



Compatibility Determination - Boating on Overflow NWR

USE: Boating (Motorized and Non-motorized)

REFUGE NAME: Overflow National Wildlife Refuge (NWR)

DATE ESTABLISHED: 1980

ESTABLISHING AND ACQUISITION AUTHORITY:

- 16 U.S.C. 715d (Migratory Bird Conservation Act)
- 16 U.S.C. 460k-1 (Refuge Recreation Act)
- 16 U.S.C. 460k-2 (Refuge Recreation Act (16 U.S.C. 460k-460k-4), as amended)

REFUGE PURPOSES:

- "for use as an inviolate sanctuary, or for any other management purpose, for migratory birds" 16 U.S.C. 715d (Migratory Bird Conservation Act).
- "the Secretary ... may accept and use ... real ... property. Such acceptance may be accomplished under the terms and conditions of restrictive covenants imposed by donors" 16 U.S.C. 460k-2 (Refuge Recreation Act (16 U.S.C. 460k-460k-4), as amended).
- "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).

NATIONAL WILDLIFE REFUGE SYSTEM MISSION:

The mission of the Refuge System, as defined by the National Wildlife Refuge System Improvement Act of 1997, 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:

(a) What is the use? Is the use a priority public use?

The use is boating and includes motorized and non-motorized types. It is not a priority public use as defined by the by the National Wildlife Refuge Improvement Act of 1997. However, this use provides a ‘means’ of participating in priority wildlife dependent uses including; hunting, wildlife observation, photography, and environmental education and interpretation. By far, the majority of boating activity on the refuge is related to waterfowl hunting. Hunting use is primarily facilitated by motorized boating during ‘wet’ conditions. Open water areas of the refuge vary considerably during most years with the flooding of bottomland hardwoods. Non-motorized boating is a minor use of the refuge and is used in association wildlife observation and photography.

(b) Where would the use be conducted?

The use would be conducted in open waters of the refuge which can significantly expand with seasonal flooding associated with Overflow Creek and other creeks and sloughs. During periods of flooding, boating is the primary ‘means’ of accessing the refuge. By regulation, all of the refuge is open to boating except where a portion of the refuge is seasonally closed as a waterfowl sanctuary. The sanctuary is closed November 1 – April 1 and July 1 – August 31. During periods of flooding, as much as 90 percent of the 13,973-acre refuge is inundated with water and at least marginally negotiable by motorized boating. Motorized boating is considered essential to support the priority public use of hunting (waterfowl). Non-motorized boating would also be allowed in order to enhance priority uses including wildlife observation, photography, and environmental education and interpretation. This use (boating) is mostly associated with waterfowl hunting, the single largest refuge use which accounts for about 85 percent of the 15,000 annual visits.

(c) When would the use be conducted?

The use would be conducted primarily during waterfowl season (e.g. mid-November – January 31); however, users may use boats year around (as water conditions permit), except within the waterfowl sanctuary areas. The sanctuary areas are closed to the public from November 1- April 1 and July 1 – August 31.

(d) How would the use be conducted?

Access for boating is primarily via two boat ramps. Refuge boat ramps and access areas throughout the refuge can be found by consulting the annual Refuge Public Use Regulations brochure. Boating on the refuge is focused around waterfowl hunting. Other priority uses utilizing boats include wildlife observation, photography, and environmental education and interpretation. These uses are largely incidental at this time. Furbearer trapping will also likely

be facilitated by boating. It is likely that non-consumptive recreational uses will increase as refuge opportunities become more widely known by the public and public use staff levels are increased.

(e) Why is this use being proposed?

Hunting was identified as a public concern when the refuge was being established. Local residents identified hunting as important and traditional activity. Boating is a traditional ‘means’ of participating in waterfowl hunting. With the CCP/EA process in 2010, the refuge included appropriate use and compatibility determinations facilitating the approval of power boating. This use was identified as needed to facilitate waterfowl hunting, primarily. Non-motorized boating use was not addressed at this time since the use was not actively participated in. With a recent emphasis on other non-consumptive recreational uses like wildlife observation, photography, and environmental education and interpretation, non-motorized boating is also being proposed.

(f) Why is the use being reevaluated?

The mandatory 10-year Re-evaluation date for this use is September 21, 2020. Power boating was approved during the CCP/EA process (Felsenthal and Overflow NWR CCP 2010). This use was required to adequately support other approved uses including hunting, wildlife observation, photography, and environmental education and interpretation. Other approved uses dependent on boating included furbearer trapping. The refuge remains one of the most popular destinations in the area for waterfowl, big game, squirrel, and turkey hunting. Along with motorized boating, non-motorized boating is being proposed under this Re-evaluation. Non-motorized boating would be open to the same areas and timing as described above. It is likely that a small number of visitors will take advantage of non-motorized boating for hunting, wildlife observation, photography, and environmental education and interpretation. The impacts of non-motorized boating will likely be far less to wildlife and habitat than motorized boating since the use will be small and there is little associated noise disturbance.

AVAILABILITY OF RESOURCES

Staff time to review, manage, and monitor the use occur when the use is required to be re-evaluated or when negative impacts are identified or significant environmental changes have occurred. The addition of non-motorized boating is not expected to increase refuge resources required for the administration and management of the use. Up to now, no issues have been identified that require a non-routine re-evaluation or further EA processes. Monitoring of the use is carried out by refuge staff and refuge law enforcement officers associated with their normal duties. Facilities and/or materials needed to support this use include maintaining access roads, parking areas, gates, roadside pull-offs, kiosks, signs, boat launching areas, and providing information in refuge publications and the refuge’s website. By far, the use of these facilities is directly related to existing uses primarily hunting. Hunting related facilities receive the majority of refuge visits.

Maintenance costs for signage, road, and boat ramp maintenance for boating activities is not increased for the refuge as this use is the same maintenance required for other existing (approved) on-going recreational uses – hunting, furbearer trapping, wildlife observation, photography, and environmental education and interpretation. Allowing the use of boating is consistent with the level of resources available to administer the refuge visitor services program. This determination is subject to the current public participation level and complexity of refuge recreation programs. If public participation changes or complexity increases, additional funding for visitor service improvements may be available from challenge cost-share projects, grant funds, and contributions. Compliance with refuge regulations is handled within the regular duties of the refuge law enforcement officer(s). Volunteers and partners will be utilized to help with construction and maintenance of roads and boating facilities. This use is on-going and occurs at relatively high levels since it is closely tied to hunting. This level of participation has not required staff to expend additional time or resources above that currently expended since the use is largely embedded in the existing recreational programs.

The administration and maintenance related to this use will not materially interfere with or detract from fulfillment of the refuge purpose(s) and the national wildlife refuge mission.

ANTICIPATED IMPACTS OF THE USE:

This is a reevaluation of an existing use, plus the addition of non-motorized boating. Power boating use was evaluated during the CCP process in 2010 with appropriate use and compatibility determination documents completed and reviewed by the refuge and regional office (FWS). Due to its nature, non-motorized boating is an appropriate additive to the previously approved use of power boating. It is likely that non-motorized use will be minimal and the use is generally of a less disturbing (to wildlife) nature. During the development of these initial CDs for boating, public review of the uses occurred prior to the approval of the CCP and Environmental Assessment (EA) under the requirements of the National Environmental Policy Act (NEPA). A Finding of No Significant Impact (FONSI) was issued September 21, 2010.

Thus, the use of power boating was fully described and evaluated in 2010 with the completion of the CCP and EA. These uses are closely tied to the priority recreational uses of hunting, wildlife observation, photography, environmental education and interpretation.

Boating will, no doubt, have a negative effect on wildlife through disturbance (primarily), though there are other minor effects including increased litter and some water pollution from exhaust gases and spilled fuel. Boaters have almost year around access to the refuge (depending on water levels and seasonal closed areas). However, a waterfowl sanctuary has been established by public use regulation and signage to provide waterfowl with areas closed to public access (seasonally). This affords migrating and wintering waterfowl with large, disturbance free areas for feeding and resting. Accessing boat launching facilities utilizing refuge roads will also cause a minor amount of wildlife disturbance. While it is clear that adverse impacts to wildlife will occur, refuge staff will monitor this use to quickly identify any changes that lead to significant adverse impacts to wildlife and habitat. If it is found during monitoring that the level of use has significantly increased and/or impacts to wildlife have significantly increased, refuge staff will reevaluate this use and consider implementing additional measures to reduce wildlife impacts.

Numerous studies have been completed that examined the effects of recreation on wildlife resources (Klein, Humphrey, and Percival 1995), and (Taylor and Knight 2003). A classic case illustrating the conflicts between boaters and waterfowl was described in “Wildlife Values Versus Human Recreation: Ruby Lake National Wildlife Refuge (Bouffard 1982). In this study it was determined that recreational boating had a significant negative impact on nesting waterfowl. Changes in boating regulations were implemented to reduce impacts to nesting waterfowl. The USFWS Waterfowl Management Handbook 13.2.15 contains a section on “Human Disturbances of Waterfowl: Causes, Effects, and Management (Korchegen and Daulgren 1992). Boating was identified as a disturbance to waterfowl primarily through noise and rapid movement. Further, this disturbance was noted to have impacts on waterfowl migration patterns. Disturbance to bald eagles was studied in 2002 (Grubb Robinson, and Bowermain 2002) in relation to recreational boating. Boating was found to be disturbing to nesting bald eagles with the prime factor being distance to the nest from the boat to the nest site. A similar refuge environment to Felsenthal National Wildlife Refuge is the Upper Mississippi River National Wildlife Refuge. A report on disturbance of waterfowl by boaters on the Upper Mississippi River Refuge determined that boating disturbance caused increased energy expenditures by waterfowl. It also determined that hunting and fishing are the two main recreation activities disturbing to waterfowl (Rasmussen and Simpson 2010). The impacts of boating have also been studied related to fish. Noise disturbance to largemouth bass from motorized boating was documented in 2008 (Graham and Cooke 2008). Waterbird behavior and the effects from motorized boating was studied (Rodgers and Schwikert 2002) with a determination that adverse behavior varied by species. In this study, buffer areas were suggested to be 180 meters for wading birds to reduce impacts.

The degree of wildlife disturbance is predicated on the species, time of year, behavioral activity, level of visitation, boat type, boat operator, and the juxtaposition between boaters and wildlife. The refuge expects that boating will have some direct short-term and long-term impacts on wildlife utilizing the refuge. Short-term impacts are immediate responses to disturbance from boating. Long-term impacts may occur with changes in habitat usage with regular daily disturbances. Cumulative impacts are not expected. While significant wildlife disturbance by recreational boating activity is expected, the impacts are mitigated with a regulation that prohibits boat motor’s greater than 25 horse power, the establishment of waterfowl sanctuaries, and diverse access locations distributed throughout the refuge. These uses are further justified by the need to meet priority recreational uses including hunting, wildlife observation, photography, and environmental education and interpretation.

Waterfowl are a priority species of management concern for the refuge. Thus, a waterfowl sanctuary has been established by regulation to protect waterfowl during the winter. This sanctuary also provides undisturbed areas for waterbirds, American bald eagle, and other important migratory birds. Sanctuary areas are designated through regulation, signage, and followed up with law enforcement to allow waterfowl to have undisturbed access and sanctuary conditions on these areas during critical winter months. Objectives for waterfowl and waterbirds are described in the 2010 CCP/EA. The establishing purposes of the refuge include providing appropriate recreational uses for the public. These uses include hunting, wildlife observation,

photography, and environmental education and interpretation – boating is an important ‘means’ for the public to fully participate in these uses.

This use is not expected to impact refuge purposes, the NWRS mission, or refuge management goals and objectives. The use is also not expected to significantly impact wildlife, plants or their habitats; cultural resources; other refuge resources; biological integrity, diversity, and environmental health of the refuge and the NWRS; priority public uses; other public uses; and public safety.

PUBLIC REVIEW AND COMMENT:

This use will be available for a 14-day public commenting period. The draft CD will be posted at the Felsenthal National Wildlife Refuge Headquarters, the refuge’s official website, and in the local newspaper.

DETERMINATION (CHECK ONE BELOW):

USE IS NOT COMPATIBLE

USE IS COMPATIBLE WITH FOLLOWING STIPULATIONS

NEPA Compliance for Refuge Use Decision: Place an X in appropriate space.

Categorical Exclusion without Environmental Action Statement
516 DM 8, 8.5 (7) Minor changes in the amounts or types of public use on Service or State-managed lands, in accordance with existing regulations, management plans, and procedures.

Categorical Exclusion and Environmental Action Statement

Environmental Assessment and Finding of No Significant Impact

Environmental Impact Statement and Record of Decision

LITERATURE CITED:

Klein, M. L., Humphrey, S. R., and Percival, H. F. 1995. Effects on Ecotourism on Distribution of Waterbirds in a Wildlife Refuge. Conservation biology Vol. 9 Issue 6, pages 1454-1465.

U.S. Fish and Wildlife Service, Region 4, Southeast Region, Fesenthal and Overflow Comprehensive Conservation Plan. October 2010.

Bouffard, S. H., Wildlife Values versus Human Recreation: Ruby Lake National Wildlife Refuge. U.S. Fish and Wildlife Service. Transactions of the Forty-Seventh North American Wildlife and Natural Resources Conference, ed. 1982.

Graham, A. L., and Cooke, S. J., 2008. Effects of Noise Disturbance from various Recreational Boating Activities common to Inland Waters on the Physiology of a Freshwater Fish, the Largemouth Bass (*Micropterus salmoides*). *Aquatic Conservation* Vol 18, Issue 7 pp. 1315 - 1324.

Korchegen, C. E., and Daulgren, R. B. 1992. Human Disturbances of Waterfowl: Causes, Effects, and Management. U.S. Fish and Wildlife Service, *Waterfowl Management Handbook* 13.2.15.

Grubb, T. G., Robinson, W. L., and Bowerman, W. W. 2002. Effects of Watercraft on Bald Eagles nesting in Voyageurs National Park, Minnesota. *Wildlife Society Bulletin* (Spring 2002) Vol. 30, No. 1 pp. 156 -161.

Rasmussen, H., and Simpson S. 2010. Disturbance of Waterfowl by Boaters on Pool 4 of the Upper Mississippi River National Wildlife Refuge. *Journal – Society and Natural Resources* Vol. 23, Issue 4, pp. 322-331.

Rodgers, J. A. Jr., and Schwikert, S. T., 2002. Buffer-Zone Distances to Protect Foraging and Loafing Waterbirds from Disturbance by Personal Watercraft and Outboard Powered Boats. *Conservation Biology*, Vol. 16, Issue 1.

STIPULATIONS NECESSARY TO ENSURE COMPATIBILITY:

1. Enforcement of refuge regulations and state and federal boating regulations.
2. Continued seasonal closure of waterfowl sanctuary areas to all public entry will minimize disturbances to wildlife.
3. Motorized land vehicles are required to remain on designated roads only.
4. Refuge staff will periodically review the level of use and revise the conditions under which this activity can be continued and if necessary eliminate any significant impacts.
5. Boats and other personal belongings are not allowed to be left on the refuge overnight.
6. Personal watercraft are not permitted.
7. Boat motors are restricted to 25 horse power or less.

JUSTIFICATION:

Boating – motorized and non-motorized provide a ‘means’ of participating in refuge priority public recreational uses: hunting, wildlife observation, photography, and environmental education and interpretation. These recreational uses are priority uses for national wildlife refuges where compatible. Boating is primarily utilized on the refuge by hunters which make up the vast majority of visits to the refuge each year (approximately 15,000). This recreational use

(power boating) was determined to be compatible during the CCP/EA process in 2010. Non-motorized boating is added to this previously approved use as a natural inclusion that should result in little (if any) additional impact. Thus, the use of boats to participate in recreational uses has previously been approved. Environmental conditions for the use of boats has not changed since the completion and approval of the CCP/EA in 2010. Monitoring of boating use has also continued through refuge operations and law enforcement activities.

As described above, wildlife on the refuge will be negatively impacted by boating, particularly motorized boating. However, the size of the refuge and diverse locations and use of boat ramps that access the refuge will distribute boating use in such a way that wildlife disturbance is much reduced. A major action taken by the refuge to lessen the impacts of boating is a restriction on boat motor size and the creation of the waterfowl sanctuary. This sanctuary is closed to the public (boating) from November 1 through April 1 and July 1 through August 31. This area provides an undisturbed area for feeding and resting for waterfowl as well as a wide variety of waterbirds.

The use of motorized boats is a longstanding traditional use on the refuge. Boat use is essential as a mode of transportation for priority public uses such as hunting. Commitments were made during public meetings associated with establishment of the refuge that such uses will continue to be allowed even though they may have to be regulated. Hunting, furbearer trapping, wildlife observation, photography, and environmental education and interpretation are uses that require boating activity as a 'means' to fully participate. Waterfowl hunting, in particular, is dependent on boating for a quality recreational experience. The refuge purposes and CCP objectives as well as the mission of the NWRS describe a condition that includes recreational uses on the refuge that allow the public to participate in recreation as well as prioritizing wildlife. As described above, this use (boating) will not materially detract with or interfere with the purpose(s) of the refuge or the mission of the NWRS.

**SIGNATURE: REFUGE
MANAGER:**_____

(Signature and date)

**REVIEW: REGIONAL COMPATIBILITY
COORDINATOR:**_____

(Signature and date)

**REVIEW: REFUGE
SUPERVISOR:**_____

(Signature and date)

**CONCURRENCE: REGIONAL
CHIEF:**_____

(Signature and date)

MANDATORY 10- OR 15-YEAR REEVALUATION DATE:
