

## DRAFT COMPATIBILITY DETERMINATION

**Use:** Hunting

**Refuge Name:** Port Louisa National Wildlife Refuge

### **Establishing and Acquisition Authority(ies):**

The Mark Twain National Wildlife Refuge (NWR), including the land area now managed as Port Louisa NWR, was established under the provisions of a Secretarial Order signed on August 1, 1958. Individual districts of the Mark Twain NWR were designated as separate National Wildlife Refuges in a reorganization change as part of the Comprehensive Conservation Plan (CCP) in 2004 when Port Louisa NWR was named. Much of the refuge consists of lands acquired in fee title by the U.S. Army Corps of Engineers that are managed as part of the refuge under a Cooperative Agreement between the Department of the Army and the Department of the Interior.

The refuge is also the designated manager for several conservation easements established by the Farmers Home Administration, Farm Service Agency (FmHA or FSA), or by the U.S. Fish and Wildlife Service (USFWS). The property interests acquired by the USFWS may vary among easements. The language of each individual easement dictates whether the USFWS has authority over certain landowner or public uses and may establish the specific purposes for that easement. Easements are generally administered and managed as part of the National Wildlife Refuge System pursuant to the National Wildlife Refuge System Administration Act as amended (16 USC).

### **Establishing Authorities:**

Refuge Recreation Act (16 U.S.C. 460k-1)

Migratory Bird Conservation Act (16 U.S.C. 715d)

Fish and Wildlife Coordination Act (16 U.S.C. -664)

Emergency Wetland Resources Act of 1986 (16 U.S.C. -3901(b) 100 Stat. 3583)

1985 Food Security Act

Consolidated Farm and Rural Development Act (7 USC 1981, 1985)

Executive Orders 11990, 11988

### **Refuge Purpose(s):**

- "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. -715d (Migratory Bird Conservation Act)
- "...shall be administered by (Secretary of the Interior) directly or in accordance with cooperative agreements...and in accordance with such rules and regulations for the conservation, maintenance, and management of wildlife, resources thereof, and its habitat thereon,..." 16 U.S.C. -664 (Fish and Wildlife Coordination Act)
- "...suitable for - (1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species..." 16 U.S.C. 460k-1 (Refuge Recreation Act)

- "... the conservation of the wetlands of the Nation in order to maintain the public benefits they provide and to help fulfill international obligations contained in various migratory bird treaties and conventions ..." 16 U.S.C. -3901(b), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986)
- "... for conservation purposes", (1985 Food Security Act in conjunction with the transfer of Farm Service Agency, formerly Farmers Home Administration, property)
- ...for the protection of wetlands and providing for the management of floodplains (Executive Orders 11990, 11988)

**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 compatibility determination updates and supercedes the compatibility determination that was developed concurrently with the refuge’s Comprehensive Conservation Plan in 2004. The use is to conduct big game, upland game, and migratory bird hunting on selected divisions of the Port Louisa NWR in Iowa and Illinois, including easements administered by the refuge. Some of the lands with underlying easements are owned by the Iowa Department of Natural Resources and open to public hunting and fishing.

Hunting has been legislated as a priority public use on national wildlife refuges where compatible with the refuge purpose. This use is legitimate and appropriate, and is dependent upon healthy wildlife populations. Several divisions of the Port Louisa NWR offer opportunities for hunting. Hunting season dates, bag limits and harvest methods will be consistent with state hunting seasons and regulations on all game species, unless more restrictive refuge regulations apply or management of the specific area requires a special hunt outside of state seasons and regulations. Hunter safety is of paramount concern to refuge staff, hunters afield, and refuge neighbors. Hunting seasons are further regulated on refuge lands by time and space so as to reduce or eliminate any conflicts with other public uses or wildlife species.

Hunting activities allowed on Refuge Divisions are given below. Non-toxic shot is required for all upland game. Non-toxic shot will also be required for turkey hunting beginning in the fall of 2016. Blinds or stands must be removed at the end of each days hunt. The refuge is closed to all nighttime hunting of furbearers.

- Big Timber Division is open to migratory birds, upland game and big game in accordance with state seasons and regulations.

- Horseshoe Bend Division is closed to migratory bird hunting and open to upland game and big game hunting. A closed period occurs from September 15 until December 1 that restricts all public entry.
- Louisa Division is closed to all hunting.
- Keithsburg Division is open only to squirrel hunting from September 1 until September 15. The Division is closed to all public use from September 15 until January 1.

Any initiation of additional refuge hunting programs would occur after it has been biologically determined that it would meet habitat management or species population objectives. For example, hunting for deer is a herd reduction tool to decrease damage to habitat.

Properly administered hunting programs can instill a healthy regard and view of the wildlife resource and help to meet Refuge and Service management goals. It is important for the Refuge System to promote hunter participation and continuation of hunting as a part of the North American model of wildlife conservation (Organ et al. 2012). Hunting promotes a conservation ethic and appreciation of the outdoors. These user groups can become a vocal advocacy for wildlife management when they understand their role in wildlife management.

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

Funds have been available to maintain the existing program level, and periodic funds have been available to adequately maintain existing facilities. Parking lots, kiosks, leaflets, gates and signs are maintained by the refuge for use by hunters. Refuge staff maintains these facilities and disseminates information to hunters. Facilities on easements open to public hunting may be minimal and maintained by a landowner other than USFWS.

Additional future hunting opportunities outlined in the CCP are not a significant change from past management and will not require additional funds. Law enforcement coverage is from officers at other refuges or with the assistance of state officers. Law enforcement coverage at Port Louisa NWR will be monitored to ensure that adequate enforcement is available to maintain compatibility of the hunting program.

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

No negative physical impacts on refuge lands or interests are expected to occur from hunting as outlined above. Refuge law enforcement officers will monitor and regulate numbers of participants to levels consistent with safe use of a specific area, and motorized equipment will be strictly limited to surfaced roads or prepared parking areas. All travel throughout the refuge divisions will be by foot only. Boat access for hunting is a primary means of access at the Big Timber Division where most hunting activity is for waterfowl. Deer hunting also occurs at Big Timber Division when water levels are low enough, but access is often limited by water levels. All access at Horseshoe Bend Division is on foot unless the area is flooded. There is no boat ramp at Horseshoe Bend and boat access would be by canoe, kayak, or small boat. Boats can access the area over a levee if the river is at high stages but then hunting opportunities would be limited at those stages. Vehicle access is only to parking lots.

Hunting obviously removes animals from the population and is a potential impact if not managed correctly. Population and harvest trends for hunted species are largely monitored by the states. Season dates, length, and bag limits are set by the state to allow harvest of annual surpluses and monitored to determine any impacts from harvest levels. Wildlife harvested from the refuge is a small proportion of what is hunted in the local area and a very small part of the overall harvested population. Recent surveys of game species by the states do not indicate population declines due to hunting. For waterfowl, the annual assessments are based on breeding ground surveys. Hunting seasons and bag limits are determined by the federal framework, flyway council recommendations, and the states. Although hunting causes mortality and temporary disturbance of waterfowl and other wildlife, harvesting populations within the carrying capacity of existing habitat ensures the long-term health and survival of these species. In certain populations, such as white-tailed deer, hunting is a management tool that prevents overpopulation and subsequent disease or habitat impacts.

There is a great deal of scientific literature on the impacts of disturbance to wildlife that shows that disturbance can alter behavior (e.g. foraging time), population structure, and distribution patterns of wildlife, particularly for large congregations of waterfowl and waterbirds (Dahlgren and Korschgren 1992). Hunting activity will disturb wildlife. But the degree of that disturbance is acceptable and mitigated by closed areas, timing, and regulations on access and types of hunting allowed. Closed areas on portions of the refuge during hunting seasons allows migrating birds and other wildlife to have resting areas and undisturbed feeding areas. Typically, migrating waterfowl have moved south by the time Horseshoe Bend opens on December 1 so that disturbance to large concentrations of birds is not an issue. There may be some seasons when milder weather allows birds to stay. However, most hunting use for deer and pheasants is in larger grass fields some distance away from where waterfowl congregate. While Big Timber Division is open to hunting during migration, it does not generally have the habitat that supports large concentrations of waterfowl. Therefore, impacts to wildlife from human disturbance are limited to only a portion of the refuge and not expected to have detrimental or long term impacts to wildlife populations.

Impacts to habitat or disturbance to wildlife from the number of people using the areas has not been an issue. The area surrounding the refuge is rural and not highly populated so the number of users is not great. In addition, use is spread over time and space which helps to prevent impacts. The Big Timber and Horseshoe Bend Divisions that are open to hunting have adequate area to support the number of hunters that typically use it during a season. Use is sporadic and not generally by large groups. The opening days of the refuge, or the seasons, sees the highest use. There is substantial acreage available for hunting on state and county lands near the refuge that also spreads this use over a larger area and prevents concentrated use by hunters that would have the potential to cause habitat or disturbance impacts.

The refuge is open during hunting seasons to other uses such as fishing, wildlife observation and photography, and environmental education and interpretation. Generally, the number of people taking part in these other activities is lower during hunting seasons because of the time of year and colder weather. Little conflict between user groups has occurred or is expected to occur. Fishing use is generally in different areas than hunting although both uses occur simultaneously at the Big Timber Division. The amount of area available and the use of different habitat types for these two activities seem to limit any potential user conflicts, cumulative impacts, or safety issues.

Hunting pressure has not previously caused obvious conflicts with staff, other users, or wildlife. The amount of use is generally monitored by refuge staff by observing the number of vehicles at refuge parking areas. In addition, only foot traffic is allowed which reduces the potential for user conflicts or habitat impacts.

Refuge management activities can be accomplished without conflict from hunting. Refuge staff enters Horseshoe Bend regularly to maintain portable pumps during migration and during the closed periods. This use is generally finished by the time the area is open to hunting so that there are not cumulative disturbance impacts or conflicts with hunters.

### **Public Review and Comment:**

Hunting was previously determined compatible in 2004 and is now being revised to include conservation easements and a more thorough evaluation of anticipated impacts. A draft of this Compatibility Determination will be available for public review and comment for 14 days at the Refuge Office in April 2016. The document will also be available for public review on the Refuge's webpage, through local media outlets, and notices posted at libraries.

### **Determination:**

Use is Not Compatible

Use is Compatible with the Following Stipulations

### **Stipulations Necessary to Ensure Compatibility:**

The following stipulations are required to ensure compatibility:

1. All applicable State and Federal regulations will apply.
2. Certain areas of the refuge remain closed to hunting to allow resting areas for migrating birds and other wildlife.
3. All personal property must be removed at the end of each day's hunt.
4. No motorized vehicles are allowed except at designated parking areas and roads.
5. Species population monitoring will be coordinated with the states.
6. Law enforcement patrols will be conducted by State and Federal officers to ensure compliance with hunting regulations and special refuge regulations.
7. Any hunting program may be immediately canceled if, in the judgment of the refuge manager, it causes undesirable disturbance to wildlife populations, safety issues, or harm to other resources beyond that associated with normal entry/access to the area.
8. Litter will be collected, as necessary, by refuge staff and/or volunteers. Signs will be placed where necessary, to provide information to hunters regarding regulations, boundaries and closed areas.

**Justification:**

Public hunting on selected areas of Port Louisa NWR, including easements administered by the refuge, in the states of Iowa and Illinois is an acceptable form of wildlife-oriented recreation which has been found compatible with the purposes for which the refuge was established. Hunting will not materially interfere with, or detract from, the purposes of the refuge or the mission of the Refuge System. Hunting is a viable management tool in managing wildlife populations and achieving habitat management objectives. When the stipulations listed above are fulfilled, little or no adverse effects to other refuge programs or wildlife species will occur.

**Literature Cited**

Dahlgren, Robert B., and Carl E. Korschgen. 1992. Human disturbances of waterfowl: an annotated bibliography. U.S. Fish and Wildlife Service Resource Publication 188. Jamestown, ND: Northern Prairie Wildlife Research Center Online. <http://www.npwrc.usgs.gov/resource/literatr/disturb/index.htm> (Version 16JUL1997).

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**Refuge Manager:**

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Catherine J. Nigg, Refuge Manager Date

**Concurrence:**

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Sabrina Chandler, Refuge Supervisor Date

**Regional Chief:**

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Charles Blair, Refuge Chief Date

**Mandatory 10 or 15 year Re-evaluation Date:** 2031