

**National Park Service
U.S. Department of the Interior**

Alaska Region



Finding of No Significant Impact

**Hunting Guide Concessions Environmental Assessment
Katmai National Preserve, Alaska**

September 2012

Recommended: *Ralph Moore* 9/13/12
Superintendent, Katmai National Park and Preserve Date

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Regional Director, Alaska Date

FINDING OF NO SIGNIFICANT IMPACT

Hunting Guide Concessions In Katmai National Preserve, Alaska September 2012

The National Park Service (NPS) is soliciting proposals for guided sport hunting services in Katmai National Preserve (Preserve). Guided hunting has occurred in this area before and since the passage of the Alaska National Interest Lands Conservation Act of 1980 (ANILCA), which established the Preserve. Sport hunting is allowed in the Preserve under Federal and non-conflicting State laws and regulations (for GMU 9C), pursuant to ANILCA Sections 203 and 1313 and 36 CFR section 13.40(d). This action will continue guided sport hunting in the Preserve by awarding one or two concession contracts for a 10 year period. The NPS is revising the guide area boundaries and annual client limits for each guide area. The purpose of this revision is to provide for a more equitable distribution of business opportunities and clients to guide area resources while maintaining the purposes and values for which the area was established.

The environmental assessment (EA) evaluated the effects of three alternatives for guided sport hunting in Katmai National Preserve: A) No Action or no contracts to be awarded for guided hunting services; B) Status Quo with two guide areas including one small guide area with 3 annual clients and one large area with 25 annual clients; and C) two more equitably sized guide areas authorizing 12 and 16 clients, respectively.

The NPS has selected Alternative C (*NPS Preferred Alternative*), which will maintain the recent past level of guided clients per year at 28 and adjust the guide areas to two more equitably-sized areas using easily recognizable topographical features. The 141,000-acre Sugarloaf Guide area will be authorized for up to with 12 clients per year, and the 187,000-acre Moraine Creek Guide area will be authorized for up to 16 clients per year.

About 630 comment letters, emails, or postings to the NPS Planning, Environment, and Public Comment (PEPC) web site were received on this EA during a 40-day public comment period from June 25 to August 2, 2012. The public comment period was extended beyond the original 30-day period because the NPS has several major documents out for public review and the review period spanned the July 4 holiday. The extended review period accommodated receipt of comments from area bear-viewing guides, biologists, and environmental organizations.

ALTERNATIVES

Three alternatives were evaluated in the EA.

Alternative A - No Action

Under the No Action alternative, the NPS would not issue a prospectus for guided hunting and concession contracts would not be awarded to provide guided hunting services within Katmai National Preserve for the next 10 years. Subsistence and sport hunting without guides could

continue in the area. Pursuant to State of Alaska regulations, nonresident citizens of the USA could not hunt brown bear in the Preserve without a licensed guide unless accompanied by a close relative who is an Alaska resident at least 19 years old with a license to hunt in Alaska, and nonresident foreigners would not be allowed to hunt any big game species in the Preserve because under State law they must be accompanied by a guide licensed with the State of Alaska. The current contract for guided hunting services in the relatively small Sugarloaf guide area with 3 annual clients would expire at the end of 2012. The concession contract for the much larger Moraine Creek Guide area with up to 25 clients annually was terminated for breach of contract. This alternative provided a baseline for evaluating the effects of the two action alternatives.

Alternative B – Award Guided Hunting Contracts for the original Sugarloaf and the Moraine Creek Guide Areas in the Preserve (*Status Quo*)

Under the Status Quo Alternative the NPS would issue a prospectus to solicit offers for two guided hunting concessioners in the Preserve. One concessioner would be authorized to guide up to 3 clients each year in the 60,000-acre Sugarloaf Guide Area, and the other concessioner would be authorized to guide up to 25 clients each year in the 268,000-acre Moraine Creek Guide Area.

This alternative would provide for a maximum of 28 clients annually, or up to 280 clients over the ten-year contract period. It is expected that guides would tend to focus on harvest of moose in the Sugarloaf guide area and brown bear in the Moraine Creek guide area. This alternative would continue the status quo guide areas and client numbers in place since 2003(until the Moraine Creek contract was terminated in 2009).

Alternative C - Award Guided Hunting Contracts for the Revised Sugarloaf and Moraine Creek Guide Areas in the Preserve (*NPS Preferred Alternative*)

The NPS would issue a prospectus to solicit offers for two guided hunting services in the Preserve. One concessioner would be authorized to guide up to 12 clients each year in the revised Sugarloaf guide area, and the other concessioner would be allowed to guide up to 16 clients each year in the revised Moraine Creek Guide Area (see attached figure). The Sugarloaf Guide Area would be enlarged to about 141,300 acres to include the Preserve area south of the Alagnak River to its outlet from Kukaklek Lake, south of Kukaklek Lake to the outlet of Nanuktuk Creek, and south of Nanuktuk Creek to the headwaters of its most northerly stem. The size of the Moraine Creek Guide Area would be reduced to about 186,700 acres to include all other NPS Preserve lands north and east of Nanuktuk Creek and north of the Alagnak River and Kukaklek Lake.

This alternative would provide for a maximum of 28 clients annually, or up to 280 clients over the ten-year contract period. This alternative is designed to provide more equitable guiding opportunities in the two guide areas within the Preserve in terms of guide area size and authorized client numbers.

PUBLIC INVOLVEMENT

The EA was issued for public review and comment from June 25 to August 2, 2012. The EA was mailed to about 75 parties including state and federal agencies, federally recognized tribes in the area, communities, organizations, and individuals, and it was posted on the NPS PEPC website. A press release announced the availability of the EA to the general public, and a second press release announced the extension of the comment period.

Comments on the EA were received from the State of Alaska, National Parks and Conservation Association (NPCA), the Alaska Professional Hunters Association (APHA), the Alaska Center for the Environment (ACE), various guide businesses, Friends of McNeil River, and over 600 individuals. The NPS identified 15 substantive comments that either raised a new issue not fully addressed in the EA, suggested a reasonable new alternative, proposed or suggested additional mitigation measures, or provided new information or facts that have bearing on the decision. NPS Responses to Public Comment (Appendix A) and Errata (Appendix B) are attached to this FONSI.

DECISION

The NPS decision is to select Alternative C (*Award Guided Hunting Contracts for the Revised Sugarloaf and Moraine Creek Guide Areas in the Preserve*). Alternative C enables the NPS to make a major adjustment to areas and associated client limits for guided hunting service contracts within the Preserve to better apportion area resources and business opportunities and to provide better options for prospective hunters. Furthermore, this alternative continues to provide an opportunity for all interested U.S. citizens to hunt brown bear and foreign hunters to hunt any big game in the Katmai National Preserve pursuant to federal and State of Alaska laws and regulations.

RATIONALE for the DECISION

Alternative C (*Award Guided Hunting Contracts for the Revised Sugarloaf and Moraine Creek Guide Areas in the Preserve*) satisfies the purpose and need for the project better than the no-action alternative and provides a more equitable distribution of the area resources and business opportunities for guided hunting within the Preserve than Alternative B. Guided sport hunting services are considered to be an appropriate and necessary means to provide hunting opportunities for both Alaska resident and nonresident hunters in Alaska national preserves.

The best available biological data show that observed brown bear numbers in Katmai National Preserve have increased since ANILCA and there is no evidence to show that “high concentrations of brown bears” (EA pages 3-3 and 3-4) have been adversely affected by ongoing guided and unguided hunting in the past 30 years.

Alternative A (*No Action and Environmentally Preferable Alternative*) was not selected because it would result in the termination of guided hunting services within the Preserve, which have occurred both before and after the passage of ANILCA in 1980. Alternative A would eliminate

the opportunity for nonresident U.S. citizens and foreigners to hunt brown bear and other big game species in the preserve.

SIGNIFICANCE CRITERIA

The preferred alternative will not have a significant effect on the human environment. This conclusion is based on the following examination of the significance criteria defined in 40 CFR Section 1508.27.”

(1) Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.

The EA evaluated the effects of Alternatives A through C on wildlife (brown bear, moose, and caribou), subsistence uses, recreational uses, and local and regional economies. As documented in the EA the effects of the selected alternative would be mostly minor and adverse or beneficial, depending on the impact topic. There would be no significant restriction of ANILCA Title VIII subsistence uses.

(2) The degree to which the proposed action affects public health or safety.

Authorizing guided sport hunting in two revised more equitably sized guide areas would not likely result in any change with regard to public safety and hunting practices in the Preserve. Because sport hunting seasons are mostly at times when sport fishing and bear-viewing do not occur in the area, safety concerns for other recreational users in the area are not expected.

(3) Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetland, wild and scenic rivers, or ecologically critical areas.

No known important historic or cultural sites and ecologically critical areas would be adversely affected from ongoing guided sport hunting in the Preserve. A portion of the Katmai Wilderness occurs in the southwest part of the Preserve Sport hunting is a consistent purpose and use of the Preserve.

(4) The degree to which effects on the quality of the human environment are likely to be highly controversial.

The guided hunting concession contracts are not expected to have a measureable effect on the quality of the human environment because guided sport hunting has occurred for decades in the Preserve area up until the present time with no apparent adverse effects on the resources and values for which the area was established. Some parties expressed concern that guided sport hunting would adversely affect “high concentrations of brown bears” in the Preserve pursuant to ANILCA section 202(2), but biological data show that brown bear numbers and concentrations have increased in recent years, most probably due to large runs of salmon.

(5) The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.

The effects of the selected alternative do not involve unique or unknown risks.

(6) The degree to which the action may establish a precedent of future actions with significant effects or represents a decision in principle about a future consideration.

Some parties expressed concern that this action could set a precedent for other NPS areas in Alaska. Sport hunting in national preserves in Alaska is authorized pursuant to ANILCA Sections 203 and 1313 and guided and unguided sport hunting have occurred in this area since the Act passed and prior to the area's establishment.

(7) Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.

Subsistence and unguided sport hunting also occur in the Preserve; however, subsistence take of brown bears in the Preserve is very low to nonexistent, and the take of brown bears by unguided sport hunters tends to be about 30% of the total take in the area. The guided sport hunter take of moose in the Preserve has been low (0-4 moose/year) and is expected to be even lower if a guide concession in the expanded Sugarloaf Guide area has potential to guide more clients for brown bears. The ongoing harvest of brown bears by guided hunters and a slightly reduced harvest of moose could result in slightly more moose available for local rural residents. The subsistence and unguided sport hunter take of caribou is very low at present and is not expected to become viable until caribou return to the area in great numbers. The cumulative effect of guided sport hunting take on caribou is expected to be negligible because caribou generally occur in large migratory herds. The overall effect of guided hunting on wildlife populations in the Katmai National Preserve area in addition to hunting by unguided sport and subsistence hunters is expected to be minor.

(8) The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.

The selected alternative would not adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places.

(9) The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.

The selected alternative would not adversely affect an endangered or threatened species or its habitat.

(10) Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

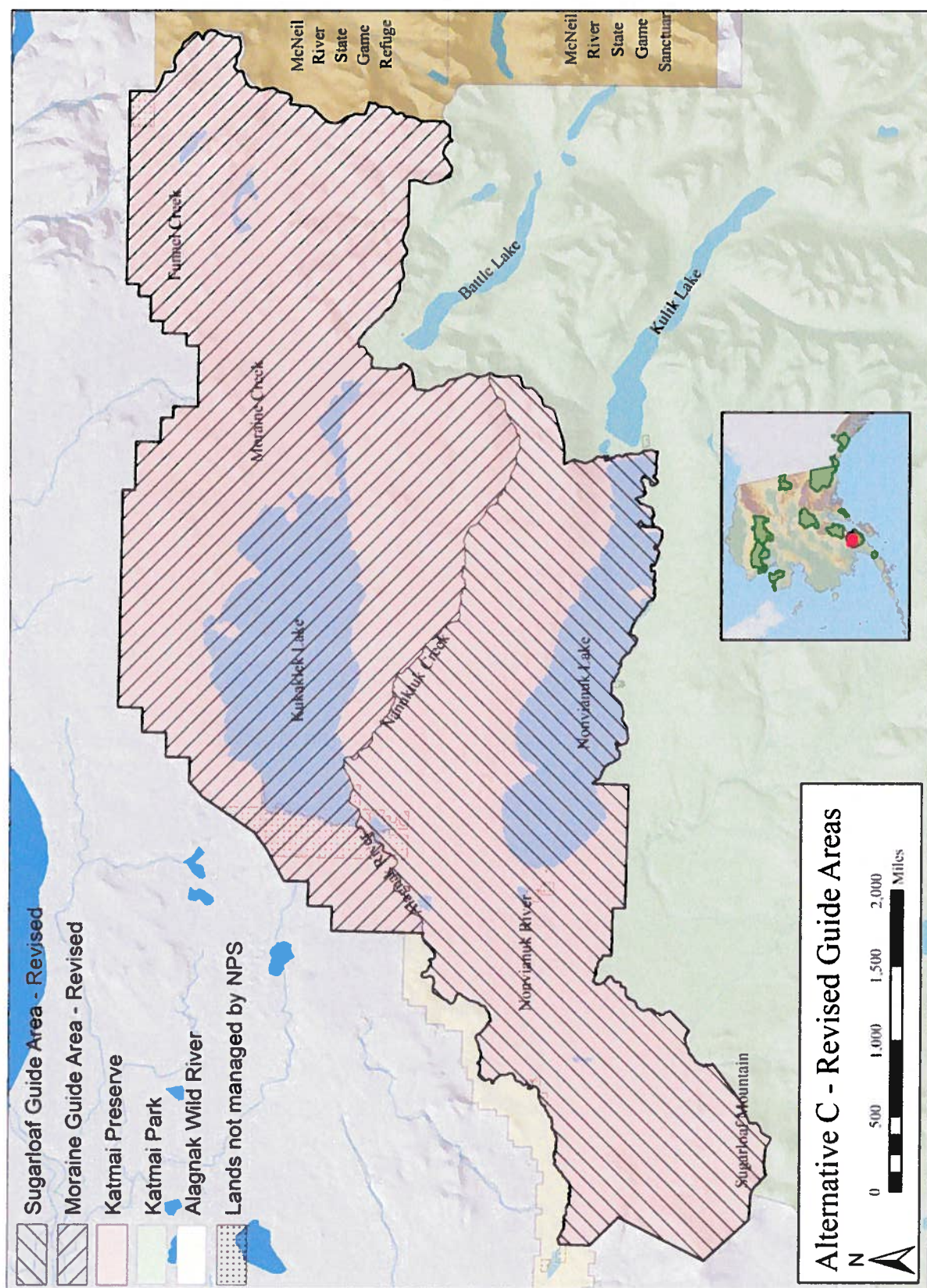
The selected alternative would not violate any Federal, State, or local law.

FINDINGS

The levels of adverse impacts to park resources anticipated from the selected alternative will not result in an impairment of Alaska NPS area resources that fulfill specific purposes identified in the establishing legislation or that are essential to the natural or cultural integrity of the Katmai National Preserve (Appendix B).

The selected alternative complies with the Endangered Species Act, the National Historic Preservation Act, and Executive Orders 11988 and 11990. There will be no significant restriction of subsistence uses as documented by the Alaska National Interest Lands Conservation Act, Title VIII, Section 810(a) Summary Evaluation and Findings.

The National Park Service has determined that the selected alternative does not constitute a major federal action significantly affecting the quality of the human environment. Therefore, in accordance with the National Environmental Policy Act of 1969 and regulations of the Council on Environmental Quality (40 CFR 1508.9), an environmental impact statement is not needed and will not be prepared for this project.



APPENDIX A

NPS RESPONSES TO PUBLIC COMMENTS

Concern 1. *Habituation of brown bears and hunting of habituated bears:*

The EA did not address harvest or fair chase issues with habituated bears or the removal of habituated bears viewed in McNeil Sanctuary or Katmai National Park. Hunting of brown bears in Katmai National Preserve could result in the removal of bears accustomed to or habituated to humans and this would select for more secretive and wary bears, which could affect the migratory and use patterns of bears in the area.

Representative comment(s):

a) *I am concerned that some of these brown bears that are hunted in the preserve are also the same bears that hundreds of visitors come to see at Brooks Camp and McNeil River during salmon season - places where the bears learn to tolerate human presence - so that they are less wary of hunters and therefore are an easier target. This is simply not fair chase and in any way an ethical hunting situation.*

b) *NPS does not consider the negative impact of removing bears from the preserve that are accustomed to the activities of the bear viewing community, bears that provide a high quality and safe bear viewing opportunity for visitors. The consumptive take of brown bears removes these bears from the preserve permanently, including during the prime summer months when bear viewers are in the preserve. Nor does the NPS consider restricting commercial guided sport hunting in areas of high bear viewing activities or protecting "natural" populations of bears in specific areas of the preserve for the enjoyment of other recreational users.*

NPS Response:

Guided sport hunting has been authorized in Katmai National Preserve since its designation in 1980. Bear viewing in Katmai National Preserve has developed largely in the years since 1990, suggesting that bears behave in a fashion that allows viewing concurrently with hunting activities.

The NPS is not aware of any studies that have shown a formal link between habituation of bears to humans and vulnerability to harvest. Bears present during August salmon surveys (when sport fishing and bear viewing are at their peak) may not be the same bears hunted in the areas during May or October. Non-hunting activities (bear viewing and sport fishing) are separated in time from hunting seasons. Bear viewing and sport fishing activities have increased with recent increased localized salmon numbers, and these activities may similarly alter spatial and temporal patterns of use by bears in the area. Non-hunting activities can lead to habituation of bears to humans. Brown bears are in close proximity to humans in many areas throughout the state, including in areas where they can be legally hunted. The difference here relative to hunting vulnerability is the presence of individuals viewing bears.

Brown bears move around to available and plentiful food sources, and some bears in the Preserve move to and from McNeil River, Katmai National Park, or to other state lands where hunting is allowed. Studies and counts show that brown bears move to salmon streams when the fish are present and disperse after the fish runs die down. Plentiful food sources may play a stronger role in brown bear movements and behaviors than the removal of a limited number of brown bears from hunting.

Concern 2. *Management Goals for Brown Bear Hunting in the Preserve:*

State management of bear hunting emphasizes intensive management and high harvest rates of predators, which may be contrary to NPS requirements to manage for high concentrations of brown bears in Katmai National Park and Preserve.

Representative comment(s):

a) Suggesting that the Alaska Board of Game (BOG) provides sufficient management recourse to address issues of sustainable harvest and in meeting Katmai's unique management mandates when 1) the state wildlife management objective is in conflict with the preserves enabling legislation (i.e. promoting maximum harvest), 2) the historical record indicates the state is unwilling to address NPS concerns regarding increasing brown bear harvest rates, and 3) the BOG meets to discuss management issues in the preserve just once every three years is a situation that is clearly inadequate for Katmai preserve. In addition, by omitting the historical NPS request record, especially NPS requests specific to Katmai preserve, does not adequately inform the public on this issue.

NPS Response:

A goal of the State of Alaska for brown bear management in southwest Alaska is to provide for trophy brown bear hunting opportunities. This differs from many areas of the state, and results in a sustainable overall harvest rate, and generally low effects on population structure. Sealing records for brown bears in the area document that the harvest has been spread across the age and sex range throughout the hunt history. There are no active brown bear intensive management programs occurring under State regulations in Katmai National Preserve or adjacent State lands. The National Park Service compared the most consistent data record, aerial bear surveys along salmon spawning streams in August, from the first few years after ANILCA to more recent years to estimate bear concentrations, which are largely driven by salmon availability and distribution. The NPS found brown bear numbers to be much higher in more recent years.

Concern 3. *Effects on Bear Population*

Guided sport hunting with an emphasis on harvesting (up to a maximum of 28) large male bears each calendar year could affect bear population demographics such as sex-age ratios and breeding biology.

Representative comment(s):

a) The unpublished 2009 NPS brown bear population survey referenced by the NPS estimated as few as 104 brown bears may inhabit the preserve (127 +/- 23), yet the NPS prefers an alternative which proposes to allow up to 28 brown bears to be harvested by guided sport hunters alone, a potential harvest rate of 27% of the population. This does not include non-guided brown bear harvest rates which historically have accounted for an additional 25% of the yearly harvest and have consistently increased each year during the last decade.

b) The NPS did not consider the bias in age / sex structure of brown bears harvested between guided and unguided hunters. Guided hunters harvest a higher percentage of male brown bears, and larger, older, or genetically unique brown bears on average than non-guided hunters (ADF&G Brown Bear Management Reports).

c) The EA lacks any historical data on the demographic of the bear population outside of family groups. And based on the EA's interpretation of the relationship between the percentage of bears in a family group and the number of large male bears, the number of large male bears is declining. The percentage of bears in family groups recorded in 5 surveys between 1989 and 2005 (Table 3.1) averaged 40% and then jumped to 59% for three surveys between 2006 and 2009 which indicates fewer large males. Furthermore, the EA does say that "In the Preserve, the proportion of males in the harvest has increased and IS ABOVE the 60% target used by ADF&G throughout Unit 9" (emphasis added, EA at 3-9) and is indeed at 69% (EA at 4-12). This apparent red flag that even by ADF&G standards, too many large males are being harvested is not discussed anywhere else in this EA.

NPS Response:

The Preserve area is contiguous with an area containing a larger population of bears in the region. This region is characterized by large areas both under state and federal jurisdiction where bear hunting is not authorized.

The National Park Service compared a variety of bear survey data to examine the demographic parameters in the population. The observed bear numbers in the Preserve have increased substantially since 1980 to the present. The bears in the preserve show a population structure that indicates either moderate harvest, rapid population growth, or both. Park managers selected 70 percent or more of observed bears in family groups to indicate a population structure in need of management discussions or intervention. Surveys and studies conducted within Katmai National Preserve indicate that the percentage of bears in family groups is below the 70 percent level (Table 3.1 of EA).

The NPS preferred alternative in the EA (Alternative C) will provide the same maximum potential numbers of total clients (28) in the Preserve as during previous contract periods. In the past two decades these client limits resulted in an average annual harvest of 10 bears per year in the Preserve and ADFG data shows an average annual harvest of about 22 bears per year for all of Unit 9C by all hunters (guided/non-guided). The preferred alternative would also distribute hunters over a broader geographic area and would reduce guided hunting pressure on the Moraine/Funnel Creek area.

Concern 4. *Definition of high concentrations of brown bears*

The NPS EA does not discuss how a moderate harvest level impacts "high concentrations of brown bears", an ANILCA management purpose for Katmai National Park and Preserve.

Representative comment(s):

a) Congress called for high concentrations of brown bears, which to us is something different than the population levels of bears in all other parks. Yet the National Park Service did nothing to quantify or define what they meant by high concentrations and they didn't delineate how it is different from bear populations in other parks. Furthermore, it didn't discuss how a moderate harvest level could impact high concentrations. This should have been a major topic of discussion and evaluation in this EA.

b) The fundamental purpose of the Preserve is to ensure "high concentrations" of brown bears, yet there is no discussion or definition of what qualifies as "high concentrations".

NPS Response:

Aerial bear surveys conducted along salmon spawning streams in August, between 1980 and 2011 indicate that brown bear numbers are much higher in more recent times. The numbers of bears are largely driven by salmon availability and distribution. The surveys suggest that these elevated brown bear numbers remain consistent with the high concentration mandate of ANILCA.

Concern 5. *Mitigation measures for bear population effects*

Several ideas were presented for mitigating the perceived effects of brown bear harvest on other uses and values of the Preserve such as: monitor harvest levels and age classes of bears taken by location in the Preserve each year; monitor changes in bear population demographics each year; monitor bear-viewing locations and opportunities each year; adjust client numbers allowed to harvest brown bears to assure a natural population structure to include a reasonable number of large male bears.

Representative comment(s):

a) I suggest modifying the preferred alternative to allow guided hunting concessions in the Katmai Preserve to also include a ceiling on the number of bears harvested in a regulatory year. In addition, I suggest that the harvest and population structure of the bear population be monitored closely in the preserve and harvest adjusted so that the natural population structure is not substantially affected and includes reasonable numbers of large male bears available to bear viewers and photographers.

b) The proper way to manage brown bears in the Preserve is to institute a drawing permit hunt for not more than 7 bears every other year during the spring bear hunting season, and 7 bears every other year during the fall hunting season. These numbers would be on the low end of generally accepted sustainable harvest levels for brown bears and are based on my interpretation of population estimates given in this EA. It is in the public interest for the NPS to be conservative in their management strategies and to insure that the ANILCA mandates for high concentrations of brown/grizzly bears is satisfied. This action will lead to quality "trophy" bear hunts and high quality viewing of all age classes of bears within the Preserve. Drawing trophy permit hunts for mature animals has proven successful for both sheep and moose. Limited brown bear permits, distributed by lottery, on Kodiak are widely sought and highly valued by both residents and non-residents.

NPS Response:

The NPS or State of Alaska already monitor most of the elements expressed by the public. Bear harvest demographics are monitored through the State of Alaska required sealing records, and have been used to assess the pattern of harvest in the EA (see figures 3.3 and 3.4 on page 3-6). State records include total harvest for both guided and non-guided hunter success. The data from these figures show that large male bears are not disproportionately harvested, and 60 to 70 percent of the bears harvested are less than 8 years old. Bear numbers are monitored by NPS with aerial surveys along salmon spawning streams in August and by on-the-ground data collection most years at Funnel and Moraine Creeks. The NPS also quantifies visitor activities occurring in the Moraine/Funnel Creek area, including bear viewing and sport fishing.

Concern 6. Accuracy of bear population information

Additional research is needed with more accurate area brown bear population estimates and demographic data as a basis to analyze harvest effects in the area.

Representative comment(s):

a) The National Park Service has not done enough research to know with certainty the exact population of bears and their genome, and the NPS does not know if the current population will be viable genetically over the medium term. No relevant studies have been done to assure concessions for hunting will not have an adverse effect on bear populations and genetics.

b) Stream Survey data gives you a "snap-shot" of a specific point in time, showing seasonal shifts in bear distribution within the Park and Preserve due mostly to salmon availability. The two guided hunting areas of the Preserve identified in the EA are relatively small geographically and estimates of bear numbers there are not representative of an actual "population."

c) The NPS did not evaluate the ecological impacts of artificially manipulating the sex or age structure of the brown bear population in Katmai. The NPS suggests that low quality biological "indices" are adequate for evaluating the current "health" of the brown bear population in Katmai. Yet, the NPS fails to provide any scientific analysis with an estimate of precision regarding the current sex or age structure of the brown bear population (current or historical), preferring instead to cite an unpublished study (i.e. Loveless et al. in review) or low quality family group surveys with no estimate of precision.

NPS Response:

The EA included data on aerial bear surveys along salmon spawning streams in August that show observed bear numbers have increased substantially since establishment of the Preserve in 1980 (see EA Figure 3.2). Additionally, data from harvested bears (EA figures 3.3 and 3.4) show no substantial change in demographics of the harvested bears. Population demographics showing the percent of bears in family groups has increased, indicating moderate harvest, a growing bear population, or both. These data sources represent ongoing monitoring efforts that can be used to assess bear demographics annually and inform management actions if needed. The information base available for this population of brown bears is comparable to, or exceeds, that which is available for most other brown/grizzly bear populations in Alaska.

Concern 7. Accuracy of bear harvest information.

Annual total brown bear harvest records in the EA (2001 to 2011) for Game Management Unit 9C are not consistent with totals provided by ADFG, which are generally much higher.

Representative comment(s):

a) Page 4-8, Table 4.4, Brown bear harvest. The brown bear harvest numbers in this table do not reflect what ADF&G provided to the Service.

NPS Response:

For Table 4.4 the NPS used published harvest records from the ADFG public web site. ADFG has supplied the NPS with updated information, which is presented in the errata.

Concern 8. *Effects on local and regional economics and business opportunities*

The EA does not consider the potential adverse impacts on bear viewing businesses and their clients, and especially from the harvest of large male brown bears from the Preserve area.

Representative comment(s):

- a) The EA does not address the economic impacts on the large and growing wildlife tourism industry in Alaska.*
- b) The EA fails to produce a satisfactory economic analysis of the value of bear hunting and bear viewing in the Preserve. Data on both subjects I available from mandatory CUA and hunting concessionaire reports, as well as various economic studies done in the state over past years that were largely ignored.*
- c) The Institute of Social and Economic Research at the University of Alaska Anchorage, for example, did a study titled "Spending Patterns of Selected Alaska Bear Viewers: Preliminary Results from a Survey" published in March 2005. In that study, one operator to Katmai Preserve generated \$634,968 to the local economy from those persons whose primary purpose for coming to Alaska was to view bears. This is the kind of data that should have been included in the EA and used to evaluate impacts.*

NPS Response:

Bear viewing in Katmai Preserve largely developed after 1990, where legal hunting occurred before and during that time frame. The development of bear viewing in this area during years when hunting was occurring suggests that hunting is not preventing the development of bear viewing businesses. Figure 3.15 of the EA clearly shows an increase in the mean daily number of visitors, especially bear viewers, at Moraine Creek from 2000 to 2011. The NPS believes that guided hunting in the Preserve does not have an economic impact on the bear viewing industry.

Concern 9. *Appropriate NEPA compliance level*

An EA is an inappropriate level of NEPA compliance. Some commenters expressed concern that a categorical exclusion would have been adequate and others requested an EIS and broader plans for context within which to consider the hunting guide concessions EA.

Representative comment(s):

a) An Environmental Impact Statement (EIS) is required because any right's to provide exclusive commercial economic opportunities to harvest public wildlife resources cannot be summarily dismissed by an EA as having no significant impacts on public resource values.

b) The proposed action clearly could have been handled as a categorical exclusion, as has been the practice previously. There is no increase proposed for the number of guide concession contracts to be issued or in the number of clients each guide would be allowed. The only substantive change proposed is in the configuration of the two guide areas. Changing the boundaries of these areas will have no measurable adverse impacts on preserve resources.

NPS Response:

A May 2011 newsletter invited public comment regarding the intent to publish a prospectus for guided sport hunting. The newsletter noted that issuance of concession contracts is generally categorically excluded from more detailed analysis under NEPA and that NPS would conduct environmental screening to determine potential impacts. The NPS later determined that several issues would be better addressed through a public decision making process. Consequently, the EA was prepared. The EA used the best available information to inform the finding of no significant impact which concluded that an EIS would not be prepared.

Concern 10. *Balance planning for all visitor uses, including hunting*

The NPS needs to have a balanced bear management program to provide for hunting (guided and not guided) and bear viewing, consistent with enabling legislation for the Preserve.

Representative comment(s):

a) While I understand that hunting is allowed in Katmai National Preserve by guided hunting concessions, I urge you to rethink how you will balance guided sport hunting with the desire by many to view high concentrations of bears in the wild.

b) The NPS proposes no limits on total (both guided and unguided) yearly brown bear harvest rates in the preserve, nor does the NPS provide a detailed, Katmai Preserve specific brown bear management plan that clearly defines management actions and thresholds based on NPS mandates and priorities.

NPS Response:

The NPS manages for and balances all visitor uses in the Preserve. Guided sport hunting will continue to be managed under concession contracts. Bear viewing is currently managed with CUAs issued to companies offering bear viewing. Subsistence management is under the purview of the Federal Subsistence Board. The State of Alaska manages the sport hunting seasons and bag limits. The NPS may close an area or restrict an activity on an emergency, temporary or permanent basis (36 CFR 13.50 a). The park has a bear-human conflict management plan, which primarily addresses human-bear interactions to reduce potential adverse impacts to bears and humans.

Concern 11. *Range of alternatives is inadequate*

The EA does not evaluate a reasonable range of action alternatives that would reduce the harvest of brown bears, particularly large male bears.

Representative comment(s):

a) I am very concerned about the impact that shooting large male bears in and around the Preserve's Funnel and Moraine Creeks will have on those wishing to visit your park to see large male brown bears in the same area. I urge you to develop a more comprehensive range of alternatives.

NPS Response:

The NPS did fully consider and evaluate the effects of three alternatives in the EA. Several other alternatives were considered but dismissed from a full evaluation because they were neither reasonable nor consistent with management goals for the area. The May 2011 newsletter invited public comment relating to the NPS proposal to adjust the guide areas and to reduce the client limits for brown bear in the Preserve to 13 hunters for odd-year fall hunts and 8 hunters for even-year spring hunts. The alternative to reduce client limits was eliminated from detailed study for the reasons stated in section 2.7.1 of the EA. Not authorizing guided hunting services within the Preserve would exclude the opportunity for U.S. citizens and foreign hunters to hunt brown bear and other big game species.

As described in section 2.7.2 of the EA, the option of commercial use authorizations (CUAs) was eliminated from detailed study. Longer term concession contracts provide an incentive to maintain healthy wildlife populations in an area and foster a long-term working relationship with the NPS. If guided hunting services were authorized as CUAs, then it could result in more hunting guides operating in the Preserve with more competition and crowding in a limited area.

12. *Effects on subsistence uses and management*

Lacking basic subsistence harvest data, the NPS cannot adequately evaluate the potential negative impacts to subsistence hunting opportunities.

Representative comment(s):

a) I have guided hunters in Katmai national preserve and in areas around the village of Kakhonak. I believe the Moose and caribou hunting should be for the village of Kakhonak, unless there is a surplus of animals available.

b) The NPS lacks detailed subsistence harvest data within the preserve that includes the hunter's village of residence, species harvested, date of harvest, and the location within the preserve where the harvest occurred for any given year.

NPS Response:

There are no records of subsistence harvest of brown bears from within the Preserve. Moose in the region are at a low density, and guided hunt effort on moose has been very low historically. Caribou sport hunting is currently closed to non-residents, but when caribou populations are large, then harvest opportunities are provided for more than just resident-only participation. The assessment of moose and caribou populations is conducted in cooperation with the State of Alaska and seasons and bag limits are set through the Board of Game and Federal Subsistence Board process.

13. Visitor use conflicts

Guided hunting results in the removal of mostly large male bears, which reduces the opportunity for bear viewers to enjoy those same animals in their natural habitat.

Representative comment(s):

a) NPCA has never disputed that there are plenty of bears in/around Katmai. The conflict has always been a localized one in the Preserve, and more specifically around Funnel and Moraine creeks, where most of the bear viewing and much of the bear hunting takes place. This is, first and foremost, a user conflict between bear hunters and bear viewers. Bear hunters want to kill large male brown bears - they are considered a trophy. Those are the very same bears that many bear viewers seek as well. So while the overall bear population is not threatened by hunting, the ability to view a large male brown bear is impacted by hunting in the preserve and that point was completely missed by the National Park Service. The EA inadequately analyzes this user conflict.

b) The biggest concern regarding the preserve is that hunting has the potential for creating a user conflict between viewers/photographers and hunters as higher harvests of bears may affect the population structure which could result in a lower probability of seeing large male bears.

c) None of the alternatives presented address the user conflict that exists between bear viewers and trophy hunters. The conflict that exists goes beyond the temporal one mentioned in the EA. The source of the user conflict is that my clients and bear viewers in general expect a high quality bear viewing experience. This means that all ages, sexes, and sizes of brown bears are well represented. Trophy hunting in the Preserve targets large males and removes them from the population, depriving park visitors of the experience of seeing large male bears. According to the EA "The current ADF&G management objective for unit 9 is to maintain a high bear density with a sex and age structure that will sustain a harvest composed of 60% males, with 50 males 8 years or older taken per regulatory year (Butler 2009)". Most bear viewing guides and clients would not consider an 8 year old bear to be very old, or of such a size to be considered a "large male."

NPS Response:

Guided hunting generally does not occur in the Preserve when bear viewers and sport fishermen are in the area. The NPS preferred alternative C is likely to decrease hunting pressure in the Moraine/Funnel Creek bear viewing area by redistributing guided hunts to other areas in the Preserve.

The biological data do not support the contention that only large boars are hunted and few to none are available for viewing. Figures 3.3 and 3.4 of the EA show that hunters remove bears of many ages and both sexes, not only the older, large males. Aerial surveys and on-site staff observations confirm the presence of large bears during the August viewing season.

Concern 14. *Effects on caribou populations and management*

The EA needs to be corrected on Page 3-19, 3.3.2 Federal Subsistence and State Hunting Regulations, Registration permit caribou hunt to indicate that no State registration permits for caribou harvest are currently issued for the Preserve area.

Representative comment(s):

a) Page 3-19, 3.3.2 Federal Subsistence and State Hunting Regulations, Registration permit caribou hunt. The state caribou hunt referenced, RC504, does not occur on Preserve lands.

NPS Response:

This is addressed in the errata as are other errors.

15. Effects on moose populations and management

Information is needed to support statements in the EA that suggest increased harvests of brown bears would result in an increase in area moose populations.

Representative comment(s):

a) Citations are needed to support the notion that increased harvests of brown bears would result in an increase in area moose populations.

NPS Response:

Citations have been added to the EA (See Errata) that indicate brown bears are effective predators of moose calves.

APPENDIX B

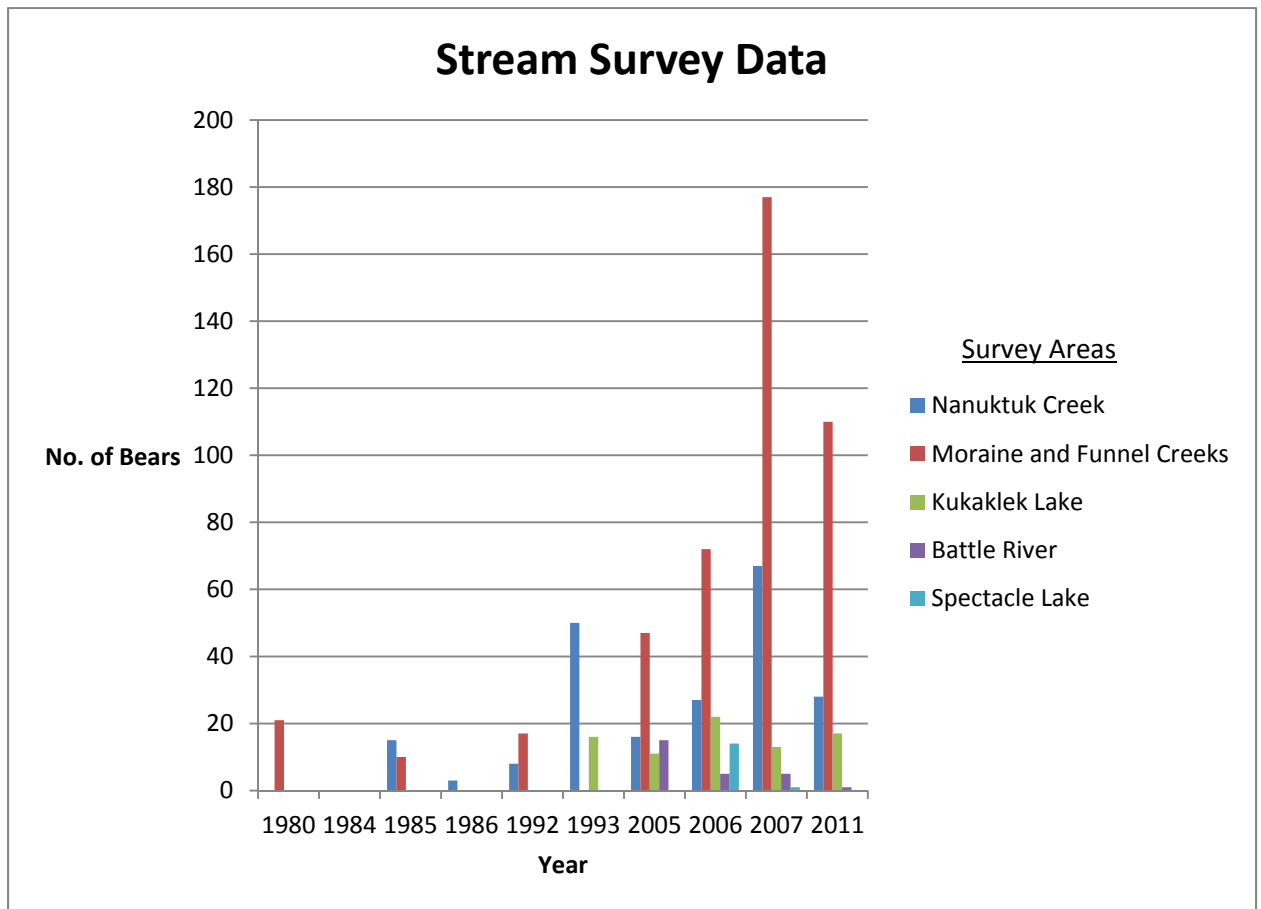
ERRATA FOR THE HUNTING GUIDE CONCESSIONS EA

Katmai National Preserve, Alaska

The following are corrections to information presented in the EA. Most of these errors were pointed out by the State of Alaska.

1. Page 2-6, Table 2.2, Alternative 2, Brown Bears: The State of Alaska is unaware of any formal commitment to “institute regulatory changes including in-season registration permits and a single fall hunt season.” At this location in the EA the word “would” is changed to “could” in the phrase: “... the state **could** institute regulatory changes **through the Board of Game** including in-season registration permits and a single fall hunt season.”
2. Page 3-25, first full paragraph, first sentence: The EA states the Preserve was established to protect *healthy* populations of wildlife species. ANILCA Section 202(2), which established Katmai National Park and Preserve, does not use the word healthy, so that word is deleted here.
3. Page 4-13, Conclusion on Brown Bears, First Sentence: The EA states for alternative B that “The alternative is expected to result in up to 25 guided bear hunters each regulatory year.” This is incorrect, the sentence is amended to state, “... each **calendar** year.” Presently there is one spring hunt in even-numbered years and one fall hunt in odd-numbered years.
4. Page 4-19, Direct and Indirect Effects (on Moose): The EA states: “If conditions of the moose population were to change, then the NPS would reduce harvest through the state regulatory process, or if necessary through the Superintendent’s compendium and the concession annual operating plan.” The EA is amended to state instead, “If moose trend counts were to indicate a serious problem with the moose population, then the State, the NPS, or both may need to take appropriate action to assure conservation of moose in the Preserve.”
5. Page 2-6, Table 2.2, “Moose calf:cow ratios” should be changed to bull:cow ratios because ADFG does have guidelines for calf:cow ratios in this trend count area.

6. Page 3.4, Figure 3.2. The color legend for figure 3.2 was omitted in the printing of the EA. The corrected figure is provided below.



7. Page 3-10, Section 3.2.2.2 Population History of Moose and Page 3-12 Figure 3.9: Numbers of moose observed during trend area surveys are *not* population sizes; therefore, stating “in 2010 populations had dropped to below 100 moose” is inaccurate, as is the caption under Figure 3.9, which refers to trend area counts as “Population numbers.” The NPS agrees with this comment, and the EA is amended in the text on page 3-10 and in Figure 3.9 to replace “Population” with “Trend area” numbers.
8. Page 3-19, Section 3.3.2 Federal Subsistence and State Hunting Regulations, Registration Permit for Caribou Hunt: The referenced state caribou hunt, RC504, does not occur on Preserve Lands. Because it does not pertain to the affected area in the Preserve, the following sentence is deleted from the EA: “The State of Alaska, however, currently maintains an “open season to be announced hunt” in the State regulation book, which was most recently opened by emergency order on January 18, 2012”

9. Page 3-21, Table 3.5, Summary of hunting regulations: Under state regulations for residents, season dates do not run to September 30 in the fall. Additionally the moose hunting season for the portion of GMU9C not draining into the Naknek River is missing from the table. The EA is corrected to indicate: “Unit 9C draining into Naknek River **and the remainder of Unit 9C**, Season Sept 1 – Sept 20”.

10. Page 4-4, Section 4.3.1.2 Moose, Cumulative Effects, 3rd sentence. The sentence has been revised to provide references indicating that brown bears are effective predators of moose calves. The sentence was revised as follows:

An increase in the brown bear population could affect moose calf:cow ratios because brown bear feed on moose calves (Butler 2010, **Ballard et al. 1981, Franzmann et al. 1980**), which may slow population growth.

11. Page 4-6, Table 4.2, Subsistence brown bear hunt: The State has no subsistence brown bear hunt in GMU 9C, but the State does have “No Closed Season” for brown bear hunting near villages in Unit 9 by registration permit only. The row for State Subsistence in table 4.2 is hereby deleted and replaced with a row under the Brown Bear column as follows: “Hunting near villages by registration permit, no closed season.”

12. Page 4-7, 3rd paragraph, 1st and 2nd sentences. The State of Alaska provided NPS with revised data for the total reported harvest of brown bear in GMU 9C for the years 2001 – 2010 as a result of the EA public review. This resulted in a change in the percentage of the brown bears taken by guided sport hunters in the Preserve (61) versus the total number of brown bears taken in GMU 9C (257). The text has been revised to reflect this change.

Between 2001 and 2010, guided sport hunters in the Preserve took 61 brown bears, which represented 24% of the total number of brown bears taken in all of GMU 9C. The number of brown bears taken by guided hunters in the Moraine Creek area illustrates the significance of guided brown bear hunting as a sport opportunity in the Preserve and indicates a concentration of guided brown bear hunting activity in the portion of GMU9C within the Preserve boundaries.

13. Page 4-8, Table 4.4, Brown bear harvest: The ADFG has provided corrected brown bear harvest numbers for Table 4.4 Table 4.4 is corrected below.

Table 4.4: Total Reported Harvests of Brown Bear, Caribou and Moose by all Hunters in GMU 9C (State of Alaska 2012)

Species	2010	2009	2008	2007	2006	2005	2004	2003	2002	2001	TOTAL
Brown Bear	7	17	11	47	8	40	16	55	13	43	257
Caribou	6	2	153	190	11	117	105	86	27	119	816
Moose	19	17	21	28	22	29	34	40	43	37	290

13. Page 6-1, Chapter 6: References Cited. The following references have been added to the text in on Page 4-4, Section 4.3.1.2 Moose, Cumulative Effects, 3rd sentence and to References Cited section

Ballard, W.B., T.H. Spraker and K.P. Taylor. 1981. Causes of neonatal moose calf mortality in South Central Alaska. *Journal of Wildlife Management*. 45:2 335 – 342.

Franzmann, A.W., C.C. Schwartz and R.O. Peterson. 1980. Moose calf mortality in summer on the Kenai Peninsula, Alaska. *Journal of Wildlife Management*. 44:3 764 - 768.

APPENDIX C

DETERMINATION OF NON-IMPAIRMENT

A determination of non-impairment is made for each of the impact topics carried forward and analyzed in the environmental assessment (EA) for the NPS selected alternative, except those topics for which an impairment finding is not needed. The NPS selected alternative is alternative C in the EA, which would establish two revised hunting guide areas in the Katmai National Preserve that are more equitably sized and have adjusted client limits for each new area. The proposed action does not change the overall annual client limits for guided hunting in the Preserve.

Park and preserve purposes and significance (as described in ANILCA Section 202(2) and other sections, the Katmai National Park and Preserve General Management Plan of 1986, and the area's Foundation Statement of 2009) are presented in Chapter 1 of the EA and was used as a basis for determining if a resource is:

- Necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the affected NPS areas in Alaska, or
- Key to the natural or cultural integrity of the NPS areas in Alaska or to opportunities for enjoyment of the areas, or
- Identified in the NPS area general management plans or other relevant NPS planning documents as being of significance.

Impairment findings are not necessary for visitor experience, recreation and subsistence uses, socio-economics, public health and safety, environmental justice, land use, and park operations because impairment findings relate back to park resources and values. These impact areas are not generally considered to be park resources or values according to the Organic Act, and cannot be impaired the same way that an action can impair park resources and values. For this EA the NPS area resources and values subject to the impairment analyses are wildlife and their habitat (particularly brown bears).

IMPACT TOPICS

Wildlife/Habitat

ANILCA Titles I and II provide for the maintenance of sound populations of, and habitat for, numerous specified wildlife species of inestimable value to the citizens of Alaska and the Nation.

ANILCA Section 202(2) established Katmai National Park and Preserve "... to be managed for the following purposes, among others: 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***; ..., and to protect scenic geological, cultural, and ***recreational features***." (Emphasis added). The highlighted text identifies the key issues for this EA and impairment analysis. The EA in chapter 3 describes known information on brown bear numbers in the affected area, hunting history and harvest records for the area, and the relationship of brown bear numbers to salmon runs. Because no construction would occur to adversely affect brown bear denning sites and hunting would generally not occur at a time or manner to disturb brown bears in their dens, the proposed action would not adversely affect brown bear denning habitat. Despite guided and unguided sport hunting in the Preserve since ANILCA, high concentrations of brown bears continue to be observed in the Preserve during the August stream surveys. The NPS would continue to monitor for high concentrations of brown bears with August stream surveys when bears are congregating in the area to feed on salmon. These surveys would continue to differentiate between single bears and bears in family groups (e.g. sows with cubs). Moose trend surveys would also be continued to monitor moose population trends and demographics in the area. If either the bear or moose population is observed to approach unacceptable population demographics (e.g. more than 70 percent of the bears observed to be in family groups or moose bull:cow ratios become too low), then the State, NPS, or both would take appropriate action to prevent overharvest of these species. The potential for adverse impacts of Alternative C to wildlife and their habitat, and particularly brown bears, is judged to be minor. Therefore, the NPS selected alternative would not result in impairment to wildlife or habitat.