

Skeena Region

MANAGEMENT DIRECTION STATEMENT

March 2003



for Tuya Mountains
Provincial Park



**BRITISH
COLUMBIA**

Ministry of Water, Land
and Air Protection
Environmental Stewardshi
Division

Tuya Mountains Provincial Park Approvals Page

Forward

This management direction statement for Tuya Mountains Park provides management direction until it is revised. Ongoing consultation between Environmental Stewardship Division and First Nations may result in revisions as required. Aboriginal rights are honoured and respected within the park.

Implementation of strategies identified in the management direction statement will be dependent on available funding and Environmental Stewardship Division priorities.

Approvals



Regional Manager
Skeena Region
Environmental Stewardship Division



Assistant Deputy Minister
Environmental Stewardship Division

**This management direction statement was developed through direction received from the
Cassiar Iskut-Stikine Land and Resource Management Plan.**

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Tuya Mountains Provincial Park Management Direction Statement

Introduction

Purpose of the Management Direction Statement

Management direction statements (MDS) provide strategic management direction for protected areas that do not have an approved management plan. Management direction statements also describe protected area values, management issues and concerns; a management strategy focused on immediate priority objectives and strategies; and, direction from other planning processes. While strategies may be identified in the MDS, the completion of all these strategies is dependent on available funding and funding procedures. In addition, all development associated with these strategies within the protected area is subject to the Parks and Protected Areas Branch's Impact Assessment Policy.

Context

The Provincial Government established Tuya Mountains as a Class A park by Order in Council under the *Park Act* on January 25, 2001. Tuya Mountains has been identified as a Goal 2 Special Feature protected area in recognition of its rare tuya landforms and associated fragile alpine ecosystems. The Cassiar Iskut-Stikine Land and Resource Management Plan recommended to the provincial government the designation of Tuya Mountains as a new protected area.

Tuya Mountains Provincial Park covers about 18,000 hectares of the Tuya River headwaters in northern British Columbia, about 90 kilometres south of the Yukon border and 75 kilometres northwest of Dease Lake. This remote park cannot be reached by road. The park lies within asserted traditional territories of the Tahltan First Nation, the Kaska Dene First Nation and the Teslin Tlingit First Nation.

Tuya Mountains Provincial Park includes an internationally significant example of the rare tuya landform (e.g., Tuya Butte). Tuyas, which resemble flat-topped cinder cones, are created through volcanic eruptions underneath a glacier. The park contains two moderately large lakes, Butte Lake and High Tuya Lake, and borders Tuya Lake in the south and Ash Mountain (another tuya) in the north. The park's alpine tundra provides habitat for caribou, wolf and grizzly bears.

Boya Lake Provincial Park provides camping opportunities about 100 kilometres away on Highway 37. A concentration of large protected areas lies 100 kilometres to the south and includes Spatsizi Plateau Wilderness Park, Gladys Lake Ecological Reserve, Mount Edziza Provincial Park, Stikine River Provincial Park and Tatlatui Provincial Park. These protected areas conserve entire ecosystems and the parks offer a variety of backcountry outdoor recreation opportunities.

Provincial Park Attributes

Conservation

- One of three parks located in the Stikine Plateau Ecoregion; this ecoregion is moderately represented (8.04%) in the protected areas system; Tuya Mountains contributes 3.3% of the overall representation of this ecoregion
- Contributes to the representation of the SWB (spruce-willow-birch) and AT (alpine tundra) biogeoclimatic zones
- Protects Tuya Butte, an internationally significant volcanic subglacial landform.
- Protects a representative lake ecosystem at Butte Lake that contains a significant arctic grayling population.
- Conserves vulnerable plant communities including fragile tundra vegetation, of provincial significance.
- Protects extremely high quality caribou and grizzly bear habitat.

Recreation and Tourism

- Presents outstanding backcountry recreation opportunities in a spectacular volcanic alpine tundra setting.
- Protects a remote wilderness environment.

Commercial Business Opportunities

- The Cassiar Iskut-Stikine LRMP directed that the managing agency (i.e. Environmental Stewardship Division) maintain opportunities for commercial facilities like lodges and cabins, compatible with the high ecological values in the surrounding area.
- A guide-outfitter operates in the park.
- While hunting and fishing are now key outdoor recreation opportunities, potential exists for non-consumptive commercial business based on the superb volcanic landform features, the open alpine tundra terrain catering to summer hiking and winter ski touring and the outstanding wildlife viewing opportunities.
- This park contains fragile environments. Commercial enterprises considering any business opportunities should look at alternative and innovative approaches. For example, non-permanent structures such as yurts and the ubiquitous tent frame instead of permanent log or frame structures.

Cultural Heritage

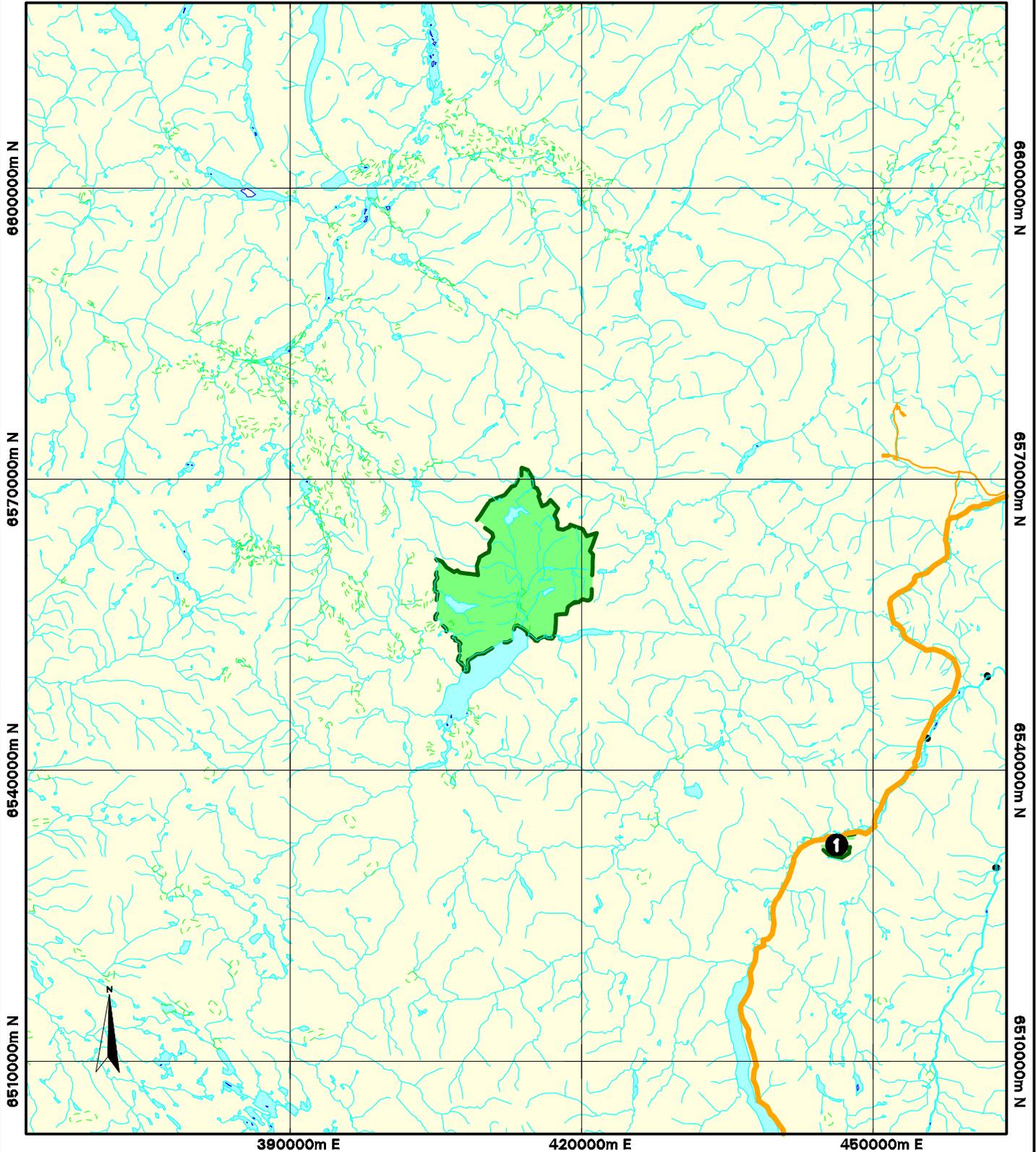
- Cultural heritage values remain undocumented at this time. Environmental Stewardship Division is seeking Tahltan, Kaska Dene and Teslin Tlingit First Nations' contributions to resolve this lack of knowledge.

Significance in the Protected Areas System

- Protects an internationally significant tuya (subglacial volcano) landform, one of the rarest volcanic landforms in the world. Tuya Butte is regarded as among the best examples of this landform outside Iceland and Antarctica. Six other tuyas lie in the general vicinity of Tuya Butte in the Stikine Volcanic Belt. Other examples contained in protected areas include Wells Gray Provincial Park and Garibaldi Provincial Park.

Figure 1: Context

Tuya Mountains Park



Projection: UTM Zone 9
Datum: NAD83

This is a visual representation only and should not be used for legal purposes.

Produced in Jan 2003
for Ministry of Water,
Land and Air Protection

Subject Area (Green shaded area)

Other Protected Areas (Green dashed outline)

Highway (Thick orange line)

Road (Thin orange line)

Other Provincial Protected Areas

1 Chickens Neck Mountain - (ER)

0 10
km

The inset map shows a larger geographic area with a dashed box indicating the location of the Subject Area. A red square on the inset map marks the Subject Area's location.

- Protects the headwaters of Tuya River including lakes, alpine tundra and a wildlife movement corridor.
- Provides outstanding wilderness backcountry recreation opportunities.
- Conserves a benchmark example of tuya landforms that provide outstanding geomorphologic and glaciological scientific research opportunities.

Land Uses, Tenures and Interests

Access

Tuya Mountains Provincial Park is relatively remote. Highway 37 runs 50 kilometres to the east. Direct water access to the park is not possible. Foot access requires a journey of several days. Floatplane and helicopter travel from Dease Lake is the usual means of access to the park.

Existing Tenures, Alienations and Encumbrances

- Lies within guide-outfitter territory 624G002 for hunting and angling. The guide-outfitter has a cabin on Tuya Lake inside the park and a grazing permit for horses within the park. The guide-outfitter operation is authorized under park use permit SK0210400.
- Contained within trapping licences 624T003, 624T016, 624T002, 624T001. None of these trapline operations have a park use permit to operate in the park.

Existing Land Use Activities and Facilities

- Contains a cluster of buildings used seasonally by the guide-outfitter between Tuya Butte and Tuya Lake. The guide-outfitter serves about 15 hunting clients and approximately 30 angling clients a year between June 15 and October 10.
- Grazing by guide-outfitter horses occurs for about a week in the park. The guide-outfitter uses horses to transport clients to Butte Lake and High Tuya Lake.
- Snowmobile users traverse the park but only in limited numbers.

Adjacent Patterns of Land Use

- The south portion of the park is located within the Tuya Resource Management Zone defined by the Cassiar Iskut-Stikine LRMP. The LRMP provided the following direction: a) maintain the functional integrity of the caribou crossing at the outlet to Tuya Lake; b) maintain water quality and fish habitat in Tuya Lake; and c) continue to enhance salmon in Tuya Lake.
- The north part of the park is situated within a portion of Bulkley-Cassiar Forest District lacking an LRMP.

First Nations Interests

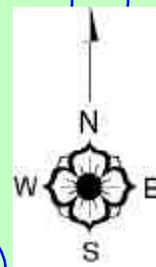
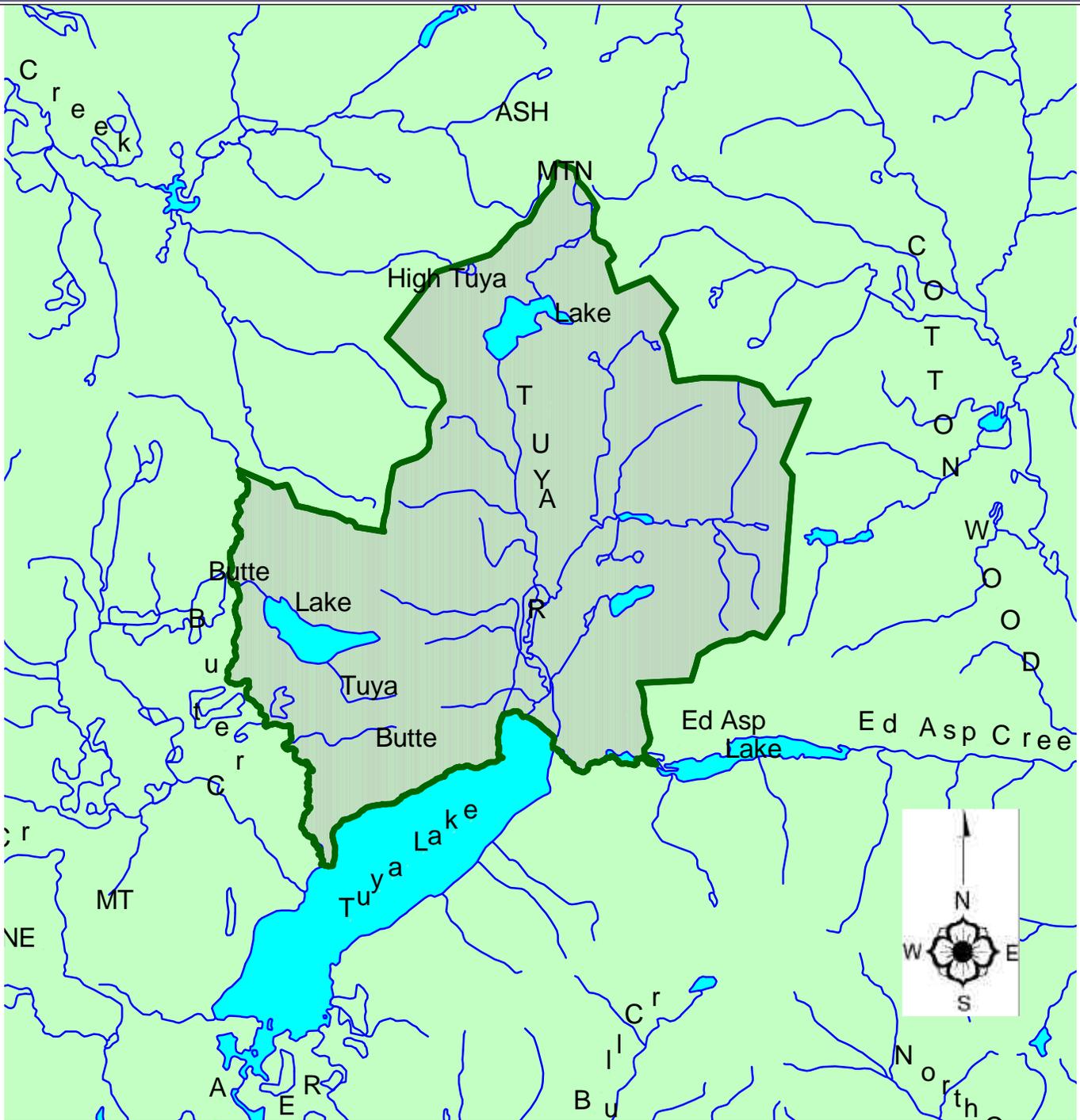
- The Tahltan, Kaska Dene and Teslin Tlingit First Nations identified Tuya Mountains Provincial Park as part of their traditional territory.
- The Tahltan, Kaska Dene and Teslin Tlingit First Nations have an interest in maintaining their aboriginal traditional uses and activities in the park.

Other Agency Interests

- Ministry of Water, Land and Air Protection, Skeena Region Fish and Wildlife Science and Allocation Section has an interest in the wildlife populations living in and travelling through the park, including caribou, grizzly bear and wolf.



Tuya Mountains Provincial Park



Legend			
	BC Parks Protected Area		
	River/Stream - Right Bank		Transposition Routes
	Lake - Definite		Air Field
	freshWater		Road - Rough
	glaciersAndSnow		Cut Earthwork
	River/Stream - Definite		Highway 37N
	River/Stream - Left Bank		
	Marsh		
	Glacier		
	Ice Field - Permanent Snow & Ice		
	Island - Definite		
	Sand/Gravel Bar		



1:174410

- Department of Fisheries and Oceans enhances sockeye salmon populations in Tuya Lake. The Department introduces fry into lake and conducts a terminal fishery below a barrier to movement. The first transplant was in 1991 with the first fishery occurring in 1995. No evidence exists to confirm that Tuya Lake supported a sockeye run in the past.

Private and Public Stakeholder Interests

- Naturalists, geologists, geographers and ecologists have an interest in the park because of the special rare volcanic landforms, fragile tundra environments and wildlife habitats and populations.
- Backcountry recreationists have an interest in the park because of its intact wilderness attributes.
- Hunters and anglers have an interest in the park because of the park's wildlife hunting and salmon and sport fish angling opportunities.
- Guide-outfitter has an interest in the park related to operating a successful hunting and sport fishing enterprise. Tuya Lake Provincial Park provides opportunities and infrastructure for this operation.
- Trapline holders are interested in the park for its fur-bearing wildlife.

Role of Tuya Mountains Provincial Park

The primary role of Tuya Mountains Provincial Park is to conserve an internationally significant, rare volcanic subglacial landform, a tuya, in a spectacular alpine tundra mountain landscape. The park protects vulnerable plant communities including fragile tundra vegetation, of provincial significance. In addition, the park protects extremely high quality caribou and grizzly bear habitat as well as important arctic grayling population in Butte Lake.

Tuya Mountains Provincial Park performs a secondary destination outdoor recreation role. The park presents outstanding backcountry recreation opportunities in a spectacular volcanic alpine tundra setting. In addition, the park offers excellent hunting and fishing recreation opportunities and has the potential for high quality non-consumptive commercial business based on the superb volcanic landform features, the open alpine tundra terrain catering to summer hiking and winter ski touring and the outstanding wildlife viewing opportunities.

Tuya Mountains Provincial Park also fulfills a tertiary role where the park conserves a benchmark example of tuya landforms that provide outstanding geomorphologic and glaciological scientific research opportunities.

Management Commitments and Issues

Direction from Previous Planning

The Cassiar Iskut-Stikine LRMP recommended Tuya Mountains as a new protected area in 2000. The LRMP gave the following management direction for the protected area:

- Allow hunting;
- Maintain opportunities for commercial facilities like lodges and cabins, compatible with the high ecological values in the area.

Management Issues

The following management issues require attention:

Theme	Issue
Protecting ecological values	<ul style="list-style-type: none"> The provincial park's volcanic and natural features remain relatively unknown because an accurate inventory is incomplete. Fragile ecosystems may be damaged because of increased visitors to the park. Fish species, such as arctic grayling, may be at risk in Butte Lake because of over-fishing. Vulnerable alpine tundra vegetation could be damaged by unmanaged horse use through trampling and the introduction of non-native plant species. Wildlife, especially caribou and wolf, may be at risk because of increased snowmobile use in the park. Wildlife populations may be frightened and disturbed by floatplane landings on Tuya Lake and helicopter landings in the park. The trapline owners may be operating in the park without a valid park use permit.
Protecting recreational values	<ul style="list-style-type: none"> Hiking trails may be damaged because of increased horse use.
Protecting cultural values	<ul style="list-style-type: none"> Cultural heritage values may be at risk because the presence and significance of these values remain undocumented.

Management Direction

The vision for Tuya Mountains Provincial Park includes sustaining the ecological integrity of the tuyas, tundra ecosystems, and lakes, and maintaining low-impact recreation use and appreciation by small numbers of visitors.

Priority Management Objectives and Strategies

The following table describes management strategies to deal with the identified issues. In addition, Appendix 1 contains a list of acceptable activities, uses and facilities for this park.

Objectives	Strategies
To conserve and sustain the park's ecological integrity.	<ul style="list-style-type: none"> Undertake a flora and fauna assessment program focused on the following priorities: <ul style="list-style-type: none"> Caribou population - trends in their population recruitment; summer and winter habitat ranges; the park's importance to the caribou. Butte Lake arctic grayling fish populations – cooperate with the Ministry of Water, Land and Air Protection, Skeena Region Fish and Wildlife Science and Allocation Section to develop a management and monitoring program for these fish that may be at risk to over-fishing. Limit helicopter landings to designated sites within the park. Contact the trapline owners to place this resource use under a valid park use permit if they are operating in the park. Work with guide-outfitter to determine appropriate areas for horse use and to ensure that horse feed does not contain seeds that will grow in the park.
To protect the park's internationally significant volcanic features	<ul style="list-style-type: none"> Undertake a research program sponsored by Environmental Stewardship Division where a University (e.g. University of Northern British Columbia) or college will formally document and collect data on the volcanic features of Tuya Mountains Provincial Park.

Objectives	Strategies
To protect the park's outdoor recreation features and opportunities.	<ul style="list-style-type: none"> • Monitor aircraft access to Tuya Mountains Provincial Park during high use season, with special attention to hunting recreation activities. • Assess and manage as appropriate snowmobile use in Tuya Mountains Provincial Park. This assessment should focus on: <ul style="list-style-type: none"> ➢ Origin of snowmobile users and purpose of their trips; ➢ Location of snowmobile routes to the park and where they go while in the park; ➢ Damage to the park's environment and impacts on the park's fauna caused by snowmobile use; and ➢ A logical management program based on the assessment and consultation with snowmobile users that adequately protects park values while meeting the needs of the snowmobile community. • Prohibit summer off-road motorised use of Tuya Mountains Provincial Park. • Continue to allow by permit access to the park by horses but monitor horse use and any ecological damage. Implement restrictions if necessary. Provide information on low impact horse riding practices to visitors.
To encourage compatible commercial business opportunities	<ul style="list-style-type: none"> • Maintain opportunities for commercial facilities (e.g. lodges, cabins, yurts, tent frames) but emphasize non-permanent structures that are compatible with the high ecological values of the park. • Follow the Parks and Protected Areas Branch's Impact Assessment Policy procedures to determine compatible uses. • Consider proposals for compatible commercial development. Negotiate with the guide-outfitter to develop a high quality recreational experience for the park that emphasizes non-consumptive wildlife viewing, nature interpretation and wilderness appreciation.
To preserve and sustain the park's cultural heritage values.	<ul style="list-style-type: none"> • Investigate and collate existing information on the park's cultural heritage values with Tahltan, Kaska Dene and Teslin Tlingit First Nations. • Meet with the Tahltan, Kaska Dene and Teslin Tlingit First Nations to discuss issues.
To inform the public about the park and its special environments.	<ul style="list-style-type: none"> • Evaluate the need to develop a brochure listing the park's conservation values, appropriate park visitor behaviour to minimise impacts and safety issues. • Update the Ministry of Water, Land and Air Protection official web site to provide accurate and current information about Tuya Mountains Provincial Park.

Consultation and Future Planning

The main challenge for managing Tuya Mountains Provincial Park will be ensuring that recreation activities are compatible with the park's high quality and fragile ecological values. Environmental Stewardship Division will continue to consult with the Tahltan First Nation through the Tahltan – Environmental Stewardship Division Protected Areas Committee, and will establish a model for consultation with the Kaska Dene and Teslin Tlingit First Nations. Environmental Stewardship Division will meet with local stakeholders and resource users to discuss arising issues. In particular, Environmental Stewardship Division will initiate consultation before accepting proposals for commercial development in the park.

Zoning Plan

This management direction statement applies two management planning zones to Tuya Mountains Provincial Park which entail the following:

Wilderness Recreation Zone

Objective: To protect a remote, undisturbed natural landscape and to provide backcountry recreation opportunities dependent on a pristine environment where air access may be permitted to designated sites

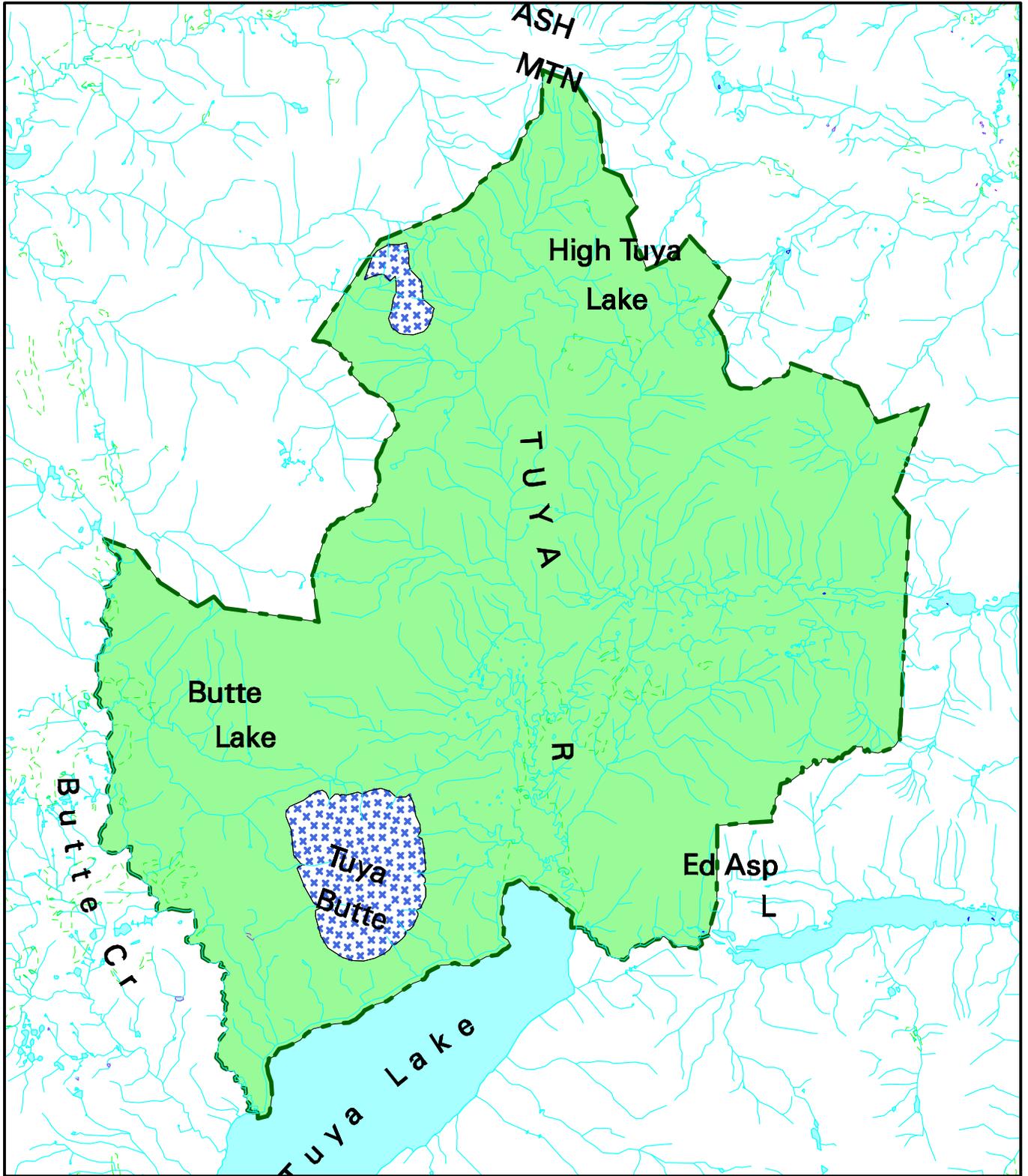
Zone Description: covers 17,138 hectares of the park. This zone covers all of Tuya Mountains Provincial Park not contained within the Special Feature Zone.

Special Feature Zone

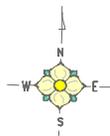
Objective: To protect and present significant natural or cultural resources, features or processes because of their special character, fragility and heritage values.

Zone Description: Covers 862 hectares of the park. This zone is focused on Tuya Butte, a spectacular subglacial landform feature.

Figure 3: Zoning



Projection: UTM Zone 9
Datum: NAD83



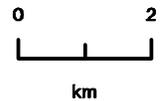
Special Feature



Wilderness Recreation



Protected Area Boundary



**Appendix 1. Tuya Mountains Provincial Park
Table of Acceptable Activities, Uses and Facilities**

Activity/Use/Facility	Acceptability
Aboriginal traditions uses and activities	Y
Hunting	Y
Fishing	Y
Trapping	Y
Grazing (domestic livestock)	N2
Recreational gold panning/rock hounding	N
Utility corridors	N
Communication sites	N
Horse use/pack animals	M
Guide outfitting (hunting)	Y
Guide outfitting (fishing)	Y
Guide outfitting (nature tours)	Y
Guide outfitting (river rafting)	N
Cat-assisted skiing	N
Ski hills	N
Commercial recreation (facility-based)	M
Commercial recreation (non-facility-based)	M
Backcountry huts	N
Water control structures	N
Fish stocking and enhancement	N
Road access	N
Off-road access (snowmobiling)	N
Off-road access (motorised)	N
Off-road access (mechanical activities)	N
Motorised water access	N
Aircraft access (helicopter access to designated sites only)	Y
Fire management (suppression)	N
Fire management (prescribed fire management)	N
Fire management (prevention)	N
Forest insect/disease control	N1
Noxious weed control	N1
Exotic insect/disease control	N1
Commercial filming	M
Scientific research (specimen collection)	M
Scientific research (manipulative activities)	M

Y = allowed subject to conditions identified in the management direction statement or management plan

M = may be permitted if compatible with protected area objectives

N = not allowed

N1 = allowed for expressed management purposes only

N2 = present and allowed to continue, but not normally allowed