

UNITED STATES GOVERNMENT

Memorandum U.S. Fish and Wildlife Service

Detroit River International Wildlife Refuge
9311 Groh Road
Grosse Ile, MI 48138

DATE: September 24, 2015

TO: General Public

FROM: Greg Norwood, Wildlife Biologist

SUBJECT: Amendment to Hunting Chapter of Visitor Service Plan: Add 30 acres to Fix Unit hunting access

The U.S. Fish and Wildlife Service has proposed an amendment to the Detroit River International Wildlife Refuge's Hunting Chapter of the Visitor Service Plan (Hunt Plan). The proposed amendment would open 30 newly acquired acres adjacent to the Fix Unit to hunting in the same way as the rest of the unit (big game, small game, and migratory birds). The attached Environmental Assessment includes the Service's analysis of the impacts of this proposed alternative as well as two additional alternatives to environmental, cultural and historical resources of the Refuge and vicinity. Also considered are the cumulative effects on these resources.

The public comment period will begin on Tuesday, September 29th and end on October 13th at 5PM. Comments must be sent to Greg_Norwood@fws.gov with the header: PUBLIC COMMENTS on FIX UNIT HUNTING

ENCLOSURES:
DetroitRiver_AmendmentHuntingChaptEA_23Sept2015

U.S. DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE
DRAFT ENVIRONMENTAL ASSESSMENT

for
Proposed Amendment to the 2011 Hunting Chapter
Of The
Visitor Service Plan
Detroit River International Wildlife Refuge
Grosse Ile, Michigan

September 2015

Regional Director
U.S. Fish and Wildlife Service
5600 American Blvd. W. Ste 990
Bloomington, MN 55437-1458

TABLE OF CONTENTS

Chapter 1. PURPOSE AND NEED	3
Chapter 2. ALTERNATIVES	6
Chapter 3. AFFECTED ENVIRONMENT.....	7
Chapter 4. ENVIRONMENTAL CONSEQUENCES	9
Section	
A. Alternative 1: Proposed Action – Add 30 acres to Fix Unit hunting access.....	9
B. Alternative 2: Add 30 acres of archery deer hunting only at Fix Unit.....	10
C. Alternative 3: No Action.....	11
D. Summary of Environmental Consequences by Alternative	12
Chapter 5. PUBLIC COMMENT AND RESPONSE.....	12

Chapter 1: Purpose and Need

Purpose

In compliance with the National Environmental Policy Act (NEPA), this Environmental Assessment (EA) will assist the Regional Director in the determination of whether to conduct an Environmental Impact Statement on the proposed action of adding 30 acres to the existing hunting at the Fix Unit of the Detroit River International Wildlife Refuge (IWR). This EA includes an evaluation of the proposed action and reasonable alternatives on environmental, cultural and historical resources sufficient to determine if a Finding of No Significant Impact (FONSI) is warranted or if an Environmental Impact Statement is required.

Need

The National Wildlife Refuge Improvement Act of 1997 (Improvement Act) directs refuges to provide six priority public uses when compatible with the purposes of the Refuge and the mission of the National Wildlife Refuge System (System). These priority uses include hunting, fishing, wildlife photography, wildlife observation, environmental education, and interpretation. The need for action, therefore, revolves around hunting as a priority use. Because hunting is one of six priority uses for the Refuge, the 2011 Hunting Chapter (Hunting Plan) seeks to balance all of these uses over time and space. This environmental assessment serves as the NEPA document which analyzes the impacts of the proposed change to the hunting program at Detroit River IWR.

Background

The Detroit River IWR (IWR) was established by an Act of Congress which became Public law 107-91 on December 21, 2001. Section 4 of the Act states the following purposes for the IWR:

1. To protect the remaining high-quality fish and wildlife habitats of the Detroit River before they are lost to further development and to restore and enhance degraded wildlife habitats associated with the Detroit River
2. To assist in international efforts to conserve, enhance, and restore the native aquatic and terrestrial community characteristics of the Detroit River (including associated fish, wildlife, and plant species) both in the United States and Canada
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 in Canada, conservation organizations, and other non-Federal entities to promote public awareness of the resources of the Detroit River

Upon establishment in 2001, all lands within the former Wyandotte National Wildlife Refuge (NWR) were incorporated into Detroit River IWR.

Detroit River IWR currently owns nearly 2,000 acres divided into 13 separate units in southeast Michigan along the Detroit River and western basin of Lake Erie in Wayne and Monroe counties. Over 3,700 acres are divided into five units managed under cooperative management agreements between the Refuge and other landowners. The Refuge acquisition boundary

stretches along 48 miles of the Detroit River and western Lake Erie shoreline, from the Rouge River to the Ohio state line. Detroit River IWR is within a 45-minute drive of nearly seven million people in the Detroit Metropolitan Area, the Windsor/Essex County region of Ontario, and the Toledo (Ohio) Metropolitan Area.

The Hunting Chapter of the Visitor Service Plan (Hunt Plan) was developed in concept from the Detroit River International Wildlife Refuge Establishment Act of 2001 which called for ensuring that hunting, fishing, wildlife observation and photography, and environmental education and interpretation are the priority uses of the Refuge. The Refuge's Comprehensive Conservation Plan of 2005 calls for allowing hunting and fishing to the maximum extent, except where contaminant exposure, safety, or sensitive species needs prohibit such uses.

Today, 80% of the U.S. population lives in urban areas. To help make sure that this urban population values natural areas, wildlife conservation and that a priority is placed on developing the next generation of conservationists in urban areas, the U.S. Fish and Wildlife Service has created a new Urban Wildlife Refuge Program. Under this program, a variety of strategies to increase recreational opportunities on federal lands were drafted. Strategies directly related to hunting focused in part on defining a "quality" hunt. The Service recognizes this is largely a value judgment that can vary from individual to individual. With this in mind the Refuge will work to ensure the proposed hunt meets the following attributes:

- SAFETY – Participants in the activity must be protected by accepted standards for the program being managed and should feel safe while participating.
- SUCCESS – Fair chase standards should be incorporated in the programs' design. Participants should have a reasonable chance of successful encounters of the fish or wildlife they are pursuing, but success should never be guaranteed.
- ACCESS – Reasonable access should be provided to participants
- ENJOYMENT – Programs should be designed for participants to maximize their enjoyment of the activity without unnecessary disturbance from other users and with opportunity to participate in a variety of activities (from which they may choose) when practical.

This EA presents the consequences of three alternatives for hunting 30 newly acquired acres at the Fix Unit (Figure 1). This unit now includes 95 acres of natural areas on the south side of the Swan Creek. The Refuge purchased 65 acres in 2007 and opened those units to big game, small game, and migratory bird hunting in time for the 2012 hunting season. Another 30 acres was acquired from the Newport Beach Marina Corporation in 2015 which is immediately adjacent to the existing original 65 acres.



Figure 1. Location of the 30-acre Newport Beach Marina Corp. parcel adjacent to the existing 65 acres of the Fix Unit.

Decision Framework

This Environmental Assessment is prepared to evaluate the environmental consequences of three alternatives regarding hunting at 30 newly acquired acres at the Fix Unit of the IWR in Frenchtown Township, MI.

1. Alternative 1: Proposed Action – Add 30 acres to Fix Unit hunting access
2. Alternative 2: Add 30 acres of archery deer hunting only at Fix Unit
3. Alternative 3: No Action

The Regional Director, U.S. Fish and Wildlife Service, Midwest Region is the official responsible for determining the action to be taken in the proposal by choosing an alternative. He will also determine, based on the facts and recommendations contained herein, whether this Environmental Assessment is adequate to support a Finding of No Significant Impact (FONSI) decision, or whether there is a significant impact on the quality of the environment from the chosen alternative, thus requiring the preparation of an Environmental Impact Statement (EIS).

Authority and Legal Compliance

The National Wildlife Refuge System includes federal lands managed primarily to provide habitat for a diversity of fish, wildlife, and plant species. National Wildlife Refuges are established under many different authorities and funding sources for a variety of purposes. The purposes for Detroit River IWR were derived from several federal statutes, including the Migratory Bird Conservation Act, Refuge Recreation Act, and Detroit River International Wildlife Refuge Establishment Act.

In 2005 a Comprehensive Conservation Plan for Detroit River IWR, which involved an Environmental Assessment, was approved. This plan addressed the future management of the Refuge with goals, objectives, and strategies in six categories, including visitor services. One of the goals is to provide a wide variety of wildlife-dependent recreational and educational opportunities to allow the public to enjoy the resources of the Refuge.

Chapter 2: Alternatives

Formulation of Alternatives

Alternatives regarding hunting on 30 newly acquired acres at the Fix Unit reflect those that would be most consistent with existing programs and directives. The three alternatives also take into account local knowledge of what would best accommodate local hunters and be compatible with the Refuge's other priorities.

Alternative 1 (Proposed Action) – Add 30 acres to Fix Unit hunting access

This alternative would open the 30 acres recently acquired by the Refuge adjacent to the Fix Unit to the same hunting regulations. Simply adding the additional 30 acres to the existing regulations ensures consistent and simpler regulations for the public and Refuge law enforcement.

Additional hunter parking will be created in 2016 during a planned wetland construction project on-site. The addition of the 30 acres is expected to help diffuse the high density of archery hunters that utilize the unit for archery hunting each fall. Finally, much of the additional 30 acres will be wet "mixed-meadow" which is characterized by native and naturalized grass and wildflower species. This habitat is ideal habitat for small game and hunters in this former agricultural field.

Alternative 2 – Add 30 acres of archery deer hunting only at Fix Unit

This alternative would open the newly acquired 30 acres at the Fix Unit to only archery hunting for deer. This would exclude hunters seeking small game and migratory birds. The unit's development into a wet "mixed meadow" of native and naturalized grasses and wildflowers will only be productive duck and goose hunting after fire, mowing, or discing operations conducted by the Refuge (i.e., dense vegetation will preclude quality migratory bird hunting). However, high quality small game hunting would be expected, especially ring-necked pheasant, cottontail rabbit, and coyote. The exclusion of small game hunters would result in some decreased use of the unit by hunters, thereby resulting in less human traffic during the deer hunting season. However, the Fix Unit has historically had very dense deer hunter use and the additional 30 acres is expected to still be used heavily. Therefore, the few small game hunters would have negligible interference on the deer hunting experience. Finally, an arbitrary boundary between the 65 acres allowing small game and migratory bird hunting and the 30 acres where it is not allowed would cause unnecessary confusion and complicate the regulations for the public and law enforcement.

Alternative 3 – No Action

This alternative would not open the newly acquired 30 acres at the Fix Unit to any hunting. This area would serve as "refuge" and hunted species would concentrate there. This could increase the opportunity of deer hunters in the existing 65 acres of the Fix Unit to harvest a deer as deer pass

into the protective 30 acre area for cover. However, this “refuge” would be negligible to the hundreds of acres immediately to the east of the unit at the DTE Fermi 2 Nuclear Power Plant where hunting is not allowed. Furthermore, these hundreds of acres absolutely exclude poachers because the site is highly secure with surveillance and fencing (although there is ample ability for deer to cross between properties). This supports the assessment that the power plant property is ample refuge for deer during the hunting season. This landscape feature helps moderate the intense hunting pressure on the herd and ensures normal deer behavior somewhat continues through the season. Finally, small game hunters would not have the opportunity to harvest species expected to become more abundant as the Fix Unit is allowed to revert from agricultural production into a wet “mixed meadow”.

Chapter 3: Affected Environment

Geographic Setting

Detroit River IWR lands are located in Wayne and Monroe Counties in southeast Michigan. Prior to rapid anthropogenic alteration of the Detroit River and Lake Erie shorelines starting during European settlement (17th and 18th Centuries), the western Lake Erie shoreline consisted of open water shallow zones, followed by emergent wetlands of bulrushes and cattails with dynamic water levels, and transitioning to grassy zones dominated by bluejoint grass and sedges with forested wetlands. The Refuge contains lands that are part of freshwater deltas, drowned river mouths, and channelside wetlands. In the past, interior hardwood swamps and “flatwoods” were mosaicked further interior with prairies underlain by sand over clay where hydrology was continually re-engineered by beavers. Today, most of the shoreline is hardened with rock and concrete with the vast majority of wetlands drained for urban development and agriculture. There are numerous communities including Trenton, Gibraltar, Rockwood, Estral Beach, Frenchtown, Monroe, and Erie. The remaining areas of unhardened shoreline containing plant and animal species adapted to the current western Lake Erie environment are held in State or Federal ownership as conservation land.

Socioeconomic Setting

The Fix Unit is located in Frenchtown Twp. and is about a 25-minute drive from the cities of Trenton and Monroe. The City of Detroit is approximately a 45-minute drive. The demographics are complex in the area representing a broad range of income levels and ethnicities.

There is a high demand for access to Refuge land for compatible recreational uses. Public lands offer a wide range of outdoor recreational opportunities in the form of state parks, game areas, and state recreation areas. The Huron-Clinton Metropolitan Authority manages the Metroparks which comprise thirteen individual parks and 24,000 acres of public land. Other publicly accessible land is available through universities, non-profit organizations, and local governments, although limited in hunting and fishing opportunities.

Wildlife viewing, especially birdwatching, has become increasingly important in drawing visitors to the area’s public lands. The Refuge is recognized as one of the best sites in North America to watch raptor migration. Passerine and waterbird migration is heavy during spring and

fall, drawing birders into the region to see migration fallouts, hawk kettles, and specific species such as Swainson's hawk and golden eagle.

Natural Communities of the Fix Unit

The Fix Unit contains 54 acres of former agricultural lands that are now left fallow and will be influenced by a planned wetland construction project. The rest of the property contains a mix of flatwoods and coastal wetlands. The flatwoods are characterized by low relief, poorly drained glacial lakeplain often with an underlying impermeable clay lens. Surface soils are sandy loam to loam and overlay sandy clay loam, clay loam, or clay. Dominant trees include American elm, green ash, silver maple, swamp white oak, red oak with wind-throw as the major canopy disturbance that perpetuates the community. The coastal wetland is associated with the mouth of the Swan Creek, which is a drowned rivermouth. The wetland zonation here exhibits open water, emergent, and a sedge/bluejoint areas depending on elevation. These zones each have a broad array of plant and animal species adapted to the environmental conditions. Generally, any given community is inherently unstable because of Lake Erie's dynamic water levels and ice conditions which re-shuffle the community as species become "winning" and "losing" species depending on conditions.

Federally Threatened and Endangered Species

The Indiana bat (*Miotis sodalis*) and the northern riffleshell (*Epioblasma torulosa rangiana*) are two Federally endangered species that have the potential to be on the Refuge in the future, but are not currently known to be present. The eastern prairie fringed-orchid (*Platanthera leucophaea*) and northern long-eared bat (*Myotis septentrionalis*) are Federally threatened. The orchid is known to occur only at Pointe Mouillee State Game Area and Cedar Point and Ottawa National Wildlife Refuges at this time. The orchid has not been found on the Refuge in recent times nor are there documented historical records. The bat is not known to occur and would only occur in very small numbers. The rayed bean (*Villosa fabalis*) and eastern massasauga (*Sistrurus catenatus*) are candidates for listing under the Endangered Species Act that have the potential to be on the Refuge, but are not currently known to be present. None of these species would be harmed by public hunting.

Cultural Resources

The Michigan Office of the State Archaeologist (MOSA) Inventory Files for the unit indicates there are no recorded archaeological sites.

Recreational Opportunities

A complete review of future public uses is being addressed in the Visitor Services Plan. Currently, 65 acres of the Fix Unit is open to public hunting for big game, small game, and migratory birds.

Chapter 4: Environmental Consequences

A. Alternative 1: Proposed Action – Add 30 acres to Fix Unit hunting access

Impacts to the Natural Communities

Hunting access would be by foot only, with parking in designated parking areas. Impacts on vegetation would be inconsequential (i.e., the existing natural communities are not disrupted by moderate pedestrian traffic). Habitats within the Detroit River IWR are resilient to infrequent foot traffic. Obtaining the desired habitat conditions of the Refuge would not be jeopardized by hunters. In fact, the Refuge has invested in numerous habitat improvement projects in this unit and success is dependent upon managing for the state deer herd target via hunting.

The small game proposed for hunting have populations that fluctuate because of inter and intra-specific competition for changing food resources, winter weather severity, and other ecological factors from changing habitat conditions. Based on repeated empirical evidence, small game harvest is a compensatory form of mortality in ecosystems like the Detroit River IWR. Hunters of these species are not substantially adversely affecting those populations on the Refuge because they are taking fewer individuals than would perish due to limited resources and weather.

White-tailed deer populations also fluctuate as conditions change. However, the Fix Unit and the surrounding landscape is very high quality white-tailed deer habitat. Even when the population is relatively lower than “average”, the herd can still sustain harvest as determined by the Michigan DNR which sets the number and types of licenses sold. Generally, high quality deer habitat surrounded by productive agricultural land allows for annual recruitment of fawns resulting in a 1/3 increase in the population annually. This ensures the population can sustain annual hunting as determined by the Michigan DNR regulations. More analysis on the anticipated impacts of hunting on the Refuge to white-tailed deer, wild turkey, small game, migratory birds as well as other aspects of the Refuge environment can be found in the Refuge’s original Hunting Chapter Environment Assessment (http://www.fws.gov/refuge/detroit_river/about/refuge_brochures.html).

Listed, Proposed, and Candidate Species

No federally threatened or endangered species occur on Refuge land. It is possible that threatened and endangered species may be found on the Refuge in the future. Individuals of these species would not be impacted by hunting activity. This is because the period when the species are active on the Refuge is not the same time when hunting would be occurring.

Public Use

The National Wildlife Refuge Improvement Act of 1997 defined protecting and managing wildlife as the purpose of national wildlife refuges and identified six “priority” public uses known as the Big 6: hunting, fishing, wildlife photography, wildlife observation, environmental education and interpretation. Adding an additional hunt will add another opportunity for the public to engage in this Big 6 activity. In addition, it will help accomplish another of the Refuge’s 2005 Comprehensive Conservation Plan strategies: “Allow fishing and hunting to the

maximum extent, except where contaminant exposure, safety or the needs of sensitive species prohibit such uses.”

Refuge Operations

Demand on Refuge resources will be negligible because this alternative merely opens the adjacent 30 acres to hunting in the same way as the rest of the Fix Unit.

Environmental Justice

None of the alternatives described in this Environmental Assessment will disproportionately place any adverse environmental, economic, social, or health impacts on minority or low-income populations.

Cultural Resources

This alternative will not have any impacts to cultural resources. No sites listed on the National Register of Historic Places are located on the Refuge. Hunting activities will result in no ground disturbance or disturbance to standing structures and would have no effect on any historical properties.

Cumulative Impacts

Refuge personnel expect no measurable adverse impacts by this proposed action on the Refuge environment which includes wildlife, soils, vegetation, air quality, and water quality. Some disturbance to surface soils and vegetation would occur in some areas; however, these disturbances would be minimal. None of the habitats are sensitive to low to moderate foot traffic.

The Refuge’s presence in the Metropolitan Area increases the quality of life for some area residents. Hunting would account for only a part of the human activity on the Refuge, since other priority public uses will be expanded in the future as described in a Visitor Service Plan. There are no other hunting-specific activities undertaken by the Service on the Refuge that have significant beneficial or adverse effects when compared to or combined with other socially important activities in the area. Refuge hunting activities under this alternative would not produce significant cumulative effects.

No long term cumulative impacts would occur to cultural resources due to activities associated with this alternative or similar action by the Service or other agencies.

B. Alternative 2: Add 30 acres of archery deer hunting only at Fix Unit

Impacts to the Natural Communities

Same as Alternative 1.

More analysis on the anticipated impacts of hunting on the Refuge to white-tailed deer and other aspects of the Refuge environment can be found in the Refuge’s original Hunting Chapter Environment Assessment (http://www.fws.gov/refuge/detroit_river/about/refuge_brochures.html).

Listed, Proposed, and Candidate Species

Same as Alternative 1.

Public Use

Same as Alternative 1.

Refuge Operations

Demand on Refuge resources will be slightly greater because of the necessity to manage the newly acquired 30 acres differently than the existing 65 acres. This would require some additional signage. It is reasonable to assume the added complexity will cause some confusion by hunters.

Environmental Justice

Same as Alternative 1.

Cultural Resources

Same as Alternative 1.

Cumulative Impacts

Same as Alternative 1.

C. Alternative 3: No Action**Impacts to the Natural Communities**

There will be no impact to the natural communities with this alternative since there is no action.

There will be no impact to wildlife populations with this alternative, although individual animals will be impacted.

Listed, Proposed, and Candidate Species

There will be no impacts to listed, proposed, and candidate species since there is no action.

Public Use

There will be no impact to existing public use. However, hunters will likely find the regulations confusing if the additional 30 acres is not opened to hunting in the same way as the existing 65 acres.

Refuge Operations

Demand on Refuge resources will be slightly greater because of the necessity to manage the newly acquired 30 acres differently than the existing 65 acres. This would require some additional signage. It is reasonable to assume the added complexity will cause some confusion by hunters.

Environmental Justice

None of the alternatives described in this Environmental Assessment will disproportionately place any adverse environmental, economic, social, or health impacts on minority or low-income populations.

Cultural Resources

This alternative will not have any additional impacts to cultural resources. No sites listed on the National Register of Historic Places are located on the Refuge. Hunting activities will result in no ground disturbance or disturbance to standing structures and would have no effect on any histories properties.

Cumulative Impacts

Refuge personnel expect no measurable adverse impacts by this action on the Refuge environment which includes wildlife, soils, vegetation, air quality, and water quality because there is no action.

Summary of Environmental Consequences by Alternative

Actions	Alternative 1 (Preferred – Adding 30 acres under existing regulations)	Alternative 2 (Only archery deer hunting)	Alternative 3 (No Action)
Natural communities	No effect	No effect	No effect
T&E Species	No effect	No effect	No effect
<i>Public Use</i>	<i>Maximizes hunting</i>	<i>Increases, but does not maximize hunting</i>	<i>No change</i>
Refuge Operations			
Environmental Justice	No effect	No effect	No effect
Cultural resources	No effect	No effect	No effect
Cumulative Impacts	No effect	No effect	No effect

Preparer

Greg Norwood, Wildlife Biologist, Detroit River IWR

Chapter 5. Public Comment and Response

This chapter will be completed after review and synthesis of public comments.