National Park Service
U.S. Department of the Interior

Alaska Region

Sport Hunting and Trapping in National Preserves in Alaska

Environmental Assessment

August 2018

Note to Reviewers

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1. NEED FOR ACTION AND ISSUES ANALYZED

1.1 Need for Action

On October 23, 2015, the National Park Service (NPS) published a final rule (2015 rule) to amend its regulations for sport hunting and trapping in national preserves (NPs) in Alaska (80 FR 65325). The 2015 rule codified prohibitions on certain types of harvest practices that are otherwise permitted by the State of Alaska (State), and went into effect in January, 2016.

Since the publication of the 2015 rule, the Secretary of the Interior issued two Secretarial Orders regarding how the Department of the Interior should manage recreational hunting and trapping in the lands and waters it administers, and directing greater collaboration with state, tribal, and territorial partners in doing so. Consistent with those Secretarial Orders, the NPS has published a proposed rule that would remove sections of the 2015 rule, which prohibited certain sport hunting practices. Additional background information, including information related to the Secretarial Orders, is available in the preamble to the proposed rule at: https://www.federalregister.gov/documents/2018/05/22/2018-10735/alaska-hunting-and-trapping-in-national-preserves.

Action is needed at this time to more closely align sport hunting regulations in national preserves in Alaska with State regulations, and to enhance consistency with harvest regulations on lands and waters surrounding national preserves in Alaska, in furtherance of Secretarial Orders 3347 and 3356.

1.2 Issues Analyzed in this Environmental Assessment

Issues related to the following resources and values are analyzed in detail in this environmental assessment (EA): wildlife; federal subsistence (subsistence) use; public use and experience; and wilderness character.

Issues related to archaeological or historic resources; fish and aquatic habitat; floodplains or wetlands; and threatened and endangered species were dismissed from detailed analysis for one or more of the following reasons:

- the environmental impacts associated with the issue are not central to the proposal or of critical importance;
- a detailed analysis of environmental impacts related to the issue is not necessary to make a reasoned choice between alternatives;
- the environmental impacts associated with the issue are not a significant point of contention among the public or other agencies; or
- there are not potentially significant impacts to resources associated with the issue.

Environmental Justice: Executive Order 12898 requires federal agencies to identify and address disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low income populations or communities. The proposed action would not result in disproportionately high direct or indirect adverse effects on minority or low income populations or communities.

Indian Trust Resources: Executive Order 13175 requires early consultation if a proposal is to have substantial direct effect on Indian Trust Resources. The proposed project area (and most of the State) does not contain Indian Trust Resources. The proposed action would not affect these resources.

2. ALTERNATIVES

2.1 Alternative 1

Remove NPS Harvest Regulations at 36 CFR 13.42 paragraphs (f) and (g) (Proposed Action and Preferred Alternative)

In the context of the current NPS wildlife regulation governing hunting and trapping in national preserves in Alaska, the proposed action would remove the prohibitions in paragraphs (f) and (g) of 36 Code of Federal Regulations (CFR) 13.42. State hunting laws and regulations that do not conflict with existing federal laws or regulations would apply on national preserves. Paragraph (f) provides that State management actions or laws or regulations that authorize taking of wildlife are not adopted in park areas if they are related to predator reduction efforts, which is defined as efforts with the intent or potential to alter or manipulate natural predator-prey dynamics and associated natural ecological processes, in order to increase harvest of ungulates by humans. Paragraph (g) sets forth a table of prohibited actions related to taking wildlife for sport purposes in national preserves in Alaska. The full text of paragraphs (f) and (g) is included in Appendix A.

Actions related to wildlife harvest that could occur in national preserves under the proposed action that are currently prohibited by 36 CFR 13.42 paragraphs (f) and (g), and are analyzed in detail in this EA include the following (see Appendix B for details regarding which GMUs specific actions would be allowed in, and specific conditions that apply; see also Appendix E for a map that includes GMUs overlaid upon national preserves)[1]:

[1] The State of Alaska manages hunting and trapping based on geographic units referred to as game management units (GMUs). GMUs, Subunits, and uniform coding units (UCUs) are the underlying geographic foundation of the wildlife and habitat management and regulations for ADFG-DWC. The GMU/UCU system consists of four Regions (I, II, III, and V) which are divided into twenty-six GMUs. Many of the GMUs are divided into Subunits (e.g. GMU 15 has three (3) Subunits, 15A, 15B, and 15C). More information is available at (http://www.dnr.alaska.gov/mlw/mapguide/metadata/game_mgmt_units.htm).

- The harvesting of black or brown bears over bait in accordance with State restrictions on this activity
- Hunting black bears with the aid of a dog, only through a State permit
- The taking of wolves (including pups) during an extended hunting season (current seasons would be extended between May 1 and August 9 pursuant to State regulations; see Appendix D for specific dates per GMU).
- The taking of caribou (1) from a motor driven boat; and (2) while the animal is swimming (both actions would only be allowed in portions of Noatak NP, Bering Land Bridge NP, and Gates of the Arctic NP overlapping with GMUs 23 and 26). This provision will not impact subsistence regulations regarding swimming caribou.

The NPS would continue to monitor wildlife, as appropriate, and could take actions in the future if necessary to protect NPS resources and values. For any such actions, the NPS would complete additional NEPA reviews, as appropriate. Before proposing NPS actions, the NPS would attempt to address any issues with the State of Alaska Board of Game (BOG) if appropriate and practicable.

A number of the prohibited actions in 36 CFR 13.42 (g) are also prohibited by the State or other authorities and would not occur under the proposed action. Other actions prohibited by 36 CFR 13.42 (g) would occur only in limited cases under State regulations and result in minimal environmental impacts. Therefore, those actions have been dismissed from detailed analysis in this EA (see Appendix C for a list of those actions).

2.2 Alternative 2

No Action (Retain NPS Harvest Regulations at 36 CFR 13.42 paragraphs (f) and (g))

Under the no-action alternative, the prohibitions on certain types of harvest practices included in paragraphs (f) and (g) of the current NPS wildlife regulation governing hunting and trapping in national preserves in Alaska, as described in the first paragraph of Alternative 1, would remain in place. The full text of paragraphs (f) and (g) is included in Appendix A.

2.3 Alternative Considered but Eliminated from Detailed Study

Prohibit State Harvest Methods Unless Specifically Authorized in NPS Areas

This alternative would specify exactly what hunting methods and means would be allowed in NPS areas in Alaska. It would likely be more restrictive with regard to hunting methods than the proposed action. The NPS believes this approach is not consistent with the Alaska National Interest Lands Conservation Act of 1980 (ANILCA), which provides that hunting and trapping shall be allowed in national preserves under applicable State and federal law and regulation, subject to potential restrictions described in ANILCA Section 1313. This would also not address the need for action.

3. ENVIRONMENTAL CONSEQUENCES

3.1 Project Area

The area that would be affected by the proposed action is limited to the 10 national preserve units in Alaska (including the Alagnak Wild River corridor adjacent to Katmai NP) as shown in Appendix D, totaling approximately 20 million acres. Appendix D summarizes the approximate preserve sizes, including acreage of designated and eligible wilderness, and some of the key species identified in ANILCA Title II for protection in these areas.

3.2 Wildlife

3.2.1 Current General Conditions of Wildlife

Large intact ecosystems, complete with large predators, are present throughout national preserves in Alaska. Title II of ANILCA mandates that the NPS "protect habitat for and populations of, fish and wildlife, including but not limited to…" and names key species. In general, the fish and wildlife populations are healthy and fluctuate within the limits of natural variation. Wildlife populations can change for a variety of reasons, including interactions between nutrition, weather, predator-prey relationships, and human harvest. These fluctuations have been occurring for thousands of years.

Relative to wildlife and habitat, pursuant to ANILCA and NPS policies, national preserves in Alaska are to be managed for the conservation of natural and healthy populations of wildlife, natural ecosystems and processes, and natural behaviors of wildlife. These mandates have largely been satisfied. Sport and federal subsistence harvest of wildlife are allowed uses in national preserves in Alaska and are governed by a combination of State and federal laws and regulations (see Hilderbrand et al. 2013a for a review of wildlife stewardship on NPS lands in Alaska).

The harvest of swimming caribou and the use of motorized boats for the harvest of caribou has been authorized by the State in certain GMUs and prior to 2010, the baiting of black bears was allowed in certain GMUs, including on some national preserves dating back as far as 1982. The taking of brown bears over bait was allowed in certain national preserves for a limited time prior to being restricted.

In 2010, through Superintendent's Compendia, some national preserves placed temporary restrictions on certain sport hunting practices newly allowed by State regulations. The 2015 rule permanently prohibited the same and some additional sport hunting practices on national preserves (see Appendix A).

3.2.2 Effects on Wildlife of Alternative 1

Remove NPS harvest regulations at 36 CFR 13.42 paragraphs (f) and (g)

Under the proposed action there would be the potential for localized effects on individual animals, family groups, and packs (e.g., direct mortality, increased mortality risk due to loss of family or group members, and food conditioning) as a result of removing the prohibitions in 36 CFR 13.42 paragraphs (f) and (g) (Hebblewhite et al. 2005, Frank 2008, Ripple and Beschta 2012). Increased take of predator species could reduce abundance of bears and wolves in localized areas. However, based on input from the Alaska Department of Fish and Game (ADFG), population-level effects on prey species are not expected. The ADFG maintains that except for within areas of relatively high human populations where more hunters and access are readily available, increased hunting of predator species neither reduces predator populations nor increases prey populations (B. Dale, personal communication, March 8, 2018). For example, "estimates of the effects of [hunting] harvest on the wolf population were that wolf numbers were reduced following two years when the harvest exceeded 40% but that wolf numbers increased the following year when the harvest was less than 35% (Peterson and others 1984)" (NRC 1997). Since preserves are generally remote and access is limited, the level of take on preserves under the proposed action is expected to be much less than 40% of predator populations, as discussed below.

The ADFG argues hunting of brown bears will not impact moose populations. For example, while it is recognized that predator populations can be impacted without an observable, resultant impact on prey populations, Miller et al. 2017 states:

> *"Since the Alaska Intensive Management Law was passed in 1994, there have been no studies demonstrating that liberalized bear hunting regulations and associated increases in harvests have resulted in increased ungulate abundance in any portion of Alaska, although a 3-year study with this objective was initiated in 2017 (T. Paragi, personal communication). The ADFG has conducted preliminary analyses and concluded, 'The department has looked at cow:calf ratios in numerous areas where brown bear seasons have been liberalized and concluded that increased bear harvest had no effect on survival of moose neonates' (B. Dale, T. Paragi, and S. Brainerd, Alaska Department of Fish and Game, personal communication)."*

Under the proposed action, extended hunting seasons for wolves would occur in certain portions of national preserves located in specific GMUs, from May 1 - August 9 of each year (see Appendix B). According to the State, the areas where extended hunting seasons would be allowed are generally characterized by vast, remote landscapes where little or no harvest takes place due to the difficulty of access, and areas where seasons have been extended have not experienced meaningful increases in the harvest of wolves (SOA 2014). Data provided by the State show that approximately 1750 wolves were reported harvested from 2012 - 2016 in GMUs that overlap with national preserves, 54 of which were taken between May 1 and August 31 in GMUs that overlap with national preserves (approximately 11 wolves per year).[2] National

[2] State harvest numbers include wolves taken between August 10 and August 31 where currently allowed in GMUs that overlap with national preserves, as the state does not maintain date-specific harvest numbers. The NPS closed some national preserves through annual compendia to take between May 1 and August 9 in certain preserves in certain years during this period. Of note, those data show how many wolves were taken per GMU, but not whether wolves were taken in a national preserve.

preserves make up approximately 10.4% of the total area of those GMUs (18,517,902 acres out of 176,826,940 acres). Of those 54 wolves, 33 were taken in May through August in UCUs that are adjacent to, within, or that overlap with national preserves (on average, < 7 wolves per year in an area partially comprised of national preserve lands). While an increase in the number of wolves taken between May 1 and August 9 is expected under the proposed action, the increase is expected to be small and would have little to no population-level effect on wolves.

When the harvest of black bears over bait was legal on NPS preserves in Alaska, harvest was low (<2 bears per year) during the period 1992-2010 (Hilderbrand et al. 2013b). During that period a total of 37 black bears were taken over bait in national preserves. 34 of those were harvested along the McCarthy Road corridor in Wrangell-St. Elias NP. Of the 37 bears taken, only three bears were harvested over bait by rural Alaska residents. While there could have been a localized effect, overall, Hildebrand et al. concluded that there were no meaningful population-level effects as a result of bear baiting on NPS lands between 1992 and 2010 (Hilderbrand et al. 2013b).

Data provided by the State shows approximately 2300 black bears were reported harvested from 2012 - 2016 in GMUs where baiting is currently allowed and that overlap with national preserves (approximately 460 bears per year).[3] National preserves make up approximately 9.8% of the total area of those GMUs (18,899,319 acres out of 193,148,767 acres). Available UCU data regarding bears taken over bait shows that of the 2300 bears taken, 171 were taken in UCUs where baiting is currently allowed that are adjacent to, within, or that overlap with national preserves (approximately 34 bears per year). Of those 171 bears, 87 were taken over bait (approximately 17 bears per year in an area partially comprised of national preserve lands). Overall, based on the data in the Hildebrand study, which found fewer than 2 black bears per year were taken in national preserves, and which also reported a 4.3% annual increase in bears taken over bait statewide between 1992 and 2010, only small numbers of black bears would be expected to be taken over bait in national preserves each year under the proposed action. No meaningful population-level effects would be expected.

Data provided by the State for brown bears shows approximately 290 brown bears were reported harvested from 2012-2016 in GMUs where baiting is currently allowed and that overlap with national preserves (approximately 57 bears per year). National preserves make up approximately 11% of the total area of those GMUs (15,351,296 acres out of 137,461,283 acres).[4] Available UCU data regarding brown bears taken over bait shows that of the 290 bears taken, 140 were taken in UCUs where baiting is currently allowed that are adjacent to, within, or that overlap with national preserves (approximately 28 per year in an area partially comprised of national preserve lands). Of those 140 bears, 40 were taken over bait (approximately 8 bears per year). Documenting brown bear reduction efforts in an area of Alaska without national preserves where take of brown bear over bait was initially permitted by the State, Miller et al.

[3] State data show how many black bears were taken per GMU, but not whether bears were taken in a national preserve or whether bears were taken over bait.

[4] As with black bears, those data only show how many brown bears were taken per GMU, and not whether bears were taken in a national preserve or whether bears were taken over bait. The NPS closed some national preserves through annual compendia to the take of brown bear over bait during this period.

2017 reported the percentage of brown bears taken over bait on the Kenai Peninsula was 77% in 2014, 89% in 2015, and 83% in 2016. Although there are some exceptions, such as in portions of Wrangell-St. Elias National Preserve, access to most national preserves in Alaska are more difficult than access to areas on the Kenai Peninsula used for bear baiting. Because baiting on most national preserves would be more difficult, the percentage of brown bears taken over bait under the proposed action is expected to be lower than the percentage reported by Miller et al. 2017on the Kenai. When the State decided to allow the taking of brown bears over black bear baiting stations it determined that practice would not affect the conservation of brown bears at the population level. Furthermore, the State has pointed out that hunters taking brown bears over bait would need to comply with seasons and bag limits for brown bears, and has committed to monitoring brown bear harvest and taking appropriate action if sustainable harvests are threatened (SOA 2014).

By design, baiting of bears alters their behavior to increase their predictability and facilitate harvest. Conditioning bears to unnatural food items can increase the likelihood that the bears will become nuisance bears, and thus be destroyed outside of harvest regulations (Herrero 2002,). Similarly, food conditioned bears are more likely to become a public safety risk relative to non-food conditioned bears (Herrero 1970, 1976, 2002,). A study of artificial feeding for tourism in Quebec concluded that a feeding station may decrease the annual and seasonal ranges of bears and lead to local increase in bear density that may exceed the social carrying capacity (Masse et al. 2014). However, an analysis of black bear baiting on Alaska national preserves from 1992-2010 concluded that, “Little to no population-level effects arose from the practice of bear baiting on NPS lands. Rather, the complexity surrounding the practice of bear baiting is centered on the management goals of minimizing food-conditioning of bears, fostering public safety, preventing defense of life and property killing of individual bears, and maintaining natural processes and behaviors” (Hilderbrand et al. 2013b). The State maintains that it has registered thousands of black bear bait stations per year for many years, and has not detected problems that could be directly attributed to the practice of bear baiting. The State points to areas with relatively high levels of bear baiting such as near Fairbanks and the Mat-Su Valley that have comparatively fewer nuisance bear issues than other urban areas such as Anchorage or Juneau (SOA 2014).

Hunting black bears with the aid of a dog would be allowed in all GMUs that overlap with national preserves with a State permit but is expected to be limited. An average of 9 permits per year from 2012 - 2016 were issued for GMUs 13, 14A, 14B, 15, 16, and 20. Of these six GMUs, only 29% of GMU 20 overlaps national preserves (Denali NP and Yukon-Charley NP), 8.1 % of GMU 16 overlaps Denali NP, and 1.7% of GMU 13 overlaps Wrangell-St. Elias NP. The other three units do not overlap or occur within national preserves. The State maintains that the use of dogs for pursuing black bears is a very limited activity in Alaska for a number of reasons including: 1) the presence of brown bears and real potential to encounter wolves makes turning dogs out to pursue black bears a risky proposition; 2) as a hunting method, this activity preferably takes place on or near a road system where dogs can be tracked and retrieved much more effectively; 3) extensive road-less (and non-motorized) areas make finding and locating dogs in pursuit very challenging and in some cases impossible without aerial support thus becoming very expensive and logistically challenging; and hunters who have invested

thousands of dollars and devoted numerous hours of training pursuit dogs for hunting bears are not likely to participate or invest time in this method in remote areas (SOA 2018b). Because this activity is expected to be rare under the proposed action any impacts related to using dogs to hunt black bears would be localized and minimal.

The taking of swimming caribou and taking of caribou from a motor driven boat could result in increases to the number of caribou taken in Bering Land Bridge, Gates of the Arctic, and Noatak NPs, which could result in localized impacts. However, most non-local hunters are generally not known to harvest swimming caribou, preferring to hunt on land since they have limited access to the necessary motorized boats (SOA 2014). Due to the low level of additional take of caribou expected under the proposed action, no meaningful population-level impacts are expected to caribou.

Cumulative Effects:

Abundant research has been conducted on myriad factors affecting bear, wolf, and other carnivore populations. Fire, harvest, illegal killing, access, habitat fragmentation, climate, and development all have the potential to impact bears and wolves at the population level across varying temporal scales and have the potential to influence natural ecosystems and processes (Creel and Rotella 2010, Gude et al. 2012, Mace and Waller 1997, McLellan 1990, McLellan et al 1999, McLellan and Shackleton 1988, McLellan and Shackleton 1989, Schwartz et al. 2012, Vucetich et al. 2005). For example, events such as wildfires, climate, and severe winters (i.e. deep snows or icing events), can impact habitat quality of ungulates, affect recruitment, and cause direct mortality of individuals (Hegel et al. 2009, Joly et al. 2003, Joly et al. 2009, Joly et al. 2011, Joly et al. 2012, MacCracken and Viereck 1990, Weixelman et al. 1998). These effects contribute to the impacts of predation on ungulates and ungulate numbers, in turn, are linked to prey available for predators (Hegel et al. 2009, Hegel et al. 2010).

Past wildlife habitat fragmentation for bears, wolves, moose, and caribou has occurred in and adjacent to park areas such as the Dalton Highway and oil and gas developments on the North Slope, the Red Dog Haul Road through Cape Krusenstern National Monument and near Noatak NP, and the McCarthy and Nabesna roads in Wrangell-St. Elias NP. The NPS evaluated the cumulative impacts of mining on wildlife and habitat, among other resources, in environmental impact statements (EISs) for Denali National Park and Preserve, Wrangell-St. Elias National Park and Preserve, and Yukon-Charley Rivers NP (NPS 1990 a, b, and c). These EISs concluded the potential for adverse effects to certain large wildlife species and their habitat. The BLM and NPS are processing an application for a road to the Ambler Mining District near the upper Kobuk River which, if built, could impact wildlife habitat and populations in Gates of the Arctic NP.

Effects outside NPS boundaries and source-sink dynamics are a management concern for carnivores and herbivores alike, particularly on the border of protected areas and areas of less restrictive harvest (Haroldson et al. 2004, Rutledge et al. 2010, Ruth et al. 2011, Salinas et al. 2005, Schwartz et al. 2006a, Schwartz et al. 2006b, Schwartz et al. 2012).

When the incremental impacts of the proposed action are added to the other cumulative impacts, wildlife and their habitat would continue to be adversely affected. The proposed action would contribute a small degree to these cumulative impacts due to the contribution of localized impacts from additional take expected under the proposed action.

Conclusion:

The proposed action could result in localized impacts to individual animals, family groups, and packs (e.g., direct mortality, increased mortality risk due to loss of family or group members, and food conditioning), resulting from the removal of current prohibitions on methods of take. However, due to the low level of additional take anticipated as a result of removing the current prohibitions, biological population-level effects are not anticipated. The proposed action would also result in conditioning of bears in areas where bear baiting occurs to human foods, which could lead to altered behaviors at a local scale that have the potential to increase the likelihood that more bears are taken in defense of life and property. The use of dogs to hunt black bears is expected to be rare and is likely to result in minimal and localized environmental impacts. No meaningful population-level impacts are expected to caribou.

The State manages take of wildlife under a “sustained yield” principle (Alaska Constitution, Article VIII, section 4) and has assured the NPS that in the event harvest were to increase beyond sustainable levels, the ADFG would close seasons by emergency order if immediate action was necessary, and/or by recommending more conservative seasons, bag limits, and/or methods to the BOG for future hunting seasons (SOA 2014). Furthermore, as part of the proposed action, the NPS would continue to work with the BOG to ensure sustainable harvest and would retain authority to act on its own in the future, if necessary to protect NPS resources and values. In general, under the proposed action, the NPS expects healthy populations of wildlife would continue to exist in a manner consistent with the range of natural variability with regard to abundance, diversity, and distribution.

3.2.3 Effects on Wildlife of Alternative 2

No Action (Retain NPS harvest regulations at 36 CFR 13.42 paragraphs (f) and (g))

Wildlife would continue to be impacted by hunting and trapping related activities in national preserves. However, because the current prohibitions on methods of take would remain in place, there would not be the potential for increased localized impacts such as mortality risk due to loss of family or group members that could occur under the proposed action. Wildlife and populations would continue to respond to current factors with little change in abundance, diversity, and distribution. Because baiting would continue to be prohibited by the NPS, bears in national preserves would maintain more natural foraging and feeding behaviors than under the proposed action.

Cumulative Effects:

Other effects on wildlife and habitat are expected to be the same under this alternative as described above for the proposed action, but the additive impacts of the no-action alternative

would result in no measurable additional changes to wildlife populations or habitat. Any changes to wildlife numbers or distribution would largely be driven by take of predators adjacent to preserves and other factors discussed under the cumulative impact section of the proposed action.

Conclusion:

Keeping the existing prohibitions on methods of take in place would contribute to the maintenance of more natural ecosystems, processes, and behaviors of affected wildlife, especially bears. Healthy populations of wildlife would continue to exist in a manner similar to current conditions. The no-action alternative could result in a more natural range of variability with regard to abundance, diversity, and distribution when compared to the proposed action. Changes to wildlife numbers or distribution could occur, but would largely be driven by take of predators adjacent to preserves. Overall, wildlife would be affected less by intentional human actions when compared to the proposed action.

3.3 Federal Subsistence Use

3.3.1 Current General Conditions of Subsistence Use

ANILCA Title VIII “Subsistence Management and Use” establishes a rural preference for subsistence uses, specifically including the taking of fish and wildlife for non-wasteful purposes on federal lands in Alaska, over other forms of taking fish and wildlife. ANILCA Section 803 defines the term “subsistence uses,” also commonly referred to as “federal subsistence use,” as “the customary and traditional uses by rural Alaska residents of wild renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools, or transportation; for the making and selling of handicraft articles out of non-edible by-products of fish and wildlife resources taken for personal or family consumption, for barter, or sharing for personal or family consumption; and for customary trade.” Subsistence hunting and trapping are allowed on national preserves pursuant to ANILCA sections 203 and 1313. Federal regulations at 50 CFR Part 100, 36 CFR Part 242 and 36 CFR Part 13 for NPS areas describe allowable federal subsistence activities on national preserves and other areas. Federal subsistence regulations promulgated in the 1990s were based, in large part, upon State harvest methods and means, seasons, and harvest limits. These regulations included the use of bait to hunt black bear, which has been prohibited for sport hunting by 36 CFR 13.42 (g) since January of 2016, but is still allowed under federal subsistence regulations.

ANILCA Section 804 established a rural preference for federal subsistence harvest on federal public lands, and allows for restrictions on the taking of populations of fish and wildlife for subsistence uses in order to protect the continued viability of such populations or to continue such uses. To satisfy the ANILCA Section 804 priority the Federal Subsistence Board has approximately 12 current sport hunting restrictions that apply to preserves in 2018, which are subject to changes or additions during each regulatory cycle. While allocation decisions by the Federal Subsistence Board are required on federal public lands to assure rural priority, they fit

within the larger system of State wildlife management, which manages populations across land ownership boundaries.

3.3.2 Effects on Subsistence of Alternative 1

Remove NPS harvest regulations at 36 CFR 13.42 paragraphs (f) and (g)

Initially, both State sport hunting and trapping (see Alaska Administrative Code 92.113 (b)(7)(iii)(D)) and federal subsistence hunting and trapping opportunities of predator species could increase due to the elimination of the prohibitions in paragraphs (f) and (g) of the current regulation. If wolf or bear numbers are sufficiently reduced, there is the potential for sport hunting to be restricted or eliminated by the BOG or the Federal Subsistence Board to protect the ANILCA 804 subsistence priority. However, such a possibility is unlikely because the State has a responsibility to manage resources under the sustained yield principle and because, as discussed in section 3.2.2, levels of additional take are expected to be low. The State has assured the NPS that if harvests were to increase beyond sustainable levels the ADFG would close seasons by emergency order if immediate action was necessary, and/or would recommend more conservative seasons, bag limits, and/or methods to the BOG for future hunting seasons (SOA 2014).

Over the long term, there would be the potential for a decrease in federal subsistence hunting opportunities for the take of predators in localized areas due to the expected increase in take of predators from sport hunting and trapping. Opportunities for federal subsistence hunting of prey populations, such as moose and caribou could see a corresponding increase in those areas if fewer predators are present (see Hegel et. al. 2010). Any reductions in opportunities for take of predator species over the long-term or increases in prey species are expected to be minimal and localized, because as discussed in the “Wildlife” section, the levels of additional take under the proposed action are expected to be low.

There would not be meaningful impacts to federal subsistence uses from removing the prohibition on hunting black bears with the aid of bait. Federally qualified subsistence users took only three black bears over bait in an 18-year period from 1992 – 2010 (Hilderbrand, et. al. 2013b). Regarding the more recent federal subsistence allowance for taking brown bears over bait, a slight increase in federal subsistence take over time could occur in areas where brown bear baiting is allowed by the State, because in those areas federal subsistence users could use a broader range of baits than those hunting under federal subsistence regulations. Encounters between nuisance bears and subsistence users at their hunting and fishing camps and in and near their communities where baiting occurs could increase due to the potential to condition bears to human foods as a result of bear baiting by sport hunters.

Federal subsistence users could see some beneficial impacts under the proposed action because non-rural family members would be able to help their rural family members hunt by methods of take that are currently prohibited for sport hunters.

Cumulative Effects:

The *Subsistence Management Regulations for Harvest of Wildlife on Federal Public Lands in Alaska* (Federal Subsistence Board 2016-2018) have approximately 12 closures in place affecting harvest of moose, caribou, muskox, and sheep in preserves where the Board has determined restrictions are appropriate to provide the required federal subsistence priority found in ANILCA Section 804. Combined with the incremental effects of the proposed action, harvest of ungulates could increase and the subsistence take of bears and wolves from hunting and trapping could decrease. The proposed action would contribute a small degree to the overall cumulative impacts.

Conclusion:

In specific, localized areas, there could be localized decreases in the number of predators available for federal subsistence harvest over the long term and increases in the number of prey animals available. Slight increases to opportunities for subsistence harvest of brown bears could occur where harvest of bears over bait is allowed for sport hunters, and there could be an increase in nuisance bears at subsistence hunting and fishing camps due to conditioning of bears to human food. Overall, the opportunities for subsistence harvest of wildlife are expected to remain similar to the opportunities currently available.

3.3.3 Effects on Subsistence of Alternative 2

No Action (Retain NPS harvest regulations at 36 CFR 13.42 paragraphs (f) and (g))

Opportunities for subsistence harvest of predator and prey populations would remain similar to current levels. If predators, weather, and other factors reduce prey populations sufficiently, the Federal Subsistence Board could restrict sport harvest to protect the ANILCA 804 subsistence priority.

Federally qualified subsistence hunters only harvested three black bears over bait in an 18-year period (Hilderbrand, et al. 2013b). Therefore, continuing to prohibit sport harvest of black bears over bait would have no discernable effect on federal subsistence harvest of black bears. By continuing to prohibit hunting brown bear over bait, no change would result in opportunities for subsistence hunters. There would continue to be a low potential to condition bears to human foods, and encounters between nuisance bears and subsistence users at their hunting and fishing camps and in and near their communities would remain similar to current conditions.

Cumulative Effects:

Other effects on wildlife and habitat are expected to be the same under this alternative as described above for the proposed action. The incremental effects of the no-action alternative would continue to maintain federal subsistence harvest opportunities similar to those that currently exist. Any changes that could occur would be a result of actions taken by entities other than the NPS.

Conclusion:

Retaining the prohibitions found at 36 CFR 13.42 paragraphs (f) and (g) would result in little to no effects on federal subsistence wildlife harvest in national preserves in Alaska.

3.4 Public Use and Experience

3.4.1 Current Public Use and Experience

ANILCA Title II, national preserve area General Management Plans (GMPs), and more recent NPS Foundation Statements describe the public uses and values to be managed for and protected in each national preserve area, including the Alagnak Wild River. National preserves are to be managed like national parks, except the taking of wildlife for sport purposes and subsistence uses and trapping shall be allowed under applicable State and federal law and regulation. Guided sport hunting concessions are offered in all of the national preserves in Alaska

Most of the park and/or preserve GMPs (NPS 1984 through 1986) describe in more detail the public access and facilities needed to meet public use objectives, and further clarify Congressional intent for public uses. The Denali National Park and Preserve Final Backcountry Management Plan (NPS 2006b) and Foundation Statement (NPS 2014) further address area management goals and zones for public uses, including for the preserve additions. Other preserve area Foundation Statements (NPS 2009, 2010) articulate primary public uses and objectives, scientific values, and interpretive themes for the various areas.

Visitor use statistics for these areas are available at: https://irma.nps.gov/Stats. In general, public visitation to the relatively remote and wild preserves is dispersed and low in number, from a few visitors to several thousands of visitors per year, depending on the area and year. National preserves located on the road system see higher visitation numbers. In 2017, a total of 2.786 million visitors experienced national parks and preserves in Alaska (*2017 National Park Service Visitor Spending Effects Report).* Visitor pursuits in national preserves are highest during the summer season for fishing, hunting, wildlife viewing, river floating, backpacking, mountain climbing, photography, and scientific study. Smaller numbers of visitors enter these areas during the winter season for skiing, dog mushing, snowmobiling, and other winter use activities, including trapping.

3.4.2 Effects on Public Use and Experience of Alternative 1

Remove NPS harvest regulations at 36 CFR 13.42 paragraphs (f) and (g)

Public use and experience would be both adversely and beneficially impacted under the proposed action, depending on the type of activity visitors wish to enjoy. Some hunters could take wolves for a longer season where authorized. The harvest of brown bears could increase for sport hunters because these animals could be attracted to and harvested over bait.

If wolf or bear numbers are sufficiently reduced, there is the potential for sport hunting to be restricted or eliminated by the BOG or the Federal Subsistence Board to protect the ANILCA 804 subsistence priority. However, such a possibility is unlikely because the State has a responsibility to manage resources under the sustained yield principle and because, as discussed in section 3.2.2, levels of additional take are expected to be low. The State has assured the NPS that if harvests were to increase beyond sustainable levels the ADFG would close seasons by emergency order if immediate action was necessary, and/or would recommend more conservative seasons, bag limits, and/or methods to the BOG for future hunting seasons.

Due to the potential for a decrease in the number of predators in specific, localized areas, visitors could experience a decrease in opportunities to view wolves and bears depending on the time of year and location, especially along access corridors. In such instances, those visitors could experience a corresponding increase in the opportunities to view prey species. A study of viewing opportunities of wolves in Denali National Park from 1997 - 2013 demonstrated that increased harvest of wolves outside the park was associated with reduced sightings inside the park (Borg et al. 2016). That study indicated that population size, pack size and den site location were strong drivers of sighting opportunities for wolves and sightings in the park were more than twice as high in years when a wolf harvest buffer was in place adjacent to the park. It also found that harvest of wolves from road packs may have a larger influence on sightings than harvest of other wolves, and noted that harvest is likely to have particularly strong effects on sightings when it reduces population size or affects breeding behavior within protected regions. Furthermore, the State of Alaska maintains that increased hunting seasons do not ensure increased harvest or reduced potential sightings of wolves and that locations where wolf hunting seasons have been extended have not experienced meaningful increases in harvest of wolves (SOA 2014). Overall, while viewing opportunities depend on a number of factors, localized reductions for opportunities to view wolves are expected compared to opportunities that currently exist, due to the increase in take of wolves expected under the proposed action. Because of their low reproductive rates, bear populations are easily reduced by hunting and recover slowly. Depending on a number of factors including the number of bears taken and their location, localized decreases in opportunities for visitors to view bears could also occur.

State regulations for bear bait stations are designed to prevent user conflicts by prohibiting stations within one-quarter mile of maintained roads or trails and within one mile of a house, cabin, campground, or other developed recreational area. In addition, State regulations require that stations be signed and that all bait, litter, and equipment be removed from the bait site when hunting is completed Bear bait stations would be allowed when authorized seasons are open, generally April 15 to June 30 and July 1 to October 15 (see Appendix B for exact dates per GMU), which can overlap with the primary visitor season. For the most part, adverse impacts to non-hunting visitors would be expected to occur during the primary visitor season under the proposed action. Some visitors would likely avoid signed bear bait station areas because they would not want to interfere with an authorized hunt situation and because of potential safety issues. Bears habituated to human foods can become less shy and unpredictable. Placing junk food in the woods can cause bears to associate food with the smells of humans and livestock, and bait piles can be smelly and irritating to other outdoor

recreationists. Some bears attracted to bait stations but not harvested could become conditioned to human-associated foods and pose a nuisance or threat to visitors, as food-conditioned bears are more likely to become a public safety risk relative to bears not conditioned to human foods (Herrero 1970, 1976, 2002). The State maintains, however, that it registers thousands of black bear bait stations yearly and has done so for many years, but to date, has not detected problems that can be directly attributed to the practice of bear baiting (SOA 2014).

Opportunities to conduct research on or observe relatively un-manipulated predator species (bears, wolves) and their relationships with other species and the ecosystem functions would be adversely impacted under the proposed action due to the potential localized impacts to predators and prey, as discussed in the “Wildlife” section. However, these impacts would be minimal in most cases because predators and prey in preserves are already subject to sport hunting and because in general, bait stations are not feasible in remote locations where access is difficult and only low numbers of additional take are expected under the proposed action.

Cumulative Effects:

Other impacts on public use and experience could result from actions inside and immediately adjacent to national park, monument, and preserve areas. There are several guided commercial activities visitors use for wildland adventures, hunting, and sport fishing trips. As of January 1, 2018, there were 32 hunt guide concessions operating in national preserves, nearly half of which are in Wrangell-St. Elias NP.

ORV trail rerouting and rehabilitation in Wrangell-St. Elias National Park and Preserve, Glacier Bay NP, and Lake Clark National Park and Preserve have and will continue to improve access for public use and experience in these areas.

Harvest methods and seasons on predators such as bears and wolves inside and outside of national preserves could reduce predators occurring inside preserves, inside park areas and opportunities to view and study them, and bear baiting is an authorized federal subsistence use in some areas.

Combined with the impacts of the proposed action, the impacts of other cumulative actions could be beneficial for sport hunting in preserves in the short term and adverse for other public uses and experience of the affected national preserves, especially those seeking opportunities to view wolves and bears in certain preserves. The proposed action would contribute a meaningful, incremental impact to the overall cumulative impacts.

Conclusion:

The proposed action could result in increased sport hunting opportunities in certain, localized areas of the preserves. It could also result in reduced opportunities for some visitors to observe predators in certain locations, especially opportunities to view wolves and bears along access corridors, and a corresponding increase in opportunities to view prey species. The avoidance of areas around bear baiting stations by recreational visitors could result in a reduction in other public uses and experience of those areas and safety issues related to bear baiting by sport

hunters could also affect public use and experience. However, due to the low level of additional take expected under the proposed action compared to current conditions, overall most opportunities to view wildlife, including predators, and opportunities for scientific studies would remain similar to those that currently exist in most areas of national preserves.

3.4.3 Effects on Public Use and Experience of Alternative 2

No Action (Retain NPS harvest regulations at 36 CFR 13.42 paragraphs (f) and (g))

This alternative would maintain the status quo for sport hunting and other public uses in national preserves. There would not be increased baiting of black bears or brown bears in national preserves by sport hunters, and therefore visitors would not experience increased safety risks from changes to bear behavior associated with habituation to human foods Sport hunting opportunities to harvest predator and prey species would remain similar to recent years. Opportunities to view wildlife and for scientific study would remain similar to those currently available, and could improve over time in certain areas because prohibitions in the 2015 rule have only been in place for two full hunting seasons.

Cumulative Effects:

The cumulative impacts on public use and experience would be the same as described for the proposed action. When combined with the impacts of the no-action alternative, overall cumulative impacts would provide for the same or similar levels of public use and experience that currently exist. Any changes that could occur, either adverse or beneficial, would be a result of actions taken by entities other than the NPS.

Conclusion:

Current NPS harvest regulations restricting wildlife take practices in Alaska preserves would remain in place, allowing for a similar level of public use and experience that currently exists. Over time, additional opportunities for viewing of predators could improve, and there could be increased opportunities to study more natural predator and prey species.

3.5 Wilderness Character

3.5.1 Current Status of Wilderness Character

The Wilderness Act directs federal agencies to manage wilderness so as to preserve its wilderness character. NPS Management Policies 6.3.1 requires the NPS to preserve wilderness character of lands in any category of wilderness. Section 701 of ANILCA designated wilderness areas in National Park System units in Alaska, including parts of national preserves. There are five tangible qualities of wilderness character (Landres et al. 2015): (1) untrammeled; (2) natural; (3) undeveloped; (4) opportunities for solitude or primitive and unconfined recreation; and (5) other features of historical, scientific, educational and scenic value.

National preserves in Alaska contain approximately 8,095,000 acres of designated wilderness and more than 9.4 million acres of eligible wilderness (see Appendix D). Wilderness character in national preserves in Alaska is generally exceptional. While ongoing hunting and trapping activities do detract somewhat from the natural and untrammeled qualities, these lands contain vast areas largely in their natural condition and are almost entirely untrammeled. The fact that these lands remain largely free from modern human influences sets them apart from wilderness areas in the lower 48 and from Alaska lands outside the wilderness boundaries. Encompassing vast acreages with few permit requirements or other management controls, these lands and waters provide outstanding opportunities for solitude or primitive and unconfined recreation. Aside from an occasional cabin or scientific instrument, there are minimal modern human developments.

Impacts to opportunities for solitude or primitive and unconfined recreation would be minimal under the proposed action due to the large size of wilderness areas and eligible wilderness in national preserves in Alaska, and impacts to other features of value would be minimal, as discussed under "Public Use and Enjoyment." Analyzing these qualities is not necessary to make a reasoned choice between alternatives and the environmental impacts associated with these issues would not be significant; therefore, these qualities are not carried forward for detailed analysis. The three other qualities are carried forward, and are described below:

> **Untrammeled.** The Wilderness Act states that wilderness is "an area where the earth and its community of life are untrammeled by man," that "generally appears to have been affected primarily by the forces of nature" and "retain[s] its primeval character and influence."
>
> **Natural.** The Wilderness Act states that wilderness is "protected and managed so as to preserve its natural conditions."
>
> **Undeveloped.** The Wilderness Act states that wilderness is "an area of undeveloped Federal land … without permanent improvements or human habitation," "where man himself is a visitor who does not remain" and "with the imprint of man's work substantially unnoticeable."

3.5.2 Effects on Wilderness Character of Alternative 1

Remove NPS harvest regulations at 36 CFR 13.42 paragraphs (f) and (g)

Natural. Under the proposed action, the natural quality of wilderness could be adversely impacted because ecological systems may be altered by the take of additional predators, which could reduce numbers of predators and increase numbers of prey in localized areas. The additional take of predators and the practice of bear baiting would also affect wildlife behavior. These changes to numbers and behavior of wildlife could further alter natural systems in localized areas within wilderness, where sport hunting already occurs.

Untrammeled. The proposed action could adversely affect the untrammeled quality of wilderness character in localized areas because the take of additional wildlife and the baiting of bears involves intentional control and manipulation of wildlife.

Undeveloped. The proposed action may result in increases in the number of bear baiting stations and associated debris. While the State requires that all bait, litter, and equipment be removed when hunting is completed, bait stations and debris could be highly visible and a clear sign of human modification and occupation of the area. These actions would degrade the undeveloped quality of wilderness while they are present on the landscape.

Cumulative Effects:

Past, present, and reasonably foreseeable future actions that affect wilderness character include illegal harvest of wildlife, subsistence hunting, including the taking of bears over bait, State predator control programs on the boundaries of national preserves, and motorized access. Illegal harvest of wildlife and subsistence hunting could have the potential to influence natural ecosystems and processes by removing certain species, including predator species that are also the target of recreational hunting activities. Ongoing motorized access by the public and for administrative activities, including maintenance of scattered communications and weather station sites could negatively impact the undeveloped quality of wilderness areas. The BLM and NPS are also processing an application for a road to the Ambler Mining District near the upper Kobuk River which, if built, could impact wilderness values in Gates of the Arctic NP. When the incremental impacts of the proposed action are added to past, present, and reasonably foreseeable future impacts, the overall cumulative impacts to the untrammeled, natural, and undeveloped qualities would be adverse, with the incremental impacts of the proposed action providing a meaningful contribution, especially to the untrammeled character.

Conclusion:

The proposed action would adversely impact the natural and untrammeled qualities of wilderness by affecting numbers of predator and prey in localized areas and intentionally altering wildlife behavior. In addition, the presence of bear bait stations and associated debris would degrade the undeveloped quality of wilderness. Overall, due to the low level of additional take expected under the proposed action and the large area of wilderness and eligible wilderness in national preserves in Alaska, wilderness character would continue to exist in a manner similar to current conditions.

3.5.3 Effects on Wilderness Character of Alternative 2

No Action (Retain NPS harvest regulations at 36 CFR 13.42 paragraphs (f) and (g))

Natural. There would be no changes to the natural quality of wilderness. The NPS would not take any actions that would detract from this quality.

Untrammeled. There would be no changes to the untrammeled quality of wilderness. The NPS would not take any actions that would detract from this quality.

Undeveloped. There would be no changes to the undeveloped quality of wilderness. The NPS would not take any actions that would detract from this quality.

Cumulative Effects:

Overall past, present, and reasonably foreseeable future actions would be the same as described for the proposed action. These cumulative effects would result in adverse impacts to wilderness character. The no-action alternative would not add any incremental impacts.

Conclusion:

The no-action alternative would result in no change to wilderness character as described in the affected environment. By retaining the current NPS harvest regulations, more natural processes would continue to be allowed to play out compared to the proposed action.

4. Agencies and Persons Consulted

Personnel from the NPS Alaska Regional Office, Alaska National Preserves, and Washington Office were involved with the preparation of this EA. The NPS also consulted with the Alaska Department of Fish and Game.

A press release was issued on September 5, 2018 to announce availability of the EA for a 30-day public review period. The EA is available on the NPS Planning Environment and Public Communications (PEPC) webpage at: https://parkplanning.nps.gov/sporthuntingandtrapping.

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6. APPENDICES

Appendix A – 36 CFR 13.42 paragraphs (f) and (g)

(f) State of Alaska management actions or laws or regulations that authorize taking of wildlife are not adopted in park areas if they are related to predator reduction efforts. Predator reduction efforts are those with the intent or potential to alter or manipulate natural predator-prey dynamics and associated natural ecological processes, in order to increase harvest of ungulates by humans.

(1) The Regional Director will compile a list updated at least annually of State laws and regulations not adopted under this paragraph (f).

(2) Taking of wildlife, hunting or trapping activities, or management actions identified in this paragraph (f) are prohibited. Notice of activities prohibited under this paragraph (f)(2) will be provided in accordance with § 13.50(f).

(g) This paragraph applies to the taking of wildlife in park areas administered as national preserves except for subsistence uses by local rural residents pursuant to applicable Federal law and regulation. As of January 1, 2016, the following are prohibited:

Table A-1. Prohibited acts and exceptions for the taking of wildlife in national preserves

Prohibited acts	Any exceptions?
(1) Shooting from, on, or across a park road or highway	None.
(2) Using any poison or other substance that kills or temporarily incapacitates wildlife	None.

Prohibited acts	Any exceptions?
(3) Taking wildlife from an aircraft, off-road vehicle, motorboat, motor vehicle, or snowmachine	If the motor has been completely shut off and progress from the motor's power has ceased.
(4) Using an aircraft, snowmachine, off-road vehicle, motorboat, or other motor vehicle to harass wildlife, including chasing, driving, herding, molesting, or otherwise disturbing wildlife	None.
(5) Taking big game while the animal is swimming	None.
(6) Using a machine gun, a set gun, or a shotgun larger than 10 gauge	None.
(7) Using the aid of a pit, fire, artificial salt lick, explosive, expanding gas arrow, bomb, smoke, chemical, or a conventional steel trap with an inside jaw spread over nine inches	Killer style traps with an inside jaw spread less than 13 inches may be used for trapping, except to take any species of bear or ungulate.

Prohibited acts	Any exceptions?
(8) Using any electronic device to take, harass, chase, drive, herd, or molest wildlife, including but not limited to: artificial light; laser sights; electronically enhanced night vision scope; any device that has been airborne, controlled remotely, and used to spot or locate game with the use of a camera, video, or other sensing device; radio or satellite communication; cellular or satellite telephone; or motion detector	(i) Rangefinders may be used. (ii) Electronic calls may be used for game animals except moose. (iii) Artificial light may be used for the purpose of taking furbearers under a trapping license during an open season from Nov. 1 through March 31 where authorized by the State. (iv) Artificial light may be used by a tracking dog handler with one leashed dog to aid in tracking and dispatching a wounded big game animal. (v) Electronic devices approved in writing by the Regional Director.
(9) Using snares, nets, or traps to take any species of bear or ungulate	None.
(10) Using bait	Using bait to trap furbearers.
(11) Taking big game with the aid or use of a dog	Leashed dog for tracking wounded big game.
(12) Taking wolves and coyotes from May 1 through August 9	None.
(13) Taking cub bears or female bears with cubs	None.
(14) Taking a fur animal or furbearer by disturbing or destroying a den	Muskrat pushups or feeding houses.

Appendix B – Summary of Methods of Take

Table B-1. Methods of Take That Would be Allowed Under the Proposed Action (that are carried forward for detailed analysis)

Prohibited under current State hunting regulations	Summary of exceptions to current State hunting regulation prohibitions (actions that would be allowed under the proposed action)
1- Using bait to harvest bears	Where allowed generally (GMUs with national preserve overlap): GMUs 5, 9, 11, 12, 13*, 19, 20, 23, 24, and 25B, 25C April 15 - June 30, GMU 16* July 1 - October 15, April 15 - June 30, GMU 17 April 15 - May 31, GMU 19D East Predation Control Area: those portions of the Kuskokwim River drainage within GMU 19D upstream from Selatna River drainage and the Black River drainage. GMU 24C, *Bait restrictions (see State hunting regulations for more details) Conditions applicable to specific GMUs: -In GMUs 9, 11-13, 16, 17, 19-20, 24, and 25, a registered guide may operate up to ten bait stations at a time in each guide use area that they are registered to operate in. A guide contract is required for each hunter. - In GMUs 9, 11-13, 16, 17, 19, 20, 23-25, black bears (and brown bears where allowed-see GMUs listed below) may be taken at permitted bait stations the same day you have flown provided you are at least 300 feet from the airplane. This is NOT allowed on National Park Service lands. - In GMUs 11, 12, 13, 19D, 20C, 20E, 23, 24C, and 24D brown/grizzly bears may be taken at bear bait stations. Hunters must comply with seasons, bag limits, salvage, and sealing requirements for brown/grizzly bears (registration permits and locking-tags may be required in some areas, contact ADF&G for details).
2- Taking big game with the aid or use of a dog	Dogs may be used to hunt black bears under a permit issued by ADF&G.
3- Taking wolves from May 1 through August 9	Wolf Seasons per 2017-2018 State hunting regulations and corresponding national preserve: GMU 9, 10: August 10- June 30 (Preserve in this GMU- Aniakchak, Lake Clark)

Prohibited under current State hunting regulations	**Summary of exceptions to current State hunting regulation prohibitions (actions that would be allowed under the proposed action)**
	GMU 12: August 10-May 31 (Preserve in this GMU- Wrangell-St. Elias) GMU 19: August 10-May 31 (Preserve in this GMU- Denali) GMU 20C, 21: August 10- May 31 (Preserve in this GMU- Denali and Yukon-Charley Rivers) GMU 22: August 1- May 31 (Preserve in this GMU- Bering Land Bridge) GMU 23: August 1 - Apr 30 (Preserve in this GMU- Noatak) GMU 24, 25: August 10- May 31 (Preserve in this GMU- Gates of the Arctic)
4- Taking big game while the animal is swimming	Caribou may be taken while swimming in Noatak NP and portions of Bering Land Bridge NP and Gates of the Arctic NP (GMUs 23 and 26)

Appendix C – Actions Dismissed from Detailed Analysis

Many of the prohibited actions in paragraph (g) of 36 CFR 13.42 are also prohibited by the State or other authorities, and therefore they would not occur under the proposed action. Other actions would only occur in limited cases under State hunting regulations. These actions, which include the following, are dismissed from detailed analysis in this EA:

- Shooting from, on, or across a park road or highway. (36 CFR 13.42 (g)(1))
    - Prohibited by the State
- Using any poison or other substance that kills or temporarily incapacitates wildlife. (36 CFR 13.42 (g)(2))
    - The Alaska Board of Game (BOG) has issued no authorizations since 2008, when it authorized U.S. Fish and Wildlife Service to use poison to remove invasive rats on Hawadax Island in Alaska Maritime National Wildlife Refuge. The State is unaware of any private citizen ever being authorized use of poison by the State (SOA 2018a).
- Taking wildlife from an aircraft, off-road vehicle, motorboat, motor vehicle, or snowmachine. (36 CFR 13.24 (g)(3))
- Taking big game by aircraft remains prohibited by 36 CFR 13.42(d) Using an aircraft, snowmachine, off-road vehicle, motorboat, or other motor vehicle to harass wildlife, including chasing, driving, herding, molesting, or otherwise disturbing wildlife. (36 CFR 13.42 (g)(4))
    - Prohibited by the State
- Using a machine gun, a set gun, or a shotgun larger than 10 gauge. (36 CFR 13.42 (g)(6))
    - Prohibited by the State
- Using the aid of a pit, fire, artificial salt lick, explosive, expanding gas arrow, bomb, smoke, chemical, or a conventional steel trap with an inside jaw spread over nine inches, except killer style traps with an inside jaw spread less than 13 inches may be used for trapping, except to take any species of bear or ungulate (36 CFR 13.42 (g)(7))
    - Prohibited by the State
- Using any electronic device to take, harass, chase, drive, herd, or molest wildlife, including but not limited to laser sights, electronically enhanced night vision scope, any device that has been airborne controlled remotely, and used to spot or locate game with the use of camera, video or other sensing device, radio or satellite communication,

cellular or satellite telephone, or motion detector in accordance with State restrictions (36 CFR 13.42 (g)(8))

- Prohibited by the State, except communications equipment may be used for safety.

- Using snares, nets, or traps to take any species of bear or ungulate (36 CFR 13.42 (g)(9))
  - Generally prohibited by the State. There is an exception that allows bears to be trapped under a formal predator control program, with a special permit. However, no formal predator control program for black bears currently exists.

- Taking black bears (including cubs and sows) with or without use of artificial light under customary and traditional use activities at den sites Oct 15 - Apr 30
  - This activity would occur in only one portion of one GMU that overlaps with one national preserve (GMU 24C). Only 2.85% of that one GMU overlaps with Gates of the Arctic NP. The State does not have data regarding number of cubs and sows harvested specifically, and black bears in GMU 24 are not required to be sealed, but in GMU 24C the State reported that four female black bears were harvested in 2012, and three male black bears were harvested in 2016, with no harvests in 2013, 2014, or 2015. Additionally, this activity is only authorized for customary and traditional use by resident hunters. Given both the low harvest rate and the small percentage overlap, this action is dismissed from detailed analysis.

- Taking coyotes (including pups) during an extended hunting season (current seasons would be extended between May 1 and August 9 per State regulations).
  - Coyotes are uncommon and seldom harvested in all GMUs that overlap with national preserves, except for Gates of the Arctic NP and Yukon-Charley NP, where they are lightly harvested (SOA 2014).

Appendix D – Project Area Summary

Table D-1. ANILCA National Preserve Areas, Wilderness Areas

NPS AREAS AND ACRES	Aniakchak National Preserve	Bering Land Bridge National Preserve	Denali National Preserve	Gates of the Arctic National Preserve	Glacier Bay National Preserve	Katmai National Preserve (includes Alagnak Wild	Lake Clark National Preserve	Noatak National Preserve	Wrangell- Saint Elias National Preserve	Yukon-Charley Rivers National Preserve
Acres	458,124	2,632,522	1,304,242	948,203	58,406	359,819	1,294,116	6,548,727	4,306,002	2,236,875
Designated Wilderness[1]	0	0	0	0	0	60,000	348,000	5,821,000	1,866,000	0
Eligible Wilderness[1]	TBD	2,509,360	TBD	914,000	100	268,000	903,000	759,000	2,249,000	1,815,000

[1]Rounded to the nearest 1,000 acres. TBD indicates the acres are to be determined. The 100 eligible acres in Glacier Bay would be contiguous with designated wilderness in the park. Estimated eligible areas for Noatak and Yukon-Charley are from the 1986 GMPs and are not yet updated.

Table D-2. Presence of Key Wildlife Species in Alaska National Preserves

NPS AREAS AND SPECIES	Aniakchak National Preserve	Bering Land Bridge National Preserve	Denali National Preserve	Gates of the Arctic National Preserve	Glacier Bay National Preserve	Katmai National Preserve (includes Alagnak Wild River)	Lake Clark National Preserve	Noatak National Preserve	Wrangell- Saint Elias National Preserve	Yukon-Charley Rivers National Preserve
Wolves	✓	X	X	X	✓	✓	✓	X	X	X
Brown Bear	X	X	X	X	✓	X	X	X	X	X
Moose	X	X	X	X	✓	✓	✓	X	X	X
Caribou	X	✓	X	X	O	✓	X	X	X	X
Dall Sheep	O	O	X	X	O	O	X	X	X	X

Note: ANILCA Title II specifically identifies protecting habitat for and populations of certain wildlife species, but the Act is not limited to protecting only those species and habitat. Section 701 of ANILCA describes areas designated as wilderness in National Park System units. ANILCA Section 1301 required park area general management plans (GMPs) and ANILCA Section 1317 required wilderness area reviews for suitability or nonsuitability, which are included with the GMP documents.

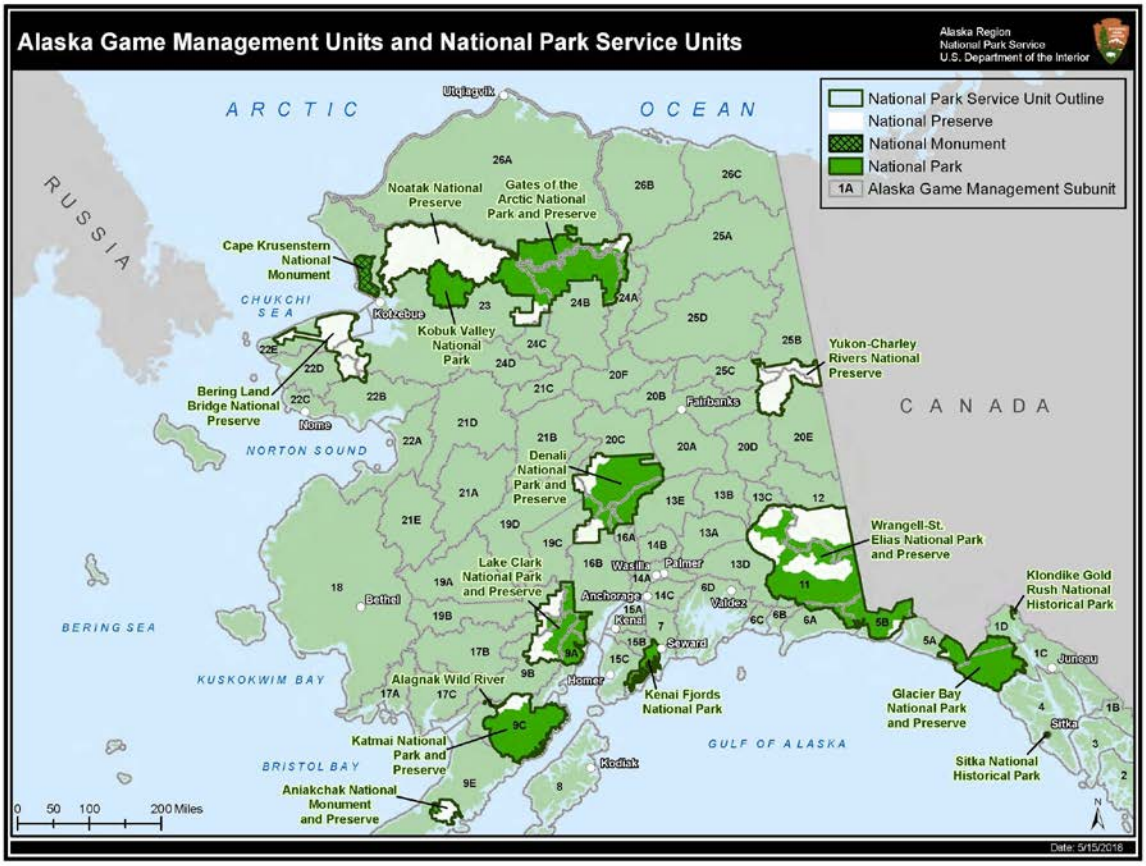
X means this key species was specifically noted in ANILCA for this area

O means this key species was not specifically noted in ANILCA for this area

✓ means this species is present in the area, but not highlighted in ANILCA as a key species

Appendix E – State of Alaska Game Management Units

Figure E-1. Alaska Game Management Units and National Park Service Units



Appendix F – ANILCA Section 810 Subsistence Evaluation and Finding

I. Introduction

Title VIII, Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA) requires Federal agencies having jurisdiction over lands in Alaska to evaluate the potential impacts of proposed actions on subsistence uses and needs. This analysis evaluates the potential restrictions to ANILCA Title VIII subsistence uses and needs that could result should the National Park Service (NPS) revise sport wildlife harvest restrictions in NPS Alaska preserve units where ANILCA Title VIII subsistence is allowed.

The NPS is considering whether to amend its regulations for sport hunting and trapping in national preserves in Alaska (80 FR 65325), deleting prohibitions in paragraphs (f) and (g) of 36 CFR 13.42, to align more closely with State regulations and to enhance consistency with harvest regulations on surrounding non-federal lands and waters in furtherance of Secretarial Orders 3347 and 3356.

II. The Evaluation Process

Section 810(a) of ANILCA states:

> *In determining whether to withdraw, reserve, lease, or otherwise permit the use, occupancy, or disposition of public lands . . . the head of the Federal agency . . . over such lands . . . shall evaluate the effect of such use, occupancy, or disposition on subsistence uses and needs, the availability of other lands for the purposes sought to be achieved, and other alternatives which would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes. No such withdrawal, reservation, lease, permit, or other use, occupancy or disposition of such lands which would significantly restrict subsistence uses shall be effected until the head of such Federal agency*
>
> *(1) gives notice to the appropriate State agency and the appropriate local committees and regional councils established pursuant to Section 805;*
>
> *(2) gives notice of, and holds, a hearing in the vicinity of the area involved; and*
>
> *(3) determines that (A) such a significant restriction of subsistence uses is necessary, consistent with sound management principles for the utilization of the public lands, (B) the proposed activity would involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition, and (C) reasonable steps would be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions.*

Section 201 of ANILCA created new preserve units in Aniakchak National Monument and Preserve, Bering Land Bridge National Preserve (NP), Gates of the Arctic NP, Lake Clark NP, Noatak NP, Wrangell-Saint Elias NP, and Yukon-Charley NP. Section 202 of ANILCA created

preserve additions to existing units at Glacier Bay National Preserve, Katmai National Preserve, and Denali National Preserve. Section 603(a) of ANILCA designated the Alagnak wild and scenic river to be administered by the Secretary of the Interior.

III. Proposed Action on Federal Lands

The potential for significant restriction must be evaluated for the proposed action's effect upon "...subsistence uses and needs, the availability of other lands for the purposes sought to be achieved and other alternatives which would reduce or eliminate the use" (Section 810(a)).

The NPS is considering whether to amend its regulations for sport hunting and trapping in national preserves in Alaska (80 FR 65325) to align more closely with State regulations and to enhance consistency with harvest regulations on surrounding non-federal lands and waters in furtherance of Secretarial Orders 3347 and 3356.

The following is a brief summary of the proposed alternatives considered in the environmental assessment (EA):

Alternative 1

Remove NPS Harvest Regulations at 36 CFR 13.42 paragraphs (f) and (g) (Proposed Action and Preferred Alternative)

Under the proposed action, the prohibitions in paragraphs (f) and (g) of 36 CFR 13.42, the current NPS wildlife regulation governing hunting and trapping in national preserves in Alaska, would be removed. All State hunting laws and regulations that do not conflict with other existing federal laws or regulations would apply on national preserves. Paragraph (f) states that State management actions or laws or regulations that authorize taking of wildlife are not adopted in park areas if they are related to predator reduction efforts, which is defined as efforts with the intent or potential to alter or manipulate natural predator-prey dynamics and associated natural ecological processes, in order to increase harvest of ungulates by humans. Paragraph (g) sets forth a table of prohibited methods of taking wildlife for sport purposes in national preserves in Alaska. The full text of paragraphs (f) and (g) is included in Appendix A. While State hunting regulations are subject to change, future changes are not currently foreseeable, and therefore this EA considers the existing State hunting regulations.

The NPS would continue to monitor wildlife, as appropriate, and could take actions in the future if necessary to protect NPS resources and values. For any such actions, the NPS would complete additional NEPA reviews, as appropriate. Before proposing NPS actions, the NPS would attempt to address any issues with the Alaska Board of Game.

Alternative 2

No Action (Retain NPS Harvest Regulations at 36 CFR 13.42 paragraphs (f) and (g))

Under the no-action alternative, the prohibitions on certain types of harvest practices included in paragraphs (f) and (g) of the current NPS wildlife regulation governing hunting and trapping in national preserves in Alaska would remain in place.

IV. Affected Environment

Subsistence uses, as defined by ANILCA, Section 810, means “The customary and traditional use by rural Alaska residents of wild, renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools, or transportation; for the making and selling of handicraft articles out of non-edible byproducts of fish and wildlife resources taken for personal or family consumption; for barter, or sharing for personal or family consumption; and for customary trade." Subsistence activities include hunting, fishing, trapping, and collecting berries, edible plants, and wood or other materials.

ANILCA and National Park Service regulations authorize subsistence use of resources in all Alaska national parks, monuments, preserves and components of the Wild and Scenic River System with the exception of Glacier Bay National Park, Katmai National Park, Kenai Fjords National Park, Klondike Gold Rush National Historical Park, “old” Mount McKinley National Park, and Sitka National Historical Park (Codified in 36 CFR Part 13, Subparts A, B, and C). ANILCA provides a preference for local rural residents over other consumptive users should a shortage of subsistence resources occur and allocation of harvest becomes necessary.

In addition to the summary of current conditions of wildlife and subsistence uses, comprehensive descriptions of the affected subsistence environment within each Alaska national park system unit can be found in the following:

- “General Management and Land Protection Plans” for each NPS unit (See online: http://www.nps.gov);
- Alaska Department of Fish and Game General and Subsistence Harvest Information and Publications (See online: http://www.state.ak.us/adfg);
- Federal Subsistence Management Regulations, Office of Subsistence Management, FWS, (See online: http://www.doi.gov/subsistence);
- National Park Service Management Policies, NPS, 2006 (See online: http://www.nps.gov/policy);
- Alaska Subsistence: A National Park Service Management History, NPS 2002; and
- Title 36 Code of Federal Regulations, Part 13 National Park System Units in Alaska.

The NPS recognizes that patterns of subsistence use vary from time to time and from place to place depending on the availability of wildlife and other renewable natural resources. A subsistence harvest in a given year may vary considerably from previous years because of weather, migration patterns, and natural population cycles.

V. Subsistence Uses and Needs Evaluation

To determine the potential impacts on existing subsistence activities for the proposed action, the following three evaluation criteria were analyzed relative to existing subsistence resources:

- the potential to reduce important subsistence fish and wildlife populations by (a) reductions in number, (b) redistribution of subsistence resources, or (c) habitat losses;
- what effect the action might have on subsistence fisherman or hunter access; and

- the potential for the action to increase fisherman or hunter competition for subsistence resources.

Potential Impacts of Alternative 1

Remove NPS Harvest Regulations at 36 CFR 13.42 paragraphs (f) and (g) (Proposed Action and Preferred Alternative)

1. The potential to impact populations:

(a) Effects on Population Levels:

The elimination of the restrictions in paragraphs (f) and (g) of the current regulations action could result in localized impacts to individual animals, family groups, and packs, resulting from the removal of current prohibitions on methods of take. However, due to the low level of additional take anticipated as a result of removing the current prohibitions, little to no population-level effects are anticipated.

(b) Redistribution of Resources:

Redistribution of resources is not anticipated. Reductions in opportunities for take of predator species over the long-term or increases in prey species are expected to be minimal and localized, because the levels of additional take are expected to be low.

(c) Habitat Loss:

Habitat loss is not anticipated due to the proposed change in regulations.

2. Restriction of Access:

Access for federally qualified subsistence users would not change under this rule.

3. Increase in Competition:

While federally qualified subsistence users would compete with sport hunters engaging in the same activity where authorized under both Federal subsistence and State harvest regulations, it is not expected to have a significant impact on subsistence uses.

Potential Impacts of Alternative 2

No Action (Retain NPS Harvest Regulations at 36 CFR 13.42 paragraphs (f) and (g))

1. The potential to impact populations:

(a) Effects on Population Levels:

Retaining the prohibitions found at 36 CFR 13.42 paragraphs (f) and (g) would maintain long-standing subsistence harvest opportunities authorized since preserves were established in 1980. The overall effect on population levels and federal subsistence wildlife harvest in national preserves in Alaska would change very little compared to current conditions and the past

several decades. Population levels and opportunities for subsistence harvest of predator and prey populations are expected to remain similar to current levels.

(b) Redistribution of Resources:

Redistribution of resources is not anticipated. The NPS has no evidence suggesting any meaningful impacts to subsistence uses and resources under the current NPS wildlife regulations.

(c) Habitat Loss:

Habitat loss is not anticipated if existing regulations are retained.

2. Restriction of Access:

Access for federally qualified subsistence users would not change if the current regulations were retained.

3. Increase in Competition:

Competition for ANILCA Title VIII subsistence resources on Federal public lands within the affected areas would not change if existing regulations are retained.

VI. Availability of Other Lands

The proposed actions are consistent with NPS mandates in NPS areas in Alaska. Subsistence users may have access to similar desired resources in national parks and monuments.

VII. Alternatives Considered

No other alternatives were identified that would reduce or eliminate the use of NPS public lands needed for subsistence purposes.

VIII. Findings

This analysis concludes that the proposed actions would not result in a significant restriction of subsistence uses.