

Draft Environmental Assessment

for Archery Black Bear Hunting on Swan River National Wildlife Refuge

March 2020

Prepared by

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Draft Environmental Assessment for Archery Black Bear Hunting at Swan River National Wildlife Refuge

Date: March 2020

This Environmental Assessment (EA) was prepared to evaluate the effects associated with allowing fall, archery-only, black bear hunting on Swan River National Wildlife Refuge (NWR) and complies with the National Environmental Policy Act (NEPA) in accordance with Council on Environmental Quality regulations (40 Code of Federal Regulations [CFR] 1500-1509) and Department of the Interior (43 CFR 46; 516 DM 8) and United States (U.S.) Fish and Wildlife Service (Service) (550 FW 3) regulations and policies. NEPA requires examination of the effects of proposed actions on the natural and human environment.

1.0 Introduction

1.1 Proposed Action

The U.S. Fish and Wildlife Service (Service) is proposing to allow fall, archery-only, black bear hunting on Swan River NWR, Lake County, Montana in accordance with Benton Lake National Wildlife Refuge Complex Comprehensive Conservation Plan (CCP) (USFWS 2012) and the Draft Benton Lake National Wildlife Refuge Complex Big Game, Waterfowl, and Upland Bird Hunting Plan (USFWS 2020a). Black bear hunting has never been allowed on the refuge and we, the Service, propose to allow archery-only hunting for black bear on all 1,960 acres owned by the Service (Figure 1). On the refuge, archery hunting for black bear would be limited to the fall in accordance with the State of Montana seasons. In addition, all state regulations would apply including the prohibition of baiting or using dogs. Also, trapping bears would be prohibited on the refuge.

This proposed action is often iterative and evolves over time during the process as the agency refines its proposal and learns more from the public, tribes, and other agencies. Therefore, the final proposed action may be different from the original. The final decision on the proposed action will be made at the conclusion of the public comment period for the EA and the Draft 2020-2021 Refuge-Specific Hunting and Sport Fishing Regulations. The Service cannot open a refuge to hunting and/or fishing until a final rule has been published in the Federal Register formally opening the refuge to hunting and/or fishing.

1.2 Background

National wildlife refuges are guided by the mission and goals of the National Wildlife Refuge System (Refuge System), the purposes of an individual refuge, Service policy, federal laws, and international treaties. Relevant guidance includes the National Wildlife Refuge System Administration Act of 1966 (NWRSA), as amended by the National Wildlife Refuge System Improvement Act of 1997 (Improvement Act), Refuge Recreation Act of 1962, selected portions of the CFR and the U.S. Fish and Wildlife Service Manual.

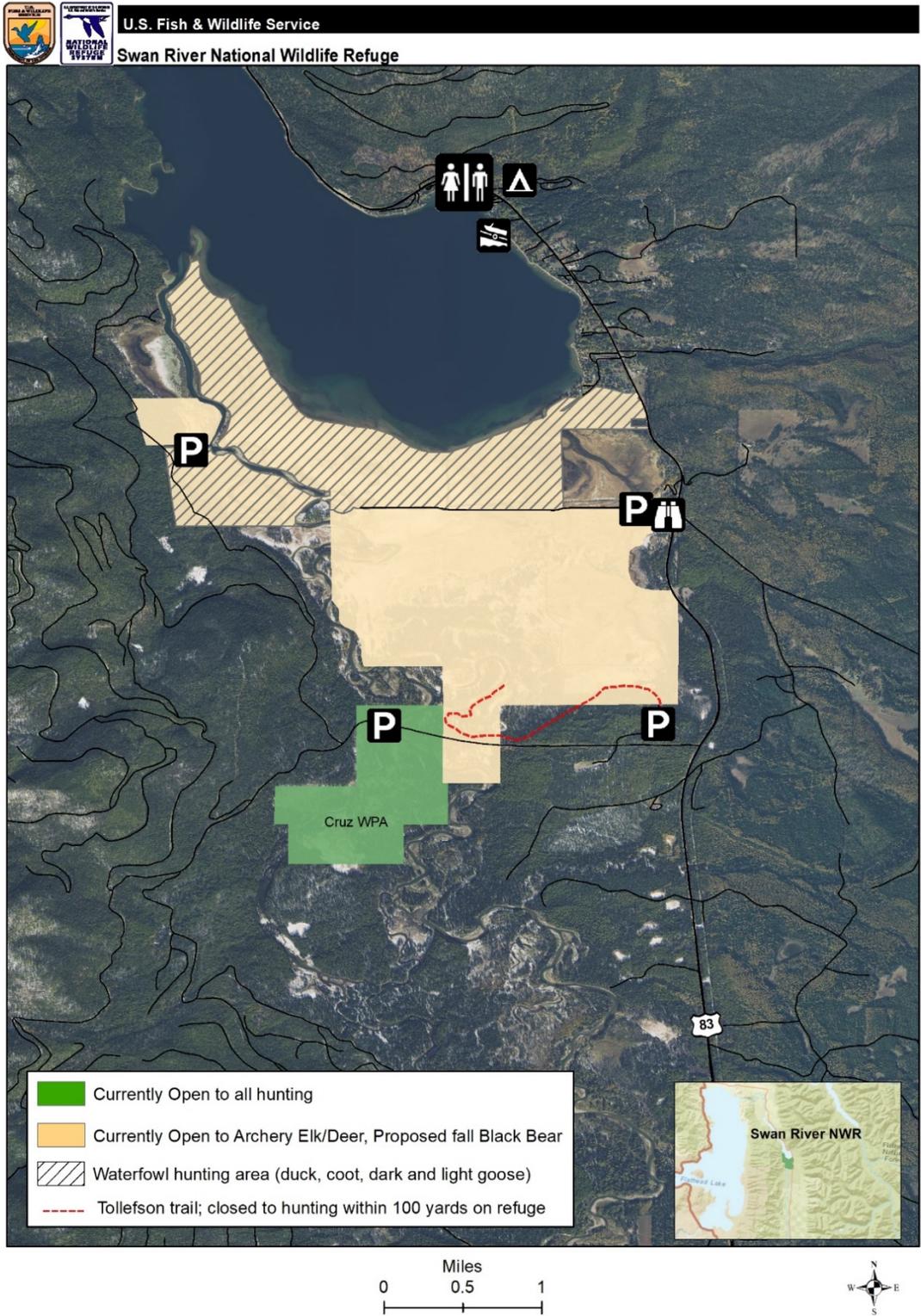


Figure 1. Map of Current and Proposed Hunting Opportunities on Swan River National Wildlife Refuge.

The refuge was established pursuant to the Migratory Bird Conservation Act. The primary purpose of the refuge is for use as an inviolate sanctuary, or for any other management purpose, for migratory birds. Objectives of the refuge are to provide for waterfowl habitat and production and to provide for other migratory bird habitat. The refuge was established May 14, 1973, at the request of Montana Senator Lee Metcalf, who often hunted the area and desired to see it preserved.

The mission of the NWRS, as outlined by the NWRSAA, as amended by the Improvement Act (16 U.S.C. 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 NWRSAA mandates the Secretary of the Interior in administering the Refuge System to (U.S. Code 668dd[a][4]):

- provide for the conservation of fish, wildlife, and plants, and their habitats within the Refuge System;
- ensure that the biological integrity, diversity, and environmental health of the Refuge System are maintained for the benefit of present and future generations of Americans;
- ensure that the mission of the Refuge System described at 16 U.S. Code 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 Refuge System are located;
- assist in the maintenance of adequate water quantity and water quality to fulfill the mission of the Refuge System 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 Refuge System for compatible wildlife-dependent recreational uses;
- 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 and fishing, when those opportunities are compatible with the purposes for which the refuge was established and the mission of the Refuge System.

Currently, the refuge records 525 visitor use days per year. Visitors enjoy a variety of recreational activities related to the six wildlife-dependent recreational uses—hunting, fishing, wildlife observation, photography, interpretation, and environmental education. At present, the refuge is popular for waterfowl hunting and fishing with an estimated 60 hunt and 110 fishing visits annually.

1.3 Purpose and Need for the Proposed Action

The purpose of this proposed action is to provide compatible wildlife-dependent recreational opportunities on Swan River NWR. The need of the proposed action is to meet the Service's priorities and mandates as outlined by the NWRSA to "recognize compatible wildlife-dependent recreational uses as the priority general use of the NWR" and "ensure that opportunities are provided within the NWR for compatible wildlife-dependent recreational uses" (16 U.S. Code 668dd[a][4]). Furthermore, this proposed action supports Secretarial Order 3356, which continues the Department's efforts to enhance conservation stewardship; 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.

Conservation and outdoor recreation go together. As public land stewards, we face many challenges managing America's natural resources for recreation. Luckily, hunters, anglers and other outdoor enthusiasts have been major supporters of our work. But over the years, fewer people have been participating in traditional outdoor activities, making it harder to achieve our conservation missions. We are looking to maintain current recreation participation while also attracting new audiences and providing new opportunities.

Through recruitment, retention, and reactivation we are seeking to create new participants or increase participation rates of current or lapsed outdoor recreationists. Outdoor recreationists engage in outdoor wildlife and fisheries dependent recreation including, but not limited to, hunting, fishing, wildlife observation, photography, education and interpretation. While the reasons for engaging in outdoor activities are more varied than in the past, connecting with nature and each other remains a driving factor for all recreationists.

2.0 Alternatives

2.1 Alternatives Considered

Alternative A – Allow Fall, Archery-Only Black Bear Hunting on Swan River National Wildlife Refuge – Proposed Action Alternative

Pursuant to the Benton Lake NWR Complex CCP (USFWS 2012), the Draft Benton Lake National Wildlife Refuge Complex Big Game, Waterfowl, and Upland Bird Hunting Plan (USFWS 2020a) and the associated Draft Compatibility Determination for Big Game, Waterfowl, and Upland Bird Hunting on Benton Lake NWR Complex (USFWS 2020b) evaluated in this document, the refuge proposes to allow archery-only black bear hunting during the fall on Swan River NWR, in accordance with state regulations subject to the following conditions:

- We would allow fall, archery-only hunting of black bear within the boundary of the refuge.
- We would allow the use of portable blinds and stands, which could be installed no sooner than August 1, and removed by December 15 of each year. Stands or blinds must be placed a minimum of 100 yards from the Tollefson trail (Figure 1). Each hunter would be limited to one stand or blind and the hunter must have their name, address, phone number, and automated licensing system number visibly marked on the stand.
- Game or trail cameras would be prohibited year-round.

- Baiting, the use of hounds, trapping and outfitting would be prohibited.

This alternative offers increased opportunities for public hunting and fulfills the Service's mandate under the Improvement Act. The Service has determined that this minor modification to the current hunting opportunity is compatible with the purposes of the Swan River NWR and the mission of the Refuge System (USFWS 2020b).

Alternative B – Continue Current Levels of Public Use on Swan River National Wildlife Refuge – No Action Alternative

Under the No Action Alternative, black bear hunting would not be allowed on Swan River NWR. Waterfowl hunting would continue on lands located north of Bog Road and recreational fishing would be allowed on the Swan River and Service-owned portions of Spring Creek as per state regulation. Archery deer and elk hunting would also continue refuge-wide. The refuge would continue to be open to wildlife observation and photography north of Bog Road and on recently acquired lands formerly owned by The Nature Conservancy (Oxbow Preserve) on the southern end of the refuge. Cross-country skiing and snowshoeing would continue to be allowed refuge-wide during applicable winter months.

2.2 Alternative Considered, But Dismissed from Further Consideration

Moose Hunting on Swan River National Wildlife Refuge

At Montana Fish, Wildlife, and Parks' (MFWP) request, we have excluded moose from this proposal. MFWP believes that the refuge offers one of the best opportunities for visitors to view moose in that portion of Lake County and want to carefully balance the needs of nonconsumptive wildlife observers with additional opportunities for big game hunters.

3.0 Affected Environment and Environmental Consequences

3.1 Affected Environment

Swan River NWR is located in northwest Montana, 38 miles southeast of the town of Creston, in the serene and picturesque Swan Valley Mountain Range. The 1,960-acre refuge lies within the floodplain of the Swan River above Swan Lake and between the Swan Mountain Range to the east and the Mission Mountain Range to the west. In 2017, the refuge was expanded by 392 acres with the acquisition of The Nature Conservancy's Oxbow Preserve.

The Swan Valley was formed when glacial water poured down the steep slopes of the Mission Range into Flathead Lake. The valley floor is generally flat but rises steeply to adjacent forested mountain sides. Approximately 80 percent of the refuge lies within this valley flood plain, which is composed mainly of emergent marshes, wet meadows, and riparian forests. Reed canary grass has invaded many of the emergent marshes and meadows in recent decades and now dominates a large portion of the refuge. Deciduous and coniferous forests comprise the remaining 20 percent. Swan River, which once meandered through the flood plain, has been forced to the west side of the refuge by past earthquakes and deposits of silt. The result of these geologic events is a series of oxbow sloughs within the refuge flood plain.

For more information regarding the affected environment, please see Chapter 3 of the Benton Lake NWR Complex CCP (USFWS 2012), which can be found here: <https://www.fws.gov/mountain-prairie/refuges/bnl.php>.

3.2 Environmental Consequences of the Action

This section analyzes the environmental consequences of the action on each affected resource, including direct and indirect effects. This EA only includes the written analyses of the environmental consequences on a resource when the impacts on that resource could be more than negligible and therefore considered an “affected resource.” Any resources that will not be more than negligibly impacted by the action have been dismissed from further analyses.

Tables 1 through 5 provide:

- a brief description of the affected resources in the proposed action area;
- effects of the proposed action and any alternatives on those resources, including direct and indirect effects.

Table 6 provides a brief description of the cumulative impacts of the proposed action and any alternatives.

Impact Types:

- *Direct effects* are those that are caused by the action and occur at the same time and place.
- *Indirect effects* are those that are caused by the action and are later or farther removed in distance but are still reasonably foreseeable.
- *Cumulative impacts* result from the incremental impact of the action when added to other past, present, and future actions, regardless of what agency (federal or non-federal) or person undertakes such other actions.

For more information on the environmental consequences of the proposed action, see Chapter 4 of the Benton Lake NWR Complex CCP (USFWS 2012). Therefore, this EA tiers from this document and provides additional specific analysis of the proposed action.

Table 1. Affected Natural Resources and Anticipated Direct and Indirect Impacts of the Proposed Action and Any Alternatives.

Affected Resources	<u>Alternative A (Proposed Action)</u> <i>The refuge would allow archery-only black bear hunting during the fall in accordance with state regulations.</i>	<u>Alternative B (No Action)</u> <i>Black bear hunting would not be allowed on Swan River NWR. There would be no change to current public use and wildlife management programs.</i>
Species to be Hunted		
<p><i>Black Bear</i></p> <p>Black bears have been observed on the refuge, but typically in small numbers; any hunting would be opportunistic if black bears happened to be traveling through the refuge. The most likely scenario for harvesting a black bear would occur if an archery deer or elk hunter happened to encounter a black bear and had a black bear tag in his or her possession.</p> <p>Currently MFWP Region 1, which includes the Swan River NWR, accounts for half of the black bear harvest in Montana. In 2017, the total black bear harvest in Region 1 (spring and fall) was 507 black bears. Region 1 has millions of acres of public land and hundreds of thousands of acres of corporate timberland. Outside of Swan Lake NWR, Archery hunting would be allowed during the entire black bear season in MFWP Hunt Unit 106. Black bear hunting opportunities are almost unlimited.</p>	<p>It is anticipated that only 3–5 hunters would take advantage of this opportunity during the season, which would result in additional disturbance and direct mortality to the species being hunted. These impacts are considered to be negligible due to the small number of hunters and the limited number of days per year on which these impacts occur. Additionally, hunter success rates tend to be low for archery hunters. Black bears are regulated by the state based on annual survey data and it is assumed that the state would apply more restrictive regulations if harvest began to impact numbers.</p>	<p>Under this alternative, the refuge would remain closed to black bear hunting. Thus, no impacts to black bears would be expected. Waterfowl hunting would continue to occur on approximately 40 percent of the refuge located north of Bog Road. Limited fishing activity would still occur during the State designated season along areas of the Swan River currently closed to waterfowl hunting, and wildlife observation would still occur on the Tollefson Trail located on the south end of the refuge. Archery elk and white-tailed deer hunting would continue refuge-wide. Present impacts are considered to be negligible and would not impact hunted species in any discernible manner.</p>
Migratory Waterfowl and Other Birds		
<p>Over 160 bird species are known to occur in the Swan River watershed with 110 breeding bird species documented.</p>	<p>Fall, archery-only black bear hunting would occur refuge-wide, which may result in temporal disturbance in locations currently closed to public use.</p> <p>Most activity would occur in timbered areas where short term disturbance associated with hunter movement could temporarily displace some forest associated bird species.</p>	<p>Under this alternative, the refuge would remain closed to black bear hunting. Thus, no additional impacts to migratory waterfowl and other birds would be expected.</p>

<p style="text-align: center;">Affected Resources</p>	<p style="text-align: center;"><u>Alternative A (Proposed Action)</u></p> <p><i>The refuge would allow archery-only black bear hunting during the fall in accordance with state regulations.</i></p>	<p style="text-align: center;"><u>Alternative B (No Action)</u></p> <p><i>Black bear hunting would not be allowed on Swan River NWR. There would be no change to current public use and wildlife management programs.</i></p>
<p>Wetland complexes in the Swan Valley provide important breeding habitat for twenty species of waterfowl including mallard, lesser scaup, wood duck, redhead, ring-necked duck, canvasback, American wigeon, Canada goose, green-winged teal, blue-winged teal, cinnamon teal, northern shoveler, gadwall, common goldeneye, Barrow's goldeneye, harlequin duck, bufflehead, hooded merganser, common merganser, red-breasted merganser, and ruddy duck.</p>	<p>It is possible that archery black bear hunters could disturb waterfowl species in areas currently closed to waterfowl hunting. The silent nature of archery hunting and the absence of gun shots would minimize these possible impacts.</p> <p>Overall, these impacts would be negligible, and it is assumed that displaced bird species would reoccupy disturbed sites following hunter departure.</p> <p>Access would only occur during the fall hunting season; thus, there would be no anticipated impacts to birds during the nesting season when they are most vulnerable to disturbance.</p>	
<p>Mammals</p>		
<p>A total of 69 species of mammals are known to inhabit the diverse habitats within the Swan Valley. This vast array of species includes large charismatic megafauna such as the grizzly bear, moose, and Canada lynx to species such as long-tailed voles and yellow-bellied marmots.</p> <p>Common mammal species documented to occur within the valley include: northern pocket gopher, southern red-backed vole, long-tailed vole, montane vole, heather vole, northern grasshopper mouse, house mouse, Norway rat, northern bog lemming, yellow-bellied marmot, northern flying squirrel, coyote, red fox, striped skunk, long-tailed weasel, mink, badger, raccoon, white-tailed jackrabbit, mountain cottontail, and porcupine. See Species of Special Concern below for additional mammal species.</p>	<p>Archery-only black bear hunting would result in disturbance to mammal species beyond what occurs at present; however, these impacts are assumed to be negligible. There could be some temporary displacement, but it is assumed that resident and transitory mammals would immediately reoccupy sites where limited disturbance associated with hunting activity had occurred.</p>	<p>Under this alternative, the refuge would remain closed to black bear hunting. Thus, no additional impacts to refuge mammals would be expected.</p>

<p style="text-align: center;">Affected Resources</p>	<p style="text-align: center;"><u>Alternative A (Proposed Action)</u></p> <p style="text-align: center;"><i>The refuge would allow archery-only black bear hunting during the fall in accordance with state regulations.</i></p>	<p style="text-align: center;"><u>Alternative B (No Action)</u></p> <p style="text-align: center;"><i>Black bear hunting would not be allowed on Swan River NWR. There would be no change to current public use and wildlife management programs.</i></p>
<p>Amphibians and Reptiles</p>		
<p>The Montana Natural Heritage Database documents ten species of amphibians and reptiles on record within the Swan Valley. Many of the species documented include S4 Status Species (apparently secure, though it may be quite rare in parts of its range or is suspected to be declining) such as common garter snake, painted turtle, rubber boa, Columbia spotted frog, long-toed salamander, and Rocky Mountain tailed frog. The northern alligator lizard is listed as a S3 Status Species and the western toad is listed as a S2 Status Species. The northern leopard frog is listed as a S1 Status Species (at high risk because of extremely limited or rapidly declining population numbers, range, or habitat, making it highly vulnerable to global extinction or extirpation in Montana). Species not listed in the Natural Heritage Database but known to occur in the Swan Valley include: Pacific tree frog, western skink, eastern racer, gopher snake, terrestrial garter snake, and western rattlesnake. A total of 16 species of amphibians and reptiles are known to inhabit the diverse habitats within the Swan Valley.</p>	<p>Archery black bear hunting would occur in timbered floodplain habitat where shallow, seasonal wetlands and moist habitat are located. While hunting would begin on the state-designated archery opening of September 1 when reptiles and amphibians would still be active, it is assumed that most would be inactive or in hibernation during the bulk of the open season. Any impacts would be negligible.</p>	<p>Under this alternative, the refuge would remain closed to black bear hunting. Thus, no additional impacts to refuge mammals would be expected.</p>

<p style="text-align: center;">Affected Resources</p>	<p style="text-align: center;"><u>Alternative A (Proposed Action)</u></p> <p style="text-align: center;"><i>The refuge would allow archery-only black bear hunting during the fall in accordance with state regulations.</i></p>	<p style="text-align: center;"><u>Alternative B (No Action)</u></p> <p style="text-align: center;"><i>Black bear hunting would not be allowed on Swan River NWR. There would be no change to current public use and wildlife management programs.</i></p>
<p>Threatened and Endangered Species and Other Special Status Species</p>		
<p>Federally listed animal species found in the Swan Valley include the threatened bull trout, grizzly bear, yellow-billed cuckoo, water howellia, and Canada lynx.</p> <p>The wolverine, which is proposed for listing as threatened, also occurs in the watershed (USFWS 2019b).</p> <p>Water howellia is thought to be extinct in California and Oregon and is threatened in Washington, Idaho, and Montana. On Swan River NWR, water howellia is known from five small, vernal wetlands. Water howellia populations fluctuate with changes in the climate and it is estimated that the southern portion of the refuge supports approximately 5,000 plants, due in part to the variable drying regimes found across the refuge.</p> <p>Additional species of concern on the refuge include Townsend’s bat, hoary bat, fringed myotis, fisher, and hoary marmot.</p> <p>Five rare plant populations and two rare lichens occur on the Swan River NWR. Round-leafed pondweed (<i>Potamogeton obtusifoliosus</i>) grows in the oxbow and adjacent ponds. Northern bastard toadflax (<i>Geocaulon lividum</i>) inhabits the wet spruce forest. Buchler fern (<i>Dryopteris cristata</i>) is found where carr vegetation and spruce forest intermingle. Small yellow lady’s slipper (<i>Cypripedium parviflorum</i>) grows on the refuge.</p>	<p>While there would be no anticipated impacts to bull trout due to archery-only black bear hunting, there could be some temporary disturbance and or displacement of large carnivore species such as grizzly bears wolverine and Canada lynx.</p> <p>These species are transitory in nature and occasionally use the refuge as a migration corridor to move back and forth between the Bob Marshall Wilderness to the east and the Mission Wilderness to the west of the refuge. Considering that these occurrences are infrequent and archery hunting is minimally disturbing (both noise and visual) these impacts are believed to be negligible and thus, acceptable.</p> <p>Grizzly bears are occasionally mistaken by hunters for black bears and accidentally killed. Monitoring the status and trends of the Northern Continental Divide Ecosystem (NCDE) population of grizzly bears has included tracking of mortalities since 1967. However, there are an unknown number of additional mortalities that are not discovered or reported, and these are taken into consideration in estimating sustainable mortalities for the population. The Swan Valley is one of the areas with relatively high overall mortality for grizzly bears in the NCDE. However, mortality due to hunter misidentification is estimated to be only 3 percent of all mortalities and has the lowest probability of causing grizzly bear deaths among all causes (Costello et al. 2016). The number of grizzly bear deaths in the NCDE from all causes has risen over the last two years but is still considered sustainable (Bolton 2019).</p>	<p>Under this alternative, the refuge would remain closed to black bear hunting. Thus, no additional impacts to refuge mammals would be expected.</p>

Affected Resources	<p align="center"><u>Alternative A (Proposed Action)</u></p> <p><i>The refuge would allow archery-only black bear hunting during the fall in accordance with state regulations.</i></p>	<p align="center"><u>Alternative B (No Action)</u></p> <p><i>Black bear hunting would not be allowed on Swan River NWR. There would be no change to current public use and wildlife management programs.</i></p>
	<p>Given that archery hunters are likely to be much closer to a bear when they decide to shoot and the low number of expected archery black bear hunters on the refuge, we expect that the proposed action would have a minor negative impact on the NCDE grizzly bear population.</p> <p>Water howellia is an annual plant that germinates and survives in seasonal wetlands. At present, the Tollefson Trail passes through areas occupied by water howellia with no known impact to the species. Trail use occurs during the growing season and at a rate far higher than anticipated by black bear hunters so no direct or indirect impacts would be anticipated beyond what might occur at present. It is unlikely that there would be any direct impacts associated with the proposed action, but any minimal impacts associated with hunter movement would be anticipated to be negligible.</p> <p>If present on the refuge, yellow-billed cuckoos would be expected to have migrated out of the area by the time fall archery season begins, so no impacts would occur.</p> <p>The other mammal species of concern may be present on the refuge and utilize the forested habitats. They may be displaced by archery bear hunters; however, we would expect these impacts to be temporary and create minimal disturbance.</p>	
Vegetation		
<p>Swan Valley is a biologically rich coniferous forest ecosystem located between the Bob Marshall and Mission Mountains wilderness complexes. The Swan Valley is unique among Montana’s spectacular valleys in that it contains over 4,000 glacially derived wetlands.</p>	<p>Negligible impact is expected to vegetation from trampling of hunters, because of the low number of users and days of use expected. While it is possible that hunters could move invasive plant seed from infested areas of the refuge to areas where they currently do not occur it is unlikely that this would become a significant distribution vector. It is unlikely that additional visitation would increase risk.</p>	<p>Under this alternative, the refuge would remain closed to black bear hunting. Thus, no additional impacts to refuge vegetation would be expected.</p>

<p style="text-align: center;">Affected Resources</p>	<p style="text-align: center;"><u>Alternative A (Proposed Action)</u></p> <p style="text-align: center;"><i>The refuge would allow archery-only black bear hunting during the fall in accordance with state regulations.</i></p>	<p style="text-align: center;"><u>Alternative B (No Action)</u></p> <p style="text-align: center;"><i>Black bear hunting would not be allowed on Swan River NWR. There would be no change to current public use and wildlife management programs.</i></p>
<p>In fact, approximately 16 percent of the land in the Swan Valley is considered wetland habitat (lakes, rivers, ponds, marshes, wet meadows, peatlands, and riparian areas). By comparison, the remainder of Montana averages 1 percent wetland habitat. This fact, along with its diverse forest types, makes the Swan Valley ideal habitat for a diverse array of wildlife. Rare carnivores, threatened trout, and a high diversity of songbirds and waterfowl depend upon the Swan Valley's unique habitats.</p> <p>The Service recently contracted Swan Valley Connections, Condon, Montana, to conduct a baseline vegetation survey for the refuge. While it was previously assumed that moderately invasive species such as reed canarygrass (<i>Phalaris arundinaceae</i>) had become dominant in much of the wetland complex, Swan Valley Connections discovered that several desirable wetland alliances were still extant on the refuge. In total, the study revealed four upland, nine wetland, and ten riparian vegetation alliances on the refuge.</p>		
<p>Geology and Soils</p>		
<p>The Swan River Basin consists of a wide diversity of lakes, riparian areas, rivers, creeks, alpine and subalpine glacial lakes, and springs feed the basin. The Swan River forged from flows through the mountains, winds across the morainal foothills and through the valleys forming braided delta areas.</p>	<p>While there could be some minor soil compaction associated with the minimal amount of increased hunter activity, the proposed action would be anticipated to have no effect on the geology or soils of the Swan Valley or refuge.</p>	<p>Under this alternative, the refuge would remain closed to black bear hunting. Thus, no additional impacts to refuge geology or soils would be expected.</p>

Affected Resources	<u>Alternative A (Proposed Action)</u> <i>The refuge would allow archery-only black bear hunting during the fall in accordance with state regulations.</i>	<u>Alternative B (No Action)</u> <i>Black bear hunting would not be allowed on Swan River NWR. There would be no change to current public use and wildlife management programs.</i>
<p>The river travels over a dense forest floor composed of variously graded porous glacial till and alluvium, averaging 6.2 miles wide at an elevational range of 2,500 to 9,000 feet. Several large lakes (250 to 2,700 acres) occur along the course of the river and its main tributaries. These large lakes within the valley were carved by large alpine glaciers. Hundreds of kettle lakes, fens, bogs, and other lacustrine and palustrine wetlands, with many perched aquifers not directly connected to surface streams, lie scattered across the glacial and alluvial valley floors and foothills.</p>		
Floodplains		
<p>Forested riverine and palustrine wetlands fringe the river channel and dominate the extensive floodplain and relict oxbows interspersed throughout Swan River NWR. The refuge is situated in the Swan River delta as it enters Swan Lake on the north boundary of the refuge. A wide diversity of wetland habitat types exists throughout the delta, which is maintained by a combination of overland flow and shallow groundwater input.</p>	<p>The proposed action is anticipated to have no effect on refuge floodplains.</p>	<p>Same as the Proposed Action Alternative.</p>

Key: MFWP = Montana Fish, Wildlife, and Parks; NCDE = Northern Continental Divide Ecosystem; NWR = National Wildlife Refuge

Table 2. Affected Visitor Use and Experience and Anticipated Direct and Indirect Impacts of the Proposed Action and Any Alternatives.

Affected Resources	<u>Alternative A (Proposed Action)</u> <i>The refuge would allow archery-only black bear hunting during the fall in accordance with state regulations.</i>	<u>Alternative B (No Action)</u> <i>Black bear hunting would not be allowed on Swan River NWR. There would be no change to current public use and wildlife management programs.</i>
<p>Currently, Swan River NWR records approximately 525 visitor use days per year. Visitors enjoy a variety of recreational activities related to the six wildlife-dependent recreational uses—hunting, fishing, wildlife observation, photography, interpretation, and environmental education—that are identified in the Improvement Act as the priority uses. Popular uses include waterfowl hunting, fishing, wildlife observation and photography. Winter activities such as cross-country skiing and snowshoeing are permitted refuge-wide when snow conditions allow. There are both spatial and temporal differences on when and where these uses occur and at present, there have been no conflicts among the various user groups.</p> <p>The Service recently acquired a 392-acre tract from The Nature Conservancy, which came with the 1.2-mile Tollefson Trail, which winds through riparian habitat at the southern end of the refuge. This habitat is used by black bears and is located in an easily accessible area for nature observers and archery hunters.</p>	<p>Various aspects of the proposed hunting program, including temporal and spatial restrictions, combined with the seasonal nature of wildlife dependent recreational activities on the refuges, would reduce the potential for conflict among refuge visitors. While hunting and other wildlife dependent public uses (e.g., wildlife observation and photography) would be available to the public in many of the same areas and times of year, the direct impacts to refuge visitors engaged in other priority public uses during the hunting season are expected to be minor.</p> <p>The hunting seasons occur when other public uses are at a minimum because they are outside the main tourist season. To ensure safety and minimize conflict between hunters and visitors engaged in wildlife photography or observation, the refuge would provide information about the hunting program’s boundaries and seasons on the Complex’s website, at refuge offices, and at parking areas. Because it is archery-only hunting, overlap impacts would be minimized because there would be no noise associated with the activity. In addition, law enforcement patrols would be conducted on a regular basis to contact the public and ensure compliance with state, federal, and refuge regulations. The refuge law enforcement staff would also monitor and collect information on the hunting program’s participation and activities to ensure it does not interfere with other wildlife dependent public uses.</p>	<p>Visitor use is at such low levels that there currently are no conflicts among user groups. Under this alternative, the refuge would remain closed to black bear hunting. Thus, no additional impacts to visitor use would be expected.</p>

Key: NWR = National Wildlife Refuge

Table 3. Affected Cultural Resources and Anticipated Direct and Indirect Impacts of the Proposed Action and Any Alternatives.

<p>Affected Resources</p>	<p><u>Alternative A (Proposed Action)</u> <i>The refuge would allow archery-only black bear hunting during the fall in accordance with state regulations.</i></p>	<p><u>Alternative B (No Action)</u> <i>Black bear hunting would not be allowed on Swan River NWR. There would be no change to current public use and wildlife management programs.</i></p>
<p>The Service has a trust responsibility to American Indian tribes that includes protection of the tribal sovereignty and preservation of tribal culture and other trust resources.</p> <p>Currently, the Service does not propose any project, activity, or program that would result in changes in the character of, or adversely affect, any historical cultural resource or archaeological site. When such undertakings are considered, the Service takes all necessary steps to comply with section 106 of the National Historic Preservation Act of 1966, as amended. The Service pursues compliance with Section 110 of the National Historic Preservation Act to survey, inventory, and evaluate cultural resources.</p>	<p>Implementation of an archery-only black bear hunt would have no anticipated effects on cultural resources.</p>	<p>Same as the Proposed Action Alternative.</p>

Key: NWR = National Wildlife Refuge

Table 4. Affected Refuge Management and Operations and Anticipated Direct and Indirect Impacts of the Proposed Action and Any Alternative.

<p>Affected Resources</p>	<p><u>Alternative A (Proposed Action)</u> <i>The refuge would allow archery-only black bear hunting during the fall in accordance with state regulations.</i></p>	<p><u>Alternative B (No Action)</u> <i>Black bear hunting would not be allowed on Swan River NWR. There would be no change to current public use and wildlife management programs.</i></p>
<p>Land Use</p>		
<p>Swan River NWR is still under development but has a parking area with an interpretive kiosk and boardwalk, a fishing access site capable of supporting drift boats and trailers, a 1.2-mile walking trail at the southern end of the refuge, and several additional parking areas at strategic locations around the refuge boundary. Access to the west side is via a U.S. Forest Service road, which is very narrow and not designed to handle excessive traffic. The primary launch site for drift boats into the Swan River is also on a U.S. Forest Service road and adjacent to an antiquated bridge.</p> <p>The Service is in the process of evaluating methods to minimize past infrastructure impacts to refuge wetlands. Historically, infrastructure has been developed for meadow hay removal and muskrat farming which have altered hydrologic characteristics of the Swan River floodplain. We have assembled baseline vegetation data, initiated shallow groundwater monitoring, and obtained LiDAR images to model bathymetry and project vegetation changes anticipated through restored hydrologic function. This report should be complete by fall 2018 and will provide the basis for future land management decisions such as development or removal of water management infrastructure while paving the way for cooperative farming and/or prescribed fire efforts to restore native habitat.</p>	<p>Archery-only black bear hunting is anticipated to result in an additional 3–5 visitors, which would seasonally result in additional vehicle traffic on refuge access routes and in limited parking areas. If popularity increases or the activity results in numerous visits by each hunter, it could exacerbate road and access point maintenance, particularly on the southern boundary. This could have a minor, negative impact.</p>	<p>Under this alternative, the refuge would remain closed to black bear hunting. Thus, no additional impacts to refuge land use would be expected.</p>

<p style="text-align: center;">Affected Resources</p>	<p style="text-align: center;"><u>Alternative A (Proposed Action)</u></p> <p style="text-align: center;"><i>The refuge would allow archery-only black bear hunting during the fall in accordance with state regulations.</i></p>	<p style="text-align: center;"><u>Alternative B (No Action)</u></p> <p style="text-align: center;"><i>Black bear hunting would not be allowed on Swan River NWR. There would be no change to current public use and wildlife management programs.</i></p>
Administration		
<p>Administering the hunting program would annually require staff time from the refuge managers, Complex biologist, maintenance workers, administrative assistant, and law enforcement officers to coordinate with MFWP staff, develop an informational brochure with regulations, produce news releases, respond to hunter inquiries, conduct hunter and visitor outreach, minimize conflicts among users, conduct law enforcement, maintain boundary posting and parking areas, monitor impacts to wildlife, habitat, and visitor use, and ensure public safety. The annual cost of the Complex’s proposed hunting program is estimated to be \$45,000 (3.5 percent) of the overall operating budget of \$1,300,000. This cost includes staff and operating expenses for refuge law enforcement and hunter assistance prior to and during the hunting season. This estimate also includes refuge staff activities associated with evaluating resources available for hunting (e.g., biological assessment of target species) as well as preparing for (e.g., developing annual brochures, managing habitat conditions, and special signage and access) and monitoring hunting activities.</p>	<p>Opening Swan River NWR to archery black bear hunting would not require additional signage or infrastructure (such as road and parking area development). Signage and parking areas have been updated with the opening of archery deer and elk during the fall of 2018. The Cruz WPA, acquired in 2019 and located just south of the Swan River NWR, would provide rifle hunting opportunities for deer, elk and black bears. Parking lot and sign maintenance would be done with existing staffing. This is expected to have a minimal impact on refuge administration.</p>	<p>The budget identified in the introductory section is adequate to administer the current public use opportunities on the refuge.</p>

Key: MFWP = Montana Fish, Wildlife, and Parks; NWR = National Wildlife Refuge; WPA = Waterfowl Protection Area

Table 5. Affected Socioeconomics and Anticipated Direct and Indirect Impacts of the Proposed Action and Any Alternatives.

Affected Resources	<u>Alternative A (Proposed Action)</u> <i>The refuge would allow archery-only black bear hunting during the fall in accordance with state regulations.</i>	<u>Alternative B (No Action)</u> <i>Black bear hunting would not be allowed on Swan River NWR. There would be no change to current public use and wildlife management programs.</i>
Local and Regional Economics		
<p>The Swan Valley watershed consist of lands owned by the U.S. Forest Service, the Service, Montana Department of Natural Resources, The Nature Conservancy, and private citizens or companies (e.g. timber companies). Most of the middle and high elevation forested lands within the watershed are administered by the U.S. Forest Service. Private lands are concentrated in the low elevation portions of the watershed. The local economy is based on a combination of tourism, the timber industry, and government employment (state, local, and federal).</p>	<p>The proposed action would not have any effect on land ownership or on Swan Valley demographics or employment. The addition of the proposed archery-only black bear hunt would have the potential to bring an additional 3–5 visitors to the Swan Valley, thus increasing the potential for ecotourism profit. It is possible that this visitation, when combined with other opportunities both on and off refuge, that the cumulative effect could result in additional ecotourism jobs.</p>	<p>Under this alternative, the refuge would remain closed to black bear hunting. Thus, no additional impacts to the local and regional economies would be expected.</p>
Tourism Industry		
<p>The Swan Valley economy is largely based on the tourism industry and, as such, a proposed use on Swan River NWR that has the potential to increase visitation would have a positive effect for that segment of the local community.</p>	<p>The proposed archery-only black bear hunt would have the potential to bring an additional 3–5 visitors to the Swan Valley, thus increasing the potential for ecotourism profit.</p>	<p>Under this alternative, the Refuge would remain closed to black bear hunting. Thus, no additional impacts to the local tourism economy would be expected.</p>
Environmental Justice		
<p>Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, requires all Federal agencies to incorporate environmental justice into their missions by identifying and addressing disproportionately high or adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities.</p>	<p>The Service has not identified any potential high and adverse environmental or human health impacts from this proposed action or any of the alternatives. The Service has identified no minority or low income communities within the impact area. Minority or low-income communities would not be disproportionately affected by any impacts from this proposed action or any of the alternatives.</p>	<p>Same as the Proposed Action Alternative.</p>

Affected Resources	<u>Alternative A (Proposed Action)</u> <i>The refuge would allow archery-only black bear hunting during the fall in accordance with state regulations.</i>	<u>Alternative B (No Action)</u> <i>Black bear hunting would not be allowed on Swan River NWR. There would be no change to current public use and wildlife management programs.</i>
Indian Trust Resources		
There are no Indian Trust Resources on this refuge and this action would not impact any Indian Trust Resources.	Not Applicable.	Not Applicable.

Key: NWR = National Wildlife Refuge;

3.3 Cumulative Impact Analysis

Cumulative impacts are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions” (40 CFR 1508.7).

The following is an assessment of cumulative effects associated with the proposed action:

Table 6. Anticipated Cumulative Impacts of the Proposed Action and Any Alternatives.

Other Past, Present, and Reasonably Foreseeable Activity Impacting Affected Environment	Descriptions of Anticipated Cumulative Impacts
Hunting	
<p>Because the Swan Valley is predominately in state or federal ownership, there are abundant opportunities for black bear hunting. The state administers the overall hunting program through annual permitting in State Management Unit 106 and through setting seasons and harvest regulations. There are numerous access points for black bear hunters throughout the hunt unit.</p> <p>Recently, the Service has acquired the 320-acre Cruz WPA which is adjacent to the refuge. The WPA is open for spring and fall black bear hunting.</p>	<p>Statewide in 2016, the black bear population was estimated at just over 12,000 bears. The population in Black Bear Management Unit 106, where Swan River NWR is located, was estimated to be between 615-923 bears (MFWP 2016). If 1–2 bears are harvested on Swan River NWR in the fall each year, this would be less than 1 percent of the population in Black Bear Management Unit 106 and an even smaller percentage of the total statewide population. Therefore, the impact of opening a fall archery hunt on black bears on Swan River NWR would be expected to have a negligible impact on overall bear populations within the local area and statewide.</p>
Development and Population Increase	
<p>The Swan Valley is very lightly populated, and few businesses are located in the largest population centers of Swan Lake (pop. 143) and Condon (pop. 343). A local non-profit group, Swan Valley Connections, is trying to convince the community to develop for ecotourism as other communities in Montana have. It is unknown how successful this approach would be. There are many seasonal cabins along Swan Lake and the area could potentially build as there is more demand for recreational properties. The Service has established a Conservation Area in the Swan Valley and is authorized to acquire up to 10,000 acres of private conservation easements where new construction would not be allowed.</p>	<p>If the Swan Valley Connections approach is successful, it could draw more visitors to the refuge potentially creating further overlap between competing uses such as wildlife observation and hunting. The Service plans to monitor public use through use of recreational counters at key access points to the refuge. If monitoring data indicates that visitation is increasing, the Service would adopt adaptive management policies to modify uses to minimize conflict between user groups.</p> <p>Increased visitation would increase revenue brought into the community through ecotourism but could create additional disturbance issues for wildlife and conflict among user groups. The Service Easement Program could curtail development and reduce population expansion which would, similarly, minimize wildlife disturbance and user group conflict while reducing ecotourism revenue.</p>

Other Past, Present, and Reasonably Foreseeable Activity Impacting Affected Environment	Descriptions of Anticipated Cumulative Impacts
Climate Change	
<p>Warming and drying, whether it results from anthropogenic or natural sources, is expected to affect a variety of natural processes and associated resources. However, the complexity of ecological systems means that there is a tremendous amount of uncertainty about the impact from climate change. In particular, the localized effects of climate change are still a matter of much debate. That said, the combination of increased frequency and severity of drought in the Swan Valley and potential to increase wildfire frequency and intensity could dramatically reduce the amount and quality of wildlife habitat in the Swan Valley. As a result, wildlife could be forced into smaller and smaller amounts of available habitat. Concentrating wildlife into smaller and smaller areas also has the potential to more readily allow disease to spread within wildlife populations such as cervids (deer and elk) and waterfowl.</p>	<p>While the impacts from climate change on refuge wildlife and habitats are not certain, allowing hunting on the refuge would not add to the cumulative impacts of climate change. The refuge uses an adaptive management approach for its hunt program, annually monitoring (through direct feedback from state and local user groups) and reviewing the hunt program annually and revising annually (if necessary). The Service would adjust the hunting program as necessary to ensure that it does not contribute to the cumulative impacts of climate change on resident wildlife and migratory birds.</p>

Key: WPA = Waterfowl Protection Area

3.4 Monitoring

Black bear populations are monitored each year by Montana Fish, Wildlife and Parks and hunting regulations are adjusted accordingly (Mace and Chilton-Redant 2011; MFWP 2017). The Service intends to install recreational use counters on major roads entering key access areas on the refuge. This year’s counts would be used as a baseline to compare future levels of visitation.

3.5 Summary of Analysis

The purpose of this EA is to briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a Finding of No Significant Impact. The term “significantly” as used in NEPA requires consideration of both the context of the action and the intensity of effects. This section summarizes the findings and conclusions of the analyses above so that we may determine the significance of the effects.

Alternative A – Proposed Action Alternative

This alternative is the Service’s proposed action because it offers the best opportunity for public hunting that would result in a minimal impact on physical and biological resources, while meeting the Service’s mandates under the NWRSA and Secretarial Order 3356.

Considering the small number of hunters anticipated (3–5) to participate in fall, archery-only black bear hunting, impacts to most aspects of the human environment would be negligible to

non-existent. To an extent, there could be temporary disturbance or displacement, or both, effects to some wildlife species and potentially some additional vegetation trampling; however, the overall positive benefit of providing a new recreational opportunity and contribution to ecotourism provides a benefit to the Swan Valley community.

The addition of archery hunting in the fall for black bear would not have significant impact on local and regional wildlife populations because the percentage likely to be taken on the refuge, though possibly additive to existing hunting takes, would be a tiny fraction of the estimated populations. In addition, overall populations would continue to be monitored by MFWP biologists to determine if harvest levels should be adjusted. Additional hunting would not add more than slightly to the cumulative impacts to resident wildlife stemming from hunting at the local or regional level, and would only result in minor, negative impacts to their populations.

Alternative B – No Action Alternative

There would be no additional costs to the refuge under this alternative. There would be no change to current public use and wildlife management programs on the refuge under this alternative. The refuge would not increase its impact on the economy and would not provide new hunting and access opportunities. This alternative has the least direct impacts of physical and biological resources. In addition, it would minimize our mandates under the NWRSA and Secretarial Order 3356.

Conclusion

The Service proposes to allow fall archery-only black bear hunting opportunities on Swan River NWR as analyzed above under the Proposed Action Alternative, which would not have any significant impacts on the human environment.

3.6 List of Sources, Agencies and Persons Consulted

- Montana Fish Wildlife and Parks (Neil Anderson, Jessy Colrane)
- Lake County Commission
- Swan Valley Connections (Luke Lamar, Rebecca Ramsey, Maria Mantes)
- Swan Lands Coordinating Committee (various agencies and local community members)

3.7 List of Preparers

Name	Position	Work Unit
Benjamin Gilles	Project Leader	Western Montana NWR Complex
Rob Bundy	Refuge Manager (former)	Benton Lake NWR Complex
Bob Johnson	Refuge Manager	Western Montana NWR Complex
Vanessa Fields	Wildlife Biologist	Mountain-Prairie Regional Office
Nicole Prescott	Fish and Wildlife Officer (former)	Benton Lake NWR Complex

3.8 State Coordination

During acquisition of the Oxbow Preserve, we worked with Neil Anderson, MFWP Assistant Regional Supervisor, to acquire funds from the Migratory Bird Commission (commission). Serving as our State Ex Officio, Neil went to the commission meeting where we committed to evaluating the archery-only big game hunt on Swan River NWR. Following successful acquisition, we worked closely with Neil and regional biologist Jessy Coltrane to develop the hunting strategy and to put a proposal before the MFWP to include the new hunting for the fiscal years 2018 and 2019 hunting season. The commission approved of the hunting on February 15, 2018. The refuge was open for archery deer and elk hunting for the first time in the fall of 2018. Information on potential black bear hunter numbers and harvest is very limited and the numbers used in this analysis were obtained from Neil Anderson (MFWP) in October of 2019.

3.9 Tribal Consultation:

The Service mailed an invitation for comments to all Tribes potentially impacted by initiating an EA to open Swan River NWR to fall black bear archery hunting. The Service extended an invitation to engage in government-to-government consultation in accordance with Executive Order 13175.

3.10 Public Outreach

Pursuant to acquisition of the Oxbow Preserve from The Nature Conservancy in 2017, the Service attended a Lake County Commission Meeting and briefed the Lake County Commissioners on the possibility of providing archery-only big game hunting. We also attended a meeting of the Swan Lands Coordinating Committee, sponsored by Swan Valley Connections, and publicly described our intent. We also plan to release this draft EA for review on the Benton Lake NWR Complex website for 30 days. We will solicit public comment and make an electronic copy available for review on-line and have a hard copy available at the Swan Valley Connections office in Condon, Montana, and another available at the Western Montana NWR Complex Headquarters in Great Falls, Montana.

3.11 Determination

This section will be filled out upon completion of any public comment period and at the time of finalization of the Environmental Assessment.

- The Service's action will not result in a significant impact on the quality of the human environment. See the attached "**Finding of No Significant Impact.**"
- The Service's action **may significantly affect** the quality of the human environment and the Service will prepare an Environmental Impact Statement.

Preparer Signature: _____ Date: _____

Name/Title/Organization: _____

Reviewer Signature: _____ Date: _____

Name/Title: _____

3.12 References

Bolton, A. 2019. Grizzly bear mortalities reach record high in NW Montana. Montana Public Radio. 1pg. Retrieved from <<https://www.mtpr.org/post/grizzly-bear-mortalities-reach-record-high-nw-montana>> [Accessed November 2019.]

Costello, C.M., Mace, R.D.; Roberts, L. 2016. Grizzly bear demographics in the Northern Continental Divide Ecosystem, Montana: research results (2004-2014) and suggested techniques for management of mortality. Montana Department of Fish, Wildlife and Parks, Helena.

Mace, R. D. Chilton-Radandt, T. 2011. Black bear harvest research and management in Montana: Final Report. Montana Department of Fish, Wildlife & Parks, Wildlife Division, Helena, Montana, USA. 82pgs.

[MFWP] Montana Fish, Wildlife and Parks. 2017. Black bear annual harvest reports. <<http://fwp.mt.gov/hunting/planahunt/huntingGuides/blackBear/>> [Accessed December 2019]

———. Montana Fish, Wildlife and Parks. 2016. 2016 Black Bear Population Estimates. <<http://fwp.mt.gov/hunting/planahunt/huntingGuides/blackBear/>> [Accessed November 2019].

[USFWS] U.S. Fish and Wildlife Service. 2012. Comprehensive Conservation Plan, Benton Lake National Wildlife Refuge Complex, Montana. Lakewood, CO: U.S. Department of the Interior, U.S. Fish and Wildlife Service. 305p. <https://www.fws.gov/mountain-prairie/refuges/completedPlanPDFs_A-E/bnl_ccpfinal_all.pdf>

———. 2019. Information for Planning and Consultation Database. <https://www.fws.gov/ipac/ipac_basics.html> [Accessed December 2019]

———. U.S. Fish and Wildlife Service. 2020a. Draft Benton Lake National Wildlife Refuge Complex Big Game, Waterfowl, and Upland Bird Hunting Plan. Great Falls, Montana. 19pgs. <<https://www.fws.gov/mountain-prairie/huntfish.php#>>

———. U.S. Fish and Wildlife Service. 2020b. Draft Compatibility Determination for Big Game, Waterfowl, and Upland Bird Hunting on Benton Lake NWR Complex. 3pgs. Great Falls, Montana. <<https://www.fws.gov/mountain-prairie/huntfish.php#>>

APPENDIX A OTHER APPLICABLE STATUTES, EXECUTIVE ORDERS, AND REGULATIONS

Statutes, Executive Orders, and Regulations
Cultural Resources
<p>American Indian Religious Freedom Act, as amended, 42 U.S.C. 1996 – 1996a; 43 CFR Part 7</p> <p>Antiquities Act of 1906, 16 U.S.C. 431-433; 43 CFR Part 3</p> <p>Archaeological Resources Protection Act of 1979, 16 U.S.C. 470aa – 470mm; 18 CFR Part 1312; 32 CFR Part 229; 36 CFR Part 296; 43 CFR Part 7</p> <p>National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470–470x-6; 36 CFR Parts 60, 63, 78, 79, 800, 801, and 810</p> <p>Paleontological Resources Protection Act, 16 U.S.C. 470aaa – 470aaa-11</p> <p>Native American Graves Protection and Repatriation Act, 25 U.S.C. 3001–3013; 43 CFR Part 10</p> <p>Executive Order 11593 – Protection and Enhancement of the Cultural Environment, 36 Fed. Reg. 8921 (1971)</p> <p>Executive Order 13007 – Indian Sacred Sites, 61 Fed. Reg. 26771 (1996)</p>
Fish and Wildlife
<p>Bald and Golden Eagle Protection Act, as amended, 16 U.S.C. 668-668c, 50 CFR 22</p> <p>Endangered Species Act of 1973, as amended, 16 U.S.C. 1531-1544; 36 CFR Part 13; 50 CFR Parts 10, 17, 23, 81, 217, 222, 225, 402, and 450</p> <p>Fish and Wildlife Act of 1956, 16 U.S.C. 742 a–m</p> <p>Lacey Act, as amended, 16 U.S.C. 3371 et seq.; 15 CFR Parts 10, 11, 12, 14, 300, and 904</p> <p>Migratory Bird Treaty Act, as amended, 16 U.S.C. 703–712; 50 CFR Parts 10, 12, 20, and 21</p> <p>Executive Order 13186 – Responsibilities of Federal Agencies to Protect Migratory Birds, 66 Fed. Reg. 3853 (2001)</p>
Natural Resources
<p>Clean Air Act, as amended, 42 U.S.C. 7401–7671q; 40 CFR Parts 23, 50, 51, 52, 58, 60, 61, 82, and 93; 48 CFR Part 23</p> <p>Wilderness Act, 16 U.S.C. 1131 et seq.</p> <p>Wild and Scenic Rivers Act, 16 U.S.C. 1271 et seq.</p> <p>Executive Order 13112 – Invasive Species, 64 Fed. Reg. 6183 (1999)</p>
Water Resources
<p>Coastal Zone Management Act of 1972, 16 U.S.C. 1451 et seq.; 15 CFR Parts 923, 930, 933</p> <p>Federal Water Pollution Control Act of 1972 (commonly referred to as Clean Water Act), 33 U.S.C. 1251 et seq.; 33 CFR Parts 320–330; 40 CFR Parts 110, 112, 116, 117, 230-232, 323, and 328</p> <p>Rivers and Harbors Act of 1899, as amended, 33 U.S.C. 401 et seq.; 33 CFR Parts 114, 115, 116, 321, 322, and 333</p> <p>Safe Drinking Water Act of 1974, 42 U.S.C. 300f et seq.; 40 CFR Parts 141–148</p> <p>Executive Order 11988 – Floodplain Management, 42 Fed. Reg. 26951 (1977)</p> <p>Executive Order 11990 – Protection of Wetlands, 42 Fed. Reg. 26961 (1977)</p>

Key: CFR = Code of Federal Regulations; U.S.C. = U.S. Code