Upper Mississippi River National Wildlife and Fish Refuge
Established 1924
Compatibility Determination

Use: Research projects by third parties

Refuge Name: Upper Mississippi River National Wildlife and Fish Refuge (Refuge)

Establishing and Acquisition Authority(ies):

The Upper Mississippi River Wildlife and Fish Refuge was established by Public Law No. 268, 68th Congress on June 7, 1924. This act authorized acquisition of lands for Refuge purposes. Additional lands acquired in fee title by the U.S. Army Corps of Engineers are managed as part of the Refuge under a 1963 Cooperative Agreement between the Department of the Army and the Department of the Interior.

Refuge Purpose(s):

"The Refuge shall be established and maintained (a) as a refuge and breeding place for migratory birds included in the terms of the convention between the United States and Great Britain for the protection of migratory birds, concluded August 16, 1916, and (b) to such extent as the Secretary of the Interior by regulations, prescribe, as a refuge and breeding place for other wild birds, game animals, fur-bearing animals, and for the conservation of wild flowers and aquatic plants, and (c) to such extent as the Secretary of the Interior may, by regulations, prescribe a refuge and breeding place for fish and other aquatic animal life."

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:

The Refuge allows research on a variety of biological, physical, archeological, and social issues and concerns to address refuge management information needs or other issues not related to refuge management. Studies are 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.

Each year, the Refuge issues Special Use Permits for three to six biological and physical research studies.

Examples of recent biological research include: determination of the causal factors affecting habitat distribution patterns; nesting, feeding and resting activities of waterfowl; songbird use of the floodplain; paddlefish habitat use; turtle distribution in relation to channel maintenance; long-term frog population and habitat studies; mussel distribution; river otter ecology; impacts of management on fish and wildlife habitat; contaminants in fish and wildlife; and scientific collections.

Research concerning changes in water quality, sedimentation rates and distribution, occurrence of contaminants, and hydrologic conditions assess physical characteristics of the Refuge in relation to construction and management of habitat projects.

Research is also applied to determine population demographics of Refuge visitors and the types of recreational activities people are doing while on the Refuge.

Studies that involve collection of plants have been made to determine available energy (food) sources, to combat invasive species, or for use in making reference collections. Fish and wildlife (including invertebrates) are collected for contaminant and/or disease analyses, mark and recapture studies, other population analyses, and radio telemetry (distribution) studies.

Research study sites, sampling locations, and transects are temporarily marked by highly visible wooden or metal posts that must be removed when research ceases.
Access to study sites is by foot, truck, all-terrain vehicle, boat, airboat, canoe, other watercraft, and aircraft. Vehicle use is allowed on Refuge roads, trails, and parking lots normally open to the public. Nearly all the Refuge is open for allowed research activities throughout the year with exceptions. Researchers may not enter, unless specifically authorized, Waterfowl Hunting Closed Areas during the regular state duck hunting seasons and may not enter the following three waterfowl areas that are closed to all entry October 1 through the end of the state duck hunting season:

- Pool Slough Closed Area in Pool 9
- Guttenberg Pond portion of the Twelve-Mile Island Closed Area in Pool 11
- Spring Lake Closed Area in Pool 13

In addition, researchers will be limited in their means of entry and use in Electric Motor Areas and Slow, No Wake areas as noted in stipulation 6.

Availability of Resources:

Each Refuge District currently uses existing staff to issue Special Use Permits for research projects that occur solely within the respective District. Refuge Headquarters staff issue Special Use Permits for research activities that occur across more than one District. Staff resources are deemed adequate to manage this use at anticipated use levels.

Access points, boats, other vehicles, miscellaneous equipment, and limited logistical support are available on the Refuge. Temporary housing located at the Savanna and Winona Districts is available for use by researchers while studying Refuge resources.

Anticipated Impacts of the Use:

Research activities may disturb fish and wildlife and their habitats. For example, the presence of researchers can cause waterfowl to flush from resting and feeding areas, or cause disruption of birds and turtles on nests or breeding territories. Efforts to capture animals can cause disturbance, injury, or death to groups of wildlife or to individuals. To wildlife, the energy cost of disturbance may be appreciable in terms of disruption of feeding, displacement from preferred habitat, and the added energy expended to avoid disturbance.

Sampling activities can cause compaction of soils and the trampling of vegetation, the establishment of temporary foot trails and boat trails through vegetation beds, disruption of bottom sediments, and minor tree damage when temporary observation platforms are built or when tree climbers access bird nests such as in great blue heron colonies.

The removal of vegetation or sediments by core sampling methods can cause increased localized turbidity and disrupt non-target plants and animals. The use of water-injection dredges to collect vegetation has similar impacts but on a wider scale than core samplers.

Installation of posts, equipment platforms, collection devices and other research equipment in open water may present a hazard to boaters if said items are not adequately marked and/or removed at appropriate times or upon completion of the project.

Research efforts may also discover methods that result in a reduction in impacts described above.

Public Review and Comment:

A draft of this Compatibility Determination was included in the Draft Comprehensive Conservation Plan and Environmental Impact Statement (EIS) released May 1, 2005 for a 120-day comment period. It was also available during a subsequent 90-day review period on a supplement to the EIS released December 3, 2005. Public notification included notices in the Federal Register, media announcements, and 31 public meetings and workshops attended by more than 3,700 persons. No comments specific to this use or determination were received.

Determination:

____ Use is Not Compatible

_xx_ Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

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 contribute to the purposes of the Refuge or the mission of the Refuge System, or causes undo 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. Researchers will not be allowed access into the three no entry areas of the Refuge listed above, October 1 to the end of the regular state duck hunting season.

4. Researchers are not allowed in Refuge Waterfowl Hunting Closed Areas during the regular state duck hunting season, except at pre-arranged, specific times and locations (if any) allowed by the local District Manager.

5. Beginning in 2007, researchers may not enter, unless specifically authorized, Waterfowl Hunting Closed Areas from October 15 to the end of the regular state duck hunting season (this coincides with voluntary avoidance dates requested of the public).

6. Beginning in 2007, researchers must use electric motors or non-motorized means in designated Electric Motor Areas unless specifically authorized in the Special Use Permit. Similarly, from March 16 through October 31, researchers must go slow, no wake and not operate airboats or hovercraft in designated Slow, No Wake Areas, unless specifically authorized in the Special Use Permit.

7. Researchers must clearly mark posts, equipment platforms, fencing material, and other equipment left unattended in open water so as to not pose a navigation hazard to boaters. Such items shall be removed from the river as soon as practicable upon completion of the research.

8. Researchers will submit annual status reports and a final report concerning Refuge research to the Refuge Manager and/or appropriate District Manager.

Justification:

Research by third parties plays an integral role in Refuge management by providing information needed to manage the Refuge on a sound scientific basis. Investigations into the biological, physical, archeological, and social components of the Refuge provide a means to analyze management actions, impacts from internal and outside forces, and ongoing natural processes on the Refuge environment. Research provides scientific evidence as to whether the Refuge is functioning as intended when established by Congress.

Adverse impacts of research that cause localized vegetation trampling or disruption of wetland bottom sediments are often short-term and will be minimized through stipulations above. Vehicular access is allowed only on roads and trails normally open to the public, thus resulting in no net increase in vehicular impacts. Researchers are also restricted from Waterfowl Hunting Closed Areas and sanctuaries to avoid and minimize human disturbance to feeding and resting waterfowl. Researchers are also required to observe public use regulations when entering Electric Motor Areas and Slow, No Wake Areas to avoid disturbance of fish and wildlife and provide areas of quiet and solitude sought by many users of the Refuge. Any research equipment that remains in the field for the duration of the project will be clearly marked to avoid potential hazards presented to other Refuge users.

Signature: **Refuge Manager:** _____ 8/17/06
(signature and date)

Concurrence: **Regional Chief:** _____ 8/21/2006
(signature and date)

Mandatory 10- or 15 year Re-evaluations Date: 2016