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Alaska Regional Office Interior Region 11 – Alaska



Revisiting Sport Hunting and Trapping on National Park System Preserves in Alaska

Environmental Assessment

January 2023





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List of Acronyms

AAC Alaska Administrative Code

ADFG Alaska Department of Fish and Game

ADNR Alaska Department of Natural Resources

ANCSA Alaska Native Claims Settlement Act of 1971

ANILCA Alaska National Interest Lands Conservation Act of 1980

AS Alaska Statute

BOG Board of Game

CE Categorical Exclusion

CFR Code of Federal Regulations

DOI United States Department of the Interior

EA Environmental Assessment

EIS Environmental Impact Statement

GMP General Management Plan

GMU Game Management Unit

IRMA Integrated Resource Management Applications

NEPA National Environmental Policy Act of 1969

NPS National Park Service

ORV off road vehicle

PEPC Planning, Environment, and Public Comment

RAC Regional Advisory Council

TES Threatened and Endangered Species

USFWS United States Fish and Wildlife Service

1 Purpose and Need

The National Park Service (NPS) is proposing through rulemaking to prohibit certain sport hunting and trapping practices (herein referred to as "harvest practices" or "harvest methods") that were previously prohibited in a rulemaking process in 2015, and then removed from prohibition in 2020 (2015 Rule and 2020 Rule, respectively), in all NPS national preserves in Alaska ("the preserves") (Figure 1). As explained in the preamble to the proposed regulation, the NPS has reconsidered its conclusions regarding the 2020 rule. This proposed regulation reconsiders three topics in the 2020 Rule: (1) the meaning and scope of hunting for "sport purposes" under the Alaska National Interest Lands Conservation Act (ANILCA); (2) bear baiting; and (3) State of Alaska ("the State") law addressing predator harvest.

1.1 Background

ANILCA allows harvest of wildlife in the preserves for subsistence purposes by local rural residents under federal regulations. ANILCA also allows harvest of wildlife for sport purposes by any individual under State laws that do not conflict with federal laws. ANILCA requires the NPS to manage national preserves consistent with the NPS Organic Act of 1916, which directs the NPS "to conserve the scenery, natural and historic objects, and wild life in the System units and to provide for the enjoyment of the scenery, natural and historic objects, and wild life in such manner and by such means as will leave them unimpaired for the enjoyment of future generations" (54 USC 100101(a)).

The harvest methods at issue in the proposed regulation (as well as in the 2015 and 2020 Rules) are specific to harvest under the authorization for sport hunting and trapping in ANILCA. Subsistence harvest by rural residents under Title VIII of ANILCA is not addressed¹ ².

1.1.1 The 2015 Rule

The NPS prohibited some of the harvest methods in the 2015 Rule to adopt a regulatory provision consistent with NPS policy direction on predator control related to harvest and because the State refused to exempt national preserves from these state-authorized practices. The NPS concluded that these methods were allowed by the State for the purpose of reducing predation by bears and wolves to increase populations of prey species (ungulates) for harvest by human hunters. The NPS

¹ The term "subsistence" applied in this document refers to subsistence under Title VIII of ANILCA. Although the State also uses the term "subsistence" when referencing harvest of fish and wildlife by state residents, state subsistence harvest is not the same as federal subsistence under Title VIII of ANILCA where harvest of fish and wildlife under federal regulations is limited to local rural residents.

² See also Appendix A, ANILCA Section 810(a) Subsistence – Summary Evaluation and Findings. Title VIII, Section 810 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 NPS revise sport wildlife harvest restrictions in NPS Alaska preserve units where ANILCA Title VIII subsistence is allowed.

determined that these harvest methods authorized by the State were in conflict with NPS Management Policies 4.4.1 and 4.4.3 (NPS 2006a) which state that the NPS will manage park lands for natural processes (including natural wildlife fluctuations, abundances, and behaviors) and explicitly prohibit predator control. The NPS conclusion was also based on State law and policies; Board of Game (BOG) proposals, deliberations, and decisions; and Alaska Department of Fish and Game (ADFG) actions, statements, and publications leading up to the 2015 Rule (extensive references are found in the Federal Register rule-making footnotes³). The State objected to this conclusion in its comments on the 2015 Rule.

The 2015 Rule restricted harvest for "sport purposes" and did not address harvest for subsistence purposes. Although the phrase "sport purposes" is used in ANILCA, the statute does not define the term "sport." The NPS reasoned that harvest for subsistence is for the purpose of feeding oneself and family and maintaining cultural practices, and that "sport" or recreational hunting invokes Western concepts of fairness which do not necessarily apply to subsistence practices. The NPS concluded that the practices of harvesting swimming caribou and taking caribou from motorboats under power were not consistent with generally accepted notions of "sport" hunting. This conclusion also supported restrictions in the 2015 Rule on the practices of taking bear cubs and sows with cubs; and using a vehicle to chase, drive, herd, molest, or otherwise disturb wildlife⁴.

The 2015 Rule also prohibited bear baiting in the preserves. The NPS concluded that the practice of putting out bait to attract bears for harvest poses an unacceptable safety risk to the visiting public and leads to unnatural wildlife behavior by attracting bears to a food source that would not normally be there. The NPS based this conclusion on the understanding that bears are more likely to attack when defending a food source and therefore visitors who encountered a bait station would be at risk from bear attacks. In addition, the NPS concluded that baiting could cause more bears to become conditioned to human food, creating unacceptable public safety risks; this conclusion was based on

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³ See, e.g., AS §16.05.255(e); State of Alaska Department of Fish and Game Emergency Order on Hunting and Trapping 04-01-11 (Mar. 31, 2011) (*available at* Administrative Record for Alaska v. Jewell et al., No. 3:17-cv-00013-JWS, D. Alaska pp. NPS0164632-35), State of Alaska Department of Fish and Game Agenda Change 11 Request to State Board of Game to increase brown bear harvest in Game Management Unit 22 (2015); Alaska Department of Fish and Game Wildlife Conservation Director Corey Rossi, "Abundance Based Fish, Game Management Can Benefit All," Anchorage Dailly News (Feb. 21, 2009); ADFG News Release—Wolf Hunting and Trapping Season extended in Unit 9 and 10 in response to caribou population declines (3/31/2011); Alaska Department of Fish and Game Craig Fleener, Testimony to US Senate Committee on Energy and Natural Resources re: Abundance Based Wildlife Management (Sept. 23, 2013), Alaska Department of Fish and Game, Hunting and Trapping Emergency Order 4-01-11 to Extend Wolf Hunting and Trapping Seasons in GMU [Game Management Unit] 9 and 10 (LACL and KATM) (Nov. 25, 2014); ADFG Presentation Intensive Management of Wolves, Bears, and Ungulates in Alaska (Feb. 2009).

⁴ To illustrate how the 2015 Rule worked in practice, a federally qualified local rural resident could harvest bear cubs and sows with cubs, or could harvest swimming caribou (where authorized under federal subsistence regulations); but a hunter from Anchorage, Fairbanks, Juneau or other nonrural areas in Alaska, or a hunter from outside Alaska, could not.

the fact that not all bears that visit bait stations are harvested. Additionally, other animals are attracted to bait stations. Because bait often includes dog food and human food, including items like bacon grease and pancake syrup, which are not a natural component of animal diets, the NPS was concerned that baiting could lead to bears and other animals associating these foods with people, which would create a variety of risks to people, bears, and property.

The 2015 Rule further provided that the Regional Director would compile, annually update, and post on the NPS website a list of any State predator control laws or actions prohibited by the NPS on the preserves.

1.1.2 The 2020 Rule

The 2020 Rule reconsidered the conclusions in the 2015 Rule regarding predator control, sport hunting, and bear baiting. First, the 2020 Rule reversed the 2015 Rule conclusion that the State intended to reduce predator populations through its hunting regulations. In their written comments on the 2015 and 2020 Rules, the State denied that the harvest practices for predators were part of their predator control or "intensive management" programs and therefore stated that these practices were not efforts to reduce predators. The State argued that the liberalized predator harvest rules were simply a means to provide new opportunities for hunters to harvest predators, in response to requests received by the BOG, and that it provided these new opportunities under a "sustained yield" management framework, distinct from what the State considers "predator control." The State asserted that it has a separate, formal predator control program which is not considered "hunting" by the State. According to the State, predator control occurs only through its "intensive management" program.

The NPS environmental assessment (EA), finding of no significant impact (FONSI) and non-impairment determination for the 2020 Rule concluded that the hunting practices in question would not likely alter natural predator-prey dynamics at the population level or have a significant adverse impact to wildlife populations, or otherwise impair park resources (NPS 2018). The NPS also considered what it viewed as the legislative requirements of ANILCA with respect to hunting. The NPS concluded the hunting practices did not run afoul of NPS Management Policies Section 4.4.3, which prohibits predator reduction to increase numbers of harvested prey species (NPS 2006a). The NPS thus removed two provisions that were implemented in the 2015 Rule: (1) the statement that State laws or management actions intended to reduce predators are not allowed in NPS units in Alaska, and (2) prohibitions on several methods of harvesting predators. The 2020 Rule went back to deferring to authorizations under State law for harvesting predators⁵.

The 2020 Rule interpreted the term "sport" in ANILCA's authorization for harvest of wildlife for sport purposes in NPS national preserves in Alaska differently than the 2015 Rule. The NPS stated that in the absence of a statutory definition, the term "sport" merely served to distinguish sport

⁵ To illustrate how the 2020 Rule works in practice, Alaska residents, including rural and nonrural residents, and out-of-state hunters may take wolves and coyotes (including pups) for sport purposes in national preserves during the denning season in accordance with State law.

hunting from harvest under federal subsistence regulations. Consequently, practices that may not be generally compatible with notions of "sport" – such as harvesting swimming caribou or taking cubs and pups or mothers with their young – may be used by anyone in the preserves in accordance with State law.

Finally, the 2020 Rule rescinded the prohibition on bear baiting. The NPS noted that peer-reviewed data are limited on the specific topic of hunting bears over bait. Additionally, the NPS concluded that human-bear interactions are likely to be rare, other than for hunters seeking bears, due to a lack of observed bear conditioning to associate bait stations with humans and the relatively few people in such remote areas to interact with bears. In making this risk assessment, the NPS considered State regulations on baiting that are intended to mitigate safety concerns, and NPS authority to enact local closures if and where necessary. Also, policy direction from the U.S. Department of the Interior (DOI) and the Secretary of the Interior requiring maximum deference to state laws on harvest did not exist in 2015. As a result, any Alaska resident, including rural and nonrural residents, or out-of-state hunter may take bears over bait in the preserves in accordance with State law, including with the use of human and dog foods.

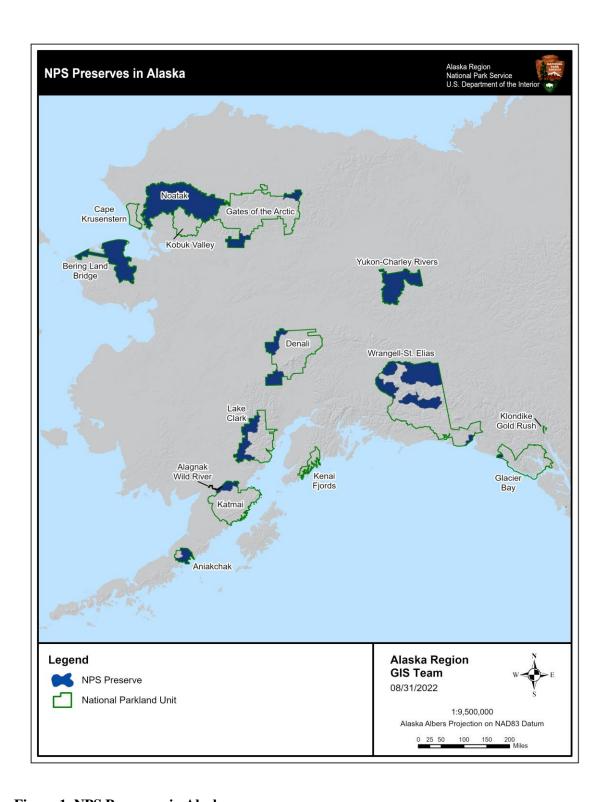


Figure 1. NPS Preserves in Alaska

1.2 Purpose of and Need for Action

The need for the revision of the rule is that the National Park Service (NPS) has determined that the 2020 rule is not compatible with generally accepted notions of "sport" hunting and is in tension with NPS management policies that prohibit predator control on NPS lands.

The purpose of taking action is to implement a regulation regarding sport hunting and trapping practices in NPS preserves in Alaska that is consistent with applicable NPS laws and NPS policies.

This EA evaluates in detail a no-action alternative and an action alternative (the "proposed action"). The proposed action would:

- Balance recreational opportunities, including both sport hunting and other recreational uses, while protecting natural resources and public safety;
- Address public safety concerns regarding bear baiting and consistency with NPS
 management policies that require the NPS to manage park lands for natural processes and
 wildlife behaviors; and
- Improve governmental functions by ensuring that national preserves are managed in a manner that is consistent with NPS policies.

The harvest practices at issue in the proposed action are specific to harvest under the authorization for sport hunting and trapping in ANILCA, and do not apply to subsistence harvest by rural residents under Title VIII of ANILCA.

This EA considers potential environmental impacts on wildlife; federal subsistence use; public uses and enjoyment; and wilderness character. Several other alternatives were considered but dismissed from detailed analysis. The alternatives dismissed and reasons for dismissal are included in Chapter 2, Alternatives. The proposed regulation is available for concurrent public review at www.regulations.gov.

1.3 Issues Analyzed in this Environmental Assessment

The following issues are evaluated for each alternative:

- Wildlife: Changes to sport hunting and trapping regulations could potentially affect wildlife and wildlife habitat.
- **Federal subsistence use:** Changes to regulations for sport hunting and trapping could potentially affect subsistence resources by decreasing or increasing resource availability.
- **Public uses and enjoyment:** Changes to regulations for sport hunting and trapping could result in changes to sport hunting and trapping activities could affect visitors as well as the resources or areas that they are coming to experience.
- **Wilderness character:** Changes to sport hunting and trapping regulations could affect wilderness character.

The following issues were dismissed from detailed analysis:

- Archeological or historic resources: Changes to sport hunting and trapping regulations are expected to have minimal impacts to these resources. There are known archeological and historic resources present within and adjacent to the preserves, including resources such as National Historic Landscapes, prehistoric hunting sites, and historic sites preserving traditional knowledge and lifeways. Under both alternatives, impacts could occur from visitors accessing areas within the preserves for hunting purposes. However, access would likely be on foot, with impacts extremely limited in duration (a few hours to a few days). In some instances, ORVs could be used to access some areas, resulting in impacts such as soil compaction at known sites, or inadvertent or deliberate damage to structures. As many sites are very remote, and in some cases the location kept confidential for cultural or protection purposes, impacts to these resources from the proposed action are expected to be minimal.
- Fish and aquatic habitat; floodplains or wetlands: Changes to sport hunting and trapping regulations are expected to have minimal impacts to these resources. Under both alternatives, impacts could occur from visitors accessing areas within the preserves for hunting purposes. However, access would likely be on foot, with impacts extremely limited in duration (a few hours to a few days). In some instances, ORVs could be used to access some areas, but even ORVs crossing streams would result only in short-term disturbance to spawning habitat for fish or other aquatic species. Impacts would be similar for floodplains or wetlands in that an ORV not following an upland route could cause disturbance to a wetland by causing tire rut, but most operators would avoid unnecessarily wet routes and thus avoid impacts to this resource. For these reasons, impacts to these resources from the proposed action are expected to be minimal.
- Threatened and endangered species (TES): Changes to sport hunting and trapping regulations are expected to have minimal impacts to this resource. Under both alternatives, impacts could occur from visitors accessing areas within the preserves for hunting purposes. While most access is likely to be on foot, ORVs or vessels could be used to access areas. In those cases, impacts would be extremely limited in duration (a few hours to a few days) during ORV or vessel transit in the presence of a listed TES. Impacts could include TES avoidance of the area or temporary behavior changes for a short period of time, with no long-term impacts. There are no terrestrial plant species listed under the Endangered Species Act that are known to occur in the preserves. For these reasons, impacts to this resource from the proposed action are expected to be none for TES plants or minimal for other TES species.
- 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 demographics of communities in or near the 10 national preserve units were assessed to determine if low-income, minority, or Tribal populations were present and whether there would be disproportionately high and adverse human health or environmental effects on these populations due to changes to sport hunting and trapping regulations. While there are nearby

communities and populations, changes to regulations would not be expected to change exposures of these communities to potential human health hazards or other environmental hazards. Therefore, environmental justice impacts from the proposed action are expected to be minimal and would not result in disproportionately high 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

This section describes the no-action alternative and the proposed action, as well as a brief description of alternatives considered but dismissed from further analysis. See Table 2 for a summary of both alternatives.

2.1 Alternative 1: No-Action

Under the no-action alternative, the 2020 NPS wildlife regulations would not be amended, and all State laws and regulations that do not conflict with existing federal laws or regulations would apply on the preserves. Actions considered by the NPS to be inconsistent with the idea of "sport" hunting, such as taking black bear cubs, and sows with cubs, with artificial light at den sites, or taking wolves and coyotes (including pups) during the denning season, would continue to be authorized by the State in certain locations on the preserves. State hunting regulations that currently prohibit acts such as shooting from or on a road, or using poison to kill or incapacitate wildlife, would not be permanently adopted and could be subject to change in the future. Restrictions on state authorized harvest are unlikely.

2.2 Alternative 2 (Proposed Action and Preferred Alternative): Promulgate NPS Wildlife Harvest Regulations in Alaska National Preserves Similar to 2015 NPS Regulations

The NPS would propose through rulemaking to prohibit the same sport hunting and trapping methods that were prohibited in the 2015 Rule by focusing on three areas: (1) the meaning and scope of hunting for "sport purposes" under ANILCA; (2) bear baiting; and (3) State law addressing predator harvest. This alternative would prohibit in regulation, practices that are not consistent with NPS laws and NPS policies. A full list of prohibited acts, with exceptions, is shown in Table 1. Under this alternative, the NPS would:

Prohibit methods considered inconsistent with "sport" hunting, including taking big game
while the animal is swimming, taking wildlife from a motorboat, taking wolves and coyotes
(including pups) during their denning period (May 1-August 9), and taking cubs or female

bears with cubs, on the preserves.⁶ The NPS would also formally adopt in federal regulations the State general hunting regulations that prohibit the acts listed in Table 1, including revising the definition of "trapping" in 36 Code of Federal Regulations (CFR) Part 13 to clarify that trapping only includes activities that use a "trap" as that term is defined in 36 CFR Part 13.⁷

- Prohibit bear baiting in the preserves for "sport" hunting.
- Prohibit predator control or predator reduction on the preserves. The NPS would therefore
 not allow harvest practices and activities or management actions that involve predator
 reduction efforts and associated natural ecological processes to increase harvest of
 ungulates.⁹

Table 1: Proposed Prohibitions for NPS Preserves in Alternative 2.

Prohibited Acts	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.
(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.
(8) Using any electronic device to take, harass, chase, drive, herd, or molest wildlife, including but not limited	(i) Rangefinders may be used.

 $^{^{6}}$ See Appendix B for additional information on sport hunting under ANILCA.

⁷ The proposed regulation would revise the definition of "trapping" in 36 CFR Part 13 to clarify that trapping only includes activities that use a "trap" as that term is defined in Part 13. The definition of "trapping" promulgated in the 2015 Rule inadvertently omitted reference to the use of traps, instead referring only to "taking furbearers under a trapping license." The proposed revision would resolve any question about whether trapping can include any method of taking furbearers under a trapping license, which could include the use of firearms depending upon the terms of the license. This change would more closely align the definition of "trapping" in Part 13 with the definition that applies to System units outside of Alaska in 36 CFR Part 1.

⁸ See also Appendix B for further information on bear baiting as it applies to the proposed regulation.

⁹ See also Appendix B for further discussion on State law addressing predator harvest.

Prohibited Acts	Exceptions
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.	 (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.

Table 2: Summary of Alternatives

	Alternative 1: No-Action	Alternative 2 (Proposed Action and Preferred Alternative): Promulgate NPS Wildlife Harvest Regulations in Alaska National Preserves Similar to 2015 NPS Regulations
Sport Hunting Methods	ods lights at den sites. No hunting of cubs and bear sows with cubs.	No hunting of bears with artificial lights at den sites. No hunting of cubs and bear sows with cubs.
	Take of cubs and bear sows with cubs.	No hunting of wolves and coyotes during the denning season.
	Harvest season for wolves and coyotes includes denning season.	No take of big game while the animal is swimming.
	Take of big game while animal is swimming in certain national preserves.	
Bear Baiting	Bear baiting stations allowed for sport hunting.	Prohibit bear baiting in the preserves for sport hunting.

	Alternative 1: No-Action	Alternative 2 (Proposed Action and Preferred Alternative): Promulgate NPS Wildlife Harvest Regulations in Alaska National Preserves Similar to 2015 NPS Regulations
Other Hunting Regulations Related to the State's Current Restrictions	All hunting restrictions for the preserves could change annually per State restrictions.	Specific current State hunting restrictions would be formalized into regulation. These include prohibitions from shooting from or on a road, using any poison that kills or temporarily incapacitates wildlife, using an aircraft or motorboat to harass wildlife, and taking big game with the aid or use of a dog.
Intensive Management of Specific Species	Intensive management to benefit one species over another by the State would continue in the preserves.	Species populations would be regulated via natural processes on the preserves, consistent with NPS policies. Management actions would not seek to benefit one species over another.

2.3 Alternatives Considered but Dismissed

2.3.1 Reinstate Temporary Restrictions of Wildlife Harvest on National Preserves in Alaska

The NPS had adopted several temporary restrictions between 2010 to 2015, which had limited certain harvest practices that are inconsistent with NPS laws and policies, including harvesting black bear cubs and sows with cubs at den sites with artificial light, taking brown bears over bait, and taking wolves/coyotes including pups during the summer denning season. In terms of impact analysis, this alternative would be analytically identical to Alternative 2. Also, under NPS regulations, rulemaking is required to make these restrictions permanent (36 CFR 13.50). The record of continued temporary restriction shows a need to find a permanent solution. This alternative is unreasonable because it is costly to the taxpayer, expensive in terms of personnel time and travel, confusing to visitors desiring to hunt the preserves, and does not provide a long-term solution to the issue identified in the purpose and need.

2.3.2 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 regards to hunting methods than is now the case. The NPS believes this approach is not consistent with ANILCA, which provides that the State establishes hunting and trapping regulations, including in national preserves, except where they may conflict with NPS laws and regulations and can be restricted pursuant to ANILCA Section 1313.

2.3.3 Allow Bear Baiting for Sport Hunting Variation: Natural Foods as Bait

The NPS considered whether bear baiting stations could be allowed using only natural foods available in the environment such as salmon carcasses. While this variation would address a concern about processed foods, it would not change the concerns for bears defending a food source at the bear baiting station, or the risk of habituation of food-conditioned bears from bear baiting. Due to concerns over the potential for severe impacts to visitors related to safety as discussed in section 3.1.2 of the EA, this alternative has been dismissed.

2.3.4 Request the Alaska Board of Game to Not Implement Liberalized Predator Harvest on National Preserves

While the NPS prefers this solution to these conflicts, the State has been mostly unwilling to exclude the preserves from these harvest practices. In doing so, the BOG has told the NPS to use its own procedures (restrictions and rulemaking) to limit these practices in the preserves since the concern is based on federal law and policy. Because of the BOG position, this alternative is not likely to be implemented by the BOG, and may not achieve consistency with NPS laws and policies.

3 Affected Environment and Environmental Consequences

The study area where the proposed regulation would take effect is limited to 10 national preserve units in Alaska (including the Alagnak Wild River corridor adjacent to Katmai National Preserve) totaling approximately 20 million acres (Figure 2). Table C1 in Appendix C 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 (see Appendix A, Part II; Appendix C). A summary of impacts for both alternatives is shown in Table 3.

3.1 Wildlife

3.1.1 Current General Conditions

Large intact ecosystems, complete with large predators, are present throughout the preserves. Title II of ANILCA mandates NPS "to 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 and it is the mandate of the NPS to allow these natural processes to continue while still allowing for limited human harvest.

Relative to wildlife and habitat, the preserves are to be managed for the maintenance of natural ecosystems, processes, and wildlife populations (including behaviors). These mandates have largely been met in the preserves. Sport and subsistence harvest of wildlife are allowed uses in the preserves and are governed by a combination of State, federal, and NPS authorizations (see Hilderbrand et al. 2013a for a review of wildlife stewardship on NPS lands in Alaska). Until the past decade, most harvest activities were managed compatibly with both the State's sustained yield principle and NPS mandates to maintain natural processes and wildlife populations.

The exception is the State authorization for the harvest of black bears over bait. State regulations prohibit setting up a bait station to take black bears within a mile of a home or other dwelling, business, campground, and other places. State regulations also prohibit setting up a bait station within a quarter mile of a road or trail. Naturally occurring items as well as human foods can be used as bait. While the harvest of black bears over bait has been legal on the preserves since the 1980s, harvest has been low (less than two bears per year) during the period 1992-2010 and largely occurred within the McCarthy Road corridor of Wrangell St. Elias National Preserve (Hilderbrand et al. 2013b).

From the harvest data reported to the State, less than or equal to 37 black bears were hunted over bait in National Preserves, and less than or equal to 34 of these were harvested along the McCarthy Road corridor in Wrangell-St. Elias National Preserve. Of the 37 reported, only three black bears were harvested over bait by rural Alaska residents from the preserves between the commencement of federal subsistence regulation in 1992 and 2010 (Hilderbrand et al. 2013b).

In 2010, the NPS adopted temporary restrictions on certain sport hunting practices in the preserves that had been newly allowed by State regulations. The 2015 Rule permanently prohibited the same and some additional sport hunting practices on national preserves. The 2020 Rule removed these prohibitions.

Abundant research has been conducted on myriad of factors affecting bear, wolf, and other carnivore populations. A portion of this body of work is cited below. Climate, fire, harvest, illegal killing, access, habitat fragmentation, 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, Joly et al. 2011, Marcot et al. 2015).

As predators are one component of a more complex system, effects of other natural events, human management, and/or resource use actions (on the full system and underlying processes) 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). Furthermore, effects from actions 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).

Past wildlife habitat fragmentation for bears, wolves, moose, and caribou has occurred in and adjacent to park areas such 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 National Preserve, and the McCarthy and Nabesna Roads in Wrangell-Saint Elias National Preserve. 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-Saint Elias National Park and Preserve, and Yukon-Charley Rivers National Preserve (NPS 1990 a, b, and c). These EISs concluded the potential for adverse effects to certain large wildlife species and their habitat.

The proposed road to the Ambler Mining District near the upper Kobuk River is an example of a foreseeable planned future action that has the potential to impact wildlife habitat and populations in Gates of the Arctic National Preserve.

The effects of these past, ongoing, and planned future actions and natural events have and will continue to 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).

3.1.2 Effects on Wildlife from Alternative 1: No-Action

Localized effects on individual animals, family groups, and packs are expected under the no-action alternative (e.g., direct mortality, increased mortality risk due to loss of family or group members, and food conditioning). The sport hunting of brown bears over bait, sport hunting of black bear sows and their cubs, and the sport hunting of wolves and coyotes during the denning and pupping period had been prohibited before this past decade by the State. These prohibitions had previously been in place specifically to prevent steep and long-term depression of these predator populations and wanton waste of wolf and coyote hides. A growing body of literature argues for the ecological importance of predators and the effects of changes to predator densities can have on prey, their habitat, soils, and natural processes (Hebblewhite et al. 2005, Frank 2008, Ripple and Beschta 2012). Focused predator harvest methods and intensive management are expected to reduce targeted predator species (bears, wolves, and coyotes) and slightly increase ungulate populations (moose and caribou).

Managed predator reductions to benefit prey can contribute to varied outcomes in herds including increased prey numbers, reduced local habitat quality, signs of nutritional stress in prey, and range shifts. Some of these outcomes have been seen by ADFG biologists in the Forty-Mile Caribou Herd (ADFG 2022b) where the herd doubled in size from 2005-2017 and then declined by more than half by 2022 likely due, in part, to nutritional stress (fewer 3-year-old cows were getting pregnant, and lower calf weights) and overgrazing in the herd's core range. Some years, a high percentage of the herd shifted their winter range much further east into Canada and spent most of the winter there (Boertje et al. 2012).

By design, baiting of bears alters their behavior to increase their predictability and facilitate harvest. This behavioral alteration directly conflicts with NPS policy to maintain natural processes and wildlife populations, including behaviors. Further, conditioning bears to unnatural food items increases the likelihood that the bears will become nuisance bears, and thus be destroyed outside of harvest regulations (Herrero 2018). Similarly, food conditioned bears are more likely to become a public safety risk relative to non-food conditioned bears (Herrero 1970, 1976, 2018).

Although the direct and indirect impacts of the no-action alternative are not likely to result in meaningful population level impacts, when considered along with other factors such as habitat quality, development and habitat fragmentation, predation and harvest, and specifically the past, ongoing, and planned future actions and natural events discussed above, changes to populations could occur. However, the no-action alternative would not be a meaningful driver of population level effects.

Conclusion: The no-action alternative is anticipated to result in localized direct effects on individual animals, family groups, and packs. This alternative could also result in the feeding and conditioning of wildlife to human foods; and the altered behaviors have the potential to increase the likelihood

more bears are taken in defense of life and property. These changes would be incompatible with NPS mandates to maintain natural ecosystems, processes, and behaviors of affected wildlife, especially bears. The no-action alternative would likely not be a meaningful driver of cumulative impacts to wildlife.

3.1.3 Effects on Wildlife from Alternative 2: (Proposed Action and Preferred Alternative) Promulgate NPS Wildlife Hunting and Trapping Regulations in NPS Preserves Similar to 2015 NPS Regulations

This alternative would formalize in regulations practices that are consistent with applicable NPS laws and NPS policies. This alternative would maintain naturally functioning ecosystems, complete with natural fluctuations of wildlife populations. Because this alternative would prohibit the taking of black bear sows and cubs in dens with artificial lights and the take of black bears (and brown bears) over bait, fewer bears would likely be harvested under this alternative compared to the no-action alternative. Because so few black bears are taken over bait in national preserves, however, this alternative would not result in a noticeable change in wildlife harvest and populations and their habitat in these areas. This alternative would remove a source of human-delivered foods to bears and therefore assures bears in national preserves maintain more natural foraging and feeding behaviors. Overall, changes to wildlife populations and their habitats would be regulated by more natural processes and affected less by intentional human actions than what would occur under the no-action alternative.

Effects of past, ongoing, and planned future actions and natural events on wildlife and habitat are expected to be the same under this alternative as described above for the no-action alternative. In the context of these other actions and trends, the additive impacts of this alternative would not be a meaningful driver of population level effects.

Conclusion: The NPS proposed action alternative would allow for the continuation of long-standing predator harvest opportunities, with the possible exception of the prohibition of harvest of bears over bait. The localized impacts that would occur to wildlife under the no-action alternative would not occur at the same levels under this alternative, resulting in a beneficial impact to wildlife. This alternative is compatible with the maintenance of natural ecosystems, processes, and behaviors of affected wildlife, especially bears. It is also consistent with NPS policies. There would be no meaningful impacts to wildlife population levels or numbers and their habitat, as a result of implementing this alternative. This alternative would not be a meaningful driver of cumulative impacts to wildlife.

3.2 Federal Subsistence Use

3.2.1 Current General Conditions

ANILCA Title VIII "Subsistence Management and Use" establishes a preference for subsistence uses, including the taking of fish and wildlife for non-wasteful purposes on federal lands in Alaska. When done in accordance with specific criteria, non-subsistence taking of fish and wildlife on federal lands can be and has been restricted. ANILCA Section 803 defines "subsistence uses" 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 nonedible 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 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.

When first authorized under ANILCA, the State managed subsistence harvest by local rural residents under Title VIII as well as harvest for sport purposes by anyone. After a ruling from the State Supreme Court that the State Constitution barred the State from implementing the rural subsistence provisions of ANILCA, the Federal government assumed management of subsistence harvest under Title VIII. Following this decision, the State only regulates harvest for sport purposes under ANILCA. Under the State's current framework, Alaska residents have a priority over nonresidents but there is no prioritization based upon where one resides in Alaska. Accordingly, all residents of Alaska have an equal opportunity to harvest wildlife for "sport purposes" in national preserves under State law.

Subsistence and sport hunting have generally co-existed in national preserves since ANILCA. For the most part, federal subsistence regulations promulgated in the 1990s were based on State harvest methods and means, seasons, and harvest limits. These regulations included the use of bait to hunt black bear. The Federal Subsistence Board in the *Subsistence Management Regulations for Harvest of Wildlife on Federal Public Lands in Alaska* (Federal Subsistence Board 2022-2024) has approximately 15 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. These restrictions will remain in effect until determined unnecessary. Impacts of other past, ongoing, and planned future actions and natural events on important subsistence prey resources such as caribou and moose are expected to be similar to those described in Section 3.1. Climate change may also be changing the abundance and habitat of subsistence species which could greatly affect subsistence users into the future (Joly et al. 2011, Green et al. 2021). The effects of climate change on access to subsistence resources is also a concern for subsistence users (Brinkman et al. 2016).

3.2.2 Effects on Federal Subsistence Use from Alternative 1: No-Action

Both State sport hunting and trapping (see AAC 92.113 (b)(7)(iii)(D)) and federal subsistence hunting and trapping opportunities on predator species could be diminished. Diminishing predators is intended to result in increases in prey populations, such as moose and caribou. In some areas, depending on the effectiveness of the management actions, habitat conditions, and the nature of the State's liberalized hunting regulations, moose and caribou numbers might increase (see Hegel et. al. 2010) and could be available to federally qualified subsistence users (hunters).

Federally qualified subsistence users might benefit from increased numbers of prey animals that are subsequently available to hunt. Federally qualified subsistence users, when engaging in the customary and traditional practice of taking swimming caribou in certain areas, would however compete with sport hunters engaging in the same activity where authorized under both Federal subsistence and state harvest regulations. Local rural subsistence hunters who typically have older and less sophisticated equipment and fewer airplanes (Cellarius and Rabinowitch, pers. comm.), might suffer from increased competition from non-rural hunters who have learned of localized abundances of ungulates. Regarding the practice of hunting black bears with the aid of bait (bear baiting), this practice has long been allowed in State and later Federal Subsistence Board regulations. State harvest data, show a very low level of harvest by bear baiting occurring on preserves (less than two bears per year) and for federally qualified subsistence users only three black bears have been taken over bait in an 18-year period (Hilderbrand et al. 2013b). Regarding the more recent allowance for taking brown bears over a bait station established for black bears, a negligible increase in subsistence brown bear take over time is expected. Subsistence hunters and trappers might find fewer wolves and coyotes available for take with prime pelts if seasons are lengthened into the denning and pupping periods from mid-April to mid-August. Combined with effects from implementing BOG regulations under the no-action alternative, the federal subsistence harvest of ungulates could be increased from the subsistence take of bears, wolves, and coyotes.

With climate change effects, access to subsistence resources could become more difficult, and has been identified as a concern by local subsistence users (Green et al. 2021). This, combined with concern for competition from sport hunters expressed by the Tribes and ANCSA corporations, could cumulatively decrease the ability for federally qualified subsistence users to harvest subsistence resources.

Conclusion: The No-Action Alternative could result in increased opportunity for federally qualified subsistence users to take moose and caribou in national preserves if predator harvest liberalizations increase prey populations. It could also randomly increase competition for these prey species in some areas between rural and non-rural hunters and could result in decreased success for local rural hunters especially as access changes. Subsistence opportunities to harvest wolves or coyotes with prime pelts could be diminished where take of these species by sport hunters during denning and pupping seasons is successful. Subsistence harvest of black and brown bears might increase under this alternative where harvest of bears over bait is allowed. In some areas, wolf and possibly bear numbers could be reduced sufficiently so that sport hunting could be restricted or eliminated by the BOG or the Federal Subsistence Board to protect the populations from being decimated and to protect the ANILCA 804 subsistence priority. In extreme cases federally authorized (ANILCA Title VIII) subsistence hunting and trapping of these species could be restricted or eliminated by the Federal Subsistence Board or the NPS until populations recover in affected areas.

3.2.3 Effects on Federal Subsistence Use from Alternative 2 (Proposed Action and Preferred Alternative): Promulgate NPS Wildlife Hunting and Trapping Regulations in NPS Preserves Similar to 2015 NPS Regulations

Opportunities for subsistence harvest of wolves and coyotes with prime pelts would be maintained at levels similar to existing conditions. The numbers of moose and caribou harvested for subsistence is expected to be similar to existing conditions. If predators, weather, and other factors reduce these prey populations (see Section 3.1), then harvests may need to be reduced. In the national preserves, sport harvest would be restricted first to protect the ANILCA Section 804 subsistence priority.

Concerning black bear baiting, federally qualified subsistence hunters have only harvested three black bears over bait in an 18-year period (Hilderbrand et al. 2013b). Eliminating sport harvest of black bears over bait would have a very small effect on subsistence harvest of black bears. Brown bear baiting has been more recently allowed by the State for sport hunting in certain game management units. By disallowing bear baiting for sport hunting, there would be a reduced potential to condition bears to human foods, as it is believed that some black and brown bears are attracted to bait, but not harvested. This could reduce the incidence of nuisance bears to subsistence users at their hunting and fishing camps and in and near their communities where baiting was occurring in the same vicinity.

As described previously, the Subsistence Management Regulations for Harvest of Wildlife on Federal Public Lands in Alaska (Federal Subsistence Board 2022-2024) has approximately 15 closures in place affecting moose, caribou, muskox, and sheep in preserves where the Federal Subsistence Board has determined restrictions are required to implement the federal subsistence priority found in ANILCA Section 804. These restrictions will remain in effect until determined unnecessary. The additive effects of the NPS action alternative would result in maintaining existing federal subsistence opportunities to hunt or trap wolves and coyotes with prime pelts. With healthy predator populations in park areas, subsistence opportunities to harvest ungulates (moose and caribou) are expected to be unchanged. Predator control efforts adjacent to and outside of NPS-managed areas could draw down predator populations inside park areas, allowing for temporary increases in prey species for subsistence harvest inside park areas. If there are times of ungulate population shortages, then the federal subsistence priority could be implemented under provisions of ANILCA Section 804.

With climate change effects, access to subsistence resources could become more difficult and has been identified as a concern by local subsistence users (Green et al. 2021). Prohibiting specific sport hunting techniques such as the take of swimming caribou and hunting from a motorized boat could decrease the level of competition for subsistence resources also expressed as a concern by the Tribes and ANCSA corporations.

Conclusion: Potential NPS regulations to restrict wildlife take practices would maintain long-standing subsistence harvest opportunities authorized since preserves were established in 1980. Elimination of bear baiting for sport hunting could result in a very small increase in opportunity for federal subsistence bear harvest, and reduce potential public safety issues by removing the ability to

take bears over bait. The overall effect from the proposed action on federal subsistence wildlife harvest in national preserves in Alaska would expect to change very little compared to the past several decades. As access becomes more difficult due to climate change, federal subsistence users would have decreased competition, since sport hunters would not be able to use certain hunting methods not considered "sporting" such as taking swimming caribou.

3.3 Public Uses and Enjoyment

3.3.1 Current General Conditions

ANILCA Title II (see Appendix A – ANILCA 810), area General Management Plans (GMPs) (NPS 1984a-b, NPS 1986a-h) and GMP amendments (NPS 2014b-c), and more recent area Foundation Statements (NPS 2009a-f, NPS 2010a-b, NPS 2012, NPS 2014a) describe the public uses and values to be managed for and protected in each preserve area, as well as the Alagnak Wild River through a River Management Plan (NPS 1983)¹⁰. 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. Subsistence take of wildlife is allowed in parks and monuments in Alaska where authorized in ANILCA Title II. Guided sport hunting concessions are offered in all of the preserves except Bering Land Bridge National Preserve.

Most of the park and/or preserve GMPs (NPS 1984a-b, NPS 1986a-h, NPS 2014b-c) 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 2013b) further address area management goals and zones for public uses, including for the preserve additions. Other preserve area Foundation Statements (NPS 2009a-f, NPS 2010a-b, NPS 2012, NPS 2014a) articulate primary public uses and objectives, scientific values, and interpretive themes for the various areas.

Visitor use statistics for these areas are available on the web through the NPS Integrated Resource Management Applications (known as IRMA) Portal (NPS 2022, 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. Visitor pursuits in these preserves are highest during the summer season for fishing, hunting, wildlife watching, 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. Smaller numbers of visitors would also use the preserve areas for hunting during the fall.

Other effects on public uses and enjoyment 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. There are 27 hunting

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¹⁰ See Appendix D for internet links to GMPs and foundation statements referenced in this EA.

guide concessions operating in national preserves, and 16 of those are in Wrangell-Saint Elias National Preserve. Future guided hunting concessions may be offered in Bering Land Bridge National Preserve (NPS 2013a).

ORV trail rerouting and rehabilitation in Wrangell-Saint Elias National Park and Preserve, Glacier Bay National Preserve, and Lake Clark National Park and Preserve have and will improve access for public use and enjoyment of these areas. Visitor access to the Kobuk River unit of Gates of the Arctic National Preserve may be facilitated in the future if a new road is built through the area to the Ambler Mining District and if public access is allowed. Climate change effects on public uses and enjoyment were studied in three NPS park and preserve units (Denali National Park and Preserve, Katmai National Park and Preserve, and Gates of the Arctic National Park and Preserve) where researchers predicted that peak season of visitor use could expand into May and September as well as widening the shoulder season from warming temperatures due to climate change (Albano et al. 2013).

3.3.2 Effects on Public Uses and Enjoyment from Alternative 1: No-Action

Hunters could continue to take advantage of the longer season instituted since 2020 to take wolves or coyotes where authorized. The harvest of brown bear could be increased for sport hunters because these animals could continue to be attracted to and harvested over bear bait stations. Black bear sows with cubs and cubs could continue to be harvested and with the aid of artificial lights at dens. Potential reductions in predator populations from State liberalized hunting regulations could result in larger ungulate populations, depending on habitat conditions, and therefore there could be increased opportunities for guided and unguided sport hunters to harvest moose, caribou, and other ungulates. Non-hunting visitors to these areas could have reduced opportunities to view bears, wolves, and coyotes in their natural habitat if more of these animals are harvested and removed.

Bear bait stations may be used when authorized seasons are open, generally April 15 to June 30 and July 1 to October 15, which can overlap the primary visitor season. There has been a notable increase in demand for bear bait stations in some game management units where the take of brown bears is also allowed at black bear bait stations. For examples: in GMU 12 requests for bear bait stations increased by 78% (from an 11-year average of 50 permits to a Spring 2013 request of 89 permits), and in GMU 20E the request increased by 93% (from an 11-year average of 12 permits to a Spring 2013 request of 23 permits.) For the most part, adverse impacts to non-hunting visitors are expected to occur during these times. Some visitors would likely avoid signed bear bait station areas because of perceived safety issues and because they would not want to interfere with an authorized hunt situation, although some visitors may be attracted to viewing the bears at the bait stations leading to increased safety issues.

Visitors to the preserves may inadvertently encounter bears and bait stations while engaging in sightseeing, hiking, boating, hunting, photography, fishing, and a range of other activities. This is because despite the vast, relatively undeveloped nature of these national preserves, most visitation occurs near roads, trails, waterways, or other encampments (e.g., cabins, residences, communities).

Establishing and maintaining a bait station requires the transport of supplies, including bait, barrels, tree stands, and game cameras. The same roads, trails, and waterways used by visitors are, therefore, often used by those setting up a bait station. Thus, despite the vast landscapes, bear baiting and many other visitor activities are concentrated around the same limited access points.

Some bears attracted to bait stations but not harvested could become conditioned to human-associated foods and pose a nuisance or threat to visitors in the area for many years. Food-conditioned bears are more likely to become a public safety risk relative to bears not conditioned to human foods (Herrero 1970, 1976, 2018). Bears are more likely to attack when defending a food source, putting visitors who encounter a bear at or near a bait station or a kill site at significant risk (Glitzenstein and Fritschie 1995, Herrero 2018). In addition, bears may become habituated to humans through exposure to human scents at bait stations and then become food conditioned, meaning they learn to associate humans with a food reward (bait). It is well understood that habituated and food-conditioned bears pose a heightened public safety risk (Glitzenstein and Fritschie 1995, Herrero 2018).

The NPS recognizes that there are restrictions in State law intended to mitigate the risks described above. Bait stations are prohibited within one quarter mile of a road or trail and within one mile of a dwelling, cabin, campground, or other recreational facility. State regulations also require bait station areas to be signed so that the public is aware that a bait station exists. Although these mitigation measures may reduce the immediate risk of park visitors approaching a bear defending bait, NPS records indicate that bait stations established at Wrangell-St. Elias National Park and Preserve often do not comply with the State's minimum distance requirements. Further, mitigation measures, including requirements for buffers and signage, do not adequately address the risk associated with habituated and food-conditioned bears because bears range widely, having home ranges of tens to hundreds of square miles. The buffers around roads, trails, and dwellings are therefore inconsequential for bears that feed at bait stations but are not harvested there.

Processed foods are most commonly used for bait because they are convenient to obtain and are attractive to bears. Processed foods do not degrade quickly nor are they rapidly or easily broken down by insects and microbes. As a result, they persist on the landscape along with the public safety risk of bears defending a food source. Bears have the potential to become habituated to humans and conditioned to human-produced foods, resulting in increased likelihood of incidents that compromise public safety, result in property damage and threaten the lives of bears who are killed in defense of human life and property.

In April 2022, the NPS queried 14 NPS resource managers and wildlife biologists from 12 different National Park System units in Alaska about bear baiting. These technical experts' unanimous opinion was that bear baiting will increase the likelihood of defense of life and property kills of bears and will alter the natural processes and behaviors of bears and other wildlife. Considering the potential for significant human injury or even death, these experts considered the overall risk of bear baiting to the visiting public to be moderate to high. These results generally agree with the universal recognition in the field of bear management that food conditioned bears result in increased bear mortality and heightened risk to public safety and property, and that baiting, by its very design and intent, alters bear behavior. The results also are consistent with the State's management plan for Denali State Park (ADNR 2006). The management plan expresses concern that bear baiting "teaches bears to associate humans with food sources" and states that bear baiting is in direct conflict with recreational, non-hunting uses of the park. The plan further notes that bear baiting has "the potential for creating serious human-bear conflicts, by encouraging bears to associate campgrounds and other human congregation points with food sources." Overall, the practice of bear baiting could result in severe impacts to the safety of park visitors.

Though most non-hunting visitors go to NPS areas in summer, some travel to these areas occurs in early fall, spring, and even during the winter season. Winter season visitors would not likely be affected by most of the State hunting regulations except to reduce potential sightings of wolves and coyotes because of the extended harvest seasons and potential increases in harvest of these species. Opportunities to trap furbearers such as wolves and coyotes during traditional seasons when pelts are in prime condition could be reduced from liberalized harvest seasons that allow take of these animals during longer seasons. If the peak season of visitor use does expand into May and September from climate change as Albano et al. (2013) predicted, visitors would have a greater temporal overlap with the take of wolves and coyotes throughout the season as well as for hunting of swimming caribou in allowed areas.

The State's liberalized harvest methods and seasons on predators such as bears, wolves, and coyotes, inside and outside of preserves could reduce predators occurring inside parks and monuments, resulting over the long-term in a drawdown of natural populations of large predators inside park areas and opportunities to view and study them. An example of a possible drawdown effect on visitor viewing of wildlife has been recently demonstrated in Denali National Park and Preserve where renewed trapping of wolves immediately north of the park is correlated with a notable reduction in visitor viewings of wolves along the eastern half of the Denali Park Road (NPS 2013b). The percentages of visitors seeing wolves on bus trips in the area decreased from 44 percent in 2010 to 21 percent in 2011 to 12 percent in 2012 to four percent in 2013 (NPS 2013b).

Combined with the No-Action Alternative, the effects of other past, ongoing, and planned future actions described in the preceding paragraphs on public uses and enjoyment in the preserves (and parks and monuments) could be somewhat beneficial for sport hunting in preserves in the short-term and negative for other public uses and enjoyment of the affected park areas.

Conclusion: The No-Action Alternative could result in the enhancement of some sport hunting opportunities in the preserves in the short-term, most likely for moose and caribou for hunters in those areas. It could also result in alterations or elimination of observations and study opportunities of naturally functioning wildlife populations, including predators like bears, wolves, and coyotes. The avoidance of areas around bear baiting stations by a small number of other recreational visitors could result in a reduction in other public uses and enjoyment of those areas, although there could also be visitors attracted to the bear bait stations to view bears. This alternative would also be incongruent with public messages to avoid the feeding and conditioning of wildlife to human foods; and the altered behaviors of wildlife, bears in particular, have the potential to have severe impacts to visitor safety.

3.3.3 Effects on Public Uses and Enjoyment from Alternative 2 (Proposed Action and Preferred Alternative): Promulgate NPS Wildlife Hunting and Trapping Regulations in NPS Preserves Similar to 2015 NPS Regulations

This alternative would likely keep the status quo for public uses in the preserve areas, except for some sport hunting practices with prohibitions including take of swimming caribou, bear baiting stations, or take of wildlife while using an off-road vehicle or motorized boat. In national preserves, sport hunter opportunities to harvest prey species like moose and caribou are still expected to remain similar to recent past years. If bear baiting is discontinued, non-hunting visitors to these preserves would see no sport hunting bear baiting station signs or be affected by this activity. No black bears or brown bears would be conditioned or habituated to human foods at sport hunting bait stations, and other visitors may feel safer visiting areas with no bait stations. Sport hunter harvest success of bears, wolves, and covotes would likely remain largely the same, although bear baiting would not be allowed, and the season would be narrowed to outside of the denning period for wolves and coyotes. Natural populations of wildlife and ecosystem functioning would continue for the foreseeable future, enabling public observation and scientific research of minimally altered ecosystems with a natural distribution and abundance of predators and prey. Preserves would continue to reflect a baseline condition where natural processes are more fully expressed, and these areas would continue to serve as places where wildlife more closely reflect their natural diversities, abundances, and behaviors in undisturbed ecosystems. The expansion of the peak visitor season into May and September predicted from climate change (Albano et al. 2013) would partially overlap with the take of wolves and coyotes and would not overlap with the sport hunting of swimming caribou.

The effects on public uses and enjoyment from other past, ongoing, and planned future actions would be the same as described for the no-action alternative. Combined with Alternative 2, these effects could result in small reductions in harvest of black bears from preserves (no bear baiting) and maintenance of other public uses and enjoyment to observe and study wildlife in its natural conditions.

Conclusion: Potential NPS harvest regulations to restrict wildlife take practices in Alaska preserves would revert back to the longstanding practices in place from 1980 to a decade ago, except for the possible elimination of black bear baiting and take of swimming caribou for sport hunting. No other changes would be likely in sport hunting opportunities in preserves. Other recreational users would continue to enjoy more natural environments and ecosystems and the opportunities to observe naturally functioning ecosystems. The removal of bear bait stations could reduce the potential for bears in preserves to become conditioned to human foods and minimize the public safety concerns presented by these bears.

3.4 Wilderness Character

3.4.1 Current General Conditions

The 1964 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. Section 1317 of ANILCA required the Secretary of the Interior to conduct additional reviews of areas to determine their suitability for wilderness designation, which were completed as part of the NPS General Management Plans completed between 1984 and 1986. Alaska national preserves contain approximately 8,095,000 acres of designated wilderness and approximately 11 million acres of eligible wilderness. See Figure 2 and Table C1 in Appendix C.

Attributes of wilderness character are generally described in terms of being natural, untrammeled, undeveloped, providing opportunities for solitude and primitive and unconfined recreation, and having other features of value. Wilderness character on wilderness lands in the national preserves in Alaska is generally exceptional (NPS 2013c). They contain vast areas 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 states 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.

Attributes specifically are defined as follows:

- **Natural**: Wilderness ecological systems are substantially free from the effects of modern civilization.
- **Untrammeled**: Wilderness is essentially unhindered and free from the intentional actions of modern human influences.
- Solitude or a Primitive and Unconfined Type of Recreation: Wilderness provides outstanding opportunities for solitude or primitive and unconfined recreation.

- **Undeveloped**: Wilderness retains its primeval character and influence, and is essentially without permanent improvement or modern human occupation.
- Other Features of Value: Wilderness protects other tangible features that are of scientific, educational, scenic, or historical value.

Long-term effects on wilderness character could result from the following past, ongoing, and planned future actions and natural events and are expected to negatively impact wilderness character:

- **Natural Quality:** Climate change and illegal harvest of wildlife have the potential to influence natural ecosystems and processes.
- **Untrammeled:** There are extremely few examples of intentional manipulation of wilderness resources.
- **Opportunities for Solitude:** Other visitor use that occurs in the national preserves affects opportunities for solitude, though existing use levels in the preserves tends to be very low.
- Undeveloped: 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 NPS does not anticipate additional developments in wilderness. The Ambler Mining District Road is a potential development project in the Gates of the Arctic National Preserve, an area eligible for wilderness designation.

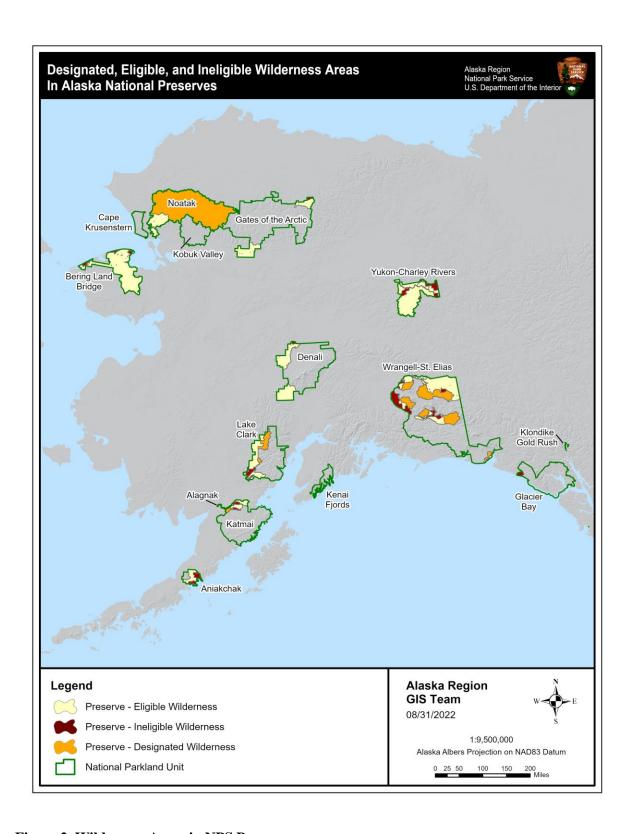


Figure 2. Wilderness Areas in NPS Preserves

3.4.2 Effects on Wilderness Character from Alternative 1: No-Action

Impacts are discussed by attribute:

- Natural: These predator harvest liberalizations under the no-action alternative that intend to
 decrease predator populations and increase ungulates available for harvest would degrade the
 natural quality of the wilderness areas from the reduction in populations of predators and the
 concomitant increase in prey species and by altering natural wildlife behavior (for example,
 baiting of bears alters their behavior).
- Untrammeled: This quality is influenced by any activity or action that intentionally controls or influences the components or processes of ecological systems inside wilderness. The no-action alternative could have long-term negative impacts to the untrammeled quality of wilderness character because the alternative involves wide-scale control and manipulation of wildlife populations and behaviors.
- Solitude or a Primitive and Unconfined Type of Recreation: This quality is primarily about the opportunity for people to experience solitude and self-reliance, and is influenced by settings that affect these opportunities. This quality could be degraded under the no-action alternative by increasing the likelihood of visitor encounters, adding signs of modern civilization inside wilderness (i.e., bear baiting stations), and creating safety concerns (food-conditioned bears, for example). Additional impacts related to visitor experience are covered in Section 3.3.
- Undeveloped: The no-action alternative may result in a higher level of use and more
 motorized access to the preserves than currently exists. Many hunters use ORVs to support
 their hunting activity. While ORV use is largely prohibited inside wilderness, there could be
 an increase in motorized use which could cause resource damage, along with an increase in
 violations for unauthorized use. Increased motorized access could impact the undeveloped
 quality of wilderness areas in the preserves.
- Other Features of Value: The no-action alternative could affect the scientific and educational values of these large natural areas by creating unnatural wildlife abundances, distributions, and behaviors.

Conclusion: The No-Action Alternative is expected to result in long-term negative impacts to wilderness character. It could degrade the natural quality, untrammeled quality, opportunities for solitude, and the undeveloped quality throughout the preserves. Combined with the effects of past, ongoing, and planned future actions and natural events mentioned above such as the Ambler Mining District Road, the No-Action Alternative, the effects would likely result in slight degradation of wilderness character.

3.4.3 Effects on Wilderness Character from Alternative 2 (Proposed Action and Preferred Alternative): Promulgate NPS Wildlife Hunting and Trapping Regulations in NPS Preserves Similar to 2015 NPS Regulations

Impacts are discussed by attribute:

- Natural: Restricting or prohibiting bear baiting would preserve natural bear behavior. This
 alternative would preserve the natural quality by not adopting management actions designed
 to reduce predator populations to stimulate larger ungulate populations for human harvest.
 This alternative is compatible with the maintenance of natural ecosystems, processes, and
 wildlife populations and behaviors.
- Untrammeled: This quality is influenced by any activity or action that intentionally controls or influences the components or processes of ecological systems inside wilderness. This alternative would preserve the untrammeled quality by prohibiting activities involving predator reduction efforts with the intent or potential to alter or manipulate natural predator-prey dynamics and associated natural ecological processes to increase harvest of ungulates.
- Solitude or a Primitive and Unconfined Type of Recreation: This quality is primarily about the opportunity for people to experience solitude and self-reliance, and is influenced by settings that affect these opportunities. This quality would not be changed or affected by the NPS potential regulations, except the removal of bear bait stations could result in fewer negative encounters with wildlife or between bear hunters and other visitors to the preserve areas and would result in fewer signs of modern civilization inside wilderness (i.e., bear baiting stations). Additional impacts related to visitor experience are covered in Section 3.3.
- **Undeveloped**: This quality would be maintained because no increases in ANILCA-authorized motorized access are expected. Therefore, the current undeveloped quality would be preserved.
- Other Features of Value: This alternative would reduce or remove the potential for unnatural wildlife abundances due to the implementation of prohibitions on certain hunting and trapping activities.

Conclusion: The direct and indirect effects of this alternative are expected to result in little change to wilderness character. For the most part, the natural, untrammeled, and undeveloped qualities, as well as opportunities for solitude, would be unchanged throughout the preserves. Effects of past, ongoing, and planned future actions and natural events would be the similar to the no-action alternative, and would have a small negative impact on wilderness character. Combined with this alternative, the overall effects are expected to be small and inconsequential to wilderness character in the national preserves.

Table 3: Summary of Impacts for the Alternatives

Issue	Alternative 1: No-Action	Alternative 2 (Proposed Action and Preferred Alternative): Promulgate NPS Wildlife Hunting and Trapping Regulations in NPS Preserves Similar to 2015 NPS Regulations
Wildlife	Localized effects on individual predators, family groups, and packs are expected to be substantial. Reductions in predator populations may occur over the long term from State intensive management and liberalized predator harvest regulations. Prey populations may increase accordingly, depending on the level of habitat and recruitment effects from climate trends and wildland fires. Habitat conditions could decline due to overbrowsing or overgrazing by ungulates; compounding effects from climate change and wildland fire on habitat alternation over broad areas would likely be seen. Increased probability of conditioning bears to human foods at bait stations could result in an increase in take of bears in defense of life and property.	Naturally functioning ecosystems with natural fluctuations of wildlife populations would be maintained. Bear baiting would be prohibited for sport hunting. Take of bears conditioned to human foods in defense of life and property may be reduced slightly. Prey populations would continue to be maintained consistent with full complements of predator populations. Climate change and wildland fire would continue to alter habitat over broad areas.
Federal Subsistence Use	Possible increased opportunities for both federally qualified subsistence users (and sport hunters) to take moose and caribou in national preserves in Alaska. Increased competition in some areas between rural and non-rural hunters could result in decreased opportunity for rural hunters who typically have older and less sophisticated equipment and fewer airplanes. In some areas, wolf and possibly bear numbers could be reduced such that sport hunting and federally authorized (ANILCA Title VIII) subsistence hunting and trapping of these species could be restricted or eliminated until populations rebound.	Federally qualified subsistence hunters may have less competition for subsistence resources as specific sport hunting methods would be prohibited such as the take of swimming caribou. There would be little to no effect of NPS wildlife harvest restrictions on federal subsistence harvests in national preserves. Elimination of bear baiting for sport purposes could result in a small positive effect on federal subsistence harvest opportunities. ¹¹

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¹¹ See Appendix A, ANILCA Section 810(a) Subsistence – Summary Evaluation and Findings.

Issue	Alternative 1: No-Action	Alternative 2 (Proposed Action and Preferred Alternative): Promulgate NPS Wildlife Hunting and Trapping Regulations in NPS Preserves Similar to 2015 NPS Regulations
Public Uses and Enjoyment	Possible increased opportunities for sport hunters to take bears, wolves, coyotes, moose, and caribou in national preserves in Alaska. Signed areas with bear bait stations could increase in number and discourage other visitors from using those areas and increase the potential for food-conditioned bears and visitor safety issues. Alternatively, visitors may consider viewing bears at these bear bait stations that could also lead to increased visitor safety issues. Opportunities for scientific study and viewing of natural populations of bears, wolves, and coyotes could be reduced.	Long-standing opportunities for visitors to engage in sport hunting of predator species in national preserves would be maintained with the possible exception of a minor reduction in bear harvest over bait. Removal of bear baiting stations would reduce the conditioning of bears to human foods and improve visitor safety and use of national preserve lands. Scientific study and visitor observations of natural predator and prey relations and habitat conditions would be maintained.
Wilderness Character	Some long-term negative impacts to wilderness character could result from the State liberalized predator harvest and potential increases in prey populations could lead to degraded natural and untrammeled qualities. Bear baiting stations for sport hunting could negatively affect the primitive and unconfined type of recreation quality of wilderness as well.	Wilderness character; including natural, untrammeled, and primitive and unconfined type of recreation qualities would be better preserved long-term throughout national preserves in Alaska.

4 Consultation and Coordination

4.1 Public Involvement

A press release was issued on January 6, 2023, to announce availability of the Draft EA for a 60-day public review period, concurrent with release of the proposed regulation for public review. The Draft EA is available on the NPS PEPC website at: https://parkplanning.nps.gov/wildliferule2023

Tribal consultation with potentially affected Native tribes in Alaska, pursuant to Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments) and Department of the Interior Secretarial Order 3317, and potentially affected ANCSA Corporations, pursuant to Secretary of the Interior Order 3317, is underway. The NPS has begun consulting and communicating with Tribes and ANCSA Corporations that would be most affected by this rule and the feedback provided to date has been incorporated by the NPS in the proposed regulation.

4.2 List of Agencies and Person Consulted

[This section will be updated in the Final EA].

5 References

- Alaska Department of Natural Resources (ADNR). 2006. Denali State Park Management Plan. Division of Parks and Outdoor Recreation. State of Alaska.
- Alaska Department of Fish and Game (ADFG). 2022a. Update on Intensive Management for Moose and Caribou. Board of Game Meeting. Handout for RC008. March 1, 2022. State of Alaska.
- ADFG. 2022b. New Fortymile Caribou Population Estimate and Hunt Quota. Advisory Announcement. August 1, 2022. State of Alaska.
- Albano, C.M., C.L. Angelo, R.L. Strauch, and L.L. Thurman. 2013. Potential effects of warming climate on visitor use in three Alaskan national parks. Park Science 30:36–44.
- Boertje, R.D., C.L. Gardner, K.A. Kellie, and B.C. Taras. 2012. Fortymile caribou herd: increasing numbers, declining nutrition, and expanding range. Alaska Department of Fish and Game Wildlife Technical Bulletin 14, Juneau, Alaska.
- Boone and Crocket Club website. 2022. https://www.boone-crockett.org/sport-hunting-hunt-fair-chase#.
- Brinkman, T. J., W.D. Hansen, F.S. Chapin, G. Kofinas, S. BurnSilver, & T.S. Rupp. 2016. Arctic communities perceive climate impacts on access as a critical challenge to availability of subsistence resources. Climatic Change, 139(3-4), 413-427. https://doi.org/10.1007/s10584-016-1819-6.
- Creel, S., and J.J. Rotella. 2010. Meta-analysis of relationships between human offtake, total mortality and population dynamics of gray wolves (*Canis lupus*). PLoS ONE 5:1-7.
- Frank, D.A. 2008. Evidence for top predator control of a grazing ecosystem. Oikos 117:1718-1724.
- Glitzenstein, E. and J. Fritschie. The Forest Service's Bait and Switch: A Case Study on Bear Baiting and the Service's Struggle to Adopt a Reasoned Policy on a Controversial Hunting Practice within the National Forests. 1 Animal Law 47, 55-56 (1995).
- Green, K. M., A.H. Beaudreau, M.K. Lukin, and L.B. Crowder. 2021. Climate change stressors and social-ecological factors mediating access to subsistence resources in Arctic Alaska. Ecology and Society 26(4):15. https://doi.org/10.5751/ES-12783-260415.
- Gude, J.A., M.S. Mitchell, R.E. Russell, C.A. Sime, E.E. Bangs, D.L. Mech, and R.R. Ream. 2012. Wolf population dynamics in the U.S. Northern Rocky Mountains are affected by recruitment and human-caused mortality. Journal of Wildlife Management 76:108-118.
- Haroldson, M.A., C.C. Schwartz, S. Cherry, and D.S. Moody. 2004. Possible effects of elk harvest on fall distribution of grizzly bears in the Greater Yellowstone Ecosystem. Journal of Wildlife Management 68:129-137.

- Hebblewhite, M., C.A. White, C.G. Nietvelt, J.A. McKenzie, T.E. Hurd, J.M. Fryxell, S.E. Bailey, and P.C. Paquet. 2005. Human activity mediates a trophic cascade caused by wolves. Ecology 86:2135-2144.
- Hegel, T.M., A. Mysterud, T. Ergon, L.E. Loe, F. Huettmann, and N.C. Stenseth. 2009. Seasonal effects on Pacific-based climate on recruitment in a predator-limited large herbivore. Journal of Animal Ecology 78:1-12.
- Hegel, T.M., A. Mysterud, F. Huettmann, and N.C. Stenseth. 2010. Interacting effect of wolves and climate on recruitment in a northern mountain caribou population. Oikos 119:1-9.
- Herrero, S.H. 1970. Human injury inflicted by grizzly bears. Science 170:593-598.
- Herrero, S.H. 1976. Conflicts between man and grizzly bears in the National Parks of North America. Pages 121-145 in M. Pelton, J.W. Leftner, and G.E. Folk, editors. Third International Conference on Bear Research Management. International Union for the Conservation of Nature New Series 40, Morges, Switzerland.
- Herrero, S.H. 2018. Bear Attacks: Their Causes and Avoidance. 3rd edition. Lyon Press, Guilford, Connecticut, USA.
- Hilderbrand, G.V., K. Joly, S.P. Rabinowitch, and B. Shults. 2013a. Wildlife stewardship in National Park Service areas in Alaska: A report to the Alaska Leadership Council Sub-group on Wildlife Harvest on Parklands. Natural Resources Report NPS/AKSO/NRR 2013/663. National Park Service, Fort Collins, Colorado.
- Hilderbrand, G.V., S.P. Rabinowitch, and D. Mills. 2013b. Black bear baiting in Alaska's National Park Service Lands, 1992-2010. Ursus 24:91-96.
- Joly, K., B.W. Dale, W.B. Collins, and L.G. Adams. 2003. Winter habitat use by female caribou in relation to wildlife fires in interior Alaska. Canadian Journal of Zoology 81:1192-1201.
- Joly, K., P.A. Duffy, and T.S. Rupp. 2012. Simulating the effects of climate change on fire regimes in Arctic biomes: implications for caribou and moose habitat. Ecosphere 3:1-18.
- Joly, K., R.R. Jandt, and D.R. Klein. 2009. Decrease of lichens in Arctic ecosystems: the role of wildfire, caribou, reindeer, competition and climate in north-western Alaska. Polar Research 28:433-442.
- Joly, K. D.R. Klein, D.L. Verbyla, T.S. Rupp, and F.S. Chapin III. 2011. Linkages between large-scale climate patterns and the dynamics of Arctic caribou populations. Ecography 34:345-352.
- MacCracken, J.G., and L.A. Viereck. 1990. Browse regrowth and use by moose after fire in interior Alaska. Northwest Science 64:11-18.
- Mace, R.D., and J.S. Waller. 1997. Demography and trend of a local grizzly bear population in a source-sink landscape. Intermountain Journal of Sciences 3:154.

- Marcot, B.G., M.T. Jorgenson, J.P. Lawler, C.M. Handel, and A.R. DeGange. 2015. Projected changes in wildlife habitats in Arctic natural areas of northwest Alaska. Climatic Change 130, 145–154. https://doi.org/10.1007/s10584-015-1354-x.
- McLellan, B.N. 1990. Relationships between human industrial activity and grizzly bears. Ursus 8:57-64.
- McLellan, B.N., F.W. Hovey, R.D. Mace, J.G. Woods, D.W. Carney, M.L. Gibeau, W.L. Wakkinen, and W.F. Kasworm. 1999. Rates and causes of grizzly bear mortality in the interior mountains of British Columbia, Alberta, Montana, Washington, and Idaho. Journal of Wildlife Management 63:911-920.
- McLellan, B.N., and D.M. Shackleton. 1988. Grizzly bears and resource extraction industries: effects of roads on behaviour, habitat use, and demography. Journal of Applied Ecology 25:451-460.
- McLellan, B.N., and D.M. Shackleton. 1989. Grizzly bears and resource extraction industries: habitat displacement in response to seismic exploration, timber harvesting, and road maintenance. Journal of Applied Ecology 26:371-380.
- National Park Service (NPS). 1983. Alagnak Wild River Management Plan.
- NPS. 1984a. Glacier Bay National Park and Preserve General Management Plan.
- NPS. 1984b. Lake Clark National Park and Preserve General Management Plan.
- NPS. 1986a. Aniakchak National Monument and Preserve General Management Plan.
- NPS. 1986b. Bering Land Bridge National Preserve General Management Plan.
- NPS. 1986c. Denali National Park and Preserve General Management Plan.
- NPS. 1986d. Gates of the Arctic National Park and Preserve General Management Plan.
- NPS. 1986e. Katmai National Park and Preserve General Management Plan.
- NPS. 1986f. Noatak National Preserve General Management Plan.
- NPS. 1986g. Wrangell-St. Elias National Park and Preserve General Management Plan.
- NPS. 1986h. Yukon-Charley Rivers National Preserve General Management Plan.
- NPS. 1990a. Final Environmental Impact Statement on Cumulative Impacts of Mining, Denali National Park and Preserve, Alaska. Denver Service Center, NPS D-121A.
- NPS. 1990b. Final Environmental Impact Statement on Cumulative Impacts of Mining, Wrangell-St. Elias National Park and Preserve, Alaska. Denver Service Center, NPS D-120A.

- NPS. 1990c. Final Environmental Impact Statement on Cumulative Impacts of Mining, Yukon-Charley Rivers National Preserve, Alaska. Denver Service Center, NPS D-14A.
- NPS. 2006a. Management Policies 2006. U.S. Department of the Interior, National Park Service.
- NPS. 2006b. Denali National Park and Preserve Final Backcountry Management Plan. General Management Plan Amendment and Environmental Impact Statement.
- NPS. 2009a. Foundation Statement. Aniakchak National Monument and Preserve.
- NPS. 2009b. Foundation Statement. Bering Land Bridge National Preserve.
- NPS. 2009c. Foundation Statement. Gates of the Arctic National Park and Preserve.
- NPS. 2009d. Foundation Statement. Katmai National Park and Preserve.
- NPS. 2009e. Foundation Statement. Lake Clark National Park and Preserve.
- NPS. 2009f. Foundation Statement. Noatak National Preserve.
- NPS. 2010a. Foundation Statement. Glacier Bay National Park and Preserve Alaska.
- NPS. 2010b. Foundation Statement. Wrangell St. Elias National Park and Preserve.
- NPS. 2012. Foundation Statement. Yukon-Charley Rivers National Preserve.
- NPS. 2013a. Finding of No Significant Impacts, Guided Sport Hunting Concessions Environmental Assessment, Bering Land Bridge National Preserve, November 2012.
- NPS. 2013b. Wolf Viewing Declining in Denali National Park, November 27 Denali National Park and Preserve News Release.
- NPS. 2013c. Wilderness Character Narratives for BELA (draft), DENA, GAAR, GLBA, LACL, NOAT, and WRST. On file at NPS Alaska Regional Office.
- NPS. 2014a. Foundation Statement. Denali National Park and Preserve.
- NPS. 2014b. Gates of the Arctic National Park and Preserve General Management Plan Amendment / Wilderness Stewardship Plan / Environmental Assessment.
- NPS. 2014c. Lake Clark National Park and Preserve General Management Plan Amendment.
- NPS. 2018. Sport Hunting and Trapping in National Preserves in Alaska. Environmental Assessment.
- NPS. 2022. Visitor Use Statistics. https://irma.nps.gov/STATS/
- Ripple, W.J., and R. L. Beschta. 2012. Large predators limit herbivore densities in northern forest ecosystems. European Journal of Wildlife Research. Springer-Verlag online publication.

- Rutledge, L.Y., B.R. Patterson, K.J. Mills, K.M. Lovelace, D.L. Murray, and B.N. White. 2010. Protection from harvesting restores the natural social structure of eastern wolf packs. Biological Conservation 143:332-339.
- Ruth, T.K., M.A. Haroldson, K.M. Murphy, P.C. Buotte, M.G. Hornocker, and H.B. Quigley. 2011. Cougar survival and source-sink structure on Greater Yellowstone's northern range. Journal of Wildlife Management 75:1381-1398.
- Salinas, R.A., S. Lenhart, and L.J. Gross. 2005. Control of a metapopulation harvesting model for black bears. Natural Resource Modeling 18:307-321.
- Schwartz, C.C., P.H. Gude, L. Landenburger, M.A. Haroldson, and S. Podruzny. 2012. Impacts of rural development on Yellowstone wildlife: linking grizzly bear *Ursus arctos* demographics with projected residential growth. Wildlife Biology 18:246-257.
- Schwartz, C.C., M.A. Haroldson, G.C. White, R.B. Harris, S. Cherry, K.A. Keating, D. Moody, and C. Servheen. 2006a. Temporal, spatial, and environmental influences on the demographics of grizzly bears in the Greater Yellowstone Ecosystem. Wildlife Monographs 161:1-68.
- Schwartz, C.C., R. B. Harris, and M.A. Haroldson. 2006b. Impacts of spatial and environmental heterogeneity on grizzly bear demographics in the Greater Yellowstone Ecosystem: A source-sink dynamic with management consequences. Wildlife Monographs 161:57-68.
- Vucetich, J.A., D.W. Smith, and D.R. Stahler. 2005. Influence of harvest, climate, and wolf predation on Yellowstone elk 1961-2004. Oikos 111:259-270.
- Weixelman, D.A., R. T. Boyer, and V. Van Ballenberghe. 1998. Diet selection by Alaskan moose during winter: effects of fire and forest succession. Alces 34:213-218.

Appendix A: ANILCA Section 810(a) Subsistence – Summary **Evaluation and Findings**

I. Introduction

Title VIII, Section 810 of 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 NPS revise sport wildlife harvest restrictions in NPS Alaska preserve units where ANILCA Title VIII subsistence is allowed. The NPS is proposing new regulations to not allow various State predator population controls and sport harvest methods on NPS lands in Alaska, among other related regulations. In particular, the NPS proposes to not allow the following, and any similar predator harvest methods and objectives:

- hunting black bears, including sows with cubs, with artificial light while denning;
- harvesting brown bears over bait (which often includes dog food, bacon/meat grease, donuts, and other human food sources); and
- taking wolves and coyotes (including pups) during the denning season when their pelts have little trophy, economic, or subsistence value.

The NPS is granted broad statutory authority under various acts of Congress to manage and regulate activities in areas of the National Park System (16 U.S.C. 1a-2(h), 3, and 3120).

II. The Evaluation Process

Section 810(a) 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 will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition, and (C) reasonable steps will be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions."

Section 201 of ANILCA created new preserve units of the National Park System in Alaska for the following purposes:

Aniakchak National Monument and Preserve, containing approximately one hundred and thirty-eight thousand acres of public lands, was created by ANILCA, Section 201(1) for the following purposes:

The monument and preserve shall be managed for the following purposes, among others: To maintain the caldera and its associated volcanic features and landscape, including the Aniakchak River and other lakes and streams, in their natural state; to study, interpret, and assure continuation of the natural process of biological succession; to protect habitat for, and populations of, fish and wildlife, including, but not limited to, brown/ grizzly bears, moose, caribou, sea lions, seals, and other; marine mammals, geese, swans, and other waterfowl and in a manner consistent with the foregoing, to interpret geological and biological processes for visitors. Subsistence uses by local residents shall be permitted in the monument where such uses are traditional in accordance with the provisions of Title VIII.

Bering Land Bridge National Preserve, containing approximately two million four hundred and fifty-seven thousand acres of public land, was created by ANILCA, Section 201(2) for the following purposes:

To protect and interpret examples of arctic plant communities, volcanic lava flows, ash explosions, coastal formations and other geologic processes; to protect habitat for internationally significant populations of migratory birds; to provide for archeological and paleontological study, in cooperation with Native Alaskans, of the process of plant and animal migration, including man, between North America and the Asian Continent, to protect habitat for, and populations of, fish and wildlife including, but not limited to, marine mammals, brown/grizzly bears, moose and wolves; subject to such reasonable regulations as the Secretary may prescribe, to continue reindeer grazing use, including necessary facilities and equipment, within the areas which on January 1, 1976, were subject to reindeer grazing permits, in accordance with sound range management practices; to protect the viability of subsistence resources; and in a manner consistent with the foregoing, to provide for outdoor recreation and environmental education activities including public access for recreational purposes to the Serpentine Hot Springs area. The Secretary shall permit the continuation of customary patterns and modes of travel during periods of adequate snow cover within a one-hundred-foot right-of-way along either side of an existing route from Deering to the Taylor Highway, subject to such reasonable regulations as the Secretary may promulgate to assure that such travel is consistent with the foregoing purposes.

Gates of the Arctic National Preserve, containing approximately nine hundred thousand acres of Federal lands, was created by ANILCA, Section 201(4)(a) for the following purposes:

The park and preserve shall be managed for the following purposes, among others: To maintain the wild and undeveloped character of the area, including opportunities for visitors to experience solitude, and the natural environmental integrity and scenic beauty of the mountains, forelands, rivers, lakes, and other natural features; to provide continued opportunities, including reasonable access, for mountain climbing, mountaineering, and other wilderness recreational activities, and to protect habitat for and the populations of, fish and wildlife, including, but not limited to, caribou, grizzly bears, Dall sheep moose, wolves, and raptorial birds. Subsistence uses by local residents shall be permitted in the park, where such uses are traditional, in accordance with the provisions of Title VIII.

Lake Clark National Preserve, containing approximately one million two hundred and fourteen thousand acres of public lands, was created by ANILCA, Section 201(7)(a) for the following purposes:

The park and preserve shall be managed for the following purposes, among others: To protect the watershed necessary for perpetuation of the red salmon fishery in Bristol Bay; to maintain unimpaired the scenic beauty and quality of portions of the Alaska Range and the Aleutian Range, including active volcanoes, glaciers, wild rivers, lakes, waterfalls, and alpine meadows in their natural state; and to protect habitat for and populations of fish and wildlife including but not limited to caribou, Dall sheep, brown/grizzly bears, bald eagles, and peregrine falcons. ...Subsistence uses by local residents shall be permitted in the park where such uses are traditional in accordance with the provisions of <u>Title VIII</u>.

Noatak National Preserve, containing approximately six million four hundred and sixty thousand acres of public lands, was created by ANILCA, Section 201(8)(a), for the following purposes:

To maintain the environmental integrity of the Noatak River and adjacent uplands within the preserve in such a manner as to assure the continuation of geological and biological processes unimpaired by adverse human activity; to protect habitat for, and populations of, fish and wildlife, including but not limited to caribou, grizzly bears, Dall sheep, moose, wolves, and for waterfowl, raptors, and other species of birds; to protect archeological resources; and in a manner consistent with the foregoing, to provide opportunities for scientific research. The Secretary may establish a board consisting of scientists and other experts in the field of arctic research in order to assist him in the encouragement and administration of research efforts within the preserve.

Wrangell-Saint Elias National Preserve containing approximately four million one hundred and seventeen thousand acres of public lands was created by ANILCA, Section 201(9), for the following purposes:

The park and preserve shall be managed for the following purposes, among others: To maintain unimpaired the scenic beauty and quality of high mountain peaks, foothills, glacial systems, lakes, and streams, valleys, and coastal landscapes in their natural state; to protect habitat for, and populations of, fish and wildlife including but not limited to caribou, brown/grizzly bears, Dall sheep, moose, wolves, trumpeter swans and other waterfowl, and marine mammals; and to provide continued opportunities including reasonable access for mountain climbing, mountaineering, and other wilderness recreational activities. Subsistence uses by local residents shall be permitted in the park, where such uses are traditional, in accordance with the provisions of Title VIII.

Yukon-Charley Rivers National Preserve, containing approximately one million seven hundred and thirteen thousand acres of public lands, was created by ANILCA, Section 201(9), for the following purposes:

The preserve shall be managed for the following purposes, among others: To maintain the environmental integrity of the entire Charley River basin, including streams, lakes and other natural features, in its undeveloped natural condition for public benefit and scientific study; to protect habitat for, and populations of, fish and wildlife, including but not limited to the peregrine falcons and other raptorial birds, caribou, moose, Dall sheep, grizzly bears, and wolves; and in a manner consistent with the foregoing, to protect and interpret historical sites and events associated with the gold rush on the Yukon River and the geological and paleontological history and cultural prehistory of the area. Except at such times when and locations where to do so would be inconsistent with the purposes of the preserve, the Secretary shall permit aircraft to continue to land at sites in the Upper Charley River watershed.

ADDITIONS TO EXISTING AREAS

Section 202 of ANILCA created new units and additions to the following Alaska NPS areas:

Glacier Bay National Monument was expanded by the addition of an area containing approximately five hundred and twenty-three thousand acres of Federal land. Approximately fifty-seven thousand acres of additional public land was established as Glacier Bay National Preserve. The monument was re-designated as "Glacier Bay National Park". The monument addition and preserve were created by ANILCA, Section 202(1), for the following purposes:

To protect a segment of the Alsek River, fish and wildlife habitats and migration routes and a portion of the Fairweather Range including the northwest slope of Mount Fairweather. Lands, waters, and interests therein within the boundary of the park and preserve which were within the boundary of any national forest are hereby excluded from such national forest and the boundary of such national forest is hereby revised accordingly.

Approximately three hundred and eight thousand acres of additional public land was established as Katmai National Preserve. The park and preserve were created by ANILCA, Section 202(2), for the following purposes:

To protect habitats for, and populations of, fish and wildlife including, but not limited to, high concentrations of brown/grizzly bears and their denning areas; to maintain unimpaired the water habitat for significant salmon populations; and to protect scenic, geological, cultural and recreational features.

Approximately one million three hundred and thirty thousand acres of additional public land was established as Denali National Preserve. The park additions and preserve were created by ANILCA, Section 202(3)(a) for the following purposes:

To protect and interpret the entire mountain massif, and additional scenic mountain peaks and formations; and to protect habitat for, and populations of fish and wildlife including, but not limited to, brown/grizzly bears, moose, caribou, Dall sheep, wolves, swans and other waterfowl; and to provide continued opportunities, including reasonable access, for mountain climbing, mountaineering and other wilderness recreational activities. That portion of the Alaska Railroad right-of-way within the park shall be subject to such laws and regulations applicable to the protection of fish and wildlife and other park values as the Secretary, with the concurrence of the Secretary of Transportation, may determine. Subsistence uses by local residents shall be permitted in the additions to the park where such uses are traditional in accordance with the provisions in Title VIII.

GENERAL ADMINISTRATION

Among other general administrative provisions, Section 203 of ANILCA states, "Subsistence uses by local residents shall be allowed in national preserves."

TITLE VI, PART C – ADDITION TO NATIONAL WILD AND SCENIC RIVERS SYSTEM LOCATED OUTSIDE NATIONAL PARK SYSTEM UNITS

Section 603(a) of ANILCA designated the following wild and scenic river outside the national park system in Alaska:

ALAGNAK, ALASKA. – Those segments or portions of the main stem and Nonvianuk tributary lying outside and westward of the Katmai National Park /Preserve and running to the west boundary of township 13 south, range 43 west; to be administered by the Secretary of the Interior.

III. Proposed Action on Federal Lands

A. Alternative 1: No-Action

Under the no-action alternative, the 2020 NPS wildlife regulations would not be amended, and all State laws and regulations that do not conflict with existing federal laws or regulations would apply on the preserves. Actions considered by the NPS to be inconsistent with the idea of "sport" hunting, such as taking black bear cubs, and sows with cubs, with artificial light at den sites, or taking wolves and coyotes (including pups) during the denning season, would continue to be authorized by the State in certain locations on the preserves. State hunting regulations that currently prohibit acts such as shooting from or on a road, or using poison to kill or incapacitate wildlife, would not be permanently adopted and could be subject to change in the future. Restriction on state authorized harvest are unlikely. Finally, questions about whether under a trapping license, trapping can include any method of taking furbearers would be unresolved, which could include the use of firearms depending upon the terms of the license.

B. Alternative 2 (Proposed Action and Preferred Alternative): Promulgate NPS Wildlife Harvest Regulations in Alaska National Preserves Similar to 2015 NPS Regulations

The NPS is proposing through rulemaking to prohibit the same sport hunting and trapping methods that were prohibited in the 2015 Rule by focusing on three specific areas: (1) the meaning and scope of hunting for "sport purposes" under ANILCA; (2) bear baiting; and (3) State law addressing predator harvest. The NPS would prohibit methods considered inconsistent with "sport" hunting, including taking big game while the animal is swimming, taking wildlife from a motorboat, taking wolves and coyotes (including pups) during their denning period (May 1-August 9), and taking cubs or female bears with cubs. The NPS would also formally adopt in federal regulations the State general hunting regulations that prohibit the acts listed in Table 1 of the EA. The NPS would prohibit bear baiting in the preserves for "sport" hunting; prohibit predator control or predator reduction on the preserves. The NPS would therefore not allow harvest practices and activities or management actions that involve predator reduction efforts and associated natural ecological processes to increase harvest of ungulates, as these are inconsistent with NPS policies. The NPS would revise the definition of "trapping" in 36 Code of Federal Regulations (CFR) Part 13 to clarify that trapping only includes activities that use a "trap" as that term is defined in 36 CFR Part 13.

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.

Comprehensive descriptions of the affected subsistence environment within each Alaska national park system unit can be found in:

- General Management Plans (GMPs) for each NPS unit (see Appendix D for links)
- ADFG General and Subsistence Harvest Information and Publications (http://www.state.ak.us/adfg)
- Federal Subsistence Management Regulations, Office of Subsistence Management, USFWS (http://alaska.fws.gov/asm/home.html)
- NPS Management Policies, NPS 2006a; Information and Publications (http://www.nps.gov/policy)
- Alaska Subsistence, NPS Management History, NPS 2002
- Title 36 CFR, 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 impact on existing subsistence activities, three evaluation criteria were analyzed relative to existing subsistence resources that could be impacted. The evaluation criteria are:

- 1. The potential to reduce important subsistence fish and wildlife populations by (a) reductions in abundance; (b) redistribution of subsistence resources; or (c) habitat losses;
- 2. The effect the action might have on subsistence fishermen or hunter access;
- 3. The potential for the action to increase fisherman or hunter competition for subsistence resources.

Potential Impacts of the No-Action Alternative

- 1. The potential to impact populations:
- (a) Effects on Population Levels:

The no-action alternative implementing all State wildlife harvest regulations in national preserves in Alaska may cause a decline in predator populations in the affected areas due to higher levels of sport

harvest and trapping, which could reduce the opportunity for subsistence trappers to trap wolves and coyotes or subsistence harvest of these species. Prey populations may increase in some areas as a result of reduced predator populations, which could increase harvest of prey species such as caribou and moose.

(b) Redistribution of Resources:

The no-action alternative could result in a higher take of bears, wolves, and coyotes, which may displace resources for subsistence trappers and hunters in the affected areas. Also, where prey populations increase as a result of predator reductions, additional sport hunters may concentrate in these areas and result in greater sport harvest of prey species like caribou and moose.

(c) Habitat Loss:

The no-action alternative could result in increased prey distribution, densities, and populations and possible increased overgrazing and habitat loss, which result in reduced availability of subsistence resources over time.

Impacts to subsistence resources and habitat from the no-action alternative may have adverse effects on subsistence uses; however, in the event of a resource shortage, ANILCA requires non-subsistence harvest be limited before Title VIII subsistence harvest. The NPS would work closely with subsistence users to assure adequate access to subsistence resources in the affected area.

2. Restriction of Access:

Where harvests of wolves and coyotes during the denning season are successful, the no-action alternative may alter current subsistence use patterns for trapping and hunting of these species. The use of human foods or other items not naturally occurring in the areas as bait to attract bears to a kill site may result in more nuisance bears at subsistence camps because some bears would become habituated to human foods.

3. Increase in Competition:

The no-action alternative may result in restrictions and/or increased competition for ANILCA Title VIII subsistence resources on federal public lands within the affected areas because predators would become less available for subsistence users and increased populations of prey species would likely attract more sport hunters to these national preserve areas.

Potential Impacts of Alternative 2

- 1. The potential to impact populations:
- (a) Effects on Population Levels:

The proposed action to implement new NPS regulations for national preserves in Alaska is not expected to cause a significant decline or change in any wildlife species in the affected areas.

(b) Redistribution of Resources:

The proposed actions are not expected to cause a significant displacement of subsistence resources in the affected areas.

(c) Habitat Loss:

The proposed actions are expected to be beneficial for maintaining habitat for key subsistence resources within the affected areas. Proposed actions are expected to maintain at natural levels the distribution, densities, and availability of subsistence resources.

Impacts to subsistence resources and habitat from the proposed actions are not expected to have adverse effects on subsistence uses, because subsistence uses would have a priority for ungulate resources if populations decline to the point that sport harvest overly competes for subsistence uses of the desired resources. The NPS would work closely with subsistence users to assure adequate access to subsistence resources in the affected area.

4. Restriction of Access:

The proposed actions are not expected to significantly restrict current subsistence use patterns. Access for Title VIII subsistence uses within NPS areas is permitted according to Federal and State law and regulations. The use of human foods or other items not naturally occurring in the areas as bait to attract bears to a kill site may be discontinued under the proposed regulation.

5. Increase in Competition:

The proposed action is not expected to significantly restrict or increase competition for ANILCA Title VIII subsistence resources on Federal public lands within the affected areas.

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

Two alternatives were analyzed for this project and are described in detail in the Environmental Assessment. No other alternatives were identified that would reduce or eliminate the use of NPS public lands needed for subsistence purposes. Neither of the two alternatives proposed would significantly restrict subsistence uses on other adjacent federally managed lands.

VIII. Findings

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

Appendix B: Additional Information on the Topics of Sport Hunting Under ANILCA; Bear Baiting; and State Law Addressing Predator Harvest

B1. Sport Hunting Under ANILCA

Congress placed a priority on the customary and traditional uses of wild renewable resources by local rural residents under ANILCA (Sec. 101(c)). By promulgating a new rule similar to the 2015 Rule, NPS would be supporting this priority for subsistence uses by local rural residents. The proposed regulation would reinstate the prohibitions in the 2015 Rule on methods of harvest that are not compatible with generally accepted notions of "sport" hunting. The NPS would define the terms "big game," "cub bear," "fur animal," and "furbearer," which are used in the table of prohibited harvest methods, in the same way they were defined in the 2015 Rule. The NPS is also considering whether it was appropriate for the 2020 Rule to change its interpretation of the term "sport" from the 2015 Rule as one of the implications is that the 2020 Rule expanded sport hunting opportunities for nonlocal residents who are not qualified to harvest wildlife under federal subsistence laws as well as out-of-state hunters.

In the spring of 2022, the NPS reached out to Tribes and ANCSA Corporations that are most likely to be impacted by the 2020 Rule. Most of these entities expressed concern that increasing harvest opportunities under the 2020 Rule and ANILCA's authorization for sport hunting and trapping could result in increased competition from individuals that are not local to the area. In addition, most of these entities do not believe there is a current demand to engage in these harvest practices in national preserves (other than limited demand to bait bears in preserve lands in Wrangell-St. Elias National Park and Preserve) and expressed a preference that the NPS disallow practices that could encourage more nonlocal hunters to visit the area and compete for wildlife resources. This feedback illustrates a tension between the interests conveyed and the outcome of the 2020 Rule which increased harvest opportunities for nonlocal residents.

In the 2015 Rule, the NPS said harvest of wildlife for "sport purposes" carries with it concepts of fairness or fair chase as articulated by some hunting organizations (e.g., Boone and Crocket Club 2022), as not providing an unfair advantage to the hunter and allowing the game to have a reasonable chance of escape. This involves avoiding the targeting of animals that are particularly vulnerable, such as while swimming, while young, or while caring for their young. While the NPS understands that the exact boundaries of this concept involve some level of ambiguity, the NPS believes the practices addressed in this rule fall outside the norms of "sport" hunting. These constructs do not necessarily apply to subsistence practices which emphasize cultural traditions and acquisition of calories for sustenance.

In the 2020 Rule, the NPS changed its interpretation by saying the term "sport" only serves to differentiate harvest under State regulations from harvest under federal subsistence regulations. As a result, practices that some might consider only appropriate for subsistence harvest by local rural residents now may be used by anyone harvesting for "sport purposes" under State law. As conveyed by the Tribes and ANCSA Corporations, this increases competition between federal subsistence hunters and sport hunters by expanding hunting opportunities to those who are not local rural residents. It also allows for sport hunters to engage in practices that are not considered sporting under notions of the term as described above.

The examples below demonstrate that the NPS's interpretation of the term "sport" under the 2015 Rule created a result that is more in line with the majority of feedback received to date from Tribes and ANCSA Corporations:

- Swimming caribou. Under the 2015 Rule, only qualified rural residents could harvest swimming caribou in national preserves in accordance with federal subsistence regulations, which recognize the practice as part of a customary and traditional subsistence lifestyle. Individuals from Anchorage, Fairbanks, Juneau, and other nonrural areas in Alaska, as well as out-of-state hunters, could not harvest swimming caribou in national preserves. Under the 2020 Rule, residents of nonrural areas in Alaska (including Anchorage, Fairbanks, and Juneau) and out-of-state hunters can harvest swimming caribou in national preserves in accordance with State law under ANILCA's authorization for harvest for "sport purposes."
- Black bear cubs and sows with cubs. Under the 2015 Rule, only a qualified rural resident could harvest bear cubs and sows with cubs in accordance with federal subsistence regulations, which recognize this practice as an uncommon but customary and traditional harvest practice by some Native cultures in northern Alaska. Accordingly, while the NPS supported the activity under federal subsistence regulations, the NPS did not support it under ANILCA's authorization for "sport" hunting." Under the 2020 Rule (which deferred to State law), harvest of bear cubs and sows with cubs is not limited based on where one resides. Accordingly, under the 2020 Rule any hunter (including those from out-of-state) can harvest bear cubs and sows with cubs at den sites in national preserves under ANILCA's authorization for harvest for "sport" purposes.
- Take of wolves and coyotes, including pups, during the denning season. The 2015 Rule prohibited sport hunters from taking wolves and coyotes during the denning season, a time when their pelts are not in prime condition, which can leave pups and cubs orphaned and left to starve. Under the 2020 Rule, any hunter (including those from out of state) can harvest wolves and coyotes year-round, including pups during the denning season. This reduces the number of wolves and coyotes available to harvest when their pelts are fuller and therefore more desirable to subsistence users and other trappers.

B2. Bear Baiting

Similar to the 2015 Rule, the NPS proposes to prohibit bear baiting in national preserves in Alaska due to the risks to humans from bears defending a food source, and the dangers of human food-habituated bears. Bait that hunters typically use to attract bears includes processed foods like bread, pastries, dog food, and bacon grease. As explained in Sections 3.1 and 3.3, the proposed action would lower the risk that bears will associate food at bait stations with humans and become conditioned to eating human-produced foods, thereby creating a public safety concern. The proposed action would also lower the probability of visitors encountering a bait station where bears may attack to defend a food source.

In the 2020 Rule, the NPS determined that the lack of conclusive evidence that bear baiting poses safety concerns justified allowing bear baiting. While the NPS acknowledges the lack of peer-

reviewed data demonstrating that bear baiting poses a public safety risk, this data gap exists primarily because rigorous studies specific to this point are logistically and ethically infeasible.

Additionally, the determination made by the NPS in the 2020 Rule did not fully consider the vast experience and knowledge of recognized experts and professional resource managers.

Feedback received to date from Tribes and ANCSA Corporations indicates that baiting bears is not a common activity in or near national preserves and not something done commonly by local rural residents. Many of the entities voiced support for prohibiting baiting altogether, limiting bait to natural items, increasing buffer zones around developments, or requiring a permit. On the other hand, a minority—mostly entities affiliated with the Wrangell-St. Elias area—recommended continuing to allow sport hunters to harvest bears over bait, including with use of processed foods like donuts and dog food. Consultation and communication with Tribes and ANCSA Corporations is ongoing, and feedback will continue to be considered by the NPS throughout the rulemaking process.

In addition to the risks explained above and in Chapter 3, there are other considerations that support the proposal to prohibit all bear baiting. The NPS is guided by its mandates under the NPS Organic Act to conserve wildlife and under ANILCA to protect wildlife populations. Food-conditioned bears are more likely to be killed by authorities or by the public in defense of life or property. While the NPS supports wildlife harvest as authorized in ANILCA, it cannot promote activities that increase non-harvest mortalities of bears.

B3. State Law Addressing Predator Harvest

The proposed regulation also would address opportunities to harvest predators that are authorized by the State. NPS policy interprets and implements the NPS Organic Act. NPS Management Policies require the NPS to manage National Park System units for natural processes, including natural wildlife fluctuations, abundances, and behaviors, and specifically prohibit the NPS from engaging in predator reduction efforts to benefit one harvested species over another or allowing others to do so on NPS lands. (NPS 2006a, Ch. 4). These activities are prohibited by policy even if they do not actually reduce predator populations or increase the number of prey species available to hunters. The NPS believes the 2020 Rule is in tension with these policies based upon the information it collected over a period of years before the publication of the 2015 Rule. This information indicates that the predator harvest practices that were allowed by the State were allowed for the purpose of benefited prey species over predators. Furthermore, ADFG has stated that "Some IM [intensive management] programs had research funding to increase species monitoring, but most programs did not have enough funding for research experimental designs to calculate a precise degree of predator reduction ("effectiveness" of predator control) or to show cause and effect in prey response. Factors other than predator control, such as wild land fires, winter severity, or prey movements may have also influenced prey abundance estimates" (ADFG 2022a). For these reasons, the proposed regulation would reinstate the prohibitions in the 2015 Rule on methods of harvest that target predators for the purpose of increasing populations of prey species for human harvest. In addition, the proposed regulation would add the following statement to its regulations to clarify that predator control is not allowed on NPS lands: "Actions to reduce the numbers of native species for the purpose of increasing the numbers of harvested species (e.g., predator control or predator reduction) are not allowed."

Appendix C: Summary Table of ANILCA National Preserve Areas, Wilderness Areas, and Presence of Key Wilderness Species

Table C1: Summary Table of ANILCA National Preserve Areas, Wilderness Areas, and Presence of Key Wilderness 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
Total 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 Acres	0	0	0	0	0	60,000	348,000	5,821,000	1,866,000	0
Eligible Wilderness ¹ Acres	TBD ²	2,509,360	TBD ²	914,000	100	268,000	903,000	759,000	2,249,000	1,815,000
Wolves	х	Х	Х	Х	Х	х	х	Х	Х	Х
Brown Bear	Х	Х	Х	Х	Х	Х	Х	Х	X	х
Moose	Х	Х	Х	X	Х	х	Х	Х	Х	Х
Caribou	Х	Х	Х	X		х	Х	Х	Х	Х
Dall Sheep			Х	Х			Х	Х	x	х

Key:

A capital, bolded X means this key species was specifically noted in ANILCA for this area. A lowercase, non-bolded x means this species is present in the area, but not highlighted in ANILCA as a key species.

Notes:

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 GMPs and ANILCA Section 1317 required wilderness area reviews for suitability or non-suitability, which are included with the GMP documents.

¹ Acres are rounded to the nearest 1,000 acres. The 100 eligible acres in Glacier Bay Preserve would be contiguous with designated wilderness in the park. Estimated eligible areas for Noatak National Preserve and Yukon Charley Rivers National Preserve are from the 1986 GMPs and are not yet updated.

²To Be Determined; indicates the acres are yet to be determined for Aniakchak National Preserve and Denali National Preserve.

Appendix D: Links to Alaska NPS Park and Preserve General Management Plans and Foundation Statements									

Internet Links to General Management Plans and Foundation Statements Referenced in this Environmental Assessment

National Park Service (NPS). 1983. Alagnak Wild River Management Plan.

Link: https://www.nps.gov/alag/learn/management/portfolio-of-management-plans.htm

NPS. 1984a. Glacier Bay National Park and Preserve General Management Plan.

Link: https://www.nps.gov/glba/learn/management/portfolio-of-management-plans.htm

NPS. 1984b. Lake Clark National Park and Preserve General Management Plan.

Link: https://www.nps.gov/lacl/getinvolved/portfolio-of-management-plans.htm

NPS. 1986a. Aniakchak National Monument and Preserve General Management Plan.

Link: https://www.nps.gov/ania/learn/management/portfolio-of-management-plans.htm

NPS. 1986b. Bering Land Bridge National Preserve General Management Plan.

Link: https://archive.org/details/generalmanagemen00beri

NPS. 1986c. Denali National Park and Preserve General Management Plan.

Link: https://www.nps.gov/dena/getinvolved/planning-portfolio.htm

NPS. 1986d. Gates of the Arctic National Park and Preserve General Management Plan.

Link: https://www.nps.gov/gaar/learn/management/planning-portfolio.htm

NPS. 1986e. Katmai National Park and Preserve General Management Plan.

Link: https://www.nps.gov/katm/learn/management/portfolio-of-management-plans.htm

NPS. 1986f. Noatak National Preserve General Management Plan.

Link: https://www.nps.gov/noat/learn/management/planning-portfolio.htm

NPS. 1986g. Wrangell-St. Elias National Park and Preserve General Management Plan.

Link: https://www.nps.gov/wrst/getinvolved/park-planning.htm

NPS. 1986h. Yukon-Charley Rivers National Preserve General Management Plan.

Link: https://npgallery.nps.gov/AssetDetail/5134fd5b-2279-48cd-811b-4657c7ac3b42

NPS. 2006b. Denali National Park and Preserve Final Backcountry Management Plan. General

Management Plan Amendment and Environmental Impact Statement.

Link: https://www.nps.gov/dena/getinvolved/planning-portfolio.htm

NPS. 2009a. Foundation Statement. Aniakchak National Monument and Preserve.

Link: https://www.nps.gov/ania/learn/management/portfolio-of-management-plans.htm

NPS. 2009b. Foundation Statement. Bering Land Bridge National Preserve.

Link: http://www.npshistory.com/publications/foundation-documents/bela-fs-

2009.pdf#:~:text=The%20Foundation%20Statement%20is%20a%20formal%20description%20of

knowledge%20acquired%20since%20the%20preserve%20was%20originally%20established.

NPS. 2009c. Foundation Statement. Gates of the Arctic National Park and Preserve.

Link: https://www.nps.gov/gaar/learn/management/planning-portfolio.htm

NPS. 2009d. Foundation Statement. Katmai National Park and Preserve.

Link: https://www.nps.gov/katm/learn/management/portfolio-of-management-plans.htm

NPS. 2009e. Foundation Statement. Lake Clark National Park and Preserve.

Link: https://www.nps.gov/lacl/getinvolved/portfolio-of-management-plans.htm

NPS. 2009f. Foundation Statement. Noatak National Preserve.

Link: https://www.nps.gov/noat/learn/management/planning-portfolio.htm

NPS. 2010a. Foundation Statement. Glacier Bay National Park and Preserve.

Link: https://www.nps.gov/glba/learn/management/portfolio-of-management-plans.htm

NPS. 2010b. Foundation Statement. Wrangell St. Elias National Park and Preserve.

Link: https://www.nps.gov/wrst/getinvolved/park-planning.htm

NPS. 2012. Foundation Statement. Yukon-Charley Rivers National Preserve.

Link: https://npgallery.nps.gov/AssetDetail/5134fd5b-2279-48cd-811b-4657c7ac3b42

NPS. 2014a. Foundation Statement. Denali National Park and Preserve.

Link: https://www.nps.gov/dena/getinvolved/planning-portfolio.htm

NPS. 2014b. Gates of the Arctic National Park and Preserve General Management Plan Amendment / Wilderness Stewardship Plan / Environmental Assessment.

Link:

https://www.nps.gov/gaar/learn/management/upload/2014_GAAR_GeneralManagementPlan Amendment_WildernessStewardshipPlan_EA_508.pdf

NPS. 2014c. Lake Clark National Park and Preserve General Management Plan Amendment.

Link: https://www.nps.gov/lacl/getinvolved/portfolio-of-management-plans.htm