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COMPATIBILITY DETERMINATION

Use: Environmental Education and Interpretation

Refuge Name: Crane Meadows NWR

Establishing and Acquisition Authorities:

- Fish and Wildlife Act of 1956 (16 U.S.C. 742f(a)(4) & (16 U.S.C. 742f(b)(1))
- Emergency Wetlands Resources Act of 1986 (16 U.S.C. 3901(b), 100 Stat. 3583)

Refuge Purpose(s):

Crane Meadows National Wildlife Refuge was established in 1992...

- "... for the development, advancement, management, conservation, and protection of fish and wildlife resources ..." 16 U.S.C. 742f(a)(4) "... for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude ..." 16 U.S.C. 742f(b)(1) (Fish and Wildlife Act of 1956)
- "... 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)

National Wildlife System Mission:

The National Wildlife Refuge System mission is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans. (National Wildlife Refuge System Administration Act of 1966, as amended (16 U.S.C. 668dd-668ee).

Description of Use:

What is the use? The Refuge conducts wildlife interpretation and environmental education programs. Refuge staff prepare, schedule, and organize formal programs for school-aged children and other organized groups upon request. In most cases, curriculums and program schedules are prepared in advance. These curriculums address a number of

wildlife conservation topics such as oak savanna restoration, wetland conservation, prescribed fire management, protection of water resources, migratory bird management, and the conservation of endangered species. Informal programs are also common, and include casual visitors, self-guided tours along public roads and nature trails, impromptu presentations and discussions of wildlife conservation issues with interested citizens, and visitation by unscheduled groups. Visitation and use of the Refuge by local educators and their classes would also be classified as an informal program.

Where is the use conducted? Refuge trails and the shop can be utilized as environmental education and interpretation sites for schools, natural resource organizations, and other visitors to the Refuge. Staff will assist teachers with group visits and presentations on the Refuge, and also present numerous programs and demonstrations off-refuge.

When is the use conducted? Visitation to the Refuge, specifically the Headquarters Unit, is available daily during daylight hours. Programs are conducted year round with weekday programs for school groups and some weekend activities for special public programs. Currently, the Refuge provides environmental education to 750 to 1,250 students per year, and to an additional 2,000 to 3,000 people per year for interpretation events/opportunities on the Refuge.

How is the use conducted? In most cases, programs are scheduled in advance. There are also impromptu presentations and discussions of wildlife conservation issues by Refuge staff with interested citizens, casual visitors, and unscheduled groups. Group size varies from just a few people to larger groups during educational field days. Interpretive and environmental education programs are provided on the Refuge by Refuge staff and volunteers. Teachers may also give programs if a Refuge curriculum is developed.

Interpretive or environmental education programs focus on wildlife and habitats. These programs address a number of wildlife conservation issues including wetland and savanna conservation, water resources protection, migratory bird management, and endangered species conservation. Programs also involve development of outdoor skills, which enhance appreciation of wildlife and their associated habitats. The Refuge provides public

facilities which support environmental education and interpretation, including the shop area available for use by groups of up to 100 people, along with, 60 pairs of snowshoes, 30 pairs of field binoculars, the Platte River Trail for hiking and cross-country skiing, a restroom at the Platte River Trailhead, and the green house. The Refuge also offers four annual programs co-sponsored by the Friends of Crane Meadows NWR and are free to the public. The Refuge partners with the Friends of Crane Meadows NWR to provide environmental education opportunities to teachers and students.

Why is the use being proposed? Interpretation and environmental education are priority general public uses of the National Wildlife Refuge System. The programs promote understanding and appreciation of natural and cultural resources and their management on all lands and waters of the Refuge System. The Refuge is proposing this use to interpret Refuge resources to local school children, adults, and the visiting public, and educate them about broader conservation issues that would promote support for the Refuge System, migratory birds, habitat conservation, conservation issues, and a greater appreciation of our natural resources.

Availability of Resources:

Approximately 0.5 FTE will be required to administer and manage these activities adequately. In addition, maintenance and improvement of Refuge interpretive signs, trails, and visitor center displays will periodically be required. The total estimated cost per year would range from \$50,000 to \$75,000. Based on a review of the Refuge budget allocated for these activities, there is currently sufficient funding to ensure compatibility and to administer and manage the existing use. Strategies to improve the environmental education and program have been identified and would require hiring another FTE to capture the potential for this area.

The CCP recommends additional staffing and facilities to support interpretation and an expanded environmental education program. Greater numbers of people would learn about, and benefit from, the Refuge with additional staff and interpretative materials. Additional staff would be able to provide teacher workshops, Refuge orientations, and would help develop site-specific curricula, materials, and activities linked to state standards. Students and teachers would also be able to participate in coordinated restoration and monitoring programs through long-term monitoring studies.

Anticipated Impacts of the Use:

Short-term impacts: The overall impacts to the Refuge and its associated wildlife populations from environmental education and interpretation would

be minimal. There would be some disturbance to wildlife and vegetation at the locations where interpretive programs occur, but at levels that would not interfere with the purposes of the Refuge. School buses and personal vehicles would utilize developed roads and parking areas to access trails which are already in place. Self-guided interpretation would be sporadic, by small groups of people, and at established trails and kiosks. This may cause short term disturbance as well, but would have minimal impact.

Long-term impacts: Anticipated long-term impacts are beneficial to the Refuge, as these activities promote a conservation ethic in the local community. This use would increase in the future if a new visitor reception area is added, and an additional staff position with visitor services responsibilities is added as proposed in the CCP. As improvements are made there may be some additional short-term, localized disturbance, but use would continue to be in existing developed areas.

Cumulative impacts: There are no anticipated cumulative impacts. Other public uses such as wildlife observation and photography at the same sites used for environmental education and interpretation may increase over time, but it is not anticipated to be significant enough to cause cumulative impacts. The cumulative impacts of educating the public about conservation issues would be beneficial to meeting the Service mission and Refuge purposes.

Public Review and Comment:

This compatibility determination is part of the Draft CCP and EA for Crane Meadows NWR. Public notification and review includes a notice of availability published in the Federal Register, 30-day comment period, local media announcements, and a public meeting at the Refuge. Comments received and agency responses will be included in the final CCP.

Determination:

- Use is not compatible.
- Use is compatible with the following stipulations.

Stipulations Necessary to Ensure Compatibility:

To ensure compatibility with National Wildlife Refuge System and Crane Meadows NWR goals and objectives the activity can only occur under the following stipulations:

1. The Refuge is open to public access year-round during daylight hours.
2. Environmental education and interpretation activities that are not led by Refuge staff would require verbal approval or a Special Use Permit

by the Refuge Manager to minimize conflicts with other groups, safeguard students and resources, and to allow tracking of use levels.

3. Educational groups are required to have a sufficient number of adults to supervise their groups.
4. Harassment of wildlife or excessive damage to vegetation is prohibited.
5. Use of motorized vehicles is limited to maintained roads and parking areas.
6. Camping, overnight use, and fires are prohibited.

Justification:

Provided compliance with the above stipulations, interpretation and environmental education have been determined compatible because the use would benefit the conservation role of the Refuge, would cause minimal disturbance to wildlife and habitats, and would not increase costs to the Refuge with the exception of adding a staff position with visitor services responsibilities when funds allow. The level of use would be light to moderate, and generally consolidated to developed public-use areas (roads, parking lots, and trails). The associated disturbance to wildlife is temporary and minor. Interpretation and environmental education are priority public uses that help fulfill the mission of the National Wildlife Refuge System. This use would not materially interfere with or detract from Refuge purposes.

Refuge Manager: s/Anne Sittauer, Aug. 25, 2010

Concurrence:

Regional Chief: s/Rick Schultz, Sept. 14, 2010

Mandatory 10 or 15 year Re-evaluation Date: 2025

COMPATIBILITY DETERMINATION

Use: Firewood Cutting/Timber Harvest

Refuge Name: Crane Meadows National Wildlife Refuge

Establishing and Acquisition Authorities:

- Fish and Wildlife Act of 1956 (16 U.S.C. 742f(a)(4)) & (16 U.S.C. 742f(b)(1))
- Emergency Wetlands Resources Act of 1986 (16 U.S.C. 3901(b), 100 Stat. 3583)

Refuge Purpose(s):

- Crane Meadows National Wildlife Refuge was established in 1992...“... for the development, advancement, management, conservation, and protection of fish and wildlife resources ...” 16 U.S.C. 742f(a)(4) “... for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude ...” 16 U.S.C. 742f(b)(1) (Fish and Wildlife Act of 1956)
- “... 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)

National Wildlife System Mission:

The National Wildlife Refuge System mission is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans. (National Wildlife Refuge System Administration Act of 1966, as amended (16 U.S.C. 668dd-668ee).

Description of Use:

What is the use? The removal of standing or fallen trees by contractors or private individuals on Crane Meadows NWR. This covers all wood removal activities regardless of the ultimate use of the wood (i.e., firewood, timber, pulp, wood chips, etc.). This use is not wildlife-dependent but may affect local wildlife populations.

Where is the use conducted? Throughout all property held in fee-title at Crane Meadows National Wildlife Refuge. Harvestable cover types on the Refuge include bottomland and upland forest, oak savanna, and any remaining areas of tree plantations. The Refuge acquisition boundary currently contains approximately 435 acres of northern floodplain forest which hosts ash, American elm, box elder, basswood; 1,180 acres of oak woodland containing bur oak, pin oak, northern red oak, white oak, basswood, and American elm; 670 acres of oak-aspen woodland containing northern pin oak, with quaking aspen, paper birch, big-toothed aspen, bur oak, northern red oak or red pine; 200 acres of conifer plantation with jack, red, and white pine; 85 acres of jack pine woodland; and 185 acres of oak savanna - primarily bur oak. During timber harvest and wood cutting activities, buffers will be implemented according to best management practices around wetlands, rivers, and creeks to prevent erosion, sedimentation, and pollution thereby limiting degradation of water quality.

When is the use conducted? Wood removal activities may be authorized throughout the year. Most often, removal of dead, dry, or cured firewood will occur from September through December. Some of this wood may then be used for the upcoming prescribed burn season. Commercial harvest activities will most likely occur during the winter months. During winter, frozen ground will facilitate access while providing protection to underlying soils and vegetation, and to adjacent wetlands by reducing sedimentation and erosion. Due to the extensive wetland system on the Refuge, access and working conditions are generally limited by hydric soils and open water. Cutting or harvesting activities will be prohibited from April 15th to July 1st to prevent the spread of oak wilt, a fungal disease affecting oak trees.

How is the use conducted? Harvest may include standing and fallen trees for personal use and commercial timber harvest. Equipment used for harvest may range from chainsaws and axes, to traditional logging equipment such as feller-bunchers and log skidders. Access may be by car and trailer, pick-up truck, farm tractor, or larger traditional logging equipment, and must be approved by the Refuge Manager. Differences in scope and necessary equipment will occur depending on the amount and type of wood available for removal. Fire wood cutters must be issued a special use permit. Commercial

harvesting will be awarded through a bidding process. The number of people participating in this activity will vary from year to year depending on need and weather cycles.

Why is the use being proposed? This activity will only occur where the Service has determined that a management need exists to remove wood. Wood removal may be desirable where trees are encroaching on hiking trails, fire breaks and/or roads, open marshes, grassland areas, or degrading earthen water impoundment structures. Most timber removal will occur in heavily wooded areas. These thinnings are intended to restore oak savanna habitat. Also, tree harvest serves the purpose of improving forest diversity and health through thinning, creating openings, removal of invasive tree species, and suppressing the transmission of oak wilt and other diseases. Wood cutting is not a priority public use, as defined by the Refuge Improvement Act of 1997, of the National Wildlife Refuge System.

Availability of Resources: Periodic and small-scale harvest operations can be adequately administered with existing staff resources. Planning, issuing permits, and monitoring a wood product harvest program would require a minimal commitment of staff hours. In the past, the Refuge has issued approximately six permits annually for this activity. All harvest sites are marked with flagging tape or paint by Refuge staff. Based on past activity, we estimate that administering a small timber harvest program will require from \$1,000 to \$2000 in staff salary costs. If larger timber harvests are needed salary cost could be as much as \$5,000. Large-scale operations affecting many acres would have to be deferred until staff and funding are available. By permitting a wood products harvest, the manager has identified a management need and will have secured and prioritized the necessary station resources.

Anticipated Impacts of the Use:

Short-term impacts: Many wildlife species may be affected by tree harvest activities. Key waterfowl species using tree cavities for nesting include wood duck, common goldeneye and hooded merganser. Many other bird species use forested habitat for nesting, roosting, protective cover, or feeding. Examples of important species include: bald eagle, red-shouldered hawk, barred owl, several woodpecker species, and many passerine bird species. The forests are also important to a variety of mammals, reptiles and amphibians, insects, and flowering plants.

During harvest activities, wildlife would be displaced to adjacent areas, though this disturbance is not likely to have a measurable impact and would be

mitigated by timing and duration of harvest, i.e., larger harvests conducted during winter months when most avian species have migrated. Potential adverse impacts include: short-term loss of site-specific habitats; short-term fragmentation of the landscape with resulting impact to bird use and productivity; loss of dead whole trees on the ground; soil disturbance that may increase exotic plant invasion and erosion; damage to roads and wetlands from equipment; damage to cultural resources; reduced visual esthetics; and disturbance to wildlife and visitors from cutting operations. These impacts are generally short-term in nature and on relatively small areas, and can be controlled to a large extent by permit conditions and management oversight. In addition, many of these impacts can be avoided by the timing of the activity in accordance with site specific characteristics and requiring equipment be cleaned prior to entering the Refuge to minimize the potential spread of invasive or invasive-exotic species. Required cultural resource surveys and actions would be conducted as determined in consultation with the Service's Regional Historic Preservation Officer prior to the initiation of any mechanized logging operation.

Long-term impacts: Carefully managed harvest would provide long-term benefits to wildlife and plants by improving overall forest and savanna structure, composition, and health. Potential positive impacts include: restoration, maintenance and enhancement of forest and savanna habitats; maintained or increased forest diversity (age, species, and structure), and provision of essential habitat requirements for declining savanna-dependent plant and animal species.

The removal of woody vegetation facilitates native habitat restoration efforts on the Refuge. While habitat transition from forest to savanna will displace species which depend on dense forest cover, forested areas thinned to oak savanna densities would restore a threatened and declining habitat, and support associated savanna wildlife species.

Cumulative impacts: Much of the land adjacent to the Refuge was cleared for agriculture over the past century and a half. Tree harvest may continue to occur on lands adjacent to the Refuge, which would cause cumulative disturbance or changes in broader regional forest habitat. However, historical records indicate that forest cover in the area of the Refuge was minimal in the past, and has only increased over the past century due to the elimination of major disturbance mechanisms - primarily fire.

Implementing tree harvest in addition to prescribed fire as forest management tools will benefit the ecosystem by promptly setting back succession

and maintaining native oak savannas and prairie openings - habitats that have been significantly reduced throughout the Nation by fragmentation and degradation. These restoration efforts will also benefit many declining migratory birds and other wildlife species dependent on “open” habitats.

Potentially negative cumulative impacts within the Refuge and in the watershed downstream of the Refuge may include water quality issues associated with deforestation – particularly sedimentation, erosion, and pollution resulting from tree removal near wetlands, rivers, or creeks; and the spread of invasive/exotic species and tree diseases resulting from equipment use and transport of wood. However, these impacts could be mitigated through controlling the timing, frequency, and duration of the harvest activities in accordance with forest management planning, and by applying best management practices.

Public Review and Comment:

This compatibility determination is part of the Draft CCP and EA for Crane Meadows NWR. Public notification and review includes a notice of availability published in the Federal Register, 30-day comment period, local media announcements, and a public meeting at the Refuge. Comments received and agency responses will be included in the final CCP.

Determination:

Use is not compatible.

Use is compatible with the following stipulations.

Stipulations Necessary to Ensure Compatibility:

To ensure compatibility with National Wildlife Refuge System and Crane Meadows NWR goals and objectives the activity can only occur under the following stipulations:

1. Any tree cutting must meet specific habitat and related wildlife objectives and contribute to the purposes of the Refuge.
2. A special use permit will be issued so that Service management goals are met, and to reduce or eliminate site specific impacts to habitat, fish and wildlife resources, cultural resources, and the visiting public.
3. When possible, vehicle access for wood removal will be limited to existing roads, trails, or fire breaks. In addition, timing of removal activities will be restricted to prevent excessive damage to actively growing vegetation, disturbance to wildlife, and the spread of tree disease. Appropriate timing (i.e., late summer which is typi-

cally dry following the growing season or during winter when the ground is frozen) is also necessary to prevent unnecessary site damage such as soil rutting.

4. Commercial equipment must be cleaned prior to entering the Refuge.
5. Standing cavity trees which are actively being used by wildlife will be marked and protected.

Justification:

Tree harvest has been determined to be compatible because beneficial impacts would far outweigh any foreseeable negative impacts, the activity can be controlled by permits, and tree harvest will ultimately benefit habitats and wildlife species on the Refuge. Indirect impacts of tree harvest are generally considered positive and thus do not materially interfere with or detract from the purpose of the Refuge or the Refuge System mission. Individuals participating in the wood harvest program will be guided by a special use permit, and thus, site specific stipulations will ensure resource protection and achievement of management goals.

Historical accounts of tree density in the upland areas of the Refuge depict primarily oak and jack pine savanna conditions - not the dense forest cover which is present in many areas today. The removal of trees at strategic locations will benefit habitat restoration objectives and increase the extent of these rare savanna habitats. Furthermore, control of woody species encroachment on wetland and grassland habitats is a necessary management activity and directly supports the mission of the National Wildlife Refuge System.

The removal of some dead trees reduces fuel buildup and the severity of potential wildfires. Openings created by woodcutting allows light to penetrate and stimulate the understory growth which increases woodland diversity. Impacts to the habitat as a result of access for wood removal purposes are potentially significant, but are also easily avoided via permit stipulations. Any direct impacts on wildlife production and survival (take, disturbance, etc.) can be largely avoided by timing the activity so that it does not coincide with the breeding/production season. Adverse impacts from harvest would be short-term and more than offset by the long-term benefits for wildlife and plants.

Refuge Manager: Anne Sittauer, Aug. 25, 2010

Concurrence:

Regional Chief: s/Rick Schultz, Sept. 14, 2010

Mandatory 10 or 15 year Re-evaluation Date: 2020

COMPATIBILITY DETERMINATION

Use: Fishing

Refuge Name: Crane Meadows NWR

Establishing and Acquisition Authorities:

- Fish and Wildlife Act of 1956 (16 U.S.C. 742f(a)(4) & (16 U.S.C. 742f(b)(1))
- Emergency Wetlands Resources Act of 1986 (16 U.S.C. 3901(b), 100 Stat. 3583)

Refuge Purpose(s):

Crane Meadows National Wildlife Refuge was established in 1992...

- "... for the development, advancement, management, conservation, and protection of fish and wildlife resources ..." 16 U.S.C. 742f(a)(4) "... for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude ..." 16 U.S.C. 742f(b)(1) (Fish and Wildlife Act of 1956)
- "... 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)

National Wildlife System Mission:

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Description of Use:

What is the use? Public fishing from the river banks and lake shores of Service property at Crane Meadows NWR, in accordance with state regulations and seasons.

Where is the use conducted? Currently, all navigable waters of lakes, rivers, and streams associated with the Refuge are managed by the state of Minnesota, and are open to fishing. These areas include

Rice, Skunk, and Mud Lakes, the Platte and Skunk Rivers, and Buckman, Rice, and Little Rock Creeks. On Service-owned lands, the shoreline areas of these lakes, rivers, and streams, as well as wetland areas, have not been open to fishing in the past, but are potential fishing sites. In accordance with objectives outlined in the CCP, specific, designated shoreline areas of Crane Meadows NWR may be opened to public bank fishing pending the acceptable results of individual site reviews. These reviews are designed to evaluate management's ability to offer a quality fishing experience opportunity at specified locations with no long-term detrimental effects to land, water, vegetation, or wildlife populations. Furthermore, acquisition of new Refuge lands is an ongoing process, and upon acquisition, newly acquired lands will also be evaluated for the potential to offer quality fishing opportunities.

When is the use conducted? Seasonality and timing of fishing opportunities will be determined as a part of the review for all new fishing sites established at Crane Meadows NWR, and will be consistent with state regulations. Some additional restrictions may be added to meet specific management objectives. The game fish season ordinarily runs from the second Sunday in May through the last Sunday in February, while other seasons for taking of aquatic species including reptiles, amphibians, crustaceans, and bivalves, run from April or May through November to February. All forms of fishing, or entry on any part of the Refuge, may be temporarily suspended by posting during occasions of unusual or critical conditions of, or affecting land, water, vegetation, or wildlife populations.

How is the use conducted? All fishing activities would be conducted with the Refuge's primary goals and objectives as guiding principles. All fishing activities will follow applicable state laws, except where the Refuge administers further restrictions to ensure compatibility with the Refuge's primary purposes and management objectives. Minnesota's recreational fishing regulations allow the traditional take of game fish species with rod and reel from shore, a boat, or through the ice; removal of rough fish by spear, harpoon, archery and dip net; as well as the taking of limited quantities of mussels, crayfish, frogs, minnows and turtles for personal use. Any new sites opened to fishing will have access trails to and from public roads, and for safety reasons, small pull-offs or parking lots may be provided in areas of higher use.

Why is the use being proposed? Fishing is a priority public use on National Wildlife Refuge System lands, as designated in the 1997 National Wildlife Refuge Improvement Act.

Availability of Resources:

Staff time would be required to administer and manage this activity. First, an initial review period would be required to determine if the activity is appropriate for a site, and if a quality experience opportunity can be provided. Once deemed acceptable, site plans would need to be generated followed by development of the area, such as a parking area, trail, fishing platform, signage, etc. Additional expenses associated with management of fishing activities would include fuel use, maintenance costs to Refuge vehicles, inspection and maintenance of any associated trails and parking lots, and sign posting. If Refuge staff choose to open new areas of the Refuge to fishing, an evaluation of the associated costs and management needs will be a part of the planning process. A review of the Refuge budget must corroborate that there is enough funding to ensure compatibility and to administer and manage the use.

Anticipated Impacts of the Use:

Fishing poses no foreseeable detrimental environmental impacts to the Refuge, its habitats, or wildlife species. Fishing activities and harvest of other aquatic species may cause temporary, localized disturbance to habitat (i.e., erosion of river banks, pollution, etc.) and may temporarily impact nearby waterfowl and other wildlife. This disturbance may displace individual animals to other parts of the Refuge. There should be only negligible effects to local fisheries. Anglers are required to harvest only surplus quantities of fish without affecting breeding populations, thereby assuring viable, healthy populations within management and habitat guidelines. Restrictions to the fishing program assure that these activities have no adverse impacts on other wildlife species and little adverse impact on other public use programs. These activities are compliant with the purposes of the Refuge and the mission of the National Wildlife Refuge System. Offering this activity would not alter the Refuge's ability to meet habitat goals, and it can help support several of the primary objectives of the Refuge.

Public Review and Comment:

This compatibility determination is part of the Draft CCP and EA for Crane Meadows NWR. Public notification and review includes a notice of availability published in the Federal Register, 30-day comment period, local media announcements, and a

public meeting at the Refuge. Comments received and agency responses will be included in the final CCP.

Determination:

Use is not compatible.

Use is compatible with the following stipulations.

Stipulations Necessary to Ensure Compatibility:

To ensure compatibility with National Wildlife Refuge System and Crane Meadows NWR goals and objectives the activity can only occur under the following stipulations:

1. Specific areas adjacent to lakes, rivers, streams, and wetlands on the Refuge may be opened to fishing only after site evaluations have demonstrated the presence of a quality fishing experience opportunities and that no long-term, detrimental effects to land, water, vegetation, and wildlife are expected.
2. All applicable state and federal Regulations will apply, except where the Refuge administers further restrictions to ensure compatibility with the Refuge's primary management.
3. Littering or disposal of entrails is prohibited, and all anglers are required to adhere to 'Leave No Trace' practices and ethics.
4. Camping, overnight use, and fires are prohibited.

Justification:

Allowing limited fishing on Crane Meadows NWR, within the stipulations above, would have minimal impact on the wildlife resources of the Refuge. Fishing is a priority public use listed in the 1997 National Wildlife Refuge Improvement Act. Facilitating this use on the Refuge would increase visitors' knowledge and appreciation of fish and wildlife, which leads to increased public stewardship of fish and wildlife and their habitats on the Refuge, and in general. Increased public stewardship supports and complements the Service's actions in achieving the Refuge's purposes and the mission of the National Wildlife Refuge System. This determination was made as part of the environmental assessment associated with the comprehensive conservation planning process.

Refuge Manager: s/Anne Sittauer, Aug. 25, 2010

Concurrence:

Regional Chief: s/Rick Schultz, Sept. 14, 2010

Mandatory 10 or 15 year Re-evaluation Date: 2025

COMPATIBILITY DETERMINATION

Use: Hunting

Refuge Name: Crane Meadows NWR

Establishing and Acquisition Authorities:

- Fish and Wildlife Act of 1956 (16 U.S.C. 742f(a)(4) & (16 U.S.C. 742f(b)(1))
- Emergency Wetlands Resources Act of 1986 (16 U.S.C. 3901(b), 100 Stat. 3583)

Refuge Purpose(s):

Crane Meadows National Wildlife Refuge was established in 1992...

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National Wildlife System Mission:

The National Wildlife Refuge System mission is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans. (National Wildlife Refuge System Administration Act of 1966, as amended (16 U.S.C. 668dd-668ee).

Description of Use:

What is the use? Hunting of game is an activity conducted by the public under regulation authority of the National Wildlife Refuge System Improvement Act and the National Wildlife Refuge System. Under the National Wildlife Refuge Improvement Act of 1997 hunting is a priority public use. The Refuge plans to open hunting as a public use within the 15-year life of the CCP, however at this stage in the

Refuge's development, the hunting opportunity will take the form of special, managed hunting events for white-tailed deer and turkey.

Where is the use conducted? Refuge hunting areas must meet minimum size criteria in order to offer quality hunting experience opportunities, and must have enforceable boundaries. Within the existing Refuge landholdings, special, managed hunting events will occur primarily on the Headquarters Unit of the Refuge until additional lands are acquired in fee-title by the Refuge to create hunting areas of sufficient size. The west, north, and most of the east sides of the Headquarters Unit are bound by water features, and the south side is bound by Iris Road, simplifying containment of the activity. The Platte River West and Sedge Meadow Units may also be opened in the future as resources allow. Similar to the Headquarters Unit, the Platte River West Unit is bound by natural water features or roads on nearly all sides. In the future it is expected that hunting will be opened on these additional portions of the Refuge, and ultimately Refuge-wide upon full acquisition.

When is the use conducted? Special, managed hunting events for persons with disabilities and for youth will be scheduled at a time coordinated with, and agreed upon by the Minnesota Department of Natural Resources (DNR). There are eight spring turkey hunting periods in the state of Minnesota, each lasting 5 days in length generally starting on the second Wednesday of April. Where possible, managed turkey hunts on the Refuge will coincide with these state seasons and managed deer hunting events will coincide with the state gun deer season in November and December. Typically, deer hunts for persons with disabilities are conducted earlier than the normal Minnesota deer hunting season to coincide with warmer temperatures. The Refuge staff will work with other FWS stations, Camp Ripley, the Minnesota DNR, the Minnesota Deer Hunters Association, organizations devoted to persons with disabilities, as well as other groups to determine the type of hunt, timing, location, and resources needed to conduct a quality hunt.

How is the use conducted? Special, managed white-tailed deer and turkey hunting events will occur in collaboration with partners such as Minnesota DNR, Wheelin' Sportsmen, National Wild Turkey Foundation, Capable Partners, Minnesota Deer Hunters Association, Pheasants Forever, Camp

Ripley, Minnesota State Archery Association, local sportsmen's clubs, and others. These events will require a substantial amount of coordination and support from volunteers, but these efforts will allow the Refuge to open hunting as a use on the Refuge in a controlled and manageable way despite minimal landholdings. They will also allow the Refuge to tailor these events to reach target audiences, including hunters with disabilities and youth hunters. Hunting at Crane Meadows NWR will adhere to the hunting step-down management plan, which will be completed within 2 years of CCP approval and will provide further details for hunting on the Refuge. All hunting activities follow applicable state regulations, except where the Refuge administers further restrictions to ensure a quality hunt and visitor and staff safety.

Why is the use being proposed? Hunting is a priority general public use of the Refuge System that is also an important wildlife management tool. The Service recognizes hunting as a healthy, traditional outdoor pastime, deeply rooted in the American heritage. Hunting can instill a unique understanding and appreciation of wildlife, their behavior, and their habitat needs. Hunting programs can promote understanding and appreciation of natural resources and their management on lands and waters in the Refuge System. A substantial portion of land within the Refuge acquisition boundary is already currently utilized for hunting, including land owned and managed by the Minnesota DNR in wildlife management areas, by private hunting clubs, and by private landowners. Hunting was discussed during initial planning events for the establishment of Crane Meadows NWR, and has been a desired activity on the Refuge ever since.

Availability of Resources:

These events will require a great deal of coordination and collaboration with partners and local hunters. No current staff time is allocated for coordinating hunting activities, but it is anticipated that a considerable amount of time and financial resources will be required to host these managed hunts. A great deal of time would be required to make initial contacts, write grants, and coordinate activities with partners and other contributing groups. Scouting and setup activities would follow, as well as coordinating logistics such as transportation of hunters to and from blinds. It is estimated that at least 160 hours of preparation time would be required to conduct the first special hunt, and that planning would begin a minimum of one year in advance of the event. Once established, it is assumed that planning and setup for successive hunts would be less labor intensive.

A small amount of road maintenance, mowing, and other upkeep will need to be performed, but are funded as part of regular Refuge management activities. Based on a review of the Refuge budget there is currently enough funding to ensure compatibility and to administer and manage the use. Law enforcement is a primary tool necessary to ensure proper and safe administration of this use, and although there is no Law Enforcement Officer stationed at the Refuge, law enforcement services are available through the Service's Regional Law Enforcement Program. The Refuge will work with the Minnesota DNR to ensure that conservation officers are aware of this use on the Refuge, and are available to assist with law enforcement as a part of their routine duties.

Anticipated Impacts of the Use:

Short-term impacts: Providing carefully planned and managed hunting events with restrictions that limit access to specific Refuge locations will generally minimize disturbance to wildlife populations, the environment, and non-consumptive users. Although hunting causes mortality of target species, harvesting populations to the carrying capacity of existing habitat and only taking the harvestable surplus ensures long-term health and survival of game species, populations, and their associated ecosystem. The presence and activity of hunters may cause temporary disturbance to other wildlife in the area, but there are no foreseeable detrimental impacts to these species. Concerns are primarily centered on the possibility of impacting non-target species that are sensitive to disturbance; especially during spring turkey hunting when most animals are breeding or nesting. Non-hunting public uses may be temporarily disrupted or postponed during specialized hunts. Visitor safety and law enforcement issues are the priority when designing and planning all hunting activities on refuges. Vehicle traffic will increase slightly during the hunting events, and the sound of gun shots will temporarily reduce the serenity for the non-hunting public. Loss of plants from foot traffic is minor, or temporary. Soil and plant disturbance may occur in ingress and egress routes, but will be minor and temporary because of the limited and controlled use associated with the managed hunts.

Long-term impacts: No detrimental long-term impacts from hunting are anticipated as long as wildlife populations are monitored through the Refuge biological program or by state officials. Long-term beneficial impacts of this use would be the ability to manage targeted wildlife populations to levels that reflect the carrying capacity of the ecosystem. When deer populations become over-abundant they can have profound negative impacts on their envi-

ronment through herbivory thereby directly and indirectly affecting other native plants and wildlife species.

Cumulative impacts: There are no anticipated cumulative impacts. Harvest on the Refuge would be very limited and would fall within the state's population management goals which are based on the best available information.

All hunts would follow all applicable laws, regulations and policies; including title 50 of the Code of Federal Regulations, the National Wildlife Refuge System Manual, the mission and goals of the National Wildlife Refuge System, and the purposes, goals, and objectives of Crane Meadows NWR. Operating this activity does not hinder the Refuge's ability to meet habitat goals, provides for the safety of the area's citizens, and supports several of the primary objectives of the Refuge. The Environmental Assessment for the Draft CCP for Crane Meadows NWR contains a more detailed discussion of the anticipated impacts of hunting on the Refuge.

Public Review and Comment:

This compatibility determination is part of the Draft CCP and EA for Crane Meadows NWR. Public notification and review includes a notice of availability published in the Federal Register, 30-day comment period, local media announcements, and a public meeting at the Refuge. Comments received and agency responses will be included in the final CCP.

Determination:

Use is not compatible.

Use is compatible with the following stipulations.

Stipulations Necessary to Ensure Compatibility:

To ensure compatibility with National Wildlife Refuge System and Crane Meadows NWR goals and objectives the activity can only occur under the following stipulations:

1. Hunting will only occur on the Refuge during special, managed hunting events, and will adhere to the Refuge's hunting step-down management plan.
2. Appropriate state hunting licenses and antlerless harvest permits (for deer) are required. Deer and turkeys harvested must be registered at MNDNR check stations in accordance with state regulations. All state hunting regulations apply unless otherwise stated in the Refuge hunt plan and state regulations.

- Hunting will only occur within designated areas on the Refuge that meet minimum size requirements and have enforceable boundaries. These areas may include, but are not limited to the following Refuge Units: Headquarters, Platte River West, and Sedge Meadows.
- Use of motorized vehicles is limited to maintained roads and parking areas. Exceptions would be allowed as a means to provide access to hunters with disabilities, but only under the review of the Refuge Manager.
- This use is subject to modification if on-site monitoring by Refuge personnel or other authorized personnel results in unanticipated negative impacts to public safety, wildlife species, or their habitats.
- Camping, overnight use, and fires are prohibited.

Justification:

This use has been determined compatible provided the above stipulations are implemented. This use is being permitted because it is a priority public use and will not diminish the primary purposes of the Refuge. This use will meet the mission of the NWRS by providing renewable resources for the benefit of the American public while conserving fish, wildlife, and plant resources on Refuge lands.

Hunting is one of the six priority wildlife-dependent recreational uses identified in the National Wildlife Refuge System Improvement Act of 1997. Service policy directs us to provide hunting opportunities when compatible with Refuge management, and offering this use was a long-term goal of the Refuge when it was established in 1992. Managed hunting programs help promote an understanding and appreciation of natural resources and their management. Additionally, managed hunts on the Refuge provide a traditional recreational activity with no definable adverse impacts to the biological integrity or habitat sustainability of Refuge resources. The limited size and distribution of current Service land ownership at the Refuge continues to limit our ability to offer quality hunting experience opportunities, but management has long understood the demand for, and importance of providing this activity on the Refuge. By beginning with short-duration, assisted, managed hunts, Refuge staff can provide hunting opportunities in a controlled fashion, direct these activities to specific audiences, and adaptively evaluate the hunting program for expansion or reduction based on demand and program success.

Without a deer hunting program as a management tool, this species could adversely affect plant communities and hence alter ecological diversity and succession. Excessive herbivory by deer populations could result in significant negative impacts to plant and animal communities, including those of special concern, or of Service trust responsibility. This impact has been well documented and accepted through research. Hunting is also an effective management tool to keep turkey populations within ecosystem limits.

Refuge Manager: s/Anne Sittauer, Aug. 25, 2010

Concurrence:

Regional Chief: s/Rick Schultz, Sept. 14, 2010

Mandatory 10 or 15 year Re-evaluation Date: 2025

COMPATIBILITY DETERMINATION

Use: Research Projects by Third Parties

Refuge Name: Crane Meadows NWR

Establishing and Acquisition Authorities:

- Fish and Wildlife Act of 1956 (16 U.S.C. 742f(a)(4) & (16 U.S.C. 742f(b)(1))
- Emergency Wetlands Resources Act of 1986 (16 U.S.C. 3901(b), 100 Stat. 3583)

Refuge Purpose(s):

Crane Meadows National Wildlife Refuge was established in 1992...

- "... for the development, advancement, management, conservation, and protection of fish and wildlife resources ..." 16 U.S.C. 742f(a)(4) "... for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude ..." 16 U.S.C. 742f(b)(1) (Fish and Wildlife Act of 1956)
- "... 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)

National Wildlife System Mission:

The National Wildlife Refuge System mission is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans. (National Wildlife Refuge System Administration Act of 1966, as amended (16 U.S.C. 668dd-668ee).

Description of Use:

What is the use? The Refuge allows research investigations on a variety of biological, physical, archeological, and social components to address Refuge management information needs or other issues not related to Refuge management. Studies are or may be conducted by federal, state, and private entities, including the U.S. Geological Survey, state departments of natural resources, state and

private universities, and independent researchers and contractors. This is not a wildlife-dependent use. Examples of past biological research subjects include:

Territory, Nesting, and Habitat Utilization of Greater Sandhill Cranes – St. Cloud State University

Department of Natural Resources, Anoka Sandplain Study – Upland Relevé Plots

Department of Natural Resources, Lake Habitat Surveys

Where is the use conducted? Sites for this use would depend on the particular study being conducted and could occur in a variety of habitat types. Access would be restricted by special use permit to the study sites needed to meet the objectives of the research.

When is the use conducted? The timing of research activities would depend on the individual project, but currently most research occurs during the growing season. The entire Refuge is open for allowed research activities throughout the year in conjunction with the issuance of a special use permit. The timing and number of visits by researchers may be restricted by special use permit.

How is the use conducted? Any research study sites, sampling locations, and transects can be temporarily marked by highly visible wooden or metal posts and must be removed when research ceases. Access to study sites must be approved by the Refuge Manager and may be by foot, truck, all-terrain vehicle, boat, airboat, canoe, and other watercraft. Vehicle use is allowed on Refuge roads, trails, and parking lots normally open to the public.

Why is the use being proposed? Most research by third parties is a collaborative effort between the researcher and Refuge staff. Research activities are generally done to address needs identified by Refuge management, or to contribute to a larger knowledge base about resources of concern on the Refuge.

Availability of Resources:

Facilities and staff are currently available for approval of the research, to provide access, maintain roads, parking lots, secondary access roads, as well as to issue special use permits. Staff resources are deemed adequate to manage this use at anticipated

use levels. Access points, boats, vehicles, miscellaneous equipment, and limited logistical support are available on the Refuge. Housing is not available.

Anticipated Impacts of the Use:

Short-term impacts: Research activities may disturb fish, wildlife, and their associated habitats. For example, the presence of researchers can cause bird species to flush from their nests, resting, and/or feeding areas, cause disruption of other wildlife species from normal activities in their territories, or may increase predation on bird nests as predators and scavengers may follow human scents or trails. Efforts to capture animals can cause disturbance, injury, or death to groups or individual animals. In addition, some projects require the collection of animals and plants for study, thereby removing these animals from the breeding population. To animals that are sensitive to disturbance, the energy cost to evade disturbance may be appreciable and may have temporary or permanent consequences due to extra energy expended, disruption of feeding and/or nesting, or displacement from preferred habitat. Sampling activities can cause disturbance to soils and vegetation when temporary foot trails and/or boat trails through vegetation are established. All equipment or supplies must be adequately marked in the field and removed at appropriate times or upon completion of the project to minimize environmental impact.

Long-term impacts: Long-term effects should generally be beneficial by gaining information valuable to Refuge management. No long-term negative impacts are expected and the Refuge Manager can control the potential for long-term impacts through special use permits.

Cumulative impacts: Cumulative impacts would occur if multiple research projects were occurring on the same resources at the same time, if the duration of the research is excessive, or if the nature of the research is intense, extensive, or invasive. No cumulative impacts are expected and the Refuge Manager can control the potential for cumulative impacts through special use permits. Managers retain the option to prohibit research on the Refuge that does not contribute to the purposes of the Refuge or the mission of the Refuge System, or causes undue resource disturbance or harm.

Public Review and Comment:

This compatibility determination is part of the Draft CCP and EA for Crane Meadows NWR. Public notification and review includes a notice of availability published in the Federal Register, 30-day comment period, local media announcements, and a

public meeting at the Refuge. Comments received and agency responses will be included in the final CCP.

Determination:

Use is not compatible.

Use is compatible with the following stipulations.

Stipulations Necessary to Ensure Compatibility:

To ensure compatibility with National Wildlife Refuge System and Crane Meadows NWR goals and objectives the activity can only occur under the following stipulations:

1. Prior to conducting investigations, researchers will obtain special use permits from the Refuge that make specific stipulations related to when, where, and how the research will be conducted. Managers retain the option to prohibit research on the Refuge which does not contribute to the purposes of the Refuge or the mission of the Refuge System, or causes undue resource disturbance or harm.
2. Researchers must possess all applicable state and federal permits for the capture and possession of protected species, for conducting regulated activities in wetlands, and for other regulated activities.
3. Archeological researchers must obtain an Archeological Resource Protection Act permit from the Regional Director prior to obtaining a special use permit from the Refuge Manager.
4. Researchers will submit annual status reports and a final report related to the research conducted on Refuge resources to appropriate Refuge staff.

Justification:

Research by third parties may play an integral role in Refuge management by providing information needed to manage the Refuge on a sound scientific basis and practice adaptive management. Investigations into the biological, physical, archeological, and social components of the Refuge provide a means to analyze management actions, impacts from internal and external forces, and ongoing natural processes on the Refuge environment. Adverse impacts of research that cause localized vegetation trampling or disruption of wetland bottom sediments are often short-term and would be minimized through stipulations above. Any research equipment that remains in the field for the duration of the project would be clearly marked to avoid potential

hazards presented to other Refuge users and Refuge staff, and removed upon completion of the project.

Refuge Manager: s/Anne Sittauer, Aug. 25, 2010

Concurrence:

Regional Chief: s/Rick Schultz, Sept. 14, 2010

Mandatory 10 or 15 year Re-evaluation Date: 2020

COMPATIBILITY DETERMINATION

Use: Wildlife Observation and Photography (Including the Means of Access)

Refuge Name: Crane Meadows NWR

Establishing and Acquisition Authorities:

- Fish and Wildlife Act of 1956 (16 U.S.C. 742f(a)(4)) & (16 U.S.C. 742f(b)(1))
- Emergency Wetlands Resources Act of 1986 (16 U.S.C. 3901(b), 100 Stat. 3583)

Refuge Purpose(s):

Crane Meadows National Wildlife Refuge was established in 1992...

- "... for the development, advancement, management, conservation, and protection of fish and wildlife resources ..." 16 U.S.C. 742f(a)(4) "... for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude ..." 16 U.S.C. 742f(b)(1) (Fish and Wildlife Act of 1956)
- "... 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)

National Wildlife System Mission:

The National Wildlife Refuge System mission is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of fish, wildlife and plant resources and their habitats within the United States for the benefit of present and future generations of Americans. (National Wildlife Refuge System Administration Act of 1966, as amended (16 U.S.C. 668dd-668ee)).

Description of Use:

What is the use? The use is general public access to observe and/or photograph wildlife and Refuge habitats on Crane Meadows NWR including the means of access such as automobile, hiking, snowshoeing, and cross-country skiing. Under the National Wildlife Refuge Improvement Act of 1997

wildlife observation and photography are priority public uses. The use is concentrated in areas with developed public access, such as trails and roads, because of the fragmented nature of Service land ownership in the Refuge acquisition boundary and the limited access to many Refuge Units.

Where is the use conducted? Wildlife observation occurs along state, county, township, and Refuge roads, and designated trails throughout the land that is held in fee title; however most of the public use currently occurs on the Headquarters Unit and along the County Soo Line multiple use trail. It is expected that concentrated access and use may occur in the future on the Sedge Meadow Unit as visitor facilities are developed in accordance with the CCP and associated step-down plans.

Most of the Refuge's wildlife observation and photography currently occurs along the Platte River Trail on the Headquarters Unit. The Trail traverses the west and north portions of the Headquarters Parcel. It is circular with four separate, but connecting components. The first loop was initially set up to accommodate persons with disabilities, and is one-tenth of a mile in length. The second loop is 1 mile in length, the third loop is 0.6 mile, and the last loop is 2 miles in length. In 2008 the entire trail system was surfaced with crushed granite to improve accessibility.

Although not managed or maintained by the Service, Morrison County's Soo Line trail is another corridor of concentrated visitor access and use through Refuge lands and provides opportunities for wildlife observation and photography. Currently two Service units (Grewe and Soo Line East) intersect the trail, and this frontage is expected to increase as additional acquisitions are made. Visitors are required to stay on the trail and obey all posted regulations.

When is the use conducted? Priority use activities will be allowed during daylight hours throughout the entire year. Most wildlife observation and photography occurs during the spring, summer, and fall seasons. Less use of the Refuge occurs in the winter due to the cold weather and lack of wildlife activity. Most winter visitation is for cross-country skiing. Snow conditions permitting, the Platte River Trail is groomed regularly throughout the winter season by Refuge staff volunteers.

How is the use conducted? All priority public uses will be conducted with the Service's mission and the Refuge's purposes, goals, and objectives as the guiding principles. Activities done with these considerations in mind allow the Refuge to accomplish its management goals, while providing safe, high quality visitor experience opportunities. The trail system is used by several thousand people each year. That number is expected to increase with increased awareness and recognition of the Refuge. Use is year-round, and is restricted to the trails and roads to minimize disturbance to habitat and the wildlife.

Why is the use being proposed? Priority public uses on National Wildlife Refuge System lands are identified in the Refuge Improvement Act of 1997. Trails provide opportunities for the general public, as well as organized groups such as schools, clubs, scout troops, etc., to use Refuge lands for priority use activities, and at the same time minimize impacts to wildlife habitat by restricting their travels. Access to the Refuge for these priority public uses will help in meeting the goals of the Refuge, as well as the National Wildlife Refuge System.

Availability of Resources:

Approximately \$5,000 is spent each year to maintain the trails, observation decks, and the restroom at Crane Meadows NWR. The Platte River Trail is surfaced with crushed granite and the edges mowed as needed. In general, the sides of the trail are mowed after the growing season yet prior to winter to facilitate grooming activities. Costs come out of the annual Refuge budget. Monitoring of the trail is conducted weekly and maintenance occurs as needed. Existing staff and funding are available to administer these activities at their current level. Upgrades to the trail are implemented as necessary.

Anticipated Impacts of the Use:

Priority uses such as wildlife observation and photography have shown no measurable environmental impacts to the Refuge, its habitat, or wildlife species. There is some temporary disturbance to wildlife due to human activity on the land. The most likely impacts will be during spring and early summer when many animals are nesting and brood rearing, and during spring and fall migration. Visitor access is typically by individuals or small groups for short durations. Destruction or negative impacts to habitat and associated vegetation are minimal because public use is confined to trails, and to state, county, township, and Refuge roads. Reducing the size of the impacted area, combined with sporadic, limited use by the public should prevent unaccept-

able impacts. Winter activities pose little to no impact on vegetation, and winter disturbance to resident wildlife is temporary and minor.

The activities follow all applicable laws, regulations and policies, including: Migratory Bird Conservation Act, Title 50 Code of Federal Regulations, National Wildlife Refuge System Manual, National Wildlife Refuge System goals and objectives, and Refuge goals and objectives.

These activities are compliant with the purpose of the Refuge and the National Wildlife Refuge System Mission. Operating this activity does not alter the Refuge's ability to meet habitat goals and it helps support several of the primary objectives of the Refuge.

Public Review and Comment:

This compatibility determination is part of the Draft CCP and EA for Crane Meadows NWR. Public notification and review includes a notice of availability published in the Federal Register, 30-day comment period, local media announcements, and a public meeting at the Refuge. Comments received and agency responses will be included in the final CCP.

Determination:

Use is not compatible.

Use is compatible with the following stipulations.

Stipulations Necessary to Ensure Compatibility:

To ensure compatibility with National Wildlife Refuge System and Crane Meadows NWR goals and objectives the activity can only occur under the following stipulations:

1. Use is confined to daylight hours.
2. Camping and fires are prohibited.
3. No photo or viewing blinds may be left over night.
4. Harassment of wildlife or excessive damage to vegetation is prohibited.
5. Use is restricted to designated trails and along established state, county, township, and Refuge roads.

Justification:

Wildlife observation and photography are priority public uses listed in the National Wildlife Refuge System Improvement Act (1997). By facilitating these uses on the Refuge, we will increase visitors' knowledge and appreciation of fish and wildlife,

which will potentially lead to increased public stewardship of fish and wildlife and their habitats on the Refuge and elsewhere. Increased public stewardship will support and complement the Service's actions in achieving the Refuge's purposes, and the mission of the National Wildlife Refuge System. The trail network and associated activities of wildlife observation, photography, education, interpretation, and recreation are compatible uses at Crane Meadows NWR.

Refuge Manager: s/Anne Sittauer, Aug. 25, 2010

Concurrence:

Regional Chief: s/Rick Schultz, Sept. 14, 2010

Mandatory 10 or 15 year Re-evaluation Date: 2025

