DRAFT COMPATIBILITY DETERMINATION

Uses: Commercial Trapping (Beaver, Muskrat)

Refuge Name: Patoka River National Wildlife Refuge and Management Area

Establishing and Acquisition Authorities and Refuge Purpose(s):

"... 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) (Emergency Wetlands Resources Act of 1986)

"... 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)

". (1) to protect, enhance, restore, and manage an appropriate distribution and diversity of wetland ecosystems and other habitats for migratory birds and other fish and wildlife in North America; (2) to maintain current or improved distributions of migratory bird populations; and (3) to sustain an abundance of waterfowl and other migratory birds consistent with the goals of the North American Waterfowl Management Plan and the international obligations contained in the migratory bird treaties and conventions and other agreements with Canada, Mexico, and other countries." 16 U.S.C. 4401-4413 (North American Wetlands Conservation Act)

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.” (National Wildlife Refuge System Administration Act of 1966, as amended [16 U.S.C. 668dd - 668ee.])

Description of Use(s):
What is the use?
This compatibility determination evaluates the commercial trapping of beaver (Castor canadensis) and muskrat (Ondatra zibethicus). Trapping will occur by private individuals operating under a "Commercial Use" refuge Special Use Permit. Commercial trapping is considered a refuge management economic activity or economic use. Commercial trapping is not a priority public use, as defined by the National Wildlife Refuge System Improvement Act of 1997, but rather serves as a management instrument for ensuring
priority habitat objectives are being addressed and infrastructure that supports wildlife dependent recreation and management stays intact. This is considered a new use on the refuge, however the use of trapping for management activities was evaluated during the comprehensive conservation planning process and was determined to be a viable management technique for controlling beaver.

Trap selection is based on best management practices evaluated by the Association of Fish and Wildlife Agencies that ensure the welfare of trapped animals, avoid unintended captures of other non-target animals and improve trapper safety. Based on best management practices that refuges across the Great Lakes region use, the refuge permits the following traps to be used on selected species:

1) Body-gripping Traps: Muskrats and Beavers

Permits will be issued to qualified individuals (see Stipulations) and will be limited based on management need. Trappers must carry the State trapping license and the commercial Special Use Permit while trapping. Trappers must also have attended the Indiana Trapper Education Course.

Refuge management may at any time, before or during the trapping season, halt or limit trapping on the refuge. Conditions of the Permit may be modified as needed; these changes will be made by an addendum which becomes part of the issued Permit. The Permit includes terms and conditions of trapping activity and requires each permit holder to keep a trapping log to be turned in at the end of the activity.

All vehicles are restricted to existing county roads or designated refuge access roads. Utility and all-terrain vehicles will not be permitted on refuge lands unless specified in the permit. Access by boat is permitted on waters owned by the refuge, following refuge regulations.

Where is the use conducted?
Trapping may occur anywhere on the refuge where beaver and muskrat are negatively impacting refuge, public or private infrastructure (levees, roads, structures), refuge habitats (bottomland hardwood forest, cropland, marsh) and nearby private lands (agricultural drainage). Location of trapping will be specified in each commercial special use permit issued.

When is the use conducted?
Trapping would occur during the established state of Indiana trapping seasons for each species. This will be evaluated on an annual basis and provided to the public to apply for permits in a timely manner. The seasons for 2020/2021 are listed below as a guideline. Trapping seasons are updated annually per state regulations.

Beaver November 15, 2020 -- March 15, 2021
Muskrat November 15, 2020 – January 31, 2021
How is the use conducted?

Trapping is conducted under the terms and conditions of the commercial permit issued by the refuge manager. Prior to the commercial permit being issued, an application will be completed by the requesting individual and submitted to the refuge manager for review. A limited number of qualified individuals will be permitted as needed to remove animals annually. The refuge will generate a list of qualified individuals from applications submitted by interested trappers. The list will be used sequentially and without prejudice when a need for trapping to occur has been identified.

Refuge staff will advise on the specifics of the permitted activity, including trapping method, targeted species, location and duration of the activity in each individual commercial special use permit. Each trapping method will follow State of Indiana trapping regulations, specifically related to trap size and types of allowable sets in order to protect non-target species. Trappers are only allowed to use body gripping traps under this compatibility determination. The state of Indiana allows for use of box traps and foothold traps for beavers and muskrats however they are not allowed on the refuge. Selected trappers will be allowed to target animals within predefined areas on Patoka River National Wildlife Refuge as identified by maps at the time the special use permit is issued authorizing removal.

Why is the use being proposed?

Beavers cause substantial issues/damage on Patoka River National Wildlife Refuge that may also affect nearby public and private lands. Examples of beaver damage include undermining roads, girdling trees, plugging water control structures, killing trees, flooding roads, and flooding private land. Refuge staff regularly hear from private landowners regarding beaver activity on the Refuge that impacts nearby off-refuge lands. Dams built or structures plugged on the refuge can cause impounding water on private land. The refuge has a responsibility to manage water that does not cause flooding issues to private land. When damage on the refuge or private land is documented then commercial trapping of beaver will be allowed.

Muskrat often burrow into roads, ditches and levees causing holes and cave-ins along refuge roads/levees. This damage increases maintenance costs, creates safety hazards to staff and the public and negatively affects water management.

Availability of Resources:

There is sufficient staff and funding available to provide commercial trapping on the refuge. Refuge personnel will determine if there are sites that need trapping, will select a trapper and prepare the commercial special use permit. On an annual basis, selecting a trapper or trappers and preparing the permit(s) will typically take less than two days, including an on the ground tour of areas to be trapped, if necessary. Staff assistance to enforce refuge rules and regulations includes shared law enforcement officers stationed at Muscatatuck National Wildlife Refuge and Conservation Officers with the Indiana Department of Natural Resources.
No station funds, other than salary, will be needed to administer the program.
• Special equipment, facilities, or improvements necessary to support the use: funded through regular management activities, no additional funding is needed.
• Maintenance costs: funded through regular management activities, no additional funding is needed. Allowing for trapping of beaver and muskrat could reduce maintenance cost of infrastructure repairs.
• Monitoring costs: Staff monitor usage of the refuge through current funding capacity, no additional funding is needed.
• Offsetting revenues: none

Anticipated Impacts of the Use(s): Short-term and Long-term Impacts:
Impacts of public trapping on the purposes of the refuge and mission of the Refuge System can be either direct or indirect and may have negative, neutral, or positive impacts on refuge resources.

Short and Long-term Impacts:
Potential effects will vary annually depending on the amount of trapping or trappers necessary. This will be determined based on resource conditions and management objectives. Generally, commercial trapping will have minimal impacts to non-target species and to short-term habitat conditions. Trapping activities may disturb non-targeted fish and wildlife and their habitats. For example, the presence of trappers can cause waterfowl to flush from resting and feeding areas, cause disruption to resident wildlife or negatively affect habitat through ground disturbance.

Trapping may occur on areas where other visitors are using the refuge. To make refuge visitors aware of the activity, signs may be installed to indicate that trapping occurs. The number of trappers on an annual basis is not expected to increase visitation to a point where conflict is expected to occur between users.

To reduce short-term negative effects, trappers will be limited in number, area and season of use through the issuance of a special use permit. Some level of disturbance is expected from trappers, especially if trappers enter areas closed to the public. Noise from vehicle use may temporarily disturb wildlife. However, disturbance (including altered behavior) of non-targeted species is expected to be localized and temporary in nature.

Long-term, positive benefits to refuge resources through the reduction in targeted species is expected. The reduction in beaver and muskrat populations is expected to reduce impacts to refuge infrastructure such as roads and levees. Reducing beaver population in specific areas will improve forest health by allowing better water management on the refuge.

Indirect and Cumulative Impacts:
Cumulative impacts may occur by trapping on the refuge. No negative cumulative impacts are expected as the refuge manager can minimize the potential for cumulative impacts through issuance of permits. The refuge manager retains the option to prohibit...
trapping on the refuge if it does not contribute to the purposes of the refuge or the mission of the Refuge System, is not needed to reach resource goals or causes undo resource disturbance or harm. The refuge manager may limit trapping occurring in a particular habitat, season, location and/or relative to a single species or species group to mitigate long-term and cumulative impacts.

Other refuge or visitor activities in the same area as trapping could cause cumulative disturbance to wildlife. However, overlapping activities can be controlled in time and space with the use of a permit.

Indirect impacts are expected to be a general improvement over time. A reduction in the long-term degradation of infrastructure and forested habitat by the removal of beaver and muskrats is expected. The local economy will benefit from trappers selling pelts and purchasing needed items for trapping. Adjacent landowners will benefit when areas are targeted along the refuge boundary.

Public Review and Comment:
The draft Compatibility Determination will be available for public review and comment for 15 days from November 4 through November 18. A press release will be sent to local media outlets in Pike and Gibson counties notifying the public of the comment period. The CD will be posted and made available online at https://www.fws.gov/refuge/patoka_river/. Please let us know if you need the documents in an alternative format. Comments received will be consolidated and agency responses will be included in the final version of this Compatibility Determination. Comments should be sent to heath_hamilton@fws.gov.

Determination (Check One Below):
☐ Use is not compatible
☒ Use is compatible with the following stipulations

Stipulations Necessary to Ensure Compatibility:
1. Indiana trapping laws apply.
2. Commercial trapping will only be conducted for management purposes as determined by the refuge manager or his/her designee.
3. Commercial trapping will occur via special use permit issued to qualified trappers.
4. Trappers must carry the State trapping license and the Special Use Permit while trapping.
5. Trappers must have attended the Indiana Trapper Education Course.
6. Special conditions will address unique local conditions. Maps will be issued as necessary.
7. All permits will be issued to meet specific habitat and wildlife objectives and contribute to purposes of the refuge.
8. All applications will be evaluated and only individuals considered expert will be issued a permit on a first come, first served basis.
9. Traps must be set to minimize interference with visitors. Only body gripping traps are allowed.
10. Traps must be checked daily.
11. The take of any other animal besides beaver and muskrat must be reported to refuge management on the same day.
12. Trappers will be required to provide a summary of catch after trapping is completed.

**Justification:**
Commercial trapping has been determined to be compatible provided the above stipulations are implemented. This use provides an activity that is otherwise not offered on the refuge. This use is critical for the refuge to meet goals and objectives regarding water management and habitat management. It is also a viable management tool for reducing damage to infrastructure including levees, dams, roads, water control structures and ensuring compliance with private landowner drainage concerns. Currently the refuge uses contract trapping as a method to control beavers and muskrats; however, due to management concerns additional management techniques need to be available for an adaptive management approach. This use does not materially interfere with or detract from the Service’s ability to meet the mission of the National Wildlife Refuge System. If commercial trapping activities as described within this compatibility determination do not meet management need, a future compatibility determination will be evaluated to expand the trapping program.

Commercial trapping follows all applicable laws, regulations and policies, including: Title 50 Code of Federal Regulations, National Wildlife Refuge System manual, National Wildlife Refuge System goals and objectives, and refuge goals and objectives. This activity is compliant with the purpose of the Patoka River National Wildlife Refuge and the National Wildlife Refuge System.

**SIGNATURE:**

Refuge Manager Signature and Date

**CONCURRENCE:**

Regional Refuge Chief Signature and Date

**Mandatory 10 or 15-year Re-evaluation Date:** 2030