

**U.S. DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

Anchorage Field Office  
4700 BLM Road  
Anchorage, Alaska 99507

**Triumvirate LLC Commercial Heli-skiing Special Recreation Permit**  
Environmental Assessment, DOI-BLM-AK-A010-2013-0008-EA

Case File: AA-093273

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## ACRONYMS

ACEC	Area of Critical Environmental Concern
AHRS	Alaska Heritage Resource Survey
AO	Authorized Officer
ANILCA	Alaska National Interest Lands Conservation Act
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
EA	Environmental Assessment
FAA	Federal Aviation Administration
FLPMA	Federal Land Policy and Management Act
GMU	Game Management Unit
LWC	Lands with Wilderness Characteristics
OHV	Off-highway vehicle
NEPA	National Environmental Policy Act
NPS	National Park Service
ROF RMP/ROD	Ring of Fire Resource Management Plan/Record of Decision
ROS	Recreation Opportunity Spectrum
SRP	Special Recreation Permit
USFWS	U.S. Fish and Wildlife Service
VRM	Visual Resource Management

## **1.0 INTRODUCTION**

### **1.1 Summary of Proposed Project**

Triumvirate LLC (Triumvirate, dba Tordrillo Mountain Lodge) has applied to the Bureau of Land Management (BLM) Anchorage Field Office for a Special Recreation Permit (SRP) to operate commercial heli-skiing activities in the Neacola and Tordrillo mountains of southcentral Alaska.

### **1.2 Project Area Description and Land Status**

Sections 21, 22, 24, 28. T. 16 N., R. 19 W., Seward Meridian

Sections 1, 2, 3, 10, 11, 12, 14, 15. T. 15 N., R. 19 W., Seward Meridian

Sections 2, 3, 4, 7, 15, 18, 20. T. 12 N., R. 18 W., Seward Meridian

Located 120 miles west of Anchorage, the affected area involves the Neacola Mountains, including the Neacola Mountain Area of Critical Environmental Concern (ACEC) (290,000 acres of unencumbered and encumbered BLM lands, referred as the south block) and the Tordrillo Mountains (138,240 acres of unencumbered BLM lands, referred to as the north block). The proposed action does not include any State or Native land selections.

The Neacola Mountains ACEC is scenic, with changes in elevation from 1,000 feet to nearly 8,000 feet. In both the southern and northern blocks, rugged mountains, hanging valleys, and ice and snow fields dominate the landscape, interspersed with razor-sharp ridgelines. At the core of the Neacola Mountains ACEC are Blockade Glacier and Lake. Seasonally, Blockade Lake melts enough to reveal “apartment sized” blocks of ice floating in the water. This ACEC contains scenic and geologic features associated with the natural landscape of mountain peaks, glaciers and spires. It is these scenic qualities for which the ACEC was designated in 2008 (BLM 2008).

### **1.3 Background**

Heli-skiing is off-trail, downhill skiing that is accessed by a helicopter, as opposed to a mechanical ski lift. Heli-skiing is essentially about skiing in a natural environment but without the effort required for hiking into these areas as in ski touring or ski mountaineering. Most heli-skiers are seeking specific, skiing conditions that are hard to replicate in the highly manipulated terrain of ski resorts: powder snow, long descents, natural terrain contours and features, smooth corn snow, old-growth tree glades, and steep slopes. The presence of the guide and aircraft offers protection against the risks and discomforts unavoidably associated with entering this mountainous environment, allowing skiers with little or no mountain experience to enjoy a natural environment.

Since 2011, the BLM has authorized three other separate authorizations involving commercial helicopter activities within the same area (see Table 1). Two of the past actions involved land use permits for commercial filming of professional ski athletes in the south block and the third permit authorized commercial heli-ski operations within the north block. Helicopter and fixed winged aircraft access was used by past operators.

The Alaska Department of Natural Resources has authorized similar commercial heli-ski operations on adjacent State-owned lands within the Tordrillo Mountains area.

Lake Clark National Park and Preserve is adjacent to BLM-managed lands in the Neacola Mountains (see Attachment 1). The National Park Service (NPS) administers a permit system which includes activities associated with commercial aircraft transportation for visitors into Lake Clark National Park and Preserve. An established management object of Lake Clark National Park and Preserve for visitor services is to: Provide and facilitate in appropriate ways a wide variety of visitor activities, ranging from primitive back-country camping and mountain climbing to nature study and sightseeing (NPS 1982).

#### **1.4 Purpose and Need**

The BLM action under consideration is the issuance of a SRP to Triumvirate for commercial heli-skiing and commercial filming in conjunction with the SRP operations on BLM lands within the south and north blocks.

Action is needed at this time to respond to Triumvirate's pending SRP application. The underlying purpose of the action is to satisfy recreational demand within allowable use levels in an equitable, safe, and enjoyable manner while minimizing adverse resource impacts and user conflicts.

##### *1.4.1 Decision to be Made*

The BLM will decide whether to authorize, and under what terms and conditions, Triumvirate's requested SRP for commercial helicopter skiing, with associated commercial filming, access and landings on BLM lands.

The BLM has discretion over whether to issue SRPs. Pursuant to 43 CFR § 2932.26, the BLM's decision will be based on the following factors to the extent that they are relevant:

- (a) Conformance with laws and land use plans,
- (b) Public safety,
- (c) Conflicts with other uses,
- (d) Resource protection,
- (e) The public interest served,
- (f) Whether in the past [the applicants] have complied with the terms of their permit or other authorization from BLM and other agencies, and
- (g) Such other information that BLM finds appropriate.

#### **1.5 Land Use Plan Conformance**

The Ring of Fire Resource Management Plan and Record of Decision (ROF RMP/ROD), approved March 2008, provides the overall long-term management direction for lands encompassed by the proposed project. The proposed action and alternatives are consistent with

the RMP/ROD. Specifically, the proposed action is consistent with the following decisions in the RMP/ROD:

## **I. Lands and Realty**

### **I-2k: [Federal Land Policy and Management Act] FLPMA Permits**

The BLM may issue land use permits if it is determined that the use conforms to agency plans, policies and programs, local regulations, and other requirements, and will not cause appreciable damage or disturbance to the public lands, their resources or improvements.

## **O. Recreation**

### **O-1: Goal**

Manage recreation to maintain a diversity of recreational opportunities. Opportunities for commercial recreation will be provided consistent with area objectives for recreation management.

## **T. Visual Resources**

### **T-1: Goal**

Manage visual resources consistent with the multiple use objectives for [Visual Resource Management] VRM classes and the classifications.

### **T-2: Management Actions**

**T-2b:** Manage the Neacola Mountains ACEC as VRM Class II.

#### **Class II Objective:**

To retain the existing character of the landscape. The level of change to the characteristic landscape should be low.

**T-2c:** Manage all other BLM-lands within the planning area as VRM Class IV (includes north block of the Neacola Mountains).

#### **Class IV Objective:**

To provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high.

The ROD states the objectives for the Neacola Mountains ACEC as follows:

#### **Goals:**

- i. Create the Neacola Mountains ACEC to preserve identified values and outstanding natural scenery in an unspoiled setting.
- ii. Manage the ACEC to maintain the visual resource and scenic values.
- iii. Manage recreation to maintain the existing opportunities (e.g. unique recreational experiences in a remote and primitive setting).

Preliminary Management Objectives:

- i. Manage the ACEC to maintain the existing Recreational Opportunity Spectrum classifications.
- ii. Maintain the area for existing (Class II) VRM classification.
- iii. Develop further guidance for limitations to [off-highway vehicle] OHV use.
- iv. Work collaboratively with landowners in the area, recreation users, and adjacent communities to develop management strategies and define enforcement responsibilities.

## **1.6 Other Applicable Laws, Regulations, Policies, etc.**

The proposed action is consistent with other statutes, regulations, plans, programs, and policies of affiliated tribes, other federal agencies, and state and local governments to the extent practical, including but not limited to the following:

- National Environmental Policy Act (NEPA) of 1969
- Federal Land Policy and Management Act of 1976 (FLPMA)
- BLM Land Use Planning Regulations at 43 Code of Federal Regulations (CFR) 1600
- BLM Land Use Planning Handbook, H-1601-1, updated March 11, 2005
- BLM NEPA Handbook H-1790-1
- Executive Order 13112: Control of Invasive Species
- Code of Federal Regulations at 43 CFR 2932 – SRPs for Commercial Use
- BLM Manual 6310 – Conducting Wilderness Characteristics Inventory on BLM Lands, March 15, 2012

Non-BLM lands adjacent to the Neacola Mountains are managed according to area or jurisdiction specific land and/or resource management plans. The BLM has considered the following plan with the proposed action:

- General Management Plan/Develop Concept Plan, Lake Clark National Park and Preserve (December 1982)

## **1.7 Summary of Public Involvement**

The BLM will release this Environmental Assessment (EA) for public review and comment prior to making a decision on the requested authorization. Any comments received during this review period will be summarized and addressed in the Decision Record.

## **1.8 Issues Identified / Issues Eliminated from Further Analysis**

Through internal scoping, the BLM identified the following issues for analysis:

- Are there any potential impacts of helicopter-supported activities on wildlife, particularly Dall's sheep and Dall's sheep habitat?
- Will there be impacts associated with noise from the proposed aircraft to other visitors to the area?

- Will the Proposed Action impact the visual values for which the Neacola Mountains ACEC was designated?

The following issues were identified but ultimately eliminated from further consideration in this EA for the reasons provided:

- *Is there a potential for fuel spills?* It is highly unlikely a fuel spill would occur since there will be no fuel caching on BLM lands.
- *What is the potential for introducing or spreading invasive weeds from the heli-skiing operations?* While there is potential for a recreationist to inadvertently transfer seeds from invasive species from one area to another via their gear or equipment, this is unlikely with respect to snow gear and snow equipment. As an added protection measure, all BLM commercial recreation permits contain a standard stipulation informing users of prevention and management of invasive species.
- *Are State or Native land selections affected?* No, only unencumbered BLM-managed lands are being proposed for use.
- *Is the proposed action adjacent to or near any Native-owned lands?* The nearest Native-owned land to the proposed use area is located seven miles to the east.
- There are no existing roads or trails within the north and south blocks. Much of the area consists of steep and remote mountainous terrain and several glaciers. The current demand to provide access to the proposed area is low, and such access that is provided occurs through fixed-wing aircraft and helicopters.

## **2.0 ALTERNATIVES**

### **2.1 Alternative 1 - No Action Alternative**

Under the No Action Alternative, the BLM would deny Triumvirate's requested SRP. Commercial heli-skiing operations and commercial filming in conjunction with the SRP operations would not be authorized on BLM lands in the Neacola Mountains ACEC.

### **2.2 Alternative 2 - Proposed Action Alternative**

Under the Proposed Action Alternative, the BLM would issue an initial one-year SRP to Triumvirate for commercial heli-skiing activities and commercial filming in conjunction with the SRP operations on BLM lands in the Neacola and Tordrillo Mountains, February through April, 2014. If the permit terms and conditions are found to be appropriate after the initial one-year period, the BLM may reissue the permit for a term not to exceed 10 years.

The remote terrain on the south side of Mount Spurr, south side of the Tordrillo Mountains (north block) and the area south of Chackachamna Lake (south block) would be accessed by up to two Eurostar AS350 BS helicopters and one DH-2 Beaver airplane on snow skis from their base of operations at the Tordrillo Mountain Lodge. The lodge is located approximately 25 miles to the east of the north block on private property at Judd Lake. The frequency at which Triumvirate would attempt operations would be affected by weather, snow pack, snow stability, snow surface, and adequate ski plane landing conditions. A Piper Super Cub aircraft would be

dispatched from their base of operations to evaluate the snow conditions and the ski plane landing viability the day prior to any operation attempt. The operation of the DH-2 ski plane would be used to shuttle guests into and out of the remote location. The two helicopters would provide the local drop-off and pick-up of heli-skiers and potential commercial filming activities in conjunction with the ski operations on the identified BLM lands.

The maximum number of aircraft landings is 130 annually (includes both helicopter and ski plane landings). The estimated duration at each helicopter landing site is 10 minutes. The number of expected clients is 30 persons for the season. The client to guide ratio would be no more than five to one (5:1) at any time. A maximum capacity of five groups can be serviced by a single helicopter, at a ratio of twenty-five clients to five guides. No fuel caching, equipment storage, or gear storage would be permitted on BLM lands. Portable toilets will not be required due to the short time frame expected on BLM lands.

Frequent landing areas would be GPS-logged for required BLM post-use reporting and radio dispatch needs by the commercial operator. Proposed landing areas are marked on Attachment 1. All helicopters are equipped with satellite/GPS transponders and can be followed by way of the internet, utilizing Capstone flight following software.

Additional supplemental information provided by Triumvirate LLC included an Operations and Safety Plan. These plans provide additional detailed information to evaluate the extent and impact of the proposed activity and to determine the viability and qualifications of the applicant to provide the proposed services. For example, Triumvirate's detailed Safety Plan includes snow stability forecasting, communications plan, safety briefing plan for clients, helicopter skiing operations, emergency rescue, first aid and medical emergencies, incident reporting, guide qualification and experience, and an emergency rescue plan. The Safety Plan was determined to be sufficient and implementation will become a condition of the SRP.

### **2.3 Design Features and/or Permit Stipulations**

The following SRP special stipulations are applicable to the Proposed Action Alternative:

1. Aircraft and ground activities will maintain 1,500 feet vertical and horizontal distance from visible goats and sheep, as well as any habitats that are mapped by BLM as high use areas. Aircraft will not land within ½ mile of habitats that are mapped as high use areas. As new data becomes available, any nearby authorized activities will be reviewed accordingly.
2. All operations, including skiing activities, will maintain a 1,500 foot clearance of key sensitive bird nesting sites, brown and black bears, wolves, wolverine, and moose. Steepness (degree in slope) and roughness (outcrops and spur ridges) affect the ratio of elevation to horizontal distance significantly. Attempts should be made to maximize distance between ground and habitats or animals wherever possible. Flight routes over near level terrain will maintain a minimum of 1,500 feet above ground level and at least 1,500 feet horizontal distance from wildlife habitat features described above. Pilots are

not expected to compromise safety when weather conditions indicate the 1,500 foot minimum cannot be met.

3. All authorized operations will adhere to U.S. Fish and Wildlife Service (USFWS) recommendations regarding eagle nests.
  - a. Maintain established travel routes, but avoid any eagle nest by at least ¼ mile (1,320 feet).
  - b. Helicopters must avoid hovering near and circling any eagle nest.
4. Authorized operators shall not hover, circle, or harass wildlife in any way. This refers particularly to mountain goats and sheep, but includes all wildlife species.
5. All authorized operators will assure that their operations meet Federal Aviation Administration (FAA) requirements to achieve safe air operations (routing, airspace separation and coordination with other operators).
6. All authorized operators will be required to submit and abide by a Safety and Operating Plan which will be approved by the BLM and will be a part of the SRP. The FAA may review these submissions.
7. Explosives for avalanche mitigation are prohibited.
8. All helicopters shall be equipped with satellite/GPS transponders with web based flight tracking capability. The flight following system shall have the ability to view both live and historic flight data for the duration of the permitted use. The permittee shall give BLM full access to the flight tracking system and historic data, including log-in information if necessary, during the period of authorized use.
9. The Authorized Officer (AO) may suspend or modify an SRP, including adaptive management strategies, if necessary to protect public resources, health, safety, or the environment or as a result of non-compliance with permit stipulations.

## **2.4. Alternatives Considered but Eliminated from Further Consideration**

No other alternatives were considered.

## **3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL EFFECTS**

### **3.1 Cultural Resources**

#### ***3.1.1 Affected Environment***

The Alaska Heritage Resource Survey (AHRS) database was reviewed for cultural resources in the project vicinity. There are no known cultural resources near the proposed project area. This project is in an area of extremely steep slopes and mostly permanent glaciers and snowpack; there is very little potential for unknown cultural resources within the project vicinity.

### ***3.1.2 Direct and Indirect Effects from No Action Alternative***

As a No Action Alternative, there is no potential to affect historic properties or other cultural resources. No activities are proposed, and therefore no cultural resources will be impacted.

### ***3.1.3 Direct and Indirect Effects from Proposed Action Alternative***

This project involves winter activities, including skiing and aircraft landing, on glaciers and winter snowpack; no ground disturbance is proposed. This project is also in an area of extremely steep slopes and mostly permanent glaciers and snowpack, with a very low potential for previously unknown cultural resources. Therefore, it is the recommendation of the BLM, Anchorage Field Office Archaeologist that, under the *BLM, Alaska State Protocol Agreement*, this project would have no historic properties affected, and no impact on other cultural resources.

### ***3.1.4 Cumulative Effects***

Because this project would have no impacts on cultural resources, it would have no cumulative effects on cultural resources. The proposed action involves no ground disturbance and has no potential to affect cultural resources. In addition, the area is extremely remote and there are no reasonably foreseeable future actions that would add to cumulative effects.

### ***3.1.5 Recommended Mitigation (if necessary)***

The SRP will contain a stipulation regarding the inadvertent discovery of cultural resources.

## **3.2 Recreation and Visual Resources**

### ***3.2.1 Affected Environment***

#### *Acoustics*

The existing acoustical environment in both the remote north and south blocks is normally quiet and devoid of sounds from engines. Various other small-sized flight seeing aircraft visit the area from Anchorage. Aircraft sounds in the area have primarily the same magnitude (loudness), frequency (pitch), timing, duration, and frequency of occurrence. Aircraft noise from infrequent aircraft within the remote area occurs at various times of the day and is considered part of the normal background noise. The background noise at this location is low most of the time. Louder noises occur intermittently for brief periods when planes or helicopters operate in the area.

#### *Visual Resources*

The Neacola Mountains ACEC was designated for its outstanding natural scenery and is managed to maintain the visual resources and scenic values. To maintain the outstanding natural scenery in an unspoiled setting, the ACEC is managed under VRM Class II. The objective of VRM Class II is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not

attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape. Lands within the north block have been classified as VRM Class IV. Class IV objectives allow for major modifications of the existing character of the landscape.

*Recreation Resource Uses and Opportunities*

Beginning in 2011, the area has received increasing interest by helicopter-supported recreation operators with providing commercial guided heli-skiing and commercial filming of skiing activities (Table 1). The project area described in Section 1.2 identifies mountain terrain that is especially well-suited for such recreation activities. The BLM has an ongoing SRP program that reviews and authorizes these activities. BLM recognizes the potential for impacts on wildlife populations from past and the currently proposed activities.

**Table 1 – Past Commercial Use within the Proposed Area**

Permitted Activity	Location	Year	Total Amount of Authorized Use	Group Size
Commercial filming of professional snowboarders using helicopters and fixed winged aircraft (Brainfarm).	Neacola Mtns. ACEC	2011	14 days April 1 - May 15	6
Commercial filming of professional skiers using helicopters and fixed winged aircraft (TGR).	Neacola Mtns. ACEC	2013	4 days March 23 - April 28	6
Commercial guided heli-skiing using helicopters and fixed winged aircraft (Triumvirate)	Tordrillo Mtns.	2013	130 landings March 1 - April 30 30 clients	6

Despite past commercial authorizations, recreation use within the area is extremely low compared to other recreation areas in the region, such as the adjacent Lake Clark National Park and Preserve to the west. There are no BLM developed recreation sites or amenities within the north or south block. The ROF RMP/ROD did not identify or recommend the need to develop any recreation sites or amenities within this area in the future (e.g., trails or trailheads, backcountry camp sites, public shelter cabins, signage, interpretation boards, maps or brochures, etc.).

*Visitation*

The estimated visitation to the proposed use area in 2013 was less than 100 people. Though the area is remote, it continues to be a viable destination for backcountry skiers and commercial filming companies with access provided by commercial recreation providers and air transportation services.

*Lands with Wilderness Characteristics*

A Lands with Wilderness Characteristics (LWC) Review (see Attachment 2) was completed by BLM recreation specialists in April, 2011 and concluded that the area has wilderness characteristics and is identified as LWC.

### ***3.2.2 Direct and Indirect Effects from No Action Alternative***

Under the No Action Alternative, commercial heli-skiing and additional commercial filming in conjunction with the proposed use would not occur in the Neacola Mountains ACEC. There would be no effects to the acoustic or visual environments as a result of the No Action Alternative. Recreation use and opportunities in the project area would remain unchanged.

### ***3.2.3 Direct and Indirect Effects from Proposed Action Alternative***

#### *Acoustics*

Noise associated with helicopters and fixed wing aircraft would be generated from the proposed use.

The proposed action would occur within areas that are remote and only accessible by aircraft. Beside aircraft-supported recreation uses, there are no other known types of recreation uses occurring in the area or on the ground. Therefore, because all known visitors to the area utilize aircraft, only these users themselves will likely experience the increased noise associated with transport aircraft, and accept it as a necessary part of the remote heliski experience. Unless and until the area becomes accessible by means other than aircraft, the Proposed Action alternative would have no direct and indirect effects on other users.

#### *Visual Resources*

The only visual impacts associated with Alternative 2 would be the temporary and transient tracks in the snow left by aircraft landings and skiers. Daily mountain winds and snowstorms would rapidly erase all evidence of this use allowing subsequent users to experience the pristine and untrammled beauty of the Neacola Mountains.

Based upon these temporary, non-permanent visual impacts, the existing character of the landscape would be retained thereby meeting the objectives of a VRM Class II.

#### *Recreation Resource Uses and Opportunities/Visitation*

The recreation potential for the Neacola Mountains is largely unmet. Interest in commercial heliskiing and filming is slowly expanding in the Neacola Mountains; however, other venues for this activity in Alaska are easier to access and are more affordable to access. Due to the remote nature of the ACEC and the logistics necessary to support heliski operations, it is not anticipated that large increases in aircraft-supported use would occur in the next 5-10 years.

#### *Lands with Wilderness Characteristics*

Given the temporary duration, intermittent use, dispersed landing areas, the expanse of public lands in the Planning Area, and the permit stipulations, Alternative 2 can be implemented in a manner that does not permanently impair existing wilderness characteristics.

### ***3.2.4 Cumulative Effects***

Past and present actions in the Neacola and Tordrillo mountains have undergone various BLM environmental analyses for similar approved activities. However, commercial heli-skiing in the Neacola Mountains ACEC has not been previously analyzed or permitted. The proposed activities in the ACEC that may cumulatively affect recreation uses and visual resources in the area involve the sights and sounds from other, unrelated aircraft use.

Increased interest from commercial recreation providers, commercial filming companies, and aircraft transportation services may result in increased noise and observed aircraft by other aircraft to the area. Although there has been a slight increase in such commercial recreation opportunities for this area, there is no substantial cumulative impact to the existing quality recreation experience due to the area's expanse where visitors can spread out and avoid others the sights and sounds of other users. Therefore, cumulative impacts to recreation and visual resources as a result of this permit authorization would be limited.

## **3.3 Wildlife Resources**

### ***3.3.1 Affected Environment***

Wildlife resources that occur in the Neacola and Tordrillo Mountains include moose, caribou, Dall sheep, wolverine, wolf, black bear, brown bear, and several species of raptors. The current population levels and distribution for these species in the area (Game Management Unit 16B) are unknown. With the exception of raptors, all species are legally hunted, with hunt limits based on harvest reporting and limited population survey data that provide information on potential population density changes.

Dall sheep are residents of alpine areas and are therefore most likely to be affected by this proposal. Dall sheep are a sedentary (relatively non-migratory) resident of alpine areas, and populations are a potential indicator of environmental change. Dall sheep can be legally hunted by subsistence and sport hunters in GMU 16B. Evidence also suggests that environmental conditions such as severe winter weather can dramatically affect Dall's sheep population levels. Population size and winter distribution of Dall sheep in the area of the proposed action is currently unknown.

### ***3.3.2 Direct and Indirect Effects from No Action Alternative***

Under the No Action Alternative, commercial heliski operations and commercial filming would not occur in the area. Wildlife populations in the Neacola and Tordrillo mountains will continue to be managed under the 2008 ROF RMP/ROD. Wildlife populations in the area would therefore not be affected by the No Action Alternative.

### ***3.3.3 Direct and Indirect Effects from Proposed Action Alternative***

The Proposed Action would occur in February and March, a period of time when snow depths are the greatest and sheep body reserves are low, potentially exposing sheep to helicopter

disturbance when the population is most vulnerable. Wind-swept areas with sufficient forage and suitable escape terrain to escape from predators are key elements of winter habitats for sheep, and may occur in areas near heli-ski operations, or be exposed to helicopter overflights that are en-route to adjacent areas.

### ***3.3.4 Cumulative Effects***

There is currently increased interest in recreational activities in the steep, alpine terrain for additional commercial heli-skiing operations under Special Recreation Permit, as well as commercial filming of snowboarding and skiing activities under land use permits. These activities would occur at the same time (February-April) and in the same or nearby adjacent locations. The effects to wildlife, particularly Dall sheep that may be wintering in high elevation areas, or in down slope habitats below tree line where helicopters would be picking up skier groups, may potentially increase the cumulative effects of helicopter overflights and skiers using these habitats. Winter habitat use of Dall sheep in the area is unknown, therefore specific critical winter habitats important to Dall sheep are unknown and may be potentially be impacted.

### ***3.3.5 Recommended Mitigation (if necessary)***

As long as stipulations included in the EA are followed and new information on Dall sheep distribution and use of winter habitats is incorporated into future permit stipulations and considered permit decisions as it becomes available, no additional mitigation measures are recommended.

## **3.4 Subsistence Resources**

### ***3.4.1 Affected Environment***

Subsistence resources available in the Neacola and Tordrillo Mountains include those species (moose, caribou, and sheep) typically found within the mountains and boreal forest landscape of GMU 16B. There are no federal permits required to hunt moose or caribou within the project area. Furthermore, there is no federal open season for sheep in Unit 16B (50CFR 100.26). Therefore, harvests of moose, caribou, and sheep in Unit 16B occur through the state permit system.

On average, between 2008 and 2013, 190 moose, 7 caribou, and 9 sheep have been harvested annually from Unit 16B (Figure 1; Winfonet database, accessed 22 January 2014). For the same time period, 94% (1068/1140) of the moose harvest, 33% (13/40) of the caribou harvest, and 54% (27/54) of the sheep harvest were by Alaska residents.

A more detailed description of these wildlife populations are provided in the Wildlife Resources section above.

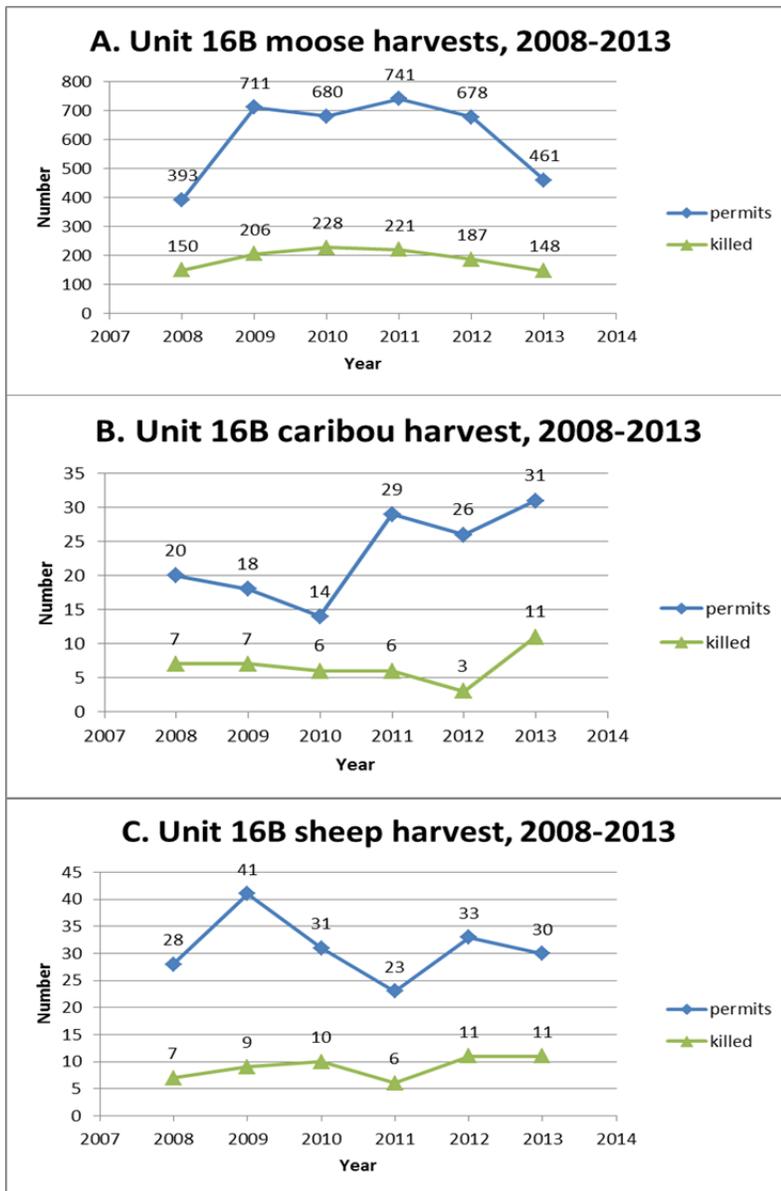


Figure 1. The annual harvest of moose (A), caribou (B), and sheep (C) in Unit 16B, 2008-2013. Source: Winfonet, accessed 22Jan2014.

### 3.4.2 Direct and Indirect Effects from No Action Alternative

Under the No Action Alternative, subsistence uses of fish and wildlife in the Neacola and Tordrillo Mountains would continue to be managed according to the 2008 Ring of Fire Resource Management Plan, the Alaska National Interest Lands Conservation Act (ANILCA) Title VIII, and in 50 CFR. BLM would continue to provide access to subsistence resources in the area and ensure that authorized activities comply with ANILCA §810. Current practices are considered adequate to meet subsistence uses and needs. Therefore, subsistence uses of fish and wildlife in the Neacola and Tordrillo Mountains would not be affected by the No Action alternative.

### ***3.4.3 Direct and Indirect Effects from Proposed Action Alternative***

The Proposed Action would occur in the late winter/early spring months. The Proposed Action is within areas surrounded by glaciers during the time of year when there are no moose or caribou hunts. Because of the time of year operations are proposed, there is no foreseen impact on subsistence fisheries resources. Therefore, the Proposed Action alternative would have no direct and indirect effects on subsistence uses and needs.

### ***3.4.4 Cumulative Effects***

Past and present actions in the vicinity of the Neacola and Tordrillo Mountains undergo a review for ANILCA Title VIII compliance. However, most activities that affect subsistence uses of resources in the area involve recreation and mining. Population increase, technological advances, economic pressure, and other societal changes may result in increased interest in the area. Although potential transportation corridors are planned for this area (e.g., West Susitna Surface Access Reconnaissance Study; <http://dot.alaska.gov/westsusitna/index.shtml>) that would provide access for future mining exploration and other activities, there are no immediate plans to construct. Given the scenario of increased interest in the area for both recreational use and for mining, cumulative impacts on subsistence uses and needs for Alternative 1 would be negligible in the Neacola and Tordrillo Mountains. The Proposed Action alternative is for one year, then subsequently renewed for no more than 10 years. The proposed activity is during late winter and early spring – a short time window. Therefore, cumulative impacts to subsistence uses in the area is limited in time and location. However, care must be taken to address access to subsistence resources mandated by ANILCA Title VIII.

### ***3.4.5 Recommended Mitigation (if necessary)***

No further mitigation measures are recommended.

## **4.0 CONSULTATION AND COORDINATION**

The project area is located on unencumbered, BLM-managed lands in remote western Alaska. No consultation or coordination entities were identified. This EA was prepared by the Anchorage Field Office Interdisciplinary Team.

## **5.0 LIST OF PREPARERS**

Doug Ballou	Assistant Field Manager, Resources
Jenny Blanchard	Archeologist
Merben Cebrian	Subsistence Biologist
Molly Cobbs	Planning and Environmental Coordinator
Jeff Kowalczyk	Outdoor Recreation Planner
Bruce Seppi	Wildlife Biologist

## **6.0 REFERENCES CITED**

BLM 2008. Ring of Fire Approved Resource Management Plan and Record of Decision.

NPS 1982. General Management Plan/Develop Concept Plan, Lake Clark National Park and Preserve.

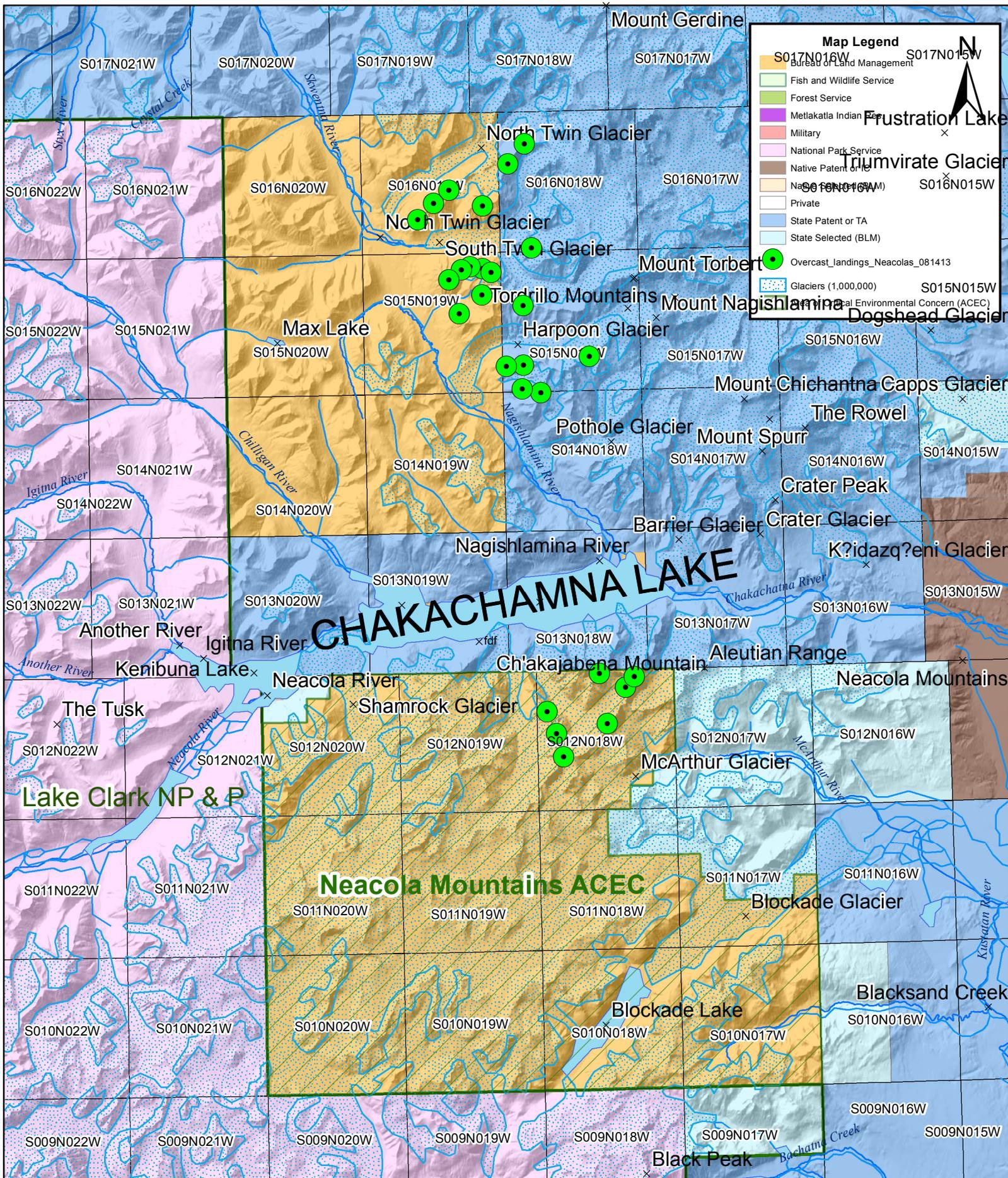
Winfonet 2012. Wildlife Conservation Information Services, Alaska Department of Fish and Game. <http://winfonet.alaska.gov/> Accessed 22 January 2014.

## **ATTACHMENTS**

- 1 Map of Triumvirate Operating Area (2014)
- 2 Lands with Wilderness Characteristics (Neacola Mountains ACEC)

**ATTACHMENT 1**  
Map of Triumvirate Operating Area (2014)

**Map 1 - Triumvirate operating area (2014)**



**Map Legend**

- S017N016W Bureau of Land Management
- Fish and Wildlife Service
- Forest Service
- Metlakatla Indian Reservation
- Military
- National Park Service
- Native Patent or Fee
- Neacola Mountains (BLM)
- Private
- State Patent or TA
- State Selected (BLM)
- Overcast\_Landings\_Neacolas\_081413
- Glaciers (1,000,000)
- Regional Environmental Concern (ACEC)



The information displayed on this map should be used for graphic display only. For official land status information, refer to Cadastra Survey plats, Master Title Plats and land status case-files.

## ATTACHMENT 2

### Lands with Wilderness Characteristics Review: Neacola Mountains ACEC

#### **Introduction**

The BLM Manual 6303 provides direction and guidance for considering Lands with Wilderness Characteristics (LWC) in project-level decisions for areas not analyzed in accordance with BLM Manual 6302. The first step in the LWC process is to inventory the lands to determine which areas have wilderness characteristics. This narrative outlines the methods used and the results of an inventory for the Neacola Mountains ACEC. The following are only relevant to inventory of public lands to assess their wilderness characteristics and should not be confused with managing of lands with wilderness characteristics.

#### **Methodology**

All public lands, including State-selected lands, addressed in the immediate area of the proposed action were inventoried for wilderness characteristics. The inventory evaluated wilderness characteristics as discussed in Section 2(c) of the Wilderness Act of 1964 (16 U.S.C. 1131) and incorporated into the Federal Land Policy and Management Act (43 U.S.C. 1701 *et seq.*).

The criteria for determining wilderness characteristics are established by the BLM Manual 6300-1 Wilderness Inventory. To be identified during the inventory process as having wilderness characteristics, lands must:

- Be a roadless area with over 5,000 acres of contiguous BLM land;
- Generally appear to have been affected primarily by the forces of nature and;
- Have outstanding opportunities for solitude, or a primitive and unconfined type of recreation.

Within this inventory, lands were not buffered. Land with wilderness characteristics may immediately abut land whose own character precludes wilderness characteristics. For example, land immediately adjacent to a road may be classified during inventory as possessing wilderness characteristics. The fact that the sight or sound of the road may detract from the wilderness experience on adjacent lands does not, in and of itself, render those lands as not possessing wilderness characteristics.

As long as the wilderness characteristics criteria listed above are met, the following facilities, activities and uses consistent with the Alaska National Interest Lands Conservation Act (ANILCA) may occur on lands having wilderness characteristics: public use cabins; administrative sites and visitor facilities; temporary facilities and equipment for hunting, fishing, and camping; airplane use and landings; and motorboat, snowmobile, and all-terrain motor vehicle use. The critical question to consider is not whether these facilities, activities or uses exist in the relevant tract, but whether they singly or in combination with other factors have altered the character of the land from one that “generally appears to have been affected primarily by the forces of nature” and precludes the land from having “outstanding opportunities for solitude and/or a primitive and unconfined type of recreation.” In general, substantial active or remnant evidence of mining or oil and gas extraction facilities, above-ground pipelines or power lines, intensive recreational developments, and similar intrusions on the land may render such

lands as inappropriate for identification in the inventory stage as having wilderness characteristics. The inventory process utilized in-house expertise from staff specialists as well as recent land use planning information (Ring of Fire RMP, 2008) to assess whether or not specific lands possess wilderness characteristics.

**Form 2. Current Conditions:** Presence or Absence of Wilderness Characteristics

Area Name: Neacola Mountains ACEC

BLM Inventory Acreage: 296,000

1) Is the area of sufficient size? Yes

Description: The area is more than 5,000 contiguous acres of BLM land. The inventory area is bounded on the east by State and Native owned lands, to the north by Chakachamna Lake and State land, and to the west and south by Lake Clark National Park and Preserve. The inventory area consist of 296,000 acres, of which 229,000 is the Neacola Mountains ACEC located on BLM-owned land and two parcels of lands selected by the State of Alaska, measuring 67,000 acres. The State selections are not high priority selections and therefore are expected to remain under BLM-ownership. There is no private property (Native Allotments) or federal mining claims within or near the boundary of the inventory area. Even if all selected lands were to be conveyed, the remaining BLM lands, in total, will exceed 5,000 acres. There are no BLM-managed wilderness areas or wilderness study areas within this inventory area (BLM, 2008).

2) Does the area appear natural? Yes

Description: This inventory area is a contiguous/un-fragmented parcel of BLM land. The area is highly natural in appearance, having been primarily affected by the forces of nature, and contains no observed evidence of people's work. There are no known roads or trails within or adjacent to the inventory area. Overall, this area retains its primitive character.

3) Does the area have outstanding opportunities for solitude? Yes

Description: The nearest established and active airstrip is the Nikolai Creek Airstrip, located 20 miles east of the inventory boundary on the shoreline of Trader Bay. The inventory area does not contain any known roads or trails (including summer or winter routes). The nearest established route is located 6.1 miles from the eastern boundary of the inventory area. This route is classified as a 60 foot wide 17(b) easement for an existing road, which travels from Trading Bay to the Chakachatna River on Cook Inlet lands (EIN # 3 D1 L). Currently there are no BLM-authorized activities or uses occurring within the inventory area (e.g. SRP or Land Use Permits). There are no other known man-made developments within the area.

4) Does the area have outstanding opportunities for primitive and unconfined recreation? Yes

Description: The Neacola Icefield and Blockade Lake area is cited for its remarkable visual beauty, recreational resources, and high quality habitat for moose, black bear, Dall sheep, and

trumpeter swans (a BLM sensitive species) (ROF RMP 2008). These lands are adjacent to Lake Clark National Park and Wilderness, Redoubt Bay State CHA, and Trading Bay State Game Refuge. The overall size, remoteness and lack of any developments in the inventory area provide users with outstanding opportunities for primitive and unconfined recreation, including the following activities: camping, bird watching, hiking, big game hunting, wildlife viewing, and photography. In addition, due to the steep, craggy mountains that characterize this area with elevations approaching 7,000 ft, and extensive icefields and glaciers that stretch for miles, along with its proximity to Anchorage, the opportunity for commercial helicopter or fixed-wing flight seeing tours exists. The Neacola Mountains ACEC will be further defined by the development of implementation plans to meet the objectives of the specific area (ROF 2008). Implementation plans may include instituting seasonal closures and/or designating trail routes.

5) Does the area have known supplemental values (ecological, geological, or other features of scientific, educational, scenic or historical value)? Yes

Description: In order to preserve the area's identified values and outstanding natural scenery in an unspoiled setting, the ACEC is managed under Visual Resource Management Class II and all other lands outside the ACEC are managed under VRM Class IV.

CONCLUSION: The area has wilderness characteristics and is identified as Land with Wilderness Characteristics (LWC).

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Name

4/18/2011  
Date