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Final Environmental Impact Statement for Commercially Guided Helicopter Skiing on the Kenai Peninsula



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United States Department of Agriculture
Forest Service – Alaska Region

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Abstract

This Environmental Impact Statement (EIS) provides the analysis of the Proposed Action and five alternatives considered for the proposed five-year special-use permit issuance for Chugach Power Guides (CPG). CPG has operated a guided helicopter skiing service on the Chugach National Forest on the Kenai Peninsula, near Girdwood, Alaska since 1997.

This Final EIS has been prepared pursuant to Section 102 (2) (c) of the National Environmental Policy Act of 1969, as amended (NEPA). In accordance with NEPA, this EIS documents the detailed analysis of environmental impacts of implementing the Proposed Action and five alternatives considered. This analysis focuses on the direct, indirect, and cumulative impacts to the physical, biological, and social aspects on the human environment. The alternatives to the Proposed Action include No Action, as required by NEPA, and action Alternatives 2, 3 (Modified), 4, 5, and 9. Alternative 3 as modified is the Forest Service's Preferred Alternative. This alternative provides for 2,200 client day of helicopter skiing on 338,200 acres. The EIS also discusses the purpose and need for the Proposed Action, describes the affected environment, and identifies potential mitigation measures to lessen any impacts. Comments on the Draft EIS are summarized and the Forest Service has responded to these comments.

The Forest Service is the lead agency undertaking this NEPA process and is responsible for the decisions made in consideration of it. Several other government agencies have provided input to assist in the preparation of this document.

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Summary

Introduction

The Chugach National Forest (CNF) has received an application from Chugach Powder Guides (CPG) requesting the issuance of a five-year special-use permit authorizing them to continue to conduct guided helicopter skiing operations on National Forest System (NFS) lands on the Kenai Peninsula and adjacent to Girdwood, Alaska (hereafter referred to as the Kenai Peninsula geographic area). The Final Environmental Impact Statement (FEIS) assesses and discloses the potential environmental effects of issuing this permit.

CPG has operated under annual U.S. Department of Agriculture (USDA); Forest Service special-use permits since 1997. These annual permits varied from 111,200 to 159,000 acres, with 800 to 1,200 client days. CPG is seeking to expand their operations in terms of number of clients and areas available for heli-skiing under a five-year permit.

Proposed Action

The proposed action requested by CPG and being considered by the Forest Service is issuance of a five-year special use permit allowing guided heli-skiing operations on portions of the Glacier and Seward Ranger Districts, CNF.

The following areas would be used:

Core Units: Glacier-Winner, West Twentymile, North Twentymile, East Twentymile, Placer-Skookum, West Bench Peak, North Bench Peak, East Bench Peak, and Grandview

Exploratory Units: West Seattle Creek, Mid Seattle Creek, East Seattle Creek, East Moose Creek, West Moose Creek, East Ptarmigan, West Ptarmigan, Snow River, and Mount Ascension

Staging Areas: Girdwood Airstrip, Kern Creek (avalanche gun mount site), Ingram Creek, Big Game Alaska, Mile 62 Gravel Pit (National Forest site), Mile 33.2 Gravel Pit (National Forest site), Mile 12.4

The proposed level of use is 2,400 client days (1,800 for the core units and 600 for the exploratory units). The core units are areas historically authorized for commercially guided helicopter skiing operations as they provide suitable terrain to meet user demand. Exploratory units are areas in which CPG would explore options for commercial activity. These units have not been historically authorized for guided heli-skiing, except in the case of the Moose Creek Unit, which was authorized for temporary use in 1997 and 1998. Throughout the life of the permit, these areas would remain as distinct units (core and exploratory) and would not be combined.

Purpose and Need

The purpose and need for this project are to:

1. Provide helicopter skiing recreation opportunities on the Kenai Peninsula geographic area consistent with direction in the Revised Land and Resource Management Plan, Chugach National Forest.

2. Provide viable opportunities for businesses that in turn supply safe, high quality recreational offerings for the public.

Issues

NEPA requires that the public and other agencies be involved in federal agency decision-making. An important part of this process is scoping. Council of Environmental Quality (CEQ) regulations refer to scoping as a process to determine the scope of the issues to be addressed in an EIS and to identify the significant issues related to a proposed action (40 CFR 1501.7).

The major steps in the scoping process for this project included: 1) sending a notice to agencies, organizations, media, and individuals about the proposal and inviting comment; 2) holding public meetings at Girdwood, Seward, Moose Pass, and Hope to discuss the proposal and accepting comments; 3) listing the project in the Chugach National Forest Schedule of Proposed Actions in January of 2003; and 4) publishing in the Federal Register a Notice of Intent to prepare an EIS.

As a result of the scoping process, six issues were identified. The Interdisciplinary Team determined three issues to be beyond the scope of the analysis and the remaining three issues guided the analysis documented in this EIS and are summarized below.

Issue 1: Wildlife Impacts

The noise and visual disturbance of helicopters and the physical presence of heli-skiers have the potential to disturb wildlife. Factors include the distance to the disturbance, sensitivity of individual species to noise, and level of habituation (becoming accustomed to). Wildlife concerns emphasized on brown bears, Dall's sheep, mountain goats, and wolverines, but potential effects on other wildlife species were also raised. Specific concerns included direct or indirect displacement of individuals by helicopters or heli-skiers, disruption of behavior, disturbance of animals on critical wintering areas or denning sites, and harm to overall health, growth rates, and reproductive success.

Issue 2: Recreational Conflicts

Non-motorized recreationists said that the presence of a helicopter, primarily as a source of noise in an otherwise pristine area, detracts from their recreational experience. The conflict is also over competition for untracked snow. Some feel that the sudden presence of heli-skiers in areas that backcountry skiers have expended considerable effort to reach is unfair, especially when it involves terrain accessible for day tours. Concerns for the safety of backcountry skiers and snowmachine users down slope from heli-ski groups were also expressed. Some snowmachine users felt that allowing heli-skiing in areas closed to snowmachines was not fair. The four main elements of this user conflict are: (1) noise disturbance, (2) a sense of fairness in effort expended to reach backcountry locations, (3) safety concerns regarding avalanches, and (4) litter left behind by the heli-ski company and heli-ski clients.

Issue 3: Impacts on Communities

Lifestyles of rural communities can be negatively impacted by increases in permitted helicopter use either incrementally over a number of years or by a sudden increase. The noise and visual disturbance of concentrated helicopter operations could affect the

quality of life for residents in the following areas: Cooper Landing, Girdwood, Hope, Moose Pass, Seward, and Sunrise.

The Alternatives

Based on the preliminary issues, the Interdisciplinary Team developed seven alternatives to the proposed action submitted by CPG. Included in the range of alternatives is the “No Action” alternative as required by NEPA (40 CFR 1502.14(d)). The team eliminated two of these alternatives before the District Rangers reviewed the proposed range. After the District Rangers reviewed the range of alternatives, two new alternatives were developed. Upon further discussion and review by the District Rangers and Interdisciplinary Team, two alternatives were deleted and the remaining six were sent to interested individuals, organizations, and other agencies for further review and comment.

Public meetings to review the proposed alternatives were held at Girdwood, Seward, Moose Pass, and Hope. Fifty written responses were received. Most respondents commented on the alternative they preferred. Several respondents requested that the 2000-2002 level of use (800 client days and 111,200 acres) be added as an alternative studied in detail. Alternative 9 reflects this request. In addition, the Interdisciplinary Team and the District Rangers combined two alternatives thus bringing the total number of alternatives to study in detail to six alternatives. Based on public comment on the Draft EIS, Alternative 3, the Preferred Alternative was modified slightly in the Final EIS.

The six alternatives that were developed but were eliminated from detailed summary are briefly discussed in Chapter 2 of the EIS. The six alternatives studied in detail are described briefly below:

Alternative 1 - No Action. Under the No Action Alternative, the Forest Service would not issue CPG a special use permit for guided heli-skiing. For the purposes of this analysis, it is assumed that no other permits would be issued, and that the recreational opportunity for guided heli-skiing would no longer be available on the Kenai Peninsula, CNF. It does not preclude unguided publics from chartering a helicopter and skiing in the area. This alternative provides a clear baseline for comparing the environmental impacts of the proposed action and other alternatives in the EIS.

Alternative 2 - Proposed Action. This alternative is the applicant’s modified proposal for a five-year helicopter skiing permit. This alternative would implement the client days proposed by the applicant - 1,800 within core units and 600 within exploratory units. Seven staging areas (five on non-National Forest lands, two on Chugach National Forest) would be approved with a maximum of 30 takeoffs/landings per day would be allowed at each staging area. The season of operation would be from December 15 through April 20. This alternative would authorize CPG for the following:

Total Area Authorized	338,200 acres
Core Units	141,000 acres
Exploratory Units	179,100 acres
Core Restricted Units*	18,100 acres
Net Acres Available after wildlife mitigation***	272,801 acres
Client Days	2,400

* **Core Restricted Units** no use on Fridays, Saturdays and Sundays.

*****Net Acres Available:** No-Fly Zones (see Chap. 2, Mitigation Measures, Wildlife Impact Issues, #3.)

Alternative 3 (modified) - Reduced Recreation Conflicts and Impact on Communities. This alternative was developed to address user conflict and community impacts. This alternative incorporates both the use of timing features and a reduction in the overall use levels in the exploratory units to reduce user conflicts. A total of 2,200 Client Days would be approved with 1,800 in Core units and 400 in Exploratory units. The alternative also addresses community impacts by eliminating a staging area adjacent to Moose Pass and by reducing the amount of skiing area within an audible and visual zone adjacent to the communities of Hope, Sunrise and Moose Pass. The permit would authorize six staging areas (five on non-National Forest lands, one on Chugach National Forest). This alternative would authorize CPG for the following:

Total Area Authorized	306,300 acres
Core Units	141,000 acres
Exploratory Units	128,200 acres
Core Restricted Units*	18,100 acres
Exploratory Restricted units**	19,000 acres
Net Acres Available after wildlife mitigation***	249,992 acres
Client Days	2,200

* **Core Restricted Units** no use on Fridays, Saturdays and Sundays.

** **Exploratory Restricted Units** no use on Fridays, Saturdays and Sundays.

*****Net Acres Available (after mitigation)** No-Fly Zones (see Chap. 2, Mitigation Measures, Wildlife Impact Issues, #3.)

Alternative 4 – Permitted Use level for 2003/2004. This alternative responds to comments expressed during public scoping that did not desire an *expansion* of the existing helicopter-skiing activity. Therefore this alternative maintains the 2003 permitted helicopter skiing use level and geographic area. This alternative analyzes 1,200 user days. This alternative would not expand helicopter operations adjacent to the communities of Moose Pass, Seward, Sunrise or Hope. In addition, this alternative would not expand helicopter operations into areas with potential user conflict, such as Seattle Creek. However, this alternative does include helicopter skiing in the Bench Peak Area. Therefore user conflicts are addressed in this alternative by timing features in the West Bench Peak area, similar to Alternative 3. A total of three staging areas would be approved (one on National Forest, two on non-National Forest locations). This alternative would authorize CPG for the following:

Total Area Authorized	159,100 acres
Core Units	141,000 acres
Exploratory Units	0 acres
Core Restricted Units*	18,100 acres
Exploratory Restricted units**	0 acres
Net Acres Available after wildlife mitigation***	131,247 acres
Client Days	1,200

* **Core Restricted Units** no use on Fridays, Saturdays and Sundays.

** **Exploratory Restricted Units** no use on Fridays, Saturdays and Sundays.

*****Net Acres Available (after mitigation)** No-Fly Zones (see Chap. 2, Mitigation Measures, Wildlife Impact Issues, #3.)

Alternative 5 - Minimize User Conflicts. User conflicts are addressed in this alternative by eliminating use areas and reducing use levels, as compared to the timing features utilized in Alternative 3. This reduction, in both numbers and geographic areas, was designed to reduce the chance of motorized/non-motorized interaction. A total of 1,800 Client Days would be approved with 1,500 in Core units and 300 in Exploratory units. This alternative would authorize use of six staging areas (five on non-National Forest lands, two on Chugach National Forest). This alternative would authorize CPG for the following:

Total Area Authorized	231,400 acres
Core Units	135,400 acres
Exploratory Units	96,000 acres
Core Restricted Units*	0 acres
Exploratory Restricted units**	0 acres
Net Acres Available after wildlife mitigation***	179,588 acres
Client Days	1,800

* **Core Restricted Units** no use on Fridays, Saturdays and Sundays.

** **Exploratory Restricted Units** no use on Fridays, Saturdays and Sundays.

*****Net Acres Available (after mitigation)** No-Fly Zones (see Chap. 2, Mitigation Measures, Wildlife Impact Issues, #3.)

Alternative 9 – Reflects 2000-2002 Level of Use. This alternative was developed in response to comments received during public scoping which desired a *reduction* of the existing (2003) helicopter-skiing activity. This alternative reflects use levels during the period 2000-2002, but would authorize a five-year permit. Some areas permitted in 2002 and prior years are no longer available for helicopter skiing under the Revised Forest Plan. To compensate for these reductions, adjacent areas that are available for helicopter skiing and were analyzed and permitted in 2003 were added to this alternative. The alternative analyzes 800 user days in Core units only. Three staging areas would be approved (two on non-National Forest lands, one on Chugach National Forest). This alternative would authorize CPG for the following:

Total Area Authorized	104,700 acres
Total Core Units	104,700 acres
Total Exploratory Units	0 acres
Core Restricted Units*	0 acres
Exploratory Restricted units**	0 acres
Net Acres Available after wildlife mitigation***	92,623 acres
Client Days	800

* **Core Restricted Units** no use on Fridays, Saturdays and Sundays.

** **Exploratory Restricted Units** no use on Fridays, Saturdays and Sundays.

*****Net Acres Available (after mitigation)** No-Fly Zones (see Chap. 2, Mitigation Measures, Wildlife Impact Issues, #3.)

Environmental Consequences

The results of NEPA analysis should clearly contrast the direct, indirect, and cumulative environmental impacts of the proposed action and alternatives. Many of the impacts of heli-skiing are difficult to quantify because some tend to be subjective (e.g., recreational conflicts) while others have not been well studied or documented (e.g., helicopter impacts on some wildlife species). Table 1 at the end of this document summarizes and compares the six alternatives.

Issue 1 - Wildlife Effects

Several reports have been written to document heli-skiing impacts on wildlife on the Chugach National Forest. The principle sources of impacts associated with heli-skiing are helicopter overflights, takeoffs and landings, and skiing near wildlife. Proximity and frequency of these disturbances determine the likelihood of human consequences.

Under Alternative 1, No Action, CPG's permit would not be issued and no commercially guided helicopter skiing would occur on NFS lands on the Kenai Peninsula unless another permit was applied for and granted. As a consequence, there would be no impacts to wildlife from commercial helicopter skiing activities.

One may make the assumption that the action alternative that impacts the least number of acres would impact the least number of individual wildlife, and the alternative that provides for the least number of client days would have a lessening degree of the overall effect on wildlife. If this was true, then the alternatives would range from least impacting to potentially more impacting in the following order: Alternatives 9, 4, 5, 3, and 2. However, the distribution of individuals in the population is not equal across the project area. Therefore, this assumption may not be correct. Furthermore, the specific locations of wide ranging species such as wolverine and grizzly bear are difficult to pinpoint.

In order to address the uncertainty related to population distribution over the large geographic area analyzed, the project has applied similar mitigation to all action alternatives. Some of these mitigation measures include:

- Adhering to No-Fly Zones, which identify mountain goat and Dall's sheep concentration areas. No-Fly Zones are based on a separation distance of 1,500 feet from important habitat.
- Maintaining a 1/2-mile horizontal or 1,500 feet above ground level (AGL) from all observed wildlife including observed bear and wolverine dens and known and observed bald eagle and goshawk nests.

Furthermore, the mitigation and design features applied to the project are designed to have minimal impacts on wildlife populations, regardless of whether or not a specific population was present in a certain ski area. By implementing this conservative approach, none of the proposed heli-skiing activities should impact any wildlife population, although minor effects to individual animals may occur. A complete listing of mitigation measures is included in Chapter 2 of the FEIS.

Issue 2 – Recreation Effects

While many forms of winter recreational use have increased in recent years (e.g., ski touring, skate skiing, backcountry skiing, snowmachine use), non-motorized recreationists expressed the most concern regarding this proposal. To contrast the proposed action and alternatives on the basis of this issue, the analysis focused on the availability of helicopter skiing opportunities and conflicts with other winter recreationists. The four main elements of user conflicts are: (1) noise disturbance, (2) a sense of fairness in effort expended to reach backcountry locations, (3) safety concerns about avalanches, and (4) litter left behind by the heli-ski company and heli-ski clients.

Under Alternative 1, No Action, CPG's permit would not be issued and no commercially guided helicopter skiing would occur on NFS lands on the Kenai Peninsula. As a consequence, there would be no heli-skiing opportunities available on the Kenai Peninsula and there would be no conflicts with other recreationists.

Alternative 2 would have the most heli-skiing opportunities in terms of acres available and number of client days granted, but would have the highest potential to impact non-motorized winter recreationists particularly in the East Seattle Creek, West Bench Peak, and Placer–Skookum units.

Alternative 3 (Modified) would have slightly less heli-skiing opportunities than Alternative 2 but would still have potential impacts to non-motorized winter recreationists in East Seattle Creek, West Bench Peak and Placer-Skookum units.

Alternative 4 would have the same number of acres, areas, and client days available for heli-skiing as the permit issued in 2003 and 2004, which is less than half of what is proposed in Alternative 2. This alternative would have a low potential for user conflicts because of the total number of client days that would be permitted and the reduced area under permit.

Alternative 5 would have less client days available for heli-skiing than Alternative 2 and some areas would be eliminated. This alternative would have a moderate potential for user conflicts because of the total number of client days that would be permitted and the location of key staging areas.

Alternative 9 would have less client days available for heli-skiing than in Alternative 4 and many areas are omitted. This alternative is similar to CPG's permitted use prior to 2003. This alternative would have the least potential for user conflicts because it has the least number of client days that would be permitted and smallest area under permit.

Issue 3 – Impacts on Communities

When viewed in terms of the weighed populations percentage (see Chapter 4, Issue 3), residents of Girdwood would be the most affected by helicopter noise and helicopter sightings. Helicopters using the Girdwood Airstrip as a staging area and the North Twentymile complex travel corridor through Glacier and Winner Creeks unit would be readily heard and seen. Alternative 9 is the only action alternative in which the number of cycles permitted in Girdwood is reduced (from 30 to 24 landings/takeoffs per day) but helicopter noise and sightings would still be very apparent.

In the Moose Pass area, helicopters would be readily heard and seen when they are using the Moose Creek travel corridor and the Mile 33.2 Gravel Pit staging area (Alternative 2). People living near the staging area would be affected the most. As Mile 33.2 staging area is not analyzed in the other alternatives, this is relevant only to Alternative 2. Helicopters would also be heard and seen in Sunrise during helicopter activity in the West Seattle unit. The communities of Seward, Hope, and Cooper Landing would not be impacted by the heli-skiing activities in any of the action alternatives.

Table 1 Summary Comparison of Alternatives

Units of Measure	2004 permit	1	2	3 modified	4	5	9
Amount of heli-skiing use in areas used by non-motorized backcountry recreationists (# of client days permitted)	1200 - Core 0 - Exploratory	No permit	1800 - Core 600 - Exploratory	1800 - Core 400 - Exploratory	1200 - Core 0 - Exploratory	1500 - Core 300 - Exploratory	800 - Core 0 - Exploratory
Acres available for heli-skiing	159,100 – Core ¹	No permit	159,100 – Core ¹ 179,100 – Exploratory ²	159,100 – Core ¹ 147,200 – Exploratory ³	159,100 – Core ¹ 0 - Exploratory	135,400 – Core ⁴ 96,000–Exploratory ⁵	104,700 –Core ⁶ 0 - Exploratory
Number of Staging Areas permitted	Girdwood Airport Big Game Alaska Mile 62	No Permit	Girdwood Airport Kern Creek Big Game Alaska Ingram Creek Mile 62 Mile 33.2 Mile 12.4	Girdwood Airport Kern Creek Big Game Alaska Ingram Creek Mile 62 Mile 12.4	Girdwood Airport Big Game Alaska Mile 62	Girdwood Airport Kern Creek Big Game Alaska Ingram Creek Mile 62 Mile 12.4	Girdwood Airport Big Game Alaska Mile 62
No. of Landings permitted at each staging area per day.	30	No permit	30	30	30	30	24
Proximity of staging areas and flight paths that could cause potential user conflicts with non-motorized backcountry recreationists	<ul style="list-style-type: none"> Mile 62 staging area and flights to all Bench Peak units 	No permit	<ul style="list-style-type: none"> Mile 62 staging area and flights to all Bench Peak units Mile 12.4 and flights to Snow River Unit and Mt. Ascension units Ingram Creek staging area and flights to East Seattle Creek 	<ul style="list-style-type: none"> Mile 62 staging area and flights to all Bench Peak units Mile 12.4 and flights to Snow River Unit and Mt. Ascension units Ingram Creek staging area and flights to East Seattle Creek 	<ul style="list-style-type: none"> Mile 62 staging area and flights to all Bench Peak units 	<ul style="list-style-type: none"> Mile 62 staging area and flights to all Bench Peak units Mile 12.4 and flights to Snow River Unit and Mt. Ascension units Ingram Creek staging area and flights to East Seattle Creek 	<ul style="list-style-type: none"> Mile 62 staging area and flights to East Bench Peak unit
Heli-skiing units where there is at least a moderate rating in one of the Alternatives: 1. Placer-Skookum 2. West Bench Peak 3. East Seattle Creek 4. Mid Seattle Creek	1. Moderate 2. Moderate 3. None 4. None	No permit	1. Moderate 2. High 3. Moderate 4. Low	1. Moderate 2. Moderate 3. Moderate (Fri-Sun) None (Mon-Thur) 4. Low (Fri-Sun) None (Mon-Thur)	1. Moderate 2. Moderate 3. None 4. None	1. Moderate 2. Low 3. None 4. Low	1. Moderate 2. Low 3. None 4. None
Foreground and Mid-ground as seen from the following communities: Girdwood Moose Pass Sunrise	1,814 acres 0 acres 0 acres	No permit	1,933 acres 2,964 acres 688 acres	1,933 acres 855 acres 0 acres	1,814 acres 0 acres 0 acres	1,933 acres 0 acres 0 acres	1,814 acres 0 acres 0 acres

- 1 Core Units include:**
Glacier-Winner Creek
West Twentymile
North Twentymile
East Twentymile
Placer-Skookum**
Grandview
West Bench Peak
North Bench Peak
East Bench Peak

** - 5,800 acres in Placer-Skookum unit are not available for heli-skiing use after March 31 per the Revised Forest Plan

- 2 Exploratory Units include:**
West Seattle Creek
Mid Seattle Creek
East Seattle Creek
West Moose Creek
East Moose Creek
West Ptarmigan
East Ptarmigan
Snow River
Mt Ascension

- 3 Exploratory Units do NOT include:**
West Seattle Creek
West Moose Creek
West Ptarmigan

- 4 Core Units do Not include:**
North Bench Peak
West Bench Peak

- 5 Exploratory Units do NOT include:**
East Seattle Creek
West Seattle Creek
West Ptarmigan
West Moose Creek
Mt. Ascension

- 6 Core Units include:**
Glacier-Winner Creek
West Twentymile
North Twentymile
Placer-Skookum
Grandview
East Bench Peak

Table of Contents

Abstract.....i
 Summary.....ii
 Reader’s Guide.....xii
 Appendices.....xvi
 List of Tables.....xvi
 List of Maps.....xvi

Chapter 1: Purpose and Need

Introduction.....1-1
 The Proposed Action.....1-1
 Purpose and Need.....1-5
 The National Environmental Policy Act Process.....1-7
 Forest Plan Direction.....1-7
 Public Involvement and Issues to be Considered.....1-9
 Issue 1: Wildlife Impacts.....1-9
 Issue 2: Recreation Conflicts.....1-10
 Issue 3: Impacts on Communities.....1-10
 Other Issues.....1-10
 Decisions to be Made.....1-11
 Required Permits and Approvals.....1-12
 Planning Record.....1-12

Chapter 2: Alternatives

Introduction.....2-1
 Alternative Development.....2-1
 Alternatives Not Analyzed in Detail.....2-1
 Alternative 1 - No Action.....2-3
 Alternative 2 - Proposed Action.....2-7
 Alternative 3 (Modified) - Reduced Recreational Conflicts.....2-11
 Alternative 4 - Current Use-2003.....2-15
 Alternative 5 - Minimized Recreation Conflicts.....2-19
 Alternative 9 – Reflects 1999-2002 Use Level.....2-23
 Mitigation Measures.....2-29
 Monitoring.....2-31
 Summary of Impacts.....2-32

Chapter 3: Affected Environment

Introduction.....3-1
 Background Information.....3-1
 Wildlife.....3-6
 General Wildlife.....3-6
 Individual Species.....3-7
 Recreation.....3-18
 Current Situation.....3-18
 Conflict Between Users.....3-26
 Regional and Community Descriptions.....3-27
 Community Attitudes and Beliefs.....3-31
 Air Quality.....3-36

Soil and Water Resources3-37
Roadless Areas3-37
Wild and Scenic Rivers3-37

Chapter 4: Environmental Consequences

Introduction4-1
Impact Assessment.....4-1
Wildlife Impacts (Issue 1).....4-2
Recreation Conflicts (Issue 2)4-12
Impacts on Communities (Issue 3).....4-22
Air Quality.....4-34
Soil and Water Resources4-35
Vegetation and Sensitive Plants4-35
Heritage Resources4-35
Roadless Areas.....4-35
Wild and scenic Rivers.....4-36
Economics.....4-36
Environmental Justice4-36
Unavoidable Adverse Impacts4-37
Irreversible and Irretrievable Commitment of Resources4-37

Chapter 5: Draft Environmental Impact Statement

Public Involvement on the Draft EIS5-1
Comments on the Draft EIS and Forest Service Responses5-1

Chapter 6: Lists

List of Recipients.....6-1
Lists of Preparers6-4
References.....6-5
Glossary and Acronyms6-12
Index6-17

Appendices

- Appendix A – Scoping Comments/Government Letters
- Appendix B – No Fly Zone Maps 1 and 2
- Appendix C – Biological Evaluation
- Appendix D – Tables of Winter Use Data
- Appendix E – Table of Potential User Conflict Ratings by Alternative
- Appendix F – Winter Ski Run Maps 1 through 4
- Appendix G – CPG Use Data
- Appendix H – Detailed Recreation Effects

List of Tables

Table 1 Summary Comparison of Alternatives.....	X
Table 2-1 Summary Comparison of Alternatives	2-27
Table 3-1 Wildlife Species.....	3-7
Table 3-2 Chugach Powder Guides Permitted Use 1997-2004	3-23
Table 3-3 Chugach Powder Guides Past Use 2001-2003	3-24
Table 3-4 Past Use of Heli-skiing units 2001-2003	3-24
Table 3.5 Average number of times ski runs were used.....	3-25
Table 3-6 2003 Season – Comparison of Average Use of Various Units	3-25
Table 4-1 Summary of Recreation Conflicts	4-14
Table 4-2 Helicopter Effects Areas by Community	4-27
Table 4-3 Estimated Fuel Use and Emissions	4-34

List of Maps

Map 1-1 Planning Area	1-3
Map 2-1 Alternative 1 – No Action	2-5
Map 2-2 Alternative 2 – Proposed Action.....	2-9
Map 2-3 Alternative 3	2-13
Map 2-4 Alternative 4	2-17
Map 2-5 Alternative 5	2-21
Map 2-6 Alternative 9	2-25
Map 3-1 Moose Winter Range	3-10
Map 3-2 Mountain Goat Winter Range	3-12
Map 3-3 Bald Eagle and Goshawk Nest Sites	3-13
Map 3-4 Dall’s Sheep Winter Habitat	3-17
Map 3-5 A and B Winter Recreation Use	3-19
Map 4-1 Visibility-All Observation Points	4-25

