

## **FINDING OF NO SIGNIFICANT IMPACT**

### **ENVIRONMENTAL ASSESSMENT for HUNTING**

## **Eastern Massachusetts National Wildlife Refuge Complex**

### **Assabet River National Wildlife Refuge Great Meadows National Wildlife Refuge Oxbow National Wildlife Refuge**

The U.S. Fish and Wildlife Service (Service) is proposing to open or expand recreational hunting opportunities in Massachusetts on three of the refuges belonging to the Eastern Massachusetts National Wildlife Refuge Complex (NWRC, Complex, refuge) in accordance with the Complex's Hunting Plan. The Complex will open opportunities for big game (white-tailed deer, bear, and/or wild turkey), upland game (fox, coyote, grouse, rabbit, and/or squirrel), and/or migratory game birds (waterfowl, woodcock, and/or snipe).

### **Selected Action**

#### **Proposed Action Alternative**

The Complex is made up of eight refuges, three of which are covered in the July 2020 Hunting Plan. Under this alternative, we set forth guidance on the expansion and continued implementation of hunt programs at Assabet River, Great Meadows, and Oxbow National Wildlife Refuges (NWR). All three refuges have been opened for hunting since at least 2005. Portions of Oxbow NWR south of Route 2 have been open to hunting of turkey, gray squirrel, cottontail rabbit, ruffed grouse, snipe and American woodcock since 1976 under previous ownership.

We would conduct hunting according to State and Federal regulations. Hunters would also have to comply with additional refuge-specific regulations, including but not limited to those contained in the Code of Federal Regulations (50 CFR §32.40), which are revised or updated annually as needed. The refuge manager may, upon annual review of the hunting program, impose further restrictions on hunting, recommend the refuge be closed to hunting, or further liberalize hunting regulations up to the limit of state regulations. The refuge would restrict activity if it becomes inconsistent with other, higher priority refuge programs or endangers refuge resources or public safety.

- At Assabet River NWR, 2,273 acres (of 2,357 total) will be maintained or opened to hunting opportunities for new species or method of take, including 123 acres to be opened to hunting for the first time. New species added would include bear, coyote, fox, and waterfowl.
- At Great Meadows NWR, 3,401 acres (of a total 3,874 acres) will be maintained or opened to hunting opportunities. Approximately 778 additional acres will be opened to archery-only deer hunting. Additionally, Great Meadows NWR will open all deer hunting units to turkey, and coyote using archery equipment only. A total of 2,623 acres will be open to black bear hunting using archery equipment only for the first time.

## *Appendix E – Finding of No Significant Impact*

Currently 334 acres is open for waterfowl hunting and an additional 670 acres will be open to waterfowl hunting for a total of 1,004 acres.

- At Oxbow NWR, 1,671 (of 1,695 acres total) will be maintained or opened to hunting opportunities, including 128 acres to be opened to hunting for the first time. New species added would include bear, coyote, and fox.

Refuge staff have worked closely with stakeholders and the Massachusetts Division of Fisheries and Wildlife (MassWildlife) to develop the proposed hunting plan. There are no unresolved conflicts about the proposed action with respect to alternative uses of available resources, because the changes proposed by this action are not expected to have harmful impacts to the ecological, aesthetic, historic, cultural, economic, social, or health aspects of the refuge and surrounding communities. Additionally, the proposed action builds on an existing hunt program, and includes measures to better meet goals and objectives developed, in part, from the refuge Comprehensive Conservation Plan (CCP). Therefore, the Service does not need to consider additional alternatives (43 CFR 46.310(b)).

This alternative was selected over other alternatives because: (1) it helps fulfill the statement of objectives detailed in the Hunting Plan; (2) it would result in a minimal impact on physical and biological resources; and (3) it meets the Service’s mandates under the National Wildlife Refuge System Administration Act (NWRSA) of 1966, as amended by the National Wildlife Refuge System Improvement Act of 1997, and Department of the Interior Secretarial Order 3356. The Service believes that expanding hunting opportunities on the three refuges will not have a significant impact to wildlife, other uses, or refuge administration. This alternative will best meet the purpose and need, refuge objectives, and Service mandates.

The Department of the Interior Secretarial Order 3347 – “Conservation Stewardship and Outdoor Recreation,” signed March 2, 2017, and Secretarial Order 3356 – “Hunting, Fishing, Recreational Shooting, and Wildlife Conservation Opportunities and Coordination with States, Tribes, and Territories,” signed September 15, 2017, includes direction to Department of the Interior agencies to “increase outdoor recreation opportunities for all Americans, including opportunities to hunt and fish; and improve the management of game species and their habitats for this generation and beyond.” The selected alternative will also promote a priority public use of the National Wildlife Refuge System (Refuge System), and providing opportunities for visitors to hunt will promote stewardship of our natural resources and increase public appreciation and support for the refuges.

### **Other Alternatives Considered and Analyzed**

#### **No Action Alternative**

New hunting opportunities would not be created under this alternative, including new access sites to refuge lands for other users. The No Action Alternative would continue the current hunting program, which allows for hunting on specific areas of Assabet River, Great Meadows, and Oxbow NWRs as described in the 2007 refuge-specific environmental assessments and hunt plans. Under this alternative, Assabet River NWR permits white-tailed deer, turkey, woodcock, grouse, rabbit, and squirrel hunting. Oxbow NWR permits white-tailed deer, turkey, woodcock,

waterfowl, grouse, rabbit, and squirrel hunting. Great Meadows NWR permits white-tailed deer and waterfowl hunting. Hunting regulations for these refuge lands are consistent with State hunting regulations. Additional refuge-specific regulations also apply. This alternative has the least short-term impacts to physical and biological resources; however, long-term impacts on habitat quality could be adverse with greater deer browsing. In addition, it would not fulfill the Service’s mandate under the NWRSA and Secretarial Order 3356 as well as the proposed action.

**Summary of Effects of Selected Action**

An Environmental Assessment (EA) was prepared in compliance with the National Environmental Policy Act of 1969, as amended (NEPA) to provide a decision-making framework that: (1) explored a reasonable range of alternatives to meet project objectives; (2) evaluated potential issues and impacts to the refuge, resources and values; and (3) identified mitigation measures to lessen the degree or extent of these impacts. The EA evaluated the effects associated with expansion of hunting opportunities at Eastern Massachusetts NWR Complex, as well as the effects of a no-action alternative. It is incorporated as part of this finding.

Implementation of the agency’s decision would be expected to result in the following environmental, social, and economic impacts:

Affected Environment	Selected Action
White-tailed deer	Negligible, short-term adverse impacts to species. An increase in the size of the hunting area would increase the number of deer harvested on the refuge. While the refuge can support the capacity of 93 additional deer hunters, we anticipate that 40 to 50 additional hunters is more likely. An increase in the hunting area would increase the number of deer harvested on the three refuges and that is estimated to be an additional 10 to 12 deer harvested in the Complex. Disturbance to deer in the area will occur during the hunting season, but the disturbance is considered negligible, as deer are prone to move regularly over large areas.
Wild turkey	As with deer hunting, while the three refuges can support the capacity of 51 additional turkey hunters, we anticipate that 40 to 50 total additional hunters is more likely. The State generally does not change the number of permits issued for turkey hunting under refuge alternatives, so there is not to be an expected increase in harvested turkeys statewide. However, expanding turkey hunting opportunities at each refuge may result in a minor increase in turkey harvest on the

*Appendix E – Finding of No Significant Impact*

	Complex that is estimated to be an additional 3 to 5 turkeys harvested. The harvest on the refuge would have a negligible impact on the overall population.
Black bear	The Complex will open 6,465 acres for black bear hunting for the first time. Disturbance to this species may occur during the hunting season, although it is considered negligible, as the number of individuals encountered will be small. In Massachusetts the use of dogs, night hunting, and baiting bear are all prohibited. This includes the use of lures, scents, or any other substance as a bear attractant. Given the state hunting restrictions and the very small number of bears reported within the Complex, we estimate only one bear to be harvested over a 5- to 8-year period in the Complex.
Small game/mammals	Negligible, short-term adverse impacts to species. Hunting small game on the refuges would include red fox, gray fox, and coyote during the refuge deer hunting seasons, in accordance to Federal, State, and refuge-specific regulations. Night hunting and baiting are not permitted on the refuge and the season would only be open concurrent with the deer season. Since the hunting season is limited and these species are typically less active during the daytime, we do not expect a large harvest to occur, and estimate harvests less than 10 coyotes and less than 10 fox across the three refuges. Similarly, we estimate an additional 2 to 3 grouse harvested as a result of the additional acres opened, and the same for rabbit and squirrel. Therefore, disturbance to these species from the proposed action will be considered negligible.
Migratory Birds/Waterfowl	Minor, short-term adverse impacts to species. Hunting would not have a significant impact on local, regional, or Atlantic Flyway waterfowl populations because the percentage taken on the Complex, though possibly additive to existing hunting take (i.e., less than 125 ducks and 85 geese), would measure a fraction of a percent of the estimated migratory game birds populations. Potential impacts to target migratory species include direct mortality or injury and indirect changes in behavior. In addition to direct mortality, hunting could result in some short-term redistribution due to disturbance.

*Appendix E – Finding of No Significant Impact*

Other wildlife species	Minor, short-term adverse impacts (disturbance) of non-target wildlife species. The estimated number of additional hunters is low in proportion to the available hunt area, and it has been observed that the current hunt program has only minor and temporary impacts on other wildlife; thus, this expansion is anticipated to have minor and temporary impacts, with the dispersed nature of hunting across wide areas, and that human disturbance is both uncommon and short-term.
Threatened and Endangered Species	We determine that the proposed hunting activities would not adversely affect any threatened or endangered species. The hunting currently occurring on the refuge has not affected any federally listed species.
Vegetation	Minor, short-term impacts to vegetation. Additional lands would be open to hunting under the proposed action. Trampling of vegetation on newly opened lands could increase slightly because of the increased number of users and an increase in the frequency of use. However, the number of visitors participating in hunting on the refuge lands is expected to remain small compared to other types of visitation and adverse impacts to vegetation is not expected.
Water Resources/Wetlands	Minor, short-term impacts to wetlands or water resources. New areas open to hunting could see an impact from increased activities and boats, but anticipated to stay in relative proportion to current levels of use. Disturbance is expected to remain minor, with estimated use between one to two boats in the waterway at any given time. For wetland areas, most hunting will also take place during the dormant season when vegetation is least vulnerable. Some of the new areas will be accessed by foot, which may result in some trampling of wetland vegetation.
Cultural Resources	No adverse impacts anticipated due to hunting activities. Hunting, regardless of method or species hunted, is a consumptive activity that does not pose any threat to prehistoric or historic properties on and/or near the refuge. Although hunters would be able to access parts of the refuge that are closed to non-hunters, this access alone is not expected to

*Appendix E – Finding of No Significant Impact*

	increase vandalism or disturbance to cultural resources by individuals while they are hunting, nor is it likely that hunters will be more likely to engage in vandalism or disturbance than any other refuge visitor.
Visitor Use and Experience	Minor, short-term adverse impacts to other public uses. With increased use, we do expect to see a slight increase in the number of conflicts among user groups. Experience has proven that time and space zoning (e.g. establishment of separate use area, use periods, and restriction on the number of users) is an effective tool in eliminating conflicts between user groups. Non-hunting users may feel uncomfortable seeing hunters on the trails. Information will be posted at the contact station and kiosk to alert non-hunters of hunting activity, and to recommend wearing blaze orange while walking the trails during hunting season.
Socioeconomics	Negligible, short-term and long-term benefits. While hunting visitation may increase due to increased opportunities, hunting only accounts for a fraction of expenditures related to the refuges.
Refuge Management & Operations	Minor, short-term and minor, long-term impacts to refuge management and operations. A detailed cost breakdown can be found in the Hunting Plan. There may be a slight increase to traffic on refuge roads, trails, and parking lots during the hunting season. The greatest impact will be to dirt hunter parking lots and boat launches increasing the need to perform more frequent maintenance of these assets. However, the increase in permit sales will offset maintenance costs.

While refuges, by their nature, are unique areas protected for conservation of fish, wildlife and habitat, the selected action will not have a significant impact on refuge resources and uses for several reasons. Measures to mitigate and/or minimize adverse impacts have been incorporated into the proposal:

1. In the context of local and State hunting/fishing programs, the selected action will only result in a tiny fraction of the estimated populations and harvest. The Service works closely with the State to ensure that additional species harvested on a refuge are within the limits set by the State to ensure healthy populations of the species for present and future generations of Americans.
2. The Refuge System uses an adaptive management approach to all wildlife management on

*Appendix E – Finding of No Significant Impact*

refuges. This approach involves monitoring and re-evaluating hunting opportunities on the refuge on a regular basis to ensure that the programs continue to contribute to the biodiversity and ecosystem health of the refuge, and these opportunities do not contribute to any cumulative impacts to habitat or wildlife, including impacts from climate change, population growth and development, or local, State, or regional wildlife management.

3. The adverse direct and indirect effects of the selected action on air, water, soil, habitat, wildlife, aesthetic/visual resources, and wilderness values are expected to be non-existent, minor and/or short-term. The benefits to long-term ecosystem health from the selected action, in conjunction with other existing refuge programs, will far outweigh any of the short-term adverse impacts discussed in the EA and document.
4. The refuge-specific regulations detailed in 50 CFR are measures that will reduce or avoid impacts. Hunting regulations will be enforced by Federal and State law enforcement officers. Providing information through various forums will ensure the public is aware of applicable laws and policies.
5. The selected action, along with the proposed mitigation measures, will ensure that there is low danger to the health and safety of refuge staff, visitors, and hunters themselves.
6. The action is not in an ecologically sensitive area.
7. The action will not adversely affect any threatened or endangered species; and will have no effect to federally designated critical habitat.
8. The action will not impact any cultural or historical resources.
9. The action will not impact any wilderness areas.
10. There is no scientific controversy over the impacts of this action, and the impacts of the proposed action are relatively certain.
11. The proposal is not expected to have any significant adverse effects on wetlands and floodplains, pursuant to Executive Orders 11990 and 11988 because hunters must use established access points that will not be located near sensitive habitats.

Additionally, stipulations are necessary to ensure compatibility:

- Eastern Massachusetts NWRC only permits non-toxic ammunition for migratory bird and upland game hunting.
- Refuge lands are closed to night hunting. Refuge hunting hours are half hour before sunrise to half hour after sunset, except for migratory waterfowl which is open to sunset.
- Hunters may enter the refuge 1.5 hours before legal hunting time and must leave the refuge within 1.5 hours after legal sunset.

## *Appendix E – Finding of No Significant Impact*

- We allow the use of dogs consistent with State regulations when hunting migratory birds and upland game species.
- On Great Meadows NWR, only archery equipment may be used to hunt white-tailed deer, bear, turkey and coyote.
- Scouting can occur once the hunter has obtained a refuge permit. Scouting can begin no earlier than 4 weeks from the opening day of the hunt season from half hour before sunrise to half hour after sunset.

The proposal is compatible with the purpose of the refuge and the mission of the Refuge System (see the Compatibility Determination, Appendix A, in the Hunting Plan). Furthermore, the action is consistent with applicable laws and policies regarding the establishment of hunting on national wildlife refuges.

### **Public Review**

The plan has been thoroughly coordinated with all interested and/or affected parties, including MassWildlife. On March 16, 2020, we distributed a press release to news organizations and alerted the public about the availability of the hunting plan with postings on the respective refuge's websites. We also notified local town representatives and partners as well as emailed to members of the Friends of Assabet River NWR mailing lists. No public meetings were held due to bans on public gatherings due to COVID-19. The Refuge Manager did answer questions on the hunt plan during a Monthly River Stewardship Council Meeting of the Sudbury, Assabet, and Concord River Wild and Scenic Partnership, attended by representatives from seven towns and three partner groups. Upon request, the public comment period was extended from April 24, 2020 until May 22, 2020, for a total comment period of 68 days.

A total of 189 unique comments representing 501 individuals or entities were submitted to the refuge. Among these were two petitions: an online Care2.com petition with 262 signatures representing 40 people from Massachusetts, 55 people from other states, and 167 people living in other countries; and, a mailed petition representing 25 Massachusetts people. Appendix D summarizes the substantive comments received on the proposal, and the Service's responses.

Based on input we received during the public comment period, we have adjusted the proposed alternative discussed in the EA, primarily with changes regarding method of take by removing handguns and rifles on Oxbow and Assabet River NWRs. This would affect the following opportunities as proposed in our hunt plan:

*Appendix E – Finding of No Significant Impact*

<b>Species</b>	<b>Refuge and Hunt Unit</b>	<b>Current/Draft Proposed Method of Take</b>	<b>Final Proposed</b>
Bear	<b>Assabet River:</b> North Unit A*  <b>Oxbow:</b> North Unit Hospital Road South Sheridan Road Route 2 South	Proposed: Align with State (including handguns and rifles)	Change to no handguns and no rifles
Rabbit	<b>Assabet River:</b> North Unit A	Currently: Archery and Shotgun only  Proposed: Align with State (including handgun and rifles)	Maintain currently allowed method of take: Archery and Shotgun Only (no rifles and handguns)
	<b>Oxbow:</b> North Unit Hospital Road South Sheridan Road Route 2 South	Currently: Shotgun only  Proposed: Align with State	Change to Shotgun and Archery (no rifles and handguns)
Squirrel	<b>Assabet River:</b> North Unit A	Currently: Archery and Shotgun only  Proposed: Aligned with State (including handgun and rifles)	Maintain currently allowed method of take: Archery and Shotgun only (no rifles and handguns)
	<b>Oxbow:</b> North Unit Hospital Road South Sheridan Road Route 2 South	Currently: Shotgun only  Propose: Alignment for method of take	Change to Shotgun and Archery (no rifles and handguns)

**Determination**

Based upon a review and evaluation of the information contained in the EA, as well as other documents and actions of record affiliated with this proposal, the Service has determined that the proposal to expand hunting opportunities at Eastern Massachusetts NWR Complex does not constitute a major Federal action significantly affecting the quality of the human environment under the meaning of section 102(2)(c) of NEPA. As such, an environmental impact statement is not required. An EA has been prepared in support of this finding (Appendix B) and is available upon request to Eastern Massachusetts NWR Complex.

The Service has decided to select the proposed action as described in the EA, and implement the Hunting Plan for Eastern Massachusetts NWR Complex upon publication of the final 2020-2021

*Appendix E – Finding of No Significant Impact*

Station-Specific Hunting and Sport Fishing Regulations. This action is compatible with the purpose of the refuge and the mission of the Refuge System, and consistent with applicable laws and policies. See attached Compatibility Determination (Appendix A).

---

Regional Chief  
National Wildlife Refuge System

---

Date