

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

**Katmai National Park and Preserve &  
Alagnak Wild River  
Alaska**



**Finding of No Significant Impact**

**Wildland Fire Management Plan**

**April 2013**

Recommended:

Diane Chung  
Superintendent, Katmai National Park and Preserve

4/16/13

Date

Approved:

[Signature]  
Regional Director, Alaska

4/16/13

Date



## **FINDING OF NO SIGNIFICANT IMPACT**

### **Wildland Fire Management Plan Katmai National Park and Preserve & Alagnak Wild River, Alaska April 2013**

The National Park Service (NPS) is approving a wildland fire management plan for Katmai National Park and Preserve (KATM) and the Alagnak Wild River corridor (ALAG). An environmental assessment (EA) was prepared to evaluate potential impacts to cultural and natural resources associated with implementation of the fire management plan. The NPS selected Alternative 3 (*Combination of Prescribed Fire and Use of Wildland Fire*), which is the NPS Preferred Alternative.

This wildland fire management plan is a comprehensive document that outlines KATM and ALAG fire management goals and describes the policies and actions by which these goals will be realized. The plan formalizes park-specific responsibilities for implementing the Alaska Interagency Wildland Fire Management Plan (AIWFMP) and will formalize park-specific management decision-making and procedures, redefines fire management strategies, articulates the park's fire management organization and responsibilities, and establishes the direct linkage between the resource management goals and fire management strategies.

This fire management plan (FMP) is required to comply with DO-18 and codifies the way fire will be managed within KATM/ALAG. Although fire protection needs may arise and remain the NPS' first priority, managers need to consider fire as an integral component of the area's ecosystems and is critical for the maintenance of many indigenous conditions, from plant and animal populations to soil and permafrost layers. The scope of the preferred alternative entails the planning and implementation of policies and practices flexible enough to allow the simultaneous pursuit of protection and resource management goals.

Three parties commented on this EA with letter, email, and/or postings to the NPS Planning, Environment, and Public Comment (PEPC) web site during a 60-day public comment period from December 3, 2012 to February 1, 2013.

### **ALTERNATIVES**

Three alternatives were evaluated in the EA.

#### **Alternative 1 - No Action (*Continue Full Suppression on All Wildland Fires*)**

Under the No Action alternative, the NPS would continue the current program to fully suppress all wildland fires in the subject areas. All ignitions, including those of natural origins, would be suppressed and no prescribed fire would be implemented. Reduction of flammable vegetation would be accomplished only by mechanical means, which would be limited to the protection of structures, historic and archeological sites, and boundary areas.

### **Alternative 2 – (*Use of Wildland Fire and Suppression Strategy*)**

Under this Alternative the NPS would allow natural ignitions occurring in certain areas and under predetermined conditions to be managed to accomplish resource management objectives, such as managing fire fuels accumulations and returning fire to its natural role in the ecosystems. Any fire posing a threat to life or property would be immediately suppressed, as described in the Alaska Interagency Wildland Fire Management Plan.

### **Alternative 3 – *Combination of Prescribed Fire and Use of Wildland Fire and Suppression Strategy – (NPS Preferred Alternative)***

Under this alternative the NPS would use all available fire management strategies to protect human life and property and to achieve land resource management objectives, including the return of fire to its natural role in the environment and to reduce hazardous accumulations of burnable vegetation. Prescribed fire would be implemented in certain cases, under the direction of NPS personnel, for the purpose of proactively reducing hazardous vegetative fuel loads in critical and full fire management units. Wildland Fires would be emphasized and used in the vast majority of the park, preserve, and wild river areas, but full suppression and prescribed fire would be used in much smaller areas.

Both action alternatives would emphasize the use of wildland fire to achieve natural landscape level conditions where high-value cultural and natural values and human life and property are not threatened by fire.

## **PUBLIC INVOLVEMENT**

The EA was issued for public review and comment from December 3, 2012 to February 1, 2013. The EA was mailed to about 82 parties, including state and federal agencies, federally recognized tribes in the area, Native corporations, communities, organizations, and individuals, and it was posted on the NPS PEPC website. A press release announced the availability of the EA for public review and comment.

Comments on the EA were received from the State of Alaska, National Parks Conservation Association (NPCA), and one individual. The NPS identified several substantive comments that either raised a new issue not fully addressed in the EA, suggested a reasonable new alternative, suggested additional mitigation measures, or provided new information or facts that have bearing on the decision. Responses to these comments are attached to this FONSI in Appendix A. Changes to the EA are indicated in the attached Errata in Appendix B.

## **DECISION**

The NPS decision is to select Alternative 3 (*Implement a Combination of Prescribed Fire, Use of Wildland Fire, and Suppression Strategies in Katmai National Park and Preserve and Alagnak Wild River – NPS Preferred Alternative*)).

## RATIONALE for the DECISION

Alternative 3 (*Combination of Prescribed Fire, Use of Wildland Fire, and Suppression Strategies*) satisfies the purpose and need for the project better than the no-action alternative or alternative 2 because it provides greater flexibility in managing wildfire. It achieves wildland management objectives to reduce vegetative fuels accumulations through use of fire as a natural component of ecosystems in these areas. It provides for protection of park visitors, employees, developed facilities, and private inholdings. Furthermore, this alternative was found to be the environmentally preferable alternative because it provides the full spectrum of fire management strategies and practices to accomplish the KATM/ALAG fire and resource management objectives while protecting human life, structures, and identified resources and values.

## 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 1 through 3 on air quality, water quality, vegetation (including wetlands), fish and aquatic habitat, wildlife and habitat, visual quality, visitor experience, cultural resources, wilderness, local economy, subsistence, and private inholdings. As documented in the EA the effects of the selected alternative will be mostly short-term (some long-term effects) minor and adverse or beneficial, depending on the impact topic. There will be no significant impacts to any of these resources and values and no significant restriction of ANILCA Title VIII subsistence uses.

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

Fire management actions (including full suppression, use of wildland fire, and prescribed fire) will not likely result in any observable adverse effects to public health and safety in the park, preserve, and wild river corridor. The use of wildland fire could reduce hazardous vegetative fuel loads over large areas thereby improving public safety over time from uncontrollable conflagrations. The implementation of prescribed fires with qualified NPS personnel during appropriate conditions would further reduce fuel loads near high-value resources at risk from wild fires. Full suppression techniques would continue to be utilized in critical and full zones to protect human life and occupied structures, which also improves public health and safety.

*(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.*

The proposed action will reduce the incidence of full suppression activities in designated wilderness and along the Alagnak Wild River corridor, where areas other than critical or full

suppression are indicated to protect human life and occupied properties. The use of wildland fire to return vegetation patterns into more natural fire adapted regimes across the bulk of the NPS areas will reduce vegetative fuel loading and the potential for massive conflagrations that could adversely impact park scenery and high-value cultural and natural areas. The use of prescribed fire by trained personnel during appropriate conditions would further protect high-value resources and sites (e.g. Brooks Camp, Lake Camp, lodges on inholdings, Native corporation lands, historical and archeological sites, and Russian Orthodox Church lands). These locations would be at greater risk of uncontrollable wildland fires during times and conditions that are difficult to defend against.

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

None of the proposed fire management strategies in these NPS areas are highly controversial because these practices have been widely accepted elsewhere in Alaska. The use of motorized tools and prescribed fire in designated or eligible wilderness areas raises some issues, but this is addressed through thoughtful application of the minimum requirements and minimum tools analyses.

*(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 because these fire management strategies have been successfully used in other locations of Alaska where wildland fires are much more prevalent. There is always the potential for prescribed fires or wildland fires to abruptly change course with a sudden change in conditions such as in wind directions and speeds, but this can be minimized with use of newly available remote automated weather data and fully trained personnel in fire decision-making.

*(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.*

This action will not set a precedent because uses of these fire management strategies have been successfully applied elsewhere National Park System units in Alaska. The Katmai area units are one of the last areas to adopt such a fire management plan on the Alaska mainland.

*(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.*

Neither the adoption of this fire management plan alone nor this action added to other past, ongoing, or foreseeable actions would have any significant effects on the environment. One possible exception could be the potential visual effects of the proposed Brooks River Bridge and Barge Landing site near Brooks Camp coupled with fire management of hazardous fuel accumulations resulting from a bark beetle outbreak in the spruce forest around the area (i.e. tree

and downfall removal). Lack of effective fire management strategies in this area, however, could result in even more severe visual impacts should a wildland fire break out in the area.

*(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. The proposed action would further protect structures, and districts and sites listed or eligible for listing on 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 U.S. Fish and Wildlife Service (FWS) Anchorage Field Office for Endangered Species Act Section 7 consultation concurred that no threatened or endangered species were known to occur in the project area. The Kittlitz's murrelet, a candidate species known to occur in the area, nests in scree and under rocks and would not be affected by vegetative fire management measures.

*(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 Katmai National Park and Preserve and Alagnak Wild River (Appendix C).

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.





## Fire Management Units, Katmai National Park and Preserve & Alagnak Wild River



**SOA-AIP#3:** Page 37, 3.10 Wilderness, third paragraph, third sentence. ANILCA Section 1317 provided the Service with a one-time opportunity to conduct wilderness reviews of areas within Alaska park units not already designated as wilderness by ANILCA. ANILCA also directed the reviews be completed within five years and recommendations be completed within seven years of the enactment of the Act. The Service's Section 1317 Wilderness suitability and recommendation reviews for Katmai were finalized and the proposed wilderness recommendations are reflected in a signed Record of Decision. While the full process outlined in ANILCA Section 1317(b) may not have been completed, the time limitation for doing so has long since passed and ANILCA Section 1326(b) prohibits new studies without Congressional approval.

**NPS Response:** *The wilderness review process required under ANILCA section 1317(b) has not been completed on the 19 million acres that were identified as eligible in the 1984-86 General management plans. ANILCA does not specify that there is only a one-time opportunity to conduct wilderness suitability and recommendations; however, it required the NPS to complete suitability reviews and recommendations within a specified period of time. Although the NPS completed EISs and Records of Decision, the Secretary's office took no final action and no wilderness recommendation was ultimately conveyed to Congress. A Park General Management Plan remains the authority for eligible wilderness until a new wilderness study or eligibility assessment is completed.*

**NPCA#1:** We are concerned by the description of Alternative 3 on page 18 that states "all-terrain vehicles may be used for ignition purposes" for controlled burns. We assume that ATVs would be used only where they are already allowed, such as on park roads at Brooks Camp. ATVs are capable of excessive damage on Alaska's fragile soils. Any other use would be unacceptable, and we want to clarify that this plan does not authorize any new uses.

**NPS Response:** *The National Park Service would not use all-terrain vehicles off-road unless they were otherwise permitted. The NPS is in agreement with the NPCA assumption.*

**NPCA#2:** Under the heading Use of Wildland Fire (see inset box on page 13) is "human ignited wildland fires". Does this mean accidental fire, such as by a dropped cigarette or escaped campfire? Would this type of fire also be allowed to burn, same as a lightning-caused fire might be? If this is the case, then we would like a little more information about what constitutes this type of Wildland Fire and its proposed use.

**NPS Response:** *The terminology of wildland fire has evolved and changed over the last several years. The definitions within the inset box on page 13 will be updated to reflect up-to-date terminology. The Use of Wildland Fire definition should have stated "prescribed fire" instead of "human-caused fire".*

*In the event of an accidental human-caused fire, the first response is to suppress the fire, as stated under the Alternative 2, section 2.3 (last sentence of first paragraph). Policy in regards to human-caused wildfire is provided below, but the cost and risk to suppress these fires will be considered in the decisions on the fires. The EA has been revised, see errata.*

## APPENDIX A

### NPS RESPONSES TO PUBLIC COMMENTS for the Katmai National Park and Preserve and Alagnak Wild River Wildland Fire Management Plan of November 2012

In response to the environmental assessment, the NPS received three comment letters during the public comment period. Described below are the substantive comments and the NPS responses. Substantive comments are those which raise important new issues, suggest new viable alternatives, suggest mitigation measures, or correct or add factual information that may have bearing on the impacts or decision at hand. The following parties submitted comments that the NPS judged to be substantive, and their comments are organized and numbered with the NPS responses following immediately after. A comment similar to or identical to a comment made by another party may be referred to the NPS response to the first such comment addressed.

Government to Government:

**SOA-AIP** - State of Alaska, ANILCA Implementation Program

Non-governmental Organizations (NGOs):

**NPCA** - National Parks Conservation Association

**SCAC** – Sierra Club Alaska Chapter

**SOA-AIP#1:** Page 3, 1.2.1 Park Purpose and Significance, Park Purpose: We request the decision document cite the source of the “park purpose” statement and identify the park unit’s purposes as established by ANILCA.

**NPS Response:** *The NPS will include in the errata the purposes for establishing the Katmai National Park and Preserve as specified in ANILCA Section 202(2) and the Alagnak Wild River Corridor as specified in ANILCA and Sections 601(25) and 603(44).*

**SOA-AIP#2:** Page 24, Table 2-2 Summary of Alternative Impacts, Fish and Aquatic Habitat. The impact analysis focuses only on adverse impacts. We recommend the Service also take into consideration the beneficial long-term impacts to fish and aquatic habitat as the result of retaining the role of fire in maintaining riparian habitat.

**NPS Response:** *Not all impacts of fire are negative to fish and aquatic systems. Potentially beneficial impacts of fire to aquatic systems can accrue after the immediate burn event as a result of diversifying the age structure and developmental stage of riparian vegetation and providing ash that can add terrestrial nutrients to the aquatic system, raising the productivity level for a period of time.*

*For more information, see:*

- 1) Interagency Standards for Fire and Fire Aviation Operations, 2013, Chapter 1, Page 1-6,*
- 2) Federal Wildland Fire Management Policy Overview and National Park Service –Wildland Fire Management, Reference Manual 18, 2008, Chapter 2, Page 14, and*
- 3) [Guidance for Implementation of Federal Wildland Fire Management Policy.](#)*

**NPCA#3:** We would appreciate if the EA included more background information on the frequency and historic role of wildland fire in the region.

**NPS Response:**

*See the KATM Fire Management Plan, Appendix F Wildfire and Prescribed Fire/Fuels Treatment Monitoring Plan. Some of this information is also included within the Fire Management Plan in Section 1.2.2.3, which is a separate and more detailed document than the EA.*

**NPCA#4:** We did not see any mention of climate change. We are curious if the fire regime in Katmai and the Alagnak is, or is expected to, change in response to changing climate.

**NPS Response:** *The EA addresses climate change as an issue on page 12, where it dismisses the effects of the alternatives on greenhouse gas emissions and climate change because the expected emissions would be miniscule. The EA does not address the effects of climate change on the projected fire frequency or size of wildland fires because this is difficult to predict with reasonable accuracy. Section 3.4 Vegetation, page 33 alludes to the possible climate change effects on vegetation. The NPS is monitoring large area die-offs of spruce from bark beetles and alder, including around Brooks Camp, which could easily burn in wildfires.*

**SCAC#1:** Alternative 3's "full" management unit includes the preserve north and west of Kukaklek Lake, the park area at the western end of Naknek Lake, and the corridor of the Alagnak River. About half of the Alagnak River corridor also has "modified" status (no acreage figure). No explanation is offered as to why these areas would be subject to prescribed burning under the preferred alternative.

**NPS Response:** *These areas have numerous human facilities, homes, trails, and communities in close proximity and they are loaded with flammable black and white spruce and other flammable vegetation. The upper portion of the Alagnak Wild River on the northwest side of the river abuts adjacent State and Native Corporation lands that are in a modified status. The portion of the Alagnak Wild River corridor on the Preserve side of the river corridor is in limited status. Following are the acreages in the various protection levels along the Alagnak River Corridor: Full - 20,425 acres; Modified - 9,332 acres; Limited - 1,152 acres. Typically management options consider all of these concerns in addition to neighbor designations just so that abrupt management options don't put firefighters in compromising situations.*

**SCAC#2:** The aforementioned three "wildland" areas are suitable for wilderness designation, and are being managed to protect their wilderness character and values pending a congressional decision on whether or not to add them to the park's designated wilderness. Prescribed burning is incompatible with the existing protective management.

**NPS Response:** *Parts of the area north and west of Kukaklek Lake are patented Native Corporation lands and allotments, so their status have since been determined as not suitable for federal wilderness designation. None of the lands in the Alagnak Wild River corridor outside of the preserve boundaries were found to be suitable for wilderness designation, largely because several lodges and allotments occur along this river corridor within the boundary of the preserve. Similarly, the area in the park immediately west of the Naknek Lake were not found to be suitable for future wilderness designation, largely because of roads, docks, and developments in the area. Some of the area north and south of the most westerly portion of Naknek Lake were found to be eligible or are already designated as wilderness. Nevertheless, full or modified fire suppression activities may occur in areas designated as wilderness or eligible for wilderness to protect high-value areas, so long as these activities meet a wilderness minimum requirement/minimum tool analysis as in the EA Appendix A.*

**SCAC#3:** “Limited” areas of Alternative 2 and 3 may not be completely secure from prescribed burning because the agency has left itself some discretion: “To the greatest extent possible, prescribed fire would be focused outside of wilderness; however, this fuel treatment may be necessary in wilderness for purposes of wildfire protection.” (EA at 89). This cryptic statement needs further explanation in the EA. Under what circumstances would prescribed burning be applied in designated and eligible wilderness areas?

**NPS Response:** *See EA pages 1, 14, and figure 4.1 – the key is to protect cultural and historical properties, uninhabited private property, high-value natural resource areas, and other high-value areas not involving the protection of human life and inhabited property. We left the discretion to accommodate those cases where there might be a value that would be best protected through the use of prescribed fire. This approach would be more of an exception rather than a rule.*

## APPENDIX B

### ERRATA FOR THE WILDLAND FIRE MANAGEMENT PLAN EA

#### Katmai National Park and Preserve and Alagnak Wild River, Alaska

The following are corrections to information presented in the EA.

1. Page 3, Section 1.2.1: This section shall include citations of the appropriate sections of ANILCA to include purposes for establishing the Katmai National Park and Preserve as specified in ANILCA Section 202(2) and the Alagnak Wild River Corridor as specified in ANILCA and Sections 601(25) and 603(44):

Pursuant to ANILCA § 202(2), Katmai National Monument is redesignated as “Katmai National Park”. “The monument addition and the preserve shall 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; to maintain unimpaired the water habitat for significant salmon populations; and to protect scenic, geological, cultural and recreational features.”

Pursuant to ANILCA § 601 (25) and § 603 (44) the Wild and Scenic Rivers Act is amended by: Alagnak, Alaska – That segment of the main stem and the major tributary to the Alagnak, the Nonvianuk River, within Katmai National Preserve; to be administered by the Secretary of the Interior, and those segments or portions of the main stem and Nonvianuk tributary lying outside and westward of 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.

2. Page 13, Inset: Inset terminology in KATM FMP EA is revised as indicated:

**Wildland** is an area in which development is essentially nonexistent. Structures, if any, are widely scattered.

**Wildland Fires** comprise a general category of any non-structure fires that occur in vegetation and/or natural fuels including both prescribed fire and wildfire.

**Wildfire** is an unplanned ignition caused by lightning, volcanoes, unauthorized and accidental human-caused actions, and escaped prescribed fires.

**Prescribed Fires** are any fires ignited by management actions in defined areas under predetermined weather and fuel conditions to meet specific objectives.

**Use of Wildland Fire** is the management of naturally ignited (e.g. lightning) or prescribed fires to accomplish specific pre-stated resource management objectives in predefined geographic areas outlined in Fire Management Plans.

## **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 National Park Service (NPS) selected alternative, except those topics for which an impairment finding is not needed. The NPS selected alternative 3 in the EA, which would implement a combination of Use of Wildland Fire, Prescribed Fires, and Fire Suppression Strategies to manage wildland fires in Katmai National Park and Preserve and Alagnak Wild River corridor. The proposed action would provide a wide range of strategies with maximum flexibility to address wildland fires and management objectives across the landscape.

The purposes and significance of the affected areas are presented in the EA section 1.2.1 (as presented in ANILCA Sections 202 (2), 601 (25), and 603 (44), the Katmai National Park and Preserve General Management Plan of 1986, and the area's Foundation Statement of 2009. These purposes and values are 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, 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 area 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: fish and aquatic habitat, wildlife and their habitat, cultural resources, visual quality/scenery, and wilderness.



## **IMPACT TOPICS**

### **Fish and Aquatic Habitat**

Katmai National Park and Preserve were established in part to protect and maintain unimpaired water habitat for significant salmon populations. The EA concluded that impacts to fish and aquatic resources under alternative 3 would adverse, minor, and short-term to long-term depending on the nature and intensity of wildland fire and fire management activities. Work near anadromous fish bearing streams during spawning seasons would be restricted to prevent disturbance to spawning salmon and trout. Minor amounts of ash and sedimentation could enter streams from nearby prescribed burn areas, but these effects are expected to be short-term. Riparian area overstory would be preserved with understory prescribed burns, and some burns could contribute large woody debris to stream channels, which may create habitat for fish. Fire management strategies under alternative 3 would reduce the long-term potential for catastrophic fires, which would tend to protect and maintain fish habitat. For these reasons, the NPS selected alternative would not result in impairment to salmon, other freshwater fish, or water habitat.

### **Wildlife and 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

“... shall 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; ....”

The EA in chapter 3 describes known information on wildlife species known to occur in the affected area, which include at least 29 species of land mammals including brown bears, moose, caribou, wolves, lynx, red fox, wolverine, beaver, coyotes, river otter, and mink. . The park area is thought to contain the largest population of “protected” brown bears, which are drawn to the abundant salmon resources in the area. Up to 150 species of birds are known to occur in these NPS areas, and many nest in trees or other vegetation, including bald eagles and various species of owls. The EA concluded that the overall effects of alternative 3 fire management activities on wildlife and habitat would be minor to moderate and adverse where prescribed burns and use of wildland fires would burn trees and vegetation used by nesting birds, for mammal denning, or for animal foraging. Prescribed fires would be conducted outside of times to protect denning mammals and nesting birds pursuant U.S. Fish and Wildlife recommendations to protect migratory birds on the Alaska Peninsula. The EA also concluded that promoting the natural role of fire through the various management strategies would minimize the eventual changes in wildlife habitats outside of the normal range of variability and therefore be beneficial to wildlife. Wildland fires and prescribed burns could result in direct mortality of a few sedentary animals,

and others could be displaced to adjacent areas temporarily. The analysis noted, however, that more numerous smaller fires could provide a variety of habitat conditions that would better meet the needs of wildlife species such as the clearing excess residual vegetation. These fires would also release nutrients bound in dead plant material and encourage new plant growth that may provide browse for some species. Overall the effects of wildland fires and prescribed burns are thought to improve wildlife habitat and productivity over time, which would be beneficial to wildlife resources. Therefore, the NPS selected alternative would not result in impairment to wildlife or habitat.

### **Cultural Resources**

Fire management activities associated with wildfire suppression, use of wildland fire, and prescribed fires could result in short-term negligible effects to long-term moderate adverse effects to cultural resources. Many historic structures and archeological sites are precisely known so that fuels reduction and prescribed burns could be designed to avoid and protect these resources. Prescribed burn plans would specify actions to avoid or mitigate potential adverse impacts to known structures or features. Heat from typical surficial prescribed fires is insufficient to damage artifacts or other archeological materials in subsurface settings, even if buried only a few centimeters below the ground surface. Potential adverse impacts to cultural resources are more likely from wildfires and suppression actions where conducted. Wildfires may expose archeological resources where vegetation is removed. Heat from more intense fires are more likely to damage buried artifacts. Stone and ceramic resources can be scorched, fractured, charred, or spalled where fire severity is high. The potential impacts to cultural resources from alternative 3 are judged to be localized, short-term to long-term, and negligible to moderate. The effects to historic structures from mechanical fuels reduction, and in some case prescribed fires away from these sites, would be beneficial. Adverse effects on cultural resources from planned fire management actions would be avoided through identification of sites prior to disturbance and protecting these resources. The impacts to cultural resources in the affected NPS areas from alternative 3 actions would not result in impairment to cultural resources because the risk of damages to these resources would be reduced and they would be protected from wildfire effects.

### **Visual Quality/Scenery**

Scenery and visual quality of the park, preserve, and wild river could be temporarily impacted from smoke and burned vegetation as a result of wildfires or prescribed burns. Large wildfires would impact larger areas than more localized and generally smaller prescribed burns. Wildfires may consume all vegetation and leave charred stands, whereas prescribed fires tend to burn understory vegetation or up to natural or controlled burn lines. The degree of effect to visual resources from prescribed burns would be greatest near Brooks Camp or Lake Camp because these areas are more heavily visited. The direct adverse effects of Alternative 3 on visual

resources would include short episodes of increased particulates and decreased visibility. These adverse impacts would generally be short-term, localized, and minor. Areas with blackened vegetation would have short-term, adverse, localized minor to moderate impacts to visual quality, but the scenery would improve over the long-term as vegetation recovers. For these reasons alternative 3 would not result in impairment to the visual quality and scenery of Katmai National Park and Preserve or Alagnak Wild River.

### **Wilderness**

In most of the park and preserve wilderness areas use of wildland fire would prevail and limited fire response actions would occur. Fire response actions would primarily occur to protect known cultural sites, structures, and high value natural sites. Prescribed fire could be implemented in wilderness or areas eligible for wilderness designation, but this would be the exception and not the rule. Alternative 3 would result in minor to moderate, localized, short-term adverse effects to wilderness resources during and immediately after fire management actions, but changes to wilderness character would be small. Using wildland fires and prescribed burns in wilderness would enhance naturalness in wilderness areas. For these reasons, Alternative 3 would not result in impairment to wilderness resources in Katmai National Park and Preserve and parts of the Alagnak Wild River.