPA, the Russian olives growing on the dam need to be cut and killed before they ruin the dam. Replacing some of the Russian olives that were cut four years ago with native trees or shrubs would be a good idea.
CCP: Vision and Goals	The draft vision statement in the February 2017 (Issue 1) Planning Update for the District is excellent and is consistent with YVAS views and recommendations.
Enforcement	I would like to see punitive actions taken with landowners who refuse to cooperate with the people's legal desires.
Fire and Fuels Management	We'd like to see addressed in the plan . . . mowing into the Tew WPA access to reduce fire danger.
Fire and Fuels Management	Good parking at District wildlife viewing areas with managed plant cover to minimize fire danger.
Districtwide Planning and Management / CCP Process	These lands should be Wilderness.
Districtwide Planning and Management / CCP Process	I am hopeful but not optimistic that the plan will provide a road map but not a requirement that management implement the plan.
Livestock Grazing	I would not like to compete with livestock of any kind.
Livestock Grazing	No grazing permits should ever be given on this public land.
Livestock Grazing	<p>a. Cattle Impacts to Riparian Areas</p> <p>The health of riparian and wetland areas that are protected in the Refuges and WPAs being analyzed in the CCP are critical to many wildlife species. Although riparian areas account for less than 2% of the West's total land area, they provide habitat for approximately one-third of the plant species. In the arid Southwest and similarly arid regions approximately 60% of vertebrate species and 70% of threatened and endangered species are riparian obligates.¹ Yet these are the areas most impacted by cattle grazing, largely due to the fact that as much as 81% of the forage in a grazing allotment can come from 2% of the area occupied by a riparian zone.</p> <p>Cattle spend a disproportionate amount of time in riparian areas and can cause significant degradation from streambank trampling, stream widening, sedimentation, and an increase in stream temperature. These localized impacts can increase over time and alter the stream and riparian area function. Cattle spend substantially more time in riparian areas than native grazers such as bison, mule deer, whitetail deer, pronghorn, and elk. The natural resources in the CMRC analysis area should be protected for these native grazers.</p> <p>Livestock grazing has damaged 80 percent of the streams and riparian ecosystems in the arid West and nearly all surface waters in the West³ contain harmful waterborne bacteria and protozoa such as Giardia due to contamination from livestock waste.⁴ Researchers have stated that "the removal or reduction of livestock from vital riparian</p>

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	<p>and wetland habitats throughout the West needs to be given serious consideration by all those concerned with ecosystem health.”</p> <p>While there is seemingly minimal cattle grazing allowed on the lands in question, these impacts must still be assessed prior to allowing any targeted grazing activity.</p>
Livestock Grazing	<p>b. Cattle Impacts to Uplands</p> <p>There is a substantial body of research that describes the detrimental impacts that livestock grazing has on vegetation. As several of the units included in this scoping notice have substantial uplands that may endure cattle grazing on occasion, it is important to understand all of the potential impacts that this grazing may have on these upland areas.</p> <ul style="list-style-type: none"> • Livestock graze and trample native plants which clears vegetation and destroys soil crusts; all contributing to weed invasion. This prepares weed seedbeds through hoof action. Additionally, livestock transport and disperse seeds on their coats and through their digestive tracks. • Without disturbance to native plants, microbiotic crusts, and soils resulting from livestock grazing and trampling, and corresponding increases in light, water, and nutrients for the remaining weeds, it is doubtful that alien plants would have spread so far or become so dense. At least they would not be invading as rapidly, and certainly not over the vast area of western grasslands, shrublands, and woodlands as they are now. • In central Washington, grazing was responsible for changing the physical structure of ponderosa pine forest from an open, park-like tree overstory with dense grass cover to a community characterized by dense pine reproduction and lack of grasses. • The Oregon-Washington Interagency Wildlife Committee, composed of biologists from several government agencies, concluded that grazing is the most important factor in degrading wildlife and fisheries habitat throughout the 11 western states. <p>Allowing livestock on the Refuges and WPAs to graze weeds might inadvertently make the weed infestations worse. When cattle graze on these species they are trampling native vegetation and encouraging the spread of weeds through their fur and digestive tracts. Additionally, the focused grazing required by targeted grazing can destroy any ground cover and any native grasses and forbs in the area, making it easier for weeds to re-establish.¹⁰ Homogenous cattle grazing at a landscape scale occurs and contributes to a decline of prairie obligate species.</p> <p>Finally, cattle graze more indiscriminately than native grazers and consume grasses and forbs, diminishing the native forb component of an ecosystem. Researchers have found that a species-rich forb component is critical for high levels of biodiversity in prairie landscapes.</p>
Livestock Grazing	<p>The scoping notice mentions that some areas see regular livestock grazing due to a lack of boundary fences and that all Refuges and WPAs endure some amount of targeted livestock grazing. Protecting all of these important wildlife areas from cattle grazing is essential to ensuring protected and productive landscapes. While fencing poses numerous threats to wildlife and must be done responsibly, excluding livestock from each Refuge and WPA might have benefits to the sage-grouse, prairie dogs, and game species that live on the CMRC system that outweigh the costs of adding fencing.</p>
Livestock Grazing	<p>The use of targeted grazing must be thoughtfully considered as it is still an unproven management tool and may contribute to continued degradation and spread of noxious</p>

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	<p>and invasive plants. Targeted grazing lacks scientific support and must be thoughtfully analyzed in all upcoming NEPA documents.</p> <p>The existing best available science identifies significant risks to utilizing targeted grazing as a treatment method.</p> <p>In fact, preliminary indications are that the grazing intensities required to reduce annual grasses, for example, are quite heavy.¹³ Young et al. caution that “using livestock grazing to suppress invasive annual grasses and enhance desirable perennials assumes that desirable perennials will fill the temporary void left by the annual grasses. In many areas, however, desirable perennials may be outcompeted by species considered even more undesirable than annual grasses.”</p>
Partnerships	We know that the Refuge faces ongoing staffing and funding challenges, and we wish to continue to partner with you.
Partnerships	YVAS and many of our associates do value and use such data [from nongovernmental organizations (NGOs) and the general public] and hope that USFWS extends some special considerations for data gathering. Such data gathering and sharing with the public will generate support for the refuge units, and they need support now more than ever. We think that while acquisition, processing, and publishing data and metadata can be somewhat burdensome, it can be very useful and important to a large array of users and uses. This is something YVAS and our associates might be able to help with.
Partnerships	Enhance cooperative efforts between the USFWS, NGOs, and the public to facilitate stewardship and improvements within the District. YVAS fully appreciates and supports the fact that USFWS first priority for the refuges and District is wildlife and habitat. Nonetheless, YVAS also encourages the many benefits that USFWS would likely glean from volunteer work on trails, weeds, public relations, habitat enhancement, litter and old fence removal, data survey, etc. within the District.
Partnerships	<u>Grass Lake NWR:</u> YVAS suggests as a possible pilot project for YVAS, cooperating NGOs, and the public to assist USFWS in public relations, obtaining and maintaining durable access roads/routes with right of way for administrative purposes and for recreation and wildlife viewing. Include possible accommodations for visitors with disabilities and for ‘walk-in only’ areas. Best practices results from this effort and from other enhanced cooperative efforts to be applied elsewhere in District (e.g. Lake Mason, War Horse NWR).
Partnerships	<u>Clark’s Fork WMA:</u> YVAS and possibly other cooperating NGOs and the public would like to be involved at the Clark’s Fork WPA for habitat and recreational management. Suggested project work for USFWS consideration includes cattail reduction, replacement and management using approved practices. Additional projects could include enhanced open water areas, weed control, road/trail maintenance, Russian Olive replacement with native species, plant species understory and overstory enhancements, terrestrial and wetland wildlife species habitat enhancements, public access including accommodations for visitors with disabilities and for ‘walk-in only’ areas, public relations. Best practices results from this effort and from other enhanced cooperative efforts to be applied elsewhere in District (e.g. Lake Mason, War Horse NWR, Grass Lake NWR)
Partnerships	YVAS and other groups and individuals may be able to assist in this work through grant writing efforts and volunteer or contracted labor and materials, etc.

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Partnerships	We would like to assist and work with the District, Refuge neighbors, the public, and County shops and officials to help provide what would be needed with regard to Refuge access, mowing for fire safety, gravel for primitive access and parking, signage, etc.
Partnerships	We look forward to mutually beneficial project work and outcomes with the USFWS and other groups and individuals.
Pesticide Use	We recommend a focus on pesticide drift and contamination into CMRC lands and waters. Enacting regulations which require significant barriers between treated farmland or pesticide-treated livestock is an effective method of reducing unintentional pesticide exposure. It may be that no such pesticide application occurs near CMRC lands, but, if it does, it should be accounted for during the CCP scoping process.
Pesticide Use	Agriculture is a major industry in central Montana and agricultural lands border much of the CMRC lands. Many of these agricultural lands are sprayed each year with pesticides, many by the US Department of Agriculture, Animal and Plant Health Inspection Services for their grasshopper and Mormon cricket reduction program each year. This spraying has the potential to drift onto the CMRC lands, damaging food sources for sage-grouse and other birds. This potential threat must be considered during the CMRC CCP process.
Public Information, Education, Outreach, and Involvement	Programs about ours and neighboring wetlands presented by the USFWS and certainly surveys like this one [referring to the scoping process comment form].
Public Information, Education, Outreach, and Involvement	Compilation of historical and forthcoming wildlife, plant, water resources, and public use data (agency and public) for the refuges in the District in one easily accessible repository.
Wildlife-Dependent Recreation: Visitor Use and Experience	Limited motorized vehicle and limited foot traffic policies are appreciated.
Wildlife-Dependent Recreation: Hunting	Consider a no-hunting policy at the Grass Lake NWR, other than the state section within the Refuge. Hunting is allowed and encouraged at the nearby Big Lake WMA, owned and managed by Montana Fish Wildlife and Parks. YVAS has no overarching issues about hunting. We suggest however that Grass Lake NWR would provide a refuge for wildlife during hunting seasons that might minimize energy expenditures by migrating birds, and provide a local safe zone for waterfowl and other wildlife given local hunting pressures. The birds and other wildlife could find refuge at the Grass Lake NWR without moving completely out of the region.
Wildlife-Dependent Recreation: Hunting	American Bird Conservancy strongly supports the phase-out of lead ammunition and fishing tackle on National Wildlife Refuges. We appreciate CMRC's existing and clear ban on the use of lead shot for the take of migratory game birds. We strongly urge CMRC to extend this practice to all hunting and fishing activities on the CMRC. Moreover, nine National Wildlife Refuges (Chincoteague, Eastern Neck, Blackwater, Pakota River, Patuxent Research, Wallops Island, Great Thicket, Rachel Carson, and Canaan Valley) are proposing a phase-out of lead ammunition and fishing tackle on refuge lands by 2026. Based on the best available science and the need to provide for a

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	transition period to educate Refuge users we are recommending an eighteen-month phase out.
Wildlife-Dependent Recreation: Visitor Experience and Use	Explore options for making the launching of canoes or small boats from the mucky shore [at the Lake Unit of Lake Mason NWR] easier.
Wildlife-Dependent Recreation: Visitor Experience and Use	At Grass Lake NWR, we would like to see at least some of the refuge opened to the public, bird watching, and hiking for sure, with some additional access for hunting (beyond the state section that is currently open).
Wildlife-Dependent Recreation: Visitor Experience and Use	At Lake Mason NWR, we think that at least some of the small constructed islands should be built up again . . . for hunters to use.
Wildlife-Dependent Recreation: Visitor Experience and Use	We suggest you maintain or rebuild at least some of the small man-made islands . . . for hunters to use in the fall.
Water Resources and Water Rights	It is of great value and importance that Refuge water rights be protected and used for wildlife. We encourage the District to obtain additional water rights where appropriate.

Draft CCP and Associated EA

NOA of a Draft CCP and Associated EA

The Service announced the NOA of a draft CCP and associated EA in the Federal Register on January 14, 2025. Publication of the NOA began the formal public comment period of 30 days for the CCP. Public comments assisted the Service in its evaluation of the effects to the human environment described in the EA. The Service included a press release on the District's web page announcing the public comment period and providing hyperlinks to the CCP and appendices. The Service also published a news release in local print media and on social media to notify the public of the Service's NOA. No public meetings were held during the draft comment period.

Federal, State, and Local Agencies' Involvement

As described in Public Scoping Period, federal and state agencies with a land management interest are invited to participate as cooperating agencies and members of the planning team. No cooperating agencies were identified through this process. In 2024, courtesy copies of the draft CCP and EA were sent to the director, the Region 5 supervisor, and the Region 6 supervisor for Montana FWP. Congressional members were also notified of the publication of the NOA.

Native American Tribes

The Service sent letters of notification about the NOA to the following Tribes:

- Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation, Montana
- Blackfeet Tribe of the Blackfeet Indian Reservation of Montana
- Chippewa Cree Indians of the Rocky Boy's Reservation, Montana
- Confederated Salish and Kootenai Tribes of the Flathead Reservation
- Crow Tribe of Montana
- Fort Belknap Indian Community of the Fort Belknap Reservation of Montana
- Little Shell Tribe of Chippewa Indians of Montana
- Northern Cheyenne Tribe of the Northern Cheyenne Indian Reservation, Montana

Summary of Public Comments and Responses on the Draft CCP and Associated EA

Access, Roads, Parking, and Signage

Comment 1 – Two commenters discussed the difficulties of public access to the Clark’s Fork WPA due to the absence of a public road or trail. Commenters expressed concerns about emergency vehicle access to Clark’s Fork WPA.

Response 1. We appreciate the comment and have made edits to the CCP and associated EA in response. To improve public access to the wetland and other areas of the Clark’s Fork WPA, the Service is proposing to create a path for foot traffic in the next several years. The path created through the WPA for foot traffic will also accommodate emergency vehicles.

Antler Collection

Comment 2 – Several commenters requested that the Service allow collection of shed antlers on the North Unit and Lake Mason Unit.

Response 2. Thank you for the comment and request. Shed antlers are an important source of nutrients to various animals. Removing them from NWRS lands, which are managed by law for wildlife, runs counter to management for all wildlife. 50 CFR § 27.61 prohibits removal of natural objects from any National Wildlife Refuge.

Biological Resources

Habitat, Wildlife, and Ecosystems Management

Comment 3 – A commenter supports management for dense nesting cover and identified how many bird species rely on dense nesting cover as habitat.

Response 3. We appreciate the support for the Service’s proposal in the CCP to expand its suite of management tools, including prescriptive grazing, prescribed fires, mechanical treatments, and chemical and biological control of invasive species to rejuvenate dense nesting cover. Existing fields and grasslands will be renovated and seeded with a mix of native grasses and forbs to improve diversity and vigor.

Comment 4 – A commenter discussed how District properties could be managed to support nongame species, including many bat species, which are a priority to the commenter.

Response 4. We appreciate the comment and recognition that the habitat management strategies proposed for the Service will support conservation of all species — both game and non-game. District management seeks to provide high-quality habitat for all native plant and wildlife species that reside on or temporarily visit District lands. The Service works with Montana FWP by providing research special-use permits for the echolocation

of various bat species. The Service looks forward to continued partnership with Montana FWP on other projects that support conservation efforts in the state.

Comment 5 – A commenter stated that habitat improvements such as enhancing water-control structures and exercising water rights to support migratory birds will promote species diversity and abundance, recreational wildlife viewing, and waterfowl hunting.

Response 5. As discussed above in response to scoping comments, the Service is proposing several water management strategies to increase conservation of the District's resources and improve wildlife-dependent recreation on the District, including improving water-control structures as staff and capacity allow.

Invasive Native and Nonnative Plants

Comment 6 – Two commenters provided additional information on the environment affected by invasive species in the Clark's Fork WPA. One supports biological weed control for invasive weeds.

Response 6. We appreciate the information. The Service is proposing in the CCP continued partnerships with the local weed districts for control of noxious and invasive weeds and expanding those partnerships where weed control requires increased treatments.

Camping

Comment 7 – Commenters requested that the District allow camping on the North Unit of Lake Mason NWR.

Response 7. As stated in the Compatibility Determination for camping located in Appendix D of the CCP, camping on the North Unit is not a compatible use (Camping Compatibility Determination – Appendix D). Camping materially interferes and detracts from the conservation purposes of Lake Mason NWR because it disturbs wildlife; has resulted in campers leaving trash behind, including non-decomposing trash; and poses a threat to NWR's wildlife and habitat as well as public health and safety due to illegal fires. This use also detracts from the experience of other visitors engaging in wildlife-dependent recreational opportunities on the NWR. Other public lands that permit camping are located nearby and adjacent to the Refuge's North Unit.

CCP: Goals

Comment 8 – Several commenters suggest adding public benefit in the EA purpose.

Response 8. The mission of the National Wildlife 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." (Improvement Act), 16 USC 668dd(a)). As such, we agree with commenters that one of the main purposes of this CCP is ensuring the District meets this mission, which includes being a benefit to the public. We have edited the purpose and need in the EA in response

to this comment to include that meeting the NWRS mission is one of the main purposes of this CCP.

Livestock Grazing

Comment 9 – Commenters suggested that grazing be a priority public use for the District because of its benefit to the public.

Response 9. The Improvement Act outlines wildlife-dependent recreational uses (hunting, fishing, wildlife observation and photography, and environmental education and interpretation) as the priority public uses of NWRS lands (16 USC 668dd et seq.). Therefore, grazing is not considered a priority public use of the District. However, as proposed in the CCP, and discussed in Public Scoping Response 9, grazing can be authorized on NWRS lands to meet our conservation purposes and objectives. We recognize public benefits beyond the conservation benefits to wildlife and habitat on the District. We have made no changes to the CCP and associated EA based on this comment.

CCP: Goals

Comment 10 – Several commenters support Alternative B because of its proposed increase in wildfire prevention efforts, invasive plant control, and visitor access through the improvement of access roads and parking areas.

Response 10. The Service appreciates support for the management strategies proposed in Alternative B and will consider these comments as we finalize the CCP.

Enforcement

Comment 11 – One commenter suggested that the District consider increasing the infrastructure and personnel needed to support law enforcement.

Response 11. We appreciate the concern of these commenters for sufficient funding and staffing to safely and effectively administer hunting and fishing activities throughout the Refuge System. Service policy (603 FW 2.12.A.(7) see <https://www.fws.gov/policy-library/603fw2>) requires station managers to determine that adequate resources, including personnel, exist or can be provided by the Service or a partner to properly develop, operate, and maintain the use in a way that will not materially interfere with or detract from fulfillment of the refuge purpose(s) and the Service's mission.

If resources are lacking for establishment or continuation of wildlife-dependent recreational uses, the refuge manager will make reasonable efforts to obtain additional resources or outside assistance from States, other public agencies, local communities, and/or private and nonprofit groups before determining that the use is not compatible. For example, when Service law enforcement resources are lacking, we can often rely on State fish and game law-enforcement capacity to help enforce hunting and fishing regulations.

Adequate resources are available to manage the hunting program proposed in the CCP at the anticipated levels of participation. The Service does not expect a meaningful increase

in costs to District management or infrastructure from expanding hunting opportunities. We did not make any changes to the CCP or EA as a result of these comments as documented in the hunting compatibility determination for the CCP (Appendix D).

Fire and Fuels Management

Comment 12 – Commenters described the link between prescribed burning and both cattle and wildlife forage.

Response 12. We agree with commenters and have proposed prescribed burning as a strategy to meet our habitat management objectives outlined under Natural Resources Goals 1 and 2 of the CPP.

Livestock Grazing

Comment 13 – Commenters emphasized the importance of grazing by linking grazing to Objective 1 (grassland management) and Objective 2 (Grasslands and Dense Nesting Cover Restoration) in the CCP. Commenters also provided information on extended rest from grazing in the North Unit.

Response 13. We appreciate these comments and agree that prescriptive grazing can be an important tool for grassland conservation and to help the District meet its habitat management objectives outlined in the CCP as discussed in Scoping Response 9.

Comment 14 – Several commenters have noted areas in the District that need repair. All stated concerns about fence maintenance and offered solutions to addressing perceived fencing issues. Two commenters stated that four-wire “game friendly” fence is not suitable for livestock. One commenter supports the use of wildlife-friendly fencing to facilitate movement for the robust wildlife populations.

Response 14. The Service appreciates the comments and will continue to repair infrastructure, including fences, on the District as staff capacity and budgets allow. Federal law (50 CFR § 26.21(b)) requires that livestock not be permitted to roam freely or trespass on Service lands, and so neighboring landowners must maintain fence to mitigate livestock trespass where those fenced lands are adjacent to District lands. However, this does not preclude any neighboring landowner with lands abutting District lands from speaking to District staff about possible alternatives to benefit both landowner and District and the Service is proposing to continue to work with landowners on fencing issues related to trespassing livestock that is or may impact District resources. Any fence the District constructs or helps to construct must consider wildlife movements and incorporate wildlife friendlier design options. For all future grazing opportunities authorized by the Service on the District, all associated fencing must prevent livestock escape or trespass.

Comment 15 – Two commenters provided background information on a proposed land trade for the War Horse NWR Yellow Water unit.

Response 15. We appreciate the information; however, the Service has found no record regarding any such land exchanges, water improvement projects, or soil improvement projects from the 1990s near or around the Yellow Water Unit of War Horse Refuge. The Service has not found a record of a joint partnership between the BLM referencing a grazing EA..

Comment 16 – Two commenters expressed concerns about the potential effect of shotgun shells and wads from shotgun shells posing a hazard to cattle grazing on Refuge property.

Response 16. While possible and plausible, complications from ingestion of shotshell wads by livestock at other refuges with robust hunting presence has not been shown to be a problem for livestock grazing. Consistent with the CCP, the District will commence plans for prescribed burning and fuel reduction, which should eliminate some excess shotshell wads on the landscape over time.

Partnerships

Comment 17 – Several commenters discussed past cooperative efforts to control noxious weeds in Musselshell County. Commenters asked if these efforts are ongoing and encouraged the refuge to continue participating in them.

Response 17. The Service recognizes the importance of cooperative efforts in controlling and eradicating invasive species in the District. Although the Service does invasive species control in the District in a limited capacity, it is proposing in the CCP to increase collaborative partnerships with county weed districts and use appropriate chemical, biological, and mechanical means to control invasive and noxious weeds where budget funds allow, particularly for outbreaks of leafy spurge (Goal 1: Objectives 1 and 3 and Goal 5). We agree that speaking with and partnering with willing landowners to combat invasives is a key component in controlling unwanted invasive weeds. We look forward to working with our partners on this important issue.

Stream Bank Erosion

Comment 18 – Two commenters noted bank erosion in Clark’s Fork WPA that could affect private property and on-Refuge roads and public parking lots.

Response 18. We appreciate the comments. The District realizes the challenges that river morphology poses for both the WPA and neighboring landowners. We are interested in speaking with the neighboring community on how we may generate long-term solutions to this problem.

Wildlife-Dependent Recreation

Hunting

Comment 19 – One commenter opposed opening Hailstone NWR and Grass Lake NWR to waterfowl hunting mostly due to concerns about avian influenza.

Response 19. The Service takes avian influenza and the impacts on migratory birds very seriously. The Service is responsible for monitoring wild bird populations for the earliest possible detection of highly pathogenic avian influenza. We conduct morbidity and mortality investigations on Service lands as well as assist our partners with collection of biological samples to test live and hunter-harvested birds.

The Service coordinates closely with the States on responding to avian disease outbreaks, including enacting any strategy that involves closing a unit of the NWRS for hunting. The district manager may close District lands to hunting at any time when there is a concern that continued hunting would pose a threat to a wildlife population. However, at present there are no concerns about avian influenza in the long-term populations of huntable bird species on the District.

State agencies manage migratory waterfowl hunting seasons and bag limits within parameters set forth by the Service's Migratory Bird program each year, which considers any population declines due to disease or other factors. The Center for Disease Control (CDC) provides [guidance](#) to hunters on mitigating the hazards and effects of avian influenza.

Comment 20 – One commenter expressed support for and several commenters opposed Alternative C due to the proposed ban on lead ammunition and fishing tackle. The commenter supporting Alternative C had concerns about the environmental effect of lead on predators and people but provided no additional information about these effects. Among the commenters opposed to the ban on lead ammunition for big game hunting and fishing tackle in the District, one submitted new information on the effects of lead on wildlife populations and discussed the differences between the effects from fishing tackle and the effects from ammunition. One commenter was concerned about the District's rationale for banning lead and stated that the data did not support a ban. Several commenters cited the economic effects of non-lead ammunition and fishing tackle on the sporting community.

Response 20. We appreciate the comments and information submitted and have incorporated the information into the EA (Appendix A) as appropriate. For more information on the Service's consideration of lead ammunition and fishing tackle in the CCP and EA, see Response 14 to Public Scoping Comments.

Hunting and Fishing

Comment 21 – There is general support for increased recreational user access on refuge properties; several commenters requested opening the Lake Mason NWR- North Unit.

Response 21. One responsibility of the NWRS is to "recognize compatible wildlife-dependent recreational uses as the priority general public uses of the System through which the American public can develop an appreciation for fish and wildlife." (16 USC 668dd(4)(H)). Therefore, the Service strives to provide increased access on the District for wildlife-dependent recreational opportunities wherever compatible.

The Service has proposed several strategies for increasing wildlife-dependent recreational opportunities and improving access to District lands as part of this CCP. These include opening Hailstone NWR to big game hunting and the north portion (north of the railroad right-of-way) of Grass Lake NWR to big game hunting, upland game bird and migratory game bird hunting, and including the lead-free ammunition requirement for upland game bird and migratory game bird hunting.

Lake Mason NWR was established in part "... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." (Migratory Bird Conservation Act, 16 USC 715d). As such, the North Unit of Lake Mason NWR is designated as refugia for all wildlife, including migratory birds, and remains closed to all public entry and access.

Comment 22 – Two public commenters identified issues regarding public safety. One issue pertained to the risk of high-powered rifles to residences and the other pertained to hunting livestock adjacent to Clark’s Fork WPA.

Response 22. The Service considers public safety a top priority. To open or expand hunting or sport fishing on a refuge, we must first find the activity compatible (Hunting Compatibility Determination- Appendix D). An activity is compatible if it does not "materially interfere or detract from" public safety, wildlife resources, or the purpose of the refuge (Service Manual, [603 FW 2.6.B.](#)).

Hunting on the District must be conducted consistently with State regulations, as well as the NWRS and refuge-specific hunting [regulations](#) that the Service has established to protect the District’s resources and human health and safety. In the interest of this serious safety issue, the Service is restricting elk, deer, and pronghorn hunting to archery-only equipment on Clark Fork’s WPA.

Fishing

Comment 23 – One commenter provided national statistics on recreational fishing that include the economic effects and monetary contributions to aquatic resource conservation through excise taxes, license fees, and direct donations.

Response 23. The Service appreciates this information and recognizes with gratitude the important monetary contributions recreational hunters and anglers have provided in support of conservation and the NWRS.

Table 2. Full Comments on the Draft CCP and EA

Topic	Comment
Access, Roads, Parking, and Signage	Last winter, when a fire jumped the river into the WPA, emergency vehicle access was very difficult due to lack of an established road.
Access, Roads, Parking, and Signage	Access in general. For anyone other than a very avid waterfowl hunter, access in general into the WPA is very difficult. We know several people that have tried walking into the WPA to go fishing along the river, walk their dogs, or take wildlife photography, but there is no established trail or road. What used to be a roadway previous to 1991 when the

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	WPA was still irrigated farmland eroded in the June, 2022 flooding. Entry into the WPA requires navigating through 6 foot tall dry grass and/or marsh.
Antler Collection	We believe the North Unit of the NWR should be open to visitor access for those reasons stated above as the citizens and taxpayers own property, pay taxes to maintain the property and should have access to the property. We believe the public should be allowed to search for antler and horns as a part of their public interest. That is shown as not being authorized currently. We would like to know how that is in the best interest of the public.
Biological Resources: Habitat, Wildlife, and Ecosystems Management	Many bird species rely on dense nesting cover and the proposed restoration methods and tools would lead to range and dense nesting habitat improvements.
Biological Resources: Habitat, Wildlife, and Ecosystems Management	The lands in the CCP support or could support many nongame species, including many bat species, which are priority species at this time. Habitat improvements such as enhancing water control structures and exercising water rights to support migratory birds will promote species diversity and abundance while benefiting recreational wildlife viewing and waterfowl hunting.
Biological Resources: Invasive Native and Nonnative Plants	Noxious weed control. This issue has improved greatly since entering into an agreement with the Carbon County Weed District for weed control. Leafy spurge and white top were an extreme issue for many years when the WPA sat literally abandoned under previous management. Canada thistle is still an issue in some areas, but access by vehicle is very limited in the more marshy areas. Any private landowner would have to control noxious weeds, so the same should apply to USFWS.
Biological Resources: Invasive Native and Nonnative Plants	The use of biological weed control presents a promising approach, and FWP looks forward to opportunities to provide input on specific projects and species selection prior to implementation.
Camping	We believe the North Unit of the NWR should be open to visitor access for those reasons stated above as the citizens and taxpayers own property, pay taxes to maintain the property and should have access to the property. We believe the public should be allowed to search for antler and horns as a part of their public interest. That is shown as not being authorized currently. We would like to know how that is in the best interest of the public. There is a proposal to close the camping in the North Unit. We don't believe that is in the best interest of the public and believe the public should be able to camp responsibly in designated areas and enjoy the landscape as citizens and taxpayers.
CCP: Goals	<p>We agree with all of the 7 stated goals listed. We think there is one key goal missing, which is public benefit. The public owns the property as tax payers and citizens of the United States.</p> <p>The best interest of the public should include return on asset. This return can be accomplished for the public by including a primary public benefit of rest rotation grazing to enhance soils, capture more rainfall into the soils, capture carbon, promote biodiversity of plants, and lead to more wildlife. The public will benefit from this by having a return on asset as well as a location to hunt, enjoy nature, the outdoors and wildlife. The public benefits from having landscape to create healthy grass fed protein to</p>

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	help feed our citizens. We strongly believe this should be a priority public use for the benefits listed above and this should be addressed in appendix D.
CCP: Goals	Additionally, we support the stated goals in Alternative B to increase efforts to prevent damaging wildfires, control invasive plant species, and enhance visitor use and experience. This includes the goal of working with local county commissioners, owners of adjoining lands, and land managers to improve access roads and parking areas for the CMR District.
Enforcement	Second, I worry the plan does not go far enough to provide additional funding to improve infrastructure and patrolling in day use areas. I often see our Fish Wildlife and Parks authorities relying on TIP-MONT to investigate crimes that have occurred. The tip line is necessary, but it should not be considered a deterrent nor a substitute for game wardens. The ability of our agencies to mitigate crimes and hunting abuses in our back yard has reached its limits. And, gun-owners and hunters of today, show they can cause a great deal of damage. Now is not the time to open hunting in these areas.
Fire and Fuels Management	Prescribed burning would also eliminate the dense buildup of dry grass that is not palatable to livestock or wildlife.
Livestock Grazing	<p>There are specific threats listed to that natural resource that include trespass livestock and water quality. The State of Montana is a fence out state. We have been great partners over the years providing 100% of the fence labor and the majority of the fence materials. We would like to know what the U.S. Fish and Wildlife Service detailed plan is for fencing on the North Unit and the Lake Mason Unit. There is a statement that shows "the service will continue to maintain and install wildlife friendly fencing to prohibit cattle from trespassing on District lands.</p> <p>Our experience in the past has been that we provide 100% of the labor and the majority of the materials on our borderline fence. We firmly believe in a rest rotation grazing system and developing water for cattle and wildlife. We move our cattle with horses and believe in great herdsman ship and a holistic management approach. We would be excited for an opportunity to enhance the watering systems on the North Unit landscape. We believe the current water quality management should include working with neighboring land owners. This is a public benefit to enhance wildlife.</p> <p>Prescribed grazing is one of the 7 strategies listed to help achieve the 1st objective. We are permit holders in the North Unit but have not been allowed to utilize that permit since 2009. We agree with listing this as a strategy on the North Unit and believe this could be greatly enhanced and utilized for the reasons stated above. Cattle grazing accomplishes the 1st and 2nd objectives. The grazing rate of \$26.50/AUM is a great return for the tax payer compared to \$16.53 on State and \$1.35 on BLM.</p>
Livestock Grazing	We do not believe you need multiple years of rest on grazing rotations as stated in the current management activities for control, but do believe you need a proper rest rotational grazing system. What number would you define as multiple years? There has been a rest of the North Unit for 16 years. We feel that is not beneficial for the land, the protein that could have been raised on that livestock for the public, the wildlife, and the public (tax payers and citizens). There is a statement in appendix D stating "continuous rest without period disturbance fails to promote long term grassland health." We strongly agree with that statement and look forward to working with US Fish and Wildlife to utilize a rest rotational grazing system again.
Livestock Grazing	Pg 49 discusses meeting with adjacent land owners. We are open to discussions in regards to the Yellow Water unit. In particular, the fence between Belk Trust and the Yellow Water unit is in need of repairs. Repairs have been increasing of late, and this is

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	not compensated. Neighbors should share costs of fence repairs, we do the work and expend the supplies, to get nothing in return. Not even grazing.
Livestock Grazing	Fence condition issue. Since USFWS first constructed the boundary fence in 1991 between our property and theirs, literally no maintenance has been done except for by us. There are several areas of the fence that need posts re-pounded and wires re-stretched. After the severe 2022 flooding, the north section of fence near where the river bank is eroding does not exist. The only thing keeping our cattle out the WPA is an electric fence we have constructed along the entirety of the WPA fence line. In any other situation, both landowners would work together to keep the fence maintained, but in this case, USFWS has done absolutely nothing in regard to fence maintenance. If the WPA were potentially open to grazing, there is no way cattle in the WPA (regardless of who owned them) would be confined to the WPA boundaries. They could easily breach the existing four wire fence and end up in our hay fields and crop land. The existing four wire "game friendly" fence is not suitable for livestock.
Livestock Grazing	<p>There are specific threats listed to that natural resource that include trespass livestock and water quality. The State of Montana is a fence out state. We have been great partners over the years providing 100% of the fence labor and the majority of the fence materials. We would like to know what the U.S. Fish and Wildlife Service detailed plan is for fencing on the North Unit and the Lake Mason Unit. There is a statement that shows "the service will continue to maintain and install wildlife friendly fencing to prohibit cattle from trespassing on District lands."</p> <p>Our experience in the past has been that we provide 100% of the labor and the majority of the materials on our borderline fence. We firmly believe in a rest rotation grazing system and developing water for cattle and wildlife. We move our cattle with horses and believe in great herdsman ship and a holistic management approach. We would be excited for an opportunity to enhance the watering systems on the North Unit landscape. We believe the current water quality management should include working with neighboring land owners. This is a public benefit to enhance wildlife.</p> <p>Prescribed grazing is one of the 7 strategies listed to help achieve the 1st objective. We are permit holders in the North Unit but have not been allowed to utilize that permit since 2009. We agree with listing this as a strategy on the North Unit and believe this could be greatly enhanced and utilized for the reasons stated above. Cattle grazing accomplishes the 1st and 2nd objectives. The grazing rate of \$26.50/AUM is a great return for the tax payer compared to \$16.53 on State and \$1.35 on BLM.</p>
Livestock Grazing	FWP supports the use of prescriptive grazing as a tool to manage invasive plans while also benefiting area ranching communities. We also support the use of wildlife-friendly fencing to facilitate movement for the robust wildlife populations these areas sustain. Many bird species rely on dense nesting cover and the proposed restoration methods and tools would lead to range and dense nesting habitat improvements.
Livestock Grazing	We are writing in regards to War Horse NWR, Yellow Water unit. In the 1990's, we were approached to trade lands to block up the Yellow Water unit rather than it being checker boarded with our private property. We were supportive of this trade, however we should not have been. We were assured that we would be able to continue grazing, and discussed with FWP personal several proposed options for rest/rotation of these lands with the adjacent private and BLM lands. FWP discussed water improvements and soil improvement projects. Once the trades were done, and the fence was built we were never offered grazing in over twenty years. We had been assured that grazing would be allowed, and we moved forward with this assumption. We were dismayed when we realized that we had been duped. Needless to say, anytime we deal with the government since, and especially the FWP, we consider very carefully what is being proposed.

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	Preliminary examination of the Draft Comprehensive Conservation Plan: Pg 36 has a discussion in regards to large ungulates. Grazing regimens include rotational grazing, as discussed above, and was originally proposed in a BLM EA which the FWP unilaterally and with out discussion effectively abandoned.
Livestock Grazing; Fire and Fuels Management	Plastic wads and shells from shotguns will also pose a choking hazard to cattle if the WPA is opened up to grazing. Prescribed burning might help eliminate some of this plastic litter.
Partnerships	Partnerships are listed to control weeds. Can you please specifically share the leafy spurge and weed control plan on the North Unit? Appendices B,C,D,E,F and H draft states that initial control was done with mapping spurge locations, applying chemical and the release of leafy spurge beetles. We actively participated in all of those practices in partnership with the US Fish and Wildlife and Extension service in Musselshell County in the 1990's. Are those practices still taking place to prevent leafy spurge from spreading? We believe the best partnerships need to include local owners and producers along with the groups listed in the documents. Local producers and owners are typically the best stewards of the land, spend the most time on the land, are the most knowledgeable of the land and have the best interest of the land long term as their livelihoods are based on the land health. We have shown to be good partners over time as stated above.
Stream Bank Erosion	River bank erosion issue. The north end of the WPA has a bend in the river that has eroded to the point that it's reached the fence line. Soon, the fence will be taken out by the erosion. Once further erosion occurs, it will erode beyond the fence line, negatively affecting our private property. It is virtually impossible to rip-rap our portion of the corner, due to the fact that our private property is down stream. Erosion would get in behind any of our rip-rap if the upstream portion of the bend is not also rip-rapped. Other river bank corners of the WPA also have experienced severe erosion, such as below the public parking lot where the original road no longer exists. However, this corner only affects access into the WPA and has no effect on private property.
Wildlife- Dependent Recreation: Hunting	I would not like to see the...opening new big game and bird hunting opportunities in refuges such as Hailstone National Refuge and the areas proposed in Grass Lake NWR. The areas are important habitat for ensuring waterfowl production and protection for other species. In light of the current bird flu epidemic, it is not the time to introduce or expand hunting.
Wildlife- Dependent Recreation: Hunting	Please do NOT allow lead ammo and tackle at the Russell Wetland complex. To do so would cause lasting harm to the environment, especially top predator species and people.
Wildlife- Dependent Recreation: Hunting	Leave the ammo the way it is, lead core ammo is legal for big game, and lead shot is legal for upland birds. Nontoxic is federally mandated for waterfowl. Why is this even a topic of discussion? Leave this the way it is
Wildlife- Dependent Recreation: Hunting	<p>The Draft CCP presents three alternatives for management, each proposing varying restrictions on the use of lead hunting ammunition. ASA writes in opposition of Alternative C, which would extend restrictions to fishing tackle, requiring anglers visiting refuges within the Charles M. Russell Wetland Management District to fish with non-lead tackle.</p> <p>To attempt to justify the restrictions presented in this alternative, the draft Comprehensive Conservation Plan states "the best available science data indicates that lead....fishing tackle negatively impact[s] the health of wildlife, humans and the</p>

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	<p>environment.” This statement is an overgeneralization that is not substantiated by the supporting evidence presented in Appendix I of the Draft CCP.</p> <p>Appendix I cites a handful of studies, most of which are one or more decades old, specific to the common loon and trumpeter swan, and often conducted in states and regions thousands of miles removed from the Charles M. Russell Wetland Management District. ASA does not dispute that if an individual animal consumes a lead sinker or jig, it will likely die of lead toxicosis. While the death of individual animals is unfortunate and should be minimized, it is important to recognize that, with rare exception, fish and wildlife are managed at the population level in the United States. If a wildlife population is declining, or at risk of declining, based on a human-caused source of mortality, it is incumbent on fish and wildlife managers to act. However, the implementation of restrictions on human activities to protect individuals of an otherwise healthy wildlife population poses risks that undermine our nation’s longstanding and highly successful model of wildlife conservation.</p> <p>Among the cited species, the common loon population is increasing in North America and is assessed as a species of least concern by the International Union for Conservation of Nature (IUCN). A 2018 literature review found modest impacts of lead fishing tackle on loon populations in New Hampshire, but otherwise that “evidence for population-level impacts in other fish and wildlife species is lacking or inconclusive.” As appendix I observes that “[l]oons are infrequent in the District,” there is little rationale to suggest that the use of lead fishing tackle within the District poses any population-level concern.</p>
Wildlife-Dependent Recreation: Hunting	<p>The Appendix states “Copper is a good substitute for lead fishing tackle for the District’s limited fishing opportunities,” but fails to consider substantial cost and performance tradeoffs. Copper tackle is significantly more expensive than lead tackle, and has a lower specific gravity than lead, requiring larger sinkers and jigs that may impact performance. Additionally, copper is not sufficiently malleable to be used for split-shot sinkers, which constitute nearly half of the US sinker market. While jigs and sinkers are available in other materials, like tin, steel and tungsten, these tradeoffs have been sufficient to limit alternatives to a small portion of the overall sinker and jig market (estimated at less than 5 percent).</p> <p>As state fish and wildlife agencies can attest, anglers are price-sensitive, and raising the cost of a fishing license even by a few dollars results in fewer license purchases. The same is true for fishing tackle. If anglers are required to purchase new fishing tackle that is more expensive and/or performs worse, a portion of them will simply choose not to go fishing. Restrictions on traditional fishing equipment and tackle will negatively impact angler participation, diminishing recreational fishing’s sizeable economic impact and the conservation benefits associated with license revenues and excise taxes.</p>
Wildlife-Dependent Recreation: Fishing	<p>The proposed restrictions in Alternative C are not consistent with population-level management of wildlife, and would negatively impact the public’s ability to access and enjoy recreational fisheries on National Wildlife Refuges. ASA encourages the US Fish and Wildlife Service and the Charles M. Russell Wetland Management District to not proceed with Alternative C, and thanks the Service and the District for the opportunity to comment on the Draft Comprehensive Conservation Plan.</p>
Wildlife-Dependent Recreation: Hunting and Fishing	<p>The U.S. Fish and Wildlife Service released a draft Comprehensive Conservation Plan and Environmental Assessment (EA) for the Charles M. Russell Wetland Management District (CMR District) that will provide management guidance and an access framework for these public lands for years to come so it is important that this plan improve management and protects hunting and fishing access. To that end, we highlight the importance of selecting Alternative B that expands hunting access on the CMR District and note our strong concerns with Alternative C that that would ban traditional lead tackle and ammunition.</p>

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Wildlife-Dependent Recreation: Hunting and Fishing	We oppose Alternative C that would ban the use of lead ammunition and tackle as this would limit hunting and fishing. Unless there is site specific data on the negative impacts of traditional lead ammunition and tackle, this type of ban should be avoided. Policies that restrict the use of lead ammunition or tackle on wildlife refuges reduces access, disproportionately affects lower income households, and may have negative downstream consequences for wildlife conservation programs that depend on fees paid by sportsmen.
Wildlife-Dependent Recreation: Hunting and Fishing	The Congressional Sportsmen's Foundation (CSF) expresses its support for Alternative A, and its strong opposition to Alternative B and C, particularly Alternative C contained in the Comprehensive Conservation Plan (CCP) for the Charles M. Russell Wetland Management District. At the outset, CSF is concerned to see the District fall into what appears to be a campaign within the National Wildlife Refuge System to ban the use of lead ammunition and fishing tackle from law-abiding sportsmen and women, despite any science to substantiate these efforts. Further, CSF would point out that Alternative B and C contained in the CCP run counter to the voluntary non-lead pilot programs that the Fish and Wildlife Service announced in 2024, which leads us to question the authenticity of the non-lead pilot program.
Wildlife-Dependent Recreation: Hunting and Fishing	<p>The clear objective of the proposed CCP, to ban lead ammunition and fishing tackle, is rather telling when three alternatives are offered in the Environmental Assessment (EA), with Alternative A being the No-Action Alternative, while the others both mention the use of lead ammunition and fishing tackle (Alternative B – Implementation of the CCP with Allowed Use of Lead Ammunition for Big Game Hunting and Fishing Tackle; and Alternative C – Implementation of the CCP with Required Use of Lead-free Ammunition and Fishing Tackle). On page 37 it states in the EA, "The only addition to lead in the District is from lead tackle used by anglers and single projectile ammunition or buckshot used by furbearer and elk/deer/pronghorn hunters." The EA notes that in 2023 there were only 434 visitors to this enormously sized District. How can lead be such a concern? As the EA itself points out, the District has no baseline as to how much remnant lead exists on District managed lands and any lead that might exist is not likely available to wildlife. This is clearly noted on page 37 of the EA where it states in part, "The amount of lead these activities [hunting and fishing] have added to the District's environment has not been quantified, but according to District staff, the likelihood is low that lead is bioavailable (emphasis added). How can a science driven agency such as the National Wildlife Refuge System propose the banning of lead ammunition and lead fish tackle when the EA itself clearly states there is no substantiated data? And the Districts own staff acknowledge that there is a low likelihood of any lead on the landscape available for wildlife to mistakenly consume.</p> <p>We are further disappointed in the District with the feeble attempt to justify the banning of lead ammunition and lead fishing tackle by including 2.5 pages of comments and study references taken completely out of context. The use of science is only as good as the context in which the study occurred. With that said, a more honest assessment would have included conducting a simple compare and contrast of each study with the reality and vast landscape that is the Charles M Russell Wetland Management District.</p>
Wildlife-Dependent Recreation: Hunting and Fishing	FWP supports Alternative B, which implements the CCP with the Allowed Use of Lead Ammunition for Big Game Hunting and Fishing Tackle. This alternative meets the agency's core values of embracing public trust, honoring tradition and heritage, working with landowners, using science, and providing stewardship.

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Wildlife-Dependent Recreation: Hunting and Fishing	Under Montana law (87-1-201 and 87-1-301, MCA), neither FWP nor the Fish and Wildlife Commission has the authority to regulate ammunition use or composition for hunting. Current regulations allow lead fishing tackle and lead ammunition for big game hunting.
Wildlife-Dependent Recreation: Hunting and Fishing	The National Wildlife Refuge System serves an important mission for the nation in conserving aquatic habitats and providing public access to the outdoors. The Charles M. Russell Wetland Management District includes four National Wildlife Refuges (NWRs) and six Waterfowl Production Areas (WPAs), providing public access for anglers and sportsmen. Within the District, the Clark's Fork WPA provides public access to an excellent trout fishery on the Yellowstone River, while the War Horse NWR offers fishing opportunities for largemouth bass and panfish.
Wildlife-Dependent Recreation: Hunting and Fishing	Hunting and fishing are integral in the conservation and management of wildlife and are consistent with the mission of the National Wildlife Refuge System (NWRS). Montana's sportsmen represent some of our state's most passionate stewards of nature. We fully support Alternative B that adds over 1,700 acres for hunting. Opening Hailstone NWR to big game hunting and the north portion of Grass Lake NWR to big game, upland game bird, and migratory game bird hunting will increase access to public lands and create a more cohesive hunting plan for the CMR District.
Wildlife-Dependent Recreation: Hunting	Use of high powered rifles. The distance from our residence, as well as other residences near the WPA is not very far when it comes to the use of high powered rifles. Our livestock also graze right along the WPA border. Other public hunting areas around Bridger that are managed by Montana Fish, Wildlife and Parks are only open to hunting by archery and shotgun. There is no reason this federally managed area should be any different.
Wildlife-Dependent Recreation: Fishing	The American Sportfishing Association is the nation's recreational fishing trade association, providing a united voice for the recreational fishing industry when emerging laws and policies pose significant impacts on sportfishing businesses or sportfishing itself. Recreational fishing is enjoyed by 57.7 million anglers annually, supporting over 1.1 million jobs with a \$230 billion economic impact. The recreational fishing community is among the nation's leading conservationists, contributing \$1.7 billion annually to aquatic resource conservation through excise taxes, license fees and direct donations.
Wildlife-Dependent Recreation: Visitor Use and Experience	<p>Visitor use and access is a goal and we agree with that goal. We have been in the Block Management program for 30 plus years and have allowed thousand of hunters to walk through our property to access the North Unit and have recreation opportunities. We also provided reasonable housing for the public to stay at and believe in providing access for the general public to hunt and have access to public lands and the outdoors. Why would the North portion of the North Unit be closed to visitor access and use? How would that be in the best interest of the public, taxpayers and citizens?</p> <p>We believe the North Unit of the NWR should be open to visitor access for those reasons stated above as the citizens and taxpayers own property, pay taxes to maintain the property and should have access to the property. We believe the public should be allowed to search for antler and horns as a part of their public interest. That is shown as not being authorized currently. We would like to know how that is in the best interest of the public. There is a proposal to close the camping in the North Unit. We don't believe that is in the best interest of the public and believe the public should be able to camp responsibly in designated areas and enjoy the landscape as citizens and taxpayers.</p>