

COMPATIBILITY DETERMINATION

Use: Fishing

Refuge Name: Swan Lake National Wildlife Refuge (NWR)

Establishing and Acquisition Authorities: Executive Order 7563 established Swan Lake National Wildlife Refuge on February 27, 1937.

Refuge Purposes:

- "... as a refuge and breeding ground for migratory birds and other wildlife: ..." Executive Order 7563, dated Feb. 27, 1937
- "... for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. 715d (Migratory Bird Conservation Act)
- "... particular value in carrying out the national migratory bird management program." 16 U.S.C. 667b (An Act Authorizing the Transfer of Certain Real Property for Wildlife)

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:

Is the use a priority public use?

Fishing is a priority public use of the National Wildlife Refuge System.

Where would the use be conducted?

All Refuge waters are open to fishing consistent with State and Refuge regulations. Most fishing occurs on Silver Lake, but some fishing also occurs on Refuge streams.

When would the use be conducted?

Refuge regulations (2008) permit fishing during daylight hours from early March through late October. The area known as Taylor Point is open to fishing year-round during daylight hours. The area can be accessed by a Refuge gravel road that comes off State Highway E. Bank fishing is all that is allowed along the shore of Silver Lake that is adjacent to the Refuge Road and 200 yards up or down Elk Creek from the parking area at the end of the Refuge Road.

How would the use be conducted?

Three fishing piers and a boat launch provide fishing access to Silver Lake. Refuge regulations call for no wake on Silver Lake and non-motorized boats on all other Refuge waters. Bank fishing is permitted along all Refuge waters. The Refuge recorded 1,000 fishing visits in 2007.

Why is this use being proposed?

Fishing is a priority general public use of the Refuge System. The Service recognizes fishing as a traditional outdoor pastime, deeply rooted in the American heritage (USFWS 2006b). Fishing programs promote understanding and appreciation of natural resources and their management on all lands and waters in the Refuge System. Public fishing opportunities are also available nearby on the 7,100-acre Fountain Grove Conservation Area administered by the Missouri Department of Conservation and at the 3,500-acre Pershing State Park administered by the Missouri Department of Natural Resources.

Availability of Resources

What resources are needed to properly (considering quality and compatibility) and safely administer use?

The present Refuge fishing program is designed to be administered with minimal Refuge resources. Refuge regulations mirror State regulations in large part, which allows Missouri Department of Conservation Officers to assist in law enforcement. There is a small amount of maintenance, mowing, and other upkeep at boat launching facilities that is funded as part of regular Refuge management activities. Approximately \$300 annually is required for labor and materials to update and print maps, and maintain signs.

Are existing Refuge resources adequate to properly and safely administer the use?

At the present level of fishing use there are adequate Refuge resources to implement the fishing program. Law enforcement is the primary tool necessary to ensure proper and safe administration of this use, and although there is no Law Enforcement Officer stationed at the Refuge, law enforcement services are available through the Regional Law Enforcement Program. State Conservation Officers also patrol the Refuge and provide additional law enforcement support.

Anticipated Impacts of the Use:

How does fishing affect Refuge purposes and the NWRS mission?

The fishing program on the Refuge helps fulfill the NWRS mission and does not detract from the ability to fulfill Refuge purposes. The Refuge was established to provide habitat for migratory birds and other wildlife. Fishing conducted in accordance with State and Refuge regulations does not adversely affect the ability of the Refuge to fulfill this purpose. Fishing is a priority public use of the Refuge System and allowing fishing on the Refuge helps fulfill the Refuge System mission.

How does fishing affect fish, wildlife, plants, and their habitats; and the biological integrity, diversity, and environmental health of the Refuge/NWRS?

Fish and Fish Habitat

Fishing is not expected to adversely affect fish populations and fish habitat within the Refuge. Conserving a diversity of fish and their habitat is included in one of the goals of the NWRS (USFWS 2006a). But the focus is on maintaining populations not individuals (USFWS 1992). Fishing does cause mortality and wounding of individuals within a fish

population, but fishing is regulated so it does not threaten the perpetuation of fish populations. The effects of fishing on fish populations are monitored by the Missouri Department of Conservation and are considered in setting annual limits.

Wildlife and Wildlife Habitat

In *Managing Visitor Use and Disturbance of Waterbirds: A Literature Review of Impacts and Mitigations* DeLong (2002) includes a summary of effects on wildlife from disturbance from fishing and other forms of recreation. The author documents that disturbance can alter behavior (e.g. foraging time), population structure, and distribution patterns of wildlife. It is probable that fishing would cause some or all of these effects to some degree on Refuge wildlife. A number of Refuge regulations mitigate these effects. Much of the Refuge is not affected because fishing is limited to lakes and streams.

The cumulative disturbance caused by fishing activity and all other public uses occurring on the Refuge is not expected to adversely affect fish and wildlife populations or their habitats. A number of factors including suitable site conditions, presence of facilities, access limitations, and seasonal restrictions or other regulations tend to concentrate uses. At any one time, much of the Refuge is unaffected by these uses and is free of disturbance.

Biological Integrity, Diversity, and Environmental Health

Fishing conducted in accordance with State and Refuge regulations is not expected to adversely affect fish and wildlife populations or the biological integrity, diversity, and environmental health of the Refuge as it is defined in Service policy (USFWS 2001).

Other Uses and Public Safety

Fishing is not expected to adversely affect other Refuge uses or public safety. As public use levels on Swan Lake NWR expand over time, unanticipated conflicts between user groups may occur. The Refuge's Visitor Services programs would be adjusted as needed to eliminate or minimize each problem and provide quality wildlife-dependent recreational opportunities that include promoting public safety. Experience on many National Wildlife Refuges has proven that time and space zoning (e.g., establishment of separate use areas, use periods, and restrictions on the number of users) is an effective tool in eliminating conflicts between user groups. Overall, the cumulative impact of fishing on other wildlife-dependent recreation or public safety at Swan Lake NWR is expected to be minor.

Public Review and Comment:

This compatibility determination was part of the Swan Lake NWR Draft Comprehensive Conservation Plan and Environmental Assessment. Public notification and review included a notice of availability published in the Federal Register, a 30-day comment period, local media announcements, and a public meeting near the Refuge. Comments received and agency responses are included in the final version of the Swan Lake NWR Comprehensive Conservation Plan.

Determination (check one below):

Use is Not Compatible
 Use is Compatible with Following Stipulations

Stipulations Necessary to Ensure Compatibility:

1. Fishing must be conducted in accordance with State and Federal regulations and special Refuge regulations.
2. Fishing may be more restrictive than State seasons and regulations to ensure compliance with visitor safety and to reduce wildlife disturbance.
3. Use of air boats is prohibited.
4. Fishing is prohibited within identified areas.

Justification: In view of the above and with the stipulations previously described, fishing will not materially interfere with or detract from the NWRS mission or purposes of the Refuge. Fishing is a priority public use of the Refuge System and providing a fishing program contributes to achieving one of the Refuge goals. Fishing seasons and limits are established by the Missouri Department of Conservation and adopted by the Refuge. These restrictions help ensure the continued well-being of fish populations. Fishing is not expected to adversely affect the biological integrity, diversity, and environmental health of the Refuge or the Refuge System.

Refuge Manager: Steve Whitson 2-3-11
(Signature and Date)

Concurrence:
Regional Chief: Rick Schuff 2/15/11
(Signature and Date)

Mandatory 10- or 15-year Re-Evaluation Date: 2026

References:

- DeLong, A. K. 2002. Managing visitor use and disturbance of waterbirds — a literature review of impacts and mitigation measures — prepared for Stillwater National Wildlife Refuge. Appendix L (114 pp.) *in* Stillwater National Wildlife Refuge Complex final environmental impact statement for the comprehensive conservation plan and boundary revision (Vol. II). Dept. of the Interior, U.S. Fish and Wildlife Service, Region 1, Portland, OR. Available URL: <http://www.fws.gov/stillwater/litreview.pdf>
- U. S. Fish and Wildlife Service. 1992. Population Management at Field Stations: General. 701 FW 1. Department of Interior. Available URL: <http://www.fws.gov/policy/701fw1.html>
- U. S. Fish and Wildlife Service. 2001. Biological integrity, diversity, and environmental health. 601 FW 3. National Wildlife Refuge System, Department of Interior. Available URL: <http://policy.fws.gov/601fw3.html>
- U. S. Fish and Wildlife Service. 2006a. National Wildlife Refuge System Mission and Goals and Refuge Purposes. 601 FW 1. National Wildlife Refuge System, Department of Interior. Available URL: <http://www.fws.gov/policy/601fw1.html>
- U. S. Fish and Wildlife Service. 2006b. Wildlife-Dependent Recreation: Fishing. 605 FW 3. National Wildlife Refuge System, Department of Interior. Available URL: <http://www.fws.gov/policy/605fw3.html>