COMPATIBILITY DETERMINATION

Use: Camping (including hammocking)

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, 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, prescribes, 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? Camping is generally defined as erecting a tent, shelter or hammock of natural or synthetic material, preparing a sleeping bag or other bedding material for use, parking of a motor vehicle or mooring or anchoring of a vessel, for the apparent purpose of overnight occupancy.

While camping is not a wildlife-dependent use, it is usually conducted in association with other wildlife dependent activities such as wildlife observation, photography, hunting, and fishing.

Where is the use conducted? The majority of camping occurs on beaches on Refuge islands or peninsulas adjacent to the main navigation channel of the Mississippi River. The areas of choice are both manmade and natural beach areas. These beach areas are either remnant channel maintenance islands or shore areas formed by the side-casting of dredged material, dredged sand placement sites, or natural sandbars and shorelines.

When is the use conducted? Camping equipment most often includes tents erected on sandy sites, hammocks hung between trees, or houseboats or large pleasure craft moored on beaches or anchored adjacent to shore. Family-sized groups are most common, although several boats may moor or anchor adjacent to each other. Large gatherings of friends and/or relatives may occupy one site or two or more adjacent sites. The primary camping season is Memorial Day through Labor Day, however, some hunters utilize camping into the fall.

How is the use conducted? Refuge regulations published in a Public Use Regulations brochure place restrictions on campfires, length of stay (no more than 14 days in one location), sanitation, vegetation removal, and private structures. No fee is charged for camping on the Refuge. Camping is considered "primitive" and toilets, fire rings, or other facilities are generally not provided, although some volunteer groups provide and maintain fire rings on select beaches under Refuge supervision. Additionally, all camp sites must be in view of the main navigation channel once the respective State waterfowl hunting season begins.

Why is this use being proposed? While it is unknown how many camping visits actually occur on the Refuge it is a traditional activity on the Mississippi River that is growing in popularity. It is believed that perhaps 95 percent of camping occurs on islands or peninsulas adjacent to the main navigation channel of the Mississippi River. In 2010, beach user surveys were conducted by the Recreation, Tourism and Therapeutic Recreation Department of Winona State University, Winona, MN, over a 40 mile stretch of the Mississippi River from the foot of Lake Pepin to Lock and Dam 6. During this study, 1,130 boats were counted with an estimated number of boaters at 4,877. A subset of 388 people were interviewed and 62% reported that they were camping (staying overnight as opposed to using the beach or island for the day only). This was an increase of 24% from a similar study conducted in 2002.

Availability of Resources: The main costs of camping to the Refuge are law enforcement and litter clean-up. Resources to adequately manage these uses are marginal at best given the number of Federal Wildlife Officers, the sheer size of the Refuge, and the number of campers. Other personnel from the state, county, and local law enforcement community may assist with oversight of camping, but they generally stay clear of enforcing Refuge regulations. Funding for law enforcement staff time and printing of the Refuge Public Use Regulations brochure is lacking some years, calling for a redirection of existing Refuge funding. This redirection is often at the expense of other Refuge programs such as monitoring, maintenance, and other public use programs. Although not optimum, funding and staffing is available to allow this use at current and anticipated levels. The stipulations associated with this determination should help reduce

problems and lessen workloads. Funding for any camping area maintenance is generally not available in refuge funding and is thus dependent on outside sources and partners such as the states, Corps of Engineers, and citizen or friends groups.

Maintenance of camping areas is sporadic and dependent on funding from volunteers, conservation organizations, the Corps of Engineers, or the states through their respective marine gas tax revenues. Maintenance generally involves annual and perennial herbaceous plant removal to keep sites open, shaping or leveling of sites with heavy equipment transported by boat or barge, and in certain cases, top dressing sites with a layer of dredged sand. All maintenance activities are determined on a site-by-site basis by the respective District Manager.

Anticipated Impacts of the Use: Camping, due to the high number of people involved and high densities on some sites, can have a direct physical impact to islands and shore areas from trampling, cutting of vegetation, campfires, and general camp set-up. Like other beach-related uses, Refuge regulation violations can be high: dogs running loose, intoxication, illegal drugs, firearm use, fireworks, noise, human waste, littering, and interference with other users, private structures, large parties, and loud boats. Although littering is of concern, there has been a marked improvement in recent years through self-regulation and voluntary clean-ups. High densities of visitors on certain sites, such as active dredge disposal areas or so-called "bathtubs," can lead to water quality concerns due to human waste. However, recent water testing at some of these sites has not shown bacteria levels above set standards.

Wildlife which may use beach and shoreline areas is generally displaced to the more remote areas of the Refuge during these activities. Some species, or individuals of species, have become more accustomed to the disturbance and are not affected. For example, some eagle pairs maintain active nests near areas frequented by persons engaged in beach-related activities. Turtles, which nest on the same sandy areas frequented by visitors, may be impacted by direct disturbance during nesting or through the destruction of nests by human traffic. The direct relationship between human use of turtle nesting areas and nest success is not understood. Some biologists believe that human use of the areas attracts predators like raccoons searching for food scraps left by groups, while others believe that human presence and scent may keep predators at bay. Turtle nest success is generally quite low even without human impact, but it is unknown whether human disturbance further negates nest success.

Maintenance of beach areas with heavy equipment causes changes in topography, addition of more sand, and grubbing of some vegetation. These impacts are short term in nature and designed to mimic the natural contours of islands on the river. The actual maintenance activity does create noise and visual disturbance to wildlife that may be present on or adjacent to a site. Timing of any maintenance activities avoids key nesting times for birds and other turtles.

Public use of beaches requires a very high law enforcement effort and takes away from resource-related enforcement. There is concern for officer safety in large groups of campers, especially when alcohol use is involved.

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. Several comments on camping were received and can be found in Chapter 7 of the EIS, with a Service response. However, no comments specific to this 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 this CD included media announcements and posting on the Refuge's website. No comments specific to the draft re-evaluation were received.

Determination:

_____ Use is Not Compatible

_XX_ Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

1. Continue to enforce general public use regulations which protect habitat and limit disturbance to other Refuge visitors.

2. The Refuge or District Manager may close or restrict use on certain beach and other shoreline areas to minimize or eliminate chronic public safety problems or safeguard wildlife or habitat values.

3. Actively promote the Leave No Trace program and provide information to campers.

4. Beach maintenance activities will follow these guidelines: The Refuge will in general only concur with maintenance of beaches on remnant dredge material islands or existing dredge material placement sites adjacent to the main channel of the river that are designated "low density recreation" in current Land Use Allocation Plans, or those not otherwise closed to use. Maintenance should be limited to the minimum reshaping, leveling, and vegetation clearing needed to ensure safe access and to facilitate the camping experience. Top dressing with sand should only be done under special circumstances.

5. Hammocks may only be attached to trees or other natural objects by means of non-penetrating devices (i.e. tree saver straps).

Justification: Although camping levels and densities are high on the Refuge, much of the use occurs adjacent to the main channel of the river which is a small percentage of the Refuge land and water base. These areas are generally not heavily used by wildlife so disturbance is limited. The timing of camping also serves to limit disturbance, with summer months being peak use

times. These times generally do not correspond to peak nesting and migration seasons. An exception is turtle nesting, which peaks in June. The size of the Refuge and extensive backwaters with difficult public access provide sizeable alternative areas for wildlife that are disturbed. Like beach-related uses, impacts to nesting turtles from camping are as yet unknown and further study is needed. Manager discretion in restricting or closing beach areas to camping and other uses will help ensure that important wildlife areas and habitats are protected, and provide a useful control for further study.

Bank and shoreline erosion and loss of aquatic or upland vegetation is variable, and perhaps not generally greater than that caused by commercial navigation, recreational fishing, and other river traffic. Also, the beach areas most used for camping are generally manmade as a result of past or current navigation channel dredging operations. These areas do not generally harbor unique plant communities or archaeological resources.

Any maintenance of beach areas is limited to only sites made from the deposit of dredge material placement, adjacent to the main channel of the river where disturbance is already high, and during times that do not disturb breeding or nesting wildlife.

Although Refuge specific regulation violations and disturbance to other visitors can be a problem locally, stipulations give managers and officers an option to close an area to address many issues. Cooperation with state and local law enforcement also helps with workload concerns. Since camping is primitive in nature with no facilities, infrastructure and regular maintenance needs are minimized.

Given the above, camping does not materially interfere with the purposes of the Refuge nor the mission of the Refuge System.

Refuge Manager: Sabra Chandler 1/3/17
Signature Date

Regional Chief Concurrence: 1-26-17
Regional Chief Date

Mandatory 10 or 15 year Re-evaluation Date: 2027