

Case File No.: FF-093637
AK-040-07-EA-009



Bureau of Land Management

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<http://www.anchorage.ak.blm.gov>

Environmental Assessment (EA)
Special Recreation Permit (43 CFR 2930)
Thomas Gray, d/b/a Grizzly Outfitters
FF-093637
AK-040-07-EA-009



Location:
BLM Administered lands within
State of Alaska, Department of Fish and Game Management Unit 22

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March 8, 2007

I. INTRODUCTION

The applicant, Thomas Gray, d/b/a Grizzly Outfitters, has applied for a renewal of his Special Recreation Permit (SRP) to conduct guided big game hunts within the State of Alaska's, Game Management Unit 22 on the Seward Peninsula and the eastern and southeastern shores of Norton Sound, Figure 1. Mr. Gray received his current BLM authorization to guide in Game Management Unit 22 and Game Management Unit 23 on August 21, 2003. Since authorization, Mr. Gray has focused his guided hunting on grizzly bears in Game Management Unit 22, Sub-unit B and Guide Use Area 22-05. A base camp was utilized near Death Valley within T. 3 S., R. 17 W., Section 30, Kateel River Meridian for one year and the camp was removed in 2003. Since removal of the base camp, Mr. Gray has used his residence in White Mountain and land received by the Council Native Corporation along the Niukluk River to conduct guiding operations in Game Management Unit 22, Sub-unit B and Guide Use Area 22-05. From 2002 to 2006, Mr. Gray's Post Use Reports indicate that the number of clients hunting on BLM land have ranged from 3 to 5 annually. All Post Use Reports show that Mr. Gray has only utilized Game Management Unit 22, Sub-unit B and Guide Use Areas 22-05 and 22-06, Figure 2.

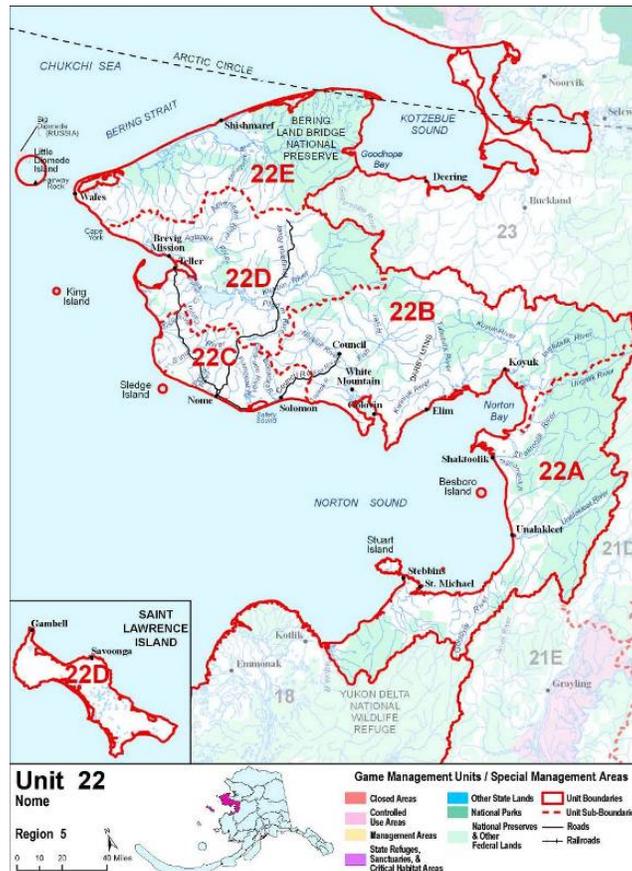


Figure 1

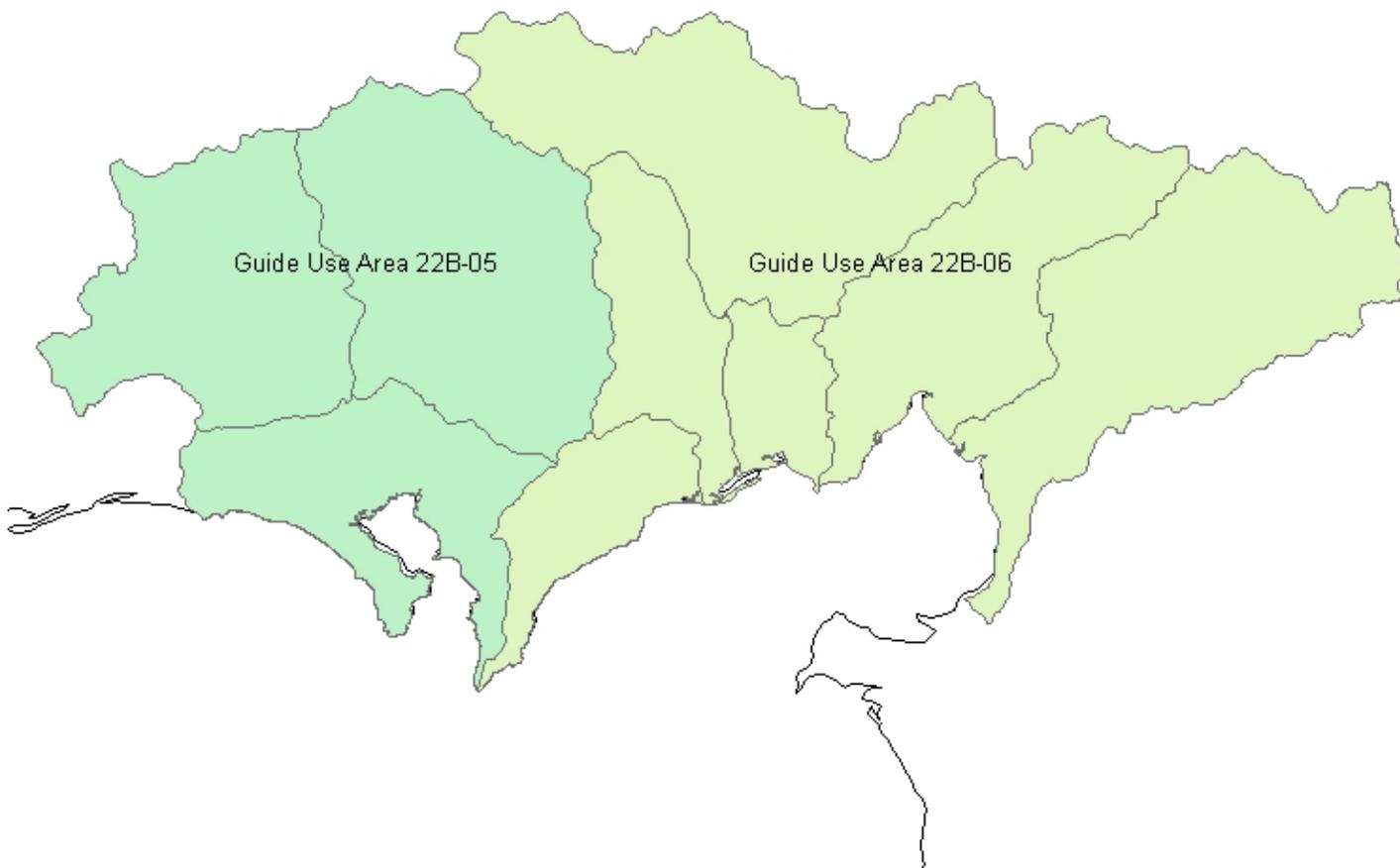
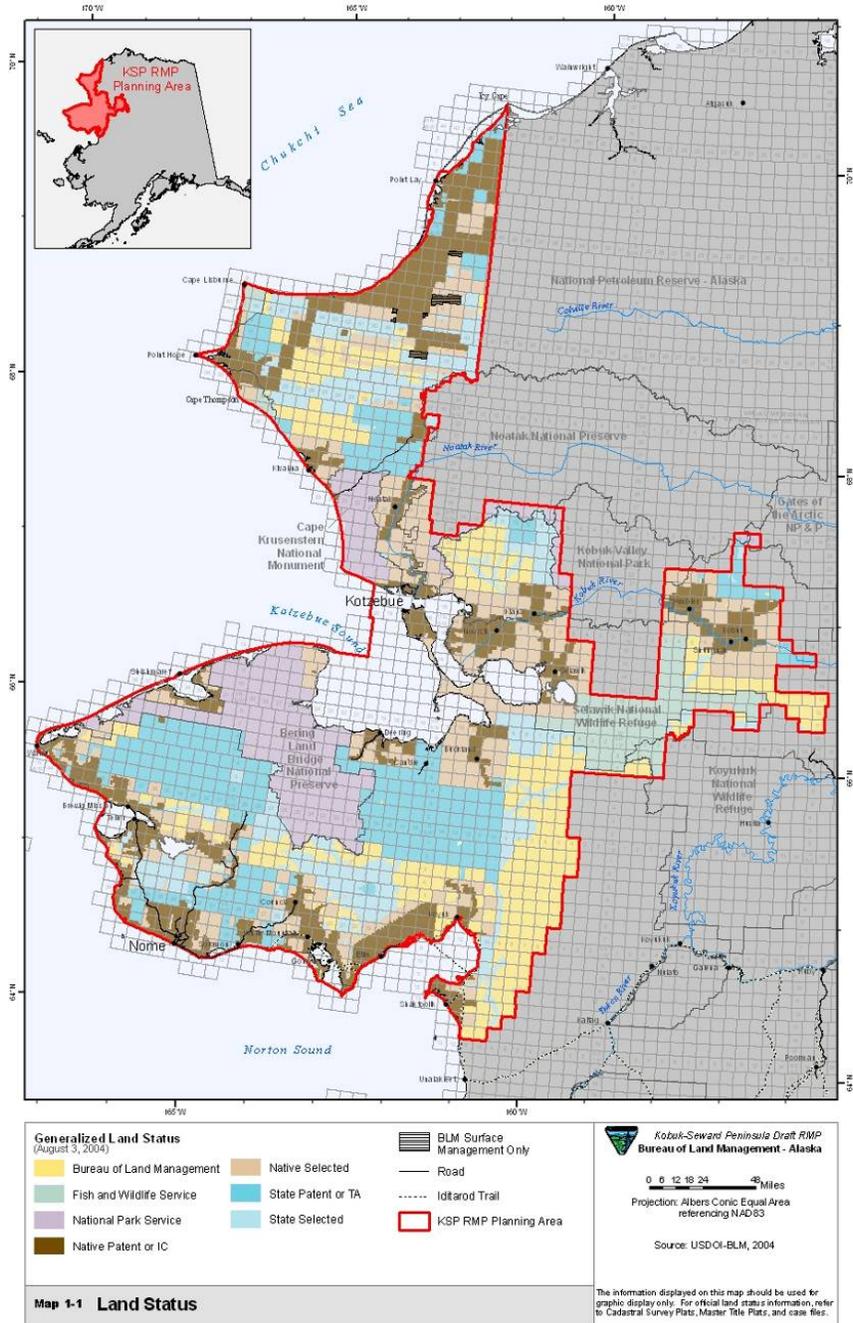


Figure 2

Mr. Gray is currently licensed by the State to conduct guided game hunting in Game Management Unit 22-B only, the area depicted in Figure 2. BLM's permit will not authorize use of BLM lands beyond the scope of the area licensed by the State.

A. Land Status:

The land status of Game Management Unit 22 consists of ANCSA patented or interim conveyed lands, Village and Regional selections, State of Alaska patented or tentatively approved land, State of Alaska selections, private lands, scattered Native allotments, patented mining claims and unencumbered BLM managed lands. Figure 3 on the following page is a generalized land status map from BLM's developing Kobuk Seward Resource Management Plan. Note that Game Management Unit 22A is not depicted.



Chapter | Introduction

Kobuk-Seward Peninsula Draft RMP/EIS

Figure 3

B. Relationship to Statutes, Regulations, Policies, Plans or Other Environmental Analyses:

An SRP is required for commercial recreational use of public lands or water. Special Recreation Permit regulations found at 43 CFR §2930 implement Section 3 of the Land and Water Conservation Fund Act, as amended¹ and Sections 302(b) and 303 of the Federal Land Policy and Management Act.² The Authorized Officer may grant up to a 10-year permit subject to annual authorization. The permittee must satisfactorily meet the requirements associated with the SRP and conform to all applicable federal, state, and local laws and regulations.

Wildlife population numbers and commercial, sport and State-defined subsistence harvests are managed by the State of Alaska³. Guided and unguided sport hunting is also managed by the State.

The Federal Subsistence Board manages federally qualified subsistence harvests on Federal “public land.”⁴

Section 302 (b) of The Federal Land Policy and Management Act of 1976 provides:

[N]othing in this Act shall be construed as authorizing the Secretary...to require Federal permits to hunt and fish on public lands or on lands in the National Forest System and adjacent waters or as enlarging or diminishing the responsibility and authority of the States for management of fish and resident wildlife. However, the Secretary...may designate areas of public land and of lands in the National Forest System where, and establish periods when, no hunting or fishing will be permitted for reasons of public safety, administration, or compliance with provisions of applicable law...Nothing in this Act shall modify or change any provision of Federal law relating to migratory birds or to endangered or threatened species.

A permit to Mr. Gray will track the area he is licensed in by the State. The State will only license a guide in three Guide Use Areas anywhere in the State. Currently Mr. Gray is licensed by the State in Guide Use Areas 22-05 and 22-06,

¹ 16 U.S.C. 460l-6a.

² 43 U.S.C. 1701, *et. seq.*

³ AS 16.05.255, 50, CFR §100.14(a).

⁴ 16 U.S.C. §3120, 50 CFR Part 100.

which is all of Game Management Unit 22-B.

C. Conformance with Land Use Plan:

The Proposed Action is in conformance with the Northwest Management Framework Plan dated October 5, 1982, activity objective Recreation (R-1). This objective states that BLM will provide recreational opportunities appropriate to the needs of visitors.

II. PURPOSE AND NEED FOR THE PROPOSED ACTION

Guiding services offer the public increased safety while in remote or relatively inaccessible and unfamiliar locations on the Seward Peninsula of Alaska. State law requires non-residents to retain the services of a registered guide to hunt grizzly bear.⁵

II. PROPOSED ACTION AND ALTERNATIVE

A. Proposed Action:

The applicant, Thomas Gray, d/b/a Grizzly Outfitters, proposes to conduct big game hunting expeditions on Federal Public lands of the Seward Peninsula and along the east and southeast shores of Norton Sound, Alaska. The applicant is a resident of White Mountain, a town on the Seward Peninsula. He has applied for a Special Recreation Permit authorizing his activities.

The applicant plans to provide his services to as few as five hunters and as many as fifty hunters at any given time depending on his non-resident clients' ability to obtain State licenses.

Mr. Gray intends to guide 8-10 non-resident hunters in pursuit of grizzly bear each spring and fall and 1-5 non-resident hunters in pursuit wolf and/or wolverine each winter. The balance of his clientele and hunting expeditions would be in pursuit of moose and caribou. The area in which Mr. Gray proposes to offer his services coincides with the State's Game Management Unit 22, Figure 1, above. Currently Mr. Gray is licensed by the state to conduct guiding operations in Guide Use Areas 22-05 and 22-06, which is Game Management Unit 22 B. Mr. Gray does not intend on establishing any field camps but rather proposes to conduct his operations out of privately held property in and near White Mountain and/or in other towns within Game Management Unit 22.

Mr. Gray proposes to use all terrain vehicles weighing less than 2,000 pounds for access (snowmobiles and "Honda" type all terrain vehicles). Access routes have not been identified in GMU 22 other than within Guide Use Area 22-05 where general areas of access have been described by the applicant as follows:

⁵ AS 16.05.407

We also use ATV's and have had them from near the Libby River to Death Valley along the south side of the Bendeleben Mountains. From Telephone Creek to the South side of Silver Mine in the Darby Mts. In the head waters of Bear Creek and Big Four. Also from Topkok to the east side of Bluff.

The State has licensed the following guides to operate in Game Management Unit 22.⁶ The State may permit an individual to guide in up to three Guide Use Areas. Mr. Gray has permits from the State to operate in Guide Use Areas, 22B-5 and 22B-6, which encompasses all of Game Management Unit 22B. These are the same Guide Use Areas and the same Game Management Unit he has operated in since 2003.

22	1	01/01/2007	BRIAN SIMPSON	PO BOX 61210 FAIRBANKS, AK 99706
22	2	01/01/2007	BRIAN SIMPSON	PO BOX 61210 FAIRBANKS, AK 99706
22	3	03/31/2007	BRIAN SIMPSON	PO BOX 61210 FAIRBANKS, AK 99706
22	5	01/01/2007	THOMAS GRAY	BOX 24 WHITE MOUNTAIN, AK 99784
22	5	02/06/2007	JAMES SMITH	12337 SILVER MAPLE DRIVE KELLER, TX 76248
22	6	01/01/2007	THOMAS GRAY	BOX 24 WHITE MOUNTAIN, AK 99784
22	6	01/01/2007	VANCE GRISHKOWSKY	BOX 38 UNALAKLEET, AK 99684
22	6	03/09/2007	HARRY HANNON	PO BOX 53022 KOYUK, AK 99753
22	7	01/01/2007	JERRY AUSTIN	PO BOX 110 ST. MICHAEL, AK 99659
22	7	01/01/2007	VANCE GRISHKOWSKY	BOX 38 UNALAKLEET, AK 99684
22	7	02/02/2007	HARRY HANNON	PO BOX 53022 KOYUK, AK 99753
22	7	02/02/2007	LANCE KRONBERGER	12570 OLD GLENN HWY #C EAGLE RIVER, AK 99577
22	7	01/20/2007	TOM SHANKSTER	PO BOX 2026 PALMER, AK 99645
22	7	01/01/2007	VIRGIL UMPHENOUR	878 LYNNWOOD WAY NORTH POLE, AK 99705

Figure 4.

B. No Action Alternative:

Under the No Action Alternative BLM would not renew Mr. Gray's Special Recreation Permit. Existing permitted commercial guiding for big game hunting on public lands would continue at current levels less the authorization of Mr. Gray. Mr. Gray would be required to seek other areas to conduct his operations.

⁶ AS §§ 08.54.750 and 08.54.600; May 04, 2007 State Web site notice.
<http://www.dced.state.ak.us/occ/apps/GuiUseReg.cfm>

III. AFFECTED ENVIRONMENT

A. Critical Elements:

1. The following Bureau defined critical elements of the human environment are either not present or would not be affected by the Proposed Action or the No Action Alternative:

Air Quality
Environmental Justice
Farm Lands (prime or unique)
Floodplains
Invasive, Non Native Species
Native American Religious Concerns
Wetlands/Riparian Zones
Wild and Scenic Rivers
Wilderness

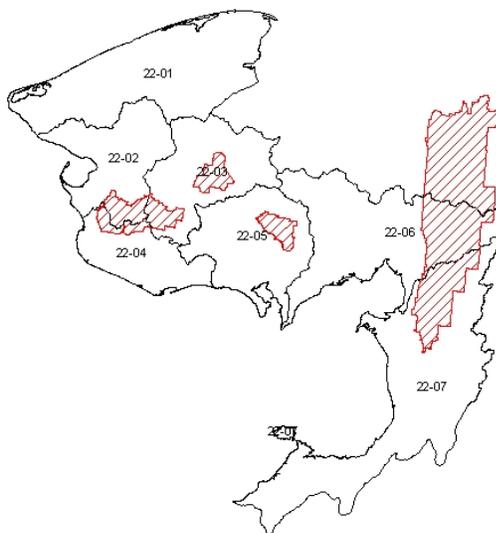
2. The following Bureau defined critical elements of the human environment may be affected by the Proposed Action or the No Action Alternative:

a. Areas of Critical Environmental Concern

The Bureau of Land Managements Resource Management Plan and Final Environmental Impact Statement for the Seward Peninsula is about to be completed. Upon approval of the Kobuk Seward Resource Management Plan, at least two areas within GMU 22 will be formally designated as ACECs. The plan develops four alternatives for adoption as the resource management plan. There are no Areas of Critical Environmental Concern under Alternatives (ACEC) A or B. There are four ACECs under Alternative C that are within GMU 22:

1. The Upper Kuzitrin River (141,000 acres) to protect caribou, moose and waterfowl habitat. The area is adjacent to the Bering Land Bridge National Park. Relevant management directives for this ACEC include:
 - a. OHV use is limited to designated trails from May 15 through October 31.
2. McCarthy's Marsh (131,000 acres) to protect caribou, moose and anadromous fish and waterfowl habitat. These lands are mostly state selected and are south of the Bendeleben Mountains. Relevant management directives for this ACEC include:
 - a. OHV use is limited to designated trails from May 15 through October 31;

- b. Commercial recreational use is limited.
3. The Nulato Hills (2,044,000 acres) to protect core winter range for the Western Arctic caribou herd. Mostly unencumbered BLM land east of the Seward Peninsula. Relevant management directives for this ACEC include:
 - a. OHV use is limited to designated trails from May 15 through October 31.
4. The Kigluaik Mountains (382,000 Acres) to protect scenic, cultural, botanical and geologic values. Relevant management directives for this ACEC include:
 - a. OHV use is limited to designated trails from May 15 through October 31; and
 - b. Commercial recreational use is limited.



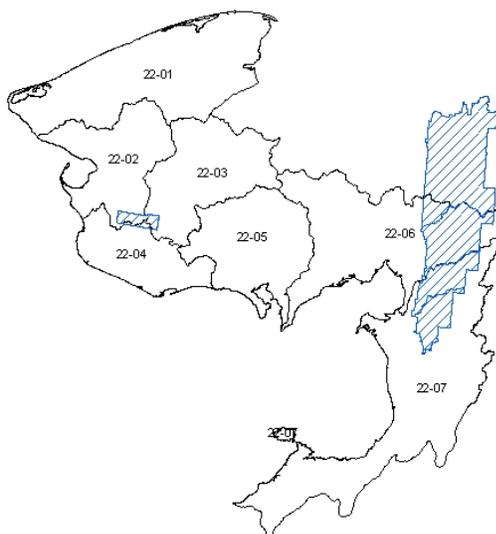
Kobuk Seward Plan Alt. C ACECs

There are five ACECs under Alternative D, the Preferred Alternative, that are within GMU 22:

1. Mount Osborn (82,000 acres), which is a residual of the Kigluaik Mountain ACEC. The ACEC designation is designed to protect scenic, geologic, and botanical values. Management directives for this ACEC include:
 - a. OHV use is limited to designated trails from May 15 through October 31. Until conveyances were completed,

OHVs would be managed consistently with the State's generally allowable uses. Once conveyances were complete or the selections were relinquished, an OHV management plan would be developed to outline limitations on OHV use.

2. Nulato Hills (1,080,000 acres) to protect core winter range for the Western Arctic Caribou Herd. Management directives for this ACEC include:
 - a. OHV use would be limited to 2,000 pounds GVWR
3. Shaktoolik River (234,000 acres) to protect anadromous fish habitat. Management directives for this ACEC include:
 - a. OHV use would be limited to 2,000 pounds GVWR
4. Ungalik River (264,000 acres) to protect anadromous fish habitat. Management directives for this ACEC include:
 - a. OHV use would be limited to 2,000 pounds GVWR
5. Inglutalik River (466,000 acres) to protect anadromous fish habitat. Management directives for this ACEC include:
 - a. OHV use would be limited to 2,000 pounds GVWR



Kobuk Seward Alt. D ACECs

- b. Cultural Resources:

There are archeological and cultural resources on the Seward Peninsula. Bering Straits Native Corporation submitted applications

under ANCSA Section 14(h)(1) for scattered historical and cemetery sites within GMU 22.

A cultural resource inventory of a small portion Guide Use Area 22-05 was conducted by BLM in 1991 (BLM- Alaska Open File Report 57, July 1995). The inventory noted several tent rings, caches, wind breaks and hunting blinds within the Boston Creek drainage. Clusters of sites were found at Boston Creek, the tributaries of the Fish River, and on the southern slopes of the Bendeleben Mountains. The sites ranged in age from the prehistoric to the historic.

c. Subsistence:

A mixed economy based on cash and subsistence practices exists in the Bering Strait Region. While the rural cash economy consists mainly of federal, tribal, state and local government jobs, a subsistence economy exists year round and includes hunting and gathering of land and marine mammals; seafood; birds; and plant life. Variations and extensions of subsistence practices are processing foods, hides, and other animal parts or resources for consumption and utilization. Other examples include bartering, sharing, and selling harvested foods; carving, sewing, beading and basket weaving; and boat and sled building. In the Bering Strait Region the need for cash is critical. Many people throughout the Norton Sound communities depend on both economies for their livelihood and survival. It is necessary for many residents to combine subsistence practices with a cash income in order to purchase hunting equipment such as tents, stoves, guns and ammunition, all terrain vehicles, boats and outboard motors. Additional items such as food, fuel, supplies, parts, and seasonal clothing contribute to the expenses necessary for participating in a mixed economy. Due to transportation costs associated with shipping these items to village locations, these expenses often equal or exceed the price of a new car or truck. However, dollars and cents can not measure the underlying importance of subsistence. Subsistence reaches far beyond hunting and gathering practices and encompasses an entire way of life passed on from generation to generation. Subsistence is vital to the livelihood of the Region's economy and is based on historical indigenous cultures and traditions, not monetary and material possessions. The subsistence lifestyle of indigenous people continues to be critical to the cultural and socioeconomic well being of the Bering Straits Region.

Residents of Shishmaref, Wales, Brevig Mission, Teller, Nome, White Mountain, Golovin, Elim, Koyuk, Shaktoolik, Unalakleet, St. Michael,

Stebbins and primarily the summer communities of Council and Solomon use various resources within GMU 22 for subsistence purposes. Area residents use the area to hunt grizzly bear, caribou, and moose, to trap and hunt furbearing animals, to fish for salmon, arctic char, grayling and white fish, a host of small and unclassified game, marine mammals and berries, greens and roots.

State regulations allow an individual, resident or non-resident, to take one brown/grizzly bear per regulatory year in the area in which the applicant proposes to provide guided hunts. This quota compares to one bear every four years in heavily regulated areas and two bears per year in lesser-regulated areas. The State also allows for the taking of five wolves and one wolverine per hunter in the area. There is no distinction between resident and non-resident hunters with regard to wolves and wolverines.

State regulations allow for the taking of one moose per regulatory year in GMU 22. Some areas of GMU 22 are closed to moose hunting by out of State hunters due to declines in the moose population.

The Federal Subsistence Board manages federally qualified subsistence harvests on Federal "public land", 16 U.S.C. §3120, 50 CFR Part 100. Federal "public lands" are defined in the Alaska National Interest Lands Conservation Act Section at 102(3) as:

The term "public lands" means land situated in Alaska which, after the date of enactment of this Act, are Federal lands except--

(A) land selections of the State of Alaska which have been tentatively approved or validly selected under the Alaska Statehood Act and lands which have been confirmed to validly selected by, or granted to the Territory of Alaska or the State under any other provision of Federal law;

(B) land selections of a Native Corporation made under the Alaska Native Claims Settlement Act which have not been conveyed to a Native Corporation, unless any such selection is determined to be invalid or is relinquished; and

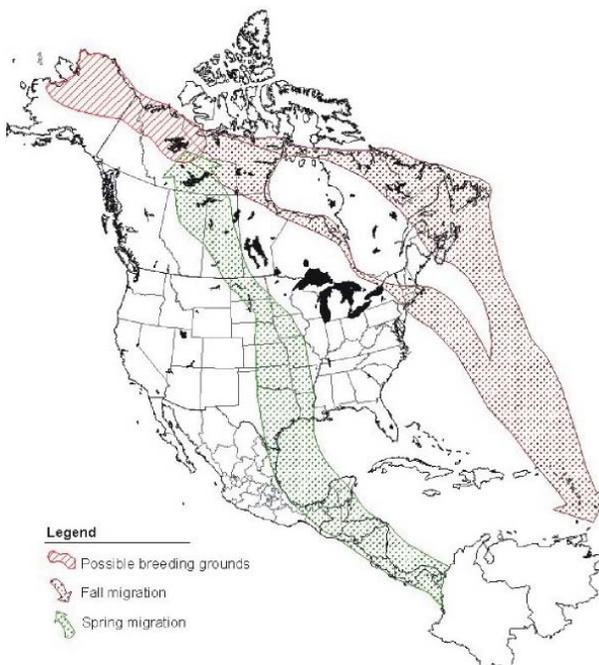
(C) lands referred to in §19(b) of the Alaska Native Claims Settlement Act.

[PL 96-487 (94 Stat. 2371) December 2, 1980]

The Federal Subsistence Board has determined that black bear, brown bear, caribou, moose, and wolf are wildlife populations that have been customarily and traditionally used for subsistence by Alaska residents of GMU 22.⁷ Wolverines do not have that distinction.

d. Threatened & Endangered Species:

There are three known T&E bird species listed by the USF&W Service within the Seward Peninsula: the Eskimo Curlew (*Numenius borealis*), Spectacled Eider (*Somateria fischeri*), and Steller's Eider (*Polysticta stelleri*). The Steller's Eider, Alaska breeding population occurs along the coastline of the Bering Sea within the Alaska Maritime National Wildlife Refuge.



Historical Migration Patterns of the Eskimo Curlew (*Numenius borealis*)
(Adapted from Northern Prairie Wildlife Research Centre, 2000).

Figure 7
Eskimo Curlew arrive at their Arctic nesting grounds in May and leave

⁷ 50 CFR §100.24

in August and inhabit sub-unit 22A and the eastern portion of sub-unit 22B of GMU 22. It should be noted that the species has not been seen or reported for a few decades.

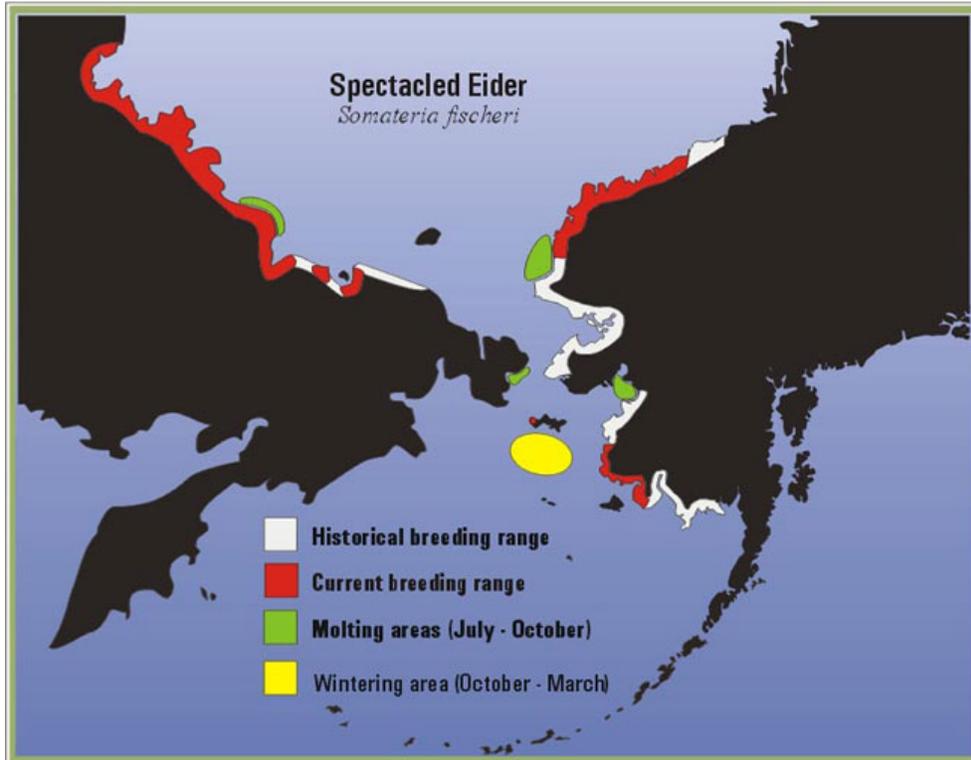


Figure 8

The U.S. Fish and Wildlife Service has designated approximately 39,000 square miles of critical habitat for the spectacled eider in Alaska in four different locations: in the Bering Sea between St. Lawrence and St. Matthew islands; in Norton Sound east of Nome; in Ledyard Bay between Cape Lisburne and Icy Cape; and on the coastal fringe of parts of the Yukon-Kuskokwim Delta. Spectacled eider inhabit sub-unit 22E of GMU 22. Spectacled eiders are in the near shore areas of Norton Sound during molt in July. However, they do not come onshore during molting. They nest on the Yukon Kuskokwim Delta and the North Slope, and winter in the Bering Sea. Consequently, they are not found on the Seward Peninsula or in the area of this proposed action and will not be impacted by Mr. Gray's proposal.

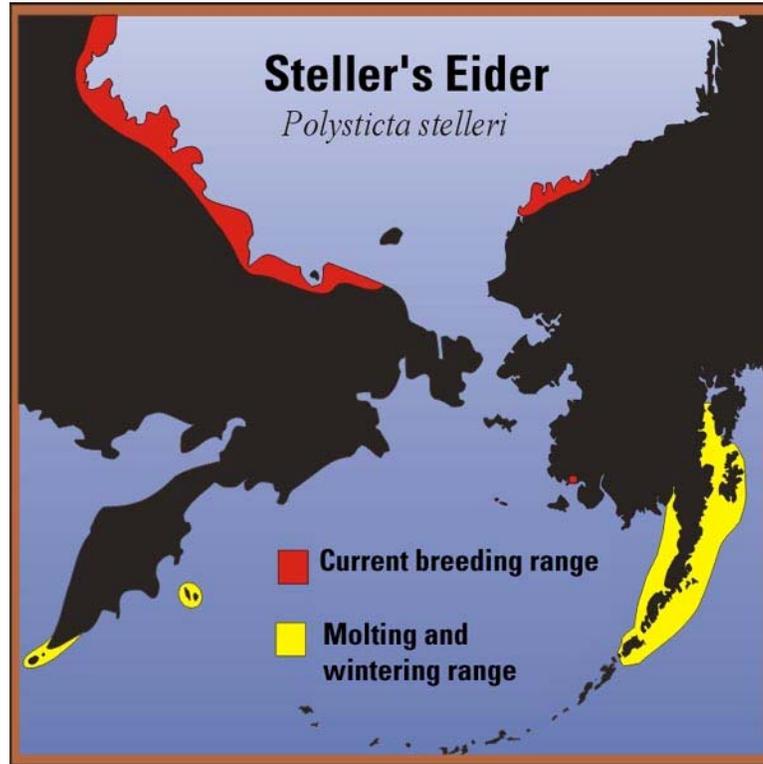


Figure 9

Steller's eider migrate through GMU 22 on their way to their breeding grounds. The majority of the world population of Steller's eiders migrates along the Bering Sea coast in April and May and stop and stage in the near shore waters of the coast on their way to breeding grounds on the North Slope and Siberia. They are in coastal areas in GMU 22, but do not go ashore during migration, so are not a factor for this proposal, and will not be impacted by Mr. Gray's proposal.

In July of 1997, a floristic inventory conducted by BLM Anchorage Field Office and the University of Alaska, Fairbanks targeted three alpine sites in the southern Nulato Hills and discovered a single population of *Douglasia beringensis* (Bering dwarf primrose). This Special Status Species was found growing in loose scree below the 3,414 foot summit of Debauch Mountain. The Inglutalik River flows through the northern Nulato Hills, south and west to Norton Bay. *Douglasia beringensis* may occur on other mountain peaks of the northern Nulato Hills, in the vicinity of the Inglutalik River or in the eastern Darby Mountains. To date none have been documented.

e. Wastes, Hazardous/Solid:

There are known hazardous wastes on BLM managed lands in GMU 22. There are solid wastes on abandoned mining claims at Omilak, on the east side of McCarthy's Marsh. Other structures in the area are located on owned or applied for Native Allotments. There is a potential for trash and petroleum product spills from past guiding operations, local recreational use or subsistence hunting.

f. Water Quality, Surface/Ground

Water quality data is lacking throughout much of Alaska. The water quality of all the major river drainages within GMU 22 is presumed to meet State and federal water quality standards.

B. Non-Critical Elements of the Human Environment

The following Non-Critical Elements of the Human Environment may be affected by the Proposed Action of the No Action Alternative.

1. Recreation:

The State of Alaska has authorized nine guides in GMU 22 including the applicant. Figure 4 above is a listing of current guides licensed in Game Management Unit 22.

Visitors and local residents recreate in GMU 22. There is a network of State maintained roads located out of Nome. Nome also has daily jet service. A port is located in Nome which services a limited number of cruise ships. Each village within the region has a State maintained Airport. Numerous established winter trails exist. The only National Trail in Alaska, the Iditarod follows the coastal area of GMU 22 from Unalakleet to Nome. Several remote unimproved gravel air strips are within GMU 22.

One Wild and Scenic River, the Unalakleet, provides world class fishing opportunities. Seward Peninsula hot springs are located at Serpentine (NPS lands), Granite Mountain (State/Native Corporation), Elim (Elim Native Corporation lands), Lava Creek (Native Selected), and Pilgrim (private lands).

Hiking, camping, fishing, hunting, wildlife viewing and other outdoor activities as well as gold mining, the Native cultural and business enterprises drive tourism and recreational pursuits on the Seward Peninsula. A Nome Area Tourism Study for the Northwest Area Transportation Plan (ADOT/PF Oct. 2003) projects a growth in tourism from 10,160 visitors in 2004 to 36,560 by 2024.

2. Vegetation:

The Seward Peninsula encompasses a diversity of land features and climatic zones, with elevations ranging from sea level to 7,500 feet above sea level. Variety in elevation and topography create an array of environments and vegetation types ranging from high elevation alpine meadows to tidal-influenced marshlands. In 1985, the USDA, Soil Conservation Service produced a Range Survey of the Seward Peninsula Reindeer Ranges. Ecological sites were identified and mapped. The physiognomy ranged from trees, tall & low shrub, and herbaceous. Portions of GMU 22 are in the Arctic. The Arctic Environment is especially sensitive. The low levels of solar energy received in the North encourage processes yet the region's cold temperatures slow rates of photosynthesis and decomposition.⁸ Biodiversity in the region involves short and simple food chains that have little or no possibility of species substitution.⁹ Since Arctic species are naturally under constant stress to survive within the harsh environment of the North, they are especially vulnerable to any additional sources of stress, both natural and human induced.¹⁰

3. Visual Resources:

Except for areas surrounding communities, the visual resources in the area of the proposed action are pristine. Except for the area north of Council and eastward near Elim, Koyuk and on the eastern Seward Peninsula, the area is above the northern limit for tree growth and offers broad views across rolling open tundra and treeless mountain slopes and ridgelines. Views from riparian areas are generally limited due to increased vegetation.

Expansive and scenic views are available from high vantage points. Except for the road system out of Nome and a few local roads in some villages, no roads exist in the area and travel is confined to snowmachine and ATV equipment, as well as air travel by mostly light aircraft. There are established camps throughout GMU 22, located primarily along river systems and local roads/trails mostly on Native Allotments/Native Corporation owned lands.

⁸ See S.E. Hobbie, *Direct and Indirect Effects of Plant Species on Biogeochemical Processes in Arctic Ecosystems*, in *Arctic and Alpine Biodiversity: Patterns, Causes and Ecosystem Consequences* 213 (F. Stuart Chapin III & Christian Körner eds., 1995)

⁹ For example, the lichen-caribou-human chain in Arctic Canada. See UNITED NATIONS ENVIRONMENT PROGRAMME. *Global Environment Outlook 2000*, 180 (1999), available at <http://www.unep.org/geo2000/english/0119.htm> (last visited Dec. 8, 2001).

¹⁰ See *id.* At 177.

The area of the proposed action is currently undesignated as to Visual Resource Management. The Kobuk-Seward Peninsula Draft Resource Management Plan and Environmental Impact Statement, April, 2006 (Chapter II, Alternatives, Map 2-3) suggests preferred alternatives for the Seward Peninsula. A small area of the Kigluaik Mountains, north of Nome and the Inglutalik and upper Ungalik River basins are classified as VRM Class II. Management objectives are to keep the level of change low; activities should not dominate the view and changes would repeat basic elements of form, line, color, and texture. VRM Management Class III is identified within the view sheds of the Nome Road system and eastern Norton Sound. The rest of the area within GMU 22 is classified as VRM Class IV. The objective of a VRM Class III is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. The objective of a VRM Class IV is to provide for management activities which may have a major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high and these management activities may dominate the view and be the major focus of viewer attention.

4. Wildlife:

GMU 22, Figure 1 above, is inhabited by many wildlife species including, but not limited to moose, grizzly bear, caribou, wolf and wolverine.

The Alaska Department of Fish and Game has no population estimates on bear numbers in GMU 22 but believes that brown and grizzly bear densities are higher in eastern Unit 22 compared to the western portion of the Unit. Under State management, all sub-units of 22 allow for 1 bear to be taken by non resident hunters each regulatory year except for sub-unit 22C where the limit is one bear every 4 regulatory years. Resident hunters can take one bear every regulatory year except in sub-unit 22C where the limit is one bear every 4 regulatory years and in sub-unit 22A which has allowed for the harvest of two bear in a regulator year due in part to the large bear population and as an attempt to increase moose populations.

Caribou numbers have risen substantially in GMU 22. The Western Arctic Caribou Herd is now the largest in Alaska, estimated at 490,000

in 2003 (Pers. Comm. Jim Dau, ADF&G). According to Persons (Persons, K. and P. Bente, 2000) the size of the GMU 22 wolf population is unknown but wolf densities are highest in sub-unit 22A and eastern sub-unit 22B. Since the 1980s, there has been a gradual increase in wolves associated with wintering caribou. In 1998-1999, GMU 22 participated for the first time in the statewide trapper survey program. To better assess harvest and abundance of wolves and other furbearers, questionnaires were sent to hunter/trappers who harvested furbearers in the unit. Respondents from sub-units 22A and 22B reported that wolves were common and numbers seem to be increasing.

Moose densities vary throughout GMU 22. In sub-unit 22E, there is no non resident season. In sub-unit 22A within the Unalakleet river basin and all rivers flowing into Norton Sound north of the Golosovia River and south of the Tagoomenik and Shaktoolik rivers, there is no open season (for resident or non resident hunter). In sub-unit 22D, there is a non resident hunt in the “remainder” of 22D but in many portions of the sub-unit there is no non resident hunt and resident hunts are curtailed by a quota. In sub-unit 22B east of the Darby Mountains, a limited number of non resident moose are available (8). There is no non resident season west of the Darby Mountains. Moose density estimates for sub-unit 22B west of the Darby Mountains (22B West), indicate that moose populations have declined. A survey of sub-unit 22B West in March 2004 resulted in a population estimate of 586 moose, indicating a decline of 64% since 1987 and 27% since 1999 (Persons 2004). The recruitment rate for sub-unit 22B West was 9%. In sub-unit 22C there is a quota but non resident hunting is available.

The moose populations in recent years have caused ADF&G management to limit both resident and non resident harvest. Federal restrictions (under subsistence management) occur in sub-units 22A, 22B, and 22D.

Resident and migrant land birds nest and feed in shrub (alder and willow) and forest habitats. Cliffs and bluffs in the region may provide nesting habitat for raptors including rough-legged hawk, bald eagle, golden eagle, and peregrine falcon and gyrfalcon.

IV. ENVIRONMENTAL CONSEQUENCES

A. Impacts of the Proposed Action:

1. Critical Elements of the Human Environment:

a. Areas of Critical Environmental Concern

The Bureau of Land Management is currently engaged in developing a Resource Management Plan and an Environmental Impact Statement for the Seward Peninsula. Areas of Critical Environmental Concern have been identified under two of the plan's alternatives, Alternative C and Alternative D. Under both alternatives and in all identified ACECs, OHV use is either limited to designated trails or limited by weight to 2,000 GVWR. Unconstrained use of OHV's in the ACEC's may result in damage to the habitat that BLM is attempting to protect.

Under Alternative C, the BLM is attempting to protect habitat used by moose and caribou in two of the identified ACECs, the Upper Kuzitrin River and McCarthy's Marsh and habitat used by caribou in the Nulato Hills. Although wildlife management is within the province of the State, the permitting of commercial big game guiding operations in these ACECs is somewhat inconsistent with the purpose of the ACECs in that it may reduce the population of the very species whose habitat BLM is protecting.

Under Alternative D, the preferred alternative, the BLM is attempting to protect habitat used by the Western Arctic Caribou Herd in one ACEC, the Nulato Hills. Although estimates of the herd's population strength are around 490,000 animals and although wildlife management is within the province of the State, permitting commercial big game guiding operations in this ACEC is somewhat inconsistent with the purpose of the ACEC in that it may reduce the population of the very species whose habitat BLM is protecting.

Renewal of Mr. Gray's permit may stress the wildlife in the ACECs and has the potential of displacing that wildlife.

b. Cultural Resources:

Irresponsible use of, reckless disregard for or sustained presence within an area of historical, anthropological or archeological significance, may pose a threat to cultural resources particularly when coupled with the use of motorized vehicles such as snow machines and all terrain vehicles. Camps, other than those necessary for emergency shelter, are not contemplated within this proposed action although emergency camps will be allowed.

c. Subsistence:

Subsistence users in the area will witness additional pressure on limited game resources, particularly moose. Guiding operations will increase

human intrusion into the area and increased snowmobile and off highway vehicle traffic may drive subsistence resources away from areas customarily used by residents of the area. Increased harvest may dislocate some species, primarily ungulates. Since the area applied for is so vast, it is difficult to know what impact the proposed activity will have on subsistence use. However, wildlife populations are managed by the State. If wildlife populations are in such jeopardy as to threaten subsistence use the Federal Subsistence Board will then commence management of the pertinent populations and take on Federal public lands, Title VIII of ANILCA.

Given the historical level of Mr. Gray's and his clients' take and their projected take, there is no reason to believe that the proposed action will jeopardize the caribou, bear, wolf, or wolverine populations; or that the his activities will jeopardize rural Alaskans' subsistence priority. Moose harvests by non-residents may affect subsistence use if too many guides work an area in close proximity to villages. Without knowing where Mr. Gary intends to offer guided hunts within GMU 22, it is difficult to assess the impacts to subsistence resources. Currently he is licensed in Guide Use Areas 22-05 an 22-06.

d. T&E Species:

Irresponsible use of motorized vehicles or guns and harassment of identified endangered species has the potential of prohibited take and displacement of the species.

There is a possibility that human use of the lands (camping, hunting, hiking, OHV use, aircraft landings, etc.) may impact *Douglasia beringensis* by killing or damaging individual plants.

Both Steller's and spectacled eiders are found in coastal areas and near shore habitats of the area, not in the areas where Mr. Gray proposes to operate. A United States Fish and Wildlife Service, Endangered Species Act consultation is not necessary.

e. Wastes, Hazardous/Solid:

Potential for harm to the environment is presented by risks associated with spills of oil and/or hazardous substances, and improper management of wastewater and trash generated by human activity.

f. Water Quality, Surface/Ground:

Use of a pit privy in violation of Alaska Department of Environmental

Conservation regulations may contaminate ground, surface, and drinking water resources. Possible contamination may include increased fecal coliform bacteria that may result in sickness to humans. Increased nitrogen constituents may indirectly reduce dissolved oxygen supplies resulting in reduced habitat quality for fisheries.

2. Non Critical Elements of the Human Environment:

a. Recreation

The Proposed Action would potentially increase the number of guides in any one Guide Use Area. The proposed action seeks authorization within seven (7) Guide Use Areas. The State of Alaska authorizes only three active Guide Use Areas per year for each registered guide. Areas within GMU 22 which have not seen increased guiding pressure may see an increase of one guide. The uncertainty of which three Guide Use Areas would be utilized by Mr. Gray in any given year makes it difficult to analyze the impacts of the proposed action on recreation users. The Proposed Action may increase the number of recreational users in the area due to the increased level of commercial services available. There may be conflicts between user groups due to the increased level of commercial guiding. Due to the relatively limited number of trophy grizzly bear, there may be increased competition between guides working in a given area and their clients. This competition may result in loss of trophy harvest opportunity for clients, animosity between guides and their assistants and lower the quality of a remote hunting experience. Although State law sets game seasons and take, competition between local guides and outsiders may discourage or diminish local guides' willingness and ability to maintain a sustained yield of any given wildlife population.

b. Vegetation:

Some impacts to vegetation at camps are expected. While Mr. Gray proposes to not use temporary camps in the field, it is expected that hunting conditions in the fall may dictate otherwise (short daylight, distance from communities, and field dressing of harvested game). Degradation to flora may result from trampling, and cutting in the immediate area of any temporary camps or overnight camping. However, these impacts are short term, as re-growth will occur once the camp is removed from the public lands. Long-term but limited impacts to vegetation may result from the use of fire pits. Intense heat may result in the complete mortality of vegetation and sterilization of the soil. This impact may persist for several months after burning ceases.

All terrain vehicle use may impact vegetation during fall hunting and in the winter if inadequate snow conditions occur.

In 2006, both the south side of the Benedeleben Mountains (and into the Boston Creek area) and the area near Omalik (or “Silver Mine in the Darby Mts.”) were inspected. There were ATV trails within the Boston Creek Area and Paragon River. These trails led to old cabin sites. Trails were also seen at Omalik but only in the area near and adjacent to the mining site.

Areas used year after year by the same guiding activities can result in ruts, soil run off, permafrost degradation and vegetation damage that may have lasting impacts if lichen habitat is involved. Although use of motorized vehicles will impact tundra, the extent of the damage is difficult to access given such a vast permit area.

c. Visual Resources:

Any temporary or emergency camps established in support of the proposed action would slightly affect the visual resources. During seasonal use periods, the activity of hunters (ATV/snowmobiles and associated gear) may be minimally visible from adjacent ground locations, and would be most visible to observers in aircraft flying directly overhead or from surrounding mountain ridges.

The proposed action will result in minimal impacts on visual resources and is fully consistent with the management objectives of VRM Classes identified in the Kobuk/Seward Peninsula RMP (pending).

d Wildlife:

Assuming no new regulatory restrictions by either the Alaska State Board of Game or a closure by the Federal Subsistence Board, the proposed action would directly affect the populations of game species within GMU 22 by increasing the opportunity for harvest by guided hunters under State regulations.

Increased snow mobile and ATV traffic may affect game movement, migratory patterns, and stress ungulate populations depending on the amount of use that occurs. Impacts to other wildlife populations will be minor or immeasurable.

At any camps, a very small amount of wildlife habitat would be impacted by being trampled or cut to make space for tents or by other camping activities. Impacts to habitat would be slight in relation to the

overall habitat in the area. Camping and the presence of food or harvested game animals at the campsites could attract bears and other scavengers if not properly secured. If such encounters occur, they may result in unplanned harvesting of bears.

This action would add cumulatively to the number of larger grizzly bear taken. This may indirectly skew the age/sex class of bears by taking larger boar bear from the population. These larger bear often kill young bears in an effort to “capture” breeding females. The result may be an increase in bear populations which may lead to a decrease in moose populations and an increase in human bear interactions.

B. Impacts of the No Action Alternative:

1. Critical Elements of the Human Environment:

a. Areas of Critical Environmental Concern:

Upon approval of the Kobuk Seward Resource Management Plan, areas within GMU 22 will be formally designated as ACECs. The use of OHVs will be subject to management restrictions either limiting use to designated trails or by the imposition of weight restrictions.. Although wildlife management is the province of the State, the Federal Subsistence Board may restrict the taking of fish and wildlife for subsistence uses in order to protect the continued viability of wildlife populations for subsistence use.

Failure to renew Mr. Gray’s permit may reduce the stress on the wildlife in the ACECs and the potential for wildlife avoidance displacement from the proposed ACECs. However, it should be appreciated that Mr. Gray represents but one commercial guiding operation and that failure to renew his permit does not speak to the impacts to these areas by non-commercial hunting.

b. Cultural Resources:

Limited impacts to cultural resources occurring under current management would remain the same. Present users of BLM managed lands may impact cultural resources from illegal removal, alteration of sites through camping and other uses of the lands.

c. Subsistence:

Conflicts between sport and subsistence hunters would remain under the no action alternative but would not be as acute. Such conflicts include hunting competition, competition for camping areas, competition for game resources and potential changes in game

movement patterns. Under the No Action Alternative the number of commercial guides working on federal lands in GMU 22 would be reduced by one. The number of non resident hunters in the area may decrease due to a decrease in the number of licensed guides working the area.

d. T&E Species:

Impacts to T&E species occurring under current management would remain the same. There is a possibility that current human use of the lands (camping, hunting, hiking, OHV use, aircraft landings, etc.) may impact *Douglasia beringensis* by killing or damaging individual plants.

e. Wastes, Hazardous/Solid:

Limited impacts to BLM managed lands from waste would continue at present levels. Present users of BLM managed lands leave trash and other debris behind from their use of lands from camping, hunting, hiking, and OHV use (among other uses).

f. Water Quality, Surface/Ground:

Impacts to water quality attributable to public use would remain the same.

2. Non Critical Elements of the Human Environment:

a. Recreation:

It is anticipated that current recreational use would remain about the same. There would still be some conflict between guides working on BLM managed lands or their clients in terms of camping areas or competition for harvesting trophy grizzly bear with resident sport and subsistence hunters.

b. Vegetation:

Impacts to vegetation attributable to public use would remain the same.

c. Visual Resources:

Visual resources would continue to be impacted under current BLM management from the establishment of temporary camps, air traffic, and other uses of lands managed by BLM which may impact visual resources.

d. Wildlife:

Wildlife would continue to be impacted by current BLM management and other activities. Population levels of bear, wolf and wolverine

would likely remain at current levels for the foreseeable future depending on State regulatory actions. Subsistence and sport/recreation hunting, fishing and trapping would continue on BLM managed lands unless closed by regulatory action.

C. Cumulative Impacts:

Subsistence resources may be impacted by altering migratory patterns of caribou and stressing moose populations that are limited in some areas of GMU 22. Wolf and wolverine, the use of which is part of the subsistence tradition, may be removed from close proximity of villages within GMU 22. Limited habitat loss from unrestricted ATV use would add to ongoing vegetation degradation in the area. This action would add cumulatively to the number of larger grizzly bear taken. This may skew the age/sex class of bears by taking larger boar bear from the population. Moose populations may be reduced due to over harvest in some areas. There will be increased competition for big game between subsistence users, local residents, hunters, commercial guides and their assistants working in the area.

D. Mitigation Measures:

In order to protect *Douglasia beringensis*, from any adverse impact, any camps or ATV use should be moved or rerouted if this species is found at the campsite or on the trails. Proper camp practices must be invoked to reduce the likelihood of unintended bear encounters.

Proper implementation of solid and hazardous wastes management practices will prevent contamination of or minimize impact to the land and ground, surface, and drinking water resources. Stipulations that direct implementation of these controls should be included with the permit. Use of pit privies that comply with ADEC regulations for wastewater management should be used. When use of a pit privy is not practical, wastewater should be collected in containers and transported to a proper sewage disposal site. All solid wastes (trash) should be backhauled. Any spill of oil/fuel or any hazardous substance should be reported to ADEC & BLM, and cleaned-up immediately. Spill cleanup residues should be backhauled to a proper disposal facility.

Known historical, anthropological or archeological sites must be avoided.

Protection of the endangered bird species utilizing habitat in GMU 22 require the following restrictions between May 1 and September 1:

1. no foot or vehicular traffic is permitted within one mile of nest sites or staging areas;
2. no noise (aircraft, vehicle, discharge of firearms, etc.) is permitted within one

- mile of nest sites or staging areas;
3. under this SRP, no human intrusion from the applicant or his clientele is permitted within one mile of nest sites or staging areas;
 4. all aircraft flights over nest sites or staging areas shall be in excess of 2,000 AGL except in emergency situations;

Use of motorized vehicles in ACECs is limited to existing trails and the vehicles must weigh 2,000 GVWR or less.

Use of snow machines is limited to adequate snow conditions so as not to damage the tundra mat, which must be frozen to a minimum depth of 18 inches.

Motorized vehicles will not be used to travel up or down stream beds. Crossing of streams will be done at 90° angles.

V. CONSULTATION AND COORDINATION

A. Persons and Agencies Consulted:

Kawerak Inc.	Bering Straits Native Corporation
Mike Quinn, Acting Chair Seward Peninsula Advisory Committee	Inupiaq Village of Council
Council Native Corporation	White Mountain IRA Council
City of White Mountain	White Mountain Native Corporation
Nome Eskimo Community	Sitnasuak Native Corporation
City of Nome	Chinik Eskimo Community
City of Golovin	Golovin Native Corporation
Teller Native Corporation	Teller Traditional Council
City of Teller	City of Brevig Mission
Brevig Mission Native Corporation	Native Village of Brevig Mission
Mary's Igloo Traditional Council	City of Elim
Elim Native Corporation	Native Village of Elim (IRA)
City of Koyuk	Koyuk Native Corporation
Native Village of Koyuk (IRA)	City of Unalakleet

Unalakleet Native Corporation	Native Village of Unalakleet (IRA)
City of Shaktoolik	Shaktoolik Native Corporation
Native Village of Shaktoolik	City of Saint Michael
St. Michael Native Corporation	St. Michael IRA Council
City of Stebbins	Stebbins Native Corporation
Stebbins Community Association (IRA)	City of Wales
Wales Native Corporation	Native Village of Shishmaref IRA Council
Shishmaref Native Corporation	Robert Hannon
Southern & Northern Norton Sound Advisory Committee Chairs c/o Board Support Section, Arctic Region	
Kate Persons	Robert Kauer
Jade's Arctic Grizzlies	Brian Simpson
Jerry Austin	Lance Kronberger
Vance Grishkowsky	Virgil Umphenour
Tom Shankster	James Smith Db a Alaska Extreme Adventures & Safaris

B. Public Comments (Appendix)

C. List of Preparers:

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James F. Moore, NEPA Coordinator, AFO
Donna Redding, Archaeologist AFO

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