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Appendix A

Wild and Scenic River (WSR) and Areas of Critical Environmental Concern (ACEC) Justification

A. Wild and Scenic River Eligibility Matrix Ranking

1. Introduction

The National Wild and Scenic River Act of 1968 was enacted to preserve the free flowing condition, water quality, and outstandingly remarkable values of select rivers. A four-step process is required before a river can be included in the NWSRS. The criteria used for ranking water bodies are eligibility, classification, suitability, and a further study analysis by Congress for authorized rivers.

The first step is an evaluation of a water body's eligibility. In order for a river to be eligible, it must be both free-flowing and possess one or more outstandingly remarkable values (ORV). An ORV is defined as a unique, rare or exemplary feature that is significant at a comparative regional or national scale. If a river is found eligible it is then analyzed to its current level of development. Next, a recommendation is made for assigning one or more of three classifications such as: wild, scenic, or recreational. The final step is the suitability analysis, which provides the basis for determining whether to recommend a river as part of the National System.

The procedures used to determine the eligibility status of rivers/streams within the Bay RMP planning area follow.

2. Method

To determine the eligibility of a river within the Bay planning area, a matrix system was used to rank comparative river resources. Rivers that received a value of 1 or 2 in any one category are considered to have an ORV. The criteria used for ranking these rivers, creeks, and tributaries are based on a numerical value of 1 to 5. The following general rating system used for the Wild and Scenic River Matrix is listed below:

- 1-Exemplary, one of the better examples of that type of resource at a national level.
- 2- Unique, a resource or combination of resources that is one of a kind at a regional level.
- 3- High quality at a regional and/ or local level.
- 4-Common resource at a regional and/ or local level.
- 5-Unknown.

An interdisciplinary team at the Anchorage Field Office (AFO) was convened to inventory and assess rivers/streams that had been recommended by members of the public or staff during scoping to determine the eligibility status for the Bay RMP/EIS. The general rating system was tailored to represent the specific factors of each resource and described below.

a) Fisheries

The Kvichak River is known for having the largest sockeye salmon run in the world (Minard 1998). This particular river received a value of 1 considering its high salmon population. However, it is no longer in BLM jurisdiction. The Alaganak, Goodnews, and Goodnews Middle Fork Rivers were given a value of 2 because of the quality of anadromous and resident fish including fish habitat. A value of 2 was assigned to rivers with existing high recreation and subsistence fishing for anadromous and resident fish species. A value of 3 was assigned to rivers with moderate recreation and subsistence fishing for anadromous and resident fish species. Rivers and creeks with no subsistence or recreational fishing were assigned a value of 4. The majority of the subsistence and recreational fishing activity occurs within the rivers that received a value of 2 or 3.

b) Recreation

The ratings provided were based on recreational and scenic qualities within the following rivers, creeks, and tributaries. Rivers that are free-flowing with unique recreational features, established patterns of high recreational use, and accessible to large numbers were assigned a value of 2. For example, the Kvichak River is a unique watershed with trophy rainbow trout and silver salmon sport fisheries that supports heavy lodge, fly-in, and local sport fishing traffic. However, it is no longer in BLM jurisdiction. The Alagnak Wild River, also received a value of 2. It is described by the National Park Service as one of the most popular fly-in fisheries in southwest Alaska. The river supported 2,133 visitor days of fishing and floating in the NPS managed upper 56 miles of river alone. Scenic values were assigned for all waterways by comparing them across the region. Most rivers rated values of between 3 (high quality) and 4 (common) at a regional and local level. None were rated at a value of 2 for scenic value due to the similar nature of their scenic characteristics throughout the planning area.

c) Wildlife/Subsistence

Both Subsistence and Wildlife were grouped together for the purpose of this evaluation since chapter 3 discussion was referenced in the same manner. The Kvichak River which drains into Bristol Bay received a rating of 2 as it had crucial salmon fisheries for supporting an entire watershed, and for subsistence uses for the entire region. It has the world's largest sockeye run which supports subsistence lifestyle of all communities in the watershed including some subsistence uses from elsewhere in the planning area and state. This river also provides subsistence uses for rural residents in all land ownerships including two National Parks and Preserves. Subsistence is unique to Alaska and cannot be considered a National level exemplar of resource management Nationwide as it is unique to Alaska. However, the Kvichak River is no longer in BLM jurisdiction. The Goodnews River received a value of 2 because it has similarities to the Kvichak River, although it has a smaller watershed and fewer dependent communities. It is the major regional resource in extreme Southwest Alaska and also includes a portion of Togiak National Wildlife Refuge and is a part of the Federal Subsistence Program. The Goodnews River is a crucial Bering Sea fishery resource. Both rivers have large anadromous fish populations, sport and commercial fishing, and subsistence dependence of international, national, and in-state importance. The fish provide a large part of sustaining the terrestrial wildlife ecosystem as well.

c) Cultural/Historic

The criteria for evaluation of cultural resources on proposed wild & scenic rivers within the Bay RMP are listed below.

1 - represents there is an observable settlement pattern of cultural sites (either eligible for listing on National Register of Historic Places individually or as a group), and/or sites exhibiting evidence of two or more cultures using the area, and/or an area of religious or cultural significance for local population (TCP eligible).

2 - represents there is at least one site eligible for listing and high potential for more.

3 - no cultural resources are known for this segment, but there is high potential for cultural resources. High potential for cultural resources in this area includes: well drained areas adjacent to salmon streams/rivers, inlets/outlets to lakes that do not freeze to bottom in the winter; overlooks where game herds would funnel through a natural constriction such as a valley.

4 - no cultural resources are known within such segments, but there is medium potential for cultural resources.

5 - indicates that no cultural resources are known within such segments, and there is low potential for cultural resources. Low potential for cultural resources in this area includes: poorly drained areas, areas not adjacent to trout or salmon streams, streams draining from lakes that freeze to the bottom in winter, steep slopes of over 30 degrees.

After comparative ranking of the river resources, the miles of stream on unencumbered BLM land were determined. This determination was added to the matrix in order to prevent bias toward BLM managed

rivers during the ranking process. Rivers that did not receive a ranking of 1 or 2 were immediately removed from the eligibility determination process due to their possessing no ORV. Rivers that are free flowing, determined to have an ORV(s), and flowed through BLM managed lands were determined to be eligible as per the Wild and Scenic River Act of 1968.

3. Results

Forty rivers within the Bay planning area were evaluated for eligibility. Of the 40 rivers evaluated. Three river segments were determined to be eligible for inclusion to the NWSRS.

Eligible rivers within the Bristol Bay region include: Alaganak River.

Eligible rivers within the Goodnews Bay region include: Goodnews River and Goodnews Middle Fork.

This resource evaluation was conducted by the following specialists:

Mike Scott/ Tim Sundlov- Fisheries
Bruce Seppi/Jeff Denton -Wildlife and Subsistence
Doug Ballou/Jeff Kowalczyk /Jake Schlapfer- Recreation
Donna Redding - Cultural and Historic



B. Draft Special Management Area Nominations

Evaluation of Carter Spit and Bristol Bay Areas of Critical Environmental Concern (ACEC)

1. Introduction

The Code of Federal Regulations at 43 CFR §1610.7-2 provides for the designation of areas of critical environmental concern (ACECs). Areas having potential for ACEC designation and protection management are identified and considered within the context of the resource management planning process. Inventory data were analyzed to identify areas containing resources, values, systems and processes or hazards that would make them eligible for further consideration for designation as an ACEC. This report will identify Areas of Critical Environmental Concern and provide rationale for designating these areas. An evaluation will be conducted of all existing ACECs, newly proposed ACECs, changes to any existing ACECs and proposed areas with a high environmental concern.

This report provides the evaluation of two areas proposed for designation as Areas of Critical Environmental Concern (ACECs), Bristol Bay and Carter Spit, which were evaluated as part of the Bay Resource Management Plan/Environmental Impact Statement.

What are the Criteria for Designation of an Area of Critical Environmental Concern (ACEC)?

The following criteria of **relevance** and **importance** must be met for designation of a potential ACEC -

- **Relevance** This criterion requires that a significant historic, cultural, or scenic value; a fish or wildlife resource or other natural system or process; or a natural hazard be present. By significant is meant that, when compared with others of its kind, it has relatively greater weight or meaning than others of its kind.
- **Importance** This criterion requires that the value, resource, system, process, or hazard being considered will have substantial significance and values. This generally requires qualities of more than local significance and special worth, consequence, meaning, distinctiveness, or cause for concern.

2. The Process

1. Evaluate existing ACECs for modification due to the change of conditions affecting the relevance and importance criteria. No ACECs are currently designated in the Bay planning area.
2. Nominate new areas with relevance and importance.
3. Evaluate nominated areas to determine if they meet the relevance and importance requirements.
4. Consider the potential ACECs as Alternatives that are analyzed and addressed in the Draft RMP/EIS.

The Draft Bay RMP/EIS contains recommendations on which potential ACECs are proposed for designation, and public comments will be requested. Public comments will be reviewed, considered, and modifications will be made as necessary before the Final RMP/EIS is circulated. Designation of ACECs will occur in the Record of Decision (ROD) upon approval of the RMP.

The ACEC evaluation was conducted by the following specialists:

Mike Scott/Tim Sundlov-Fisheries
Jeff Denton/Bruce Seppi-Wildlife and Subsistence
Doug Ballou/Jeff Kowalczyk-Recreation
Donna Redding- Cultural and Historic

a) Cultural/Historic

Overall the proposed Areas of Critical Environmental Concern within the Bay Plan have few recorded historic or archaeological sites. This is not because these areas are not significant but rather that they are remote, undeveloped and have not been intensively surveyed. The proposed ACECs all appear to have potential for historic or prehistoric sites and except for the Carter Spit area will be designated priority 3 for unknown potential. The Carter Spit area will be designated priority 2 for cultural resources, not only for its known cultural resources but also because it has high potential for previously undiscovered resources given its geographic setting on the coast and location within prime hunting areas for marine and terrestrial game as well as fishing areas.

b) Fisheries

Four major tributaries are located on BLM unencumbered lands in the Bay planning area that should be considered for a Special Management Area. The South Fork of the Goodnews River is located in the Goodnews Bay watershed and the three other tributaries, Faro Creek and the South and East Fork of the Arolik River, contribute to the Kuskokwim Bay watershed. All four tributaries are within the Kuskokwim Bay ADF&G Management Area. An Aquatic Habitat Management Plan will be implemented for water bodies falling within the designated ACECs to promote quality fish habitat.

(1) South Fork of the Goodnews River

The South Fork of the Goodnews River provides spawning and rearing habitat for economically important subsistence, commercial and recreational fisheries in the main stem Goodnews River. The historic average salmon escapement to the main stem Goodnews River is 3,137 Chinook salmon, 36,925 sockeye salmon, 21,284 chum salmon, and 27,897 coho salmon (Linderman 2005a). Stewart (2004) estimates that less than 10 percent of returning salmon to the Goodnews watershed spawn in the South Fork. Residents of Quinhagak, Goodnews Bay, and Platinum, located along the south shore of Kuskokwim Bay (approximately 220 households), harvest subsistence salmon primarily from Kanektok,

Arolik, and Goodnews River drainages (ADF&G 2001). The rainbow trout stocks which inhabit the Kuskokwim Bay streams are considered “world class” with high catch rates and are capable of producing rainbow trout that exceed 25 inches (ADF&G 2004). The stem of the Goodnews River supports the second largest sport fishery in the Kuskokwim Bay Area and angler effort (angler days) has averaged 2,522 from 1983 - 2002 (Lafferty 2004).

(2) Faro Creek and the South and East Fork of the Arolik River

Faro Creek and the South and East Fork of the Arolik River provide spawning and rearing habitat for economically important subsistence, commercial and recreational fisheries in the main stem Arolik River. The headwaters of these tributaries are located within an area of medium to high mineral potential. The Arolik River is a significant salmon producing river that drains into Kuskokwim Bay (Linderman 2005b). Residents of Quinhagak, Goodnews Bay, and Platinum, located along the south shore of Kuskokwim Bay (approximately 220 households), harvest subsistence salmon primarily from Kanektok, Arolik, and Goodnews River drainages (ADF&G 2001). The rainbow trout stocks which inhabit the Kuskokwim Bay area are considered “world class” with high catch rates and are capable of producing rainbow trout that exceed 25 inches (ADF&G 2004). The Arolik River supports the third largest rainbow trout sport fishery in Kuskokwim Bay and angler catch has averaged 1,122 fish from 1997 - 2002 (Lafferty 2004).

c) Subsistence and Wildlife Resources

(1) Goodnews Bay Region: Carter Spit and coastal wetlands

There are several wildlife related resources that justify essential habitats for maintaining species diversity. Carter Bay and coastal areas provide molting and staging habitat for Steller’s Eiders, a threatened species under the Endangered Species Act. (Shaw et al. 2004). Many BLM sensitive species use the area for staging and migration in fall including black brant, black scoters, blackpoll warblers, bristle-thighed curlews, grey-cheeked thrush, harlequin ducks, king eiders, long-tailed ducks, red-knot, Hudsonian godwit, red-throated loon, surf scoter, white-fronted geese and occasional harbor seals (Seppi, 1997). Carter Bay and coastal areas provide molting habitat for white-winged scoters and lesser scaup (Shaw et al. 2004). Several species of rare plants have been documented in the Carter Spit/Goodnews Bay area (Lipkin 1996, Parker 2005). The coastal estuaries and watersheds have concentrations of breeding shorebirds and waterfowl, including several trans-oceanic shorebird species. Beluga whales, Steller sea lions, harbor seals and bearded seals are found in tidal bays and the coastal fringes of the area (NOAA 2003). Subsistence activities serve local communities, through egg and spring waterfowl hunting, and seal and Beluga whale hunting. The area is subject to the effects of global warming in the form of active shoreline modifications from rising sea levels, increased storminess, and reduction of pack ice. Brown bears concentrate in coastal areas in spring to forage on vegetation and marine mammal carcasses, and later concentrate on salmon runs on coastal streams.

The islands in Carter Bay and other associated coastal estuaries are Maritime National Wildlife Refuge managed but their ecosystems are dependent upon the mainland terrestrial watersheds for fresh water sources to maintain estuary tidal flat ecosystems adjacent to BLM lands (NOAA, 2003). The Jacksmith Creek watershed is the fresh water source for the Togiak National Wildlife Refuge Coastal Wetlands and Jacksmith Bay/Carter Spit estuary and mudflats.

Should portions of the Indian River watershed remain in long-term BLM jurisdiction it would be added to the Carter Spit ACEC.

(2) Bristol Bay Region

The Bristol Bay region holistically provides seasonal habitats for the Mulchatna Caribou Herd and the fisheries forage base for brown bears. The area has concentrations of nesting trumpeter (Gibson and Malry 2003) and tundra swans (Wilk 1988) and widespread wetland habitats, which have moderate

productivity. However, cumulatively the area ranks high in statewide waterfowl productivity. Waterfowl produced in Bristol Bay are harvested throughout the Pacific flyway. Sensitive species in the region include trumpeter swans, white-winged and black scoters, black-poll warblers, rusty blackbirds and bald eagles. BLM lands provide movement corridor continuity for caribou movement and crucial seasonal habitats including calving and crucial winter range. Five plant species have been listed as rare by the Alaska Natural Heritage Program (Batten and Parker 2003). Adjacent tidal mudflats in Kvichak Bay and Nushagak Bay are recognized as a shorebird migration stopover site of regional importance, under the Western Hemisphere Shorebird Reserve Network (WHSRN 2005).

BLM planning blocks do not individually rank as high for wildlife importance as the region due to the widespread occurrence and use of wildlife resources. Subsistence use of wildlife resources are mostly local and regional importance. Sport harvest is subject to statewide, non-resident and international demand for large game.

d) Recreation

Recreation planning tools, such as Visual Resource Management and the Recreation Opportunity Spectrum, were utilized to determine relevance and importance ratings for potential Special Management Area nominations. The management objectives analyzed as a result of these planning inventories determined area-specific prescriptions.

For example, the recreation objective for semi-primitive motorized areas within the Bay planning area shall be to partially retain the existing character of the visual landscape. Activities will not dominate the view of a casual observer. The objective for primitive non-motorized areas within the planning area will allow evidence of humans and management controls and maintain a natural-appearing environment through careful mitigation measures while allowing moderate to major modification to the landscape. Commercial recreation activities are very limited to non-existent. Dispersed recreation is also very low and is normally tied to established subsistence activities. Therefore, recreation and scenic values were not rated as highly relevant or important on a world national or regional scale.

Table A.2. Areas of Critical Environmental Concern Nomination Matrix

Scores for Relevance (A) and Importance (B)																
Name of BLM Land Block	BLM Land Status	Acres	Wildlife		Cultural		Historic		Fisheries		Scenic		Recreational		Subsistence	
			A	B	A	B	A	B	A	B	A	B	A	B		
Klutuk Creek	U*	129,173	3	3	3	3	3	3	3	3	4	4	4	4	3	2
Yellow Creek	U*	243,689	3	4	3	3	3	3	4	4	4	4	3	3	4	3
Koggiling Creek	U*	159,732	3	4	3	3	3	3	4	4	4	4	4	4	4	4
Kvichak	U*	99,158	3	3	3	3	3	3	3	3	4	4	3	3	4	3
Iliamna West	U*	182,993	3	2	3	3	3	3	3	3	3	4	3	3	3	2
Alagnak	U*	126,023	3	4	3	3	3	3	3	3	4	4	3	3	4	3
Carter Spit ACEC	U*	62,862	1	2	3	3	3	3	3	3	3	3	3	4	3	2
Faro Creek	U*	20,737	3	3	3	3	3	3	2	2	3	3	4	4	3	4
Arolik River	U*	17,022	3	3	3	3	3	3	2	2	3	3	4	4	3	4
Goodnews River South Fork	U*	32,294	3	3	3	3	3	3	2	2	3	3	4	4	3	4

U* indicates unencumbered BLM lands. Some lands may be topfiled by the State of Alaska.

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Appendix B

ANILCA Section 810 Analysis of Subsistence Impacts

Appendix B

ANILCA Section 810 Analysis of Subsistence Impacts

On January 30, 2004, the Bureau of Land Management (BLM) issued a Notice of Intent in the *Federal Register* to prepare a Resource Management Plan (RMP) and associated Environmental Impact Statement (EIS) for public lands administered by the Anchorage Field Office. As defined by the Federal Land Policy and Management Act of 1976 (FLPMA), as amended, “public lands” are those federally-owned lands and interests in lands (such as federally-owned mineral estate) that are administered by the Secretary of the Interior through the BLM. In this case, public lands also include lands selected, but not yet conveyed, to the State of Alaska and Native corporations and villages.

Current management of these lands in part (Goodnews Block) is guided by the Southwest Planning Area Management Framework Plan (MFP) (BLM 1981). Since approval of the MFP in 1981, new regulations and policies have created additional considerations that affect the management of public lands. In addition, new issues and concerns have arisen over the past 25 years. Consequently, some of the decisions in the MFP are no longer valid or have been superseded by requirements that did not exist when the MFP was prepared. Further, the remaining lands in the Bristol Bay portion of the Bay Planning Area are not covered by an existing plan. Through the completion of an RMP/EIS, the BLM proposes to provide a comprehensive land use plan that will guide management of the public lands and interests administered by the Anchorage Field Office.

Chapter III: Affected Environment and Chapter IV: Environmental Consequences of the Bay Draft Resource Management Plan provide a detailed description of both the affected environment of the planning area and the potential adverse effects of the various alternatives to subsistence. This appendix uses the detailed information presented in the Bay Draft RMP/EIS to evaluate the potential impacts to subsistence pursuant to Section 810(a) of the Alaska National Interest Land Conservation Act (ANILCA).

A. Subsistence Evaluation Factors

Section 810(a) of ANILCA requires that an evaluation of subsistence uses and needs be completed for any federal determination to “withdraw, reserve, lease, or otherwise permit the use, occupancy or disposition of public lands.” As such, an evaluation of potential impacts to subsistence under ANILCA Sec. 810(a) must be completed for the Bay Draft RMP/EIS. ANILCA requires that this evaluation include findings on three specific issues:

- The effect of use, occupancy, or disposition on subsistence uses and needs;
- The availability of other lands for the purpose sought to be achieved; and
- Other alternatives that would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes (16 USC Sec. 3120).

The evaluation and findings required by ANILCA Sec. 810 are set out for each of the four alternatives considered in the Bay Draft Resource Management Plan.

A finding that the proposed action may significantly restrict subsistence uses imposes additional requirements, including provisions for notices to the State of Alaska and appropriate regional and local subsistence committees, a hearing in the vicinity of the area involved, and the making of the following determinations, as required by Section 810(a)(3):

- Such a significant restriction of subsistence uses is necessary, and consistent with sound management principles for the utilization of the public lands;
- The proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of use, occupancy, or other disposition; and
- Reasonable steps will be taken to minimize adverse effects upon subsistence uses and resources resulting from such actions.

To determine if a significant restriction of subsistence uses and needs may result from any one of the alternatives discussed in the Bay Plan, including their cumulative effects, the following three factors in particular are considered:

- The reduction in the availability of subsistence resources caused by a decline in the population or amount of harvestable resources;
- Reductions in the availability of resources used for subsistence purposes caused by alteration of their normal locations and distribution patterns; and
- Limitations on access to subsistence resources, including but not limited to increased competition for the resources.

A significant restriction to subsistence may occur in at least two instances: 1) when an action substantially reduces populations or their availability to subsistence users, and 2) when an action substantially limits access by subsistence users to resources. Chapter III: Affected Environment of Bay Plan provides information on areas and resources important for subsistence use, and the degree of dependence of affected communities on different subsistence resource populations. Chapter IV: Environmental Consequences provides much of the data on levels of reductions and limitations under each alternative, which was used to determine whether the action would cause a significant restriction to subsistence. The information contained in the Bay Draft RMP/EIS is the primary data used in this analysis.

A subsistence evaluation and findings under ANILCA Sec. 810 must also include a Cumulative Impacts analysis. The following section begins with evaluations and findings for each of the four alternatives discussed in Bay Plan. Finally, the cumulative case, as discussed in Chapter IV: Environmental Consequences of the Bay Plan, is evaluated. This approach helps the reader to separate the subsistence restrictions that would potentially be caused by activities proposed under the four alternatives from those that would potentially be caused by past, present, and future activities that could occur, or have already occurred, in the surrounding area.

When analyzing the effects of the four alternatives, particular attention is paid to those communities who have the potential to be most directly impacted by the proposed actions. These communities are located adjacent to or within the Bay planning area. The cumulative case expands the analysis to include lands within and outside the Bay planning area sharing subsistence resource populations' seasonal distributions, migratory patterns and key habitats. This would include indirect effects to communities located in other areas of the state to assess any impacts to subsistence that may result because of negative effects to migratory subsistence species and seasonal distributions thereof.

In addition to ANILCA, Environmental Justice, as defined in Executive Order 12898, also calls for an analysis of the effects of federal actions on minority populations with regard to subsistence. Specifically, Environmental Justice is:

The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic group should bear a disproportionate share of the

negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, local, and tribal programs and policies.

Section 4-4 of Executive Order 12898, regarding the Subsistence Consumption of Fish and Wildlife, requires federal agencies to collect, maintain, and analyze information on the consumption patterns of populations who principally rely on fish and/or wildlife for subsistence, and to communicate to the public any risks associated with the consumption patterns from activities that they are proposing. To this end, the description of subsistence use as presented in Chapter III: Affected Environment, as well as the subsistence analyses of the alternatives located in Chapter IV: Environmental Consequences of the Bay Plan, have been reviewed and found to comply with Environmental Justice requirements.

B. ANILCA Sec. 810(a) Evaluations and Findings for All Alternatives and the Cumulative Case

The following evaluations are based on information relating to the environmental and subsistence consequences of alternatives A through D, and the cumulative impacts analysis as presented in Chapter IV: Environmental Consequences of the Bay Plan. The stipulations discussed in Chapter 2 of the Bay Plan are also considered for the alternatives to which they apply. The evaluations and findings focus on potential impacts to the subsistence resources themselves, as well as access to resources, and economic and cultural issues that relate to subsistence use.

1. Evaluation and Findings for Alternative A

Selection of Alternative A would result in management of the Bay planning area as specified in this document and in part (Goodnews Block) as per the Southwest Planning Area MFP. Valid decisions contained in the Southwest Planning Area MFP would be implemented if not already completed. Direction contained in existing laws, regulation and policy would also continue to be implemented, sometimes superseding provisions in the Southwest Planning Area MFP. The current levels, methods and mix of multiple use management of public land in the planning area would continue, and resource values would receive attention at present levels. In general, most activities would be analyzed on a case-by-case basis and few uses would be limited or excluded as long as they were consistent with State and Federal laws. Fire would be managed consistent with the Alaska Land Use Plan Amendment for Wildland Fire and Fuels Management (BLM 2004b, 2005c).

a) Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Uses and Needs

Under Alternative A, primary impacts to subsistence would be associated with the exploration, development and production of mineral resources on adjacent lands, support infrastructure that may involve BLM lands directly, commercial fishing and ocean-related factors beyond the scope of BLM management, continuation of the current management of recreation and OHV use and potential grazing use in the planning area as described within this plan and in part (Goodnews Block) within the 1981 Southwest Planning Area MFP.

Extensive mineral exploration and potential development projects (including infrastructure), mostly on adjacent lands but potentially on or traveling over BLM-administered lands via aircraft, and various inventory, monitoring and compliance activities have the potential to affect subsistence fish and wildlife species and use in the planning area. Specifically, the following activities associated with resource development of adjacent lands could displace subsistence resources for the duration of the activity: temporary or long-term camps and associated facilities; the use of aircraft, especially helicopters for personnel and equipment transport; potential chemical and hazardous material spills and air-transported

contaminants; aerial resource surveys and exploration activities; road construction; and the use of boats and/or OHVs. The magnitude, intensity and timing of these activities is unknown and may vary from temporary and localized to regional in scope. Effects to any fish or wildlife at the population(s) level cannot be predicted at this time and is beyond the scope of this analysis.

Inventory and monitoring efforts would provide valuable baseline and longer term monitoring information that would be used to maintain or improve habitat as well as wildlife and fish populations. Every action in the Bay planning area would be evaluated on a case-by-case basis under Alternative A. Each proposed project could have BLM-imposed required operating procedures, stipulations or other mitigation requirements in order to minimize impacts to fish and wildlife subsistence resources and their use. Activities on adjacent lands which could potentially affect BLM subsistence resources and uses are beyond the scope of BLM authority under ANILCA Section 8.

Under Alternative A, impacts to subsistence may result from continuing the current management standard of OHV and recreational use in the Bay planning area. Currently, commercial and non-commercial recreational use occurs in the planning area and use in general has been on the rise. There are a few heavily used areas where these activities compete directly with subsistence use. During scoping, residents expressed concern over the large number of sport hunters and guiding operations that compete with subsistence users for resources, primarily moose and caribou. Subsistence hunters in the Bristol Bay land blocks maintain that air traffic by transporters and guide/outfitters and the presence of sport hunters in the area during the hunting season has resulted in the displacement of migrating caribou away from traditional use areas near Koliganek. The Mulchatna Caribou Herd (MCH) has displayed significant shifts in seasonal ranges and migration routes over the past 20 years. Many areas such as Iliamna, Naknek, Levelock, King Salmon and other communities in the eastern portion of the Bay planning area that enjoyed abundant caribou 10-15 years ago now do not have MCH animals readily available. The Goodnews, Platinum, Aniak and Bethel areas, which had very few or no caribou present 20 years ago, now have abundant caribou seasonally available from the MCH. The bull component of the herd and the herd in general has experienced significant declines approaching 60% since 2000.

Currently, there are no active livestock grazing operations in the Bay planning area. If applications are submitted, they would be considered on a case-by-case basis. Potential negative impacts from grazing include: competition for forage and space; degradation of wetlands: conversion of native habitat vegetative diversity and composition: introduction of noxious weeds and exotic plants: riparian habitat degradation: stream bank and fish habitat degradation; and introduction of exotic diseases and parasites. Competition for habitat and seasonal disruption of subsistence resources would depend on the intensity and extent of grazing.

According to ADF&G, the current subsistence need for moose in Game Management Units (GMUs) in the Bay planning area range between 280-390 moose annually. These amounts are considered relatively low, especially since there has been a significant increase in the distribution and population of moose in GMU 17A, resulting from a hunting moratorium which gave the moose population time to rebound from a previously low population level. These use numbers also seem low considering the declining annual caribou harvest in recent years due to population decline of MCH. Currently, the MCH is experiencing a rapid decline (approaching 60% since 2000) and subsistence hunters' reliance on moose is currently high and is anticipated to increase throughout the Bristol Bay Blocks. However the majority of harvest occurs on non-BLM lands along major rivers with adequate boat access. The Goodnews Bay Block is currently under a moose harvest moratorium to restore viable numbers of moose in that block. Restoration may allow for limited moose hunting at some time during the life of the Bay Plan.

According to ADF&G, the current subsistence need (5 AAC 99.025 or another citation) for caribou for the GMUs in the Bay planning area ranges between 3,600 and 4,800 per year. Reported harvests indicate a relatively low number of caribou harvested, however low harvest reporting is likely. Actual harvest by subsistence users is probably much higher. Unreported harvest has been estimated to lie between 3,200 and 7,200 caribou annually.

According to ADF&G, the current subsistence need for brown bear (5 AAC 99.025) ranges between 45 and 85 annually for Bay planning area GMUs. Actual harvest likely exceeds this number significantly and adequate reporting of harvest by local residents may be lacking.

b) Evaluation of the Availability of Other Lands for the Purpose Sought to be Achieved

Alternative A would continue the current management of BLM-managed lands in the planning area under the 1981 Southwest Planning Area MFP for the Goodnews Block and current management in the remainder of the Bay planning area which is not covered under a management plan. Lands managed by other federal agencies in the planning area are managed under National Park Service or Fish and Wildlife Service planning documents. Other BLM lands in the state either already have land use planning documents in place, or are being addressed by separate planning processes. State and Native corporation lands cannot be considered in a BLM plan, and under BLM policy other BLM lands outside of Alaska are not considered under ANILCA.

c) Evaluation of Other Alternatives that Would Reduce or Eliminate the Use, Occupancy, or Disposition of Public Lands Needed for Subsistence Purposes

Alternatives that would reduce or eliminate the use of public lands needed for subsistence include the three action alternatives that are presented and analyzed in Chapters 2 and 4 of the main body of the Bay Plan. These alternatives were created to represent a wide range of potential activities that could occur on BLM-managed lands, along with management actions that would serve to protect specific resource values following current national guidelines. Additional alternatives that were considered but not analyzed in detail are also discussed in Chapter 2.

d) Findings

Alternative A may significantly restrict subsistence use and needs in the Bristol Bay region of the Bay planning area. The impacts to subsistence users of moose and caribou by increased competition in this heavily-used area and the associated displacement of resources meet the threshold of “may significantly restrict subsistence use.” This finding applies primarily to the Bay planning area communities dependent upon MCH and to a lesser degree moose.

2. Evaluation and Findings for Alternative B

Alternative B lays the groundwork for active management to facilitate resource development on BLM lands in the planning area. In this alternative, constraints to protect resource values and habitat would be implemented in specific geographic areas rather than across the planning area. Nearly all ANCSA 17(d)(1) withdrawals would be revoked on lands retained in long-term federal ownership, increasing the potential for mineral exploration and development. Travel and trail restrictions would be minimized. Recreation management would focus on dispersed recreation and management of permits. Management of State and Native-selected lands would be mostly custodial.

a) Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Uses and Needs

Under Alternative B, the primary potential impacts to subsistence would be associated with the proposed management of the Livestock Grazing and Locatable/Saleable/Leasable Minerals programs from mineral exploration and development. Compliance, inventory, and monitoring efforts under a variety of resource

programs (see Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Uses and Needs beginning on page D-5) could cause potential impacts. However, unlike Alternative A, inventory and monitoring efforts under Alternative B would be guided by a standard set of Required Operating Procedures that serve to protect habitat and resources from potential impacts as a result of permitted activity within the planning area (see Chapter 2).

Alternative B has potential to impact subsistence resources from grazing. Under this alternative, the entire planning area would be open to livestock and/or reindeer grazing, which could result in: a reduction of grazing habitat; impact to important seasonal ranges; disease and parasite outbreaks; and degradation of wetlands/riparian and fisheries habitats. These potential impacts could affect subsistence fishery resources, migratory birds (subsistence uses managed via USFWS under the Migratory Bird Treaty Act) and the Mulchatna Caribou Herd, which is a primary source of large land-mammal protein for most communities in and adjacent to the planning area. At this time it appears unlikely that livestock or reindeer grazing operations would be established during the life of the plan due to lack of interest and practicality of such operations in the Bay planning area.

Under Alternative B, oil and gas leasing would be allowed on all BLM lands. Oil and gas leasing can result in three associated activities: seismic exploration, exploratory drilling, and development/production.

Year around subsistence resource distribution, abundance, movement and associated seasonal harvest activities could be affected by seismic exploration, exploratory drilling and infrastructure and development/production activities. The following could be impacted by oil and gas leasing activities: caribou, moose, brown bear, furbearer trapping, waterfowl (not managed under ANILCA but subsistence migratory bird use is under the authority of the Migratory Bird Treaty Act), fishing, and hunting.

A number of other activities associated with oil and gas leasing that have the potential to impact subsistence are: helicopter-supported activities, access and facilities (pipelines, production water treatment units, separation ponds, electric lines, buildings, storage facilities etc), construction and OHV use. Although, seismic exploration can be a hindrance and an annoyance, it does not create a substantial barrier between communities and subsistence resources. Seismic exploration and exploratory drilling are expected to have localized and temporary affects on subsistence resources and uses.

Potential impacts from oil and gas development and associated infrastructure are greater than for exploration, given the permanent and year-round nature of operations. If a development were to occur in the calving area of the MCH, or if infrastructure was constructed in such a way as to impede movements of the herd to important seasonal aggregation sites such as calving and post calving aggregations, insect-relief habitat, and breeding or winter ranges, then there would be significant impacts to this important subsistence resource. However, for the purposes of this planning effort, the reasonable foreseeable development scenario indicates 6 exploratory wells and 1 developmental oil and gas well would be constructed in the Bristol Bay portion of the Bay planning area under Alternative B. Other subsistence species that could be affected by oil and gas development include: salmon and fresh water fish, moose, brown bear and migratory birds; however, impacts to these species as a result of Alternative B are considered negligible (See Wildlife, Alternative B. Impacts to wildlife from Leasable Minerals discussion in Chapter 4). Although specific parameters concerning the projected development are not discussed, associated roads, pipelines, production water treatment facilities and docking facilities all serve to potentially displace animals until they may become acclimated to the infrastructure and associated human activity. Additionally, roads, docks, and even remote airstrips constructed to aid production may serve as potential inroads for additional local subsistence user accessibility to resources as well as non-local hunters and fishermen, increasing the amount of competition for resources in the area. Adequate stipulations and ROPs concerning the use of infrastructure by local and non-locals would serve to minimize this type of impact.

Potential impacts to subsistence activities and fish and wildlife resources from other potential industries, such as Locatable Minerals (hard-rock or placer mining), Mineral Materials (gravel pits) may increase with the removal of the ANCSA 17(d)(1) withdrawals in the Goodnews Block, depending on the subsequent market for such minerals and interest in the area. Infrastructure for exploration and development of mineral resources adjacent to BLM managed lands may require location of such infrastructure on BLM

lands. This infrastructure development could potentially impact subsistence uses, as well as increase accessibility. This could cause increased competition for subsistence resources between local and non-local user groups. OHV opportunities may increase with development of access infrastructure. Increased access could compromise local subsistence fish and wildlife resource abundance, distribution, movement, and use levels. Impacts to subsistence activities, fish and wildlife resources, and habitats from management of forest products (timber sales, pre-commercial thinning, access construction, etc.) are anticipated to be minor given the lack of commercial timber in the Bay planning area. Under Alternative B, conflicts between subsistence users, commercial and non-commercial recreation users, and associated OHV uses would be addressed by Limited areas that would designate use of roads and trails, seasonal use and apply gross vehicle weight limitations. Management of transporter, guides and outfitter numbers and distribution would not be applied under this Alternative, but would be evaluated on a case-by-case basis. Alternative B would have fewer impacts on subsistence use than Alternative A in this heavily-utilized area (see discussion under Alternative A).

b) Evaluation of the Availability of Other Lands for the Purpose Sought to be Achieved

Alternative B would manage BLM lands in the planning area in order to optimize resource development, with fewer restraints on commercial activity. Lands managed by other federal agencies in the planning area are managed under National Park Service or Fish and Wildlife Service planning documents, and wide-scale development of these lands is limited or disallowed by the mission and goals of these federal lands as conservation system units. Other BLM lands in the State, such as the National Petroleum Reserve Alaska, are managed primarily to allow for oil and gas development under specific planning documents. Additional BLM lands are managed by current planning documents that allow a mixture of development and conservation following the BLM multiple-use mission, or are currently being evaluated through the planning process. State and Native Corporation lands cannot be considered in a BLM plan, and under BLM policy other BLM lands outside of Alaska are not considered under ANILCA. However activities on adjacent State and Native land may impact subsistence fish and wildlife resources and the access to and use of subsistence resources on BLM managed lands. BLM has little control over such activities except by active participation in input and management of proposed actions that would occur on BLM lands in support of development on non-BLM lands.

c) Evaluation of Other Alternatives that would Reduce or Eliminate the Use, Occupancy, or Disposition of Public Lands Needed for Subsistence Purposes

Alternatives that would reduce or eliminate the use of public lands needed for subsistence include the three action alternatives that are presented and analyzed in Chapters 2 and 4 of the main body of the Resource Management Plan. These alternatives were created to represent a wide range of potential activities that could occur on BLM-managed lands, along with management actions that would serve to protect specific resource values following current national guidelines. Additional alternatives that were considered but not analyzed in detail are also discussed in Chapter 2.

d) Findings

Alternative B would not significantly restrict subsistence use in or near the planning area given the management parameters outlined, including the stipulations and ROPs found in Chapter 2. Should the amount of oil and gas exploration or anticipated area of potential development expand, this finding may need to be revised to resolve and mitigate additional impacts to: salmon and freshwater fisheries; the Mulchatna Caribou Herd; habitat and other localized resources; traditional subsistence use areas; and subsistence use.

3. Evaluation and Findings for Alternative C

Alternative C emphasizes active measures to protect and enhance resource values. Production of minerals and services would be more constrained than in Alternatives B or D and in some areas, uses would be excluded to protect sensitive resources. Areas of Critical Environmental Concern (ACEC) are identified, and specific measures proposed to protect or enhance values within these areas. Several rivers are recommended suitable for designation under the Wild and Scenic Rivers Act. Limited areas are proposed for Off-Highway Vehicles to protect habitat, soil and vegetation resources. Most ANCSA 17(d)(1) withdrawals would be revoked, but some would be replaced/retained in order to protect or maintain resource values.

a) Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Uses and Needs

Alternative C would have minimal impact on subsistence use as a result of management actions or designations within the planning area. Some of the proposed actions would positively impact subsistence. Those actions would emphasize habitat and resource protection and use patterns. While development activity could occur under this alternative, areas of critical habitat would be protected by special designation, and by the stipulations and ROPs as presented in Chapter 2. Actions such as the creation of new Areas of Critical Environmental Concern and/or the designation of Wild and Scenic Rivers (WSRs) do not limit or impose any restriction on subsistence use as per ANILCA Title VIII.

b) Evaluation of the Availability of Other Lands for the Purpose Sought to be Achieved

Alternative C would manage BLM lands in the Bay planning area in order to optimize conservation. Lands managed by other federal agencies in the Bay planning area are managed under National Park Service or Fish and Wildlife Service planning documents, and are considered conservation system units. Other BLM lands in the State either already have land use planning documents in place that specify the amounts and types of activities that can or can not occur, or are currently being evaluated by separate planning processes. State and Native Corporation lands cannot be considered in a BLM plan, and under BLM policy other BLM lands outside of Alaska are not considered under ANILCA; however activity and land use on adjacent State or Native lands would potentially impact BLM subsistence activity and resources in terms of resource abundance, distribution, movements and subsistence user access to said resources. BLM lands may provide: support infrastructure for access; mineral materials; water resources transportation systems; or other things needed for development on adjacent non-BLM lands, which may have impacts to fish and wildlife resources, habitat and subsistence uses. Further evaluation of such developments may be necessary if and when proposed. Such development would also potentially increase competition for subsistence resources from other user groups by providing increased accessibility, which may increase harvest on BLM lands and adjacent lands, which share subsistence resource populations.

c) Evaluation of Other Alternatives that would Reduce or Eliminate the Use, Occupancy, or Disposition of Public Lands Needed for Subsistence Purposes

Alternatives that would reduce or eliminate the use of public lands needed for subsistence include the three action alternatives that are presented and analyzed in Chapters 2 and 4 of the main body of the Resource Management Plan. These alternatives were created to represent a wide range of potential activities that could occur on BLM lands, along with management actions that would serve to protect specific resource values following current national guidelines. Additional alternatives that were considered but not analyzed in detail are also discussed in Chapter II.

d) Findings

Alternative C would not significantly restrict subsistence use of or access to fish and wildlife resources by communities in the Bay planning area. Some impacts to subsistence resources would be beneficial, and any impacts from the limited development allowed under this alternative would be minimized by ROPs and stipulations.

4. Evaluation and Findings for Alternative D

Alternative D emphasizes a moderate level of protection, use, and enhancement of resources and services. Constraints to protect resources would be implemented, but would be less restrictive than under Alternative C. This alternative would designate one Areas of Critical Environmental. No rivers would be recommended as suitable for designation under the Wild and Scenic Rivers Act. This alternative would revoke most ANCSA (d)(1) withdrawals.

a) Evaluation of the Effect of Use, Occupancy, or Disposition on Subsistence Uses and Needs

Alternative D, much like Alternative C, would have minimal impact on subsistence use, as a result of management actions. All lands within the planning area would be available for oil and gas leasing and impacts similar to those discussed under Alternative B could occur. However, protective measures in the form of stipulations and ROPs (see Appendix A) would help to minimize impacts to subsistence uses. These stipulations and ROPs would include; the seasonal restriction of activity; and the creation of an ACEC to protect fish and wildlife diversity, abundance, distribution movement. This should protect habitat from conversion, degradation, fragmentation, and the loss of habitat used by fish and wildlife, which in turn would protect subsistence uses.

Under Alternative D, the Bay planning area would be managed as semi-primitive motorized Limited OHV area, which would take into consideration current use levels, safety, resource impacts, operator tolerance, and quality of recreational experience. Using a public process, BLM may develop management objectives and strategies for specific areas which may include: limitations on total number of visitor use days; number of commercial operators; instituting additional permitting requirements; instituting seasonal closures or limitations on OHV use and size; and determining the appropriate level of facility development. Outfitters, guides and possibly transporters would be managed on a case-by-case basis. Other public users would have no set limits on use. Under this scenario, increased competition from non-local hunters would continue to impact subsistence users and competition may increase over the life of the Bay Plan.

b) Evaluation of the Availability of Other Lands for the Purpose Sought to be Achieved

Alternative D would manage BLM lands in the planning area following the BLM mission of multiple use, while at the same time protecting critical habitat and enhancing natural resource values. Lands managed by other federal agencies in the planning area are managed under National Park Service or Fish and Wildlife Service planning documents, and are considered conservation system units. Other BLM lands in the State either already have land use planning documents in place that specify the amounts and types of activities that can or can not occur, or are currently being evaluated by separate planning processes. State and Native Corporation lands cannot be considered in a BLM plan, and under BLM policy other BLM lands outside of Alaska are not considered under ANILCA. However activity and land use on adjacent State or Native lands would potentially impact BLM subsistence activity and resources in terms of resource abundance, distribution, movements and subsistence user access. BLM lands may provide support infrastructure for access, materials, water resources transportation systems, or other things needed for development on adjacent non-BLM lands, which may have impacts to fish and wildlife resources, habitat and subsistence uses. Further evaluation of such developments may be necessary if

and when proposed. Such development would also potentially increase competition for subsistence resources from other user groups by providing increased accessibility, which may increase harvest on BLM lands and adjacent lands, which share subsistence resource populations.

c) Evaluation of Other Alternatives that would Reduce or Eliminate the Use, Occupancy, or Disposition of Public Lands Needed for Subsistence Purposes

Alternatives that would reduce or eliminate the use of public lands needed for subsistence include the three action alternatives that are presented and analyzed in Chapters II and IV of the main body of the Resource Management Plan. These alternatives were created to represent a wide-range of potential activities that could occur on BLM Lands, along with management actions that would serve to protect specific resource values following current national guidelines. Additional alternatives that were considered but not analyzed in detail are also discussed in Chapter II of the main document.

d) Findings

Alternative D would not significantly restrict subsistence use in the planning area. Most of the impacts to subsistence resources would be negligible. Any impacts from the limited amount of development allowed to occur under this alternative would be minimized by the stipulations and ROPs discussed in Appendix A. Impacts to subsistence species are expected to be localized and temporary, and are not envisioned to impact resources at the population level. No impacts to access by subsistence users are expected to occur.

Competition for subsistence resources, primarily fish, caribou and moose, occurs due to the large number of non-local users, especially those using the services of transporters and outfitters. Under Alternative D, there would be no set limit on the number of guides, outfitters, transporters, local hunters, non-local hunters not using guides or non-consumptive user groups. According to ADF&G, the demand for fish and wildlife by nonresident and non-local hunters in Game Management Units in the Bay planning area continues to increase. Due to a decline in the MCH, especially the male component, increased hunting restrictions for caribou have occurred since 2002 and are likely to continue for several more years. Currently, moose harvest levels are adequate, given the abundance and accessibility of moose. However, if the MCH is impacted to the extent that subsistence users require more moose to offset the shortage in caribou, then significant impacts to subsistence use could result, and revisions to this finding may be required. Significant regulatory changes to restrict non-subsistence and/or subsistence use of caribou and moose resources through the Federal Subsistence Board and State Board of Game would also become necessary.

5. Evaluation and Findings for the Cumulative Case

The goal of the cumulative analysis is to evaluate the incremental impact of the current action in conjunction with all past, present, and reasonably foreseeable future actions in or near the Bay planning area. The cumulative analysis considers in greatest detail activities that are more certain to happen, and activities that were identified as being of great concern during scoping. Actions included in the cumulative analysis include, but are not limited to, the following:

History of Oil and Gas Exploration - To date, oil and gas exploration has been limited to 26 onshore wells and 2 offshore wells in the Bristol Bay region, an area comprising about 40,000 square miles (Magoon et al. 1996). None of the wells produced oil or gas.

First Lease Sales - The State of Alaska first made land available for oil and gas leasing in the Bristol Bay area in the 1960s. Sales #2 and #5 resulted in the leasing of five isolated tracts in Nushagak Bay and on the Alaska Peninsula (State of Alaska 2005). A total of 476,824 acres were leased. In 1961 Pure Oil

Company received a contract from the State of Alaska to drill three wells in the Nushagak Bay area. The project was abandoned when Pure Oil Company failed in an attempt to land a drilling rig in the area due to icing conditions (State of Alaska 1961).

Historic Wells - The North Aleutian COST #1 well (1983) and the Amoco Becharof #1 well (1985) were drilled in the Aleutian Islands region. The North Aleutian COST #1 well was drilled offshore by ARCO into the Bear Lake Formation, which exhibited good reservoir properties. Approximately 33 feet of coal was also found (Reifenstuhl and Finzel 2005).

Becharof #1, the nearest well on the Alaska Peninsula to the planning area boundary is located approximately 30 miles south of the boundary. It was drilled in 1985 by the Amoco Petroleum Company. Significant gas shows were encountered in Tertiary rocks (Reifenstuhl and Brizzolara 2004). The strata lying between 6,700 and 8,000 feet are considered mature (hydrocarbon generating) (Haga and others 2005). The exploratory well was abandoned.

Cook Inlet Basin Oil and Gas - Alaska's first commercial oil production came from discoveries in Cook Inlet. In 1959, the State of Alaska established a competitive leasing program. Since then over 5.6 million acres of State land have been leased in 40 State oil and gas lease sales in the Cook Inlet region. Prior to Statehood in 1959 the Federal government conducted non-competitive lease sales. About 67,000 acres of the non-competitive Federal leases remain active in the Cook Inlet basin. One competitive Federal lease has been issued to date: a 400-acre parcel. In 1960, annual production rose to 600,000 bbls, and peaked at 83 million bbls in 1970. Industry-related developments include a Unocal ammonia-urea plant in Nikiski, the first oil refinery developed by Tesoro in 1969 near Kenai, and a liquid natural gas (LNG) plant in Nikiski in 1969.

History of Locatable Mineral Production - Known mineral deposits within the Bay planning area that have seen historical production include one deposit of placer platinum, placer gold, and one small mercury lode deposit. Placer platinum mining has historically occurred on the Salmon River near the Goodnews Mining Camp and associated side drainages including Dowery Creek, Squirrel Creek, and Clara Creek. Between 1928 through 1982 an estimated 646,312 troy ounces of platinum were mined from these drainages. Early open cut mining was conducted by draglines/slucice-boxes in the side drainages. In 1937 a large bucket-line dredge was brought in to mine the Salmon River which operated through 1982.

Placer gold mineralization has been identified and mined in the past but these operations were small and have been inactive for many years. Placer gold mining has occurred in the headwaters of the Arolik River and the Wattamuse/Slate Creek area, north of Goodnews Bay; at Trail Creek, a tributary of the Togiak River; at American Creek, north of Naknek Lake; and at Portage Creek and Bonanza Creek, north of Port Alsworth. The largest gold placer operation occurred around Wattamuse Creek and associated drainages, where between 1917 through 1947 an estimated 30,041 troy ounces of gold were mined (BLM, 2005 AMS).

Mercury was discovered at the Redtop Mercury Mine, located on Marsh Mountain north of Dillingham. Production occurred from 1952 to 1959 with a total of approximately 100 flasks (Hudson, 2001a OFR 01-192). Several abandoned mine projects have been conducted at the Redtop Mercury Mine during the last decade, including hazardous waste removal of the retort and contaminated soil at the Redtop Millsite along the Wood River. Additionally, dynamite demolition and a closure of the main underground adit have occurred at the associated mine site on top of Marsh Mountain (BLM 2005).

Omnibus Roads - Three Omnibus roads were constructed in the Bay planning area.

C. Present and Reasonably Foreseeable Future Development

Commercial Fishing - Commercial fishing in Bristol Bay continues as the key economic driver in the region. Residents in every village in the region participate in the fishery, with members of every community holding set net and drift net limited entry permits.

The Oil Industry - Oil provides approximately 85% of the State of Alaska income, Permanent Fund Dividends to residents, and has resulted in infrastructure development in the Bristol Bay Region. Oil and Gas in Bristol Bay Basin - Offshore drilling is currently off limits following a 1996 presidential moratorium; however, directional drilling from onshore is authorized (State of Alaska 2004). The moratorium on offshore drilling is in effect until June 30, 2012, but can be revoked by the President prior to that date (Sherwood et al. 2006).

Alaska Peninsula and Nushagak Peninsula Oil and Gas Leasing Program - On March 17, 2004, ADNR, Lake and Peninsula Borough, Bristol Bay Borough, and Aleutians East Borough signed a Memorandum of Understanding (MOU) in support of oil and gas lease sales and licensing of State land in the Bristol Bay and Alaska Peninsula regions. Similar MOUs were already in place between the ADNR and the Aleut Corporation and the Bristol Bay Native Corporation (State of Alaska 2004). These MOUs also provide collaboration in attempting to persuade the Federal government to lift the offshore exploration moratorium on oil and gas exploration in the Bristol Bay region (Chambers 2003).

Oil and Gas Exploration Licensing Near Dillingham - The multi-agency coordination resulted in the State of Alaska initiating an Exploration Licensing area near Dillingham, which originally totaled 329,113 acres, only applicable for lands owned by the State (State of Alaska 2004). Bristol Shores, LLC, the primary interested licensee, was granted a license but let it lapse. In June 2005, Bristol Shores applied for a new license application for a reduced area consisting of 20,154 acres on the east side of Nushagak Bay, south of Dillingham (Petroleum News 2005) with the intent of conducting initial exploration. Currently there is no proposed or pending license in the Bristol Bay license area. Commercial oil finds are unlikely, but the area may contain up to 1 trillion cubic feet (tcf) of natural gas (Loy 2004).

Oil and Gas Lease Sales - ADNR held an oil and gas lease sale October 26, 2005, offering 1,047 tracts of 5.8 million acres within the Alaska and Nushagak peninsulas (Decker 2005). Lands offered within the planning area include the lower Nushagak Peninsula and the southern portion of land extending from south of Ekuk eastward to the Kvichak River delta (State of Alaska 2005). About 510,000 acres lie within the Bay planning area boundary, none of which are BLM administered lands. At that time, 213,120 acres were leased, none of which were within the planning area. Interested was limited to Port Moller and vicinity, on the lower Alaska Peninsula approximately 200 miles south of the planning area. According to ADNR the next sale for the Alaska Peninsula is scheduled for February 2007 (State of Alaska 2006). **Cook Inlet Basin Leasables**- The Cook Inlet basin is currently the only commercially producing oil and gas region in southern Alaska. Between 1997 and 2001 Cook Inlet natural gas production remained relatively stable at an average of 213 billion cubic feet (bcf) per year.

Locatable Mineral Exploration in the Bay Planning Area - During 2005, the last complete year of information, 7 APMA's and AHEA's were submitted for Locatable Mineral projects located within the Bay planning area. Four lode exploration applications and 3 placer mining applications were filed (AK DNR 2005). APMA's are currently being submitted for 2006.

Lode and Placer Exploration - Lode exploration projects include the Big Chunk, Kamishak Project, Pebble Copper, and Shotgun/Mose projects located on State land. One placer mining project on the Arolik River is located on Native-selected land and one location at Salmon River Bench is located on Native land. One placer mining operation on State land includes the Syneeva Creek (Northern Bonanza). There are no lode or placer mining activities on BLM unencumbered land at this time.

Pebble Copper Mine Project - State lode mining claims are located on the Big Chunk (BC), FUR, GDH, KAK, Pebble Copper, Pebble South, 25 Gold: Sill, 37 Skarn, and 38 Porphyry properties. The Pebble gold-copper-molybdenum-silver deposit is located in the Lake and Peninsula Borough, just north of Frying Pan Lake and 18 miles northwest of Iliamna. The exploration and planning phase of this project is likely to continue for several years, and provides income for lodge and hotel owners in Iliamna as well as jobs for locals.

In 2004, Northern Dynasty Minerals, Ltd. began a program to collect engineering, environmental, and socioeconomic data required for completion of a Bankable Feasibility Study and submission of permit applications for the Pebble Copper Mine. New finds in 2005 have delayed the permit application submission timeline. Production is not expected to begin before 2010 (Northern Dynasty Minerals Ltd. 2005).

In conjunction with the mining project, the Alaska Dept. of Transportation and Public Facilities (ADOT&PF) is examining the feasibility of constructing a 75 mile road from the Pebble Copper mine site to a port site at Inskin Bay or Williamsport. Draft reconnaissance engineering started in July 2004, and final reconnaissance engineering was to be completed in 2005 (ADOT&PF 2004).

Big Chunk Project - Liberty Star conducted a comprehensive exploration project to evaluate copper-gold deposits on state mining claims adjacent to the Pebble Copper Mine deposit (Alaska Minerals Commission 2005).

Locatable Mineral Claim Staking - Mining claims have been staked throughout the Bay planning area for both lode and placer deposits. Extensive claim staking has historically occurred in the Bonanza Hills, Kemuk, Kvichak, Pebble Copper, Shotgun Hills, Sleitat Mountains, Snow Gulch, and Red Top areas. As of January 2005 there were a total of 257 Federal claims covering approximately 10,280 acres and as of December 2005 there were a total of 5,824 State claims and no State prospecting sites covering a total of approximately 232,960 acres (BLM, 2005).

Bonanza Creek Area - State placer mining claims are located on Bonanza Creek and Syneeva Creek. State lode mining claims are located on the Bonanza Hill and Bonanza property.

Goodnews Bay/Snow Gulch Area - State placer mining claims are located on the Arolik River.

Iliamna/Kvichak Area - Federal and State lode mining claims are located on the Iliamna Project, H Block property. State lode mining claims are located on the Iliamna Project, D Block and LSS properties.

Kemuk Mountain Area - State lode mining claims are located on the Kemuk and NAP properties.

Platinum Area - Federal placer mining claims are located on the Salmon River Bench property.

Shotgun Hills Area - State lode mining claims are located on the Shot, Shotgun/Mose, and Win properties.

Exploration and Development Activities Bonanza Creek Area - There are no identified exploration projects reported in the Bonanza Creek area as of 2004 (Szumigala and Hughes, 2005). One APMA placer mining project was submitted for Syneeva Creek for 2005 (AK DNR, 2005).

Exploration and Development Activities Goodnews Bay/Snow Gulch area - There are no identified exploration projects reported in the Goodnews Bay/Snow Gulch area as of 2004 (Szumigala and Hughes, 2005). One APMA placer mining project was submitted for the Arolik River for 2005 (AK DNR, 2005).

Exploration and Development Activities Iliamna/Fog Area - There are no identified exploration projects reported in the Iliamna/Fog area as of 2004 (Szumigala and Hughes, 2005). No APMA or AHEA exploration projects were submitted for 2005 (AK DNR, 2005).

Exploration and Development Activities Iliamna/Kvichak Area - Detailed geophysical survey and core drilling was completed in 2004 on the Iliamna Project H Block by Geocom Resources Inc. Over 3,303 feet

of core drilling was completed at four locations outlining a 2,296 by 4,921 foot gold, copper, and molybdenite mineralized zone. At their Iliamna Project, D Block additional geophysical studies were conducted to delineate drill targets (Szumigala and Hughes, 2005). No APMA or AHEA exploration projects were submitted for 2005 (AK DNR, 2005).

Exploration and Development Activities Kasma Creek Area - There are no identified exploration projects reported in the Kasma Creek area as of 2004 (Szumigala and Hughes, 2005). No APMA or AHEA exploration projects were submitted for 2005 (AK DNR, 2005).

Exploration and Development Activities Kemuk Mountain Area - There are no identified exploration projects reported in the Kemuk Mountain area as of 2004 (Szumigala and Hughes, 2005). No APMA or AHEA exploration projects were submitted for 2005 (AK DNR, 2005).

Exploration and Development Activities Kijik Lake Area - There are no identified exploration projects reported in the Kijik Lake area as of 2004 (Szumigala and Hughes, 2005). No APMA or AHEA exploration projects were submitted for 2005 (AK DNR, 2005).

Recent Exploration and Development Activities Pebble Copper Area - Three properties had extensive exploration activities conducted during 2004; Pebble Copper, Big Chunk (BC), and Pebble South. Northern Dynasty Minerals, LTD. conducted comprehensive drilling, base-line environmental and socioeconomic studies to support Federal and State project permit applications. Also, Northern Dynasty conducted site testing and engineering studies for a bankable feasibility study which will be started in 2005. In-fill drilling to upgrade resources to measured and indicated status and to finalize pit design as conducted. During 2004, more than 157,614 feet of core drilling in 227 holes was completed, in-fill drilling totaled 101,539 feet in 122 holes, metallurgical and process drilling totaled 21,335 feet in 26 holes, geotechnical drilling totaled 32,502 feet in 70 holes, and exploration drilling totaled 13,815 feet in 9 holes. A new higher-grade, laterally extensive gold, copper, and molybdenite "East Zone" was discovered on the east side of the "Central Zone" of Pebble Copper. Mineralization has been discovered to a depth of 2,379 feet, and extends beyond to an unknown depth. More extensive drilling will be conducted during 2005. This deposit would be mined by underground methods and is richer than the Central Zone (Szumigala and Hughes, 2005).

Liberty Star Gold Corp. conducted exploration activities on the Big Chunk (BC) property, abutting the northwest corner of the Pebble Copper claims. Airborne magnetic survey, geologic, geochemical, space imagery, and aeromagnetic studies identified 21 anomalous areas. Geological sampling, mapping, and diamond drilling activities were conducted during 2004 (Szumigala and Hughes, 2005).

Full Metal Minerals, Ltd. conducted exploration activities on the Pebble South property, abutting the south side of the Pebble Copper claims. A geological sampling program, geophysics and ground magnetic studies were completed in 2004. Eleven anomalous areas were identified with two high priority targets identified; the Boo and TYP properties (Szumigala and Hughes, 2005).

Two AHEA exploration projects were submitted for the Big Chunk (BC) and Pebble Copper projects for 2005 (AK DNR, 2005).

Exploration and Development Activities Platinum Area - There are no identified exploration projects reported in the Platinum area as of 2004 (Szumigala and Hughes, 2005). One APMA placer mining project was submitted for the Salmon River for 2005 (AK DNR, 2005).

Exploration and Development Activities Shotgun Hills Area - TNR Gold Corp. conducted geological and geochemical exploration programs during 2004. This resulted in acquiring 14,080 acres of new State mining claims. The claims follow a north-south trend from the Main Shotgun Zone and are called the Shot, King, and Winchester areas. New drill targets for 2005 were identified along this zone as well as more extensive drilling of the Main Zone. One AHEA exploration projects were submitted for the Shotgun/Mose project for 2005 (AK DNR, 2005).

Sleitat Mountain Area - There are no identified exploration projects reported in the Sleitat Mountain area as of 2004 (Szumigala and Hughes, 2005). No APMA or AHEA exploration projects were submitted for 2005 (AK DNR, 2005).

Construction of the Wood River Bridge - The ADOT&PF, with the Federal Highway Administration, have made an Environmental Assessment and Finding of No Significant Impact for the proposed construction of the Wood River Bridge in Alaknagik. The bridge is currently in the design phase, with construction to begin in late 2007 or in 2008 (ADOT&PF 2005).

Iliamna Airport Improvements - The ADOT&PF began study of ways to improve the Iliamna airport in 2005, including identifying improvement options, preparing engineering and environmental reports, and completing a master plan that outlines short-term (5 years), intermediate (10 years), and long-term (20 year) airport improvements (ADOT&PF 2005).

Manokotak Airport Improvements - The ADOT&PF with the Federal Aviation Administration is proposing improvements to Manokotak Airport in Manokotak. Improvements include expanding the runway, surfacing the entire facility, providing adequate area for snow storage, constructing an apron and taxiway system, installing an airport lighting system and precision approach path indicators and runway end identification lighting, adding two snow removal equipment storage building bays, and extending overhead electrical lines to the new facility. A draft Environmental Assessment was published in July 2005 (ADOT&PF 2005; FAA 2005).

Proposed Naknek River Bridge and Aviation Operations Improvements - The proposed ADOT&PF project would entail a bridge spanning the Naknek River and connecting the three communities of the Bristol Bay Borough, South Naknek, Naknek, and King Salmon. The bridge would tie into the existing Omnibus road that connects Naknek and King Salmon. A bridge would influence aviation use patterns and the priority of aviation operations and improvements at the individual airport facilities, some of which had been identified by 2005 and were awaiting funding (ADOT&PF 2005).

Near-Term Recommendations for Community Linkages - In its Transportation Plan, the ADOT&PF recommends five community linkage projects, three of which are in or immediately adjacent to the Bay planning area: Williamsport-Pile Bay roadway improvements; Iliamna-Nondalton road improvements and bridge construction connection; and Dillingham-Aleknagik road improvements and bridge construction connection (ADOT&PF 2005).

ADOT&PF Recommendations for Port and Harbor Improvements - One recommended set of port improvements is Williamsport navigation improvements and dock facility and Pile Bay dock and boat launch facility. While this is outside the Bay planning area, it is seen as providing an intermodal complement to key transportation infrastructure, some of which would probably be within the planning area (ADOT&PF 2005).

ADOT&PF Marked Winter Trail System - Provides a system of trail markers that permits safe travel by snowmachine between Bristol Bay communities during the winter months (ADOT&PF 2005).

D. Speculative Development

ADOT&PF Corridor Delineation - The purpose of corridor delineation is to recognize the patterns of existing travel and desired travel in the region and to establish and protect the surface transportation "highways" that would best serve the region's long term social and economic infrastructure needs. The Transportation Plan identifies four primary corridors, three of which are in or immediately adjacent to the Bay planning area: Cook Inlet to Bristol Bay corridor; Alaska Peninsula corridor' and Dillingham/Bristol Bay corridor (ADOT&PF 2005). It is possible that all or segments of these projects may be completed during the life of this plan.

ADOT&PF “Triggers” for Planning - ADOT&PF’s Transportation Plan recommends a series of triggers for re-evaluation of lower-priority projects that could lead to their development within the 20-year period considered by the plan (ADOT&PF 2005). This is dependent on such factors as a dramatic increase in population and increased demand from the economic sector.

a) Evaluation of the Effect of Such Use, Occupancy, or Disposition on Subsistence Uses and Needs

According to the fish and wildlife analyses in Chapter 4 of the main document, the combination of ongoing oil and gas development occurring in or adjacent to the planning area, and possible solid mineral exploration and development in the same region, would have cumulative impacts on caribou from the MCH. In addition, the privatization or mineral exploration and development of State or Native Corporation lands could lead to additional development. Depending on the location, extent, intensity, and duration of development, these impacts could include: short or long-term disturbance to: caribou calving habitat; post calving aggregations; winter ranges; insect relief habitat; migratory routes; disruption of caribou movements; stress and disturbance impacts to caribou during all seasons of the year; and possible reductions in herd productivity. If significant activity occurred within the calving grounds or other seasonal aggregation habitats or insect relief habitat, impacts could be significant to subsistence.

The potential list of cumulative activities would, depending on timing, magnitude, duration, intensity, and type of activity would impact the full spectrum of local and regional subsistence species fish and wildlife relative to abundance, distribution, seasonal habitat use, movement patterns, habitat integrity (relative to fragmentation, degradation, conversion). The activities and impacts of such actions would be dealt with on a case-by-case basis as at this time it cannot be predicted how such activities will present themselves or if they will occur for sure.

Development of regional roads and trails infrastructure within the Bay planning area would have the potential to negatively affect fish, wildlife and their habitats and thus affect subsistence. These impacts would include; habitat fragmentation and degradation; increased access into wildlife habitats; proliferation of unauthorized or uncontrolled OHV use; increased disturbance impacts; increased potential for mortality (road kills); and possible alteration of behavior or movement patterns of wildlife. Small roads that connect communities within the planning area may aid subsistence users in accessing their traditional harvest areas. However, they may also concentrate hunting efforts along the road/trail corridors, thus depleting resources from the area, and potentially altering harvest from current traditional harvest areas. Increased competition for subsistence resources would likely result if smaller communities were linked to the existing road system within the State, as non-resident and non-local hunters would be able to access the area with little effort. This may also result in an increase in tourist traffic and recreational use of the area, resulting in additional impacts to wildlife. However, the construction of major road projects within the life of the plan would be dependant upon social and economical conditions and it is not clear which, if any, of these projects would be completed during the life of the plan. Because regional road construction in the planning area is so uncertain and the level of development projected through this plan so minimal, no cumulative impacts to subsistence species are anticipated

b) Evaluation of the Availability of Other Lands for the Purpose Sought to be Achieved

The Cumulative Case, as presented in the planning document, contains information on reasonably foreseeable activities that could have an effect on the management decisions being analyzed as part of the RMP. The purpose of the Cumulative Case is to present known ongoing activity by all entities on all lands near or within the planning area, as well as those activities that have been proposed for the future and are likely to occur. The Cumulative Case is not an implementable alternative that specifies land uses and management, and is instead a discussion of impacts that could affect the management decisions contained within Alternatives A through D. As such, no other lands are evaluated under the Cumulative Case.

c) Evaluation of Other Alternatives that would Reduce or Eliminate the Use, Occupancy, or Disposition of Public Lands Needed for Subsistence Purposes

Alternatives that would reduce or eliminate the use of public lands needed for subsistence include the three action alternatives that are presented and analyzed in Chapters II and IV of the main body of the Resource Management Plan, as well as Alternative A. These alternatives were created to represent a wide range of potential activities that could occur on BLM-managed lands, along with management actions that would serve to protect specific resource values following current national guidelines. Additional alternatives that were considered but not analyzed in detail are also discussed in Chapter II.

d) Findings

The cumulative case, as presented in this analysis, may result in a reasonably foreseeable and significant restriction of subsistence use for most communities within the planning area, if significant activity occurred within the calving grounds or crucial insect relief habitat of the MCH. Currently, the MCH is a primary subsistence source for communities in the Bristol Bay and Goodnews Bay regions of Alaska, as well as a significant number of communities adjacent to and well beyond the Bay Plan boundaries, with between 4,700 to 11,700 animals harvested annually . Moose provide a similar source of food and include a harvest of approximately 425-745 per year . Fish resources, primarily salmon, are the major subsistence resource use in the Bay Plan area. The cumulative case may result in a reasonably foreseeable and significant restriction of subsistence use for most communities within the Bay Plan area if significant activities occur with commercial fishing, impacts to stream spawning and migration and rearing habitats, or unforeseen events in the ocean or climate influences (global warming) that impact fisheries abundance, run timing, availability, and access to fish resources.

E. Notice and Hearings

ANILCA Sec. 810(a) provides that no “withdrawal, reservation, lease, permit, or other use, occupancy or disposition of the public lands which would significantly restrict subsistence uses shall be effected” until the Federal agency gives the required notice and holds a hearing in accordance with ANILCA Sec. 810(a)(1) and (2). The BLM will provide notice in the Federal Register that it has made positive findings pursuant to ANILCA Sec. 810 that Alternative A and the cumulative case presented in the Resource Management Plan/EIS meets the “may significantly restrict” threshold. As a result, public hearings will be held in the potentially affected communities. Notice of these hearings will be provided in the Federal Register and by way of the local media.

F. Subsistence Determinations Under the ANILCA Sec. 810(a)(3)(A), (B), and (C)

ANILCA Sec. 810(a) provides that no “withdrawal, reservation, lease, permit, or other use, occupancy or disposition of the public lands which would significantly restrict subsistence uses shall be effected” until the federal agency gives the required notice and holds a hearing in accordance with ANILCA Sec. 810(a)(1) and (2), and makes the three determinations required by the ANILCA Sec. 810(a)(3)(A), (B), and (C). The three determinations that must be made are: 1) that such a significant restriction of subsistence use is necessary, consistent with sound management principles for the utilization of the public lands; 2) that the proposed activity will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other such disposition; and 3) that reasonable steps will be taken to minimize adverse impacts to subsistence uses and resources resulting from such actions [16 U.S.C. Sec. 3120(a)(3)(A), (B), and (C)].

The BLM has found in this subsistence evaluation that Alternative A considered in this Resource Management Plan might significantly restrict subsistence uses. Therefore, the BLM will undertake the notice and hearing procedures required by ANILCA Sec. 810 (a)(1) and (2) in conjunction with release of the Draft RMP/EIS in order to solicit public comment from the potentially affected communities and subsistence users.

The determination that the requirements of ANILCA Sec. 810(a)(3)(A), (B), and (C) have been met will be analyzed in the Final ANILCA Sec. 810 Evaluation, using input from the communities in which subsistence hearings will be held.

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Appendix C:

BLM Policy for Structure Protection

BLM Anchorage Field Office Policy for Structure Protection January 2006

The following policy and procedures are meant to serve as guidance to the Alaska Fire Service (AFS) and the Alaska Division of Forestry (DOF), as appropriate, concerning cabin/structure protection priorities in relation to wildland fire monitoring and suppression activities on lands managed by the Bureau of Land Management in Alaska. Item 2 lists the protection priorities on BLM managed lands. This policy recognizes that availability of resources may preclude protection of some sites indicated for protection during portions of the fire season.

1. The safety of the public and fire suppression personnel will remain the first priority when fire suppression/protection decisions are made.
2. The Bureau of Land Management (BLM) will provide protection of structures on Bureau lands using the following criteria:
 - a) Regardless of the value of the cabin/structure, the protection and safety of human life will take precedence. This means that high value cabin/structures may not be protected if suppression puts human life at risk. Conversely, low value cabin/structures may be protected to ensure public safety.
 - b) It is necessary to preserve structures to save human life due to an imminent threat of the structure(s) being burned over.
 - c) If the structure has been evaluated and is on or has been determined to be eligible for the National Register of Historic Places.
 - d) If the structure has not been evaluated for eligibility to the National Register of Historic Places, the Evaluating Structures for Historic Value process (attached below) will be initiated.
 - e) Public funds have been expended in the construction and/or maintenance of the structure. These federal facilities should receive protection commensurate with their monetary or resource management value as established by the Field Office Manager.
 - f) When fire suppression resources are available to provide the necessary protection of authorized structures.
3. Field Offices will initiate the actions to reduce hazardous fuels adjacent to federal facilities, structures that have been identified for protection.
4. The policy for unauthorized structures will be consistent with policy items 1-3 above.
5. Decisions made pursuant to this policy will be recorded on the fire map atlas. Keeping the fire maps current is a joint responsibility of the field office specialist, field office fire personnel, and the AFS/DOF fire management officers. Changes in fire maps should be initiated as part of the annual fire plan. Part of the annual review will be to re-evaluate any fire operations that included cabin/structure protection actions in the preceding year.
7. In a wildfire situation, if information on the fire map atlas is not sufficient. AFS/DOF fire management officers will contact the field office fire personnel for a decision. The decision will be made on a case-by-case basis in consultation with the appropriate field office manager.

Evaluating Structures for Historic Value

The Normal Situation

The current fire map atlas or an equivalent source will be kept updated with current information, including protection standards for structures based in part on an assessment of their historic value. Part of this historic assessment will be a determination of eligibility arrived in consultation with the State Historic Preservation Officer in exactly the same fashion as we do for other activities.

Sites will be designated for full protection unless they have been determined to be not eligible for the National Register.

In a Wildfire Situation

In a wildfire situation, it may be necessary to try to determine appropriate levels of protection for structures whose eligibility to the National Register has not been determined, or it may be necessary to provide priorities among structures designated for full or critical protection. In those cases, the following process will be followed. All decisions that are based on this process will be documented and submitted to the Field Office Manager.

1. A qualified cultural resource specialist is available.
 - 1.0 If at all possible¹, a qualified cultural resource specialist will evaluate structures to determine if they appear to have sufficient historic value to warrant protection. The specialist will also try to assign relative value to multiple structures so that resources can be concentrated on the most important sites.
 - 1.1 If time and circumstances allow, the cultural resource specialist will arrive at determinations of historic value only after an on-site visit to the structures involved.
 - 1.2 If circumstances do not allow for an on-site visit by a cultural resource specialist, the determination will be made by the cultural resource specialist on the basis of the best available information.
 - 1.2a If AFS/DOF personnel can get to the site, they should try to obtain the following information for use by the cultural resource specialist:
 - photograph(s) - digital or Polaroid images
 - number of structures
 - conditions of structures (collapsed, standing, ruin)
 - construction materials (logs, plywood, sheet metal)
 - associated features (bottle/can dumps, equipment)
 - 1.2b Use of a standard data gathering form, which would be available for fire personnel, is encouraged. This would greatly facilitate determinations of the historic value of structures and sites.

¹ If the home Field Office cultural resource specialist is not available, attempts will be made to contact a cultural resource specialist from another Field Office or the State Office to provide assistance.

1.3 Once information has been gathered regarding structures involved in a wildfire situation, protection status and protection priorities will be made after communication with the State Historic Preservation Office (SHPO) if time and circumstances allow. Use of current technology may assist in this communication. (For example, digital images might be gathered and posted on a web page or transmitted via e-mail.)

1.3a If circumstances do not allow for communication with the SHPO, a determination of historic value will be made by the cultural resource specialist.

2. A qualified cultural resource specialist is not available.

2.0 Historic evaluations will be made by the Field Office fire personnel.²

2.1 Training will be provided to the Field Office fire personnel to allow him/her to better make these evaluations. The details and extent of this training will be worked out by the FMO and the field archaeologists

3. If the Field Office Manager or their acting cannot be contacted

3.0 If no other options are available, evaluations should be made by AFS/DOF personnel on site. The following is meant to provide some guidance in making these evaluations.

3.1 An older structure is probably more important than a younger one. Several characteristics of structures can be used to estimate relative age, such as the state of collapse; construction materials (logs vs. plywood); vegetation re-growth around the structure; and associated artifacts (wagon vs. *1934 Dodge*)

3.2 A settlement, meaning a site with multiple dwelling structures, is probably more *important* than a single structure.

3.3 A site with a single dwelling structure and associated outbuildings, such as barns, sheds, outhouses or caches, is more important than an isolated structure.

3.4 A site with associated non-structural features, such as can or bottle dumps is probably more important than one without.

² If the home Field Office fire personnel are not available, attempts will be made to contact the Field Office Manager or their acting.

Appendix E

17(b) Easements

Goodnews Planning Block.....	E-2
Alagnak Planning Block.....	E-3
Koggiling Creek Planning Block.....	E-4
Iliamna East Planning Block.....	E-5
Iliamna West Planning Block.....	E-9
Yellow Creek Planning Block	E-12
Klutuk Planning Block.....	E-13
Kvichak Planning Block.....	E-14

Goodnews Planning Block 17(b) Easements

Within this area there are 5 easements reserved for public access. Table E-1 below provides the information regarding each easement within this planning block.

Table E-1. Goodnews Planning Block 17(b) Easements

Easement I.D.	Administrative Agency	Land Owner IC/Pat#	Land Access	Easement Type	Location Information
EIN 1 C3,C5, D1, D9 M	BLM	Arviq Inc. 50-95-0437	Public Lands	<u>Existing</u> 25 foot trail Seasonal use <u>Winter</u>	U.S.G.S. Kuskokwim Bay D-1 Current to date: 12/15/2003
EIN 3 C3, C4, D1, D9	BLM/TNWR	Calista Corp. IC 1660	SOA	<u>Existing</u> 25 foot trail	U.S.G.S. Goodnews A-8 Current to date: 02/02/2006
EIN 3a C3, C4, D1, D9	BLM/TNWR	Calista Corp. IC 1660	SOA	<u>Existing</u> 25 foot trail <u>Winter</u>	U.S.G.S. Goodnews B-7 Current to date: 02/13/2006
EIN 3b C3, C4, D1, D9	BLM/TNWR	Calista Corp. IC 1660	SOA	<u>Existing</u> 25 foot trail <u>Summer</u>	U.S.G.S. Goodnews B-7 Current to date: 02/13/2006
EIN 4 C3,C4, D1, D9	BLM	Calista Corp. IC 1660	Public Lands	<u>Existing</u> 25 foot trail <u>Winter</u>	U.S.G.S. Goodnews B-6 Current to date: 02/13/2006

Alagnak Planning Block 17(b) Easements

Within this area there are 4 easements reserved for public access. Table E-2 below provides the information regarding each easement within this planning block.

Table E-2. Alagnak Planning Block 17(b) Easements

Easement I.D.	Administrative Agency	Land Owner IC/Pat#	Land Access	Easement Type	Location Information
EIN 29d C5	BLM	50-91-0600 Paug-vik Inc. Ltd	Public Lands	<u>Existing</u> 25 foot trail	U.S.G.S. Naknek D-3 Current to date: 10/14/2005
EIN 14 C3, D1, D9	BLM	50-91-0600 Paug-vik Inc. Ltd	Public Lands	<u>Existing</u> 25 foot trail <u>Winter use</u>	U.S.G.S. Naknek D-3 Current to date: 10/14/2005
EIN 8b C6, D9	BLM	IC 193 Levelock Natives Limited	Public Lands	1 acre site	U.S.G.S. Dillingham A-2 Current to date: 12/15/2003
EIN 8c C4	BLM	IC 193 Levelock Natives Limited	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Dillingham A-2 Current to date: 12/15/2003

Koggiling Creek Planning Block 17(b) Easements

Within this area there are nine easements reserved for public access. Table E-3 below provides information regarding each easement within this planning block.

Table E-3. Koggiling Creek Planning Block 17(b) Easements

Easement I.D.	Administrative Agency	Land Owner IC / Pat #	Land Access	Easement Type	Location Information
EIN 1 D1, N	BLM	BBNC IC 1658	Public Lands	1 acre site	U.S.G.S. Dillingham A-5 Current to date: 04/15/2003
EIN 1a D1, N	BLM	BBNC IC 1658	SOA	<u>Proposed</u> 25 foot trail	U.S.G.S. Dillingham A-5 Current to date: 04/15/2003
EIN 2 D1, N	BLM	BBNC IC 1658		1 acre site	U.S.G.S. Dillingham A-5 Current to date: 04/15/2003
EIN 2a D1, N	BLM	BBNC IC 1658	SOA	<u>Proposed</u> 25 foot	U.S.G.S. Dillingham A-5 Current to date: 04/15/2003
EIN 29c C5	BLM	Paug-vik Inc. 50-91-0600	SOA	<u>Existing</u> 25 foot trail	U.S.G.S. Naknek D-4 Current to date: 06/22/2005
EIN 8b C5	BLM	Choggiung Limited 50-93-0519	SOA	<u>Proposed</u> 25 foot trail	U.S.G.S. Naknek D-6 Current to date: 12/15/2003
EIN 8a C5	BLM	Choggiung Limited 50-93-0519	N/A	1 acre site	U.S.G.S. Naknek D-6 Current to date: 12/15/2003
EIN 2 D1, C5	BLM	BBNC 50-88-0370	Public Lands	1 acre site	U.S.G.S. Naknek D-5 Current to date: 12/15/2003
EIN 2a C5	BLM	BBNC 50-88-0370	BLM	<u>Proposed</u> 25 foot trail	U.S.G.S. Naknek D-5 Current to date: 12/15/2003

Iliamna East Planning Block 17(b) Easements

Within this area there are 40 easements reserved for public access. Table E-4 below provides the information regarding each easement within this planning block.

Table E-4. Iliamna East Planning Block 17(b) Easements

Easement I.D.	Administrative Agency	Land Owner IC / Pat #	Land Access	Easement Type	Location Information
EIN 24 C5, D1 N	BLM/NPS	Nondalton Native Corporation IC 300	State Conveyed	1 acre site	U.S.G.S. Lake Clark A-6 Current to date: 08/08/2002
EIN 25 C5, D1 N	BLM/NPS	Nondalton Native Corporation IC 300	State Conveyed	<u>Proposed</u> 25 foot trail	U.S.G.S. Lake Clark A-6 Current to date: 08/08/2002
EIN 12b D9	BLM/NPS	Nondalton Native Corporation IC 300	State Conveyed	1 acre site	U.S.G.S. Lake Clark A-6 Current to date: 08/08/2002
EIN 4a D1	BLM/NPS	Kijik Corporation 50-94-0485	State Conveyed	<u>Existing</u> 25 foot trail	U.S.G.S. Lake Clark A-6 Current to date: 08/08/2002
EIN 12b D9	BLM	Nondalton Native Corporation IC 300	Public Lands	1 acre site	U.S.G.S. Lake Clark A-6 Current to date: 08/08/2002
EIN 12e C5	BLM	Nondalton Native Corporation IC 300	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Lake Clark A-5 Current to date: 08/08/2002
EIN 13a D9	BLM	Nondalton Native Corporation IC 300	Public Lands	1 acre site	U.S.G.S. Lake Clark A-5 Current to date: 08/08/2002
EIN 20 C5, D1, N	NPS	Kijik Corporation 50-94-0485	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Lake Clark A-5 Current to date: 08/08/2002
EIN 22 C5, D1, N	NPS	Kijik Corporation 50-94-0485	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Lake Clark A-5 Current to date: 08/08/2002
EIN 10k E	NPS	Nondalton Native Corporation IC 300	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Lake Clark A-5 Current to date: 08/08/2002
EIN 16a L	NPS	Nondalton Native Corporation IC 300	Public Lands	<u>Existing</u> 50 foot trail	U.S.G.S. Lake Clark A-5 Current to date: 08/08/2002

Easement I.D.	Administrative Agency	Land Owner IC / Pat #	Land Access	Easement Type	Location Information
EIN 16 L	NPS	Nondalton Native Corporation IC 300	Public Lands	<u>Existing unimproved</u> bush airstrip, 250' width and 1500' length	U.S.G.S. Lake Clark A-5 Current to date: 08/08/2002
EIN 16b L	NPS	Nondalton Native Corporation IC 300	Chulitna River	1 acre site	U.S.G.S. Lake Clark A-5 Current to date: 08/08/2002
EIN 102 C5	NPS	Kijik Corporation IC 1337	Lake Clark NP	½ acre site	U.S.G.S. Lake Clark A-4 Current to date: 12/08/2004
EIN 27 C5	NPS	Kijik Corporation IC 1337	Lake Clark NP	½ acre site	U.S.G.S. Lake Clark A-4 Current to date: 12/08/2004
EIN 100 C4	NPS	Kijik Corporation IC 1337	Lake Clark NP	1 acre site	U.S.G.S. Iliamna D-5 Current to date: 11/29/2004
EIN 26b C5, D1, N	NPS	Nondalton Native Corporation IC 300 (X- not in IC)	Lake Clark NP	1 acre site	U.S.G.S. Iliamna D-5 Current to date: 11/29/2004
EIN 27a D1	NPS	Iliamna Natives Ltd IC 1341	Lake Clark NP	1 acre site	U.S.G.S. Iliamna D-5 Current to date: 11/29/2004
EIN 27 D1	NPS	Iliamna Natives Ltd. IC 1339	Lake Clark NP	1 acre site	U.S.G.S. Iliamna D-5 Current to date: 11/29/2004
EIN 17a D1	NPS	Applicant AA6685-0	Lake Clark NP	<u>Proposed</u> Size(?) trail	U.S.G.S. Iliamna D-5 Current to date: 11/29/2004
17 D1	NPS (?)	(X- not in IC or patent)	Lake Clark NP (?)	1 acre site	U.S.G.S. Iliamna D-5 Current to date: 11/29/2004
EIN 11a C5	NPS	Iliamna Natives Ltd. 50-94-0481	Lake Clark NP	1 acre site	U.S.G.S. Iliamna D-5 Current to date: 11/29/2004
EIN 12a C5	NPS	Iliamna Natives Ltd. 50-94-0481	Lake Clark NP	½ acre site	U.S.G.S. Iliamna D-5 Current to date: 11/29/2004
EIN 15c D9	BLM	Iliamna Natives Ltd. 50-94-0481	Public Lands	1 acre site	U.S.G.S. Iliamna D-5 Current to date: 11/29/2004

Easement I.D.	Administrative Agency	Land Owner IC / Pat #	Land Access	Easement Type	Location Information
EIN 11d D1, D9	BLM	Iliamna Natives Ltd. IC 402	Public Lands	1 acre site	U.S.G.S. Iliamna D-5 Current to date: 11/29/2004
EIN 22 E	BLM	Iliamna Natives Ltd. IC 402	State Conveyed	1 acre site	U.S.G.S. Iliamna D-6 Current to date: 07/16/2002
EIN 4a C4	BLM	Newhalen Native Corporation IC 283	Public Lands	1 acre site	U.S.G.S. Iliamna C-6 Current to date: 12/15/2003
EIN 3e D9	BLM	Newhalen Native Corporation IC 283	Public Lands	1 acre site	U.S.G.S. Iliamna C-6 Current to date: 12/15/2003
EIN 5b D1, D9, L	BLM	Newhalen Native Corporation IC 283	Public Lands	1 acre site	U.S.G.S. Iliamna C-6 Current to date: 12/15/2003
EIN 6a D9	BLM	Iliamna Natives Ltd. IC 402	Public Lands	1 acre site	U.S.G.S. Iliamna C-5 Current to date: 08/25/2003
EIN 24a D3	BLM	Iliamna Natives Ltd. IC 649	Public Lands	1 acre site	U.S.G.S. Iliamna D-5 Current to date: 11/29/2004
EIN 24b D3	BLM	Iliamna Natives Ltd. IC 649	Major Waterway - Slopbucket Lake	1 acre site	U.S.G.S. Iliamna D-5 Current to date: 11/29/2004
EIN 12b D9	BLM	Alaska Peninsula Corporation IC 357	Navigable Water	1 acre site	U.S.G.S. Iliamna C-5 Current to date: 08/25/2003
EIN 12k D9	BLM	Alaska Peninsula Corporation IC 357	Public Lands	1 acre site	U.S.G.S. Iliamna C-4 Current to date: 05/13/2004
EIN 23 E	BLM	Alaska Peninsula Corporation IC 357	Public Lands	1 acre site	U.S.G.S. Iliamna B-4 Current to date: 10/26/2004
EIN 8a D9	BLM	Alaska Peninsula Corporation IC 357	Public Lands	1 acre site	U.S.G.S. Iliamna B-5 Current to date: 08/13/2002
EIN 22 E	BLM	Alaska Peninsula Corporation IC 357	State Conveyed	1 acre site	U.S.G.S. Iliamna B-5 Current to date: 08/13/2002

Easement I.D.	Administrative Agency	Land Owner IC / Pat #	Land Access	Easement Type	Location Information
EIN 24 C5	BLM	Alaska Peninsula Corporation IC 357	State Conveyed	1 acre site	U.S.G.S. Iliamna B-5 Current to date: 08/13/2002
EIN 25 C5	BLM	Alaska Peninsula Corporation IC 357	State Conveyed	1 acre site	U.S.G.S. Iliamna B-5 Current to date: 08/13/2002
EIN 4a D9	BLM	Alaska Peninsula Corporation IC 357	Public Lands	1 acre site	U.S.G.S. Iliamna B-5 Current to date: 08/13/2002

Iliamna West Planning Block 17(b) Easements:

Within this planning block there six easements reserved for public access. Table E-5 below provides the information regarding each easement within the planning block

Table E-5. Iliamna West Planning Block 17(b) Easements

Easement I.D.	Administrative Agency	Land Owner IC / Pat#	Land Access	Easement Type	Location Information
EIN 19b C4	BLM	Igiugig Native Corporation 50-89-0710	Public Lands	1 acre site	U.S.G.S. Iliamna B-8 Current to date: 08/27/2002
EIN 19a C4	BLM	Igiugig Native Corporation 50-89-0710	Public Lands	<u>Proposed</u> 50 foot trail	U.S.G.S. Iliamna B-8 Current to date: 08/27/2002
EIN 6c D9	BLM	Igiugig Native Corporation 50-89-0710	Public Lands	1 acre site	U.S.G.S. Iliamna B-8 Current to date: 08/27/2002
EIN 11 D9	BLM	Igiugig Native Corporation IC 302	Public Lands	<u>Existing and Proposed</u> 50 foot trail	U.S.G.S. Iliamna B-8 Current to date: 08/27/2002
EIN 11a C4	BLM	Igiugig Native Corporation 50-89-0710	Public Lands	<u>Proposed</u> 50 foot trial	U.S.G.S. Iliamna B-8 Current to date: 08/27/2002
EIN 18a C4	BLM/NPS	Igiugig Native Corporation 50-89-0710	Public Lands	<u>Proposed</u> 50 foot trail	U.S.G.S. Iliamna A-7 Current to date: 08/27/2002

Kvichak Planning Block 17(b) Easements:

Within this area there are 12 easements reserved for public access. Table E-6 below provides information regarding each easement within the planning block.

Table E-6. Kvichak Planning Block 17(b) Easements

Easement I.D.	Administrative Agency	Land Owner IC / Pat #	Land Access	Easement Type	Location Information
EIN 1b D9, C6	BLM	Levelock Natives Ltd. IC 193	Public Lands	1 acre site	U.S.G.S. Dillingham A-2 Current to date: 12/15/2003
EIN 1f D9, C6	BLM	Levelock Natives Ltd. IC 193	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Dillingham A-2 Current to date: 12/15/2003
EIN 1c D9, C6	BLM	Levelock Natives Ltd. IC 193	Public Lands	1 acre site	U.S.G.S. Dillingham A-2 Current to date: 12/15/2003
EIN 1d D1, D9, L	BLM	Levelock Natives Ltd. IC 193	Public Lands	1 acre site	U.S.G.S. Dillingham A-2 Current to date: 12/15/2003
EIN 1g C6, D1, D9, L	BLM	Levelock Natives Ltd. IC 193	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Dillingham A-2 Current to date: 12/15/2003
EIN 1h D1, D9, L	BLM	Levelock Natives Ltd. IC 193	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Dillingham A-2 Current to date: 12/15/2003
EIN 2e C4	BLM	Levelock Natives Ltd. IC 193	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Dillingham A-3 Current to date: 12/15/2003
EIN 12b E	BLM	Levelock Natives Ltd. IC 193	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Dillingham A-2 Current to date: 12/15/2003
EIN 13 E	BLM	Levelock Natives Ltd. IC 193	Public Lands	<u>Existing</u> 5 foot trail winter?	U.S.G.S. Dillingham A-2 Current to date: 12/15/2003
EIN 14 E	BLM	Levelock Natives Ltd IC 193	Public Lands	<u>Existing</u> 5 foot trail winter?	U.S.G.S. Dillingham A-3 Current to date: 12/15/2003
EIN 15a C5	BLM	Levelock Natives. Ltd IC 193	Public Lands	1 acre site	U.S.G.S. Dillingham A-2 Current to date: 12/15/2003
EIN 16 C5	BLM	Levelock Natives Ltd. (X-not in IC)	Public Lands	1 acre site	U.S.G.S. Dillingham A-3 Current to date: 12/15/2003

Yellow Creek Planning Block 17(b) Easements

Within this area there are 10 easements reserved for public access. Table E-7 below provides the information regarding each easement within the planning block

Table E-7. Yellow Creek Planning Block 17(b) Easements

Easement I.D.	Administrative Agency	Land Owner IC / Pat #	Land Access	Easement Type	Location Information
EIN 10 C4	BLM	Ekwok Natives Ltd. IC 177	Public Lands	1 acre site	*Not found on easement quad
EIN 11 C4	BLM	Ekwok Natives Ltd. IC 177	Public Lands	1 acre site	U.S.G.S. Dillingham B4 Current to date: 12/15/2003
EIN 11a C4	BLM	Ekwok Natives Ltd. IC 177	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Dillingham B4 Current to date: 12/15/2003
EIN 37 E	BLM	Ekwok Natives Ltd. 50-92-0738	Public Lands	1 acre site	U.S.G.S. Dillingham B4 Current to date: 12/15/2003
EIN 38 E	BLM	Ekwok Natives Ltd. 50-92-0738	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Dillingham B4 Current to date: 12/15/2003
EIN 10a C4	BLM	Ekwok Natives Ltd. 50-92-0738	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Dillingham B5 Current to date: 12/15/2003
EIN 10b C4	BLM	(X-not in IC of Patent)	Public Lands	1 acre site	U.S.G.S. Dillingham B5 Current to date: 12/15/2003
EIN 13 E	BLM	Levelock Natives Ltd. 50-89-0751	Public Lands	<u>Existing</u> 25 foot trail	U.S.G.S. Dillingham A3 Current to date: 12/15/2003
EIN 119 D1, M	BLM	Stuyahok Limited 50-92-0709	Public Lands	1 acre site	U.S.G.S. Dillingham C3 Current to date 07/27/2004
EIN 119a D1, M	BLM	Stuyahok Limited 50-92-0709	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Dillingham C-3 Current to date: 07/27/2004

Klutuk Planning Block 17(b) Easements:

Within this area there are 18 easements reserved for public access. Table E-8 below provides the information regarding each easement within the planning block.

Table E-8. Klutuk Planning Block 17(b) Easements

Easement I.D.	Administrative Agency	Land Owner IC / Pat #	Land Access	Easement Type	Location Information
EIN 30 C4,	BLM	Koliganek Natives Ltd. IC 228	Public Lands	1 acre site	U.S.G.S. Dillingham D-4 Current to date: 11/23/1993
EIN 30a,C4	BLM	Koliganek Natives Ltd. IC 228	Public Lands	<u>Proposed</u> 25 foot	U.S.G.S. Dillingham D-4 Current to date: 11/23/1993
EIN 29 C4,	BLM	Koliganek Natives Ltd. IC 228	Public Lands	1 acre site	U.S.G.S. Dillingham D-4 Current to date: 11/23/1993
EIN 29a,C4	BLM	Koliganek Natives Ltd. IC228	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Dillingham D-4 Current to date: 11/23/1993
EIN 28, C4,	BLM	Koliganek Natives Ltd. IC 228	Public Lands	1 acre site	U.S.G.S. Dillingham D-4 current to date: 11/23/1993
EIN 28a, C4	BLM	Koliganek Natives Ltd. IC228	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Dillingham D-4 Current to date: 11/23/1993
EIN 25, C4	BLM	Koliganek Natives Ltd. IC 228	Public Lands	1 acre site	U.S.G.S. Dillingham C-3 Current to date: 07/27/2004
EIN 25a,C4	BLM	Koliganek Natives Ltd. IC 228	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Dillingham C-3 Current to date: 07/27/2004
EIN 33, C4	BLM	Stuyahok Ltd. IC 290	Public Lands	1 acre site	U.S.G.S. Dillingham C-3 Current to date: 07/27/2004
EIN 33a,C4	BLM	Stuyahok Ltd. IC 290	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Dillingham C-3 Current to date: 07/27/2004
EIN 32 C4	BLM	Stuyahok Ltd. IC 290	Public Lands	1 acre site	U.S.G.S. Dillingham C-4 Current to date: 01/13/1993
EIN 32A, C4	BLM	Stuyahok Ltd.	Public Land	<u>Proposed</u>	U.S.G.S.

Easement I.D.	Administrative Agency	Land Owner IC / Pat #	Land Access	Easement Type	Location Information
		IC 290		25 foot trail	Dillingham C-4 Current to date: 01/13/1993
EIN 119 D1, M	BLM	BBNC 50-92-0709	Public Lands	1 acre site	U.S.G.S. Dillingham C-3 Current to date: 07/27/2004
EIN 119a D1, M	BLM	BBNC 50-92-0709	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Dillingham C-3 Current to date: 07/27/2004
EIN 16 C4	BLM	Ekwok Natives Ltd. 50-92-0738	Public Lands	1 acre site	U.S.G.S. Dillingham B-5 Current to date: 12/15/2003
EIN 16a C4	BLM	Ekwok Natives Ltd. 50-92-0738	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Dillingham B-5 Current to date: 12/15/2003
EIN 14 C4	BLM	Ekwok Natives Ltd. 50-92-0738	Public Lands	1 acre site	U.S.G.S. Dillingham B-5 Current to date: 12/15/2003
EIN 14a C4	BLM	Ekwok Natives Ltd. 50-92-0738	Public Lands	<u>Proposed</u> 25 foot trail	U.S.G.S. Dillingham B-5 Current to date: 12/15/2003

Appendix F

Generally Allowed Uses on State Land Alaska Department of Natural Resources

GENERALLY ALLOWED USES ON STATE LAND

Alaska Department of Natural Resources

Division of Mining, Land and Water, May 2006

As provided in 11 AAC 96.020, the following **uses and activities are generally allowed on state land** managed by the **Division of Mining, Land and Water** that is not in any special management category or status listed in 11 AAC 96.014¹. Uses listed as "Generally allowed" do not require a permit from the Division of Mining, Land and Water. Note that this list does not apply to state parks, nor to land owned or managed by other state agencies such as the University of Alaska, Alaska Mental Health Trust, Department of Transportation and Public Facilities, or the Alaska Railroad. **You may need other state, federal, or borough permits for these uses or activities.** Permits can be required from the Army Corps of Engineers, Department of Environmental Conservation, the Environmental Protection Agency, or other divisions within the Department of Natural Resources, such as the Office of Habitat Management & Permitting for activities within fish bearing streams. A Coastal Project Questionnaire may also be required by these agencies. Before beginning an activity on state land, the user should check to be sure it is generally allowed in that particular area.

TRAVEL ACROSS STATE LAND:

Hiking, backpacking, skiing, climbing, and other foot travel; bicycling, traveling by horse or dogsled or with pack animals.

Using a highway vehicle with a curb weight of up to 10,000 pounds, including a four-wheel-drive vehicle and a pickup truck, **or using a recreational-type vehicle** off-road or all-terrain vehicle with a curb weight of up to 1,500 pounds, including a snowmobile and four-wheeler, on or off an established road easement, if use off the road easement does not cause or contribute to water quality degradation, alteration of drainage systems, significant rutting, ground disturbance, or thermal erosion. An authorization is required from the Office of Habitat Management and Permitting for any motorized travel in fish bearing streams. (Curb weight means the weight of a vehicle with a full tank of fuel and all fluids topped off, but with no one sitting inside or on the vehicle and no cargo loaded. Most highway rated sport utility vehicles are within the weight limit as are most ATVs, including a basic Argo).

Landing an aircraft (such as a single engine airplane or helicopter), or using watercraft (such as a boat, jet-ski, raft, or canoe), without damaging the land, including shoreland, tideland, and submerged land.

Driving livestock, including any number of reindeer or up to 100 horses or cattle, or other domestic animals.

¹ These special use areas are listed in 11 AAC 96.014 and on the last page of this fact sheet. Maps of the areas are available online at: www.dnr.state.ak.us/mlw/sua/

ACCESS IMPROVEMENTS ON STATE LAND:

Brushing or **cutting a trail** less than five feet wide using only hand-held tools such as a chainsaw (making a trail does not create a property right or interest in the trail).

Anchoring a mooring buoy in a lake, river, or marine waters, or placing a **float, dock, boat haulout, floating breakwater, or boathouse** in a lake, river, or in marine waters, for the personal, noncommercial use of the upland owner, if the use does not interfere with public access or another public use, and if the improvement is placed within the projected sidelines of the contiguous upland owner's parcel or otherwise has the consent of the affected upland owner. A float or dock means an open structure without walls or roof that is designed and used for access to and from the water rather than for storage, residential use, or other purposes. A boat haulout means either a rail system (at ground level or elevated with pilings) or a line attached from the uplands to an anchor or mooring buoy. A floating breakwater means a structure, such as a log bundle, designed to dissipate wave or swell action. A boathouse means a structure designed and used to protect a boat from the weather rather than for other storage, residential use or other purposes.

REMOVING OR USING STATE RESOURCES:

Hunting, fishing, or trapping, or placement of a crab pot, shrimp pot, herring pound or fishwheel, that complies with applicable state and federal statutes and regulations on the taking of fish and game.

Harvesting a small number of **wild plants, mushrooms, berries, and other plant material** for personal, noncommercial use. The cutting of trees is not a generally allowed use except as it relates to brushing or cutting a trail as provided above.

Using dead and down wood for a cooking or warming fire, unless the department has closed the area to fires during the fire season.

Grazing no more than five domesticated animals.

Recreational goldpanning; hard-rock mineral prospecting or mining using light portable field equipment, such as a hand-operated pick, shovel, pan, earthauger, or a backpack powerdrill or auger, or **suction dredging** using a suction dredge with a nozzle intake of six inches or less, powered by an engine of 18 horsepower or less, and pumping no more than 30,000 gallons of water per day. An authorization is required from the Office of Habitat Management and Permitting prior to redesigning fishbearing streams.

OTHER IMPROVEMENTS AND STRUCTURES ON STATE LAND:

Setting up and using a camp for personal, noncommercial recreational purposes, or for any non-recreational purpose (such as a support camp during mineral exploration), for more than 14 days at one site, using a tent platform or other temporary structure that can readily be dismantled

and removed, or a floathouse that can readily be moved. Moving the entire camp at least two miles starts a new 14-day period. Cabins or other permanent improvements are not allowed, even if they are on skids or another non-permanent foundation. The camp must be removed immediately if the department determines that it interferes with public access or other public uses or interests.

Brushing or cutting a survey line less than five feet wide using only hand-held tools (such as a chainsaw), or **setting a survey marker** (setting a survey monument - a permanent, official marker - requires written survey instructions issued by the Division of Mining, Land and Water under 11 AAC 53).

Placing a residential **sewer outfall** into marine waters from a contiguous privately owned upland parcel, with the consent of the affected parcel owners, if the outfall is within the project sidelines of the contiguous upland parcel and is buried to the extent possible or, where it crosses bedrock, is secure and covered with rocks to prevent damage. Any placement of a sewer outfall line must comply with state and federal statutes, and regulations applicable to residential sewer outfalls.

Placing riprap or other suitable bank stabilization material to prevent erosion of a contiguous privately owned upland parcel if no more than one cubic yard of material per running foot is placed onto state shoreland and the project is otherwise within the scope of the U.S. Army Corps of Engineers nationwide permit on bank stabilization.

MISCELLANEOUS USES OF STATE LAND:

An event or assembly of 50 people or less, including events sponsored by nonprofit organizations or a commercial event.

Entry for **commercial recreation** purposes **on a day-use basis** with no overnight camps or unoccupied facilities that remain overnight, as long as the use has been registered as required by 11 AAC 96.018.

Recreational or other use not listed above may occur on state land as long as that use

- Is not a commercial recreational camp or facility (whether occupied or unoccupied) that remains overnight
- Does not involve explosives or explosive devices (except firearms)
- Is not prospecting or mining using hydraulic equipment methods
- Does not include drilling in excess of 300 feet deep (including exploratory drilling or stratigraphic test wells on state land and not under oil or gas lease)
- Is not for geophysical exploration for minerals subject to a lease or an oil and gas exploration license
- Does not cause or contribute to significant disturbance of vegetation, drainage, or soil stability
- Does not interfere with public access or other public uses or interests, and
- Does not continue for more than 14 consecutive days at any site. Moving the use to another site at least two miles away starts a new 14-day period.

Check for special conditions and exceptions!

All activities on state land must be conducted in a responsible manner that will minimize or prevent disturbance to land and water resources, and must comply with all applicable federal, state, and local laws and regulations. **By acting under the authority of this list, the user agrees to the conditions set out in 11 AAC 96.025** (a copy of these conditions are attached to this fact sheet). A person who violates these conditions is subject to any action available to the department for enforcement and remedies, including civil action for forcible entry and detainer, ejection, trespass, damages, and associated costs, or arrest and persecution for criminal trespass in the second degree. The department may seek damages available under a civil action, including restoration damages, compensatory damages, and treble damages under AS 09.45.730 or AS 09.45.735 for violations involving injuring or removing trees or shrubs, gathering technical data, or taking mineral resources (11 AAC 96.145).

Remember that this list does not apply to state parks or Alaska Mental Health Trust lands. In addition, some other areas managed by the Division of Mining, Land and Water are not subject to the full list of generally allowed uses. Exceptions may occur because of special conditions in a state land use plan or management plan. For example, a management plan may reduce the number of days that people camp at a specific site, or by a "special use land" designation (for instance, a special use land designation for the North Slope requires a permit for off-road vehicle use). Special Use Areas are listed in 11 AAC 96.014; more information is available on the department's website at www.dnr.state.ak.us/mlw/sua/.

Also, be aware that this list does not exempt users from the permit requirements for other state, federal, or local agencies. For example, the Office of Habitat Management and Permitting may require a permit for a stream crossing or a permit might be required by the Department of Fish and Game if the use will take place in a state game refuge.

Finally, this list does not authorize use if another person has already acquired an exclusive property right for that use. For instance, it does not give people permission to graze livestock on someone else's state grazing lease, to build a trail on a private right-of-way that the Division of Mining, Land and Water has granted to another person, or to pan for gold on somebody else's state mining location.

Department staff can help users determine the land status of state-owned land and whether it is subject to any special exceptions or to private property rights.

For additional information, contact the Department of Natural Resources:

<p>PUBLIC INFORMATION CENTER 550 W. 7th Avenue, Suite 1260 Anchorage, AK 99501-3557 (907) 269-8400 TDD: (907) 269-8411</p>	<p>DIVISION OF MINING, LAND & WATER PUBLIC INFORMATION OFFICE 400 Willoughby Ave., Suite 400 Juneau, AK 99801-1700 (907) 465-3400 TDD: (907) 465-3888</p>	<p>PUBLIC INFORMATION CENTER 3700 Airport Way Fairbanks, AK 99709-4699 (907) 451-2705 TDD: (907) 451-2770</p>
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CONDITIONS FOR GENERALLY ALLOWED USES (11 AAC 96.025)²

A generally allowed use listed in 11 AAC 96.020 is subject to the following conditions:

1. activities employing wheeled or tracked vehicles must be conducted in a manner that minimizes surface damage
2. vehicles must use existing roads and trails whenever possible
3. activities must be conducted in a manner that minimizes
 - a) Disturbance of vegetation, soil stability, or drainage systems
 - b) Changing the character of, polluting, or introducing silt and sediment into streams, lakes, ponds, waterholes, seeps, and marshes
 - c) Disturbance of fish and wildlife resources
4. cuts, fills, and other activities listed in (3)(A)-(C) must be repaired immediately, and corrective action must be undertaken as may be required by the department
5. trails and campsites must be kept clean; garbage and foreign debris must be removed; combustibles may be burned onsite unless the department has closed the area to fires during the fire season
6. survey monuments, witness of corners, reference monuments, mining location posts, homestead entry cornerposts, and bearing trees must be protected against destruction, obliteration, and damage; any damaged or obliterated markers must be re-established as required by the department under AS 34.65.020 and AS34.65.040
7. every reasonable effort must be made to prevent, control, and suppress any fire in the operating area; uncontrolled fires must be immediately reported
8. holes, pits, and excavations must be repaired as soon as possible; holes, pits, and excavations necessary to verify discovery on prospecting sites, mining claims, or mining lease hold locations may be left open but must be maintained in a manner that protects public safety
9. on lands subject to a mineral or land estate property interest, entry by a person other than the holder of a property interest, or the holder's authorized representative, must be made in a manner that prevents unnecessary or unreasonable interference with the rights of the holder of the property interest.

² Register 164, January 2003

List of Special Use Land Designations Excluded from Generally Allowed Uses

- Alyeska Ski Resort
- Lower Goodnews River
- Baranof Lake Trail
- Lower Talarik Creek
- Caribou Hills
- Marmot Island Special Use Area
- Exit Glacier Road
- Nenana River Gorge and McKinley Village Subd.
- Glacier/Winner Creek
- North Slope Area
- Hatcher Pass Special Use Area
- Nushagak
- Indian Cove
- Poker flat North
- Kamishak Special Use Area
- Poker Flat South
- Kenai Fjords Coastline
- Resurrection Bay
- Kenai River Special Management Area Proposed
- Thompson Pass Additions
- Togiak National Wildlife Refuge
- Lake Clark Coastline

Appendix G

**Master Memorandum of Understanding
Between ADF&G and BLM**

MASTER MEMORANDUM OF UNDERSTANDING

BETWEEN

THE ALASKA DEPARTMENT OF FISH AND GAME
Juneau, Alaska

AND

THE U.S. BUREAU OF LAND MANAGEMENT

DEPARTMENT OF THE INTERIOR

Anchorage, Alaska

This Master Memorandum of Understanding between the State of Alaska, Department of Fish and Game, hereinafter referred to as the Department, and the U.S. Department of the Interior, Bureau of Land Management, hereinafter referred to as the Bureau, reflects the general policy guidelines within which the two agencies agree to operate.

WHEREAS, the Department, under the Constitution, laws, and regulations of the State of Alaska, is responsible for the management, protection, maintenance, enhancement, rehabilitation, and extension of the fish and wildlife resources of the State on the sustained yield principle, subject to preferences among beneficial uses; and

WHEREAS, the Bureau, by authority of the Constitution, Laws of Congress, executive orders, and regulations of the U.S. Department of Interior has a mandated responsibility for the management of Bureau lands, and the conservation of fish and wildlife resources on these lands; and

WHEREAS, the Department and the Bureau share a mutual concern for fish and wildlife conservation, management, and protection programs and desire to develop and maintain a cooperative relationship which will be in the best interests of both parties, the concerned fish and wildlife resources and their habitats, and produce the greatest public benefit; and

WHEREAS, it has been recognized in the Alaska National Interest Lands Conservation Act (ANILCA) and subsequent implementing Federal regulations that the resources and uses of Bureau lands in Alaska are substantially different than those of similar lands in other states; and

WHEREAS, the U.S. Congress and the Alaska Legislature have enacted laws to protect and provide the opportunity for continued subsistence use of Alaska's fish and wildlife resources by rural residents; and

WHEREAS, the Department and the Bureau recognize the increasing need to coordinate resource planning, policy development, and program implementation;

NOW, THEREFORE, the parties hereto do hereby agree as follows:

THE DEPARTMENT OF FISH AND GAME AGREES:

1. To recognize the Bureau as the Federal agency responsible for multiple-use management of Bureau lands including wildlife habitat in accordance with the Federal Land Policy and Management Act, ANILCA, and other applicable law.
2. To regulate and manage use of fish and wildlife populations on Bureau lands in such a way as to maintain or improve the quality of fish and wildlife habitat and its productivity.
3. To consult with the Bureau in a timely manner and comply with applicable Federal laws and regulations before embarking on enhancement or construction activities on or which would affect Bureau lands.
4. To act as the primary agency responsible for management of all uses of fish and wildlife on State and Bureau lands, pursuant to applicable State and Federal laws.
5. To notify the Bureau of any animal damage control activities on Bureau lands; and to obtain Bureau approval for the use of pesticides, herbicides, or other toxic chemical agents in the course of animal damage control.
6. To provide all maintenance on facilities, structures, or other construction owned by the Department on Bureau lands; and to hold the Bureau harmless for liability claims resulting from these constructions, facilities, and/or structures.

THE BUREAU OF LAND MANAGEMENT AGREES:

1. To recognize the Department as the primary agency responsible for management of use and conservation of fish and wildlife resources on Bureau lands.
2. To recognize the right of the Department to enter onto Bureau lands at any time to conduct routine management activities which do not involve construction, disturbance to the land, or alterations of ecosystems.
3. To recognize the Department as the primary agency responsible for policy development and management direction relating to uses of fish and wildlife resources on State and Bureau lands, pursuant to applicable State and Federal laws.
4. To incorporate the Department's fish and wildlife management objectives and guidelines in Bureau land use plans unless such

provisions are not consistent with multiple use management principles established by FLPMA, ANILCA, and applicable Federal law.

5. To adopt the State's regulations to the maximum extent allowed by Federal law when developing new or modifying existing Federal regulations governing or affecting the taking of fish and wildlife on Bureau lands in Alaska.
6. To notify the Department of any portion of the Department's fish and wildlife management objectives, guidelines, or State regulations that the Bureau determines to be incompatible with the purposes for which Bureau lands are managed.
7. To manage Bureau lands so as to conserve and enhance fish and wildlife populations.
8. To inform the Department of proposed development activities on Bureau lands which may affect fish and wildlife resources, subsistence and other uses, and to provide or require appropriate mitigation where feasible.
9. To permit, under appropriate agreement or authorization, the erection and maintenance of facilities or structures needed to further fish and wildlife management activities of the Department on Bureau lands, provided their intended use is not in conflict with Bureau policy and land-use plans.
10. To recognize that the taking of fish and wildlife by hunting, trapping, or fishing on Bureau lands in Alaska is authorized in accordance with applicable State and Federal law unless State regulations are found to be incompatible with Bureau regulations.

THE DEPARTMENT OF FISH AND GAME AND BUREAU OF LAND MANAGEMENT MUTUALLY AGREE:

1. To coordinate planning for management of fish and wildlife resources on Bureau lands and adjacent lands having common fish and wildlife resources so that conflicts arising from differing legal mandates, objectives, and policies either do not arise or are minimized.
2. To cooperate in planning, enhancement, or development activities on Bureau lands which require permits, environmental assessments, compatibility assessments, or similar regulatory documents by responding in a timely manner with requirements, time tables, and any other necessary input.
3. To consult with each other when developing or implementing policy, legislation, and regulations which affect the attainment of wildlife resource management goals and objectives of the other agency.

4. To cooperate in the management of fish and wildlife resources and habitat (including planning, regulation, enforcement, protection, restoration, research, inventories, and habitat enhancement) on Bureau lands and adjacent lands having common fish and wildlife resources consistent with the species and habitat management plans and objectives of both agencies.
5. To develop specific plans for cooperative development and joint management of habitat areas determined to be essential to the continued productivity or existence of fish and wildlife populations.
6. To consult with the Department prior to entering into any cooperative land management agreements which could affect fish and wildlife resources.
7. To cooperate in the development of fire management plans which may include establishment of priorities for the control of wild-fires, or use of prescribed fires.
8. To make facilities, equipment and assistance mutually available on request for use in fish and wildlife work and habitat improvement consistent with Bureau and Department requirements.
9. Neither to make nor sanction any introduction or transplant of any fish or wildlife species on or affecting Bureau lands without first consulting with the other party and complying with applicable Federal and State laws and regulations.
10. To provide to each other upon request fish and wildlife data including subsistence and other uses, information, and recommendations for consideration in the formulation of policies, plans and management programs regarding fish and wildlife resources.
11. To cooperate in the preparation of announcements and publications and the dissemination of fish and wildlife information; any material obtained from cooperative studies may be published or reproduced with credit given to the agencies or organizations responsible for its acquisition or development. Any news release relating specifically to cooperative programs will be made only by mutual consent of the agencies.
12. To cooperate and coordinate in the issuance of permits to persons, industry, or government agencies for activities affecting designated anadromous fish streams on Bureau lands, in accordance with Alaska Statute 16.05.870 and to cooperate in the formulation of comments and recommendations on permits issued by other governmental agencies in accordance with the Fish and Wildlife Coordination Act, Clean Water Act and other applicable laws.

13. To resolve, at field office levels, all disagreements pertaining to the cooperative work of the two agencies which arise in the field and to refer all matters of disagreement that cannot be resolved at equivalent field levels to the State Director and to the Commissioner for resolution before either agency expresses its position in public.
14. To meet annually at the Director/Commissioner level and discuss matters relating to the management of fish and wildlife resources and their habitats on, or affected by, respective programs; to provide for other meetings at various administrative levels for discussion of law enforcement, educational programs, cooperative studies, research, fish and wildlife surveys, habitat development, hunting, fishing, trapping seasons, and such other matters as may be relevant to fish and wildlife populations and their habitats.
15. To develop such supplemental memoranda of understanding and cooperative agreements between the Bureau and the Department as may be required to implement the policies contained herein.
16. That this Master Memorandum is subject to the laws of the State of Alaska and the United States. Nothing herein is intended to conflict with current directives, laws or regulations of the signatory agencies. If conflicts arise or can be foreseen, this Memorandum will be amended or a new Memorandum of Understanding will be developed.
17. That this Master Memorandum of Understanding is subject to the availability of appropriated State and Federal funds.
18. That this Master Memorandum of Understanding establishes procedural guidelines by which the parties shall cooperate, but does not create legally enforceable obligations or rights.
19. That this Master Memorandum of Understanding supersedes all previous Master Memoranda of Understanding between the Bureau and Department and all supplements and amendments thereto.
20. That this Master Memorandum of Understanding shall become effective when signed by the Commissioner of the Alaska Department of Fish and Game and the State Director of the Bureau of Land Management and shall continue in force until terminated by either party by providing notice in writing 120 days in advance of the intended date of termination.
21. That amendments to this Master Memorandum of Understanding may be proposed by either party and shall become effective upon approval by both parties.

STATE OF ALASKA

Department of Fish and Game

By Don W. Collinsworth

Don W. Collinsworth

Commissioner

Date 6-28-83

U.S. DEPARTMENT OF THE INTERIOR

Bureau of Land Management

By Curtis V. McVee

Curtis V. McVee

Director

Date 8/3/83

Supplement to the
MASTER MEMORANDUM OF UNDERSTANDING
between
THE ALASKA DEPARTMENT OF FISH AND GAME
AND
THE BUREAU OF LAND MANAGEMENT
U.S. DEPARTMENT OF THE INTERIOR, ALASKA

SIKES ACT IMPLEMENTATION

This supplemental memorandum of understanding is pursuant to the Master Memorandum of Understanding between the Alaska Department of Fish and Game (ADF&G) and the Bureau of Land Management (BLM), Alaska, dated AUG 3 1983. Public Law 93-452, of October 18, 1974, 16 U.S.C. 670a et seq., commonly referred to as the Sikes Act, provides the broad authority to: 1) Plan and carry out fish and wildlife conservation and habitat rehabilitation programs on Bureau lands consistent with overall land use plans; 2) Protect significant habitat for threatened and endangered species; and 3) Enforce regulations to control off road vehicle (ORV) traffic or other public use of lands subject to conservation and rehabilitation programs conducted under the Act.

The Act in no way diminishes the authority of the State of Alaska to manage resident fish and wildlife populations.

It is the purpose and intent of this supplement to provide a working relationship and procedure for implementation of the Sikes Act on Bureau lands in Alaska between ADF&G and BLM.

Terms used in this supplement are defined as follows:

- 1) Conservation and rehabilitation program - Includes programs necessary to protect, conserve, and enhance wildlife resources to the maximum extent practicable on Bureau lands consistent with any overall land-use and management plans for the lands involved.
- 2) Habitat Management Plan (HMP) - BLM's intensive, detailed action plan for wildlife management on a specific geographic area of biological interest on Bureau lands. The HMP is a cooperative plan with the State Wildlife agency and is based on current public input. The HMP shall be the implementing document for the Sikes Act.
- 3) Bureau Lands - These are public lands under the jurisdiction of the Bureau of Land Management.

THEREFORE, BE IT RESOLVED THAT FOR THE PURPOSE OF IMPLEMENTING P.L. 93-452, ADF&G and BLM mutually agree to the following:

- 1) HMPs will be implemented for areas where land-use plans have been prepared, unless otherwise authorized by the State Director, BLM.
- 2) HMPs will be based on priorities within Alaska, as mutually selected by the Commissioner, ADF&G, and the State Director, BLM. Guidelines for establishing HMP priorities shall be based on the following:
 - a) The basic resource values which may be enhanced and benefits produced by implementation of active management programs and/or regulations.
 - b) The identification, through the BLM or ADF&G planning systems, of areas having a need for intensive wildlife management.
 - c) The potential for wildlife habitat to be altered by land use activities such as energy and industrial development, urban expansion, road construction, and ORV traffic.
 - d) The need to protect important and/or critical fish and wildlife habitat such as salmon spawning areas, moose winter range, or the habitats of endangered or threatened species.
- 3) Protection will be afforded to those fish and wildlife species designated as threatened or endangered by the Alaska Department of Fish and Game or by the Secretary of the Interior pursuant to Section 4 of the Endangered Species Act of 1973.
- 4) HMPs will specify fish and wildlife habitat improvements or modifications needed.
- 5) Rehabilitation of Bureau lands will be undertaken where necessary to support HMP recommendations and consistent with the availability of funds for that purpose.

- 6) Hunting, fishing, and trapping of resident fish and wildlife on HMP areas will be in accordance with applicable laws and regulations of the State of Alaska.
- 7) It is herein recognized that the Secretary of the Interior has the authority to promulgate regulations to control the public use of Bureau lands consistent with the HMP, including, but not limited to ORV use. BLM and ADF&G will coordinate federal land use and state hunting, fishing and trapping regulations during Sikes HMP development.
- 8) Funds authorized and appropriated for HMP implementation on Bureau lands in Alaska shall include, but not be limited to all activities associated with scientific resource management, such as the following: protection, research, census, law enforcement, habitat management, propagation, live trapping, transplation, and regulated taking. Funds may be allocated for hiring of personnel, contractual services, physical habitat improvement projects, and grants to colleges. It shall be the joint responsibility of the Commissioner, ADF&G, and the State Director, BLM, to define areas and projects for priority funding under the Sikes Act. It shall be the responsibility of the State Director, BLM to secure funding through BLM's program funding procedures. Final disbursement of Sikes Act Funds shall be made through the State Director, BLM, after consultation with the Commissioner, ADF&G.
- 9) Plans and programs initiated on Bureau lands under the Sikes Act in Alaska shall not conflict with comprehensive plans required of the State under any Federal or State Acts.
- 10) BLM and ADF&G will discuss the following Sikes Act items during the course of their annual coordination meeting:
 - a) A progress report on the current status of HMP implementation.
 - b) The review of wildlife values produced under the existing conservation and rehabilitation programs.

- c) The priorities for HMP implementation.
- d) The program and budget recommendations for the upcoming and succeeding fiscal years.

This supplement shall become effective on the date when last signed and shall remain in force until terminated by mutual agreement, by amendment or abolishment of the Act by Congress, or by either party upon thirty days notice in writing to the other party of its intention to terminate upon a date indicated.

STATE OF ALASKA
Department of Fish and Game

By *Don W. Collinsworth*
Don W. Collinsworth
Commissioner

Date 6-28-83

U.S. DEPARTMENT OF THE INTERIOR
Bureau of Land Management

By *Curtis V. McVee*
Curtis V. McVee
State Director

Date 8/3/83

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Acronyms and Abbreviations

ACEC	Area of Critical Environmental Concern
ADEC	Alaska Department of Environmental Conservation
ADF&G	Alaska Department of Fish and Game
ADNR	Alaska Department of Natural Resources
AFO	Anchorage Field Office
AIWFMP	Alaska Interagency Wildland Fire Management Plan
ANCSA	Alaska Native Claims Settlement Act
ANILCA	Alaska National Interest Lands Conservation Act
ARPA	Archaeological Resource Protection Act
ATV	All Terrain Vehicle
BLM	Bureau of Land Management
CAA	Clean Air Act
CBNG	Coalbed Natural Gas
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CEQ	Council of Environmental Quality
CFR	Code of Federal Regulations
CL	Cinder Land
COA	Conditions of Approval
EIS	Environmental Impact Statement
EO	Executive Order

EPA	Environmental Protection Agency
ESA	Endangered Species Act
FCLAA	Federal Coal Leasing Amendments Act
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulation Commission
FIRM	Flood Insurance Rate Maps
FLPMA	Federal Land Policy and Management Act
GIS	Geographical Information System
GMU	Game Management Units
HUC	Hydrologic Unit Code
IAP	Integrated Activity Plan
KGRA	Known Geothermal Resource Area
MFP	Management Framework Plan
MLA	Mineral Leasing Act
MOU	Memorandum of Understanding
MCH	Mulchatna Caribou Herd
NAGPRA	Native American Graves Protection and Repatriation Act
NAAQS	National Ambient Air Quality Standards
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NPS	National Park Service
NEPA	National Environmental Policy Act
NRCS	Natural Resource Conservation Service
NSO	No Surface Occupancy

OHV	Off-Highway Vehicles
ORV	Outstandingly Remarkable Value
PLO	Public Land Order
ROD	Record of Decision
RMP	Resource Management Plan
R&PP	Recreation and Public Purposes
ROPS	Required Operating Procedure Stipulations
ROS	Recreation Opportunity Spectrum
ROW	Right-of-Way
SHPO	State Historic Preservation Officer
SPA	Southwest Planning Area
SRAC	Subsistence Regional Advisory Council
SRMA	Special Recreation Management Areas
SRP	Special Recreation Permit
UCU	Uniform Coding Units
USC	United States Code
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
USFS	U.S. Forest Service

Bay Draft RMP/EIS

USFWS	U.S. Fish and Wildlife Service
VRM	Visual Resource Management
WHSRN	Western Hemispheric Shorebird Reserve Network
WSR	Wild and Scenic Rivers

Glossary

17 (b) easement

A public easement across native lands to access public land and waters established under section 17(b) of the Alaska Native Claims Settlement Act (ANCSA) in 1971.

3809 regulations

Surface management regulations for locatable mineral operations.

-A-

Aboriginal

Refers to those people who reported identifying with at least one Aboriginal group, that is, North American Indian, Metis, or Inuit.

Ahtna

Regional language dialect shared by Athabaskans living in the Copper River Basin of Alaska.

Alaska National Interest Lands Conservation Act (ANILCA)

The Alaska Native Claims Settlement Act (ANCSA), was legislated in response to the need for a fair and just settlement of aboriginal land claims in Alaska. As compensation for extinguished claims of aboriginal title based on use and occupancy, Alaska Natives would receive 44 million acres of land and \$962.5 million.

Alternative

One of a number of possible options for responding to the purpose and need for action.

Ambient

Environmental and surrounding conditions.

Anadromous

Ascending rivers from the sea for spawning. Salmon are an anadromous species.

Aquatic

Living or growing in or near water.

Archaeology

The study of past human cultures through the analysis of their material and physical remains.

Area of Critical Environmental Concern (ACEC)

An area within the public lands where special management attention is required to protect important historic, cultural, or scenic values, fish and wildlife or natural systems or processes, or to protect life and safety from natural hazards.

Artifact

An object that was made, used, and/or transported by humans that provides information about human behavior in the past. Examples include: pottery, stone, tools, bones with cut marks, and coins.

Assessment

The act of evaluating and interpreting data and information for a defined purpose.

-B-

Back Country Byway

The BLM contribution to the national By way Program. A Back Country Byway is a designation for a road that has unique scenic and historical significance. These roads provide the public with recreational opportunities while informing them about natural and cultural resources and multiple use activities on the public domain.

Before Present (B.P.)

A term used to describe the time periods before the present.

Best Management Practices

A set of practices which, when applied during implementation of management actions, ensures that negative impacts to natural resources are minimized. BMPs are applied based on site specific evaluation and represent the most effective and practical means to achieve management goals for a given site.

-C-

Cache

A place to store something temporarily.

Cairn

Stones piled up as a landmark, monument, or memorial.

Closed

Generally denotes that an area is not available for a particular use or uses (BLM, H-1601-1).

Closed Area (in reference to OHV designations)

An area where OHV use is prohibited. Use of OHV's in closed areas may be allowed for certain reasons (e.g., to access subsistence resources); however, such use shall.

Code of Federal Regulations (CFR)

A codification of the general and permanent rules published in the Federal Register by the executive departments and agencies of the Federal Government. The Code is divided into 50 titles that represent broad areas subject to Federal regulation. Each volume of the Code is updated once each calendar year and is issued on a quarterly basis

Collaboration

Any cooperative effort between and among governmental entities (as well as with private partners) through which the partners work together to achieve common goals.

Commercial use

Any use of public lands where money is paid for services provided.

conveyed

Land where the title has been transferred to the selecting organization.

cumulative effects

cygnet

A young swan.

- D -

d(1) withdrawal

A withdrawal made under section 17(d)(1) of the Alaska Native Claims Settlement Act for study to determine the proper classification of the lands and to determine the public values of the lands which need protection.

decomposition

The breakdown of matter by bacteria and fungi. Decomposition changes the chemical makeup and physical appearance of materials

designated trail

A trail that is marked on the ground and mapped for public use. It is an administrative and not a legal designation. In some areas, motorized travel may be limited to designated trails.

developed recreation

Recreation dependent on facilities provided to enhance recreation opportunities in concentrated use areas.

dispersed recreation

Recreation activities of an unstructured type which are not confined to specific locations such as recreation sites. Example of these activities may be hunting, fishing, off-road vehicle use, hiking, and sightseeing.

drainage

A general term applied to the removal of surface or subsurface water from a given area either by gravity or by pumping.

- E -

ecosystem

A naturally occurring, self-maintained system of varied living and non-living interacting parts that are organized into biophysical and human dimension components.

ecosystem health

A condition where the parts and functions of an ecosystem are sustained over time and where the system's capacity for self-repair is maintained, such that goals for uses, values, and services of the ecosystem are met.

endangered species

An animal or plant species designated by the U.S. Fish and Wildlife Service to receive Federal protection status because the species is in danger of extinction throughout all or a significant portion of its natural range.

environmental analysis

A comprehensive evaluation of alternative actions and their predictable short- and long-term environmental effects, including physical, biological, economic, social, and environmental design factors and their interactions.

environmental assessment (EA)

A concise analysis of the significance of a given project's potential environmental consequences. An EA is required by the National Environmental Policy Act (NEPA), and determines if an Environmental Impact Statement (EIS) is needed.

environmental impact statement (EIS)

A detailed statement of a given project's environmental consequences, including unavoidable adverse environmental effects, alternatives to the proposed action, the relationship between local short-term uses and long-term productivity, and any irreversible or irretrievable commitment of resources.

environmental justice

The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations and policies.

Executive Order

A rule or order having the force of the law.

existing trail

A trail that is on the ground but has not been inventoried and evaluated by the managing agency to determine designation.

- F -

Federal Land Policy and Management Act (FLPMA)

A law passed in 1976 to establish public land policy, guidelines for its administration, and provide for the management, protection, development, and enhancement of the public lands.

FLPMA 302 permits

Section 302 of FLPMA provides for use, occupancy, and development of public lands with consideration for multiple use and sustained yield by requiring permits for utilization of public lands for habitation, cultivation, and the development of small trade or manufacturing concerns.

Federal Register

A daily publication that reports Presidential and Federal Agency documents.

fishery

Habitat that supports the propagation and maintenance of fish.

- G -

Generally Allowed Uses

The State of Alaska's uses and activities that are generally allowed on State land. For travel across State land (OHV use) it allows, "Using a highway vehicle with a curb weight of up to 10,000 pounds, including a four-wheel-drive vehicle and a pickup truck, or using a recreational-type vehicle off-road or all-terrain vehicle with a curb weight of up to 1,500 pounds, including a snowmobile and four-wheeler, on or off an established road easement, if use off the road easement does not cause or contribute to water quality degradation, alteration of drainage systems, significant rutting, ground disturbance, or thermal erosion. An authorization is required from ADF&G for any motorized travel in fish bearing streams" (ADNR 2004). All generally allowed uses are subject to conditions outlined in 11 AAC 96.005.

Geographic Information System (GIS)

An information processing technology to input, store, manipulate, analyze, and display all forms of geographically referenced information.

goal

A broad statement of a desired outcome that is usually not quantifiable (e.g., "maintain ecosystem health and productivity").

- H -

haul-out site

A specific out-of-water substrate site such as a particular area with a beach, rock, or iceberg component onto which marine mammals (e.g., sea lions or seals) hoist themselves for purposes of gaining solar warmth, physical rest and relaxation, safety from underwater predators (sharks), pup nursing and care, more efficient molting, and more energetic efficiency than remaining in frigid waters.

Holocene

The most recent geologic era; from about 10,000 years ago to the present.

housepit

The depression left by a lodging structure after it has burnt down or decomposed.

hydrocarbons

A group of chemical compounds containing only hydrogen and carbon; these include petrol, diesel, gas, oil, and some solvents

Hydrologic Unit Code (HUC)

A hierarchical system of numbering watersheds initiated by the U.S. Water Resources Council (1970) and expanded by Seaber et al. (1987) for use by water-resource organizations as a standardized base "for locating, storing, retrieving, and exchanging hydrologic data." The U.S., including Alaska, Hawaii, and parts of the Caribbean, is divided into 21 major hydrologic regions, then subdivided into 222 sub-regions, 352 accounting units, and 2,149 cataloging units. At each division, a 2-digit numerical code is added so that each watershed is assigned a unique numerical identifier.

hydrophytic vegetation

Plant species that live in water or very wet soils.

- I -

Implementation plan

A site-specific plan written to implement decisions made in a Resource Management Plan. Also called an Activity Plan.

invasive species

Organisms that have been introduced into an environment where they did not evolve. Executive Order 13112 focuses on organism whose presence is likely to cause economic harm, environmental harm, or harms to human health. See also *noxious weeds*.

- L -

land status

The legal standing of land within BLM boundaries. Land status includes private, military, State, State-selected, Native, Native-selected, and unencumbered public lands.

land use allocation

The identification in a Resource Management Plan of the activities and foreseeable development that are allowed, restricted, or excluded for all or part of the planning area, based on desired future conditions.

leasable minerals

Minerals subject to exploration and development under leases, permits, and licenses under various mineral leasing acts. Leasable minerals include oil, gas, and coal. See also *locatable minerals*.

lease

A means of allowing long-term use of public lands without transferring ownership of that land.

Leave No Trace (LNT)

A set of ethics used to minimize damage to the environment while recreating on public lands. Developed by the National Outdoor Leadership School (NOLS 2005).

lessee

A person or entity holding record title in a lease issued by the United States (see 43 CFR 3160.0-5).

limited

Generally denotes that an area or roads and trails are available for a particular use or uses (BLM, H-1601-1). See also *limited area* below.

limited area (*in reference to OHV designations*)

An area restricted at certain times, in certain areas, and/or to certain vehicular uses. These restrictions may be of any type, but can generally be grouped into the following categories: number of vehicles; types of vehicles; time or season of vehicle use; permitted or licensed use only; use on existing road and trails; use on designated roads and trails; and other restrictions (CFR 43 sec. 8340.05(g)).

locatable minerals

Minerals subject to appropriation under the mining laws and 43 CFR 3809. Locatable minerals include gold, silver, copper, gypsum, and other hard rock minerals. See also *leasable minerals*.

- M -

macroinvertebrate

An animal having no backbone or internal skeleton, large enough to be seen without magnification.

Management Framework Plan

A planning decision document prepared before the effective date of the regulations implementing the land use planning provisions of FLPMA. The MFP establishes, for a given area of land, land-use allocations, coordination guidelines for multiple-use, and objectives to be achieved for each class of land use or protection.

Memorandum of Understanding (MOU)

A formal, written agreement between organizations or agencies that presents the relationship between the entities for purposes of planning and management.

metaliferous

Yielding or containing metal.

microblade

A small prismatic parallel-sided flake struck from a prepared core. Microblades were probably inserted end-to-end in a slotted bone or antler shaft to provide a continuous cutting edge for points or knives.

mine

An opening or excavation in the earth for extracting minerals.

mineral entry

The filing of a claim on public land to obtain the right to any minerals it may contain.

mineral materials

The BLM authorizes disposal of mineral materials such as gravel and sand to third parties on unimproved lands. Materials cannot be bartered or sold and must be used in connection with project construction or maintenance.

mitigation measures

Actions taken to reduce adverse impacts on resource values.

model

An analytical framework based on the past behavior of numeric variables that is able to predict the future behavior of those variables. 10 CFR Part 960.2 defines a model as “a conceptual description and the associated mathematical representation of a system, subsystem, component, or condition that is used to predict changes from a baseline state as a function of internal and/or external stimuli and as a function of time and space.”

monitoring

The process of collecting information to evaluate if objectives and anticipated results of a management plan are being realized, or if implementation is proceeding as planned.

multiple-use

According to the Multiple-Use Sustained-Yield Act of 1960, the management of all the various renewable surface resources so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.

muskeg

A water-soaked form of peat or moss, 3-10 feet thick. Similar to a bog.

- N -

National Environmental Policy Act of 1969 (NEPA)

An act mandating an environmental analysis and public disclosure of Federal actions.

National Wild and Scenic Rivers System

A system of nationally designated rivers and their immediate environments that have outstanding scenic, recreational, geologic, fish and wildlife, historic, cultural, and other similar values and are preserved in a free-flowing condition. The system consists of three types of streams: 1) recreation—rivers or sections of rivers that are readily accessible by road or railroad and that may have some development along their shorelines and may have undergone some impoundments or diversion in the past, 2) scenic—rivers or sections of rivers free of impoundments with shorelines or watersheds still largely un-developed but accessible in places by roads, and 3) wild— rivers or sections of rivers free of impoundments and generally inaccessible except by trails, with watersheds or shore-lines essentially primitive and waters unpolluted.

no action alternative

The most likely condition expected to exist if current management practices continue unchanged. The analysis of this alternative is required for Federal actions under the National Environmental Policy Act of 1969 (NEPA).

No Surface Occupancy (NSO)

A limitation of oil and gas leasing. It denotes that the area is open for mineral leasing but analysis has found that in order to protect other resource values, no well sites, tank batteries, or similar facilities are to occupy the surface of specified lands unless site-specific analysis shows that resource values can be protected.

noxious weed

A plant species designated by Federal or State law as generally possessing one or more of the following characteristics: aggressive and difficult to manage; parasitic; a carrier or host of serious insects or disease; or nonnative, new, or not common to the United States. See also *invasive species*.

nunatak

An isolated hill or peak which projects through the surface of a glacier. A hill or peak which was formerly surrounded but not overridden by glacial ice. An Eskimo word meaning "lonely peaks."

- O -

objective

A concise statement of a specific desired outcome for a resource. Objectives are usually quantifiable and measurable.

off-highway vehicle (OHV)

Any motorized vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain, excluding: 1) any non-amphibious registered motorboat; 2) any military, fire, emergency, or law enforcement vehicle being used for emergency purposes; 3) any vehicle whose use is expressly authorized by the authorizing officer, or otherwise officially approved; 4) vehicles in official use; and 5) any combat or combat support vehicle when used for national defense (CFR 43 sec. 8340.05(a)).

open

Generally denotes that an area is available for a particular use or uses (BLM, H-1601-1). See also *open area* below.

open area (*in reference to OHV designations*)

Any area where all types of vehicle use is permitted at all times, anywhere in the area subject to the operating regulations and vehicle standards set forth in subparts 8341 and 8342 of the Title 43 CFR (CFR 43 sec. 8340.05(f)).

organic material

Referring to or derived from living organisms; compounds containing carbon.

outstandingly remarkable value

As defined by the Wild and Scenic Rivers Act of 1968, an "outstandingly remarkable value" is the characteristic of a river segment that is judged to be a rare, unique, or exemplary feature that is significant at a regional or national scale. Values can be recreational, scenic, geological, historical, cultural, biological, botanical, ecological, heritage, hydrological, paleontological, scientific, or research-related.

oxidation

The chemical process of oxygen combining with an element or compound

- P -

paleontological

Of or relating to past geological periods. Paleontological resources include fossils of shellfish, swamp forests, dinosaurs, and other prehistoric plants and animals.

paleontology

The study of ancient plants and animals now known only from fossil remains.

palisades

A line of bold cliffs.

particulates

Fine liquid or solid particles such as dust, smoke, mist, fumes or smog, found in the air or emissions.

permit

A means of authorizing use of public lands in an equitable, safe, and enjoyable manner while minimizing adverse impacts and user conflicts. A permit does not transfer ownership of the land, it simply allows the permittee to use the land in a pre-determined fashion for a set amount of time.

photochemical

Any chemical reaction that is initiated by light. Such processes are process important in the production of ozone and sulfates in smog.

planning area

The region within which the BLM will make decisions during a planning effort. A planning area boundary includes all lands regardless of jurisdiction; however, the BLM will only make decisions on lands that fall under the BLM jurisdiction (including subsurface minerals).

play

When referring to oil and gas resources, play is defined as a specific combination of geological features with perceived potential for oil and gas accumulation.

Pleistocene

A geologic period, usually thought of as the Ice Age, which began about 1.6 million years ago and ended with the melting of the large continental glaciers creating the modern climatic pattern about 11,500 years ago.

pollutants

Any substance introduced into the environment that adversely affects the usefulness of a resource or the health of humans, animals, or ecosystems.

prehistory

Any period in the past for which there is no contemporary written historical evidence. For the Copper River Basin, "prehistory" refers to any events occurring before 1850.

prescribed fire

A fire purposefully ignited to meet specific objectives. Prior to ignition, a written, approved fire plan must exist and legal requirements must be met.

primary trumpeter swan breeding habitat

Those slow-moving bodies of water and associated wetland habitats where concentrations of trumpeter swans are found during breeding/cygnets-rearing season due to the quality of available habitat.

proliferation

To spread or grow by rapid production of new parts such as unmanaged growth of trails.

public land

Land or interest in land owned by the U.S. and administered by the Secretary of the Interior through the BLM without regard to how the U.S. acquired ownership, except land located on the Outer Continental Shelf, and land held for the benefit of Native Americans, Aleuts, and Eskimos.

Public Land Order (PLO)

Congressional orders defining withdrawals of public lands by statute or secretarial order from operation of some or all of the public land laws.

pump station

A facility that serves as a base of operations, maintenance, and monitoring of the Trans-Alaska Pipeline System. There are 12 pump stations along the entire length of the Trans-Alaska Pipeline.

- R -

Recreation and Public Purposes (R&PP) Act

An act authorizing the sale or lease of public lands for recreational or public purposes to State and local governments and to qualified non-profit organizations.

R&PP lease

A lease issued by the Federal government for use of public lands to serve community and recreational purposes on public lands by issuing leases for uses such as parks, cemetery, and landfills.

radiocarbon dating

A chemical analysis used to determine the age of organic materials based on their content of the radioisotope carbon-14; believed to be reliable up to 40,000 years

record of decision

A public document associated with an Environmental Impact Statement (EIS) that identifies all alternatives, provides the final decision, the rationale behind that decision, and commitments to monitoring and mitigation.

Recreation Opportunity Spectrum (ROS)

A framework for stratifying and defining classes of outdoor recreation environments, activities, and experience opportunities. The settings, activities, and opportunities for obtaining experiences are arranged along a continuum or spectrum divided into seven classes: Primitive (P), Semi-Primitive Non-Motorized (SPNM), Semi-Primitive Motorized (SPM), Roaded Natural (RN), Roaded Modified (RM), Rural (R), Urban (U), Remote Developed Lakeside (RDL), and Special (S).

Required Operating Procedures (ROPs)

ROPs are requirements, procedures, management practices, or design features that the BLM adopts as operational requirements. In this Draft RMP/EIS, the ROPs would be common to all action alternatives. ROPs would apply to all permitted activities, including FLPMA leases and permits, Special Recreation Permits, oil and gas operations, mining Plans of Operation, and Right-of-Way authorizations. Obviously, not all ROPs would apply to all permitted activities. ROPs have been developed to ensure that objectives identified within the Alaska Land Health Standards are met when carrying out permitted activities and management practices.

Research Natural Area (RNA)

An area that is established and maintained for the primary purpose of research and education because the land has one or more of the following characteristics: 1) a typical representation of a common plant or animal association; 2) an unusual plant or animal association; 3) a threatened or endangered plant or animal species; 4) a typical representation of common geologic, soil, or water features; or 5) outstanding or unusual geologic, soil, or water features.

right-of-way (ROW)

The legal right to pass over another owner's land, or the area over which a right-of-way exists.

riparian zones

Wetlands that are transitional between permanently saturated lowlands and drier upland sites. Riparian habitat is characterized by hydrophytic vegetation (plants that often grow in water or wet soils) that grows in nonhydric (moist but not wet) soils.

R.S. 2477

A provision originally part of the 1866 Mining Act that states in its entirety, “The right-of-way for the construction of highways over public lands, not reserved for public uses, is hereby granted.” In 1873, the provision was separated from the Mining Act and reenacted as Revised Statute (R.S.) 2477. In 1938, it was recodified as 43 U.S.C. Section 932. FLPMA repealed both the 1866 Mining Act and R.S. 2477, but all rights-of-way that existed on the date of the repeal (October 21, 1976) were preserved under 43 U.S.C. Section 1769. The State of Alaska recognizes approximately 650 R.S. 2477 routes throughout the State. The assertion of these routes has not been recognized and current BLM policy is to defer any processing of R.S. 2477 assertions except where there is a demonstrated and compelling need to make a determination.

- S -

scoping

The process used to determine, through public involvement, the range of issues that the planning process should address.

sedentary

Abiding in one place; not migratory; not moving.

sedimentary

Having the quality of being layered. Sedimentary rocks are those that were created through the deposition of layers of materials that were compressed into hard rock.

Sensitive Status Species

Those wildlife, fish, or plant species designated by the BLM Alaska State Director, usually in cooperation with the State agency responsible for managing the species, as sensitive. They are: 1) species under status review by U.S. Fish and Wildlife Service and/or the National Marine Fisheries Service; 2) species whose numbers are declining so rapidly that Federal listing may be necessary; 3) species with typically small and widely dispersed populations; or 4) species inhabiting ecological refugia or other specialized or unique habitats.

seral

Relating to ecological communities where all successional stages of biotic development are represented.

smog

Generic term used to describe mixtures of pollutants in the atmosphere.

snowmachine

A motor vehicle of 850 pounds or less gross vehicle weight, primarily designed to travel over ice or snow, and supported, in part, by skis, belts, cleats, or low-pressure tires (11 AAC 12.340(9)).

Special Recreation Management Area (SRMA)

Areas where the management emphasis is on recreation, though other resource uses and development are allowed.

special recreation permit

A means of authorizing recreational uses of public lands and waters. Special recreation permits are issued for specific recreational uses as a means to manage visitor use, protect natural and cultural resources, and provide a mechanism to accommodate commercial recreational uses. There are four types of permits: commercial, competitive, organized groups/events, and individuals or groups in special areas.

Standard Lease Terms (SLT)

Denotes that no special stipulations are applied to a lease. Current environmental protection laws and the Federal Onshore Oil and Gas Leasing Reform Act orders provide the direction for the oil and gas operation.

stipulations

Stipulations are specific to oil and gas exploration, development, and production. They constitute restrictions on the conduct of operations under a lease. As part of a lease contract, lease stipulations are specific to the lessee. All oil and gas activity permits subsequently issued to a lessee will comply with the lease stipulations appropriate to the activity under review. The *Oil and Gas Leasing Stipulations* in Appendix III are example of stipulations.

subsistence/subsistence use

Relying on fish, wildlife and other wild resources for food, shelter, clothing, transportation, handicrafts, and trade. An Alaskan resident living in a rural area may participate in Federal subsistence hunting on certain unencumbered BLM lands.

succession

The replacement in time of one plant community with another. The prior plant community (or successional stage) creates conditions that are favorable for the establishment of the next community.

sustained-yield

According to the Multiple-Use Sustained-Yield Act of 1960, the achievement and maintenance in perpetuity of a high-level annual or regular output of the various renewable resources of the national forests without impairment of the productivity of the land.

- T -

Tangle Lakes Archaeological District (TLAD)

An area rich in historic and prehistoric remains located between mileposts 17 and 37 on the Denali Highway. TLAD was accepted to the National Register of Historic Places in 1971 and encompasses 226,660 acres. The boundary was revised in 1993 to follow natural features and more closely contain the archaeological resources for which the district was designated.

terminal moraine

An accumulation of earth and stones formed across the course of a glacier at its farthest advance, at or near a relatively stationary edge, or at places marking the termination of important glacial advances.

thermokarsting

Ground subsidence due to the thawing of permafrost.

threatened species

A designation by the U.S. Fish and Wildlife Service when a plant or animal species is likely to become endangered throughout all or a specific portion of its range within the foreseeable future.

tiering

The coverage of broad, general information in environmental impact statements, with subsequent site-specific analyses incorporating that general information by reference.

transportation and utility corridor

A specific corridor along the Richardson Highway that is used for purposes of concentrating transportation and utility facilities within a specified area. The Trans-Alaska Pipeline is located within the corridor. Shown on Map 41, this corridor was withdrawn from mineral entry by PLO 5150, as amended by PLO 5151. The corridor consists of an inner and outer corridor that are often referred to within this document as separate areas with different management strategies. However, unless otherwise specified, the term "transportation and utility corridor" refers to both the inner and outer corridors.

tundra

A level or undulating treeless plain characteristic of northern arctic regions in both hemispheres. It consists of black mucky soil with a permanently frozen subsoil, but supports a dense growth of mosses and lichens, and dwarf herbs and shrubs, often showy-flowered.

- U -

unencumbered/unencumbered BLM lands

Public lands that have not been selected by the State or Native organizations. These are the lands that will be retained in long-term Federal ownership.

- V -

viewshed

A region or area that can be seen from a particular location.

Visual Resource Management

A means of managing visual resources by designating areas as one of four classes: Class I: maintaining a landscape setting that appears unaltered by humans; Class II: designing proposed alterations so as to retain the existing character of the landscape; Class III: designing proposed alterations so as to partially retain the existing character of the landscape; and Class IV: providing for management activities which require major modifications of the existing character of the landscape.

- W -

Wild and Scenic River

A river that is part of the National Wild and Scenic River System. In Alaska, most Wild and Scenic Rivers were designated through the Alaska National Interest Lands Conservation Act (ANILCA). The Glennallen Field Office manages two of these rivers: the Delta National Wild and Scenic River, and the Gulkana National Wild River. See also *National Wild and Scenic Rivers System*.

wildland fire

Any nonstructural fire, other than prescribed fire, that occurs in an area under the fire management jurisdiction of a land management agency. This term encompasses fires previously called "wildfires."

withdrawal

Federal land set aside and dedicated to a present, governmental use; public land set aside for some other public purpose, e.g., pending a determination of how the land is to be used; an action approved by the Secretary or a law enacted by Congress that closes land to specific uses under the public land laws (usually sale, settlement, location, and entry), or limits use to maintain public values or reserves area for particular public use or program, or that transfers jurisdiction of an area to another Federal agency.