

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

**Use:** Boating with motor-driven watercraft, and snowmobiling

**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, 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 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:**

This use involves the use of combustion engine watercraft such as powerboats, airboats, hovercraft, personal watercraft (e.g. jet skis) for general recreational boating on the Refuge. Waterskiing is also included in this use due to its close association with powerboats. This use occurs most frequently during the summer from May to September. People who take part in this use often engage in other water-related recreation as well, including fishing, camping, hunting, picnicking and swimming. Estimates for recreational boating visits are not tallied separate, but in 2003, the Refuge estimated that 1.3 million people took part in recreational boating, camping and beach-related activities.

Trend data from 10 years of aerial surveys on 150 miles of the Refuge during the Memorial Day to Labor Day peak use season show that just over 30 percent of boating use occurs on Pools 4, 8, and 10, or 3 of the 12 pools on the Refuge. Corps of Engineers data on the number of recreational boat lockages through the system of locks on the Mississippi River continue to increase. At Lock and Dam 5A, for example, recreational boat lockages were 1,195 in 1952, 7,768 in 1972, 9,704 in 1992, and 11,300 in 1999. Many recreational boating visits, especially for those who stay mainly on the main navigation channel due to boat size, originate their trips off-Refuge from marinas or other public and private boat launches.

A 2003 recreational boating study by the Minnesota Department of Natural Resources, in cooperation with the Wisconsin Department of Natural Resources, Corps of Engineers, and the Refuge, helped characterize the nature and extent of boating use on Pools 4 through 9 of the Mississippi River and the Refuge. The study estimated that 60 percent of recreational boating takes place in the main navigation channel of the river, with 40 percent in side channels and backwater areas. The Minnesota study also noted several boating trip characteristics:

- The average boating party size is 2.9 people, most of whom are adults.
- Overnight boating trips account for 12% of all trips.
- Most boaters (87%) do not leave (or lock out of) the pool into which they launch.
- One-third of all trips (32%) involve beaching.
- Fishing is the primary activity for half of all boaters.

The Refuge maintains 26 boat landings with 700 parking spaces. These landings generally accommodate 18 foot or less watercraft due to ramp size and water depths. An additional 222 non-Refuge boat landings are scattered throughout the length of the Refuge and offer ample access options for recreational boaters.

Recreational boating is subject to respective state boating laws and regulations, and applicable U.S. Coast Guard and Refuge recreation regulations. There are 45 slow, no-wake zones within the Refuge, most of which are administered by local units of government. Enforcement of recreational boating is a cooperative effort between Refuge officers, state conservation officers, and local sheriff and/or city police departments.

Snowmobile use occurs during winter months and is allowed only on the ice over navigable waters accessed from boat landings. No snowmobiles are allowed on or across Refuge uplands. In 2004, an estimated 7,500 snowmobile visits occurred on the Refuge.

#### **Availability of Resources:**

The main costs of these uses are law enforcement and litter clean-up. Resources to adequately manage these uses are marginal at best given the number of refuge officers, the sheer size of the Refuge, and the number of users. Other personnel from the state, county, and local law enforcement community may assist with oversight of many of these uses. Funding for law enforcement staff time and printing of the Refuge Public Use

Regulations brochure is limited some years, calling for a redirection of existing Refuge funding. Although not optimum, funding and staffing is available to allow this use at current and anticipated levels. Proposals in the Refuge Comprehensive Conservation Plan (CCP) as reflected in the stipulations section of this determination should help reduce problems and lessen workloads. Facilities to support recreational boating are deemed adequate given the number and variety of public accesses and private marinas. No special facilities are needed in support of snowmobiling since existing accesses or access points are used.

#### **Anticipated Impacts of the Use:**

Recreational boating has the potential to cause temporary disturbance to bald eagles, water birds, waterfowl, and other wildlife. Disturbance is limited for boating occurring in the main river channel and adjacent areas since wildlife is more prevalent in the backwater areas of the Refuge. However, certain watercraft such as jet skis and airboats can easily access backwater areas with a corresponding increase in disturbance to resting and feeding birds and other wildlife. This disturbance usually displaces wildlife to adjacent areas of the Refuge. In some cases, however, repeated disturbance can have serious impacts, such as forcing the abandonment of nesting colonies of herons and egrets. Some shoreline erosion is caused by the wakes of all boats, and is most serious with very large craft. Loss of vegetation and increase in turbidity occurs from boats running through shallow backwater areas.

There is potential for conflicts between recreational boating and anglers, canoers, and kayakers due to speed, wake, and noise.

Snowmobiling has little to no resource impact given the season of use and regulation confining snowmobiles to ice covered navigable waters. Snowmobiles do generate noise which may, in certain areas, be viewed negatively by other visitors engaged in silent sports such as cross-country skiing, snowshoeing, or general winter hiking and wildlife observation.

#### **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. Many comments on boating and Electric Motor Areas and Slow, No Wake Areas were received and are found in Chapter 7 of the EIS, with a Service response. However, no comments specific to this determination were received.

**Determination:**

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

xx Use is Compatible with Following Stipulations

**Stipulations Necessary to Ensure Compatibility:**

1. All appropriate state and federal boating regulations apply.
2. Existing or new Electric Motor Areas prohibit combustion engine driven watercraft in sensitive backwater areas (five areas, 1,852 acres).
3. Establish eight Seasonal Slow, No Wake Areas (March 16 to October 31) that require slower speeds and a prohibition of airboat and hovercraft operation in important backwater areas (9,720 acres).
4. A series of linear Slow, No Wake Zones for safety and/or to protect shorelines are in place.
5. Maintain a network of Waterfowl Hunting Closed Areas which provide resting and feeding areas for waterfowl during fall migration with provision for voluntary avoidance on large closed areas and no motors on small areas to limit disturbance. A threshold of disturbance will also be in place should voluntary measures not prove effective.
6. Snowmobiles are not allowed to travel on or across uplands and must stay on ice covered navigable waters.

**Justification:**

Although recreational boating levels are high on the Refuge, much of the use occurs on the main channel of the river and adjacent deeper waters. These areas are generally not heavily used by wildlife so disturbance is limited. The timing of recreational boating on the main channel and adjacent areas also serves to limit disturbance, with summer months and mid-morning to evening being peak use times. These times generally do not correspond to peak nesting and migration seasons, and morning feeding hours. The size of the Refuge and extensive backwaters with difficult public access and Electric Motor Areas and Slow, No Wake Areas provide sizeable alternative areas for wildlife disturbed. Bank and shoreline erosion, loss of aquatic vegetation, and increase in water turbidity is variable, and perhaps not generally greater than that caused by commercial navigation, recreational fishing, and other river traffic. Snowmobiling has little impact to no impact to wildlife and habitat due to winter use when most migratory birds have left, the season of use, and ice-only restriction.

Some wildlife, such as bald eagles, have become increasingly tolerant of watercraft, and often nest successfully adjacent to major boating areas. Other wildlife is less tolerant, but Electric Motor Areas, Slow, No Wake Areas, Slow, No Wake Zones, and Waterfowl Hunting Closed Areas help limit disturbance. Fish and other aquatic species generally have ample habitat to move away from boating disturbance. Conflicts between user groups occur, but the establishment of additional Electric Motor Areas and the Slow, No Wake Areas will allow different user groups or subgroups to separate themselves.

Snowmobiles, given the ice-only restriction, are generally restricted to certain parts of the Refuge, leaving ample space for silent sport visitors.

Also, closing or severely restricting a large portion of the Refuge to recreational boating and snowmobiling would be nearly impossible given the mix of navigable waters, various jurisdictions and authorities, enforcement practicalities, and commercial and social considerations.

With stipulations in place, recreational boating and snowmobiling, given the location and season of most use and the physical nature and size of the Refuge, does not materially interfere with or detract from the conservation purposes of the Refuge.

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

**Concurrence:**                      **Regional Chief:** Nate M. Felt 8/21/2006  
(signature and date)

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