

# **Draft Compatibility Determination**

## **Title**

Draft Compatibility Determination for Non-commercial and Special Events Fishing  
Mingo National Wildlife Refuge

## **Refuge Use Category**

Fishing

## **Refuge Use Type(s)**

Fishing (non-commercial and special events)

## **Refuge**

Mingo National Wildlife Refuge

## **Refuge Purpose(s) and Establishing and Acquisition Authority(ies)**

“...for the use as an inviolate sanctuary or for any other management purpose, for migratory birds” 16 U.S.C. § 715d (Migratory Bird Conservation 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, 460k-460k-4 (Refuge Recreation Act)

“... to secure for the American people of present and future generations the benefits of an enduring resource of wilderness...wilderness areas... shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness...” 16 U.S.C. §1131 (Wilderness Act)

## **National Wildlife Refuge System Mission**

The mission of the National Wildlife Refuge System, otherwise known as 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 (Pub. L. 105-57; 111 Stat. 1252).

## **Description of Use**

Is this an existing use?

Yes. This compatibility determination reviews and replaces the 2006 compatibility determination for Fishing (non-commercial) and Fishing (special events). Non-commercial fishing has been conducted on the refuge since the 1940s and was evaluated in conjunction with the 2007 Comprehensive Conservation Plan (U.S. Fish and Wildlife Service, 2007, 2006). This use is being reevaluated at least every 15 years per policy. There are no use changes to the existing fishing program occurring under this re-evaluation. The use is consistent with the 2007 Comprehensive Conservation Plan and associated Environmental Assessment and Finding of No Significant Impact (U.S. Fish and Wildlife Service, 2007, 2006).

What is the use?

Fishing (non-commercial) is defined as the harvest of fish, shellfish, or other aquatic organisms for recreational purposes and/or personal consumption (includes collection of bait for personal use) in accordance with State seasons and regulations. Fishing (special events) is defined as the educational or other special fishing events, including clinics and excluding tournament fishing. Neither of these uses are considered refuge management economic uses as defined in U.S. Fish and Wildlife Service policy, 603 FW 2.6.

Is the use a priority public use?

Yes, this is a legislated priority wildlife-dependent public use of the National Wildlife Refuge System.

Where would the use be conducted?

Open water on the refuge includes 387 acres of open water and 77 miles of ditches, streams, and river (U.S. Fish and Wildlife Service, 2011a). Fishing will be available year-round on Red Mill Pond, Mingo River (south of Ditch 6 Road), Stanley Creek, May Pond, Fox Pond, Hartz Pond, Binford Unit, and Ditches 1, 2, 3, 10, and 11. Seasonal fishing is allowed from March 1–September 30 on all refuge waters (Refuge Specific Regulations for Hunting and Fishing, Mingo National Wildlife Refuge, 2021). Entry and use of all or portions of the refuge may be temporarily posted and closed to fishing by the refuge manager when it may conflict with competing goals of the wildlife refuge (managed hunts, feral hog removal and wildlife disturbance). Fishing predominately occurs from non-motorized and motorized boats; however, bank fishing does occur. Motorized boats are prohibited on waters within the wilderness area. Access for fishing occurs through boat ramps located on Flatbanks Road, Bluff Road, May Pond, and Fox Pond, and from parking lots, pull-outs, and trails maintained by refuge staff. Participants should reference the latest refuge brochure to see the most up to date

map available at kiosks, online, and at the refuge visitor center (U.S. Fish and Wildlife Service, 2019). Fishing events are held at locations on the refuge that can support larger groups and include but are not limited to Binford Pond, May Pond, Fox Pond, and the Mingo River. No fishing events occur within the wilderness area.

### When would the use be conducted?

Seasonal use from March 1 through September 30 is allowed on all refuge waters. Year-round use is allowed on specific refuge waters that limit wildlife disturbance during high-use months. See the where is the use conducted section for specific location details. Anglers are allowed to take state-defined nongame fish (Other Fish, 2021) by seines and nets for personal use only from March 1–September 30. No night fishing is allowed as fishing on the refuge is allowed from ½ hour before legal sunrise to ½ hour after legal sunset (Refuge Specific Regulations for Hunting and Fishing, Mingo National Wildlife Refuge, 2021). The take of specific fish species on the refuge are subject to the seasons defined by the Missouri Department of Conservation (Wildlife Code: Sport Fishing: Seasons, Methods, Limits, 2021) and through refuge-specific regulations. Refuge-specific regulations are defined in the Code of Federal Regulations under 50 U.S.C. Part 32.5 and 32.44(f).

Fishing events are held occasionally, one to three times per year. Time of year varies. The scheduling of fishing events is such that they do not conflict with other concurrent uses. These events normally occur on Saturday in spring, summer, or fall.

### How would the use be conducted?

Approximately 9,600 visitors fish annually on the refuge (U.S. Fish and Wildlife Service, 2020). Group size for fishing events is limited by the amount of parking and water access at each site. Peak seasons are spring and fall, but fishing occurs year-round. Fishing activity is dispersed throughout the day and throughout the refuge waters. All parking areas that support dispersed fishing and fishing events are gravel surface. Fishing regulations at the refuge follow the State of Missouri fishing regulations for impounded waters (Wildlife Code: Sport Fishing: Seasons, Methods, Limits, 2021) and refuge-specific regulations and limits the traditional taking of fish to rod and reel from shore or boat, trotlines, limb lines, bank lines, and jugs from ½ hour before legal sunrise until ½ hour after legal sunset. Anglers must mark each line with their conservation identification (ID) number. All recreational fishing use at the refuge is limited to the taking of fish, common snapping turtle (*Chelydra serpentina*) and softshell turtles (*Apalone* sp.), the take of all other aquatic species (frogs, crawfish, and mussels) is prohibited. Take of common snapping turtles and softshell turtles is limited to use of only pole and line. All anglers must immediately release alligator

snapping turtles (*Macrochelys temminckii*) as per State regulations. On May and Fox Pond, only pole and line method is allowed. Bow fishing is prohibited. From March 1 through September 30, we allow anglers to take state-defined nongame fish by nets and seines for personal use only. Anglers must attend trammel and gill nets at all times and plainly label them with the angler's conservation identification (ID) number. No commercial fishing is allowed. Recreation may occur from the shoreline or by motorized or non-motorized boat; electric trolling motors (only form or motorized boats allowed) are permitted for use outside of the Mingo Wilderness Area which is delineated in brochures and by signage. All watercraft will be removed from the refuge at the end of each day's activity. The Flatbanks, Bluff Road, May Pond, and Fox Pond boat ramps can accommodate approximately 6 vehicles or 3 boat trailers each. Bank fishing along Flatbanks Road and the Mingo River can accommodate approximately an additional 12 vehicles at pull off sites. Binford Pond can accommodate at least 50 vehicles. Bank fishing is dispersed along 77 miles of ditches, streams, and river where water is accessible and pull-offs or walk-in access allows. Access can also occur from many hand launching areas on the refuge. See the refuge brochure for the most up to date locations. Refuge staff and volunteers will organize and staff special programs and events. For fishing special events, fishing equipment and educational materials will be available for public use. Fishing events are scheduled and advertised to the public or set up as programs for a specific group. Event participation ranges from 10-50 people and is composed of youth age 15 and younger or all ages with a focus on family groups. Fishing during events may be catch-and-release or will follow regulations for state limits. Participation may be capped by pre-registration if infrastructure or equipment is limited, or public interest exceeds facility capacity. Events will not be a competition for monetary or other prizes.

Additional fishing access and facilities may be increased as outlined in the Comprehensive Conservation Plan (U.S. Fish and Wildlife Service, 2007) and the Visitor Services Plan (U.S. Fish and Wildlife Service, 2011b).

Why is this use being proposed or reevaluated?

This use is being reevaluated because the 15-year renewal period ends in 2021 (603 FW2.11 H). There are no administrative changes to the way this use has previously been conducted on the refuge.

### **Availability of Resources**

The analysis of cost for administering and managing each use will only include the incremental increase above general operational costs that we can show as being

directly caused by the proposed use.

*Special equipment, facilities, or improvements necessary to support the use:* Facilities that are already present (boat ramps, parking lots, signs) will support the use. The refuge will increase and improve fishing access as necessary and as funds are available through the establishment of new infrastructure such as accessible fish piers, docks, and additional boat launches. However, existing refuge resources are adequate to properly and safely administer the use with existing infrastructure and facilities. Infrastructure and facilities improvements would be a one-time cost that varies depending on the cost of materials. Recurring annual expenses to maintain infrastructure and facilities are covered within existing refuge budget. The refuge maintains a supply of fishing equipment and educational materials provided by the Mingo Swamp Friends for check-out by individuals and families for use on refuge and for fishing special events. Volunteers from the Mingo Swamp Friends maintain and repair fishing equipment averaging 10-15 hours on an annual basis.

*Maintenance costs:* Roads, parking lots, trail maintenance, mowing, cleaning, and repair are part of the managing station's funding. These costs are part of routine maintenance of public use areas.

*Monitoring costs:* Refuge biology program staff spends approximately 1% of their time monitoring this use. State partners at the Missouri Department of Conservation are the primary party monitoring fish populations and health on the refuge.

*Offsetting revenues:* Approximately \$12-15,000 is collected annually from daily and annual passes purchased by visitors as part of the Federal Lands Recreation Enhancement Act. Typically, a portion of these recreation fee funds are spent to employ a temporary park ranger who works on fishing activities along with all other public use activities. Donations by Mingo Swamp Friends will be used to aid in maintenance and improvement as needed.

Numerous facilities are currently present to provide access to anglers including existing networks of roads, parking lots, boat ramps and signage. The refuge provides staff and funding to maintain facilities, disseminate information to visitors and enforce regulations as a part of routine management duties. The biologist and biological program will continue to aid in managing and monitoring aquatic species and work with the state to ensure sustainable levels of fish populations. Adequate resources are available to manage the existing fishing program at the current level of participation. It is not anticipated that the level of participation in fishing will increase

during the lifetime of this compatibility determination.

## **Anticipated Impacts of the Use**

Non-commercial and special events fishing were evaluated in the environmental assessment associated with the comprehensive conversation plan (insert date). Additionally, fishing has been evaluated through fishing plans (insert date(s)) and associated environmental assessments. In both cases fishing has been found to not significantly impact the human environment through Findings of No Significant Impacts. The analysis below is supplemental to the previous environmental effects described in those documents. The effects and impacts of the proposed use to refuge resources, whether adverse or beneficial, are those that are reasonably foreseeable and have a reasonably close causal relationship to the proposed use. Potential impacts of a proposed use on the refuge's purpose(s) and the Refuge System mission.

Recreational fishing has been a priority use on the refuge since the 1940s and has not shown significant impacts to the refuge, wildlife or habitat. Over the last 5 years, the refuge averaged an estimated 9,621 fishing visits per year (U.S. Fish and Wildlife Service, 2020). This trend is expected to continue over the lifetime of this compatibility determination. No substantial increase in angler visits is expected. Accommodating this wildlife-dependent use has and is expected to result in minimal impacts to the refuge.

### **Short-term impacts**

This compatibility determination includes the written analyses of the environmental consequences on a resource only when the short-term impacts on that resource could be more than negligible and therefore considered an “affected resource.” Air quality, floodplains, cultural resources, refuge management and operations, and socioeconomics are not further described as there would be no effects from fishing.

### ***Fish Species***

Although fishing causes mortality to fish and turtles, season dates and limits are set with the long-term health of populations in mind. Populations of most species are regularly monitored by state agencies and USFWS fisheries staff and have determined that a controlled sport fishing harvest would not adversely affect overall fish population levels. Supplemental stocking of catfish, bass, bluegill and crappie occurs as needed to ensure population levels are maintained in a healthy balance. Species commonly fished include crappie, bluegill, bass, catfish, and bowfin. Fishing events are predominately catch and release events resulting in minor impact to individual fish and no impact to the fisheries of the refuge.

### ***Wildlife and Aquatic Species***

Temporary disturbance to wildlife may result from fishing activity including non-

motorized and electric-motor boat usage and bank fishing. The activity is not expected to cause impacts because, at current use levels, there is sufficient refugia for wildlife adjacent to fishing areas. During fishing special events, there may be a temporary increase in concentration of users but should not cause more than a temporary disturbance during the event which typically lasts a few hours. All motor vehicle use associated with fishing is restricted to designated roads and parking areas which reduces disturbance to wildlife. Littering including trash, derelict fishing tackle and fishing line can potentially impact wildlife, but existing resources and maintenance are used to mitigate this impact. Fishing is not permitted in popular waterfowl feeding and loafing areas during the waterfowl migration, this use will not be a source of disturbance to waterbirds concentrated in these areas. Areas where waterfowl concentrate in high numbers are not normally used as fishing areas during the open season.

### ***Threatened and Endangered Species***

Federally threatened and endangered species do occur on the refuge, but it is expected that this use will not conflict with recovery or protection of these species. There have been no traceable issues to date. The refuge supports the endangered Indiana bat and threatened northern long-eared bat. Temporary disturbance to listed bats may result from fishing activity including non-motorized and electric-motor boat usage and bank fishing. The activity is not expected to cause impacts because, at current use levels, there is sufficient refugia for listed bats adjacent to fishing areas.

The alligator snapping turtle is under proposal for listing as a threatened species and are known to occur on the refuge. Impacts to alligator snapping turtles include hook ingestion (Steen and Robinson 2017), entanglement and drowning (Frazer et al. 1990). There is no open season for alligator snapping turtles in Missouri and the turtles must be released unharmed whenever caught. By not allowing unattended fishing techniques on the refuge, such as, overnight trotlines, limblines, juglines, and banklines, impacts to the alligator snapping turtle may be reduced. The requirements for nets and lines to be attended while deployed will further reduce impacts to the species.

### ***Habitat and Vegetation***

Disturbance to terrestrial vegetation and wildlife may result from fishing activity on stream, pond, and ditch banks. Vegetation may be trampled during bank fishing activities or when visitors are gaining access to fishing areas. Trampling of vegetation is typically limited in area. Some aquatic vegetation may be disturbed in shallow areas during harvest. This disturbance is expected to be limited in scope and duration and habitat will recover annually from use.

### ***Geology and Soils***

Disturbance to habitat is minimal although some soil compaction and erosion can

occur along bank fishing areas. These impacts are generally localized and have little overall negative impact. Access points are subject to erosion from boat and canoe launching and parking, but cumulative impacts are minimal and managed with regular maintenance.

### ***Water Quality***

Current water quality concerns on the Refuge include increased surface runoff, erosion and sediment transport, mercury and agricultural chemicals (USFWS 2017). Boating is restricted to electric trolling motors in non-wilderness areas and no motors in wilderness area, which decrease effects of erosion and turbidity effects are minimal to non-existing. Electric motors do not result in leaking of gas or oil into the water reducing water quality impacts. Fishing activity and supporting boating activity is not expected to change the existing water quality on the refuge.

### ***Wilderness***

No motors or motorized vehicles are authorized in the 7,730-acre Wilderness Area which includes Stanley Creek, portion of the Mingo River, Monopoly Marsh, Ditch 4, Ditch 5, Ditch 6, and Ditch 10. Dispersed fishing is low-impact and low-concentration within the Wilderness Area and makes up a very small portion of the overall use. Bank and river fishing is expected to remain infrequent as considerable effort is required to reach fishing spots within the designated wilderness. This use is appropriate for wilderness area as it allows opportunity for primitive unrefined wilderness experiences and solitude. Continued recreational fishing within wilderness at current visitation rates is not expected to negatively impact wilderness character.

### ***Visitor Use and Experience***

Recreational fishing by individuals or small groups on the refuge may indirectly impact other recreational users as the use occurs concurrently in places of other recreation (boating, wildlife observation, photography). These indirect impacts are expected to be negligible. During managed hunts, all other wildlife-dependent recreation use is closed in the hunt area for safety. Organized fishing special events may temporarily impact other refuge users, but the use area for events is small in relation to the overall size of the refuge. Fishing events are not held during waterfowl hunting season or other times when other priority uses may be in conflict.

### ***Long-term impacts***

This compatibility determination includes the written analyses of the environmental consequences on a resource only when long-term impacts on that resource could be more than negligible and therefore considered an “affected resource.” Fish species/fisheries, wildlife and aquatic species, threatened and endangered species, habitat and vegetation, geology and soils, air quality, water quality, floodplains, wilderness, visitor use and experience, cultural resources, refuge management and



operations, and socioeconomics will not be more than negligibly impacted by the action and have been dismissed from further analyses.

## **Public Review and Comment**

The draft compatibility determination will be available for public review and comment for 15 days from March 23, 2022 to April 6, 2022. The public will be made aware of this comment opportunity through newspapers, postings at local libraries, and online communication such as on the refuge website. The State of Missouri has been asked to review and comment on the draft compatibility (Mense, 2021). A copy of this document will be made available electronically on the refuge website [fws.gov/refuge/mingo](https://fws.gov/refuge/mingo). Comments can be sent in by phone, email, or mail. Please let us know if you need the documents in an alternative format. Concerns expressed during the public comment period will be addressed in the final.

## **Determination**

Is the use compatible?

Yes

## **Stipulations Necessary to Ensure Compatibility**

1. This use must be conducted in accordance with state and federal regulations, and applicable special refuge regulations published in the refuge brochure and in Title 50 of the Code of Federal Register, 50 U.S.C. §32.5 and 50 U.S.C. §32.44(f).
2. Portions of the refuge are restricted during the waterfowl migration period to limit disturbance to large numbers of resting and feeding waterfowl.
3. At May Pond and Fox Pond, only pole or rod-and-reel methods are authorized.
4. Electric trolling motors are the only motors permitted for use; no motors are allowed to be possessed on waters inside of the Mingo Wilderness Area.
5. All alligator gar and alligator snapping turtles must be immediately released. Harvest of crayfish, frogs, and mussels is prohibited.
6. Refuge managed fishing events will only be conducted at a level that does not impact other management objectives and is within staff capacity.
7. Fishing events will be individually evaluated for impacts.
8. No commercial fishing events will be held on the refuge.

## **Justification**

In view of the above and with the provided stipulations implemented this use has been determined to be compatible at Mingo National Wildlife Refuge. Based on available science and best professional judgement, the Service has determined that recreational non-commercial fishing and fishing events, in accordance with the stipulations provided here, will not materially interfere with or detract from the purposes of the refuge or the mission of the National Wildlife Refuge System. Allowing this use supports the mission of the National Wildlife Refuge System by providing renewable resources for the benefit of the American public while conserving fish, wildlife, and plant resources on the refuge. Fishing is one of the six priority wildlife-dependent recreational uses identified in the National Wildlife Refuge System Improvement Act of 1997. As a priority use, the U.S. Fish and Wildlife Service directs us to provide recreational fishing opportunities when compatible with the original purpose of the refuge as a resting and wintering area for migrating waterfowl and other migratory birds. Fishing inherently provides visitors with education of native wildlife and habitat while fostering an appreciation for the Refuge Systems lands and waterways. Allowing recreational fishing is a goal for the refuge outlined in the Comprehensive Conservation Plan (U.S. Fish and Wildlife Service, 2007) and Visitor Services Plan (U.S. Fish and Wildlife Service, 2011b).

Fishing seasons and limits are established by state agencies and adopted by the refuge. These restrictions ensure the continued well-being of overall populations of fish. Fishing does result in the taking of many individuals within the overall population, but restrictions are designed to safeguard adequate population and recruitment from year to year. On-going habitat restoration and enhancement projects are also improving overall fish habitat and increasing the carrying capacity of the refuge for fish. Recreational and special event fishing, as outlined in this compatibility determination, would not conflict with the national policy to maintain the biological diversity, integrity, and environmental health of the refuge. Specific refuge regulations address equity and quality of opportunity for anglers and help safeguard refuge habitat. Disturbance to other fish and wildlife does occur, but this disturbance is generally local, short-term and does not adversely impact overall populations. Loss of plants or increases in water turbidity from boat motors is extremely minor to nonexistent. Necessary stipulations limit the effect of fishing on non-target wildlife species and natural habitats.

## **Signature of Determination**

Refuge Manager Signature and Date

## **Signature of Concurrence**

Assistant Regional Director Signature and Date

## **Mandatory Reevaluation Date**

2037

## **Literature Cited/References**

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