
Appendix G: Compatibility Determinations

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COMPATIBILITY DETERMINATION

Use: Hunting

Refuge Name: Hamden Slough National Wildlife Refuge

Establishing and Acquisition Authority:

Hamden Slough National Wildlife Refuge, located in Becker County, Minnesota, was established on September 18, 1989, by the Migratory Bird Conservation Commission as the 452nd national wildlife refuge.

Refuge Purposes:

The primary purpose of Hamden Slough National Wildlife Refuge is “. . . for use as an inviolate sanctuary, or for any other management purposes, for migratory birds.” 16 U.S.C. 715d (Migratory Bird Conservation Act) and including “. . . 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 (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.” (National Wildlife Refuge System Administration Act of 1966, as amended [668dd–668ee])

Description of Use:

Public hunting will be allowed on all or portions of the Refuge in accordance with the State of Minnesota regulations and seasons for two separate hunts: the Youth Waterfowl Hunting Day and the Muzzleloader Deer Season.

The Youth Waterfowl Hunting Day will take place on Refuge fee title property, in Audubon and Riceville Townships. Hamden Township (60percent of the Refuge) will be closed to waterfowl hunting. The hunting season for the Youth Waterfowl Hunting Day is usually one week ahead of the opening of the State Waterfowl Season. Tentatively it will take place on Saturday, September 23, 2006, the 4th weekend in September.

The White-tailed Deer Muzzleloader Season will take place on all tracts of Hamden Slough NWR purchased in fee title. The State of Minnesota Deer Muzzleloader season is usually approved for 15 days beginning on the last weekend in November.

Both hunts will take place in accordance with Minnesota regulations and seasons. No additional Refuge permits or taking regulations are expected. Biological data from harvested deer in Units #259 and #297 are collected by the Minnesota DNR to reconstruct basic information on the deer herd. The Refuge staff will consult with Minnesota DNR biologists to adjust harvest recommendations for future hunts and in conjunction with the state, sample deer for Chronic Wasting Disease and other diseases.

The Youth Waterfowl Hunting Day will take place on Refuge fee title property in Audubon and Riceville Townships, a total of 1360 acres. Hamden Township (60 percent of the Refuge) will be closed to waterfowl hunting. Hunting will take place on restored native tallgrass prairie and restored wetlands. Fall migrating waterfowl will be the primary users of restored wetlands during the Youth Waterfowl Hunting Day. Well-developed county and township roads provide public access to all hunting areas.

The White-tailed Deer Muzzleloader Season will take place on all tracts of Hamden Slough NWR purchased in fee title in Audubon, Hamden, and Riceville Townships. This will allow hunting on all 3,402 acres of Hamden Slough NWR in Audubon, Hamden, and Riceville Townships. Hunting will take place on restored native tallgrass prairie and restored wetlands. Resident winter wildlife will be the primary users of that habitat during the muzzleloader season for white-tailed deer. Well-developed county and township roads provide public access to all hunting areas.

The hunting season for the Minnesota Youth Waterfowl Hunting Day is usually one week ahead of the opening of the Minnesota State Waterfowl Season. Tentatively, the first Youth Waterfowl Hunt will take place on Saturday, September 23rd, the 4th weekend in September, 2006. The Minnesota Youth Waterfowl Hunt will take place for one day, on the 3rd or 4th weekend of September, during each subsequent year, subject to Minnesota State regulations.

The State of Minnesota Deer Muzzleloader season is usually approved for 15 days beginning on the last weekend in November. For 2006, the Minnesota Deer Muzzleloader is scheduled for November 25 - December 10. The Minnesota Deer Muzzleloader hunt will take place for 15 days, beginning on the last weekend in November, during each subsequent year, subject to Minnesota State regulations.

Both hunts will take place in accordance with Minnesota regulations and seasons. No additional Refuge permits or taking regulations are expected. No supporting facilities or structures are expected to be used. An estimated 75 youth hunters, ages 15 and below, are expected for the Youth Waterfowl Hunting Day and should be accompanied by approximately 30 non-hunting adults. An estimated total of 200 deer hunters is expected during the 15-day Muzzleloader Hunt.

Maintaining the "Closed to Hunting" status of the Refuge does not provide for all the priority public uses identified as goals of the National Wildlife Refuge System. The Refuge Recreation Act of 1962 (16 U. S. C. 460K) and the National Wildlife Refuge System Administration Act of 1966 (16 U. S. C. 668dd—668ee) provide authorization for hunting and fishing on national wildlife refuges. The effects of hunting and fishing on refuges have been examined in several environmental review documents, including the Final Environmental Impact Statement on the Operation of the National Wildlife Refuge System (1976), Recommendations on the Management of the National Wildlife Refuge System (1978), and the Draft Environmental Impact Statement on the Management of the National Wildlife Refuges (1988). Nothing in the establishing authority for the Hamden Slough NWR (Migratory Bird Conservation Act {16 U. S. C. § 715}) precludes hunting on the Refuge.

Maintaining the "Closed to Hunting" status of the Refuge does not provide for all the public uses identified as goals of the Refuge. The 1988 Hamden Slough Final Environmental Assessment developed for the establishment of the Hamden Slough NWR identified providing compatible wildlife-dependent recreational uses, including ". . . waterfowl and resident game hunting, wildlife observation and photography . . ." as public use benefits. It further states, "An estimated 50 percent of the public use would be for these activities." There are no known administrative conflicts associated with the proposed hunting program. All features of the program are in compliance with Refuge objectives.

Fifteen federal Waterfowl Production Areas (WPAs) are adjacent to or near Hamden Slough National Wildlife Refuge. They are used by waterfowl, deer, and upland game hunters during the Minnesota State hunting seasons.

Availability of Resources:

The current staffing levels are sufficient to support a public hunting program on Hamden Slough NWR. Refuge funding is available to manage both hunts. No increase in costs is expected above the Refuge's current Operations and Maintenance budget.

Anticipated Impacts of the Use:

Youth Waterfowl Hunting and white-tailed deer hunting activities are intended to meet the conservation and priority public use objectives of the National Wildlife Refuge System Improvement Act and Refuge objectives and management goals without adversely affecting the primary objectives and mission of the Refuge. Refuge white-tailed deer hunting and Youth Waterfowl Hunting follow all applicable laws, regulations, and policies including the Migratory Bird Conservation Act, 50 CFR, National Wildlife Refuge System Manual, National Wildlife Refuge System goals and objectives, and Hamden Slough National Wildlife Refuge goals and objectives. These activities are compliant with the purpose of the Refuge and the National Wildlife Refuge System mission. Operating the hunting activity does not alter the Refuge's ability to meet habitat goals, provides for the safety of the areas' citizens, and supports several of the primary objectives of the Refuge.

Disturbance to wildlife is an anticipated effect, as people participate in the Youth Waterfowl Hunting Day. Disturbance to wildlife is limited to occasional flushing of non-target species and the harvest of individual members of the waterfowl species approved for taking on the Youth Waterfowl Hunting Day. Waterfowl hunting would only occur on Refuge tracts in Audubon and Riceville Townships. Some temporary dispersal of migratory birds from the north and south ends of the Refuge may occur. The dispersal of migratory birds could include Canada geese, which can be harvested by hunters hunting on Waterfowl Production Areas or private land around the Refuge, during the Minnesota Special Goose Season. Refuge tracts in Hamden Township, which total 60 percent of the Refuge acreage, will be undisturbed. Maintaining Hamden Township as a closed area during the Youth Waterfowl Hunt, as outlined in the Hunting Management Plan, provides a resting and feeding area for waterfowl during the hunting day.

Disturbance to wildlife is the anticipated effect, as people participate in the Muzzleloader Deer Hunt. White-tailed deer hunting would occur on all Refuge tracts in Audubon, Hamden and Riceville Townships. Some temporary dispersal of deer from the Refuge may occur. These deer could be harvested by hunters hunting on Waterfowl Production Areas or private land around the Refuge. Disturbance by vehicles will be limited, as off-road travel will not be permitted. Special access accommodations for persons with disabilities will be minimal, utilizing existing gravel trails on the Refuge.

Disturbance to wildlife is limited to occasional flushing of non-target species and the harvest of individual members of white-tailed deer during the Minnesota State muzzleloader hunt. Restrictions to the hunting program assure that these activities have no adverse impacts on other wildlife species and little adverse impact to other public use programs.

Restrictions on both hunting programs assure that these activities have no adverse impacts on other wildlife species and little adverse impact to other public use programs. Disturbance by vehicles will be limited, as off-road travel will not be permitted. Special access accommodations for persons with disabilities will be minimal, utilizing existing gravel trails on the Refuge.

As indicated in the Hamden Slough NWR Hunting Management Plan, adjustments to the species hunted and harvestable limits will be annually evaluated by wildlife surveys conducted by both the State of Minnesota and U.S. Fish and Wildlife Service.

Long-term impacts:

- The muzzleloader hunt helps control the size of the deer herd, reducing the stress of disease and the damaging effects to habitat causes by over population. As indicated in the Hamden Slough NWR Hunting Management Plan, adjustments to the species hunted and harvestable limits will be annually evaluated by wildlife surveys conducted by both the State of Minnesota and U.S. Fish and Wildlife Service. Conducting deer hunting during the late November muzzleloader season, as outlined in the Hunting Management Plan, will not disturb resting and feeding areas for migratory birds during their migration period. The first week of November is the normal freeze-over period of area wetlands, and most migrating birds have left the area by November 10th.
- No long-term impacts to wildlife are expected from the Youth Waterfowl Hunting Day.

By facilitating hunting on the Refuge, program participants' knowledge and appreciation of wildlife will increase, which should lead to increased public stewardship of wildlife and their habitats at the Refuge. 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 Service has allowed public hunting and administered a hunting program on WPAs since the early 1960s. Most recent estimates show that more than 125,000 people visit WPAs located in Minnesota annually for the purpose of hunting. During its history, the Service has not noted any significant adverse effects of this program on the administration of WPAs and has determined that this use is compatible with the purposes of the WPAs and the Refuge System's mission statement. The hunting program for Hamden Slough NWR will be consistent with the program administered by the Service for WPAs. Based on the similarities between adjacent and nearby WPAs and the Refuge, it is expected that the establishment of a hunting program for Hamden Slough NWR should not adversely affect the Refuge's purpose or goals.

Public Review and Comment:

The first period of public review and comment began November 30, 2004 and ended January 10, 2005. A second period of review began November 4, 2005 and ended December 9, 2005.

The following methods were used to solicit public review and comment:

- Posted notice at Refuge headquarters
- Public notice in newspaper with wide local distribution
- Posted notices in public places
- Letter to other interested persons
- Public meeting
- Extended comment period
- Media used to solicit public review and comment included Becker County Record, and Detroit Lakes Tribune.

Why was this level of public review and comment selected?

The public was notified by newspaper, radio, and other media regarding a public meeting on November 30, 2004 to review opening the Refuge to hunting and also propose various Refuge hunting options. At the meeting, the public was given the opportunity to make comments on opening the Refuge to hunting, and the types of hunting desired. Following the meeting, a public comment period lasted from November 30, 2004 to December 15, 2004. Comments or letters were received from 23 respondents, of which a majority favored either limited waterfowl hunting or limited deer hunting. Some respondents recommended either the waterfowl or deer hunt but were opposed to the other. Most expressed concern about wildlife disturbance and the effect on hunting on nearby private and public lands. Recorded public comments and letters are maintained for review at the Refuge office.

After initial public comments from the 2004 November public meeting were received, a draft Hunting Plan, and draft Hunting Environmental Assessment and draft Compatibility Determination were placed at the Detroit Lakes Public Library on December 17, 2004. Legal notification and news articles on December 19 and 22, 2004 informed the public that the hunting proposal documents were available for review and that additional public comments would be received through January 10, 2005. With the comments generated during the first public comment period being generally favorable to the proposed Hunting Plan, and since no new information was obtained to revise the plan, the Refuge submitted a draft Hamden Slough Hunt Plan, draft Environmental Assessment, and draft Compatibility Determination to the Region 3 Office of the U.S. Fish and Wildlife Service.

Their comments and suggestions were incorporated into a final draft Hunt Plan, final draft Environmental Assessment, and final draft Compatibility Determination, in November, 2005. The public was notified a second time by newspaper, radio, and other media about a second public comment period, which lasted from November 4 through December 9, 2005. With the comments generated during both public comment periods being generally favorable to the proposed Hunting Plan, and since no new information was obtained to revise the Plan, the Refuge submitted the final draft Hunting Plan, final draft Environmental Assessment, and final draft Compatibility Determination to the U.S. Fish and Wildlife Service Region 3 office for approval.

Summarize comments received and any actions taken or not taken because of comments received.

Comments or letters were received from 23 respondents, of which a majority favored either limited waterfowl hunting or limited deer hunting. Some respondents recommended either the waterfowl or deer hunt, but were opposed to the other. Most expressed concern about wildlife disturbance and the effect on hunting on nearby private and public lands. The comments are summarized below:

Public Comment	Number of comments
Maintain No Hunting status	5
Open for general waterfowl hunting	1
Open for restricted waterfowl hunting	14
Maintain no waterfowl hunting status	1
Open for general deer hunting	1
Open for restricted deer hunting	11
Maintain no deer hunting status	1
Open small game and upland bird hunting	1

1) Issue/Concern: Traditional public use opportunities, especially limited hunting, should be provided on Service lands.

There would be a positive impact on this issue, since lands would be open to limited hunting. If Hamden Slough National Wildlife Refuge remained closed, it would essentially represent a sanctuary unavailable to the public for the harvest of wildlife resources. The public desire for public use opportunities would not be met and actually decrease from levels when private ownership controlled public use. National Wildlife Refuge System goals, the President's Executive Order, and Refuge objectives for public use opportunities would not be met.

If the Refuge was opened for Big, Small, Upland, and season length Waterfowl Hunting, there would be a negative impact on this issue. A significant proportion of the public would view the general hunting as disturbing wildlife, particularly waterfowl, and adversely affecting hunting on public and private lands surrounding the Refuge.

2) Issue/Concern: A balance of public uses should be accommodated.

During the Youth Waterfowl Hunting Day and Deer Muzzleloader season, areas open to wildlife observation, environmental education, and interpretation would also be open for specified public hunting. Time and spacing considerations in the Hunting Management Plan would help accommodate a variety of user groups. Disturbance of public use and wildlife would be minimal with one day of youth waterfowl hunting in September. The muzzleloader hunting season in late November takes place after wetlands freeze over, and numbers of migrating birds and public use is minimal. If no hunting is permitted, some negative impact is expected on this issue.

If the Refuge was opened to all Minnesota State hunt seasons, areas open to wildlife observation, environmental education, and interpretation would also be open to public hunting. Refuge general hunting will disturb the high concentration of waterfowl that now use the Refuge in September, October, and early November. This will reduce public wildlife viewing opportunity, and reduce the quantity of waterfowl, which are hunted on the surrounding private and public lands. Time and spacing considerations in the Hunting Management Plan would help accommodate a variety of user groups, but the disturbance of other public use activities would be a factor negatively affecting a quality visitor experience.

3) Issue/Concern: A concern by private landowners near or adjacent to Refuge land is that Refuge hunting will reduce the quality of hunting on surrounding property.

With a September Youth Waterfowl Hunting Day and a late November Deer Muzzleloader season, there would be some minimal disturbance having a negative impact on this issue. The disturbance factor is considered minimal, as the Refuge would be open for only one day of waterfowl hunting in September, and for a 15 day period of muzzleloader deer hunting, in late November and early December. It is also possible that Refuge hunting will increase hunting opportunities on surrounding lands by increasing the wildlife moving beyond the Refuge boundary.

If the Refuge remains closed to hunting, Hamden Slough NWR would act as a wildlife sanctuary and maintain a reservoir of migratory game birds and white-tailed deer. These animals do move beyond the Refuge boundary and are available for hunting on private and public property. The public's desire for Refuge public use opportunities would not be met and actually decrease from levels when private ownership controlled public use. National Wildlife Refuge System goals, the President's Executive Order, and Refuge objectives for public use opportunities would not be met.

If the Refuge was opened to all Minnesota State hunt seasons, there would be significant negative impact on this issue, with multiple hunting seasons disturbing wildlife, particularly waterfowl, from early September through early December. This could adversely affect hunting on public and private lands surrounding the Refuge by moving migratory game birds to other sanctuary areas.

4) Issue/Concern: Hunting programs should be biologically sound from a populations and habitat standpoint.

With a September Youth Waterfowl Hunting Day and a late November–early December Deer Muzzleloader season, hunting will result in the removal of white-tailed deer and a decrease in the population of waterfowl species. However, this loss of individuals from populations, in accordance with specified seasons and regulations, is expected to be compensatory in nature. By compensatory, this means removing part of the population by hunting is only at the level that is lost naturally from predation, injury, disease, weather, competition, and other factors.

Disturbance of non-targeted wildlife species under limited hunting could result in additional stress on these animals, but the impacts are not expected to be significant. Hunter entry and exit will be limited to foot travel, and Refuge regulations prohibit the removal of any plant materials. With these constraints on visitor behavior, impacts to wildlife habitat and local plant communities are expected to be minor. The Youth Waterfowl Hunt would provide a closed migratory bird hunting area (Hamden Township) since that

portion of the Refuge will be closed to any migratory game bird hunting to comply with the 40 percent restriction considered in policies of the Migratory Bird Conservation Act.

If the Refuge remained closed to hunting, ecological impacts would center on the expected increase of the white-tailed deer population without hunting and the absence of natural predators. Large numbers of deer would degrade the existing Refuge and adjacent habitat through over-browsing, having negative impacts on flora and other fauna and deer health. The Minnesota Department of Natural Resources target for deer density in this area is 4.4 deer/square mile. Deer density in Unit #259 is currently estimated at 8.4 deer/square mile.

If the Refuge was opened to all Minnesota State hunt seasons, there would be significant negative impact on this issue. General hunting will result in the removal of game species and a disturbance and decrease in the populations of these species. However, this loss of individuals from populations, in accordance with specified seasons and regulations, is expected to be compensatory in nature. By compensatory, this means removing part of the populations of animals by hunting is only at the level that is lost naturally from predation, injury, disease, weather, competition, and other factors.

Disturbance of non-targeted wildlife species, with the Refuge open to hunting for all Minnesota State hunting seasons, will result in additional stress on resident wildlife, particularly migratory birds, over a period from early September through mid-November. Daily usage of the Refuge is expected by multiple hunter groups for any state season. Their entry and exit will be limited to foot travel, and Refuge regulations prohibit the removal of any plant materials. Impacts to wildlife populations and local plant communities are expected to be moderate.

Public Notification

Legal notification and news articles on December 19 and 22, 2004 informed the public that the hunting proposal documents were available for review, and that additional public comments would be received through January 10, 2005. Two comments were received: one by the White Earth Reservation Tribal Council and one from the Minnesota Department of Natural Resources. No comments were received from the general public.

A second comment period was posted for review at the Detroit Lakes Public Library and Refuge headquarters, on November 4, 2005. Legal notification and news articles on November 3 and November 6, 2005 informed the public that the hunting proposal documents were available for review, and that additional public comments would be received through December 9, 2005. Public review was taken in the form of written comments and phone calls for a period of 35 days. No additional comments during the second public review period. With the comments generated during both public comment periods being generally favorable to the proposed Hunting Plan, and since no new information was obtained to revise the plan, the Refuge will implement the Hunting Plan as written.

Determination:

Use is Not Compatible

Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

1. Ensure annual wildlife surveys are completed and that the hunting program is adjusted to populations.
2. Annually review all hunting activities and operations to ensure compliance with all applicable State and Federal laws, regulations and policies.
3. Construction and use of permanent blinds is not permitted.
4. Use of motorized boats is not permitted.
5. All boats, decoys, and blind materials must be removed at the end of the day.

6. Hunting dogs are under the immediate control of the hunter.
7. Public entry to hunting areas is not allowed earlier than 2 hours before legal shooting hours.

The following additional special regulations are necessary to ensure the planned public hunting seasons are compatible with Hamden Slough NWR's goals, objectives, and purposes.

Suggested Regulations for Hamden Slough National Wildlife Refuge:

A. Hunting of White-tailed Deer is permitted on the Refuge subject to the following conditions:

1. Hunting of white-tailed deer is permitted in accordance with Minnesota state hunting regulations during the state Deer Muzzleloader Season only, with muzzleloaders.
2. Hunters may use portable stands. Hunters may not construct or use permanent blinds, permanent platforms, or permanent ladders.
3. All stands and personal property must be removed from the Refuge at the end of each day's hunt.
4. Entry to hunting areas is not allowed earlier than two hours before legal shooting hours.
5. Allowable equipment: State regulations will govern all weapons and ammunition used for hunting on the refuge. All-terrain-vehicles (ATV) will be allowed on Refuge roads, for disabled hunting only.

B. Hunting of Waterfowl is permitted on designated areas of the Refuge subject to the following conditions:

1. Hunting of waterfowl is permitted in accordance with state hunting regulations during the Minnesota State Youth Waterfowl Hunting Day only, by hunters age 15 and under. Waterfowl hunting will be limited to Refuge tracts in Audubon and Riceville Townships, only. Refuge tracts in Hamden Township are closed.
2. We prohibit the use of motorized boats.
3. We prohibit the construction or use of permanent blinds, stands, or scaffolds.
4. You must remove all personal property, which includes boats, decoys, blinds, and blind materials (except for blinds made entirely of marsh vegetation) brought onto the Refuge following that day's hunt.
5. We allow the use of hunting dogs, provided the dog is under the immediate control of the hunter at all times during the state approved hunting season.
6. Entry to hunting areas is not allowed earlier than two hours before legal shooting hours.

Subsequent modifications in hunting regulations will be addressed in an amendment process as needed, and the public will be informed through leaflets or postings. Hunter numbers and success, observations or measurements of animal health, and measurements of habitat conditions may all be used to determine if changes in hunting regulations are necessary.

Justification:

Waterfowl hunting is a historical and current tradition of residents of northwestern Minnesota. Allowing waterfowl hunting on Hamden Slough National Wildlife Refuge, with the stipulations above, will have a positive effect on the wildlife resources of the Refuge. The dispersal of migratory birds during the Youth Waterfowl Hunting Day will include Canada geese, which can be harvested by hunters hunting on Waterfowl Production Areas or private land around the Refuge, during the Minnesota Special Goose Season. Canada goose populations in western Minnesota need to be kept within the limits necessary to prevent extensive crop depredation to private lands surrounding the Refuge. Failure to maintain the goose population within normal levels supported by the public will result in serious degradation of Refuge

support and cooperation, particularly from adjacent and local private landowners. This will impact other wildlife species on the Refuge.

The Hamden Slough NWR Hunting Management Plan provides the management needed to ensure compatibility with the goals of the Refuge and to maintain compliance with the 1997 National Wildlife Refuge System Improvement Act. The 1997 Improvement Act identified hunting, when compatible, as one of six priority public uses. Waterfowl hunting will not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or Refuge purposes, including migratory bird conservation. Compliance with the Hamden Slough NWR Hunting Management Plan ensures associated disturbance to wildlife is localized, temporary and minor. Those portions of the Refuge with increased activities generally have facilities present to accommodate the public use with minor impacts to the habitat. The stipulations will reduce or eliminate any unwanted impacts from waterfowl hunting.

Annual wildlife surveys conducted by the State of Minnesota and the U.S. Fish and Wildlife Service have provided the data to ensure that hunting of waterfowl species doesn't jeopardized their long-range population goals. The continuation of these surveys on Hamden Slough National Wildlife Refuge will provide the necessary data for managing the hunting program into the future.

Mandatory 15-year Re-Evaluation Date: 2020

Signature: Refuge Manager: /Mike Murphy/ 12/12/2005
(Signature and Date)

Concurrence: Regional Chief: /Tom Worthington (Acting)/ 12/14/2005
(Signature and Date)

COMPATIBILITY DETERMINATION

Use: Wildlife Observation and Photography (including means and dates of access)

Refuge Name: Hamden Slough National Wildlife Refuge

Establishing and Acquisition Authority:

Hamden Slough National Wildlife Refuge, located in Becker County, Minnesota, was established on September 18, 1989, by the Migratory Bird Conservation Commission as the 452nd national wildlife refuge.

Refuge Purposes:

The primary purpose of Hamden Slough National Wildlife Refuge is “. . . for use as an inviolate sanctuary, or for any other management purposes, for migratory birds.” 16 U.S.C. 715d (Migratory Bird Conservation Act) and including “. . . 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 (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.” (National Wildlife Refuge System Administration Act of 1966, as amended [668dd–668ee])

Description of Use:

The U.S. Fish and Wildlife Service (Service) encourages wildlife observation and photography as a means for the public to enjoy the Refuge resource. Access to the Refuge would be limited to foot traffic only (including hiking, snowshoeing, and cross country skiing). Access by bicycles, horses, and motorized vehicles would be limited to county and township roads. Boats will not be allowed within the Refuge.

Wildlife observation and photography are priority public uses on National Wildlife Refuge System lands as identified in the National Wildlife Refuge System Improvement Act of 1997. Entry on all or portions of individual areas may be suspended by posting upon occasions of unusual or critical conditions affecting land, water, vegetation, wildlife populations, or public safety.

Availability of Resources:

The needed staff for developing and administering the wildlife observation/photography program is available. Because of the anticipated low impact of these uses, minimal staff time will be required. Most resources will be dedicated to the upkeep of associated facilities for these uses.

Anticipated Impacts of the Use:

Both short- and long-term impacts include temporary disturbance to wildlife while visitors access the Refuge. However, by limiting the disturbance on the Refuge to foot travel only, these disturbances will be minimized.

This CD also allows for the siting of the prairie-chicken blind as well as a photography blind to be placed in easily accessible areas and allowing the public unique opportunities to enjoy Refuge wildlife. Blinds will be placed in areas to provide opportunities for specific wildlife observation/photography while minimizing disturbance to wildlife and habitat.

Public Review and Comment:

This Compatibility Determination was part of the Draft Hamden Slough NWR Comprehensive Conservation Plan and Environmental Assessment. Public notification and review included a notice of availability published in the *Federal Register*, 30-day comment period, local media announcements, and a public meeting. Additionally, drafts of this and all CDs were available at the Detroit Lakes WMD

headquarters for review and comment. Comments received and agency responses are included in the final CCP.

Determination:

Use is Not Compatible

Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

1. Access to the Refuge will be by foot traffic only (including hiking, snowshoeing, and cross country skiing).
2. Motorized vehicles, bicycles, and horses are restricted to adjacent county and township roads. Boats are not allowed within the Refuge.
3. Blinds for wildlife observation/photography can be placed to provide specific wildlife viewing opportunities.

Justification:

This use has been determined compatible provided the above stipulations are implemented. This use is a priority public use on national wildlife refuges. By providing wildlife observation and photography, the public will have an opportunity to observe/photograph wildlife on the Refuge. This could lead to a further appreciation of the Refuge and associated resources.

Mandatory 15-year Re-Evaluation Date: 2027

Signature: Refuge Manager: /Ryan Frohling/ 10/01/2012
(Signature and Date)

Concurrence: Regional Chief: /Tom Worthington (Acting)/ 10/05/2012
(Signature and Date)

COMPATIBILITY DETERMINATION

Use: Environmental Education and Interpretation

Refuge Name: Hamden Slough National Wildlife Refuge

Establishing and Acquisition Authority:

Hamden Slough National Wildlife Refuge, located in Becker County, Minnesota, was established on September 18, 1989, by the Migratory Bird Conservation Commission as the 452nd national wildlife refuge.

Refuge Purposes:

The primary purpose of Hamden Slough National Wildlife Refuge is “. . . for use as an inviolate sanctuary, or for any other management purposes, for migratory birds.” 16 U.S.C. 715d (Migratory Bird Conservation Act) and including “. . . 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 (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.” (National Wildlife Refuge System Administration Act of 1966, as amended [668dd–668ee])

Description of Uses:

To allow wildlife interpretation and environmental education programs to be conducted on Hamden Slough NWR. Formal programs include activities prepared, scheduled, and organized for school-aged children and organized groups by U.S. Fish and Wildlife Service staff. Programs conducted by the Prairie Wetlands Learning Center and Tamarac National Wildlife Refuge would be included in this category. In most cases, curriculums and program schedules are prepared in advance. These curriculums address a number of wildlife conservation issues including wetland and grassland conservation, migratory bird management, and the conservation of endangered species. Informal programs include self-guided auto tour routes and nature trails and impromptu presentations and discussions of wildlife conservation issues with interested citizens, casual visitors, and unscheduled groups. The visitation and use of the Refuge by local educators and their classes on their own for the purposes of furthering their understanding of natural resource management issues would also classified as an informal program.

In addition, this use includes the development of indoor interpretive areas at the Refuge’s environmental education building. The purposes of these exhibits are many, but include telling the story of the National Wildlife Refuge System and conservation of prairie-wetland habitats.

Availability of Resources:

The current staffing levels are sufficient to support environmental education and interpretation programs on Hamden Slough NWR. No increase in costs is expected above the Refuge's current Operations and Maintenance budget. However, increases in visitor services staff may result in an expanded effort.

Anticipated Impacts of the Uses:

The overall impacts to the Refuge and associated wildlife populations from this use will be minimal. There will be some disturbance to waterfowl and other wildlife but at levels that will not likely interfere with waterfowl production. School buses and personal vehicles will utilize parking areas already constructed for use by waterfowl hunters and other Refuge users. The limited number of nature trails planned for development will be done in a way to minimize disturbance to vegetation and wildlife use of these areas. Any auto tour routes will be designed to minimize disturbance to waterfowl during the spring breeding/nesting season.

Public Review and Comment:

This Compatibility Determination was part of the Draft Hamden Slough NWR Comprehensive Conservation Plan and Environmental Assessment. Public notification and review included a notice of availability published in the *Federal Register*, 30-day comment period, local media announcements, and a public meeting. Additionally, drafts of this and all CD's were available at the Detroit Lakes WMD headquarters for review and comment. Comments received and agency responses are included in the final CCP.

Determination:

Use is Not Compatible

Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

The stipulations for environmental education and interpretation are the same as for wildlife observation and photography.

1. Environmental education /interpretation activities are allowed on the Refuge from August 1st through March 31st.
2. Environmental education/interpretation will be allowed year round from adjacent township and county roads, Refuge trails, and parking lots.
3. Access on the Refuge will be by foot traffic only (including hiking, snowshoeing, and cross country skiing).
4. Motorized vehicles, bicycles, and horses are restricted to adjacent county and township roads. Boats are not allowed within the Refuge.
5. The headquarters area, including the environmental education building, will remain open year round for environmental education and interpretation.
6. The Refuge Manager may allow staff or expert-led special events such as birding festivals, etc. on a case-by-case basis.

Justification:

This use has been determined compatible provided the above stipulations are implemented. This use is a priority public use on national wildlife refuges. By allowing environmental education and interpretation, the public will have an opportunity to learn about the Refuge, its habitats and wildlife. This could lead to a further appreciation of the conserving the Refuge and associated resources.

Mandatory 15-year Re-Evaluation Date: 2027

Signature: Refuge Manager: /Ryan Frohling/ 10/01/2012
(Signature and Date)

Concurrence: Regional Chief: /Tom Worthington (Acting)/ 10/05/2012
(Signature and Date)

COMPATIBILITY DETERMINATION

Use: Cooperative Farming as a Habitat Management Tool to Enhance and Restore Refuge Grasslands

Refuge Name: Hamden Slough National Wildlife Refuge

Establishing and Acquisition Authority:

Hamden Slough National Wildlife Refuge, located in Becker County, Minnesota, was established on September 18, 1989, by the Migratory Bird Conservation Commission as the 452nd national wildlife refuge.

Refuge Purposes:

The primary purpose of Hamden Slough National Wildlife Refuge is "...for use as an inviolate sanctuary, or for any other management purposes, for migratory birds." 16 U.S.C. 715d (Migratory Bird Conservation Act) and including "...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 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.

Description of Use:

Cooperative farming is the term used for cropping activities done by a third party on land that is owned by the Service. This type of activity is usually done on a short term basis (five years or less) to prepare an optimum seedbed for the establishment of native prairie species.

The cropping is done under the terms and conditions of a Cooperative Farming Agreement or Special Use Permit issued by the Refuge Manager. The terms of the Agreement or Permit insure that all current Service and Refuge restrictions are followed.

Cooperative farming activities are only compatible on previously disturbed areas that have unacceptable levels of chemical residue, noxious weeds, or non-native plant species or ecotypes or to honor the land use clauses of a purchase agreement. To ensure that all Service policies are met, all such land use clauses must be approved by the Refuge Manager prior to Service acceptance of the purchase agreement.

Contracts are typically written for three to five years. The cooperator breaks up the ground the first year and then farms it for the remaining two to four years. The last year of the contract requires the cooperator to seed the field to soybeans. Soybean stubble is the preferred substrate for the Refuge to seed native grasses and forbs into.

Farming entails the use of mechanical equipment such as tractors, disks, and seeders. Each site is tilled prior to spring planting, once ground conditions permit. Tilling requires one to two days per site. Some sites may also be treated with herbicide prior to planting. Crops such as corn and soybeans are planted. Typically, planting is completed in one day or less on any individual site, and planting on all sites usually begins as early as mid-April and is completed as late as early June depending on soil conditions and type of crop planted. Cooperators are limited to using only Service-approved herbicides. The use of genetically modified crops (GMO crops), specifically glyphosate-tolerant corn and soybeans, will be authorized on Refuge lands consistent with current Regional policy. Beginning in calendar year 2012, the use of genetically modified, glyphosate-tolerant corn and soybeans will be used only for the purpose of habitat restoration.

Harvest techniques are the same for both no-till and traditional farming practices. Harvest begins in the fall, using a self-propelled harvesting implement such as a combine, and usually takes about one day per site and is complete on all sites by late October.

Availability of Resources:

The needed staff time for development and administration of cooperative farming programs is already committed and available. Most of the work needed to prepare for this use would be done as part of routine grassland management duties. The decision to use a cooperative farmer would occur as part of strategies developed under grassland development and management discussions. The additional time needed to coordinate issuance and oversight of the needed Special Use Permit or Cooperative Farming Agreement is relatively minor and within existing Refuge resources.

The cooperative farming of Service land will in most cases generate income for the Service. In accordance with Service policy, some of the farming income may be reduced to achieve the ultimate purpose of the agreement (grassland cover) by having the cooperator purchase seed or apply herbicide for the grassland restoration as the final step of the farming agreement. All farming income received will be submitted for deposit in the Refuge Revenue Sharing Account and is not available at the Refuge level to offset station costs incurred in administration of this use. All Service employees involved in the administration of the program must, however, be sensitive to the primary purpose of cooperative farming; providing an optimum seedbed for native prairie plant species. The Service should receive a fair market value from cooperative farmers, but generation of income is a secondary consideration when developing the terms and conditions of a cooperative farming agreement.

To lessen any appearance of favoritism or impropriety, Refuge Managers should document how cooperators were selected and how rental rates were derived (see Refuge Manual).

Anticipated Impacts of the Use:

The use of farming provides Refuge staff with a management tool that allows the Refuge staff to meet the habitat goals and objectives. Service policy calls for maintaining or restoring Refuge habitats to historic conditions if doing so does not conflict with Refuge purposes (U.S. Fish and Wildlife Service 2001).

Cooperative farming to prepare suitable seedbeds for native prairie plantings will result in short-term disturbances and long-term benefits to both resident and migratory wildlife. Short-term impacts will include disturbance and displacement typical of any noisy heavy equipment operation. Cropping activities in old fields or abandoned croplands will also result in short-term loss of habitat for any animal or insect species using those areas for nesting, feeding, or perching. Long-term benefits are extremely positive due to establishment of diverse nesting cover including native tallgrass species. The resulting habitat will greatly improve conditions for most of the same species affected by the short-term negative impacts. Strict time constraints placed on this use will limit anticipated impacts to these relatively minor areas.

Public Review and Comment:

This Compatibility Determination was available for public review from April 18, 2011 through May 2, 2011.

Determination:

Use is Not Compatible

Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

1. Cooperative farming agreements will be limited to five years or less.
2. Farming activity will only take place on previously altered tracts of land within the Refuge and must meet specific habitat and related wildlife objectives and contribute to the purposes of the Refuge.

3. Cooperating farmers will be subject to Service policy and regulation regarding use of chemicals. Herbicide and pesticide use is restricted by type and to the minimum necessary amount applied.
4. Special conditions of Cooperative Farming Agreements will address unique local conditions as applicable.
5. Planting and harvest activities are restricted to minimize disturbance of wildlife species.
6. The use of GMO crops is limited to glyphosate-tolerant corn and soybeans.
7. Beginning in calendar year 2012, the use of genetically-modified, glyphosate-tolerant corn and soybeans will be used only for the purpose of habitat restoration.

Justification:

Farming, both conventional and with the use of glyphosate-tolerant corn and soybeans, contributes to the achievement of Refuges purposes and the National Wildlife Refuge System mission, because it helps enhance and restore grassland habitat for migratory birds and resident wildlife. The cooperative farming of previously disturbed areas which are owned by the Service and have unacceptable levels of chemical residue, noxious weeds, or non-native plant species or ecotypes or are being farmed to honor the land use clauses of a purchase agreement to prepare an optimum seedbed for the establishment of native prairie species, will not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission.

1. Only areas that have already been significantly manipulated or altered by cropping activities will be affected. These areas contain few if any native plants and offer extremely limited value to the ecological integrity of the unit or landscape.
2. Cooperative farming activities in most cases provide the fastest, most cost-effective way to establish native prairie species on areas that have unacceptable levels of chemical residue, noxious weeds, or non-native plant species or ecotypes. Refuge staff could complete all work, but for most districts that would require additional equipment and/or staff to efficiently break up non-native brome sod, or to cultivate and control weeds on small, widely scattered tracts of land. Hiring contractors to do this work at rates that can approach \$100/acre is a possibility but would require additional funds in years when the farming acres were high. By using local farmers to conduct these farming activities, Refuge budgets and staff time can be better allocated to completing the needed restoration (seeding of native grasses and forbs) on lands that have completed the farming cycle and are in good condition for seeding.
3. Short term impacts of farming small tracts of land are minor. No wildlife or habitat losses occur when land purchased in row crop is farmed for an additional period of two–five years. Low quality grasslands that are farmed as a first step to conversion to higher-value native grasslands will result in habitat loss for trust resources during the farming period. The long-term benefits to the ecological integrity of the Refuge and landscape by restoring these degraded or row-cropped areas to native prairie plant species are significant and exceed the short term losses incurred through the cropping process.

Mandatory 10-year Re-Evaluation Date: 2021

Signature: Refuge Manager: /Scott B. Kahan/ (undated)
(Signature and Date)

Concurrence: Regional Chief: /James T. Leach (Acting)/ 5/04/2011
(Signature and Date)

COMPATIBILITY DETERMINATION

Use: Haying

Refuge Name: Hamden Slough National Wildlife Refuge

Establishing and Acquisition Authority:

Hamden Slough National Wildlife Refuge, located in Becker County, Minnesota, was established on September 18, 1989, by the Migratory Bird Conservation Commission as the 452nd national wildlife refuge.

Refuge Purposes:

The primary purpose of Hamden Slough National Wildlife Refuge is “. . . for use as an inviolate sanctuary, or for any other management purposes, for migratory birds.” 16 U.S.C. 715d (Migratory Bird Conservation Act) and including “. . . 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 (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.” (National Wildlife Refuge System Administration Act of 1966, as amended [668dd–668ee])

Description of Use:

Haying is the cutting and removal of grass, either non-native cool season species such as brome or native warm or cool season species. Haying of this type is typically done by a cooperative farmer acting under authority of a Cooperative Farming Agreement or Special Use Permit issued by the Refuge Manager.

Haying can be an effective management tool as part of an overall grassland management plan to improve and maintain district grasslands for the benefit of migratory birds. Grasslands need periodic renovation to maintain vigor, diversity, and the structure necessary for migratory bird use. Haying is an effective alternative for burning or grazing, which are two other means used by district staff to maintain grassland vigor. If local site conditions preclude use of prescribe fire due to hazards to neighboring property or a similar problem, removal of accumulated biomass through haying does serve to reduce unwanted overstory, reduce woody plant invasion, etc. Such removal will allow for more vigorous regrowth of desirable species following the haying, although results are neither as dramatic nor positive as with prescribed fire.

Hamden Slough NWR has historically allowed haying, especially within Hamden Lake bottom. Although specific acreages for fields to be hayed will vary by unit, they will typically range from five to 40 acres with only rare exceptions exceeding 100 acres.

Availability of Resources:

The current staffing levels are sufficient to support a haying program on Hamden Slough NWR. Refuge funding is available to manage this use. No increase in costs is expected above the Refuge's current Operations and Maintenance budget.

Anticipated Impacts of the Use:

Haying will result in short-term disturbances and long-term benefits to both resident and migratory wildlife using the Refuge. Short-term impacts will include disturbance and displacement typical of any noisy heavy equipment operation. Cutting and removal of standing grasses will also result in short-term loss of habitat for those species requiring tall grasses for feeding and perching such as obligatory grassland species such as the bobolink or dickcissel. Long-term benefits will accrue due to the increased vigor of

the regrown grasses or the establishment of highly desirable native tallgrass species, which will improve conditions for those same species affected by the short-term negative impacts. Longer-term negative impacts may occur to resident wildlife species such as pheasant that would lose overwintering habitat in the hay areas. Strict time constraints placed on this use will limit anticipated impacts to these relatively minor areas.

Public Review and Comment:

This Compatibility Determination was part of the Draft Hamden Slough NWR Comprehensive Conservation Plan and Environmental Assessment. Public notification and review included a notice of availability published in the *Federal Register*, 30-day comment period, local media announcements, and a public meeting. Additionally, drafts of this and all CD's were available at the Detroit Lakes WMD headquarters for review and comment. Comments received and agency responses are included in the final CCP.

Determination:

Use is Not Compatible

Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

1. Haying will only be allowed after July 15 to minimize disturbance to nesting migratory birds. In normal years, most birds are off the nest by this date.
2. Bales must be removed from the Refuge within two days of baling.
3. Windrowed grass left lying to dry prior to baling must be raked and moved every two days if left on newly seeded native grass and in no cases should it remain on the ground more than six days prior to baling.

Justification:

Haying will not materially interfere with waterfowl production if done within the necessary stipulations. Use of haying as a management tool can be a valuable technique for providing long-term habitat improvements to grassland that otherwise would degrade through natural succession or dominance of non-native plants. Without this tool, the areas would suffer encroachment of undesirable woody species such as box elder or ash or would remain in unwanted non-native cool season grasses such as brome.

Mandatory 10-year Re-Evaluation Date: 2022

Signature: Refuge Manager: /Ryan Frohling/ 10/01/2012
(Signature and Date)

Concurrence: Regional Chief: /Tom Worthington (Acting)/ 10/05/2012
(Signature and Date)

COMPATIBILITY DETERMINATION

Use: Prescribed Grazing

Station Name: Hamden Slough National Wildlife Refuge

Establishing and Acquisition Authority:

Hamden Slough National Wildlife Refuge, located in Becker County, Minnesota, was established on September 18, 1989, by the Migratory Bird Conservation Commission as the 452nd national wildlife refuge.

Refuge Purposes:

The primary purpose of Hamden Slough National Wildlife Refuge is “. . . for use as an inviolate sanctuary, or for any other management purposes, for migratory birds.” 16 U.S.C. 715d (Migratory Bird Conservation Act) and including “. . . 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 (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.” (National Wildlife Refuge System Administration Act of 1966, as amended [668dd–668ee])

Description of Use:

Allow the limited grazing by domestic livestock, chiefly cattle but potentially including other domestic livestock, on Hamden Slough NWR (Refuge) to improve grassland vigor and health. Controlled grazing is recognized as a valuable tool to remove standing vegetation, reduce vegetative litter, and suppress woody vegetation.

Grazing may take place anytime from April through November. Most commonly, the Refuge will use short duration grazing pulses lasting four to eight weeks and then require livestock removal. The Refuge will employ three typical seasons of use. One season will be early spring (mid-April to late May) on native prairie or seeded native grasses designed to reduce the vigor of exotic species and increase the vigor of native species. Summer grazing (July 15–September 1) may be used, especially on non-native grasslands, to stimulate the grassland after the peak nesting season yet allow vegetative regrowth in the fall. Fall grazing (September 1–October 31) will be designed to have effects similar to spring grazing, mostly on native prairie remnants or fields seeded with native tallgrass prairie species.

Fencing and control of livestock will be the responsibility of the cooperating private party. Market rate grazing fees will be required of permittees. Market rates will be determined annually in consultation with U.S. Department of Agriculture on prevailing local grazing rates.

Frequency of grazing on any unit will be based on site-specific evaluation of the grassland unit being managed. Historically, the Refuge has frequently grazed units for two consecutive years and then eliminated grazing from the unit for several years before resuming grazing.

Grazing is not a priority public use as identified in the National Wildlife Refuge System Improvement Act. As an economic use of Refuge System lands, a Compatibility Determination for grazing is mandatory.

Availability of Resources:

Developing grazing agreements and monitoring compliance and biological effects requires some U.S. Fish and Wildlife Service (Service) resources. Most grazing costs (fencing, monitoring herd health, etc.) are incurred by the permittee. Some alternative grassland management is required if we do not use grazing as a tool for grassland management. Typically, these other tools include prescribed burning,

mowing, and haying. Haying has comparable costs to controlled grazing, since it also requires administering Special Use Permits. Mowing is more expensive since all costs are the responsibility of the Service. Prescribed burning is an effective grassland management tool, but staff limitations prevent us from burning as many acres as desirable each year. In addition, there is likely an ecological benefit to rotating grassland management techniques and seasons over time so that a given field is grazed one year and burned another.

Anticipated Impacts of the Use:

Grazing will result in both short-term disturbance and long-term benefits to both resident and migratory wildlife at the Refuge. Short-term impacts will include disturbance and trampling of vegetation and aesthetic concerns. Grazing will result in short-term loss of habitat, but the long-term benefits will greatly outweigh this loss by establishing a diverse nesting cover of tall grasses and promoting increased vigor of regrown grasses. The resulting habitat will greatly improve conditions for most of the same species affected by the short-term loss.

Public Review and Comment:

This Compatibility Determination was part of the Draft Hamden Slough NWR Comprehensive Conservation Plan and Environmental Assessment. Public notification and review included a notice of availability published in the *Federal Register*, 30-day comment period, local media announcements, and a public meeting. Additionally, drafts of this and all CD's were available at the Detroit Lakes WMD headquarters for review and comment. Comments received and agency responses are included in the final CCP.

Determination:

Use is Not Compatible

Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

1. Grazing will not occur more frequently than three out of every five years on any tract without the preparation of a site-specific Compatibility Determination.
2. No insecticides, including insecticidal dusting bags, will be allowed on the Refuge
3. No supplemental feeding will be allowed without specific authorization of the Refuge Manager.
4. Control and confinement of the livestock will be the responsibility of the permittee.

Justification:

Controlled grazing by domestic livestock will not materially interfere with or detract from the purposes for which the units were established. Limited livestock grazing creates temporary disturbances to vegetation. Many of these disturbances are desirable for grassland management. Grazing produces an undesirable but short-term impact to grassland bird nesting and site aesthetics. Controlled grazing is an alternative management tool that can be used to replace or compliment prescribed burning, mowing, or haying on grasslands. Without occasional disturbance caused by mowing, haying, burning, or grazing the health of the grassland community would decline, as would the areas' potential for waterfowl production.

Mandatory 10-year Re-evaluation Date: 2022

Signature: Refuge Manager: /Ryan Frohling/ 10/01/2012
(Signature and Date)

Concurrence: Regional Chief: /Tom Worthington (Acting)/ 10/05/2012
(Signature and Date)

COMPATIBILITY DETERMINATION

Use: Tree Harvest – Wood cutting

Refuge Name: Hamden Slough National Wildlife Refuge

Establishing and Acquisition Authority:

Hamden Slough National Wildlife Refuge, located in Becker County, Minnesota, was established on September 18, 1989, by the Migratory Bird Conservation Commission as the 452nd national wildlife refuge.

Refuge Purposes:

The primary purpose of Hamden Slough National Wildlife Refuge is “. . . for use as an inviolate sanctuary, or for any other management purposes, for migratory birds.” 16 U.S.C. 715d (Migratory Bird Conservation Act) and including “. . . 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 (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.” (National Wildlife Refuge System Administration Act of 1966, as amended [668dd–668ee])

Description of Use:

This Compatibility Determination involves the removal of standing or fallen trees by private individuals and applies to all wood removal activities regardless of the ultimate use of the wood (e.g., firewood, pulp, etc.). Differences in scope and necessary equipment will occur depending on the amount and type of wood available for removal. Impacts to the purpose of the Refuge and the Refuge System mission are similar regardless of the reason why the wood is removed. This activity will only occur where the U.S. Fish and Wildlife Service (Service) has determined that a management need exists to remove wood from the Refuge consistent with Refuge plans or other documents. Wood cutting is not a priority public use, as defined by the National Wildlife Refuge System Improvement Act of 1997, of the National Wildlife Refuge System.

Wood removal may be done within former homesites, along existing windbreaks/shelter belts and in other areas on the Refuge where trees are encroaching on the prairie. Harvest sites will vary in size from a portion of an acre up to several hundred acres depending on the site and management objectives.

Wood removal activities may be authorized throughout the year. Most often, wood removal activities will occur during the winter months when frozen ground will facilitate access and afford protection to underlying soils and vegetation.

The scope of the activity will be determined by the management objective for the area and by the quantity and quality of available wood. 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 snow machine, all-terrain vehicle (ATV), pick-up truck, farm tractor, or larger traditional logging equipment.

Harvest of wood products may be permitted on the Refuge to stop, reduce, or reverse the encroachment and presence of trees on prairie habitats. The tallgrass prairie habitat is arguably the most endangered of all North American ecosystems, with less than one percent of the historic habitat remaining. Encroachment of woody vegetation due to fire suppression, absence of landscape-scale grazing, and tree planting practices continue to threaten this habitat type. The Refuge is established for migratory birds, and managing woody vegetation to enhance prairie habitat generally facilitates that purpose. In

accordance with the Refuge System mission, restoration of the tallgrass prairie habitat is appropriate on the Refuge. Managing woody vegetation is an important means to that end.

Availability of Resources:

The time required to plan, issue permits, and monitor the implementation of a wood product harvest program would require the dedication of some existing staff hours to this activity. In permitting a wood products harvest, the Refuge Manager has identified a management need and presumably has secured and prioritized station resources to that end.

Anticipated Impacts of the Use:

In permitting this type of activity, the potential exists to directly impact waterfowl production by displacement of birds from localized areas due to disturbance or crushing of nests as a result of access for this activity. These impacts are easily avoided by timing of the activity in accordance with site-specific characteristics. In limited and rare instances, a small number of individuals of tree-nesting species (e.g., wood duck, hooded merganser, etc.) may be displaced from a local area for obvious reasons.

Indirect impacts to waterfowl production will occur as a result of removing woody vegetation. In nearly every instance, these impacts will be positive. The removal of woody vegetation from historic prairie habitats positively impacts waterfowl production and the System mission by facilitating the restoration of tallgrass prairie and removing artificially created predator habitat from within the Refuge.

Access for the purpose of removing wood may impact habitat by rutting soils, destroying groundcover, creating weed seedbeds, and increasing sedimentation due to runoff in nearby wetlands. These impacts can be avoided by timing of the activity.

Anticipated long-term impacts include the reduction of woody species in Refuge grasslands and resulting benefits to grassland dependent wildlife.

Impacts to the habitat as a result of access to the Refuge for wood removal purposes are potentially significant, but also easily avoided. Areas where woody species are removed for the purpose of conversion of the habitat type to prairie will likely receive follow-up treatments of burning, farming, or both. Ground disturbance in these areas is less problematic and possibly desirable depending on the specific site. Access to and from these areas will need to be carefully controlled (via Special Use Permit) to avoid impacts such as rutting and increased sedimentation in area wetlands due to run-off. If existing roads are not present, access can be restricted to periods of frozen ground to avoid or minimize impacts to underlying vegetation and soils.

Other indirect impacts are generally considered positive and thus, do not materially interfere with or detract from the purpose of waterfowl production or the Refuge System mission. The removal of trees along trails, in shelter belts, and within old homesites will benefit waterfowl production by assisting with the restoration of prairie habitat and eliminating predator habitat and perch sites. Individuals participating in the wood harvest program will be under Special Use Permit and thus, site-specific stipulations will ensure resource protection and achievement of management goals. Control of woody species encroachment on prairie habitats is a necessary management activity for the Hamden Slough NWR in converting areas back to their historical grassland condition and directly supports the mission of the National Wildlife Refuge System.

Public Review and Comment:

This Compatibility Determination was part of the Draft Hamden Slough NWR Comprehensive Conservation Plan and Environmental Assessment. Public notification and review included a notice of availability published in the *Federal Register*, 30-day comment period, local media announcements, and a public meeting. Additionally, drafts of this and all CD's were available at the Detroit Lakes WMD headquarters for review and comment. Comments received and agency responses are included in the final CCP.

Determination:

Use is Not Compatible

Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

1. Work will generally be restricted to areas where soil types indicate that pre-settlement habitat was comprised of native prairie vegetation.
2. If work is in an area where waterfowl nesting is likely, no cutting operations will be permitted from April 1 through July 15.
3. Vehicle access for wood removal will be limited to existing trails or restricted to the frozen ground period when rutting and damage to growing vegetation would occur.
4. A Special Use Permit will be issued so that site-specific impacts can be reduced or eliminated and Service management goals are met.

Justification:

Any direct impacts on waterfowl production (take, disturbance, etc.) can be largely avoided by timing the activity so that it is not coincident with the waterfowl production season. Removal of trees in certain instances will, on occasion, eliminate wood duck, hooded merganser, or other cavity-nesting species habitat. This would be an irregular and occasional impact, and since most wood harvest will be associated with restoration sites, it is unlikely that these areas would have provided historic nesting sites. Due to the benefits that would be realized by other waterfowl species, and the abundance of artificial and natural nest sites for cavity-nesting species in the area, these impacts would not significantly detract from Refuge purposes or the Refuge System mission.

This use contributes to the achievement of Refuge purposes. Removal of woody vegetation that is encroaching into historic prairie habitat is an ongoing management concern for the Refuge, and private citizens can be a valuable partner in removing and controlling woody vegetation in localized areas to benefit migratory bird habitat.

Mandatory 10-year Re-Evaluation Date: 2022

Signature: Refuge Manager: /Ryan Frohling/ 10/01/2012
(Signature and Date)

Concurrence: Regional Chief: /Tom Worthington (Acting)/ 10/05/2012
(Signature and Date)

COMPATIBILITY DETERMINATION

Use: Placement/Construction of New, Small Parking Areas

Refuge Name: Hamden Slough National Wildlife Refuge

Establishing and Acquisition Authority:

Hamden Slough National Wildlife Refuge, located in Becker County, Minnesota, was established on September 18, 1989, by the Migratory Bird Conservation Commission as the 452nd national wildlife refuge.

Refuge Purposes:

The primary purpose of Hamden Slough National Wildlife Refuge is “. . . for use as an inviolate sanctuary, or for any other management purposes, for migratory birds.” 16 U.S.C. 715d (Migratory Bird Conservation Act) and including “. . . 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 (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.” (National Wildlife Refuge System Administration Act of 1966, as amended [668dd–668ee])

Description of Use:

Allow the placement and construction of small parking areas on Hamden Slough NWR (Refuge) where the Refuge Manager considers necessary to provide safe off-road parking and access to the general public for the following permitted activities: hunting, wildlife observation and photography, environmental education and interpretation—all priority public uses on National Wildlife Refuge System lands. In addition, these parking areas will be used by U.S. Fish and Wildlife Service (Service) personnel while conducting management activities or biological surveys and assessments. This Compatibility Determination will also allow the expansion of current parking areas to better facilitate more Refuge users and staff, especially for special events, peak hunting, and others.

These parking areas will be less than one acre and will be relatively primitive with primarily grass or gravel surfaces. Barriers to restrict motorized vehicles within the parking areas and to identify the parking area boundary generally will be constructed of wood posts, wire fence, or rock barriers, as appropriate and available on a site-specific basis.

Availability of Resources:

Hamden Slough National Wildlife Refuge is open to most priority public uses at specific times during the year. One of the comments the Refuge has received in the past is the lack of adequate parking around Hamden Slough NWR, particularly during the muzzleloader deer hunting season. Because these will be primitive parking lots, the effort to establish or expand and maintain them should be minimal. Refuge staff and volunteers already maintain several parking lots around the Refuge; more parking lots would add a minimal amount of maintenance.

Anticipated Impacts of the Use:

Installation and use of these parking areas will result in minimal impacts, as these parking areas are used infrequently during most of the year by either the general public participating in authorized and permitted activities or by Service personnel. Peak use of these areas will generally occur during fall hunting seasons when no disturbance to nesting or young animals will result. Impacts to habitat will be minimal due to their relatively small size (less than one acre). Impacts will be lessened by selecting sites away from any wetland or native prairie. Generally, parking areas will be constructed at or near abandoned farm sites utilizing existing graveled driveways or previously constructed farm field approaches

immediately off public roadways. Parking lots will not be constructed within the interior of the Refuge to minimize wildlife disturbance, impacts to unique or critical habitats, and conflicts with other authorized public uses.

Public Review and Comment:

This Compatibility Determination was part of the Draft Hamden Slough NWR Comprehensive Conservation Plan and Environmental Assessment. Public notification and review included a notice of availability published in the *Federal Register*, 30-day comment period, local media announcements, and a public meeting. Additionally, drafts of this and all CD's were available at the Detroit Lakes WMD headquarters for review and comment. Comments received and agency responses are included in the final CCP.

Determination:

Use is Not Compatible

Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

1. Parking areas must not be constructed in areas where negative wetland impacts will result.
2. Parking areas must not be constructed on native prairie habitat.
3. Camping, overnight use, and fires are prohibited.
4. Construction of parking lots will be directly adjacent to existing township/county roads.
5. An archaeological review of each selected site shall be made through the State Historic Preservation Officer and Regional Historic Preservation Officer prior to construction.

Justification:

This use has been determined compatible provided the above stipulations are implemented. This use is permitted, as it is deemed necessary to provide safe off-road access by the public to participate in appropriate and permitted priority uses and will not diminish the primary purposes of waterfowl production and the conservation of migratory birds and other wildlife. This use will meet the mission of the National Wildlife Refuge System by providing resources for the benefit of the American public while conserving fish, wildlife, and plant resources on these lands.

Mandatory 10-year Re-Evaluation Date: 2022

Signature: Refuge Manager: /Ryan Frohling/ 10/01/2012
(Signature and Date)

Concurrence: Regional Chief: /Tom Worthington (Acting)/ 10/05/2012
(Signature and Date)

COMPATIBILITY DETERMINATION

Use: Scientific Studies and Research Projects by Third Parties

Refuge Name: Hamden Slough National Wildlife Refuge

Establishing and Acquisition Authority:

Hamden Slough National Wildlife Refuge, located in Becker County, Minnesota, was established on September 18, 1989, by the Migratory Bird Conservation Commission as the 452nd national wildlife refuge.

Refuge Purposes:

The primary purpose of Hamden Slough National Wildlife Refuge is “. . . for use as an inviolate sanctuary, or for any other management purposes, for migratory birds.” 16 U.S.C. 715d (Migratory Bird Conservation Act) and including “. . . 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 (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.” (National Wildlife Refuge System Administration Act of 1966, as amended [668dd–668ee])

Description of 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, Minnesota DNR, state and private universities, non-governmental organizations, and independent researchers and contractors through the issuance of a Special Use Permit. Each research project will be approved by the Refuge Manager on a case-by-case basis.

Research investigations will follow a specific protocol. Sites and timing of the investigations will depend on each individual project. Locations, means of access, and frequency of visits will be stipulated by the Special Use Permit.

Availability of Resources:

Facilities and staff are currently available to issue and oversee Special Use Permits required for research projects. Staff resources are deemed adequate to manage this use at anticipated levels.

Anticipated Impacts of the Use:

Short-term impacts include disturbance to wildlife and habitat. Efforts to capture animals can cause disturbance, injury or death. Sampling activities can also disturb habitat by trampling of vegetation.

No long-term impacts are expected as the scientific studies and research projects by third parties are typically short duration investigations. These studies also provide valuable information regarding Refuge resources and management that will help make decisions in the future. All impacts can be controlled by the issuance of Special Use Permits.

Public Review and Comment:

This Compatibility Determination was part of the Draft Hamden Slough NWR Comprehensive Conservation Plan and Environmental Assessment. Public notification and review included a notice of availability published in the *Federal Register*, 30-day comment period, local media announcements, and a public meeting. Additionally, drafts of this and all CD's were available at the Detroit Lakes WMD

headquarters for review and comment. Comments received and agency responses are included in the final CCP.

Determination:

Use is Not Compatible

Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

1. Prior to conducting investigations, researchers will obtain Special Use Permits.
2. Researchers must possess all applicable state and federal permits as required for their research.
3. Researchers must provide the Refuge with copies of all data and a final report.

Justification:

Research is conducted to provide useful information on which to base Refuge management decisions in the future. In order to make scientifically-based decisions, research must be conducted to monitor and document management activities.

Mandatory 10-year Re-Evaluation Date: 2022

Signature: Refuge Manager: /Ryan Frohling/ 10/01/2012
(Signature and Date)

Concurrence: Regional Chief: /Tom Worthington (Acting)/ 10/05/2012
(Signature and Date)