

## COMPATIBILITY DETERMINATION

**Use:** Inventory, Monitoring, and Research by Third Parties

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

**Establishing and Acquisition Authorities:** The Upper Mississippi River National Wildlife and Fish Refuge was established by Public Law No. 268, 68<sup>th</sup> 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 Purposes:** 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.

Goals of the National Wildlife Refuge System:

- a. To fulfill our statutory duty to achieve refuge purpose(s) and further the System mission.
- b. Conserve, restore where appropriate, and enhance all species of fish, wildlife, and plants that are endangered or threatened with becoming endangered.
- c. Perpetuate migratory bird, interjurisdictional fish, and marine mammal populations.
- d. Conserve a diversity of fish, wildlife, and plants.
- e. Conserve and restore, where appropriate, representative ecosystems of the United States, including the ecological processes characteristic of those ecosystems.
- f. To foster understanding and instill appreciation of fish, wildlife, and plants, and their conservation, by providing the public with safe, high-quality, and compatible wildlife-dependent public use. Such use includes hunting, fishing, wildlife observation and photography, and environmental education and interpretation.

**Description of Use:**

*What is the use?* The use consists of inventory, monitoring, and research activities conducted by third parties for the purpose of collecting data about a variety of biological, physical, archeological, and social subjects, features, or phenomena. These activities are conducted by federal, tribal, state, and private entities, including the U.S. Geological Survey, state departments

of natural resources, state and private universities, independent researchers and contractors, and citizen scientists.

*Where is the use conducted?* Inventory, research, and monitoring activities by third parties are permitted and conducted on nearly the entire Refuge but there are locations where activities are substantially restricted or prohibited. Unless specifically authorized, researchers may not enter Waterfowl Hunting Closed Areas during the regular state duck hunting seasons and Waterfowl Sanctuaries October 1 through the end of the state duck hunting season. In addition, investigators are limited in their means of entry into and use of Electric Motor Areas and Slow, No Wake areas. Finally, access to and use of the Lost Mound Unit in the Savanna District is restricted or prohibited to insure the safety and well-being of investigators at this decommissioned ammunition manufacturing depot.

*When is the use conducted?* Inventory, research, and monitoring activities by third parties can take place at any time of the year but field work is typically conducted during the spring, summer and fall. The Refuge substantially restricts or prohibits activities in several areas with special administrative designations during the fall waterfowl migration season as noted above.

*How is the use conducted?* 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. Research study sites, sampling locations, and transects are often temporarily marked by wooden or metal posts, or flagging, which must be removed when research ceases.

Inventory, monitoring, and research activities by third parties are typically conducted under a Special Use Permit. There are instances where a Refuge or District Manager may choose to not issue a Special Use Permit, such as when activities are always conducted in the presence of Refuge personnel. Additionally, a Refuge or District Manager may declare a Cooperating Agency Exemption when activities are thoroughly coordinated with the Refuge and the activities provide information that is of high interest to the Refuge.

*Why is the use being proposed?* The Upper Mississippi River contains a wealth of biological, physical, commercial, and social features that make it unique at a regional, continental, and global scale. These features are of great interest to the general public, policy makers, and resource managers. Information about these features is used by the Refuge and other resource managers to understand the resources that are managed and the effects of management on those resources.

Examples of recent biological inventory, monitoring, and research activities that were conducted under Special Use permits include: determining the habitat quality and body condition of diving ducks; songbird use of floodplain forests; survey and inventory of odonates; survey and inventory of non-game fishes; assessing the role of genetic variation in faucet snail invasion; and controlling reed canary grass to regenerate floodplain forest.

**Availability of Resources:** Each Refuge District currently uses existing staff to issue Special Use Permits for inventory, monitoring, and research activities that occur solely within that

respective District. Refuge Headquarters staff issue Special Use Permits for research activities that occur across more than one District. Each year, the Refuge issues 15–20 Special Use Permits for inventory, monitoring, and research activities by third parties. Staff resources are deemed adequate to manage this use at current and anticipated future levels of use.

With some limitations, access points, boats, other vehicles, miscellaneous equipment, and logistical support are available on the Refuge. Temporary housing located at the Savanna District may be 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. The Refuge has documented disturbance to resting waterfowl caused by State or Federal research vessels entering the Lake Onalaska voluntary avoidance and closed area (Kenow 2011 and 2012). Efforts to capture animals can cause disturbance, injury, or death to wildlife. 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 or relocate to undisturbed areas.

Sampling activities can compact soils, destroy vegetation, and re-suspend bottom sediments. Investigator activities can result in the establishment of temporary foot trails and boat trails through vegetation and re-suspension of bottom sediments. These effects are typically small in scale relative to the amount of surrounding habitat that is affected.

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.

**Public Review and Comment:** This Compatibility Determination is a re-evaluation of an existing determination which 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.

A draft of this re-evaluation was released on August 5, 2016 for a 30-day comment period. Public notification of the availability of the Compatibility Determination included media announcements and posting on the Refuge's website. The Minnesota and Wisconsin Departments of Natural Resources commented on the draft re-evaluation expressing concern with the Stipulations and permit requirements. The States requested clarification of the Cooperating Agency Exemption described in the Description of Use Section and asked for a statement in the compatibility determination which would exempt staff of state natural resource management agencies from the requirements of the compatibility determination. An additional stipulation was added to the final compatibility determination which further describes the conditions under which a State or Federal cooperating agency would be exempted from obtaining a special use permit for inventory, monitoring or research activities on the Refuge.

**Determination:**

\_\_\_\_\_ Use is Not Compatible

XX Use is Compatible with Following Stipulations

**Stipulations Necessary to Ensure Compatibility:**

1. Many State and Federal agencies have existing and ongoing inventory and monitoring programs which involve field collection of data from Refuge lands and waters. In some instances, these existing and ongoing inventory and monitoring programs have occurred without the issuance of special use permits from the Refuge and were administered within the framework of a Cooperating Agency Exemption. In a few cases, inventory and monitoring efforts were initiated and executed without any prior notification provided to the Refuge. To insure the Refuge is able to fulfill its resource protection mandate, and to reduce or eliminate conflicts between researchers, agency personnel, and the public, coordination between the Refuge and cooperating agencies must include submission to the Refuge of a brief schedule of planned activities for the following year. The schedule of inventory, monitoring and research activities planned by State or other Federal agencies on Refuge lands and waters will be submitted bi-annually by January 15<sup>th</sup>.
2. Research conducted by State or Federal agencies which requires physical disturbance or alteration of Refuge lands (including submerged lands) as part of study design requires at a minimum contacting the appropriate District or Refuge Manager. When study design requires physical disturbance or alteration of Refuge lands, an SUP may be required. Examples may include the placement of predator exclosure nets or predator traps (outside of trapping season) on Refuge lands; the construction or placement of any semi-permanent structure or object on the Refuge, including stakes, posts, and other markers; or the destruction, removal or alteration of vegetation.
3. Prior to conducting activities, investigators will apply for and obtain Special Use Permits from the Refuge (State and Federal agency partners see #2 above). Special Use Permits will include a Special Conditions document that includes specific stipulations related to when, where, and how the inventory, monitoring, or research activities will be conducted. Managers retain the option to prohibit activities on the Refuge if it does not contribute to the purposes of the Refuge or the mission of the Refuge System, or causes unnecessary disturbance or harm to refuge resources.
4. Research applicants must submit a study plan to the Refuge Manager that includes:
  - a) justification and objectives of the study;
  - b) relevance to resource management;
  - c) methods, schedule, and personnel;
  - d) potential impacts on Refuge wildlife and/or habitat;
  - e) provisions to minimize disturbance, injury, or mortality and prevent the introduction of invasive or pest species;

- f) compliance with established standards for proper animal care and use;
  - g) data standards and data management plan;
  - h) costs to Refuge, if any; and
  - i) anticipated end products (i.e., reports, publications, recommendations)
5. Research plans will be reviewed by Refuge staff. Evaluation criteria will include, but not be limited to, the following:
- a) Research that has direct relevance to management will have higher priority than other requests
  - b) Research requests that conflict with higher priority research, monitoring, or management programs may not be granted.
  - c) Research that causes undue disturbance or is intrusive, will likely not be granted.
  - d) If staffing or logistics make it difficult for Refuge staff to monitor researcher activity in a sensitive area, this may be reason to deny the request.
  - e) The length of the project will be considered and agreed upon before approval. Projects will not be open-ended and at a minimum, will be reviewed annually.
6. Investigators 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 (e.g., banding). Researchers must demonstrate they have approval from the Animal Care and Use Committee, if such approval is required by their research institution.
7. Archeological researchers must obtain an Archeological Resource Protection Act permit from the Regional Director prior to obtaining a SUP from the Refuge Manager.
8. Sampling equipment as well as investigator(s) clothing and vehicles (e.g., ATV, boats) will be thoroughly cleaned (free of dirt and plant material) before being allowed on Refuge lands, to prevent the introduction and/or spread of pests and invasive species.
9. Researchers, investigators, scientific collectors, and surveyors will submit annual progress reports, a final report, and copies of publications resulting from the work to the Refuge Manager or appropriate District Manager.
10. Researchers, scientific collectors, and surveyors will submit an electronic copy of all raw data collected on Refuge lands to the Refuge Manager with the understanding that the researcher will have the opportunity to produce publications based on the data.
11. If unacceptable impacts to natural resources or conflicts arise or are documented by the Refuge staff, the Refuge Manager can suspend, modify conditions of, or terminate an on-going project already permitted by an SUP.

12. Unless specifically authorized by the Refuge or District Manager, investigators will not be allowed access into the three Waterfowl Sanctuaries of the Refuge, identified previously, during the period October 1 to the end of the regular state duck hunting season.
13. Unless specifically authorized by the Refuge or District Manager, investigators will not be allowed in Refuge Waterfowl Hunting Closed Areas during the regular state duck hunting season. When authorized, entry of waterfowl hunting closed areas during the regular state duck hunting seasons will occur during specific times and at specific locations determined by the Refuge or District Manager(s).
14. Unless specifically authorized by the Refuge or District Manager, investigators must use electric motors or non-motorized means in designated Electric Motor Areas. Similarly, from March 16 through October 31, researchers must go slow, no wake and may not operate airboats or hovercraft in designated Slow, No Wake Areas.
15. Investigators must clearly mark posts, equipment platforms, fencing material, and other equipment placed in the field, including areas of open water, so as to not pose a hazard to the public or agency personnel operating equipment and vehicles. Such items shall be removed from the field as soon as practicable upon completion of inventory, monitoring and research activities.

**Justification:** Inventory, monitoring, and research by third parties can contribute to Refuge management by providing information that is needed to manage the Refuge on a sound scientific basis. Investigations into the biological, physical, archeological, and social features of the Refuge provide a means to analyze management actions, assess impacts from internal and external forces, and understand ongoing natural processes in the Refuge environment. This information provides a 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 specified above and in Special Use Permits. Vehicular access is allowed only on roads and trails normally open to the public, thus resulting in no net increase in vehicular impacts. Investigators are restricted from Waterfowl Hunting Closed Areas and Sanctuaries to avoid and minimize human disturbance to feeding and resting waterfowl. Investigators 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 to maintain currently existing areas of quiet and solitude sought by many Refuge users. Any research equipment that remains in the field for the duration of a project will be clearly marked to avoid potential hazards presented to other Refuge users and agency personnel.

