

COMPATIBILITY DETERMINATION

Use: Wildlife Observation and Photography

Refuge Name: Ottawa National Wildlife Refuge

County and State: Ottawa County, Ohio

Establishing and Acquisition Authority (ies): Established in 1961 under the authority of the Migratory Bird Conservation Act (16 U.S.C. 715d). In addition, Public Law 108-23, 2003 expands the refuge's acquisition boundary and establishes new refuge purposes.

Refuge Purposes: Units of the Ottawa National Wildlife Refuge were established under the authority listed above for the following purpose:

Ottawa National Wildlife Refuge was established in 1961 under the authority of the Migratory Bird Conservation Act "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds." 16 U.S.C. 715d.

Public Law 108-23, dated May 19, 2003, "Ottawa National Wildlife Refuge Complex Expansion and Detroit River International Wildlife Refuge Expansion Act", established additional purposes for the Complex as follows:

...the Refuge Complex shall be managed--

(1) to strengthen and complement existing resource management, conservation, and education programs and activities at the Refuge Complex in a manner consistent with the primary purposes of the Refuge Complex--

(A) to provide major resting, feeding, and wintering habitats for migratory birds and other wildlife; and

(B) to enhance national resource conservation and management in the western basin;

(2) in partnership with nongovernmental and private organizations and private individuals dedicated to habitat enhancement, to conserve, enhance, and restore the native aquatic and terrestrial community characteristics of the western basin (including associated fish, wildlife, and plant species);

(3) to facilitate partnerships among the United States Fish and Wildlife Service, Canadian national and provincial authorities, State and local governments, local communities in the United States and Canada, conservation organizations, and other non-Federal entities to promote public awareness of the resources of the western basin; and

(4) to advance the collective goals and priorities that--

(A) were established in the report entitled "Great Lakes Strategy 2002--A Plan for the New Millennium", developed by the United States Policy Committee, comprised of Federal agencies (including the United States Fish and Wildlife Service, the National Oceanic and

Atmospheric Administration, the United States Geological Survey, the Forest Service, and the Great Lakes Fishery Commission) and State governments and tribal governments in the Great Lakes basin; and

(B) Include the goals of cooperating to protect and restore the chemical, physical, and biological integrity of the Great Lakes basin ecosystem.

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-ee]).

Ottawa’s stated vision: *The Ottawa National Wildlife Refuge Complex will be managed for the conservation, management and restoration of fish and wildlife habitats. In its unique position on the shore of Lake Erie, the Refuge will encourage and nurture diverse native plant communities to provide resting, feeding and breeding sites for migrant and non-migrant birds, resident mammals, reptiles, amphibians, and fish. It will provide a place for people to enjoy wildlife-dependent activities and learn about the complexities of the natural world through high-quality education and interpretive programming. It will add to the richness of the community by holding in trust a portion of the natural heritage of the Great Lakes ecosystem for the continuing benefit of the American people.*

Description of Use: Ottawa National Wildlife Refuge will provide opportunities for wildlife observation and wildlife photography, two of the six priority public uses of the National Wildlife Refuge System, on the more than 7100 acres. If found compatible, priority uses are to receive enhanced consideration over other general public uses. (16 U.S.C. 668dd-668ee. As amended by Pub.L. 105-57; 111 Stat 1252).

Wildlife observation and photography will be authorized at current and future established trail systems and public use facilities of the Ottawa National Wildlife Refuge, including the Visitor Center, photo blind(s), hiking trails, wildlife drive, and observation platforms. The Refuge has approximately 13 miles of hiking trails and a 7.5 mile self-guided wildlife drive traversing through diverse wildlife habitats. A portion of the trail system has been designated as a National Recreation Trail. The trails are composed of dike-top service roads surrounding wetland units, open pools, and woodlots. Foot trails and boardwalks meander through woodlots and marshes and are open from sunrise to sunset year round; some trails are seasonally closed to mitigate disturbance to wildlife and for public safety reasons during hunting seasons. Interpretive wayside signs and informational kiosks provide management and wildlife information to visitors. The wildlife drive is open one weekend a month and for special events including some federal holidays and wildlife festivals; the drive is open from sunrise to sunset using automated gates preset to open at designated times. The Ottawa Wildlife Drive had 35,491 visits during the more than 40 days it was open in 2015. The Refuge has wildlife viewing platforms at the following units: Boss, Stange, and Pool 2C. Canoeing and kayaking to observe and photograph wildlife is authorized within the Metzger marsh portion of the refuge. A wildlife photography blind is available for reservation at the visitor center. Additional wildlife photography blinds may be

established to support this growing outdoor recreation activity.

Ottawa NWR is located within the Lake Erie Marsh Region which provides critical habitat for migratory birds and other wildlife. The refuge has been designated as a site of regional significance in the Western Hemisphere Shorebird Reserve Network. In 2002, the refuge was voted one of the Top 15 favorite sites to see birds and identified as an Important Bird Area by the American Bird Conservancy. Coastal freshwater marshes, remnant Great Black Swamp forest, shrublands, and grassland communities dominate the landscape of the refuge, attracting both wildlife and wildlife watchers and photographers. The refuge provides exceptional wildlife viewing and photograph opportunities throughout the year, but spring and fall migration are peak times to visit. In 2015, Refuge visitation exceeded 188,000 visits with a bulk of that visitation being the nearly 177,000 visits representing wildlife observation and photography visits. Birdwatchers and other outdoor enthusiasts visit the refuge from all around the world to witness the migration spectacle in the Lake Erie marshes. Within 15 years, the refuge expects to provide > 250,000 annual visits with ~90% of those visits being wildlife observation and photography visits.

Additional hiking trails, wildlife viewing areas (e.g., viewing decks/platforms, docks, etc.), parking areas, canoe/kayak blue trails, and other visitor use facilities will be considered to support the use as the refuge budget and staffing levels permit. As new lands are acquired, refuge management will evaluate the feasibility and compatibility of authorizing Wildlife Observation and Wildlife Photography at newly acquired properties consistent with this compatibility determination. Recreational non-motorized boats such canoes and kayaks may be authorized in some areas of the refuge or non-motorized boat access ramps developed to facilitate boater access to waters of the state (e.g., rivers and Lake Erie). Additional trails and public use facilities will be evaluated on a case by case basis to ensure compatibility and mitigate impacts to federal trust resources and refuge purposes.

Wildlife observation and photography is also authorized in other areas within the refuge through guided tours and outreach programs administered by refuge staff, volunteers, or refuge partners. A special use permit (SUP) will be required when partners or outside groups conduct the use independently of refuge staff. The number of permits issued will be limited to mitigate impacts to the wildlife and habitats and other refuge resources. Any request by a partner or outside entity that involves charging a user fee is considered a commercial use. Commercial uses will not be administered under this compatibility determination. A separate commercial use compatibility determination was completed in 2011.

Availability of Resources: Staff, equipment, and facilities are available to administer this use through the refuge's annual budget allocations. A full-time law enforcement officer is available for resource protection and enforcement of state and federal laws. Two visitor services professionals are available to ensure compatibility and to administer public use. Maintenance staff will ensure roads, trails, and other public use facilities receive annual maintenance.

Annual maintenance of trails, roads, and visitor use facilities including the Visitor Center will cost an estimated \$50,000. Updating and improving information and interpretative signs and

kiosks throughout the refuge will cost an estimated \$10,000. New visitor service facilities including parking areas, trails, and kiosks will be addressed incrementally over the next five years. Grants and partner funding will be sought when new public use facilities are proposed such as new trails, parking areas, observation platforms, comfort stations, and photography blinds. Based on a review of the refuge budget allocation for these activities, there is currently enough funding to ensure compatibility and to administer and manage the use with some increases in user opportunities during the next 15 years. However, future budget cuts may require the reduction of public services provided to administer this use.

Anticipated Impacts of the Use: Wildlife observation and wildlife photography can have both positive and negative implications on refuge resources. A positive effect of the use would be an increase in user appreciation and understanding of the Service's mission and refuge wildlife and habitats. Outdoor recreation users are among nature's most committed constituents, but their presence can disturb wildlife. Research has shown that walking, boating, and biking were shown to alter water bird behavior (Pease et al., 2005; Borgmann 2010). Pedestrian travel has the potential of disturbing shorebird, waterfowl, and other migratory birds feeding and resting near trails, along the wildlife drive, and within adjacent wetland pools/impoundments near hiking trails. Human disturbance to migratory birds and other wildlife has been documented in many studies (Klein et al, 1995; Pease et al., 2005; Borgmann, 2010). The presence of humans will disturb some wildlife causing temporary displacement. Some species may avoid areas with frequent visitation, while other species will be unaffected by human activity. There are many factors that can contribute to how an individual may respond to a disturbance and those responses vary by species. Walking and biking disturb ducks more than vehicles (Pease et al. 2005). However, most studies evaluated the overt behavioral responses to a disturbance stimulus and few studies showed a population level impact. Several studies identified management actions such as seasonal closures; disturbance free zones; designated parking areas; keeping drivers in their vehicles; and guided tours as possible solutions to help managers mitigate the impacts of disturbance on migratory birds and other wildlife (Klein et al, 1995; Pease et al., 2005; Borgmann, 2010). The refuge will impose seasonal, area closures, and other user restrictions identified in the scientific literature to ensure there are areas with little to no disturbance serving as "inviolable sanctuary" for migratory birds.

The refuge has 6 active bald eagles nests. These nests are spread out over the entire refuge. There are nests within high visitation areas, such as the hiking trails and wildlife drive. Exclusion areas around active bald eagle nests will be established to protect them from human disturbance. Signs and barricades will close off areas, as needed, from wildlife observers and photographers during the eagle nesting period.

There are other potential impacts of the use such as litter, unauthorized collecting of flora and fauna, and tramping of wildlife habitats. Refuge law enforcement and education outreach will help to minimize these impacts. Regular law enforcement patrols and enforcement of litter and collecting regulations will help to deter the negative behaviors associated with these impacts. Visitors will be authorized only on designated trails and roadways to prevent tramping of habitats. Areas will be seasonally or administratively closed if disturbance to wildlife, their habitats, or native flora appears to be having a long-term negative impact.

Borgmann, K. L. 2010. A review of human disturbance impacts on waterbirds. Retrieved from: <http://www.yourwetlands.org/pdf/A%20Review%20of%20Human%20Disturbance%20Impacts%20on%20Waterbirds.pdf>

Pease, M. L., R. K. Rose, and M. J. Butler. (2005). Effects of human disturbance on the behavior of wintering ducks. *Wildl. Soc. Bull.*, 33(1):103-112.

Klein, M. L. S. R. Humphrey, and H. F. Percival. (1995). Effects of ecotourism on distribution of waterbirds in a wildlife refuge. *Conservation Biology*, 9 (6):1454-1465.

Public Review and Comment: (to be determined)

Determination:

___ Use is not compatible

___ Use is compatible with the following stipulations

Stipulations Necessary to Ensure Compatibility:

- 1) Phase in new visitor service facilities and opportunities over time as station budget and outside funding sources (e.g., partner funds or grants) become available.
- 2) Controlled access and seasonal use restrictions/stipulations to mitigate disturbance impacts to trust resources.
- 3) Law enforcement activities will help to enforce regulations and visitor compliance.
- 4) Monitoring the resource impacts of the uses both quantitatively and qualitatively.
- 5) Ensure trails, roads, and visitor use facilities are maintained and safe for the use.

Justification: The refuge hiking trails, wildlife drive, and public use facilities (e.g., observation platforms) provide a wildlife observation and photography experience that allows visitors to connect with nature and better understand the conservation mission of the Service. The majority of this public use is confined to a small portion of the refuge throughout most of the year. The Ottawa Wildlife Drive provides opportunities to a broader public user and will be available approximately 50 days annually; all other times the area is closed to the public and will serve as an ‘inviolable sanctuary’ for migratory birds and other wildlife. Wildlife observation and wildlife photography will be restricted to trails and designated use areas; users will not be permitted off official trails or within refuge management units. Canoeing and kayaking will be restricted primarily to navigable waters of the state and not permitted within refuge wetlands, with exception of the approximately 200 acres of Metzger Marsh owned by the Service. Metzger Marsh public uses are managed under a cooperative management agreement between the U.S. Fish and Wildlife Service and the Ohio Division of Wildlife. Wildlife disturbance is a concern and seasonal restrictions and closures will help to minimize any adverse impacts to refuge wildlife and habitats.

Signature: Refuge Manager: _____

(Signature and Date)

Concurrence: Regional Chief: _____

(Signature and Date)

Mandatory 15 year Re-evaluation Date: _____