

**Adventure Tourism Tenure Application**

**30 year Licence of Occupation**

**Non-Mechanized (snow free)**

**Location: Monashee Mountains near Revelstoke**

**Submitted by Goldrange Alpine**

**goldrangealpine@gmail.com**

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# **Goldrange Alpine Adventure Tourism Tenure Application**

## **General Overview of Business**

Goldrange Alpine is submitting an application for a 30 year License of Occupation for a 210 sq km non-exclusive extensive use area in the Monashee Mountains near Revelstoke. The License of Occupation is for a hiking, mountaineering and mountain biking operation in accordance with the Commercial Recreation Adventure Tourism Policy. Goldrange Alpine is submitting a separate application for three 30 year Leases for three proposed intensive use hut sites described in this application. Improvements to the area applied for will include 3 remote backcountry huts and summer access trails.

Access to the huts will be via access trails established from existing FSR roads in the Pingston River valley and the Columbia valley. Seasonal supplies will be transported to the huts via helicopter from a staging area also in the Pingston River valley.

Summer operations will consist of non-mechanized hut based mountaineering, hiking, and mountain biking. The establishment of three high mountain huts will enable Goldrange Alpine the ability to offer high-level hut-to-hut trips as well as trips based out of a single hut. The proposed locations of the huts near the crest of the Monashee Mountains will offer a unique high mountain experience to guests. The proposed huts are surrounded by glaciated peaks and high alpine lakes providing world-class alpine scenery. Hiking and Mountain biking trips into the proposed huts will include a guide certified in the specific activity, all meals, and accommodation. Mountaineering trips to the Goldrange Huts will include an ACMG Mountain Guide, all meals, and accommodation.

The proponent is an ACMG/IFMGA Mountain Guide with 10 years experience guiding mountaineering, hiking and other backcountry adventures.

## **Section A Maps**

See Appendix A at the back of this submission.

## **Management Plan**

### **1.0 General Description of Project**

Goldrange Alpine (Goldrange) will offer guided non mechanized backcountry recreation based out of a series of three high mountain huts. Goldrange will offer guided backcountry mountain biking, hiking, and mountaineering. Each hut will hold a total of 12 people including staff. The huts will be simple mountain huts with sleeping areas, a kitchen, an eating area, a drying room, and living space. The huts will be located at or above treeline to provide a high mountain experience to guests. All meals will be provided by GRH.

#### **1.01 Summer Operations**

The summer season will operate from June 1- November 1. Summer activities will include guided mountaineering, hiking, and mountain biking.

Mountaineering will take place on the numerous peaks in the proposed extensive use area. Peaks that will be utilized include: Mt Odin, Kelly peak, Cranberry Peak, Blanket Peak, Mt Gunnarsen, Saturday peak, Laag Mountain, Mount Niflhiem, Horsely Peak, Gates Peak, Hughes Peak, and Armstrong Peak. The high concentration of accessible peaks will allow trips to be tailored for all mountaineering ability levels and the ability to operate trips in unfavorable weather conditions.

Guided hiking trips will explore the high alpine meadows and lakes found throughout the proposed tenure. Areas that will be utilized include: Icebound lake area, high alpine lakes south of Gates peak, Dickinson Lake, meadows and lakes

north of Gates peak, meadows and lakes at the headwaters of Cranberry creek, and numerous sub alpine ridges and smaller peaks in the proposed extensive use area.

Guided Mountain Biking will take place on the proposed trail network accessing the Gates Hut and Cranberry Hut (see below). A second access trail linking the Gates and Cranberry huts is proposed to be established on the west side of the Monashees (See Below). The proposed access trails will provide a unique riding experience encompassing valley bottom to high alpine terrain. Riders will stay at the huts in a 3 day hut to hut trip. Hut to hut backcountry mountain biking is rare in North America, currently mountain bike riders travel to Europe to find this type of experience.

The Goldrange huts are proposed to meet the growing demand for non-mechanized backcountry recreation in BC. Hut based mountaineering and hiking trips are increasingly popular with local and international visitors. The proposed extensive use area includes world class alpine scenery in a remote uncrowded area of the Monashee Mountains. Similarly mountain biking has exploded in popularity in recent years. Mountain bike tourists are seeking remote uncrowded trails in mountainous and alpine terrain. As mountain biking has gained mainstream acceptance the market for destination mountain biking has grown rapidly. With Revelstoke fast becoming a top destination for mountain biking Goldrange will be able to capitalize on its proximity to this well known recreational destination. Goldrange offers an exceptional destination for mountaineering, hiking, and mountain biking in a remote corner of the Monashee Mountains.

Preliminary investigative work has included site visits to assess the areas mountain biking, hiking, and mountaineering potential. Background research includes: determination of adjacent commercial tenure boundaries, forest tenure holders in area, determination of useable Forest Service roads (FSR) near

proposed tenure, identification of section 16 caribou areas, identification of wildlife in area, locating proposed hut sites, and identifying water sources for huts.

### **Adjacent Commercial Recreation Tenures.**

There are five commercial recreation tenures adjacent or overlapping the proposed extensive use area:

- Sol Mountain Lodge operates a winter ski touring and summer hiking lodge 13km south of the proposed extensive use area.
- Blanket Glacier Chalet operates a winter ski touring lodge 12km north of the proposed extensive use area. Blanket glacier only operates during the winter ski season.
- Canadian Mountain Holidays Revelstoke and K2 Heli ski tenures overlap the proposed extensive use area along the main range of the Monashees. CMH does not offer or operate a summer program in these tenures.
- Eagle Pass Heliskiing has a winter ski tenure in the area of the proposed extensive use area. Eagle Pass Heli does not offer or operate a summer program.

All of the above listed operators provide a different product than Goldrange will provide. Sol offers winter ski touring and summer hiking and biking located out of a single lodge. Blanket offers winter ski touring based out of a single location. The three heli-ski operators operate in the winter and provide a mechanized ski experience based out of Revelstoke or Nakusp. Currently only two other backcountry lodges offer hut to hut mountaineering in BC, there are no operators providing alpine hut to hut mountain biking.

## **1.1 Location**

### **1.11 General Area**

The proposed extensive use area is located along the crest of the Monashee Mountains 30km south of Revelstoke. The area includes glaciated alpine peaks, high alpine meadows and lakes, and sub alpine valleys. The area offers excellent alpine mountaineering on glaciated peaks and long alpine ridges, numerous smaller peaks, alpine lakes and expansive meadows allow for endless hiking opportunities. The sub alpine valleys leading to meadows and alpine scenery provide an incredible location for backcountry mountain biking.

The linear nature of the Monashee range lends itself ideally to a continuous hut to hut system. The terrain between the huts is stunning and varied enough to provide a world class experience for any visitor.

### **1.12 Extensive Use Area**

#### **Odin Zone**

The Odin zone is the most southern zone in the proposed extensive use area. The zone covers an area 62km<sup>2</sup>. The Odin zone includes the headwaters of Odin creek and Ledge creek. Icebound lake, Bearpaw lake and several smaller lakes are found in this zone. The zone includes the most dramatic mountains in the southern Monashees with Mt. Odin rising directly adjacent to the proposed hut location. Other mountains included in this zone are: Mt Thor, Kelly peak, Mt. Niflhiem, Frigg Tower, Saturday peak, Mt Gunnarson, Zeal pk, Caution pk and Humility pk. The area contains several glaciated areas including the north face of Saturday pk, the Frigg glacier, and the north face of Kelly pk. There are extensive sub alpine meadows in this zone. The Odin zone also includes the majority of the

Odin creek valley before its confluence with Pingston creek. The elevation range in this zone is 1140m in the valley bottom to 2960m on the summit of Mt Odin.

### **Gates Zone**

The Gates zone is the central zone in the proposed extensive use area. The zone covers an area of 61km<sup>2</sup>. The Gates zone includes the headwaters of Gates creek, Thor creek, Vanwyck creek, and Pingston creek. Pingston lake, Riley lake, Dickinson lake, and several other un-named sub alpine lakes are found in this zone. The notable feature of the mountains in this zone are the long interconnected ridgelines allowing moderate routes to the summits. The zone includes Gates pk, Mt Hughes, Horsefly pk, and numerous other unnamed alpine peaks. The proposed hut location provides uninterrupted views of the glaciated north face of Gates peak. There are large areas of sub alpine meadows surrounding the zones lakes. The elevation range in this zone is 1250m to 2750m.

### **Cranberry Zone**

The Cranberry zone is the northern most zone in the proposed extensive use area. The zone covers an area of 67km<sup>2</sup>. This Cranberry zone includes the headwaters of Lindmark creek and Cranberry creek along with several small unnamed alpine lakes. The Cranberry zone features large glaciated peaks connected by a scenic sub alpine pass. Mountains in this zone include Blanket pk, Cranberry pk, Armstrong pk, and several other unnamed peaks. Cranberry pk and Blanket pk feature the largest glaciated areas in the proposed extensive use area. The Cranberry zone includes a large sub alpine meadow area at the pass between Cranberry and Lindmark creeks. The elevation range in this zone is 1175m to 2800m.

## **Park Zone**

The park zone is located to the west of both the Odin and Gates zone. The Park zone is located in Monashee Provincial Park. The Park zone covers 18km<sup>2</sup>. This zone covers the alpine area from Gates peak to Mt. Gunnarson, and includes Laag Mt, Spam pk, and Horsefly pk. The elevation range in this zone is 1600m-2750m.

## **Trail Zone**

The trail zone is located in the valley bottoms of Lindmark and Vanwyck creeks. The trail zone will encompass the proposed connector trail from the Gates Hut to the Cranberry Hut. The valley bottom trail will enable mountain bikers and hikers to traverse the Monashee range. The total area of the trail Zone is ~2km. The elevation range in this zone is 800-1300m.

### **1.13 Base Operation**

The head office will be located in Revelstoke.

### **1.14 Access**

Access to all three proposed huts will be by hiking or biking into them on trails established by Goldrange.

#### **Odin Hut Access**

Access to the Odin hut will be on a 12km trail. The trailhead is located at 50 35 13.62N 118 02 05.48W on a FSR branch road in the Pingston valley. The trail will follow the bottom of the Odin creek valley on the north side of Odin creek. Once at the head of the valley the trail will climb up into the alpine basin below

Saturday peak and traverse to the hut. The access trail will provide overwhelming scenery as views of the Odin and Thor groups tower over the trail.

See Appendix A for a map of the access trail.

### **Gates Hut Access**

Access to the Gates hut will be on a 10km trail. The trailhead is located on an FSR spur road at 50 37 43.55N 118 05 03.76W adjacent to Thor creek. The trail will climb up the north branch of Thor creek on the north side of the valley. The trail will pass by Riley lake and Dickinson lake on its way to the hut. As it reaches the head of the valley it will climb through talus fields to gain the basin below Gates peak. Once in the basin the trail will contour around the north side of Dickinson lake to the hut.

See Appendix A for a map of the access trail.

### **Cranberry Hut Access**

Access to the Cranberry hut will be on a 12km trail. The trailhead is located on an FSR at 50 47 40.84N 118 06 47.51W on a ridge between Blanket Creek and Cranberry Creek. The trail will climb from the trailhead at 1300m to the sub alpine ridgetop at 2100m. The trail will then traverse and descend the south side of Blanket Mountain to the headwaters of Cranberry creek. From the headwaters of Cranberry creek the trail will climb through sub alpine meadows to the hut at 1875m on the north side of Cranberry Pass.

See Appendix A for a map of the access trail.

## 1.2 Detailed Listing of Activities and Level of Use

Activity Period					Client Days				
Extensive Area Map Reference	Activity	Frequency of Use	Period of Use	Proposed Use Start Date	Year 1	Year 2	Year 3	Year 4	Year 5
Odin Zone	Hiking, Mountaineering	Daily	Jun 1 – Nov 1	Jun. 2020	50	150	300	450	600
Gates Zone	Mountain Biking, Hiking, Mountaineering	Daily	Jun 1 – Nov 1	Jun 2018	50	150	300	450	750
Cranberry Zone	Mountain Biking, Hiking, Mountaineering	Daily	Jun 1 – Nov 1	Jun 2019	50	150	300	450	750
Park Zone	Hiking, Mountaineering	Intermittent	Jun 1 – Nov 1	Jun 2018	25	50	100	150	150
Trail Zone	Mountain Biking, Hiking	Daily	Jun 1 – Nov 1	Aug 2019	50	150	300	450	750

## 1.3 Land Use in Proposed Extensive Use Area

### 1.31 Forestry

The area encompassed by this tenure application falls within the Cascadia TSA.

### **1.32 Mineral Claims**

There are several mineral claims in the proposed extensive use area:

David James Turner holds claim:

1037494

Lloyd John Addie holds claims:

1029695

1037427

1037422

1032978

1032972

1032980

1032974

1030120

1032976

1032975

1030121

1032977

1032979

1032973

1032981

1037583

1037582

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1038084

1038083  
1037538  
1037532  
1037531  
1037530  
1037445  
1037455  
1037433  
1037454  
1037441  
1037453  
1038252  
1037456  
1037457  
1037975  
1037976  
1037977  
1037424

Herb Moss Hyder holds claims:

1038244  
1038248

### **1.33 Provincial Park**

Monashee Provincial Park borders the proposed extensive use area on its south western edge. The proposed Park Zone encompasses 18 sq km of the Monashee park and is included in this application.

## **1.4 Infrastructure and Improvements**

There are several infrastructure and improvements proposed both in the extensive use area and on three intensive use sites.

### **1.41 Intensive Use Sites**

There will be three intensive use sites on Crown land; Odin Hut, Gates Hut, and Cranberry hut. A description of each site and there purpose is below. See table 1.41 below for frequency of use of each intensive use site. The Site Layout Plans can be found in Appendix A for each intensive use site.

#### **Gates Hut**

The proposed Gates hut will provide accommodation for 12 people. The hut will provide a base for mountaineering, hiking, and biking at the headwaters of Thor creek. The proposed hut site is at 1950m on a low angle ridge above Dickinson Lake (see location map). The hut site is .25ha. The hut site will include the hut, an outhouse, and grey water disposal pit.

The water source for the lodge will be an adjacent small stream. All sewage will be flown out in barrels. Greywater will be disposed of in a greywater pit.

Power for the hut will be supplied by a small solar system.

#### **Cranberry Hut**

The proposed Cranberry hut will accommodate 12 people. The Cranberry hut will be located at 1875m on the north side of Cranberry Pass at the headwaters of Cranberry creek (see location map). The hut site is .25ha. Cranberry hut will provide a base to access mountaineering, hiking, and biking in the sub alpine and alpine areas on and around Blanket peak and Cranberry peak. The hut site will include the hut, an outhouse, and a greywater disposal pit.

The water source for the hut is a small stream adjacent to the hut location. All sewage will be flown out in barrels. Greywater will be disposed of in the greywater pit.

Power for the hut will be supplied by a small solar system.

### **Odin Hut**

The proposed Odin Hut will accommodate 12 people. The Odin hut will be located at 2200m in a high basin below Saturday Peak (see location map). Odin hut will provide a base for mountaineering and hiking in the southern portion of the proposed tenure including Mt. Odin, Kelly peak, and Ice bound lake. The hut site will include the hut, an outhouse, and a greywater disposal pit.

The water source for the lodge is a small stream adjacent to the hut site. All sewage will be flown out in barrels. Greywater will be disposed of in the greywater pit.

Power for the hut will be supplied by a small solar system.

All three huts will have the same layout. The main floor will have 3 bedrooms holding 4 people per room, a small drying room, an entrance/mud/storage room, a basic kitchen area, an eating area with tables for 12, and a small living area. Cooking and heating will done with propane flown in via helicopter.

Site Layout Map	Intended Use	Frequency of Use	Period of Use	Desired Exclusivity	Proposed Improvements	Environmentally Sensitive Area
1 Gates Hut	Lodge	7 Days/Week	June 1-Nov 1	Fully Exclusive	Hut, Outhouse, Greywater pit	None identified
2 Cranberry Hut	Lodge	7 Days/Week	June 1-Nov 1	Fully Exclusive	Hut, Outhouse, Greywater pit	None identified
2 Odin Hut	Lodge	7 Days/Week	June 1-Nov 1	Fully Exclusive	Hut, Outhouse, Greywater pit	None identified

**1.42 Extensive Use Area**

Improvements to the extensive use area are limited to trails accessing the 3 huts. A trail to Odin hut will be constructed from the Pingston creek FSR up Odin creek to the proposed hut location. A trail to Gates hut will be constructed from the Pingston creek FSR up the north branch of Thor creek to the proposed hut location. A trail to Cranberry hut will be constructed from the end of the Hardman FSR above Cranberry creek to the proposed hut location.

The Mountaineering and Hiking programs will require no improvements as the area is ideally suited to the activities.

The hut to hut Mountain Biking program will require trail construction from Gates hut to Cranberry hut. The proposed trail will descend west from Gates hut down to the headwaters of Gates creek, climb over a sub alpine pass into Vanwick creek, then descend towards the upper Shushwap River. From the upper Shushwap river the trail will climb up Lindmark creek to the Cranberry hut. See appendix A for trail location.

### 1.43 Roads

The proposed extensive use area includes several branch roads from the Pingston Creek FSR. Goldrange will utilize the Pingston FSR and 2 branch roads during summer operations. During the summer operating season (Jun 1 to Nov 1) the FSR roads will be used intermittently to transport guests to/from access trailheads.

### 1.5 First Nations

No first nations have been contacted regarding this application.

### 1.6 Staff

Gold Range Huts will employ 2 full time staff and up to 12 seasonal staff during peak operation. See Table 1.6 below.

**Table 1.6 Goldrange Alpine Staffing Requirements**

<b>Staff</b>	<b>Number of Employees</b>	<b>Experience and Training</b>
Mountain Operations Manager	1	IFMGA/ACMG Mountain Guide with 10 years experience guiding and organizing mountain trips.
Mountain Guides	2+	ACMG Mountain or Alpine Guides
Hiking Guides	2+	ACMG Hiking Guides
Mountain Biking Guides	2+	Previous experience guiding backcountry mountain biking
Cook	2	Previous experience cooking in remote lodges

Trail Crew	2+	Experience with trail layout, construction, and maintenance.
Office Manager	1	Experience booking trips, organizing logistical support to huts and trips.

## 1.7 Environmental

Goldrange is proposing a wilderness backcountry experience. In line with this experience is minimizing environmental impacts.

### 1.71 Land Impacts

The proposed Odin and Gates huts will be located in the sub alpine, there will be little disturbance of vegetation on these sites. The proposed Cranberry hut will be located at treeline, a small number of trees will need to be cleared on site to allow construction of the hut. The proposed access trails will require limited vegetation clearing. All vegetation clearing will be minimized as much as possible. The access/biking/hiking trails will follow sustainable trail building guidelines established by the international mountain bike association (IMBA). . The vegetation cut on the trails will be limited to undergrowth and small shrubs. All trails will avoid cutting trees as much as possible.

There will be limited soil disturbance at the proposed hut sites during construction. Soil disturbance will occur during construction of the access/biking/hiking trails.

There will be no riparian encroachment at the proposed hut sites. The biking/hiking trails may occasionally cross small tributary streams including the associated riparian zones. Trails will be developed to minimize encroachment on

riparian zone. All trails crossing over alpine streams/riparian zones will be constructed with bridges to eliminate impacts on the riparian zone.

No pesticides or herbicides will be used during construction or operations.

The proposed huts will be designed and built to be unobtrusive. The buildings will have little to no visual impact on the surrounding areas.

There are no known archaeological sites in the proposed extensive use area.

### **1.72 Atmospheric Impacts**

During construction of the huts there will be limited sound impacts on the area immediately surrounding the hut sites. Once operations begin sound impacts will be limited to days when supplies are flown into the huts. These will be limited to a few days per month during the operations.

Sources of fuel emissions will be a propane stove and furnace, and the helicopter. The helicopter meets emission standards for light aircraft. All propane will be stored and transported in portable propane cylinders.

### **1.73 Water Impacts**

The proposed huts and associated outbuildings will not have a measurable effect on drainage or sedimentation. A small amount of water will be extracted from tributary streams adjacent to the proposed hut sites for use in the huts. Public access to any rivers, creeks, or lakes in the proposed extensive use area will not be affected.

## 1.74 Fish and Wildlife Habitat

The proposed tenure encompasses a diverse range of habitat including forest, riparian, krumholz, and alpine/tundra. The area includes habitat of the following Red and Blue listed wildlife:

<i>Ursus arctos</i> ,	Grizzly Bear	Blue listed
<i>Rangifer tarandus pop 1</i>	Southern Mountain Caribou	Red listed

The proposed summer tenure application includes a portion of the Section 16 Caribou reserve in the South Monashees. The portion of the reserve covered by the tenure application is in Cranberry creek and its tributaries.

<i>Gulo gulo luscus</i>	Wolverine	Blue listed
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Other wildlife likely in proposed tenure

<i>Oreamos americanus</i>	Mountain Goat	Yellow listed
<i>Puma concolor</i>	Cougar	Yellow listed
<i>Alces americanus</i>	Moose	Yellow listed
<i>Odocoileus hemionus</i>	Mule Deer	Yellow listed
<i>Odocoileus virginianus</i>	White-tail Deer	Yellow listed

The proposed tenure includes the headwaters of several creeks. Cutthroat Trout and the Mountain Sucker may inhabit these mountain creeks. Activities in the proposed tenure are not expected to significantly impact fish values.

## 2.0 Adventure Tourism Activities Offered on Crown Land

### 2.1 Description of Experience Being Offered

Goldrange will offer guided mountaineering, hiking, and backcountry mountain biking. All trips will be based out of the proposed Goldrange hut system. Trips will operate out of a single hut or travel between huts. The location of the proposed

huts will facilitate hut to hut trips in the alpine and sub alpine of a remote area of the Monashee mountains. Trips will vary in duration from 2 to 5 days. Access to the huts will be via hiking/biking access trails constructed to each hut. All trips will be lead by certified guides. The mountaineering trips will be lead by ACMG Mountain Guides, the hiking trips by ACMG hiking Guides, and the biking trips by experienced biking guides with first aid certification. The experience offered is a remote backcountry experience in an isolated mountain setting. The rugged nature of the Monashee mountains, the numerous glaciers and alpine tarns, and the abundance of sub alpine meadows will create an unforgettable guest experience.

Safety is the main priority while operating all the programs. Risk management systems that exceed the industry standard will be in place for all programs.

**Activities:** Mountaineering will take place from all three proposed huts. All three huts have access to significant mountaineering objectives including; Odin peak, Kelly peak, Mt. Niflhiem, Laag Mountain, Mt Gunnarsen, Hughes Peak, Gates Peak, Cranberry Peak, and Blanket peak. There are numerous sub peaks that will provide options for easier ascents as well. The location of the three proposed huts along the spine of the Monashees will provide a unique opportunity to complete a mountaineering traverse in the high alpine hut to hut.

A typical day mountaineering will start with breakfast at one of the huts. The Guide will lead the guests up the objective for the day. Lunch will be in the field. At the end of the day the guests will return to one of the huts for an afternoon snack. Then there will be time to relax and enjoy the endless alpine scenery before dinner.

Hiking will take place on both the proposed access trails and off trail in the expansive sub alpine areas of the proposed tenure.

A typical day hiking will start with breakfast at the hut and then a full day of guided hiking in the surrounding area. Hiking guides will provide information on wildlife, flora, geology, and the areas history. Lunch will be provided and eaten at a scenic location in the field. At the end of the day guests will return to the lodge to enjoy afternoon snacks and relax before dinner.

Mountain biking will occur on the purpose built access trails to the proposed Gates and Cranberry huts. A trail connecting the proposed Gates Hut to Cranberry Hut will be constructed to facilitate hut to hut alpine mountain biking (see appendix A for proposed trail locations). The area provides a very unique opportunity to build a hut to hut trail that allows mountain bikers to ride from valley bottom up into the alpine. The trail will cross the Monashee range twice and create roughly 60km of world class mountain bike trail. The views and variety of terrain the biking guests will ride through will make for a unique experience that is not offered elsewhere in the region. The continued growth in mountain bike tourism is taking biking tourists to high alpine trails in the Alps and elsewhere. The trails that will be developed will showcase the unmatched alpine scenery and riding potential in the Monashee mountains of BC. The trails and scenery will rival the experiences available in the alpine riding locations of the Alps, New Zealand, and the USA.

A typical Mountain Bike trip will start with meeting the guests in Revelstoke and transporting them to the Gates Hut trailhead. The guide will lead the group to the Gates hut where they will spend the first night. Lunch, after ride snacks, and dinner will be provided. The second day starts with breakfast at the Gates hut. All guests will be given a packed lunch to take for the day. The group will ride through the high alpine below Gates peak before descending to the start of the days first big climb. The guests will ride up to a high pass with great views of the surrounding mountains before starting a 1200m descent to the valley bottom. From valley bottom the group will start a 850m climb up to the Cranberry hut. The group will enjoy a scenic evening at the Cranberry hut. The final day will see the

group ride from Cranberry Hut through endless sub alpine meadows and ridgelines to the Cranberry reservoir on Highway 23. Goldrange will transport the guests back to Revelstoke at the end of the trip.

**Huts:** The huts will be designed to offer a rustic mountain experience. Each hut will have capacity for up to 12 people. The huts are planned to be simple mountain huts reminiscent of alpine huts in the Alps. Each hut will have three bedrooms each with 4 beds. Duvets and comfortable mattresses will be provided. The huts will have a kitchen, dining area, and living room area. All huts will have a small drying room for wet clothing and gear, and a mudroom. The bathroom will be an outhouse located adjacent to the huts. The design of the huts will focus on creating a comfortable and relaxing place that allows guests to feel immersed in the surrounding mountains.

### **3.0 Wildlife Management Plan**

The Wildlife Management plan for Goldrange Alpine follows the Guidelines for Backcountry Tourism/Commercial Recreation in British Columbia.

The Wildlife Guidelines, as amended from time to time, will be followed/adhered to when carrying out activities authorized by the Crown land tenure.

Goldrange is proposing summer non-mechanized activities.

#### **3.1 Non-Mechanized Recreation (Snow free)**

Activities proposed are mountain biking, hiking, and mountaineering.

Ecosystem types that are proposed for use during snow free activities include Alpine/Tundra and Forest. The specific non-mechanized recreation (snow free) desired behaviors for each ecosystem are listed below:

### 3.11. Degradation of Soil, Air, and Water Quality

Concern: Water pollution

Results	Desired Behaviors
<ul style="list-style-type: none"> <li>● Avoid water pollution</li> </ul>	<ul style="list-style-type: none"> <li>● Pack out all garbage</li> <li>● Use existing facilities for human waste, pack it out, or bury it in holes 10-15cm deep located at least 100m from any water sources (use group latrines minimum 30cm deep for parties of more than 4 persons)</li> <li>● Use existing bridges and structures to cross streams, or cross at right angles away from spawning areas where the substrate particle size is cobble or larger, including bedrock</li> <li>● Minimize use of pesticides and herbicides near waterways</li> <li>● Use biodegradable cleaning products</li> </ul>

Concern: Soil compaction and erosion

Results	Desired Behaviors
<ul style="list-style-type: none"> <li>● Minimize soil compaction off established trails</li> <li>● Minimize erosion associated</li> </ul>	<ul style="list-style-type: none"> <li>● Use existing roads and trails where they exist</li> <li>● avoid travelling on existing trails</li> </ul>

with trails	<p>that show evidence of erosion</p> <ul style="list-style-type: none"> <li>● Avoid widening existing trails</li> <li>● Use rock and gravel trails where possible</li> <li>● Avoid poorly placed trails (eg steep grades with soft substrates)</li> <li>● Where no trails exist, travel on rock or other durable surfaces or disperse use and avoid areas where impacts are evident</li> <li>● Avoid off trail muddy conditions</li> <li>● Obey all signs and area closures</li> <li>● Use designated campsites and/or existing intensive use sites where they exist, or use rock or durable surfaces for camping</li> <li>● Minimize campfires and use only established fire rings</li> </ul>
-------------	--

Concern: Bank erosion and siltation

<b>Results</b>	<b>Desired Behaviors</b>
<ul style="list-style-type: none"> <li>● Protect living and non-living substrates</li> <li>● Minimize bank erosion</li> </ul>	<ul style="list-style-type: none"> <li>● Use existing bridges and structures to cross streams, or cross at right angles away from spawning areas where the particle size is cobble or larger or bedrock</li> </ul>

	<ul style="list-style-type: none"> <li>● Avoid existing trails that parallel streams and those that show evidence of erosion</li> </ul>
--	---

### 3.12. Integrity of Vegetation Communities

Concern: Invasive species

Results	Desired Behaviors
<ul style="list-style-type: none"> <li>● Minimize spread of invasive plant species (weeds)</li> </ul>	<ul style="list-style-type: none"> <li>● Use existing trails where possible</li> <li>● Learn to identify invasive plants</li> <li>● Inspect clothing, equipment, pack animals and pets for plant parts before and after activity</li> <li>● Incinerate or bag and dispose of collected plant parts</li> <li>● Obey all signs and area closures</li> <li>● Leave gates as you found them</li> <li>● Restrict use of areas with invasive plants to times of the year when spread is unlikely</li> <li>● Invasive plants should generally be cut at the ground rather than pulled if pulling is likely to result in dispersal of seed</li> <li>● Pack-in invasiveplant-free feed for pack animals</li> <li>● Avoid grazing animals in infested areas</li> </ul>

Concern: Soil Compaction

Results	Desired Behaviors
<ul style="list-style-type: none"> <li>● Protect vegetative cover and root systems</li> </ul>	<ul style="list-style-type: none"> <li>● Use existing roads and wide trails where they exist</li> <li>● Avoid widening existing trails</li> <li>● Avoid off-trail muddy conditions</li> <li>● Use rock and gravel trails where possible</li> <li>● Avoid travelling on existing trails that show evidence of erosion</li> <li>● Obey all signs and area closures</li> <li>● Use designated campsites and/or existing intensive use sites where they exist, or use rock or durable surfaces for camping</li> <li>● Minimize campfires and only use established fire rings</li> <li>● With exception of invasive plants do not pick or pull vegetation</li> <li>● Do not bury garbage, pack it out</li> </ul>

Concern: Damage to sensitive sites

Results	Desired Behaviors
<ul style="list-style-type: none"> <li>● Protect habitats of endangered wildlife species and ecosystems</li> </ul>	<ul style="list-style-type: none"> <li>● Learn to identify endangered species and ecosystems within</li> </ul>

<ul style="list-style-type: none"> <li>● Protect sensitive ecosystems (alpine/tundra and moist soil ecosystems such as riparian areas and wetlands)</li> <li>● Protect nesting/calving sites</li> </ul>	<p>the operating area</p> <ul style="list-style-type: none"> <li>● Operate in a manner that is consistent with governments approved approach to recovery planning for species at risk</li> <li>● Use existing roads and trails</li> <li>● Avoid muddy conditions</li> <li>● Use rock and gravel trails where possible</li> <li>● Obey all signs and area closures</li> <li>● Do not break or trample vegetation in riparian areas</li> <li>● Avoid known calving/nesting sites (seasonal closures may be required)</li> <li>● Do not damage wildlife trees</li> </ul>
---	---

### 3.13. Direct Disturbance of Wildlife

Concerns: Physiological and behavioral displacement from preferred habitats: direct mortality, habituation/sensitization

<b>Results</b>	<b>Desired Behaviors</b>
<ul style="list-style-type: none"> <li>● Minimize physiological and behavioral disruption</li> <li>● Minimize changes in habitat use resulting from activities</li> </ul>	<ul style="list-style-type: none"> <li>● Record wildlife encounters, actions taken, and responses of animals</li> <li>● Remain on established trails where they exist</li> <li>● Obey all signs and area closures</li> </ul>

	<ul style="list-style-type: none"> <li>● Do not harass wildlife</li> <li>● Do not feed wildlife</li> <li>● Do not handle wildlife</li> <li>● Do not allow dogs to be at large and harass wildlife</li> <li>● Pack out all garbage</li> <li>● Yield to wildlife on roads and trails</li> <li>● Focus activities in areas and at times of the year when wildlife are least likely to be disturbed (seasonal closures may be required)</li> <li>● Remain still or retreat when animals are encountered and react to your presence</li> <li>● Stay at distances sufficient to prevent changes to the behavior of animals (at least 100m in open areas is default for large animals)</li> </ul>
--	--

### 3.14. Integrity of Fisheries Resources

Results	Desired Behaviors
<ul style="list-style-type: none"> <li>● Protect fish populations and habitat</li> </ul>	<ul style="list-style-type: none"> <li>● Do not move live fish or other aquatic life between water bodies</li> <li>● Do not harm spawning or rearing habitats by crossing or otherwise disturbing streams in</li> </ul>

	<p>these areas</p> <ul style="list-style-type: none"><li>● Obey all signs and area closures</li><li>● Obey all fisheries regulations</li><li>● Follow desired behaviors related to water quality</li></ul>
--	--

#### **4.0 Risk Management Plan**

A General Risk Management Plan has been prepared and is available for agency review on request.

## Appendix A Maps

### Index

#### 1.0 Extensive Use Area

- 1.1 Tenure Location Map
- 1.2 Tenure Overview Map
- 1.3 Odin Zone
- 1.4 Park Zone
- 1.5 Gates Zone
- 1.6 Cranberry Zone
- 1.7 Trail Zone

#### 2.0 Intensive Use Areas

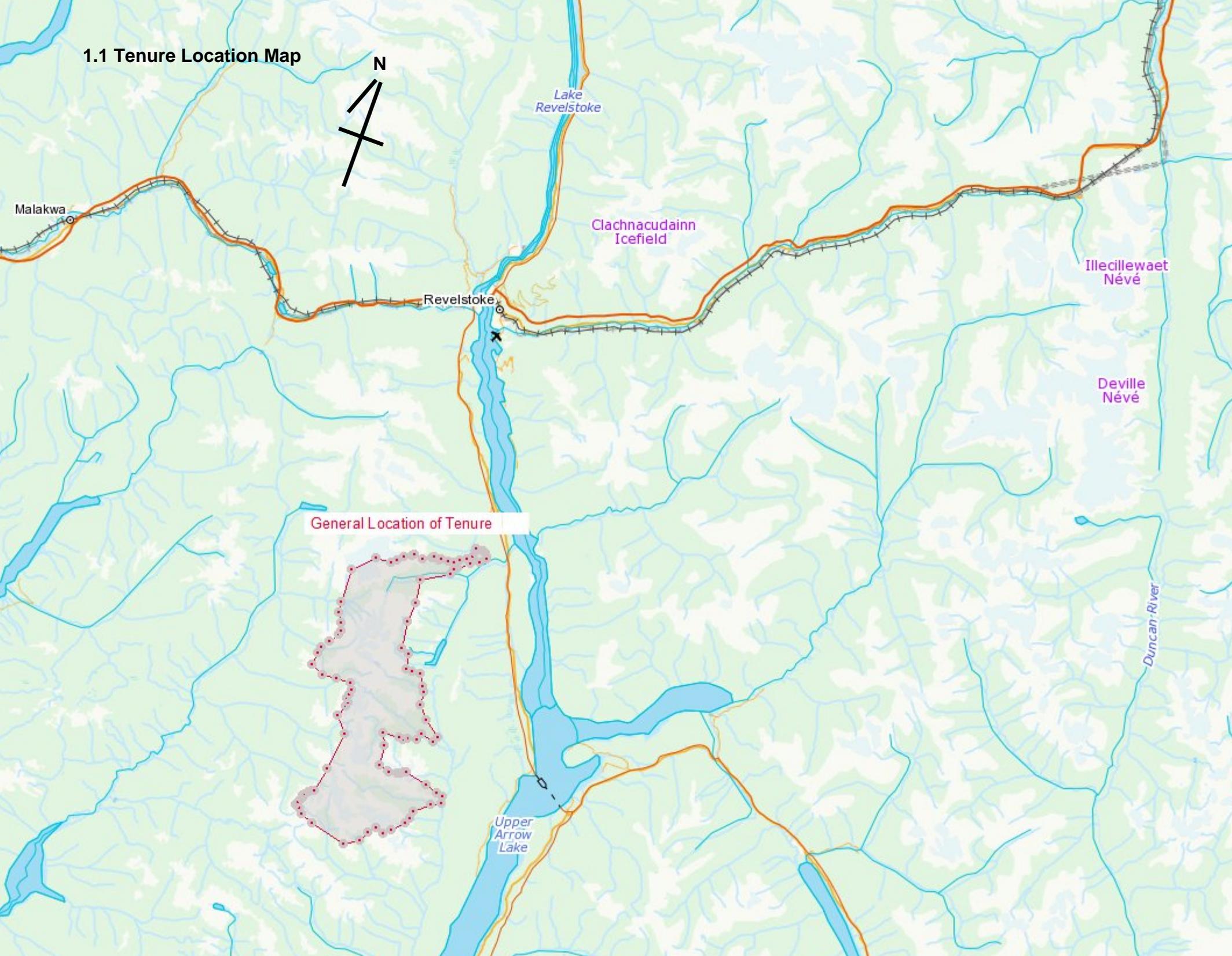
- 2.1 Odin Hut
  - 2.11 Odin Hut Location
  - 2.12 Odin Hut Site Plan
- 2.2 Gates Hut
  - 2.21 Gates Hut Location
  - 2.22 Gates Hut Site Plan
- 2.3 Cranberry Hut
  - 2.31 Cranberry Hut Location
  - 2.32 Cranberry Hut Site Plan

#### 3.0 Access Trails

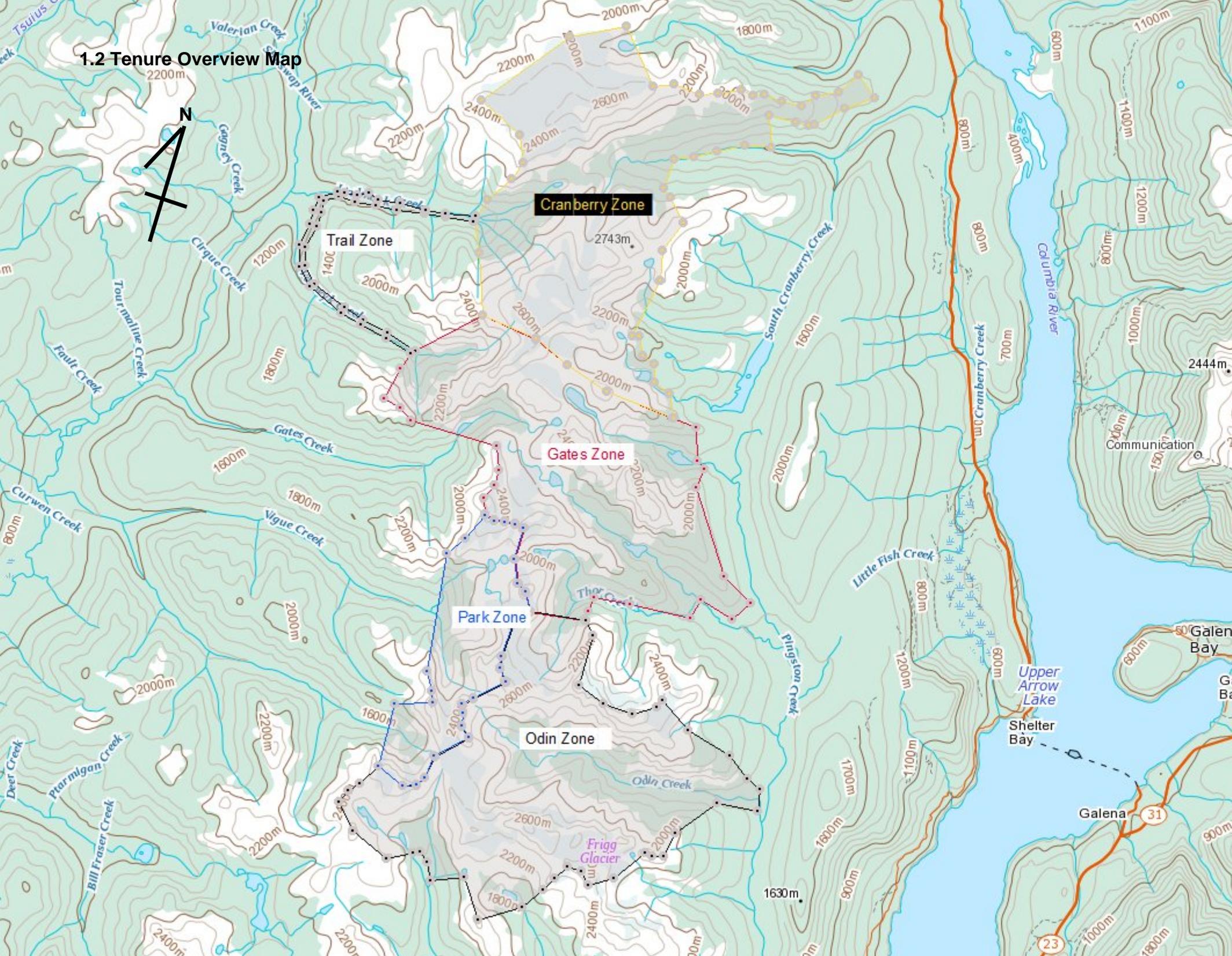
- 3.1 Odin Hut Access Trail
- 3.2 Gates Hut Access Trail
- 3.3 Cranberry Hut Access Trail
- 3.4 Gates to Cranberry Connector Trail

## 1.0 Extensive Use Area

# 1.1 Tenure Location Map



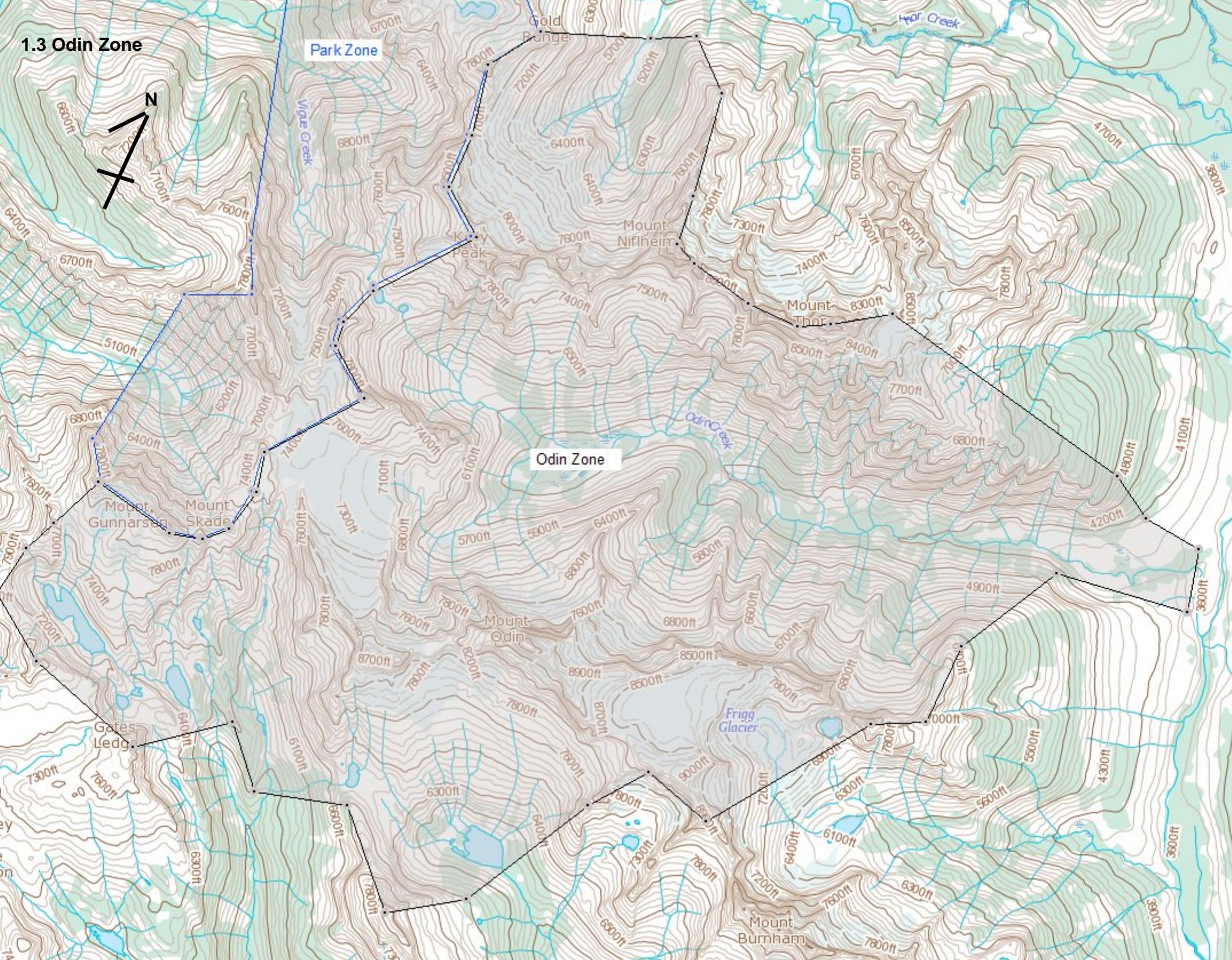
# 1.2 Tenure Overview Map



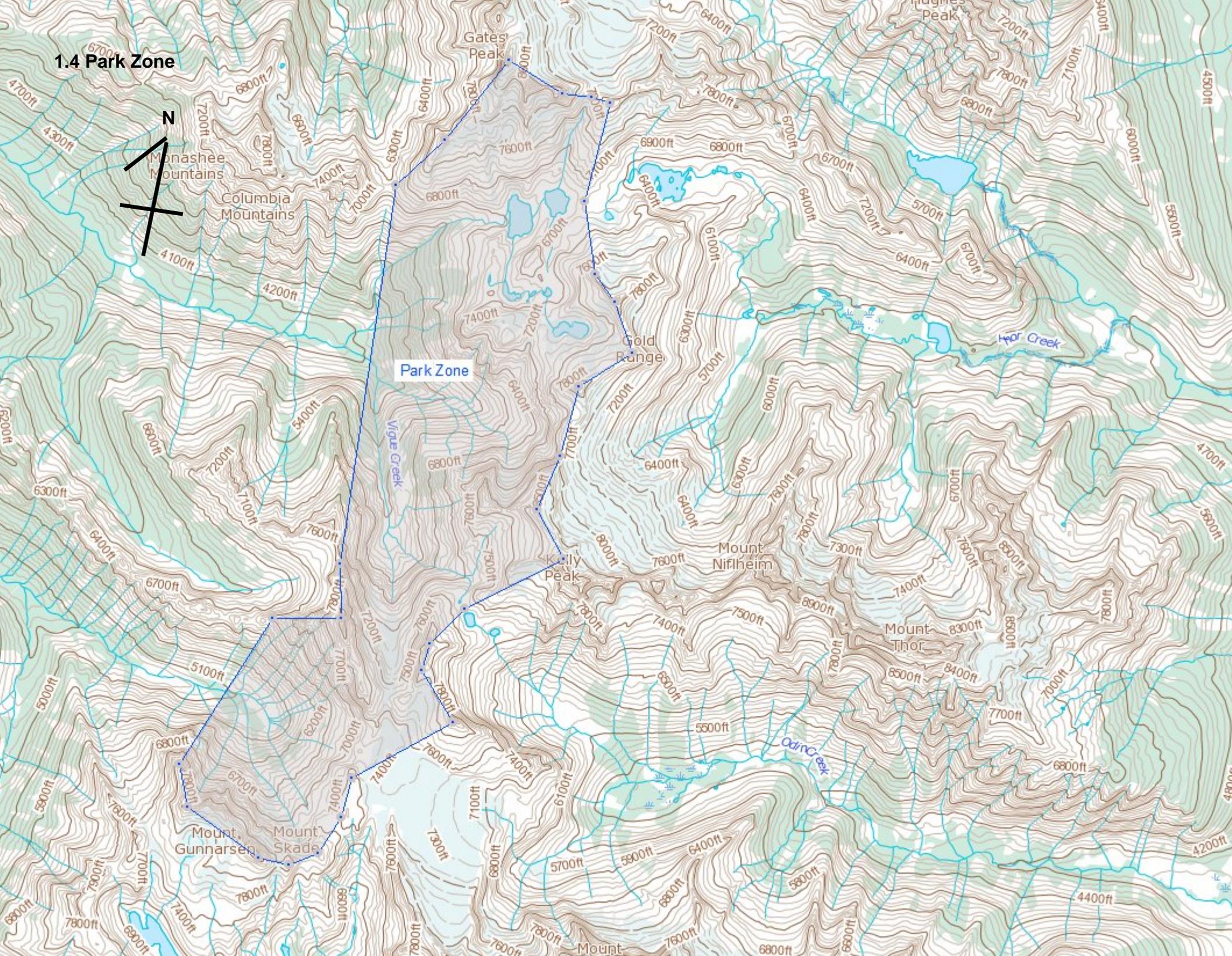
1.3 Odin Zone

Park Zone

Odin Zone

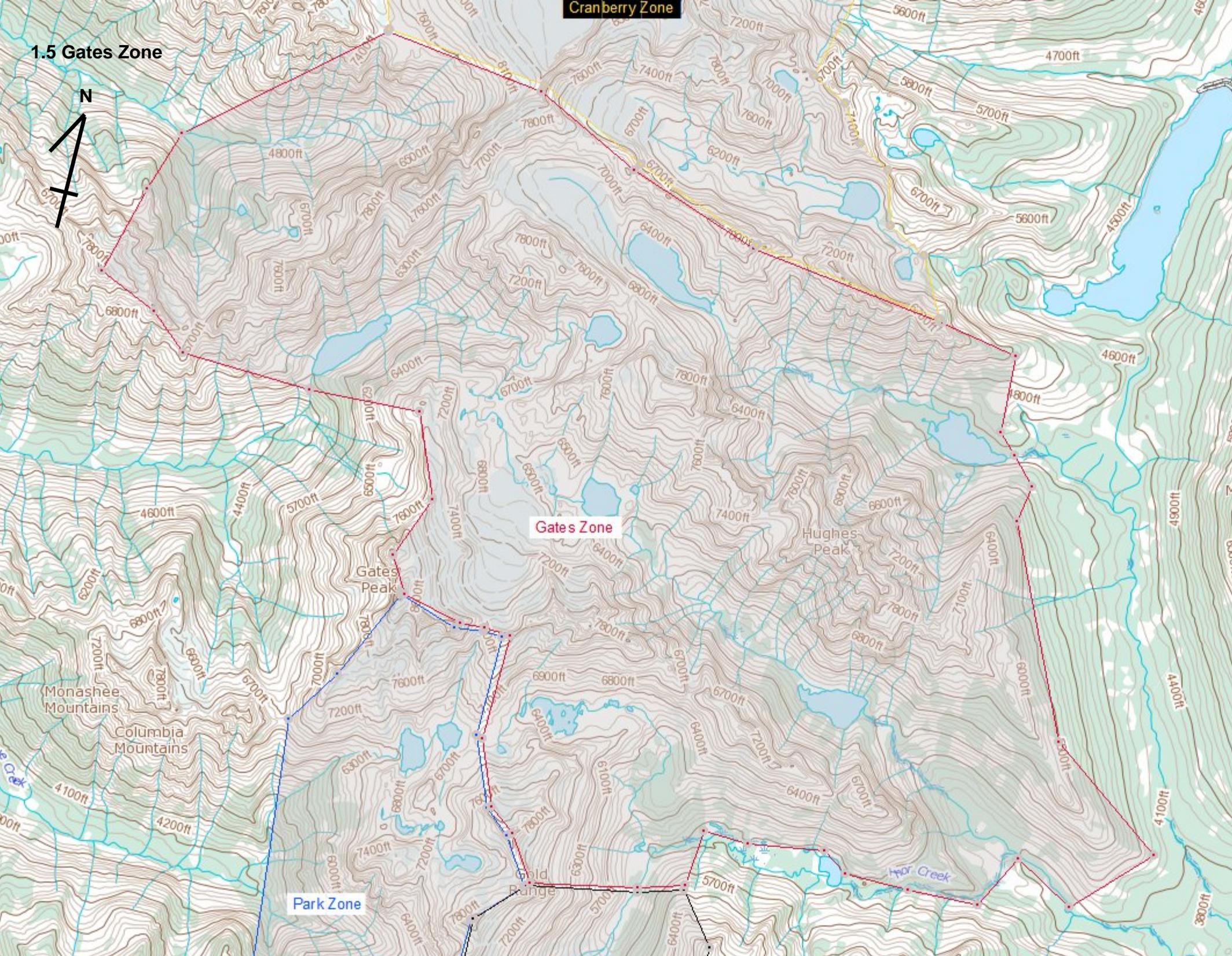


# 1.4 Park Zone



Cranberry Zone

1.5 Gates Zone



Gates Zone

Park Zone

Monashee Mountains

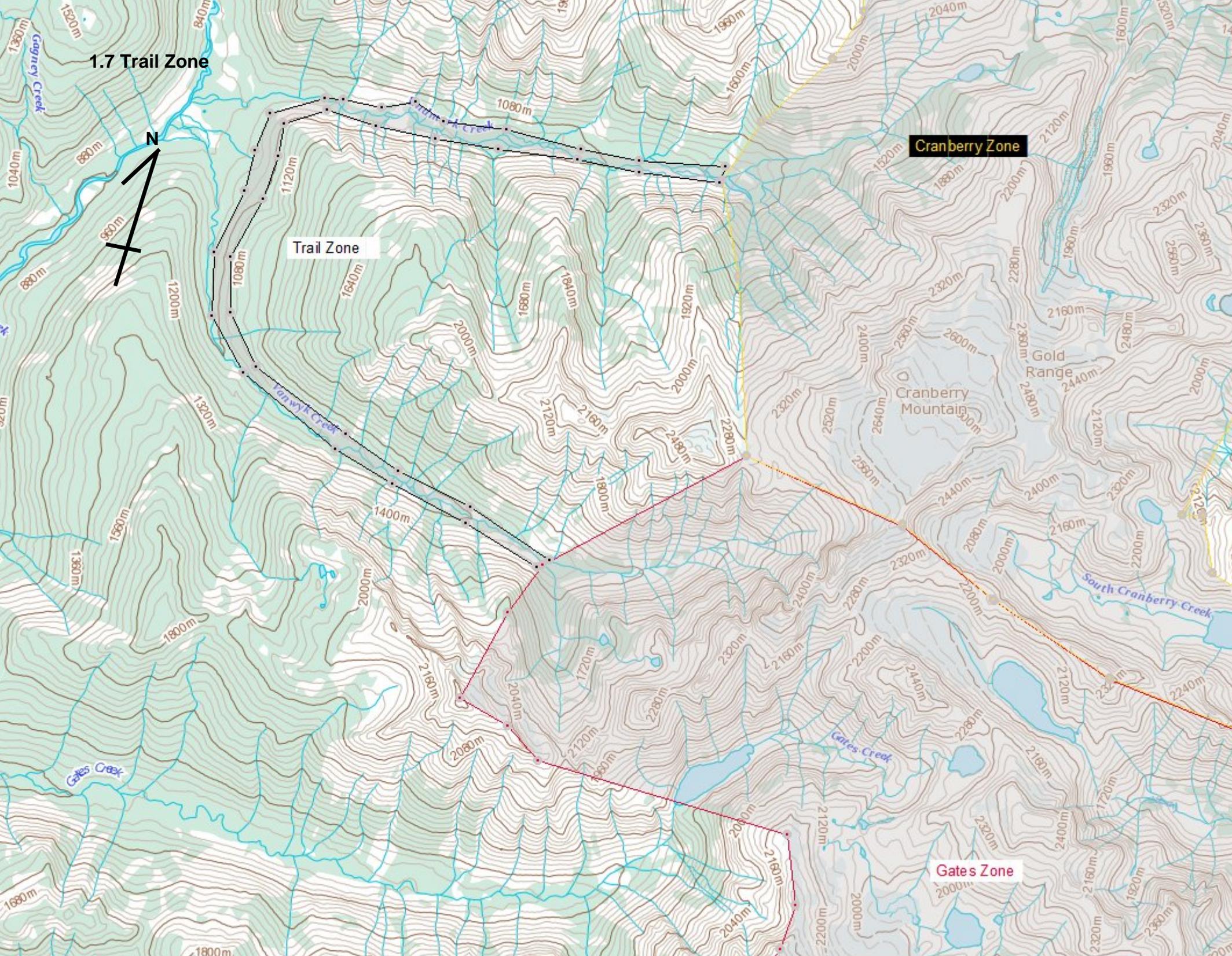
Columbia Mountains

Hughes Peak

Old Range

Map Creek





1.7 Trail Zone

Cranberry Zone

Trail Zone

Gates Zone

Gold Range  
2440m

Cranberry Mountain  
2500m

South Cranberry Creek

Gates Creek

Gagnrey Creek

Gates Creek

N

## 2.0 Intensive Use Areas

## 2.1 Odin Hut

## 2.11 Odin Hut Location



Odin Hut Location  
50 33 39.28N 118 10 16.86W

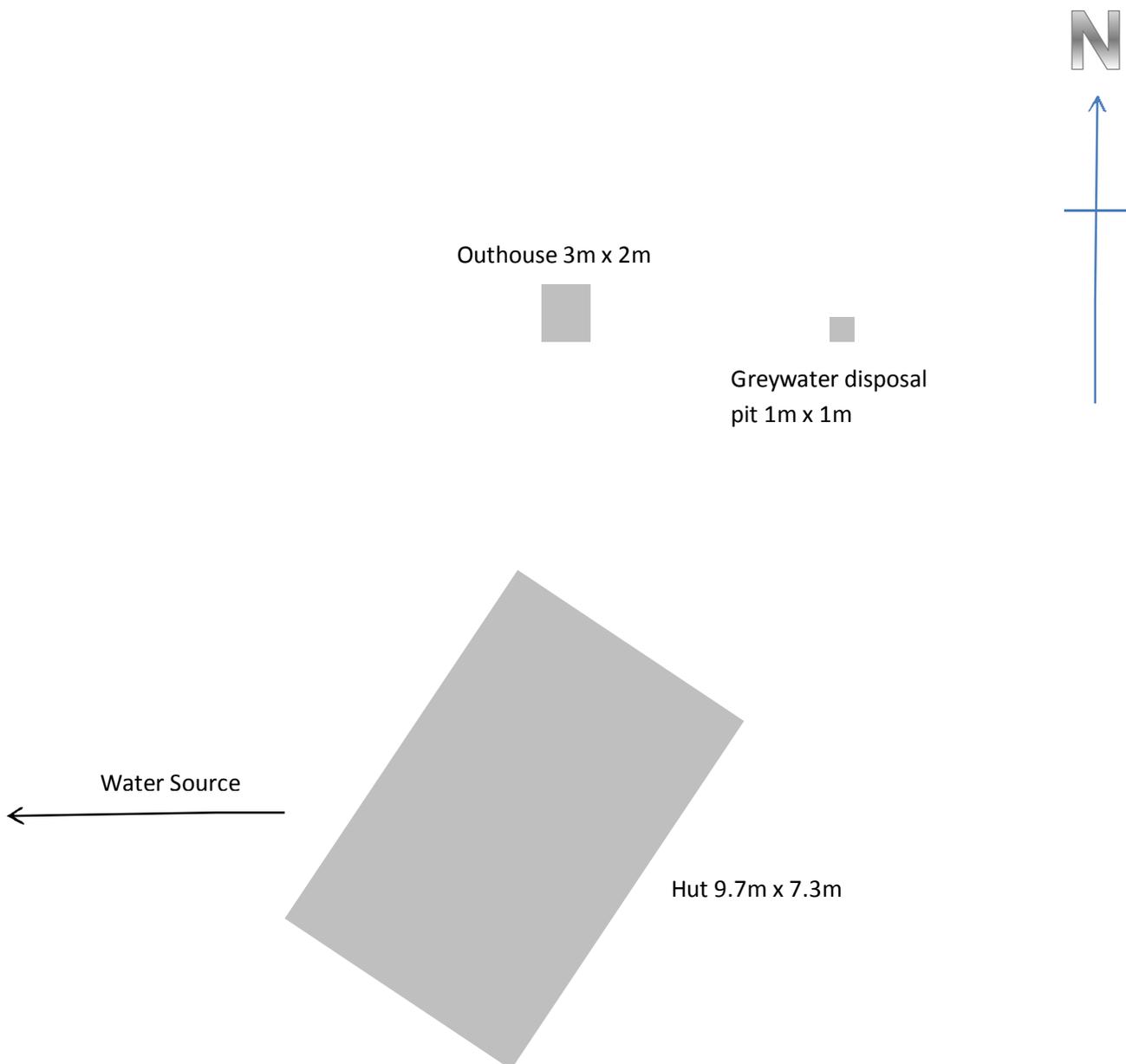
## 2.12 Odin Hut Site Plan

Location: Monashee Mountains, 48km South of Revelstoke, Basin on north side of Saturday peak, East of Monashee Park Boundary.

Elevation: 2214m

Co-ordinates: 50 33 39.28N 118 10 16.86W

Hut: single story, 9.7m x 7.3m



## 2.2 Gates Hut

## 2.21 Gates Hut Location



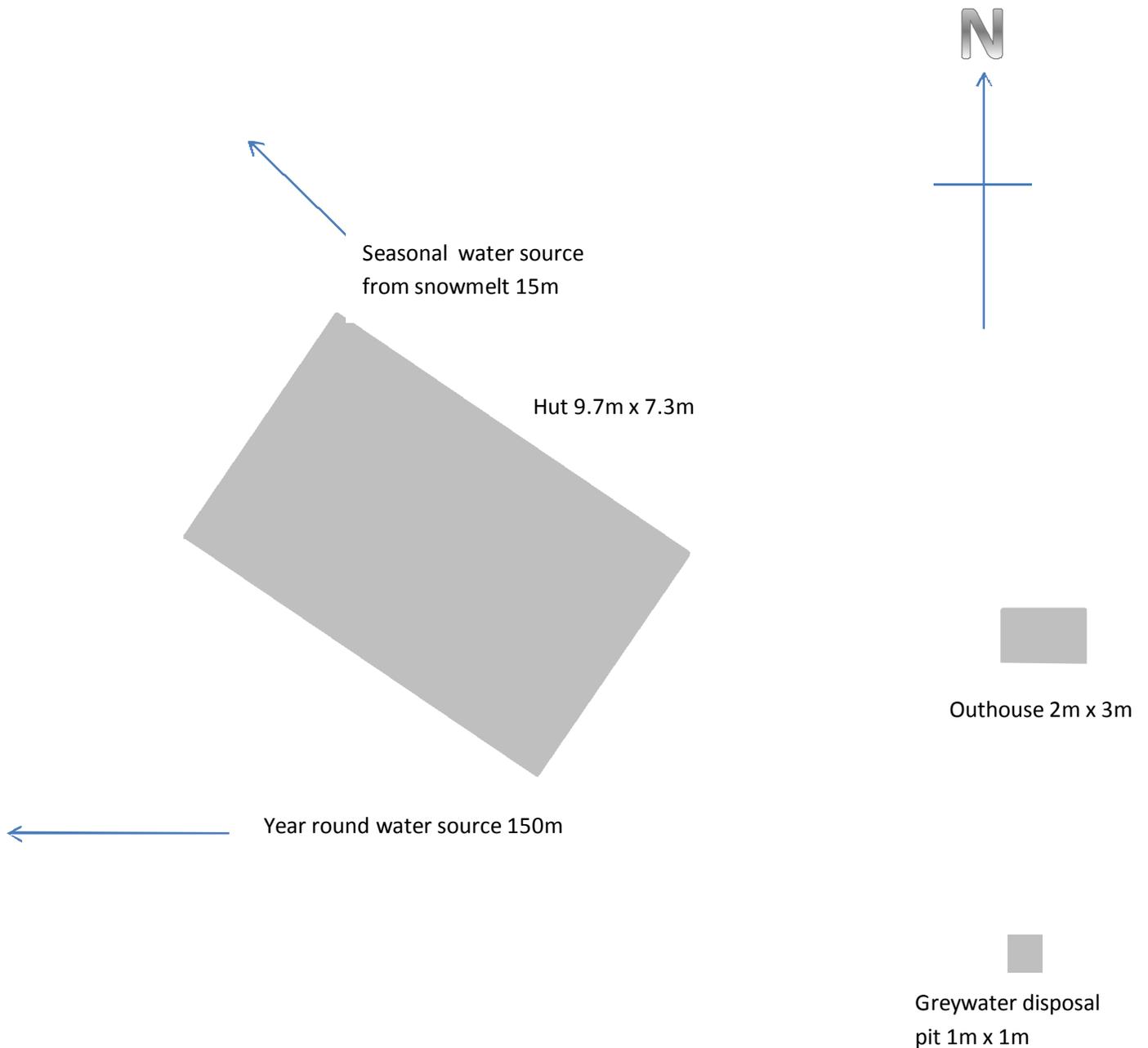
## 2.22 Gates Hut Site Plan

Location: Monashee Mountains, 38km South of Revelstoke, basin on north side of Gates peak, west of Dickinson Lake.

Elevation: 1945m

Co-ordinates: 50 39 08.54N, 118 10 47.78W

Hut: single story, 9.7m x 7.3m,



## 2.3 Cranberry Hut

### 2.31 Cranberry Hut Location



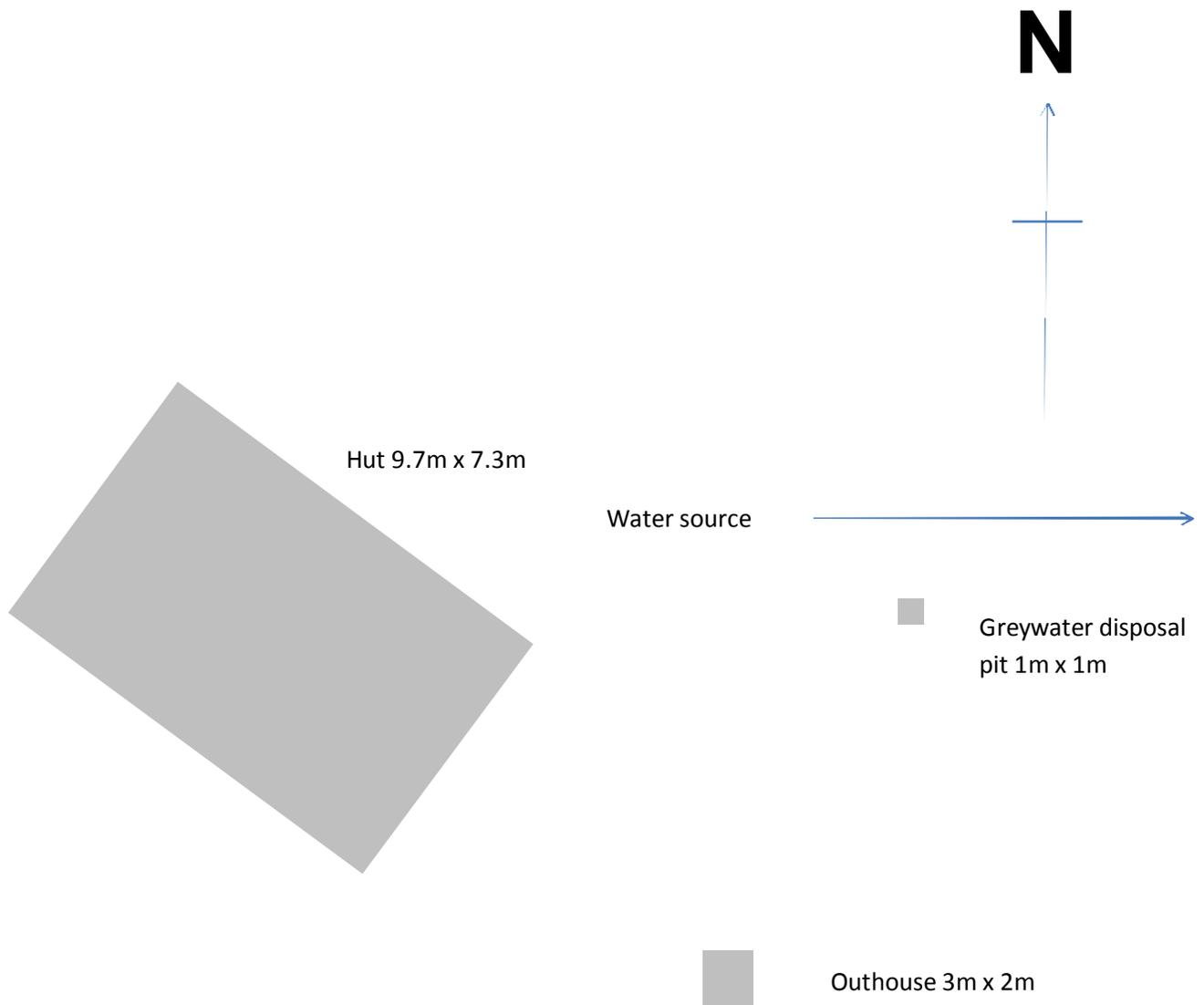
## 2.32 Cranberry Hut Site Plan

Location: Monashee Mountains, 28km South of Revelstoke, Pass between Cranberry Mountain and Blanket Mountain.

Elevation: 1880m

Co-ordinates: 50 44 23.74N 118 13 10.25W

Hut: single story, 9.7m x 7.3m



### 3.0 Access Trails

### 3.1 Odin Hut Access Trail



#### Legend



1: 72,224

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Datum: NAD83

Projection: NAD\_1983\_BC\_Environment\_Albers

#### Key Map of British Columbia



### 3.2 Gates Hut Access Trail



#### Legend

- Geographical Names



1: 62,500

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#### Key Map of British Columbia

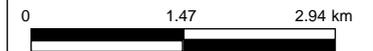


### 3.3 Cranberry Hut Access Trail



iMapBC Mapping

#### Legend



1: 72,224

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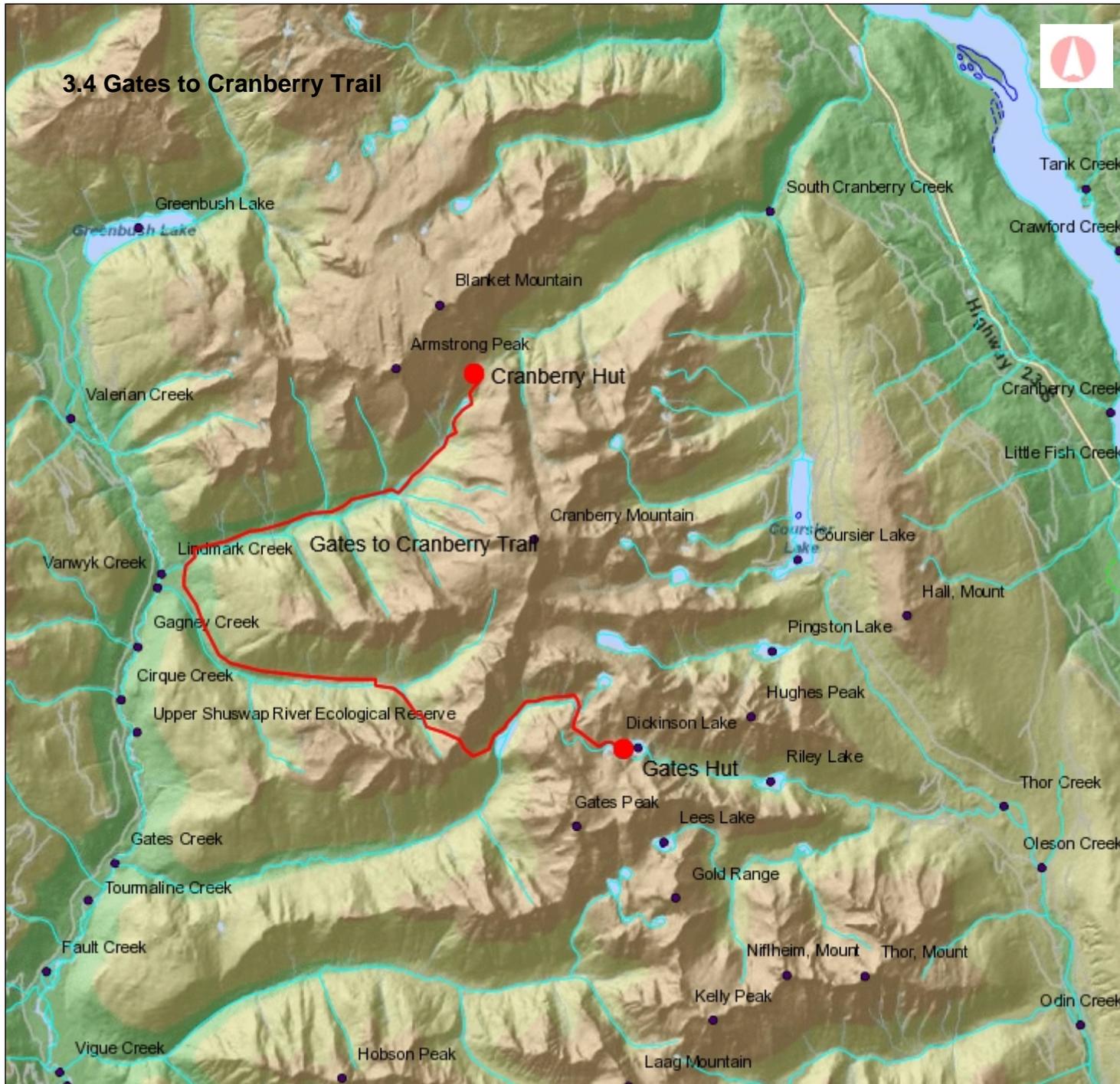
Datum: NAD83

Projection: NAD\_1983\_BC\_Environment\_Albers

#### Key Map of British Columbia



### 3.4 Gates to Cranberry Trail



#### Legend

- Geographical Names
- (1:250,000) Water - Rivers, etc.
- FCODE
- Conduit - Aboveground
- Conduit - Electrical - Undergrou
- Canal - Irrigation
- Falls
- Penstock
- Rapids
- River or Stream - Definite
- River or Stream - Braided
- River or Stream - Disappearing
- River or Stream - Dry
- River or Stream - Indefinite



1: 147,638

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#### Key Map of British Columbia

