



**Green River National Wildlife Refuge**  
***Draft Migratory Game Bird and Big Game***  
***Hunting Plan***  
***July 2024***



*Eastern Wild Turkeys Strutting – Ray Stainfield, USFWS*

# Green River National Wildlife Refuge Draft Migratory Game Bird and Big Game Hunt Plan

June 2024

U.S. Fish and Wildlife Service

Green River National Wildlife Refuge  
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# **SECTION A. DRAFT GREEN RIVER NATIONAL WILDLIFE REFUGE MIGRATORY GAME BIRD AND BIG GAME HUNTING PLAN, HENDERSON COUNTY, KENTUCKY**

## **I. Introduction**

The U.S. Fish and Wildlife Service (Service, USFWS) developed the initial Hunting Plan for Green River National Wildlife Refuge (NWR, refuge, USFWS 2024) to open the refuge to hunting as part of the Service's 2024-25 Hunting and Sport Fishing Rulemaking. The refuge's Hunt Opening Package included Section A Hunting Plan, Section B Environmental Assessment, Appendices (including the Hunting Waterfowl, Other Migratory Birds, and Big Game Compatibility Determination, Appendix C), new refuge-specific regulations in the Code of Federal Regulations (CFR), and an Endangered Species Act Section 7 Biological Evaluation. This Hunting Plan may be updated over time through appropriate planning and environmental analysis. Refuge-specific regulations in CFR may be updated through future annual Hunting and Sport Fishing Rulemaking.

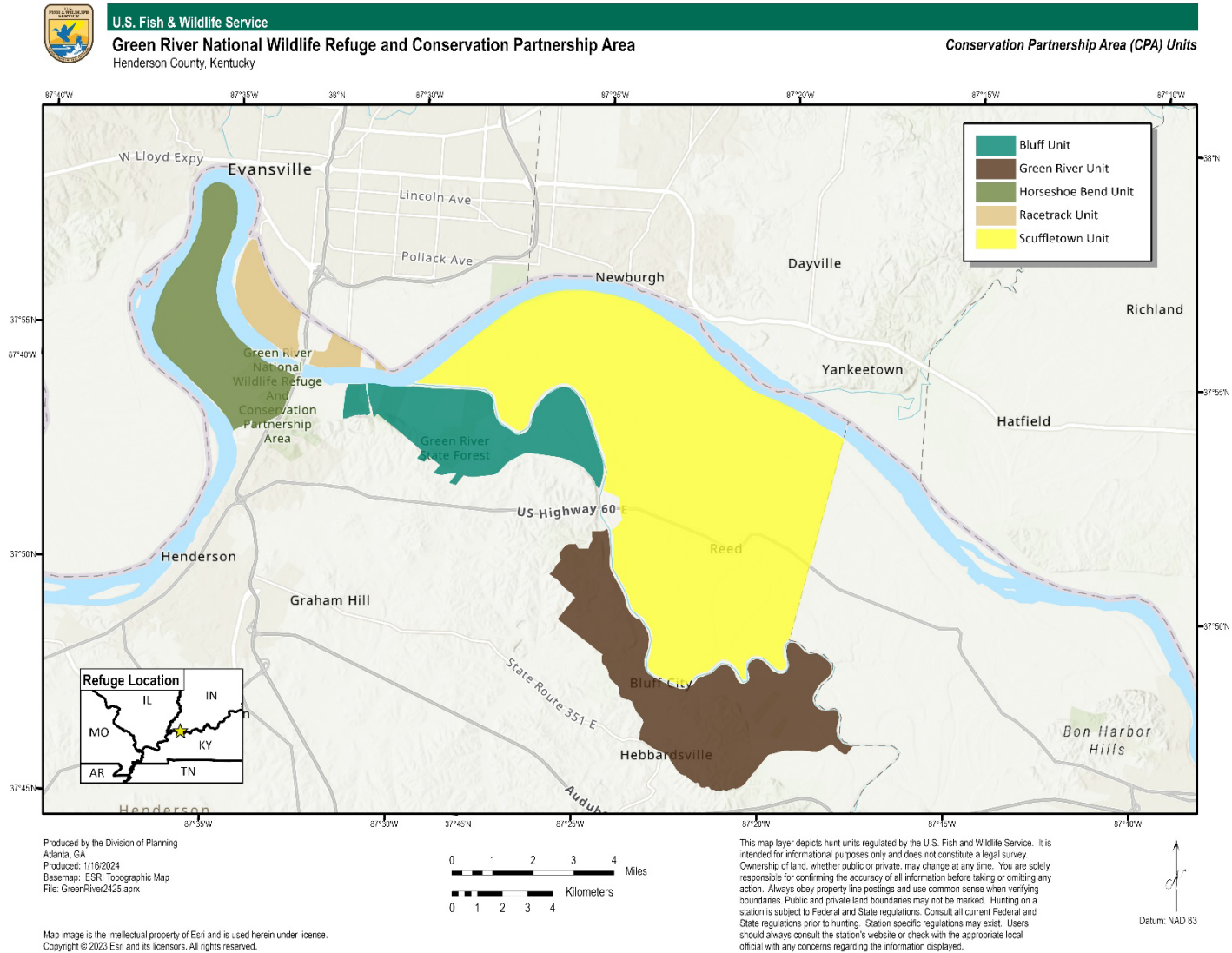
National Wildlife Refuges are guided by the mission and goals of the National Wildlife Refuge System (NWRS), the purposes of an individual refuge, policies of the U.S. Fish and Wildlife Service, and laws and international treaties (see Appendix A for key applicable laws, regulations, and Executive Orders). Relevant guidance includes the NWRS Administration Act of 1966 (NWRSA), as amended by the NWRS Improvement Act of 1997 (NWRRIA), Refuge Recreation Act of 1962, and selected portions of CFR and the Fish and Wildlife Service Manual. The Service recognizes that the Kentucky Department of Fish and Wildlife Resources (KDFWR) is the authority in the state of Kentucky regarding the population status and sustainability of resident wildlife, including the species that are hunted on Green River NWR. The Service strives to provide hunting opportunities at Green River NWR that are within the state and Federal frameworks.

Green River NWR was established pursuant to the NWRSA of 1966, as amended by the NWRRIA of 1997. The primary purpose of the refuge is:

"... conservation, management, and ... restoration of the fish, wildlife, and plant resources and their habitats ... for the benefit of present and future generations of Americans..." 16 U.S.C. §668dd(a)(2) (NWRSA of 1966, as amended by the NWRRIA of 1997).

The approved Green River NWR acquisition boundary is comprised of a Conservation Partnership Area (CPA, Figure 1) of approximately 53,000 acres of wetland forests, backwater sloughs, and open farmland with some fields of warm-season grasses and small amounts of upland forest. These habitats support a diverse suite of game and non-game wildlife species. Lands acquired as a part of the Green River NWR are purchased on a willing-seller basis. The Service is authorized to acquire up to 24,000 acres within the designated 53,000-acre CPA for Green River NWR.

**Figure 1. Conservation Partnership Area for Green River National Wildlife Refuge**



Since the 2019 establishment of the refuge, the Service has actively been pursuing the acquisition of lands as outlined in the Land Protection Plan (LPP) and Environmental Assessment (EA) for Green River NWR and CPA (USFWS 2019a). The CPA consists of 5 units which are outlined in Figure 1. For additional information regarding acquisitions and acquisition priorities, please consult the LPP (USFWS 2019a) and the Refuge Manager.

Acquisition of refuge properties can occur through various legislative and administrative authorities, creating related secondary purposes for Green River NWR. As properties are acquired over time, additional secondary purposes may apply, depending on the acquisition authorities used and any special conditions associated with a specific acquisition. As outlined in the refuge's LPP and Conceptual Management Plan (CMP) (USFWS 2019a), potential secondary purposes for the refuge are listed.

- "...to conserve (A) fish or wildlife which are listed as endangered species or threatened species...or (B) plants..." 16 United States Code (USC) §1534 (Endangered Species Act of 1973)
- "...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 USC §3901(b), 100 Stat. 3583 (Emergency Wetlands Resources Act of 1986)
- "...for use as an inviolate sanctuary, or for any other management purpose, for migratory birds..." 16 USC §715d (Migratory Bird Conservation Act)
- "...to conserve and protect migratory birds..., including species that are listed...as endangered species or threatened species, and to restore or develop adequate wildlife habitat." 16 USC §715i (Migratory Bird Conservation Act)
- "...for the benefit of the United States Fish and Wildlife Service, in performing its activities and services. Such acceptance may be subject to the terms of any restrictive or affirmative covenant, or condition of servitude..." 16 USC §742f(b)(1) "...for the development, advancement, management, conservation, and protection of fish and wildlife resources..." 16 USC §742f(a)(4), (Secretarial powers to implement laws related to fish and wildlife) (Fish and Wildlife Act of 1956)
- "...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 USC §460k-1 "... the Secretary ... may accept and use ... real ... property. Such acceptance may be accomplished under the terms and conditions of restrictive covenants imposed by donors ..." 16 USC §460k-2 (Refuge Recreation Act of 1962)

Green River NWR is part of the Ohio River and Green River Ecosystems and lies in the Interior River Lowland Ecoregion. As such, this refuge is a component of multiple regional and ecosystem conservation planning initiatives, including the Gulf Coastal Plains and Ozarks Landscape Conservation Cooperative (LCC); Southeast Conservation Adaptation Strategy (SECAS); the North American Waterfowl Management Plan (NAWMP); Partners-In-Flight Plan; United States Shorebird Conservation Plan; and Waterbird Conservation Plan of North America.

The mission of the NWRS, as outlined by the NWRSA, as amended by the NWRSA (16 USC §668dd et seq.), 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.”

The NWRSA mandates the Secretary of the Interior in administering the NWRS to (16 USC §668dd(a)(4):

- Provide for the conservation of fish, wildlife, and plants, and their habitats within the NWRS;
- Ensure that the biological integrity, diversity, and environmental health of the NWRS are maintained for the benefit of present and future generations of Americans;
- Ensure that the mission of the NWRS described at 16 USC §668dd(a)(2) and the purposes of each refuge are carried out;
- Ensure effective coordination, interaction, and cooperation with owners of land adjoining refuges and the fish and wildlife agency of the states in which the units of the NWRS are located;
- Assist in the maintenance of adequate water quantity and water quality to fulfill the mission of the NWRS and the purposes of each refuge;
- Recognize compatible wildlife-dependent recreational uses as the priority general public uses of the NWRS through which the American public can develop an appreciation for fish and wildlife;
- Ensure that opportunities are provided within the NWRS for compatible wildlife-dependent recreational uses; and
- Monitor the status and trends of fish, wildlife, and plants in each refuge.

Therefore, it is a priority of the Service to provide for wildlife-dependent recreation opportunities, including hunting, when those opportunities are compatible with the purposes for which the refuge was established and the mission of the NWRS.

A hunting program was not initiated when the Green River NWR was established in 2019 due to the lack of sufficient area to support the program. The refuge has grown to approximately 2,197 acres by the end of calendar year 2023, allowing the Service to accommodate recreational opportunities, such as hunting, to be conservatively opened as outlined in the 2019 CMP (USFWS 2019a). Over time, as the Service acquires additional properties for the refuge within the designated CPA, each newly acquired parcel and existing closed properties will be evaluated to be opened to hunting as outlined here and in the 2019 LPP and CMP (USFWS 2019a) and as analyzed in the EA (Section B, USFWS 2024).



This draft Hunting Plan tiers from the refuge’s LPP and associated CMP (USFWS 2019a). Proposed hunting as outlined herein would be consistent with the LPP and CMP. The draft Hunting Plan would amend the CMP to provide additional details on implementation of the hunting program for Green River NWR. The associated draft hunting compatibility determination is included in Appendix C. Upon approval, these documents would open the refuge to the recreational hunting of migratory game birds and big game as listed in Table 1 and Section III.B and would replace the interim compatibility determination for hunting from the LPP and CMP (USFWS 2019).

The EA (Section B) also evaluates the impacts of incidental take of feral hogs (*Sus scrofa*) during big game hunts, which are also listed in Section III.B as a proactive measure. Feral hogs are not currently established on the refuge, however, with the potential for the spread of this invasive species onto refuge properties and with the potential for the future acquisition of properties with feral hogs, the Service proactively included this species in this analysis to enable the Service to respond quickly, in the future, to the presence of this species with a variety of control measures. It is neither the goal nor the intent of the Service to manage feral hogs as a huntable game species. Further, the state of Kentucky does not consider the feral hog to be a game species and discourages public hunting of feral hogs in favor of more effective control methods (Commonwealth of Kentucky 2022). Hogs are an invasive, exotic species that damage native habitats and prey on native wildlife. The objective of a feral hog control program would be to reduce numbers to levels that minimize impacts to acceptable levels, and where possible, completely eradicate them. Because the primary goal would be to eliminate feral hogs, the Service sees no management value in promoting recreational hunting of feral hogs on any public properties. The Service does believe that hunter effort can remove a portion of feral hogs from its refuges, but it does not support the overall goal that hunting alone can control feral hog populations. Feral hogs will not be regarded as a game species on Green River NWR and control measures will be implemented to eradicate this non-native, invasive species, which may include a hunting option. The Service would work with partners to implement a variety of tools to control and eliminate them from refuge properties. Any addition of this species to the refuge’s hunt program would require a hunt package and proposed changes to the refuge-specific hunting regulations in CFR.

**Table 1. New species to be opened for hunting on Green River NWR.**

Species	Scientific Name(s)
<b>Waterfowl and Migratory Bird Species</b>	
Mallard	<i>Anas platyrhynchos</i>
American Black Duck	<i>Anas rubripes</i>
Gadwall	<i>Mareca strepera</i>
American Wigeon	<i>Mareca americana</i>
Mexican Duck	<i>Anas diazi</i>
Mottled Duck	<i>Anas fulvigula</i>
Northern Pintail	<i>Anas acuta</i>

<b>Species</b>	<b>Scientific Name(s)</b>
Northern Shoveler	<i>Spatula clypeata</i>
Black-Bellied Whistling Duck	<i>Dendrocygna autumnalis</i>
Teal	<i>Anas discors, Anas crecca carolinensis, A. cyanoptera,</i>
Wood Duck	<i>Aix sponsa</i>
Merganser	<i>Mergus serrator, Lophodytes cucullatus, Mergus merganser</i>
Canvasback	<i>Aythya valisineria</i>
Redhead	<i>Aythya americana</i>
Scaup	<i>Aythya infinis, A. marila</i>
Ring-necked Duck	<i>Aythya collaris</i>
Goldeneye	<i>Bucephala clangula, B. islandica</i>
Bufflehead	<i>Bucephala albeola</i>
Ruddy Duck	<i>Oxyura jamaicensis</i>
Long-tailed Duck	<i>Clangula hyemalis</i>
Scoter	<i>Melanitta deglandi, M. perspicilatta</i>
Dark Geese	<i>Branta canadensis, Anser albifrons, A. erythropus</i>
Light Geese	<i>Anser caerulescens, A. c. atlantica, A. rossii, A. hutchinsii</i>
Dove	<i>Zenaida macroura, Z. asiatica, Streptopelia decaocto, S. risoria</i>
<b>Big Game Species</b>	
White-tailed Deer	<i>Odocoileus virginianus</i>
Turkey	<i>Meleagris gallopavo silvestris</i>
Feral Hog (not considered game species)	<i>Sus scrofa</i>

## **II. Statement of Objectives**

Hunting on the refuge is consistent with NWRSIA, the refuge’s LPP, and CMP. Since Green River NWR is such a new refuge, a Comprehensive Conservation Plan (CCP) outlining refuge management goals and objectives has not yet been developed for the refuge. Where appropriate and feasible, the Service would align the refuge’s hunting program with state hunting regulations. In the interim period, the refuge will continue to be managed as outlined in the CMP, as modified by any step-down management plans (e.g., this Hunting Plan). The LPP and CMP included 4 overarching goals for Green River NWR; refuge goals 1, 3, and 4 outlined in the LPP and CMP would be supported by the draft 2024 Hunting Plan, as outlined below.

**Green River NWR LPP/CMP Goal 1.** Protect, Restore, and Manage Habitats for Fish and Wildlife. The Green River NWR would restore, manage, and conserve bottomland hardwoods, adjacent upland habitats, and plant and animal species associated with these communities. The refuge would contribute to the habitat goals presented in the North American Waterfowl

Management Plan (NAWMP), various threatened and endangered recovery plans, and Kentucky's State Wildlife Action Plan.

The draft Hunting Plan would serve this goal by:

- maintaining sustainable wildlife populations at levels compatible with refuge habitats and
- preserving the natural diversity and variety of biotic communities occurring on the refuge by reducing populations of invasive and nuisance animals to minimize adverse wildlife and habitat impacts.

**Green River NWR LPP/CMP Goal 3.** Connect People with Nature. Visitors would have access to the Green River NWR in order to enjoy and take advantage of opportunities for compatible hunting, sport fishing, wildlife observation, photography, and environmental education and interpretation.

The draft Hunting Plan would serve this goal by:

- connecting visitors of all ages with nature through wildlife-oriented outdoor recreational activities by developing and maintaining a compatible hunt program on current and future refuge properties consistent with Federal and state laws and regulations and in accordance with Service laws and policy, while maintaining sustainable wildlife populations at levels compatible with refuge habitats, and by providing the public with quality and compatible wildlife-dependent recreational opportunities according to Service laws and policy including access and opportunities for hunting on the refuge, especially for youth hunters, underserved groups, and families.
- providing safe, compatible, quality, wildlife-dependent hunting programs; fostering quality outdoor experiences; promoting greater understanding of fish, wildlife, and habitat conservation, and the natural systems of the Ohio and Green River deltas; and nurturing a greater appreciation for the value of the refuge and the NWRS.

This program would include hunting of migratory game birds and big game listed by the state. To address other management goals and objectives, to supplement other Service and partner invasive species control and elimination activities, and to minimize adverse wildlife and habitat impacts from invasive species, the hunt program would also have the potential to be expanded in the future to include the incidental take of invasive species, such as feral hog. Green River NWR would utilize a variety of management tools, including quotas, permits, and period limitations, as needed to administer the refuge hunting program to achieve wildlife population objectives, to ensure quality and safe hunting activities, to limit potential conflict with adjacent landowners, and reduce conflicts with other public uses on current and future refuge properties. The Service would also, when feasible, develop special hunting opportunities for youth, mobility impaired individuals, and other underserved individuals; use hunting, as deemed appropriate, as one management tool in the control of non-native, invasive, and/or nuisance species populations on current and future refuge properties; and develop visitor amenities to facilitate hunting in feasible locations and as maintenance requirements of such amenities align with

staffing capacities. All strategies could be used to manage/restore viable populations, while providing quality outdoor recreational opportunities.

**Green River NWR LPP/CMP Goal 4.** Promote Conservation Partnerships. The Green River NWR would increase opportunities for collaboration and partnerships in science, education, and research with conservation organizations, private landowners, government agencies, and others. These collaborative efforts will help inform land management decisions on the refuge/landscape and encourage continued responsible stewardship of the refuge and its natural resources.

The draft Hunting Plan would serve this goal by coordinating hunting activities with Native American Tribes, adjacent landowners, the general public, other conservation organizations, and state fish and wildlife agencies and by aligning as much as possible with state hunting regulations while serving refuge purposes.

### **Framework of the Green River NWR Hunting Program**

The proposed hunting program at Green River NWR was designed to serve goals expressed in the LPP and CMP, while supporting the purpose of the refuge. All methods of approved take have been developed with the objective of humanely dispatching the animal. Approved hunts, including dates, time, and method of take, while involving the take of individuals, are developed with humaneness and animal welfare concerns. Established hunter training, hunter ethics, and hunter responsibilities help ensure hunters continue to use good judgment related to humaneness and animal welfare. The Service recognizes hunting as an acceptable, traditional, and legitimate form of wildlife-oriented recreation. Within the context of the above stated refuge management goals, the purpose of the hunting program on the refuge would be as listed.

- Support refuge management goals and objectives expressed in the LPP and CMP.
- Provide the public with quality and compatible wildlife-dependent recreational opportunities according to Service laws and policies.
- Increase opportunities for hunting on refuge properties, especially for youth hunters, underserved groups, and families.
- Maintain sustainable wildlife populations at levels compatible with habitat management and protection goals, while also serving the above stated public use goal.
- Preserve the natural diversity and variety of biotic communities occurring on the refuge.
- Reduce populations of invasive and nuisance animals to minimize adverse wildlife and habitat impacts.
- Ensure communication of information to the public and neighboring landowners about the effects of invasive, nuisance, or overpopulated species (e.g., white-tailed deer and feral hog) as it relates to the refuge's hunting program.

### **III. Description of Hunting Program**

Hunting on the refuge would be permitted in accordance with Federal regulations governing public use on NWRs as set forth in Title 50 of the Code of Federal Regulations. Migratory bird hunting seasons and species (including waterfowl) will be consistent with Federal and state season frameworks and regulations. All other species open for take on the refuge are allowable for take under state regulations, subject to the special conditions as published annually in CFR and outlined in annual refuge-specific hunting brochures, which are available to the general public. Specific hunting seasons, days, and times may vary in some instances from state frameworks as the refuge may be more restrictive than state frameworks. The Green River NWR hunt brochures would be annually updated to reflect more specific information and restrictions, including seasons, days, times, bag limits, access, licenses and permits, allowable hunting ammunition, other equipment, quota application process, and other refuge-specific regulations. Refuge-specific hunting regulations allow for proper management of public lands and their resources; they also provide increased safety to refuge visitors.

Important game species to be considered by the Green River NWR hunt program are listed below in Section III.B and can be found throughout various habitats that would make up the refuge. These include migratory game birds and big game. To achieve the objectives set forth by this Plan and meet compatibility requirements, on occasion, it may be necessary to deviate from state season structures, adjust bag limits, or implement other restrictions. Determinations would be based on evaluations of multiple factors including, but not limited to, public use conflicts, wildlife population levels, habitat conditions, wildlife diseases, and time/space zoning. Adjustments would be made in coordination with KDFWR to ensure achievement of the purpose of the refuge, the mission of the NWRS, and the mutual regional conservation goals of both partners.

Establishment of a refuge hunt program would authorize public hunting of species identified within the Plan. To evaluate and facilitate the provision of this outdoor recreational opportunity, the Service evaluated existing properties, as well as the entire CPA. Over time as the Service acquires additional properties for Green River NWR, each newly acquired parcel and existing closed properties would be evaluated for inclusion, in whole or in part, in the hunting program. As annual evaluations are conducted of Green River NWR's management, including management of wildlife, habitat, and visitor services, and as changes occur across time (e.g., increased public use of the refuge, completion of public use infrastructure, and/or intense management of units for specific species), limits or closures of some areas may be deemed necessary and would remain an option to ensure that all refuge program goals and objectives are met (e.g., temporarily or permanently closing an area to hunting during a specified time period).

The 2019 LPP for Green River NWR outlined a 53,000-acre CPA within which the Service is authorized to acquire up to 24,000 acres for Green River NWR (USFWS 2019). As of December 31, 2023, Green River NWR (Figure 1) currently owns and manages approximately 2,197 acres. Under the 2024-25 proposal, and as previously analyzed (USFWS 2019), the Service would open the following listed hunts.

Beginning in the 2024-25 hunt season, the Service proposes to open the 589.13 acres of the Horseshoe Bend Unit to the listed hunts.

- Migratory waterfowl hunting (duck, goose, coot, and merganser) for youth, seniors, and disabled hunters, as defined by the state, during the months of December and January of the statewide season and for youth and veterans in February for the state-wide veterans and youth dates
- Deer and turkey archery and crossbow only hunting for youth, seniors, and disabled hunters, as defined by the state, during the months of September and October of the statewide season
- Turkey archery and crossbow only hunting for youth only, as defined by the state, during the months of April and May of the statewide season

Beginning in the 2024-25 hunt season, the Service proposes to open the 204 acres of the Tschanner West section of the Bluff Unit to the listed hunts.

- Deer and turkey archery and crossbow only hunting for youth, seniors, and disabled hunters, as defined by the state, during the months of September and October of the statewide season
- Turkey archery and crossbow only hunting for youth only, as defined by the state, during the months of April and May of the statewide season

Beginning in the 2025-26 hunt season, given the logistical timing of approval for hunt plans, as well as the time needed for applications, awards, and permit issuance, the Service proposes to open approximately 793.13 acres (i.e., 589.13 acres in Horseshoe Bend and 204 acres of the Tschanner West section of Bluff Unit) to the listed hunts.

- Quota archery and crossbow deer/turkey in November of the statewide season

In accordance with existing Federal, state, local, and refuge-specific regulations as outlined in Table 2, the Service developed refuge-specific spatial and temporal regulations to ensure compatibility of hunting as part of the 2024-25 Hunt Package. Based on acreage, staffing, habitat restoration, infrastructure, and visitor amenities, the Service will work at the refuge to refine existing opportunities and/or develop additional migratory game bird hunting (e.g., quota hunts, early teal and wood duck hunts, and dove hunts) and additional big game hunting (e.g., quota hunts).

**Table 2. Conservation Partnership Area Acres, Acres to be Opened and Closed to Hunting in 2024-25, and Potential Future Acquisition Acres are Divided by Management Unit.**

Units	Total CPA Acres	Approximate Total Acres Owned or Managed by FWS (as of December 31, 2023)	Approximate Acres to be Evaluated for Inclusion in Hunting Program for the 2024-25 Hunt Season*	Approximate Acres for Potential Future Acquisition
Scuffletown Unit	29,627	0	0	Up to 21,803.48
Horseshoe Bend Unit	5,443	589.13	589.13	Up to 4,853.50
Race Track Unit	1,994	0	0	Up to 1,994.00
Bluff Unit	5,365	1,607.39	204.00	Up to 3,757.61
Green River Unit	10,202	0	0	Up to 10,202.00
<b>Total Acres</b>	<b>52,631</b>	<b>2,196.52</b>	<b>793.13</b>	<b>Up to 21,803.48</b>

\*Approximately 1,403.39 acres would currently be closed to hunting.

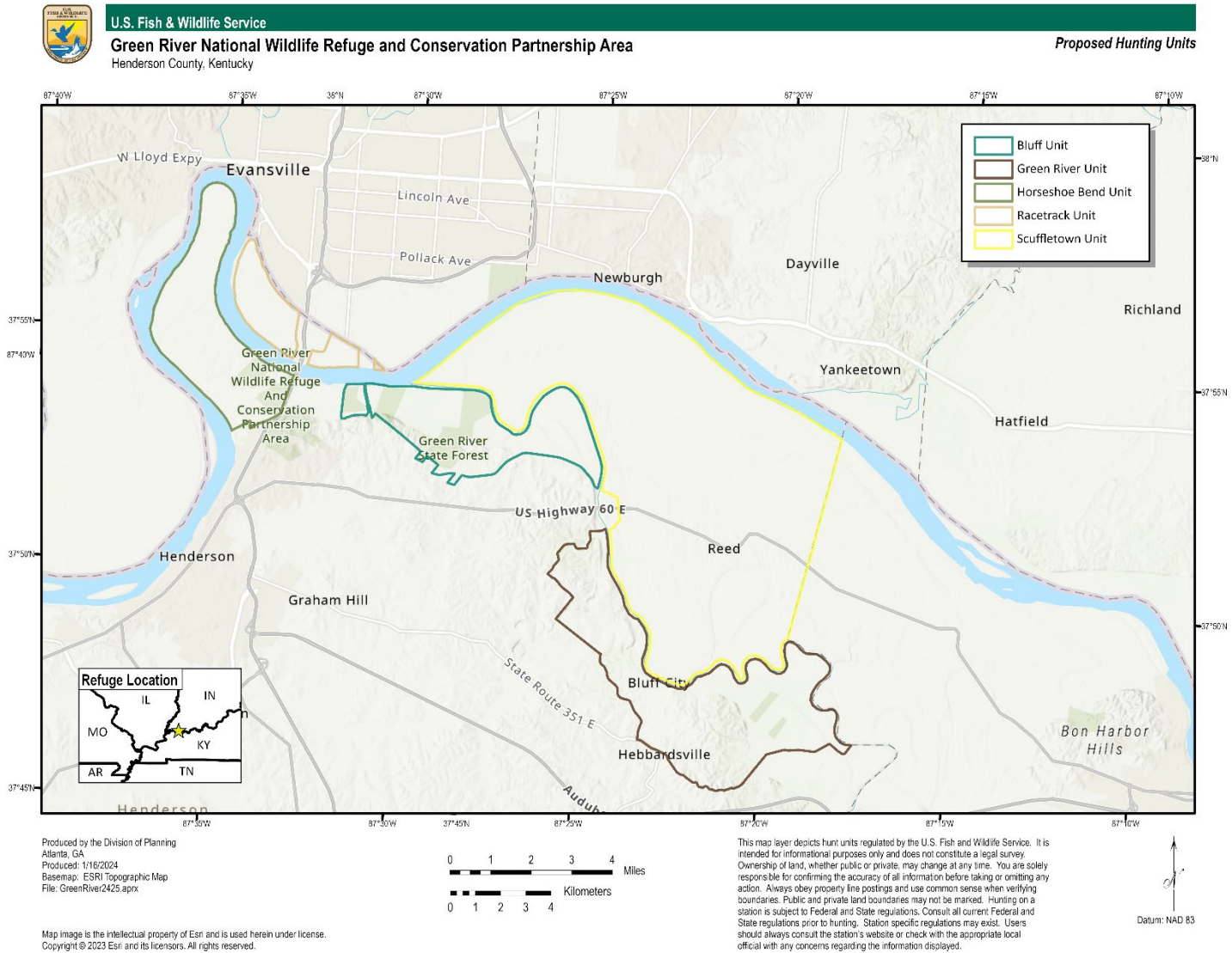
Note: As additional lands are acquired as part of Green River NWR, the Service would evaluate and potentially open to hunting activities on up to 24,000 acres as outlined in this plan, the 2019 LPP, and CMP (USFWS 2019a) and as analyzed in the EA (Section B), in accordance with procedures outlined by hunting and sport fishing rulemaking process and Service Policy.

### **A. Areas to be Opened to Hunting**

The acquisition area for Green River NWR is within a CPA of approximately 53,000 acres along the Ohio and Green rivers (Figure 1). The CPA allows the Service flexibility to meet the project’s target acreage of approximately 24,000 acres. It also provides the ability to diversify habitats, increase connectivity of conservation properties, provide resources for wildlife during major flood events, and support public uses. Figure 2 outlines the proposed hunt units for Green River NWR, based on the outlined CPA, for existing properties and future acquisitions. While the Service currently manages approximately 2,197 acres for the refuge, with the ongoing active land acquisition program, the Service could acquire up to 24,000 acres within the 53,000-acre CPA and could open the greater part of these acres to hunting activities.

The up to 24,000-acre Green River NWR is in five units with the majority of area lying on the south side of the Ohio River (Figure 2). All refuge properties would be in Henderson County, Kentucky.

**Figure 2. Proposed Green River NWR Hunting Units**



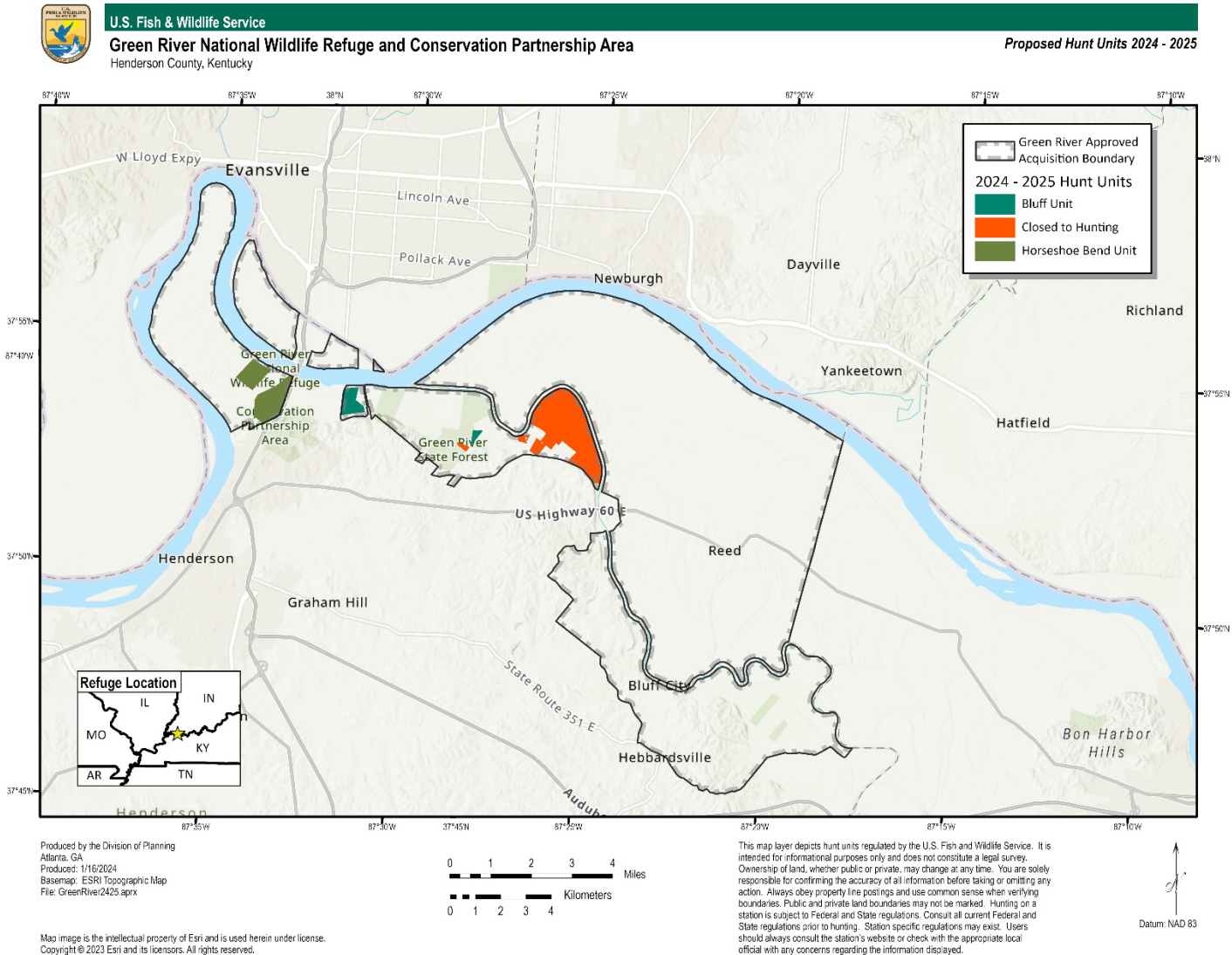


- The Scuffletown Unit (within the 29,627-acre Scuffletown CPA) and the Horseshoe Bend Unit (within the 5,443-acre Horseshoe Bend CPA) are located along the south bank of the Ohio River and are separated by U.S. Highway 41.
- The Race Track Unit (within the 1,994-acre Race Track CPA) is located both east and west of Highway 41 and along the north bank of the Ohio River.
- The Bluff Unit (within the 5,365-acre Bluff CPA) is bordered by the John J. Audubon State Park on the west, the Green River on the north and east, and a CSX railway on the south.
- The Green River Unit (within the 10,202-acre Green River CPA) is located south and east of Spottsville, Kentucky and is bordered by the Green River on the north and east.

The Service anticipates evaluating newly acquired properties within each of the management units for the opportunity to open hunting; the Service would evaluate newly acquired properties for inclusion, in whole or in part, in the refuge's hunting program. While much would be opened, not all 24,000 acres would be opened to hunting activities due to such issues as available habitat, sanctuaries, population of target species, user conflicts, and aspects of safety. Table 2 outlines by management unit the CPA acreage total, the total acreage owned or managed (as of December 31, 2023), the potential acquisition acres to be evaluated for inclusion in the hunting for 2024-25, and the estimated acres for potential future acquisitions.

As of December 2023, Green River NWR owns or manages approximately 2,197 acres in the Horseshoe Bend and Bluff units. In 2024-25, Green River NWR proposes to open approximately 589.13 acres of the Horseshoe Bend Unit and approximately 204 acres of the Tscharner West section of the Bluff Unit. The Tscharner East section of the Bluff Unit currently has areas which will be closed year-round to all public entry, including hunting; waterfowl sanctuaries will likely be developed in the Bluff Unit, which will be seasonally closed for all public entry, including hunting. Based on acreage, staffing, habitat restoration, infrastructure, and visitor amenities, the Service will work at the refuge to refine existing opportunities and/or develop additional migratory game bird hunting (e.g., quota hunts, early teal and wood duck hunts, and dove hunts) and additional big game hunting (e.g. quota hunts), including in the Tscharner East section of the Bluff Unit, specifically within 1,355 acres in the Tscharner East section of the Bluff Unit. In the future as infrastructure such as levees, water control structures, and impoundments are created on this site, the Service may set aside waterfowl units for sanctuary, limiting public entry, and potentially units for quota migratory game bird and big game hunts. Hunting in this section of the Bluff Unit will be analyzed in the future through procedures outlined by hunting and sport fishing rulemaking process and Service Policy. Figure 3 depicts the approximately 793.13 acres of hunting areas to be opened later in 2024.

**Figure 3. Green River NWR Properties to be Opened to Hunting in 2024-2025**



Green River NWR has an active land acquisition program. Upon acquisition of a property within the Green River NWR CPA, the property will be evaluated regarding the potential for opening it to public use activities, including hunting opportunities. Criteria used to evaluate compatibility of hunting on future properties include the acreage and size of the property; configuration of the property; juxtaposition in the landscape and to other refuge properties; adjacent property uses; wildlife habitat type, availability, and condition; potential management of the property to meet refuge purposes and goals (e.g., sanctuary for migratory waterfowl, closed areas, and visitor use and facilities); and public safety concerns. As properties are acquired and determinations made, any tracts expanding or restricting hunting would be identified through various outlets, including, but not limited to in the refuge's hunt brochure, the refuge's website (<https://www.fws.gov/refuge/green-river>), the refuge's Facebook site (<https://www.facebook.com/GreenRiverNWR/>), and the Service's Find Your Hunt website (<https://www.fws.gov/refuges/hunting/map/>).

The funding source used for acquisition of properties can influence management aspects of a property. As properties are acquired, additional secondary purposes may apply, depending on acquisition authorities used and any special conditions associated with the specific authority. Funding sources will likely be derived from five legislative authorities which may integrate secondary purpose(s) for Green River NWR as outlined above.

Future NEPA analysis will be necessary for actions not covered in the EA (e.g., future facilities to support visitation activities such as parking areas, improved trails, kiosks, and boat ramps).

## **B. Species to be Taken, Hunting Periods, and Hunting Access**

Based on Federal frameworks, state bag limits, and other state restrictions, the proposed hunting program is designed to be sustainable. Restrictions on methods of harvest, timing, and seasons aid in maintaining sustainable populations.

The following is an assessment of the hunting resources on the refuge; in any given year, consult the refuge's current hunt brochure and CFR for current information and regulations regarding hunting of migratory game birds and big game on the refuge. Table 1 lists the specific migratory game bird and big game species proposed for hunting under this plan.

### **Migratory Game Birds (duck, goose, coot, and merganser beginning in 2024-25 and quota hunts, early teal and wood duck hunt, and dove hunt as a potential future hunt opportunities)**

Frameworks for season lengths, bag limits, and areas for migratory bird hunting are established by the Service. For each species, frameworks and seasons regulations are developed using factors such as population size and trends, geographic distribution, annual breeding effort, condition of breeding and wintering habitat, number of hunters, and anticipated harvest. Green River NWR is located within the Mississippi Flyway for waterfowl and the Eastern Management Unit (EMU) for mourning doves.

Migratory game birds are known to occur in the marshes, flooded woodlands, grasslands, and upland hardwoods throughout the CPA. Thus, they would be expected to occur on existing refuge properties and future acquisitions. Numbers of migratory game birds have been sufficient to support hunting prior to refuge establishment. Populations would be expected to continue to be sustainable under the proposed hunt program. Duck, goose, coot, and merganser would be hunted according to regulations within the state zones and seasons (including state methods of take, and bag limits) within the refuge open to public hunting, except for refuge-specific regulations outlined in CFR (e.g., shooting hours only being allowed until 12:00 p.m. [noon]). Based on acreage, staffing, habitat restoration, infrastructure, and visitor amenities, the Service will work at the refuge to refine existing opportunities and/or develop additional migratory game bird hunting (e.g., quota hunts, early teal and wood duck hunts, and dove hunts).

As part of the active land acquisition program, the Service would develop inviolate sanctuaries, which would be closed to migratory game bird hunting, and consider the use of quotas, permits, period limitations, and other measures on some areas to facilitate a quality, safe hunting experience, while meeting other refuge management priorities, goals, and objectives. The harvest of migratory game birds on the refuge would not be expected to reduce population levels below acceptable levels.

Active duck hunters in Kentucky make up approximately 1% of U.S. duck hunters (Lander 2018). The limited number of active duck hunters in Kentucky combined with state and Federal regulations and hunting frameworks reduce the chances of an impact on duck populations migrating through the Mississippi Flyway. To additionally limit disturbance to native wildlife and user conflicts, morning only hunting for waterfowl would be instituted on the refuge, which would help minimize noise impacts of gun fire throughout the refuge for approximately 18 hours each day. As additional properties, staff, and funding are attained for the refuge, the Service would develop sanctuary areas, which are closed to all public use from November through March to provide a disturbance free zone for migrating game birds and resident wildlife. Green River NWR would continue developing managed impoundments to provide both moist soil and hot foods for waterfowl and create quality hunting opportunities; however, additional time and space zoning (e.g., establishment of separate use areas, use periods, and restrictions on the number of users such as quota hunts) would be implemented to reduce negative effects to migratory game birds and other wildlife species. Upon acquisition of additional properties, staff, and funding for the refuge, the Service would consider the expansion of migratory bird hunting through quotas, permits, period limitations, and other measures on some areas to facilitate a quality, safe hunting experience, while meeting other refuge management priorities, goals, and objectives.

**Light and Dark Geese** – Giant Canada goose populations were nearly extirpated in the early 1900s. The Mississippi Flyway population increased an average of 3% a year from 1998 to 2007 (Ducks Unlimited 2019). The 2018 Waterfowl Population Status assessment presented a mixed bag with snow geese and several populations of Canada goose increasing, while other populations of Canada goose and white-fronted geese declined (USFWS 2018). In 2017, however, a 16% increase to 1.78 million geese (including the resident population) were

recorded in the Mississippi Flyway (USFWS 2017). In the 2020 Waterfowl Population Status Report, the population estimate for mid-continent lesser snow geese declined by 14%, or 1.57 million geese (USFWS 2020). The population remains abundant at 9.92 million geese (USFWS 2020). Ross's geese were also down 37% over 2019 estimates (USFWS 2020). The mid-continent population of white-fronted geese, a.k.a. specklebellies, is estimated at 1.27 million, a healthy 64% increase over 2019 (USFWS 2020).

**Ducks (including teal, wood ducks, and merganser)** – In the Waterfowl Population Status Report released by the Service, the total duck population estimate was approximately 38.9 million birds in 2019 (USFWS 2019) and 34.2 million birds in 2022 (USFWS 2022a). This estimate was 12% lower than the 2019 estimate of 38.9 million and 4% below the long-term average (1955–2019) (USFWS 2022a). Total duck and goose harvest in the Mississippi Flyway from the 2021 hunting seasons was estimated at 3,978,000 ducks harvested from 357,700 duck hunters and 1,015,800 geese harvested from 226,50000 goose hunters. Total duck and goose harvest in the Mississippi Flyway from 2019 was estimated at 4,177,100 ducks harvested from 386,000 duck hunters and 1,023,200 geese harvested from 233,800 goose hunters (Raftovich et al. 2022). Raftovich et al. (2022) determined that total ducks harvested in Kentucky in 2021 was 120,600 by 8,700 hunters and 8,100 hunters harvested 33,400 geese.

**Coot** – American coot populations appear to be stable, according to the North American Breeding Bird Survey and Partners in Flight, estimating the global breeding population at 7.1 million (Cornell 2023). The 2022 mid-winter waterfowl survey for Kentucky conducted in January reported approximately 7,500 ducks, 15,800 geese, and 50 coots within the Lower Ohio River and Western Coalfield area (KDFWR 2022a). The Migratory Bird Activity Report (Raftovich et al. 2022) estimates only 700 coots harvested in Kentucky in 2021 with only 100 active hunters in the state.

**Dove** – There were about 165 million doves in the U.S. in 2021 and 39.5 million in the EMU for mourning doves (Seamans 2022). Estimates for mourning dove total harvest, active hunters, and total days afield in the U.S. in 2021 were 9,202,100 ± 291,200 (estimate ± SE) birds, 642,800 hunters, and 1,710,000 ± 59,200 days afield (Seamans 2022). In 2021 harvest and hunter participation in the EMU were 3,822,100 ± 156,700 birds, 256,800 hunters, and 624,300 ± 28,500 days afield (Seamans 2022). Doves are not included in the 2024-25 hunt package for the refuge, but they could be evaluated for inclusion in the refuge's hunt program at a later date. Based on acreage, staffing, habitat restoration, infrastructure, and visitor amenities, the Service will work at the refuge to refine existing opportunities and/or develop additional migratory game bird hunting (e.g., quota hunts and dove hunts).

### **Big Game (archery and crossbow white-tailed deer and eastern wild turkey beginning in 2024-2025 and quota hunts as a potential future hunt opportunities)**

Big game species are known to occur throughout the habitats of the CPA. Thus, they would be expected to occur on existing refuge lands and future acquisitions of land. Numbers of big game have been sufficient to support hunting prior to refuge establishment. Populations would be expected to continue to be sustainable with the proposed hunt program. Based on acreage,

staffing, habitat restoration, infrastructure, and visitor amenities, the Service will work at the refuge to refine existing opportunities and/or develop additional big game hunting (e.g. quota hunts).

**White-tailed deer** – Kentucky archery and crossbow deer seasons normally open in September and close in January with one antlered deer and unlimited antlerless deer bag limits. Despite a statewide bag limit that allows hunters to shoot more than one deer per year, there appears to be a limit on the number of deer that hunters are willing or able to harvest, as 77% (81,746) of all successful hunters only harvest one deer. The total number of deer harvested during the 2020-21 deer season was 141,620, which is the fifth highest harvest on record, however, this was a 5% decrease from the 2019-20 season (148,385); the 2020-21 season was 3.7% above the 10-year average (137,005). The total antlered buck harvest was 69,441 during the 2020-21 season, which is 2.2% below the five-year average. The total female harvest was 64,599 in the 2020-21 season, which is 1.7% below the five-year average. There were no significant changes in the percentage of the 2020-21 harvest by weapon type compared to the 2019-20 season with the exception of the crossbow harvest. Crossbow harvest increased 34.6% (13,171) from the 2019-20 season (9,784) and was 138.7% above the five-year average (5,518). Nine percent of the total deer harvested in the 2020-21 season came from hunters using crossbows with more female deer taken by crossbows and archery equipment (17,431) than antlered males (12,162). Henderson County, Kentucky currently has 2 public hunting areas totaling approximately 8,200 acres and recorded 156 deer taken during the 2020. (KDFWR 2022b).

White-tailed deer would be hunted on open refuge units according to state regulations including zones, seasons, bag limits, and shooting hours, except as outlined in CFR. During any refuge quota hunt, other public uses will not be permitted. Upon acquisition of additional properties, staff, and funding for the refuge, the Service would consider the expansion of deer hunting methods and/or implementation of quotas, permits, period limitations, and other measures on some areas to facilitate a quality, safe hunting experience, while meeting other refuge management priorities, goals, and objectives. The harvest of white-tailed deer on the refuge would not be expected to reduce population levels below acceptable levels.

**Eastern Wild Turkey** – Kentucky's statewide spring turkey regular season is 23 consecutive days beginning the Saturday closest to April 15th (i.e., this varies among years and is generally between April 12th and 18th). A youth-only spring season is 2 days beginning the Saturday closest to April 1<sup>st</sup>. During the spring turkey season, bag limits are 2 turkeys with visible beards harvested per season and 1 per day. A total of 29,223 turkeys were harvested during the spring 2021 statewide youth and regular seasons combined, which was 8% below 2020, 4% below the 10-year average. Harvest on opening weekend of the regular spring season (34% of the season total) changed by <1% from last season, but it was 10% above the 5-year average. During the 2020 spring season, private land harvest of turkeys (27,476) dropped by 9% compared to the previous year and by 5% compared to the 5-year average. However, during the 2020 spring season, public land harvest (1,746) increased 14% compared to the previous year and 7% compared to the 5-year average. Kentucky also has a fall turkey season from September to mid-January. Currently, the fall season bag limit is 4 turkeys, only 2 of which may be taken during the 2 shotgun seasons (regardless of weapon used), and only 1 of which may be a male

bird with a beard length  $\geq 3$  inches. The reported harvest during Kentucky's 2020 fall season (2,102) increased 20% from 2019 (1,757). Geographically, fall harvest mirrors spring harvest. Eighty-five percent of successful hunters harvested 1 turkey, 14% harvested 2, 1% harvested 3, and <1% harvested the limit of 4. Sixty-eight percent of fall-harvested turkeys in 2020 were hens, a 26% increase over 2019. Between 2009 and 2017, sales of fall turkey permits declined by 66% among residents and 22% among nonresidents. (KDFWR 2022b) Henderson County, Kentucky currently has 2 public hunting areas totaling approximately 8,200 acres and recorded 32 turkeys taken during the 2022 seasons (KDFWR 2023c).

Wild turkey would be hunted on designated refuge hunt units according to state regulations including zones, seasons, bag limits and shooting hours, except as outlined in CFR. Upon acquisition of additional properties, staff, and funding for the refuge, the Service would consider the expansion of turkey hunting methods and/or implementation of quotas, permits, period limitations, and other measures on some areas to facilitate a quality, safe hunting experience, while meeting other refuge management priorities, goals, and objectives. The harvest of turkey on the refuge would not be expected to reduce population levels below acceptable levels.

### **Incidental Take Species**

The proposed big game hunting would include white-tailed deer and eastern wild turkey with the option to consider incidental take of feral hogs, in the future, to aid the Service and partners in the control and elimination of this invasive species.

**Feral Hogs** – Feral hogs are an invasive, exotic species that damage native habitats and prey on native wildlife. The Service's intent would be to eliminate this species from the refuge lands; hence it would not be managed as a game species; any public hunting of feral hogs on the refuge would be to support the intent and Service and partner management efforts to remove this species presence from refuge lands. Public hunting of feral hogs may be considered as one of the tools to support control and elimination efforts. As part of adaptive management and through a future planning process, incidental take of feral hogs may be authorized during approved refuge hunts if a population becomes established on Green River NWR. Consultation with KDFWR and other stakeholders would be included as a part of any feral hog control plans as it is unlikely the problem, if incurred, would only be limited to refuge properties.

Kentucky currently has five known feral hog breeding populations and five areas of concern, each covering thirteen counties. Joint efforts between the U.S. Department of Agriculture (USDA) Wildlife Services (WS) and KDFWR resulted in the eradication of 171 wild pigs in 2018. Most breeding populations have been reduced significantly. The largest wild pig population in north central Kentucky (Henry, Owen, and Franklin counties) has been drastically reduced. Agricultural damage from feral hogs throughout north central Kentucky was moderate in 2016. However, no reports of agricultural damage were received from this area in 2017 or 2018. Concentrated efforts in this area have only turned up a handful of remaining feral hogs. KDFWR expects full eradication of feral hogs from this area within the next one to two years. Two emerging populations on Federal lands (Land Between the Lakes National Recreation Area and Fort Campbell U.S. Army Base, in Christian County) have recently been identified. The USDA

WS and KDFWR are currently collaborating with agency personnel and local officials to develop eradication plans for these areas (Backs 2019). Currently no known populations of feral hogs exist on refuge properties.

## **Hunting Access**

The refuge would currently be closed at night. Hunters would be able to access refuge hunting areas from two hours before legal sunrise until two hours after legal sunset. Multiple public roadways provide access to each Green River NWR hunt unit. Primary access to the refuge would likely be along county roads, unless flooding conditions occur. Hunters wishing to access hunting areas would find legal parking along the refuge's boundary to access the area by foot. Hunting periods and access points (e.g., parking areas and, if applicable, boat ramps) would be outlined in the annual hunt brochure and identified on the associated map. We would allow hunters to use boats (manual power or electric trolling motors only) and bikes (including e-bikes) along designated routes only (graveled, paved roads, and established trails) managed by the Service as part of Green River NWR for access the refuge. Mobility-impaired individuals are allowed to use a personal off-road or all-terrain vehicle, if approved, for access to designated areas of the refuge if a reasonable accommodation is required to participate in refuge programs. A formal request must be filed with the refuge including a verified physician's statement attesting to the nature of the disability and specific area to be accessed. If approved, the individual is issued a special use permit (SUP) permitting off-road or all-terrain vehicles use for access purposes only in designated areas. Hunters may park along open roadways, in parking lots, or at gates/pull-offs when on the refuge. Hunters may not block access to refuge roads.

### **C. Hunter Permit Requirements**

Hunters would be required to have all applicable licenses, permits, and stamps, including state hunting licenses and a refuge hunt brochure. The Service is exploring the implementation of a refuge-specific permit and fee structure for the 2025-26 hunting season. Implementation of a fee program will not only allow the Refuge to better track visitor numbers, harvest data, and visitor usage of the refuge, but fees garnered through this program will be used to offset expenses for road and parking lot maintenance, boundary maintenance, brochures, public education programs, law enforcement salaries, and expansion/improvements of visitor amenities. Fees would also support habitat management and enforcement activities by Federal Wildlife Officers, and other staff support.

### **D. Consultation and Coordination with the State**

National wildlife refuges, including the Green River NWR, conduct hunting programs within the framework of state and Federal regulations. Authorized hunting opportunities for the Green River NWR would be conducted under state regulations; however, the refuge may elect to be more restrictive to support refuge management goals. In development of this proposal, the Service coordinated with the state partners and reviewed the operations and regulations for neighboring state wildlife management areas and other refuges to find consistency where possible. Building on the 2019 LPP and CMP and building on the Service Hunt Opportunity Tool



coordination activities with the state, the refuge began coordination with the state of Kentucky in 2021 for the current proposal, including working with the local State Biologist and KDFWR Conservation Officers. Refuge staff would continue to coordinate with the KDFWR to address implementation of hunting activities. The Service sent scoping letters to KDFWR on March 31, 2021, to engage it early in the planning process, for the proposed hunting program at Green River NWR, to provide comments and input into the development of this proposal to open hunting on the refuge and to help align state and refuge-specific regulations, where possible.

The EA, draft Hunting Plan (Section A), draft Hunting CD (Appendix C), and draft refuge-specific regulations were made available for public review and comment in spring 2024 nationally through the Federal Register and locally through notice to local media and notice on the refuge's website (<https://www.fws.gov/refuge/green-river>) and Facebook page (<https://www.facebook.com/GreenRiverNWR/>). Separate notice was also provided in 2024 to KDFWR. The Service will continue to consult and coordinate with KDFWR to maintain regulations and programs that align with the state as much as possible, as well as to monitor populations of game species and set harvest goals. The Service will strive to maintain consistent regulations with each state agency whenever applicable.

Disease management activities, including chronic wasting disease surveillance, will continue to be coordinated through the states. The Association of Fish and Wildlife Agencies Technical Report on Best Management Practices for the Prevention, Surveillance, and Management of Chronic Wasting Disease (Gillin and Mawdsley 2018) provides guidance and will help the Service and states to work jointly to implement a response plan for any other wildlife disease that surfaces in this area.

The Service would continue to work with the state of Kentucky to ensure safe and enjoyable recreational hunting opportunities on the refuge. Hunter participation and harvest data may be collected by the state or the refuge. Law enforcement officers from the Service and the state would work together to patrol the refuge, safeguarding hunters, visitors, game and nongame species, and other resources.

## **E. Law Enforcement**

Enforcement of refuge violations normally associated with management of a NWR is the responsibility of commissioned Federal Wildlife Officers. Dependent on jurisdictions and inter/intra agency agreements, other officers, Special Agents, state game wardens, and local Sheriff's Departments assist the NWRS Federal Wildlife Officers.

The listed methods are used to control and enforce hunting regulations.

- Refuge and hunt area boundaries would be clearly posted.
- The refuge would provide a brochure that shows hunting areas.
- Service law enforcement staff would conduct routine compliance checks on refuge users, including hunters.

- The refuge would monitor user conflicts and strive to alleviate issues through management practices that consider opportunity, time, space and other elements associated with a specific issue.

## F. Funding and Staffing Requirements

Currently, the administration of Green River NWR is through the Clarks River NWR, located two hours southwest of the refuge in Benton, Kentucky. Green River NWR has no full-time staff stationed on-site, at present. Future programs, services, and facilities/amenities supporting visitor use would be dependent upon on-site staffing and refuge-specific funding. Development of infrastructure to support refuge programs and habitat management objectives would also be dependent on on-site staffing and refuge-specific funding. Annual administration costs for the hunting program at Green River NWR, including staff salary, equipment, law enforcement, brochures, and collection of data and analysis of biological information would total approximately \$32,850. It is anticipated that funding would be provided to support and enhance the hunting program at Green River NWR, as properties are acquired and user opportunities increase. Table 3 outlines annual funding and staffing requirements to support the proposed hunting uses.

**Table 3. Funding and Staffing Requirements.**

Identifier	Cost
Staff (Maintenance Workers, Biologist, and Refuge Managers) Hunt Program	\$12,000
Maintain roads, parking lots, trails*	\$6,750
News releases, fact sheets, reports for Hunt Program	\$1,350
Posting and maintain hunting signs	\$6,750
Law Enforcement**	\$6,000
<b>Total Annual Cost</b>	<b>\$32,850</b>
* <i>Development and maintenance of refuge parking lots, trails, and roads would be shared across multiple uses. Due to no on-site staff, initial development and maintenance activities would need to be contracted. One-time development costs are not included in this annual cost estimate.</i>	
** <i>Detailed Federal Wildlife Officers would be needed to support this use.</i>	

## Offsetting Revenue

Currently, no offsetting revenues exist. As outlined above under Hunter Permit Requirements, the Service is exploring the implementation of a refuge-specific permit and fee structure. The U.S. Fish and Wildlife Service (Service) is proposing a recreation fee structure at Green River National Wildlife Refuge. The fee structure would be in effect in 2025. Implementation of a fee program will not only allow the Refuge to better track visitor numbers, harvest data, and visitor usage of the refuge, but fees garnered through this program will be used to offset expenses for road and parking lot maintenance, boundary maintenance, brochures, public education programs, law enforcement salaries, and expansion/improvements of visitor amenities. Fees would also support habitat management and enforcement activities by Federal Wildlife Officers,

and other staff support. The offsetting revenues within the 2024-25 hunting season are estimated to be approximately \$2,000 however, revenues would increase as additional properties are acquired and opened to hunting with anticipated increases in annual hunting visits with estimates up to \$37,500. With the development of any facilities, maintenance costs would be expected to increase from the estimates in Table 3.

## **IV. Conduct of the Hunting Program**

### **A. Hunter Permit Application, Selection, and/or Registration Procedures**

Hunters would be required to possess and carry all applicable state and Federal licenses and stamps. The Service is considering requiring refuge hunting permits. Beginning in 2025-26, if approved, a special refuge permit would be required for individuals to participate in hunting activities on the refuge. Any future permit requirements would be considered in a future proposal with appropriate public involvement. Until the recreational fee program is approved, each hunter, aged 12 and older, must possess and carry a signed refuge hunt brochure while hunting on the refuge. Hunters would be expected to review the refuge's hunt brochure and website (<https://www.fws.gov/refuge/green-river>) and the Service's Find Your Hunt (<https://www.fws.gov/refuges/hunting/map/>) database / map interface for refuge-specific hunting information. Based on acreage, staffing, habitat restoration, infrastructure, and visitor amenities, the Service will work at the refuge to refine existing opportunities and/or develop additional migratory game bird hunting (e.g., quota hunts, early teal and wood duck hunts, and dove hunts) and additional big game hunting (e.g. quota hunts). Hunters attempting to hunt these areas will be required to submit an application (OMB Control Number 1018-0140; FWS Form Number 3-2439) for a random draw which will be held prior to the opening of hunting season for the designated hunt species. Mobility-impaired individuals are allowed to use a personal off-road or all-terrain vehicle, if approved, for access to designated areas of the refuge if a reasonable accommodation is required to participate in refuge programs. A formal request must be filed with the refuge including a verified physician's statement attesting to the nature of the disability and specific area to be accessed. If approved, the individual is issued a special use permit (SUP) permitting off-road or all-terrain vehicles use for access purposes only in designated areas.

### **B. Refuge-Specific Hunting Regulations**

Specific hunting seasons, days, and times may vary in some instances from state frameworks; however, these differences would be coordinated with KDFWR. The Service can be more restrictive than state regulations (e.g., to meet refuge management wildlife and habitat goals and objectives, to meet safety concerns, and to minimize user conflicts). The Green River NWR hunt brochure will be annually updated to reflect more specific information and restrictions, including seasons, days, times, bag limits, access, licenses and permits, allowable hunting ammunition, other equipment, quota application process, and other refuge-specific regulations. To ensure compatibility with refuge purposes and the mission of the NWRS, hunting must be conducted in accordance with state and Federal regulations, as supplemented by refuge-specific regulations, and information sheets/brochures. Stipulations are detailed in the Hunting

Compatibility Determination (Appendix C). The proposed refuge-specific hunting regulations were published in the 2024-25 Hunting and Sport Fishing Rule in the Federal Register (see [50 CFR Part 32 Subpart B](#) for current regulations) and are incorporated herein by reference. Any future changes to CFR would be published in a future Hunting and Sport Fishing Rule.

Refuge management goals and objectives could require increases or decreases to the hunting program opportunities based on harvest data, wildlife population management objectives, public safety, ability to provide high quality hunting opportunities, public use demands, wildlife disease, and other refuge management needs. Adjusting the number of hunters, adjusting the types of equipment allowed, and/or other actions, such as the use of spatial and temporal sanctuaries, quota hunts, or special hunts, may be necessary to meet refuge specific objectives. All or part of the refuge may be closed to hunting by the Refuge Manager at any time, if necessary, for public safety, to provide wildlife sanctuary for trust species, or for other essential management actions to ensure that the uses continue to meet compatibility requirements. An administrative closure may be warranted if whooping cranes are found to occur on the refuge in areas open to hunting, pursuant to 50 CFR §25.21(e), to reduce any impacts from disturbance due to these activities.

### **C. Relevant State Regulations**

The refuge conducts its hunting program within the framework of state and Federal regulations. Hunting on the refuge is at least as restrictive as the state of Kentucky and in some cases is more restrictive. Additionally, the refuge coordinates with the state as needed to maintain regulations and programs that are consistent with the state's management programs.

Regulations for the state of Kentucky regarding hunting are located at the listed websites.

- Kentucky Revised Statutes, Chapter 150 Fish and Wildlife Resources  
<https://apps.legislature.ky.gov/law/statutes/chapter.aspx?id=37729>
- Kentucky Administrative Regulations, Title 301 Tourism, Arts and Heritage Cabinet – Department of Fish and Wildlife Resources, Chapters 1-6  
<https://apps.legislature.ky.gov/law/kar/TITLE301.HTM>

Additional information regarding state regulations can be found at the KDFWR website (<https://fw.ky.gov/>).

### **D. Other Refuge Rules and Regulations for Hunting**

The 50 CFR Part 32 outlines refuge-specific regulations, 50 CFR Part 20 outlines migratory bird hunting, 50 CFR Part 26 outlines Public Entry and Use, and 50 CFR Part 27 outlines prohibited acts. The refuge hunt brochure would provide important information and requirements for hunting on the refuge. Seasons would be set annually and would be published in the refuge hunt brochure. Refuge-specific regulations and other CFR outline key requirements and prohibitions, including those listed.

- Hunting in designated closed areas
- Hunting within 100 yards (91 meters) of a residence, graveled roads, and hiking trails managed by the Service as part of Green River NWR
- Marking or flagging any tree or other refuge feature with non-biodegradable reflectors, paint, flagging, or other substance
- Trapping
- Reserving hunting areas by leaving boat, decoys, portable blinds, tree stands, or other materials or items
- Using all-terrain vehicles (ATVs, including off-highway vehicles and utility task vehicles) without a Special Use Permit (FWS Form 3-1383-G)
- Using internal combustion motors, personal watercraft (e.g., jet skis), airboats, and hovercraft
- Blocking gates or roadways
- Discharging a weapon outside of hunting season, including target practice
- Using motor vehicle, bikes, or e-bikes on other than designated routes
- Unauthorized taking, disturbing, injuring and damaging of wildlife and plants (including cutting trees or brush)
- Introducing plants and animals or their parts taken elsewhere
- Searching for, or removing, any object of antiquity or other valued objects
- Using artificial light to locate wildlife
- Interfering with any private person or employee of a state or Federal government agency engaged in an authorized activity
- Littering
- Cleaning of harvested game and/or discarding of carcasses in public use areas
- Installing or using permanent structures, including stands or blinds
- Using fires
- Camping
- Having pets not on a leash, except for legal use of hunting dogs
- Participating in a commercial activity without appropriate permit
- Driving a nail, spike, or other metal object in tree or hunting from tree with such an object in it
- Hunting without securing and possessing appropriate licenses, stamps, and permits, including a state hunting license
- Using arrows to which any drug, chemical, or toxic substance has been added
- Using or possessing alcoholic beverages or controlled substances
- Hunting of any wildlife by the aid of or distributing any feed, salt, minerals, or other ingestible attractants
- Installing or using trail cameras

The refuge is currently closed at night. As outlined above, hunters may enter the refuge two hours prior to legal sunrise and must leave within two hours after legal sunset. Special closures are in effect during waterfowl season. Consult the Green River NWR hunt brochure for specific information and a map.

## **V. Public Engagement**

### **A. Outreach for Announcing and Publicizing the Hunting Program**

The Service sent scoping letters to KDFWR and nine potentially interested Native American Tribes (i.e., Cherokee Nation, Chickasaw Nation, Delaware Nation of Oklahoma, Eastern Band of Cherokees, Miami Tribe of Oklahoma, Osage Nation, Peoria Tribe of Indians of Oklahoma, Quapaw Tribal Business Committee, and United Keetoowah Band of Cherokee Indians) on March 31, 2021 with follow up letters on January 4, 2024, to engage them early in the planning process for the proposed hunting program at Green River NWR. The EA, draft Hunt Plan, draft Hunting Compatibility Determination and draft refuge-specific regulations were made available for public review and comment in 2024 nationally through the Federal Register and locally through notice to local media and notice on the refuge's website (<https://www.fws.gov/refuge/green-river>) and Facebook page (<https://www.facebook.com/GreenRiverNWR/>). Separate notice was also provided to KDFWR and the nine above-mentioned Native American Tribes.

All comments received will be reviewed in the development of final documents. All comments received become part of the official public record. We will handle all requests for such comments in accordance with the Freedom of Information Act and National Environmental Policy Act regulations in 40 CFR §1506.6(f).

The refuge maintains a contact list, for information bulletin purposes, to local newspapers, radio, and television news stations. Special announcements and articles may be released in conjunction with hunting seasons. In addition, information about proposed hunting and sport would be available on the Green River NWR website (<https://www.fws.gov/refuge/green-river>), social media pages (<https://www.facebook.com/GreenRiverNWR/>), and the Service's Find Your Hunt website (<https://www.fws.gov/refuges/hunting/map/>).

### **B. Anticipated Public Reaction to the Hunting Program**

Based on the comments received during the LPP (USFWS 2019a), minimum negative public reaction would be expected regarding the proposed hunting program for Green River NWR. Hunting is important economic and recreational use of Kentucky's natural resources. Comments received during the LPP/CMP planning process related to future hunting activities were supportive of the establishment and management of the refuge, including the provision of opportunities for hunting.

### **C. How Hunters Will Be Informed of Relevant Rules and Regulations**

General information regarding hunting and other wildlife-dependent public uses can be obtained at Green River NWR at P.O. Box 89, Benton, KY 42025; by calling (270) 527-5770; or by the refuge manager at emailing [Michael.Johnson@fws.gov](mailto:Michael.Johnson@fws.gov). Dates, forms, hunting unit directions, maps, applications, and other requirements about the hunt would be available on the refuge

website at <https://www.fws.gov/refuge/green-river>, on the refuge social media pages (<https://www.facebook.com/GreenRiverNWR/>), and at the Service's Find Your Hunt website (<https://www.fws.gov/refuges/hunting/map/>). The media may be contacted with updated hunting information. Further, the annual refuge hunt brochure would provide updated hunting information on an annual basis.

## **VI. Compatibility Determination**

Hunting and all associated program activities proposed in this Plan would be compatible with the purposes of the refuge. The draft Hunting Compatibility Determination is in Appendix C (USFWS 2022). Upon approval and finalization, the new compatibility determination (appendices B) would replace the interim compatibility determination for hunting from the LPP and CMP (USFWS 2019a).

## **VI. References**

- Commonwealth of Kentucky. 2022. Wild Pig Home. Kentucky Department of Fish and Wildlife Resources. Frankfort, KY. <https://fw.ky.gov/InvasiveSpecies/Pages/Wild-Pig-Home.aspx>.
- Cornell Lab of Ornithology. 2023. All About Birds, American Coot Life History. [https://www.allaboutbirds.org/guide/American\\_Coot/lifehistory](https://www.allaboutbirds.org/guide/American_Coot/lifehistory).
- Ducks Unlimited. 2019. Canada Goose. Waterfowl ID. <https://www.ducks.org/hunting/waterfowl-id/canada-goose>.
- Gillin, Colin M., and Mawdsley, Jonathan R. (eds.). 2018. AFWA Technical Report on Best Management Practices for Surveillance, Management and Control of Chronic Wasting Disease. Association of Fish and Wildlife Agencies, Washington, D. C. 111 pp. [https://www.fishwildlife.org/application/files/9615/3729/1513/AFWA\\_Technical\\_Report\\_on\\_CWD\\_BMPs\\_FINAL.pdf](https://www.fishwildlife.org/application/files/9615/3729/1513/AFWA_Technical_Report_on_CWD_BMPs_FINAL.pdf)
- Kentucky Department of Fish and Wildlife Resources. 2022a. Kentucky Periodic Waterfowl Inventory. Conducted January 3-10, 2022. Commonwealth of Kentucky. Frankfort, KY. Retrieved from: <https://fw.ky.gov/Hunt/Documents/Waterfowl/2022%20Mid-Winter%20Waterfowl%20Aerial%20Survey%20Report,%20January%203-10,%202022.pdf>
- Kentucky Department of Fish and Wildlife Resources. 2022b. 2020 – 2021 Kentucky White-tailed Deer Harvest and Population Report. Commonwealth of Kentucky. Frankfort, KY. Available from: <https://fw.ky.gov/Hunt/Documents/2020-2021%20Kentucky%20Deer%20Report.pdf>.
- Lander, Art. 2018. Art Lander's Outdoors: The Mallard, Kentucky's most-taken species during waterfowl season., 2018. October 19 Northern Kentucky Tribune, <https://www.nkytribune.com/2018/10/art-landers-outdoors-the-mallard-kentuckys-most-taken-species-during-waterfowl-season/>.

Raftovich, R. V., K. K. Fleming, S. C. Chandler, and C. M. Cain. 2022. Migratory Bird Hunting Activity and Harvest during the 2020–21 and 2021–22 Hunting Seasons. U.S. Fish and Wildlife Service, Laurel, Maryland, USA.

Seamans, M. E. 2022. Mourning dove population status, 2022. U.S. Department of the Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Laurel, Maryland.

U.S. Fish and Wildlife Service. 2017. Waterfowl population status, 2017. U.S. Department of the Interior, Washington, D.C. USA.

U.S. Fish and Wildlife Service. 2018. Waterfowl population status, 2018. U.S. Department of the Interior, Washington, D.C. USA

U.S. Fish and Wildlife Service. 2019a. Land Protection Plan and Environmental Assessment for Green River National Wildlife Refuge and Conservation Partnership Area. U.S. Department of the Interior Fish and Wildlife Service, Southeast Region. September 2019. Atlanta, GA.

U.S. Fish and Wildlife Service. 2019b. Waterfowl population status, 2019. U.S. Department of the Interior, Washington, D.C. USA.

U.S. Fish and Wildlife Service. 2020. Waterfowl population status, 2020. U.S. Department of the Interior, Washington, D.C. USA.

U.S. Fish and Wildlife Service. 2024. Green River National Wildlife Refuge Draft Migratory Game Bird and Big Game Hunting Plan and Environmental Assessment. U.S. Department of the Interior, Fish and Wildlife Service, Southeast Region. June 2024. Atlanta, GA.