



**Designated Office Evaluation Report
for
Amaruk Wilderness Corp. – Kluane
National Park & Reserve
Project Number: 2011-0038**

Proponent: Amaruk Wilderness Corp.

Assessment Completion Date: March 23, 2011

Haines Junction Designated Office

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EXECUTIVE SUMMARY

Amaruk Wilderness Corp. has proposed to conduct guided hiking and backpacking expeditions as a business within the boundaries of Kluane National Park and Reserve. The proponent will operate during the summer each year for the period of five (5) years. No views and information were submitted for this project. The following four valued components were identified during the assessment: fish and wildlife, human and environmental health, visitor experience, and heritage resources. The Designated Office has determined that the project could result in significant adverse effects on all the above-mentioned valued components. Mitigations proposed by the proponent (Appendix A) combined with relevant non-discretionary legislation (Appendix B) are considered adequate to eliminate, reduce, or control the significant adverse effects of the project.

OUTCOME

The Haines Junction Designated Office, pursuant to section 56(1)(a) of the *Yukon Environmental and Socio-economic Assessment Act (YESAA)*, recommends to the decision bodies that the project be allowed to proceed, as it has determined that the project will not have significant adverse environmental or socio-economic effects in or outside Yukon.

Issued by the Haines Junction Designated Office on March 23, 2011.

For more information please contact:

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Table of Contents

Part A.	Introduction	2
1.0	PROJECT DESCRIPTION.....	2
1.1	Proponent Information.....	2
1.2	Geographical Context.....	2
1.3	Project Scope	3
2.0	ENVIRONMENTAL AND SOCIO-ECONOMIC SETTING	4
2.1	Biophysical Environment.....	4
2.2	Socio-economic Environment.....	4
3.0	REQUIREMENT FOR AN ASSESSMENT	5
4.0	SCOPE OF THE ASSESSMENT	6
Part B.	Effects Assessment and reasons for recommendation.....	7
5.0	FISH AND WILDLIFE.....	7
5.1	Overview.....	7
5.2	Project Effects	7
6.0	HUMAN AND ENVIRONMENTAL HEALTH	10
6.1	Overview.....	10
6.2	Project Effects	10
7.0	VISITOR EXPERIENCE	13
7.1	Overview.....	13
7.2	Project Effects	13
8.0	HERITAGE RESOURCES.....	15
8.1	Overview.....	15
8.2	Project Effects	15
9.0	CONCLUSION OF THE ASSESSMENT	17
Appendix A	LIST OF KEY MITIGATIONS THE PROPONENT HAS COMMITTED TO UNDERTAKE	18
Appendix B	LIST OF RELEVANT NON-DISCRETIONARY LEGISLATION APPLICABLE TO THE PROJECT.....	20
Appendix C	REFERENCES.....	21

PART A. INTRODUCTION

The following sections present background information for this project and the assessment. This information includes details of the project; the environmental and socio-economic setting of the project area; and a description of the requirement for an assessment. Part A also has a discussion on the scope of the assessment, which includes the identification of values potentially affected by the project.

1.0 PROJECT DESCRIPTION

1.1 PROPONENT INFORMATION

Proponent: Amaruk Wilderness Corp.
 6942 Possession Point Road
 Sooke, BC
 V9Z 0T6

Contact: Christopher Fragassi
 Tel: 888-926-2785
 Chris.Fragassi@Amaruk.com

1.2 GEOGRAPHICAL CONTEXT

NW Boundary: 61.4° N; 141.0° W	NE Boundary: 61.4° N; 137.0° W
SW Boundary: 60.0° N; 141.0° W	SE Boundary: 60.0°N; 137.0° W
First Nation Traditional Territories Involved: Champagne & Aishihik First Nations Kluane First Nation White River First Nation	
Watersheds and Drainage Region: Major Drainage Area: <i>Yukon River Drainage Area, Pacific Drainage Area</i> Sub Drainage Area: <i>Upper Yukon, Alsek</i> Sub-Sub Drainage: <i>Upper White, Donjek, Dezadeash, Tatshenshini, Gulf of Alaska-Yakutat Bay</i>	
Nearby Watercourses or Waterbodies: Slims River, Alsek River, Dezadeash River, Kaskawulsh River, Donjek River, Duke River, Bates River, Alder Creek, Shorty Creek, Dalton Creek, Goat Creek, Sheep Creek, Kimberley Creek, Bullion Creek, Congdon Creek, Cottonwood Creek, Victoria Creek, Quill Creek, Kathleen Lake, Louise Lake, Bates Lake, Mush Lake, and St. Elias Lake.	

Table 1: Project Location

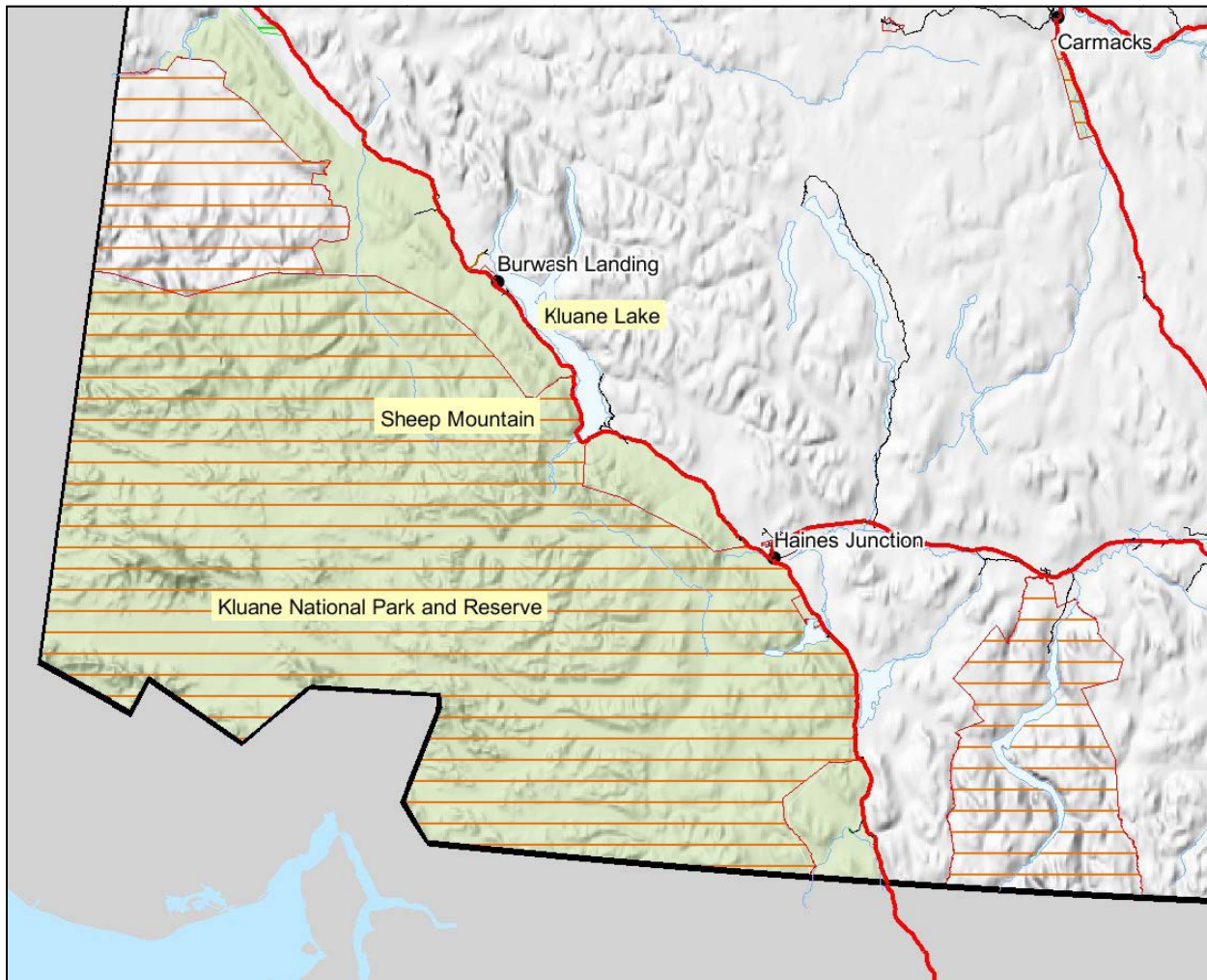


Figure 1: Map of Project Area

1.3 PROJECT SCOPE

The scope of the project for this assessment has been determined to be as follows:

The principal activity for this project is the conducting of guided trips and associated activities for five (5) years as a business within Kluane National Park and Reserve.

Associated activities include:

- Transportation provided to clients;
- Guided hiking and backpacking expeditions in summer; and
- Overnight camping, waste management, water filtration, food storage, and possible use of aircraft to deliver supplies.

2.0 ENVIRONMENTAL AND SOCIO-ECONOMIC SETTING

2.1 BIOPHYSICAL ENVIRONMENT

Kluane National Park and Reserve (KNP&R) is located within the Boreal Cordillera Ecozone and within the St. Elias Mountains, Mount Logan, Yukon Stikine Highlands, and Ruby Ranges Ecoregions. The Park is dominated by two major mountain ranges: St. Elias Mountains and Kluane Ranges which includes the highest mountains in Canada. In terms of ecological processes, the area is glacially influenced and continuous permafrost underlies the northern portion of the Park with the majority having discontinuous permafrost. The Park is mostly covered by annual ice and snow, while approximately 18% is vegetated.

A variety of wildlife species are found in KNP&R including: moose, Dall Sheep, mountain goats, wolves, lynx, coyotes, a small population of woodland caribou, and one of the strongest populations of grizzly bears in the Yukon. There are over 180 species of birds present in the Park including the threatened peregrine falcons (listed on Schedule 1 of SARA) and short-eared owls (listed as a species of special concern on Schedule 3 of SARA). Many creeks and streams within the Park are silt-laden and therefore not prime fish bearing areas. However, there are many rivers and lakes that support an abundance of fish species such as arctic grayling, lake trout, rainbow trout, Kokanee salmon, whitefish, and northern pike.

2.2 SOCIO-ECONOMIC ENVIRONMENT

Kluane National Park and Reserve is bordered on its northern side by the Alaska Highway which has several communities located adjacent to the Park. These include: Haines Junction, Destruction Bay, and Burwash Landing which are located within the Traditional Territories of the Champagne and Aishihik First Nations, Kluane First Nation, and/or White River First Nation. Haines Junction is a full-service community with a population of approximately 800 residents. It is the gateway community for Kluane National Park and Reserve.

The Park is used frequently for recreation purposes including hiking, rafting, canoeing, and camping. It has been inhabited by aboriginal people for hundreds or thousands of years and continues to be used for subsistence purposes including fishing, hunting, and trapping.

From May to October of 2010, 134,340 visitors came to Kluane National Park and Reserve. Historical visitation records indicate that there has been a large increase in the number of visitors between 1994 and 2004. This may be due in part to the inclusion of the Alsek River corridor and the Kluane National Park and Reserve in the United Nations designation as a World Heritage Site.

The area in which this project is proposed is known for its archaeological potential where traditional activities still occur. The land continues to be used and/or travelled upon by First Nations people for activities such as trapping, hunting, and other traditional pursuits.

3.0 REQUIREMENT FOR AN ASSESSMENT

An assessment by the Designated Office is required under the following circumstances:

1. An activity is proposed to be undertaken that is listed in Schedule 1 of the Assessable Activities, Exceptions and Executive Committee Projects Regulations (Activity Regulations) and not excepted;

The proponent proposes to undertake activities listed in part 12, item 3 of the Activity Regulations, specifically:

“In a national park or national park reserve, a recreational activity that is a business within the meaning of Section 1 of the National Parks of Canada Businesses Regulations”.

2. The project is being undertaken in the Yukon; and
3. An authorization or the grant of an interest in land by a government agency, independent regulatory agency, municipal government, or first nation is required for the activity to be undertaken.

Decision bodies and authorizations have been identified based on information in the project proposal and information submitted to the Haines Junction Designated Office during the assessment. A list of the decision body(s) and authorizations required for the project can be found in Table 2 below.

Decision Body	Authorization(s) Required	Act or Regulation
Parks Canada Agency	Parks Business License	<u>National Parks of Canada Business Regulations</u>

Table 2: Decision Body(s) and Authorizations Required

4.0 SCOPE OF THE ASSESSMENT

The scope of the assessment includes both the identification of valued environmental and socio-economic components (VESECS) that may be affected by the proposed project and the matters to be considered in 42 (1) of the Act. No views and information were submitted for this project.

Valued environmental and socio-economic components

After taking into account the matters referred to in section 42 of the Act, the Designated Office has identified the valued environmental and socio-economic components (VESEC) for consideration in this assessment:

- Fish and Wildlife
- Human and Environmental Health
- Visitor Experience
- Heritage Resources

PART B. EFFECTS ASSESSMENT AND REASONS FOR RECOMMENDATION

The following sections present the effects assessment of project activities related to values identified in Section 4.0. Each section includes an overview, an analysis of how project activities may affect values, and where relevant, measures to mitigate significant adverse effects. Part B ends with a conclusion of the effects assessment.

5.0 FISH AND WILDLIFE

5.1 OVERVIEW

The proposed project is intended to take place within Kluane National Park and Reserve (KNP&R) for the purpose of conducting guided tours for hiking and backpacking. Project activities such as hiking, backpacking, and sightseeing in a group have the potential to adversely affect fish and wildlife in the area. A wide variety of fish and wildlife species inhabit KNP&R including but not limited to: arctic grayling, lake and rainbow trout, Kokanee salmon, whitefish, grizzly and black bears, Dall sheep, mountain goats, wolves, lynx, wolverines, coyotes, moose, and caribou.

Potential effects from this proposed project to fish and wildlife include:

- Injury or death of fish and wildlife due to entrapment, ingestion of inedible matter (i.e. deleterious substances), and/or human/wildlife conflict.

The Designated Office has determined that the proposed project may result in significant adverse effects to fish and wildlife that can be mitigated. The following sections provide the rationale for this determination.

5.2 PROJECT EFFECTS

The proposed project involves guided hiking and backpacking expeditions within Kluane National Park and Reserve. The proponent has identified that the business will operate between May 1st and October 15th for the period of the five year business licence.

The proponent has identified that two 10-day trips and two 7-day trips will occur throughout the summer season. There is the potential for refuse associated with tour groups to become a hazard for fish and wildlife with direct effects including animal death and/or injury through ingestion of inedible matter and entrapment of animals in plastic or metal containers. Bears are attracted to smells such as garbage, fuel, grey water, toiletries, and food. Animals such as bears and coyotes that gain access to human foods either as a result of being actively fed by humans or by making “raids” on food and garbage containers, often become problem animals that have to be destroyed in order to preserve human safety and property.

A further project effect related to hiking and backpacking trips within the Park is the potential for the disturbance of animals at crucial stages in their life cycle by human presence/behaviours. Such disturbances could result in the animals abandoning their young or attacking or displaying unnatural

Haines Junction Designated Office Evaluation Report

Amaruk Wilderness Corp. – Kluane National Park & Reserve – Number: 2011-0038

behaviour among other possibilities. The proponent has also indicated that two dogs may be brought along on each trip. Dogs have the potential to chase or harass wildlife if not under control.

The Designated Office has determined that the above-mentioned activities could result in significant adverse effects to fish and wildlife that can be addressed by compliance with non-discretionary legislation.

Commitments

The following are key commitments and mitigations the proponent has indicated in the project proposal that have been considered in the effects assessment when determining the significance of the effects of the project on fish and wildlife.

- Packing out of all wastes (with the exclusion of wastes caused by bodily functions)
- Grey water will be disposed of as follows:
 - Organic material strained from grey water and packed out; grey water disposed of in rocky/scree area preferably;
 - At least 100 m from any body of water; and
 - At least 100 m from route/trail/campsite.
- Human waste will be disposed of as follows:
 - Small hole dug in soil or under small rocks;
 - At least 100 m from any body of water;
 - At least 100 m from route/trail/campsite;
 - Toilet paper, if applicable, will be either packed out, or burnt on site and on top of waste; and
 - Waste covered by previously disturbed soil, or previously removed rocks.
- Toiletries are required to be unscented and will be stored in bear proof containers and kept at least 100 m away from tents and sleeping bags
- Use of bear proof containers and low odor foods (e.g. dehydrated/freeze-dried foods)
- Extensively brief clients in respect to bear conflict avoidance
- Dogs brought into the Park will be done in strict compliance with the Canada National Parks Act domestic dog regulations. This includes keeping the dogs under physical control at all times and ensuring they do not interfere with fauna, flora, natural or cultural resources, or other park users. (This also applies to Environmental Health and to Visitor Experience).
- Follow specific guidelines as it relates to wildlife interaction and possible conflicts with photography

Non-discretionary legislation

I have considered the requirements of:

- The *Species At Risk Act (SARA)*;
- The National Parks of Canada Businesses Regulations;
- The National Parks of Canada Domestic Animals Regulations;
- The National Parks of Canada Fishing Regulations;
- The National Parks of Canada Aircraft Access Regulations;
- The National Parks General Regulations; and
- The National Parks Wildlife Regulations;

and am satisfied that compliance with the act, regulations, and proposed commitments will satisfactorily eliminate, reduce, or control the potential significant adverse effects of the project on fish and wildlife.

MITIGATION:

No additional mitigations are required.

Cumulative Effects

Activities within Kluane National Park and Reserve that could affect fish and wildlife include: commercial, recreational, and traditional users of Kluane National Park and Reserve.

The residual effects of each of these activities are the incidental, accidental, or deliberate deposit of litter and food waste into the environment where it may be present and accessible to fish and wildlife, as well as the removal of fish and wildlife as it relates to park management and traditional harvesting activities.

It is anticipated that this proposed project will not result in residual effects on fish and wildlife upon compliance with non-discretionary legislation and successful implementation of the proposed commitments identified above. I have determined that the project, in combination with the effects of existing activities, will not result in significant adverse cumulative (environmental or socio-economic) effects.

6.0 HUMAN AND ENVIRONMENTAL HEALTH

6.1 OVERVIEW

The proposed project will occur during the summer of each year within Kluane National Park and Reserve which is largely considered pristine and isolated from human activities. Project activities such as the disposal of solid waste as well as the consumption of untreated/unfiltered water all have the potential to adversely affect human and environmental health.

Potential effects of the proposed project include:

- Bacteria and parasite infections;
- Contamination of environment; and
- Damage to the environment.

The Designated Office has determined that the proposed project may result in significant adverse effects to human and environmental health that can be mitigated. The following sections provide the rationale for this determination.

6.2 PROJECT EFFECTS

Bacteria and parasite infections

The proposed project involves the potential for pathogens and parasites to be transmitted through the ingestion of untreated water. There are a number of pathogens that may be carried in human waste such as *E. coli* bacteria and *Giardia spp.* Transmission may occur through the ingestion of untreated/unfiltered water from contaminated sources. Effects can range from minor gastrointestinal problems associated with some parasites, to kidney failure, to death. Parasites such as *Giardia* can be distributed throughout the environment by humans, pets, and wild mammals, specifically through their wastes. This may pose health risks to users downstream of contaminated sites.

The proponent has indicated that water treatment will be done through filtration. However, there still remains a possibility of users consuming untreated/unfiltered water, thus, the potential for the ingestion of pathogens and parasites does exist. Though the likelihood of such occurrences is low, the consequences could have considerable impacts on the health of those affected. Therefore, the Designated Office has determined that the project will result in significant adverse effects such that further mitigations are required.

Contamination of environment

The proposed project includes two 10-day trips and two 7-day trips into Kluane National Park and Reserve for the purpose of guided hiking and backpacking tours. This and other associated activities could involve the creation of garbage and waste materials. These materials can cause contamination to environmental components such as water, soils, and air as they break down and/or decompose. In addition to being unsightly, garbage can create hazards to large and small animals, birds, and fish as they may ingest or become trapped or entangled in refuse.

Haines Junction Designated Office Evaluation Report

Amaruk Wilderness Corp. – Kluane National Park & Reserve – Number: 2011-0038

The proponent has indicated that all wastes (with the exception of waste caused by bodily functions) will be packed out. Grey water will be strained and the solids packed out. Human waste will be disposed of in a small hole or under small rocks which will be covered by previously disturbed soil or previously removed rocks. If applicable, toilet paper will be carried out or burnt on top of the waste. Grey water and human waste disposal will be at least 100 m from any body of water, trail, route, and campsite. As a result, I have determined that human and solid waste disposal will not result in significant adverse effects on human and environmental health.

Damage to the environment

Activities that increase the number of people recreating in wilderness areas increase the potential for damage to the environment. Hiking and backing off of established trails has the potential to damage sensitive vegetation. Camping outside of established campsites increases the possibility of water and ground contamination through waste disposal. Also, the use of campfires, if not in established campfire pits and particularly when the weather is hot and dry, has the potential to get out of control and cause forest fires.

The proponent has indicated that a stove will be used instead of campfires and that their expeditions are entirely non-smoking. The expeditions are low frequency with a small number of people. Small footprint individual tents will be used. Also, sensitive areas will be avoided and previously used routes will be used whenever possible to minimize environmental impact.

Commitments

The following are key commitments and mitigations the proponent has indicated in the project proposal that have been considered in the effects assessment when determining the significance of the effects of the project on human and environmental health.

- Water treatment through filtration;
- Use of stove instead of campfires to reduce risk of wildfire;
- Expeditions are entirely non-smoking to reduce risk of wildfire;
- Avoidance of sensitive areas;
- Small groups and low frequency expeditions;
- Small footprint individual tents;
- Previously used routes will be used whenever available to minimize environmental impact; and
- Campsites will be selected to ensure “no trace of human presence or environmental damage whatsoever upon vacation.” This includes:
 - Area at least 100 meters from body of water;
 - Area that is level to avoid soil destabilization;
 - Area that is rocky rather than vegetated in order to avoid vegetation damage;
 - Area away from wildlife corridors or away from areas with signs of wildlife use;

Haines Junction Designated Office Evaluation Report

Amaruk Wilderness Corp. – Kluane National Park & Reserve – Number: 2011-0038

- Area not identified as culturally significant by First Nations;
- Area not viewed as culturally significant by Guides; and
- Area not previously used by party in order to avoid damage and allow regeneration.

Non-discretionary legislation

I have considered the requirements of:

- 1) The National Parks of Canada Businesses Regulations;
- 2) The National Parks Camping Regulations;
- 3) The National Parks General Regulations (Prevention of Nuisance, Use of Water Resources, Closing of Areas and Ways);

and am satisfied that compliance with the regulations and proposed commitments will satisfactorily eliminate, reduce, or control the potential significant adverse effects of the project on human and environmental health.

MITIGATION:

No additional mitigation is required.

Cumulative Effects

Activities within Kluane National Park and Reserve that could affect human and environmental health include: commercial, recreational, and traditional users of Kluane National Park and Reserve.

The residual effects of these activities are the incidental/accidental release of pathogens and parasites into the environment, and the presence of human generated refuse on the landscape.

It is anticipated that this proposed project will not result in residual effects on human and environmental health upon compliance with non-discretionary legislation and successful implementation of the proposed commitments identified above. I have determined that the project, in combination with the effects of existing activities, will not result in significant adverse cumulative (environmental or socio-economic) effects.

7.0 VISITOR EXPERIENCE

7.1 OVERVIEW

The proposed project will occur in Kluane National Park and Reserve where visitors anticipate and expect experiences that are not impacted by human activities. The proposed project includes wilderness travel and activities such as guided hiking and backpacking tours, camping, and solid waste disposal.

Potential effects of the project include:

- Negative perception of human presence and activities in National Parks; and
- Ruined sense of wilderness experience by other users.

The Designated Office has determined that the proposed project will result in significant adverse effects to visitor experience that can be mitigated. The following sections provide the rationale for this determination.

7.2 PROJECT EFFECTS

Project activities that could affect visitor experience involve mainly the disposal of waste associated with guided hiking and backpacking tours. The presence of litter and waste can affect other users' experience within a national park by creating visual pollution and a negative perception regarding human presence in remote areas. In addition, the presence of groups and their associated activities could affect the perception of wilderness that other users may expect. The proponent has also indicated that two dogs may be brought along on each trip. Dogs have the potential to be a nuisance to other users if not under control.

The proposed project includes hiking and backpacking on two routes: the Donjek Route and the Ä'ay Chù West and Observation Mountain Route, both of which are popular routes with wilderness enthusiasts. Due to the number of likely users along these routes, the potential effects of solid waste disposal and other activities could have significant adverse effects on visitor experience.

Commitments

The following are key commitments and mitigations the proponent has indicated in the project proposal that have been considered in the effects assessment when determining the significance of the effects of the project on visitor experience.

- Packing out of all wastes (with the exclusion of wastes caused by bodily functions);
- Dogs brought into the Park will be done in strict compliance with the Canada National Parks Act domestic dog regulations. This includes keeping the dogs under physical control at all times and ensuring they do not interfere with fauna, flora, natural or cultural resources, or other park users;

Haines Junction Designated Office Evaluation Report

Amaruk Wilderness Corp. – Kluane National Park & Reserve – Number: 2011-0038

- Consult with First Nations to ensure proposed schedule does not interfere with their enjoyment or use of KNPR including avoiding trips in the Donjek area during hunting season, avoiding camping and travelling through archeologically significant sites or sacred sites;
- We would be open to work with First Nation in regards to cultural interpretation in order to deliver proper information to clients; and
- Consult with KNPR to ensure proposed schedule does not unduly or unreasonably conflict with that of other operators.

Non-discretionary legislation

I have considered the requirements of:

- 1) The National Parks General Regulations (Preservation of Property, Use of Water Resources, Watercraft and Aquatic Sports, Prevention of Nuisance, Prohibited Conduct);
and
- 2) The National Parks of Canada Businesses Regulations (including permit terms and conditions);

and am satisfied that compliance with the regulations and proposed commitments will satisfactorily eliminate, reduce, or control the potential significant adverse effects of the project on visitor experience.

MITIGATION:

No additional mitigation is required.

Cumulative Effects

Activities within Kluane National Park and Reserve that could affect visitor experience include: commercial, recreational, and traditional users of Kluane National Park and Reserve.

The residual effects of these activities are the incidental, accidental, or deliberate deposit of litter/waste into the environment, and conflict with other users' enjoyment of the land.

It is anticipated that this proposed project will not result in residual effects on visitor experience upon compliance with non-discretionary legislation and successful implementation of the proposed commitments identified above. I have determined that the project, in combination with the effects of existing activities, will not result in significant adverse cumulative (environmental or socio-economic) effects.

8.0 HERITAGE RESOURCES

8.1 OVERVIEW

The proposed project is located in areas of known archaeological potential where traditional activities still occur. The project areas demonstrate characteristics of terrain and location that have been correlated with historic land use by aboriginal peoples for hundreds or thousands of years, invariably resulting in the presence of heritage resources. The land has also been used and/or travelled upon in the recent past by First Nations people, trappers, explorers, geologists, miners, hunters, and outfitters.

Potential effects considered include:

- Incidental/accidental destruction, removal or disturbance of heritage resources.

The Designated Office has determined that the proposed project will result in significant adverse effects to heritage resources that can be mitigated through compliance with non-discretionary legislation. The following sections provide the rationale for this determination.

8.2 PROJECT EFFECTS

Project activities that could affect heritage resources include group guided hiking and backpacking, camping, and the possible use of shorelines and associated activities. Heritage resources include artifacts related to human activities. A portion of the value of these resources rests within their context upon the landscape in which they are located, in essence, when they are in situ. Once disturbed or removed the value cannot be restored.

As a result of recent glaciations and the relatively short time humans have been present in the proposed project area, heritage resources would be predicted to be on or near the surface of the ground. The Designated Office has determined that because of the proximity of the proposed project to areas with a high likelihood to contain heritage resources, the potential effects are significant and adverse.

Commitments

The following are key commitments and mitigations the proponent has indicated in the project proposal that have been considered in the effects assessment when determining the significance of the effects of the project on visitor experience.

- Avoidance of sensitive areas whenever possible; and
- Coaching of guests to insure no artifact is disturbed and/or removed from the land.

Non-discretionary legislation

I have considered the requirements of:

- 1) The National Parks General Regulations (Preservation of property);

Haines Junction Designated Office Evaluation Report

Amaruk Wilderness Corp. – Kluane National Park & Reserve – Number: 2011-0038

- 2) Terms and conditions of the Parks Business Licence;
- 3) Champagne and Aishihik First Nations Final Agreement, Chapter 13 Heritage; and
- 4) Kluane First Nation Final Agreement, Chapter 13, Heritage

and am satisfied that compliance with the regulations and Final Agreements will satisfactorily eliminate, reduce, or control the potential significant adverse effects of the project on heritage resources and traditional activities.

MITIGATION:

No additional mitigation is required.

Cumulative Effects

Activities within Kluane National Park and Reserve that could affect heritage resources include: commercial, recreational, and traditional users of Kluane National Park and Reserve.

The residual effects of each of these activities include: the incidental/accidental discovery of artifacts and/or the accidental/deliberate removal of artifacts from their *in situ* context.

It is anticipated that this proposed project will not result in residual effects on heritage resources upon compliance with legislation and successful implementation of the proposed commitments identified above.

It is anticipated that this proposed project will not result in residual effects on visitor experience upon compliance with non-discretionary legislation and successful implementation of the proposed commitments identified above. I have determined that the project, in combination with the effects of existing activities, will not result in significant adverse cumulative (environmental or socio-economic) effects.

9.0 CONCLUSION OF THE ASSESSMENT

The Designated Office has determined that the proposed project could result in significant adverse effects on fish and wildlife; human and environmental health; visitor experience; and heritage resources. However, compliance with non-discretionary legislation and implementation of the commitments and mitigations proposed by the proponent, will adequately eliminate, reduce, or control these effects so that they are no longer significant and adverse.

In conclusion, the Designated Office has recommended to the decision bodies that the project be allowed to proceed, as the project will not have significant adverse environmental or socio-economic effects in or outside Yukon.

Appendix A LIST OF KEY MITIGATIONS THE PROPONENT HAS COMMITTED TO UNDERTAKE

The following is a compilation of the key mitigations proposed by the proponent and noted in this report and/or the project proposal:

Related to Fish and Wildlife:

- Packing out of all wastes (with the exclusion of wastes caused by bodily functions)
- Grey water will be disposed of as follows:
 - Organic material strained from grey water and packed out; grey water disposed of in rocky/scree area preferably;
 - At least 100 m from any body of water; and
 - At least 100 m from route/trail/campsite.
- Human waste will be disposed of as follows:
 - Small hole dug in soil or under small rocks;
 - At least 100 m from any body of water;
 - At least 100 m from route/trail/campsite;
 - Toilet paper, if applicable, will be either packed out, or burnt on site and on top of waste; and
 - Waste covered by previously disturbed soil, or previously removed rocks.
- Toiletries are required to be unscented and will be stored in bear proof containers and kept at least 100 m away from tents and sleeping bags
- Use of bear proof containers and low odor foods (e.g. dehydrated/freeze-dried foods)
- Extensively brief clients in respect to bear conflict avoidance
- Dogs brought into the Park will be done in strict compliance with the Canada National Parks Act domestic dog regulations. This includes keeping the dogs under physical control at all times and ensuring they do not interfere with fauna, flora, natural or cultural resources, or other park users. (This also applies to Environmental Health and to Visitor Experience).
- Follow specific guidelines as it relates to wildlife interaction and possible conflicts with photography

Haines Junction Designated Office Evaluation Report

Amaruk Wilderness Corp. – Kluane National Park & Reserve – Number: 2011-0038

Related to Human and Environmental Health:

- Water treatment through filtration
- Use of stove instead of campfires to reduce risk of wildfire
- Expeditions are entirely non-smoking to reduce risk of wildfire
- Avoidance of sensitive areas
- Small groups and low frequency expeditions
- Small footprint individual tents
- Previously used routes will be used whenever available to minimize environmental impact.
- Campsites will be selected to ensure “no trace of human presence or environmental damage whatsoever upon vacation.” This includes:
 - Area at least 100 meters from body of water;
 - Area that is level to avoid soil destabilization;
 - Area that is rocky rather than vegetated in order to avoid vegetation damage;
 - Area away from wildlife corridors or away from areas with signs of wildlife use;
 - Area not identified as culturally significant by First Nations;
 - Area not viewed as culturally significant by Guides; and
 - Area not previously used by party in order to avoid damage and allow regeneration

Related to Visitor Experience:

- Consult with First Nations to ensure proposed schedule does not interfere with their enjoyment or use of KNPR including avoiding trips in the Donjek area during hunting season, avoiding camping and travelling through archeologically significant sites or sacred sites
- We would be open to work with First Nation in regards to cultural interpretation in order to deliver proper information to clients.
- Consult with KNPR to ensure proposed schedule does not unduly or unreasonably conflict with that of other operators

Related to Heritage Resources:

- Avoidance of sensitive areas whenever possible
- Coaching of guests to insure no artifact is disturbed and/or removed from the land

These mitigations are important because they help to mitigate significant adverse effects of the project. I have confidence that the proponent will implement these mitigations and I expect that the decision body and regulators will ensure that these activities are undertaken as proposed.

Appendix B LIST OF RELEVANT NON-DISCRETIONARY LEGISLATION APPLICABLE TO THE PROJECT

The following is a notation of the key legislation and associated sections that I believe are relevant to this project. These provisions help to ensure that significant adverse effects do not occur. Note that this list is not intended to be a comprehensive list of all the relevant legislation that applies to this project. Rather it is a reflection of the legislation that was discussed in this report. I have confidence that the proponent will adhere to this legislation, and I expect that the decision body and regulators will enforce the legislation.

Legislation	Key Provisions (by part or section number)
<i>Canada National Parks Act</i>	<u>National Parks of Canada Businesses Regulations;</u> <u>National Parks of Canada Camping Regulations;</u> <u>National Parks of Canada Domestic Animals Regulations;</u> <u>National Parks of Canada Fire Protection Regulations;</u> <u>National Parks of Canada Fishing Regulations;</u> <u>National Parks of Canada General Regulations;</u> <u>National Parks of Canada Wildlife Regulations.</u>
Champagne and Aishihik First Nations Final Agreement	Chapter 13, Heritage
Kluane First Nation Final Agreement	Chapter 13, Heritage
<i>Species at Risk Act</i>	

Appendix C REFERENCES

Kluane National Park and Reserve
www.pc.gc.ca/pn-np/yt/kluane/index_e.asp

2004 Yukon Visitor Exit Survey, Kluane Region
[http://www.tc.gov.yk.ca/pdf/Kluane_VES2004_Apr14\(1\).pdf](http://www.tc.gov.yk.ca/pdf/Kluane_VES2004_Apr14(1).pdf)

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