# Resort Master Plan

(Community Alpine Ski Resorts – Type I)

Nakusp Ski Club Association (NSCA)

Ski the Summit ... the affordable ski & board area for the whole family



LAKE 9KI AND 9NOWBOARD AREA

# **Table of Contents**

EXECUTIVE SUMMARY	3
Project Vision	3
GENERAL OVERVIEW OF BUSINESS (EXISTING AND PROPOSED)	3
KEY AREAS OF CONCERN	3
SECTION 1: DESCRIPTION OF EXISTING OPERATION	4
1.0 General Description of Existing Ski Resort	4
1.1 Description of Experience/Activities Being Offered	4
1.2 Base Operation and Improvements	
1.3 Mountain Operation and Improvements	
1.4 Access	
1.5 Servicing	
1.6 Resort Capacity and Skier Visits	5
SECTION 2: OVERVIEW OF PROPOSED EXPANSION	7
2.1 Expansion Area	7
2.2 Description of Experience/Activities Being Offered in Expansion Area	7
2.3 Base Improvements	
2.4 Mountain Improvements	8
2.5 Access Upgrades	
2.6 Projected Capacity and Skier Visits	
2.7 Economic Benefits	8
SECTION 3: OVERLAP WITH ENVIRONMENTAL & CULTURAL VALUES	9
3.1 FISH VALUES	9
3.2 WILDLIFE VALUES	9
3.3 WATER VALUES	
Summit Lake Ski Area is within the area of interest of the following First Nations:	
SECTION 4: OVERLAP WITH EXISTING USE	11
4.1 Mineral Tenure	
4.3 LAND USE PLANNING, LOCAL OR REGIONAL ZONING REQUIREMENTS	11
4.4 COMMERCIAL RECREATION TENURE & GUIDE OUTFITTER TERRITORIES	12
4.5 Public Recreational Use	
APPENDIX 1 - MAPPING	13
APPENDIX 2 - HAZARDS AND SAFETY PLAN	18

# **Executive Summary**

## **Project Vision**

The Summit Lake Ski Hill has been operating under the Nakusp Ski Club Association (N.S.C.A.) for 49 years. Summit is a small, community-based ski hill run through the efforts of dedicated local volunteers. Downhill skiers and snowboarders from Nakusp, New Denver, Kaslo, Silverton, Burton, Fauquier and Edgewood make up the majority of Summit's clientele. To generate more interest and a broader user base at Summit, the N.S.C.A. is proposing an expansion to Summit's existing operating area. This expansion would allow for the extension of the downhill ski runs and the creation of a tube park, a small outdoor ice rink and a multi-use cross-country trail area.

## **General Overview of Business (Existing and Proposed)**

- Summit Lake Ski Hill is located at the eastern tip of Summit Lake, approximately 18.8 km southeast of downtown Nakusp on the south side of Highway 6.
- Summit has a variety of ski runs that are accessed via a central T-bar. The beginner area is accessed via a handle tow in the northeast portion of the existing operating area. If this expansion application is passed, the downhill ski area will be extended southwards to double the length of the existing runs. An existing trail will be improved and expanded on in the timbered area east of the downhill runs for cross-country skiing and snowshoeing. There is a potential for multi-season use of these trails in the future.
- Summit has a day-use lodge complete with first aid, cafeteria, washrooms, storage and rental shop.
- Summit has night skiing available two evenings per week.
- Summit has lessons available from qualified instructors and is used for several student ski and snowboard programs.
- Summit has numerous family events, carnivals and competitions throughout the winter months.
- Summit has been utilized by Search and Rescue and other organizations for avalanche training.
- Summit Lake Ski Hill has been operating since February 26<sup>th</sup>, 1961.

#### **Key Areas of Concern**

- There are two avalanche tracks within the application area which do not impact the existing facilities or ski runs. An avalanche risk assessment will be completed for these tracks prior to the commencement of any future developments.
- Other areas of concern and mitigation strategies are discussed in Sections 3 and 4 of the document. There are no areas of concern that do not have sound mitigation strategies.

# **Section 1: Description of Existing Operation**

## 1.0 General Description of Existing Ski Resort

- Summit Lake Ski Hill covers an area of 26.6 hectares above the east end of Summit Lake, between Nakusp and New Denver.
- Summit is a small, affordable, community-run operation providing a great resource to the surrounding communities.
- Nine downhill runs provide a range of difficulty from beginner to expert. Some of the runs are groomed while others provide fresh powder.
- The attached maps detail the location, operating area and proposed area for expansion.

### 1.1 Description of Experience/Activities Being Offered

- Summit offers nine downhill runs ranging from beginner in the handle tow area, to green, blue, black and double black diamond runs in the T-Bar area.
- The hill is located just 15 minutes from Nakusp and 25 minutes from New Denver, and is very affordable for families.

### Site Plan Map Reference

- The attached Site Plan Map, as well as the Harvest Plan and Base Maps, detail all existing operations, as well as terrain and management information.
- The solid fuchsia linework shows the existing T-bar and Handle Tow locations.
- The solid bright blue linework shows the MOTI Highway Right-of-Way.
- The solid army green polygons show existing and proposed tree retention areas.
- The solid orange polygons hatched cream show existing natural non-forested openings (ie. swamps and avalanche chutes).
- The solid green hatched polygons show the Amended Map Reserve 4404409.
- There are five polygons with labels denoting the locations of the lodge, parking area, septic field, water storage tank and cat shed for the maintenance.

#### Activity

- Currently Summit offers downhill skiing and snowboarding on a variety of runs five days per week, as well as two evenings per week. The Site Plan, Harvest Plan and Base Maps outline these existing runs.
- Several school programs and ski/snowboarding events and competitions are held throughout the winter.
- Other organizations including SAR utilize the hill for avalanche and other training.

#### **Specific References On Map**

• Sequential numbering and a variety of shapes are used to differentiate existing downhill ski and snowboard runs. The numbers refer to the run names shown in the legend. The shapes refer to the skill level of the run which is also noted in the legend.

## **Period of Use**

• Currently Summit operates from December until early April depending on the annual snow levels. The future plan is to offer other recreational activities to expand operations into other seasons.

#### 1.2 Base Operation and Improvements

- Summit Ski Hill is located on crown land adjacent to Highway 6 between Nakusp and New Denver. The lower third of the hill is comprised of Lots 11345, 11346 and 11347. During the course of working on this Master Plan, it was realized that although the parking lot, Ski Runs #7 (The Bone) and #8 ( Johnny Walker) are partially located within Lots 11345 and 11346. These lots are not within the old licence for the ski area due to a historic mapping error. The approval of this Master Plan and the modification of the Controlled Recreation Area (CRA) for the ski hill will correct this error and see the licence area expanded to include all of the existing improvements for the hill. District Lots 11345 and 11346 were also designated Map Reserve on File 4404409 in the name of Ministry of Agriculture and Lands. The Ministry of Tourism, Culture and the Arts worked with representatives of the Ministry of Environment to resolve the overlapping interests. All parties have agreed to a new modified boundary for the Map Reserve and the CRA that serves everyone's interests. See mapping in Appendix 1.
- The parking lot for the hill is just off the highway at the east end of Summit Lake. The lot is sufficient for
  parking approximately 100 vehicles and is maintained by the N.S.C.A. During the Master Plan review it
  was realized that the majority of the existing parking lot falls within the Ministry of Transportation and
  Infrastructure (MOTI) right-of-way for Highway 6. N.S.C.A. is currently working with MOTI to acquire the
  appropriate authorizations.
- There is an existing trail/road from the parking lot that encompasses the current operating area. This
  trail is utilized for lift and ski run maintenance in snow-free conditions and for the groomer during the
  winter.
- The current facilities include a lodge with first aid, cafeteria, washrooms, storage areas and an equipment rental shop; a central T-bar; and a beginner handle tow hill in the northeast. There are no required upgrades or improvements to existing infrastructure needed at this time.
- The lodge is maintained by the N.S.C.A. The cafeteria, washrooms and rental facilities of the lodge are all in good condition.
- The cat shed is adequate for groomer maintenance, but there are plans to enlarge it.

#### 1.3 Mountain Operation and Improvements

- The T-bar is powered by a diesel engine which is maintained by the N.S.C.A. Both the T-bar and handle tow meet all safety requirements and are inspected by the BC Safety Authority twice annually.
- The downhill runs are brushed regularly and danger trees are removed.
- The existing trail that was historically used for cross-country skiing has not been utilized or maintained for several years. Currently its width is not sufficient for groomer access.

## 1.4 Access

 Access to the hill is 18.8 km southeast of downtown Nakusp and 27.6 km northwest of New Denver along Highway 6.

#### 1.5 Servicina

- N.S.C.A. is in the process of acquiring a water license on the unnamed creek to southwest of the lodge.
  The existing water supply for the lodge is a gravity system that draws from this creek and includes a
  1000 gallon storage tank. The water is treated both by filtration and ultraviolet light. The estimated peak
  use is 200 gallons/day.
- A septic field is located west of the lodge above the parking area.
- There is hydro power to the lodge and to all of the ski runs with the exception of Run #2 (Widowmaker), #7 (The Bone) and #8 (Johnny Walker).

#### 1.6 Resort Capacity and Skier Visits

 The current lift capacity is around 700 skiers per hour and the annual usage is approximately 4000 skier days.

•	The ski hill typically operates from Wednesday to Sunday during the winter months. Hours of operation are 10:00am to 3:30pm with night skiing two days per week from 6:00 to 9:30 pm. Operating hours make increase and expand into other seasons depending on demand and feasibility.	ior nay

# **Section 2: Overview of Proposed Expansion**

#### 2.1 Expansion Area

- The proposed area of expansion is adjacent to the south, west and east boundaries of the existing operating area.
- The existing operating area covers 26.6 hectares of crown land incorporating Lots 11347 and portions of Lots 11345 and 11346. N.S.C.A. would like to expand the operating area to the south for additional downhill runs and to the east to create a multi-use trail area.
- The Controlled Recreation Area covers 169.8 hectares of crown land east of the Nakusp and Area Community Forest's (NACFOR) Chart and partially within B.C. Timber Sales (BCTS) Chart areas. This is an expansion of 143.2 hectares.
- These boundaries are clearly shown on both the Site Plan and Overview maps.

## 2.2 Description of Experience/Activities Being Offered in Expansion Area

- The proposed expansion will double the vertical feet of the existing downhill ski and snowboard runs. It will also provide more technical tree skiing for skiers and snowboarders. The proposed runs will be of varying difficulty levels to suit the needs of our clientele.
- The multi-use trail area requires some further field review, but will be located roughly as shown on the attached maps. These trails will be used primarily for cross-country skiing and snowshoeing. There is a potential for multi-season use in the future.

## **Site Plan Map Reference**

- The solid aqua linework shows the Controlled Recreation Area.
- The bright blue linework shows the MOTI Highway Right-of-Way.
- The dashed teal linework shows the proposed downhill run expansion area.
- The dashed plum polygon with plum hatching shows the proposed multi-use trail area.
- The dashed lilac linework shows the existing, unmaintained trail.
- The dashed/dotted lilac linework shows the proposed multi-use trails.
- The dotted fuchsia linework shows the proposed T-bar/chair lift location.
- The yellow hut shows the proposed warming/first aid hut location.
- The solid brick linework shows the proposed tube park.
- The white polygon outlined in navy blue and labeled "R" shows the proposed outdoor ice rink.
- The solid army green polygons show existing and proposed tree retention areas.

#### **Activity/Activities**

- The downhill run expansion will double the length of the existing runs and provide even more
  variety for skiers and snowboarders of different skill levels. Patches of trees will be retained
  throughout the expansion area to break up the runs, increase their complexity, and improve visual
  appeal of the hillside.
- Summit will continue with its school ski and snowboard programs, family events and competitions.
- Qualified instructors will provide various levels of ski and snowboard instruction.
- The multi-use trail area to the east includes roughly 3.3km of proposed trail and 0.5km of existing
  trail for cross-country skiing and snowshoeing. Trails will be constructed approximately 10
  metres wide to accommodate both a classic and skate ski track, as well as room for
  snowshoeing. There is a potential for these trails to be available to hikers and bikers in the off
  season. More trails may be constructed depending on future demand.
- Community events and competitions utilizing this trail complex may be organized at a later date.

#### **Specific References on Map**

Map symbology is described in the Site Plan Map Reference section above.

#### Period of Use

- Currently Summit operates from late November until early April depending on the annual snow levels.
- The multi-use trail area could be usable year round dependant on suitable trail and weather conditions.

### 2.3 Base Improvements

- The Site Plan Map identifies the location of a proposed ice rink in the base area, just west of the parking lot, in a flat, open area. The ice rink would be a temporary improvement, essentially consisting of a flooded area contained by snow banks. Currently the location chosen for the ice rink is partially outside of the CRA boundary and within the MOTI right-of-way for Highway 6; therefore prior to creation of the ice rink, N.S.C.A. will have to ensure the appropriate approvals are in place.
- First aid huts/stations and appropriate signage may be constructed in locations yet to be finalized.
- No other upgrades to the existing facility are required. However, changes to the rental area as well as other improvements to the lodge, cat shed and parking area may occur.

## 2.4 Mountain Improvements

- The Site Plan Map outlines the approximate locations of the proposed roads, downhill runs and multi-use trails. The road surface will be constructed 6m wide within a 20m right-of-way. This will allow for equipment necessary for the T-Bar/Chairlift construction.
- Timber will only be removed for the construction of these features and to glade out new and existing runs
- The Site Plan Map outlines the approximate location of the proposed T-bar/chair lift. The decision to build either a chair lift or an additional T-bar is dependant on funding opportunities.
- Maintenance of the lift will be done by the N.S.C.A.
- The Site Plan Map identifies the location of the proposed tube park which would be located within an existing opening.

# 2.5 Access Upgrades

- The red dashed line on the Site Plan map indicates the proposed access road for the new ski lift.
- Portions of the existing road may require re-surfacing for improved access.

#### 2.6 Projected Capacity and Skier Visits

- This proposed expansion will double the vertical feet of Summit's downhill runs and provide more diversity to the hill. This is projected to attract more skiers and snowboarders.
- In addition the multi-use trail area will have a variety of new users wanting to cross-country ski and snowshoe through the forest adjacent to Summit's current operating area. This will increase both the capacity and number of visits by recreationists giving Summit further exposure.
- N.S.C.A. predicts that the expansion of the runs, trails and facilities will increase Summit's clientele from 4000-6000.

#### 2.7 Economic Benefits

- During the expansion, jobs will be created for timber removal, road and trail construction, ski-lift installation, minor construction and signage.
- Once the expansion is complete, there will be jobs created for downhill run and trail maintenance.
- Also the expansion will increase the number and diversity of the users bringing in more direct income in terms of user fees, and indirect income in terms of overall tourism to the area. This increase in tourism will benefit the restaurants, hotels, B&Bs, hot springs and shops in the surrounding communities.
- Upon completion of the proposed ski lift, it is expected that an additional two to three jobs will be created to operate the lift and to provide ski patrol for the expansion area.

## Section 3: Overlap with Environmental & Cultural Values

#### 3.1 Fish Values

- Water courses within the application area that exceed 20% gradient or have downstream fish barriers are assumed to be non-fish bearing. All harvesting activities within the vicinity of these streams will follow the best management practices set out in the Riparian Management Area Guidebook (1995 Forest Practices Code of BC). Such practices will include falling away from all streams and minimizing machine use to designated crossings within the Riparian Management Zone. As the Site Plan map indicates, there will be leave tree patches scattered throughout the downhill run expansion area to improve visuals and minimize the impact to the surrounding area.
- Bonanza Creek is confirmed fish-bearing and any tributaries to it or Summit Lake with gradients less than 20% will be assessed by a fish biologist if harvesting or construction occurs within their riparian management area. Any recommendations including machine use, timing and methodology made by the biologist will be followed during construction and harvesting.

#### 3.2 Wildlife Values

- There is no known critical wildlife habitat in the application area.
- Summit Lake and the adjacent slopes to the south are known western toad habitat.
- There are periodic sightings of grizzly bears and moose in the area.
- There is some beaver activity in the swamps within the proposed multi-use trail area.
- Numerous bird species frequent the Summit Lake area.

#### Potential Adverse Effects of the Operation on Wildlife Values.

• There are no known adverse effects of the operation.

# **Mitigation Options.**

- Sensitive sites (ie. riparian, swamps, avalanche chutes) within the multi-use trail area will be protected by either sufficient buffers or small bridge structures in wet zones. Proper signage will inform users of site sensitivities. Beaver dams/activity will be respected.
- Significant patches of timber will be retained throughout the downhill run extension for both thermal and security cover for bear, ungulates, small mammals and birds. The run openings will increase forage for ungulates and bears. Signage regarding appropriate behaviour and gear required to safely interact with wildlife will be posted at trail heads and near facilities if the operating season extends beyond the winter months. Bear-proof garbage bins will also be located and maintained near facilities. The Bear Aware program is active in the surrounding communities and most users are educated on how to reduce their interactions with bears and how to respond when an interaction occurs.

#### Wildlife and Habitat Sensitivity in the area.

- The western toad is a yellow listed species. The largest concentrations of these toads occur further west where the shoreline is more conducive to their migration into the forest. This is where barriers have been placed along the highway diverting them to a culvert crossing under the highway.
- The grizzly bear is a blue listed species that hibernates during the winter when most of the recreational activity will occur.

#### 3.3 Water Values

- The application area is not within a community or domestic watershed. There is a Point of Diversion (POD) located on Bonanza Creek that is outside (north) of the application area. The water licensee will be contacted prior to the commencement of operations that may impact water quality. There is a low probability of impact to water values.
- N.S.C.A. is in the process of acquiring a license on the unnamed creek southwest of the ski lodge. The
  water to the lodge is gravity fed from a storage tank on this creek. Water is filtered and treated using a UV
  system. In addition, the majority of the creek is protected by leave tree areas. New trail construction will
  not occur within 100 metres upstream of the POD.
- There is a very low probability of impact on this POD.

#### 3.4 First Nations

#### Summit Lake Ski Area is within the area of interest of the following First Nations:

Okanagan Nation Alliance Ktunaxa Nation Council (m

Ktunaxa Nation Council (member bands: Akisqnuk, Lower Kootenay, St. Mary's & Tobacco Plains)

Lower Similkameen Indian Band

Okanagan Indian Band

Penticton Indian Band

Shuswap Indian Band

**Shuswap Nation Tribal Council** 

# Section 4: Overlap with Existing Use

#### **4.1 Mineral Tenure**

 There are no current mineral claims within the application area. The licence area is covered by a Conditional Staking Reserve No. 1003075 under the Ministry of Tourism, Culture and Arts.

#### 4.2 Timber Tenure & Forest Use

- The Summit Lake Ski Area is within the Arrow Boundary Forest District and partially within the Nakusp and Slocan Provincial Forests. A portion of the existing licence area has been designated under the Resort Timber Administration Act (RTAA), which provides the Ministry of Tourism, Culture and the Arts (MTCA), with the authority to administer timber within the Summit Lake Ski Area.
- The intent of transferring the timber administration to the MTCA from the Ministry of Forest and Range was to provide a "one window" approach for resort developments with CRAs, in order to streamline and integrate provincial review and application processes. Also, the transfer recognized that any land use decision that may be made in relation to the CRA is for long term all season resort development purposes. To finalize government's direction and intent of the RTAA, MTCA is proposing to remove the proposed expansion area from the Provincial Forests.
- A portion of the existing licence area and some of the expansion area is adjacent to the Nakusp and Area Community Forest (NACFOR). In addition, the eastern two thirds of the application area falls with the BC Timber Sales chart area. There are no active harvesting authorizations within the proposed boundary.
- Harvesting outside of ski run and trail expansion/maintenance, the proposed tube park and ice rink, will
  only occur for forest health or fuel management purposes. Root rot (armillaria in particular) is the most
  significant concern in this area.

#### 4.3 Land Use Planning, Local or Regional Zoning Requirements

- The Summit Lake Ski Area is within the Central Kootenay Regional District (RDCK) Area H.
- The Summit Lake Ski Area falls within the Kootenay Boundary Land Use Plan (KBLUP). This plan can be referenced at <a href="http://ilmbwww.gov.bc.ca/slrp/lrmp/cranbrook/kootenay/legaldocuments/index.html">http://ilmbwww.gov.bc.ca/slrp/lrmp/cranbrook/kootenay/legaldocuments/index.html</a>. The KBLUP was approved in 1995 and was followed by the Kootenay-Boundary Higher Level Plan which was approved in 2002. The Kootenay-Boundary Higher Level Plan can be referenced at <a href="http://ilmbwww.gov.bc.ca/slrp/lrmp/cranbrook/kootenay/legaldocments/higher level order.html">http://ilmbwww.gov.bc.ca/slrp/lrmp/cranbrook/kootenay/legaldocments/higher level order.html</a>. This plan brought into force ten legal objectives that provide direction on biodiversity emphasis, old and mature forests, caribou, green-up and patch size, grizzly bears and connectivity corridors, consumptive use streams, enhanced resource development zones (timber), fire maintained ecosystems, visuals and the forest economy. Since 2002 there have been nine variances to the plan. These variances have dealt with improving caribou management, addressing issues associated with mountain pine beetle infestations and addressing economic concerns.
- The Summit Lake Ski Area is within the Special Resource Management Zone, Connectivity Corridor (KOR\_5\_2023), and the Intermediate Biodiversity Emphasis Option. The north eastern portion of the expansion area dips into an Ungulate Winter Range area. The ski hill is adjacent to Bonanza Creek, which has been designated as a Critical and High Value Fish Stream.
- As mentioned in Section 1.2, a small portion of the proposed expansion area (DL's 11345 & 11346) overlaps the Summit Lake Map Reserve for Protected Area purposes on File 4404409, which was established in 2006. This Map Reserve stems from the Protected Area Strategy of the late 1990's, which identified an allowance for the creation of Goal 2 (small, site specific) Parks in the West Kootenay. The Ministry of Tourism, Culture and the Arts worked with representatives of the Ministry of Environment to resolve the overlapping interests. All parties have agreed to a new modified boundary for the Map Reserve and the CRA that serves everyone's interests. See mapping in Appendix 1.

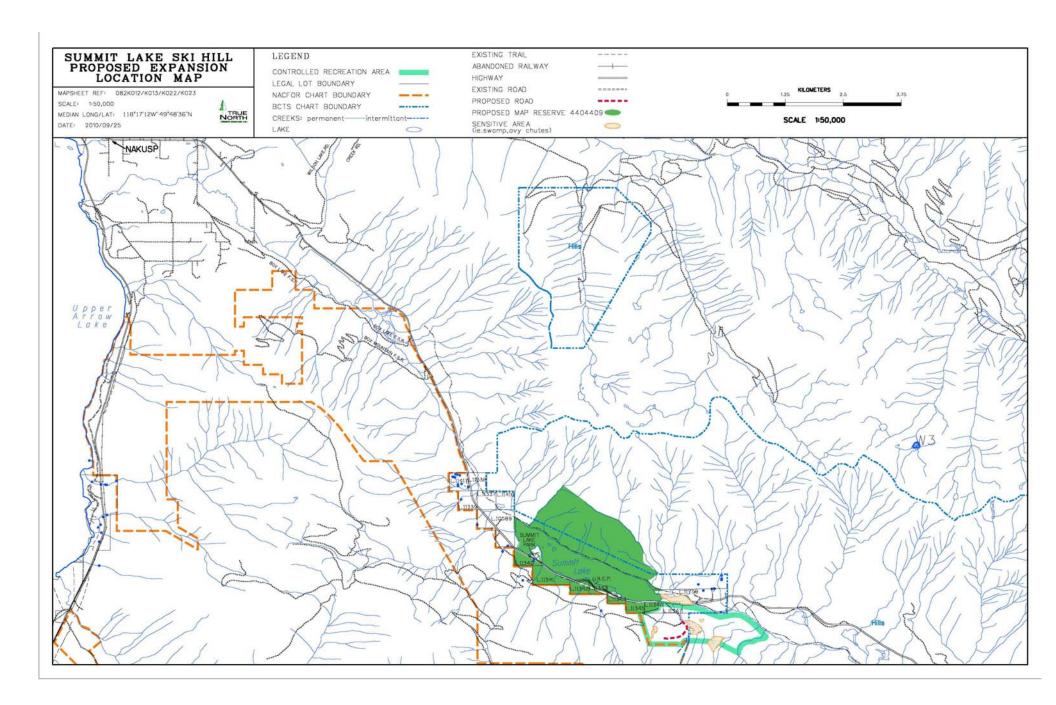
#### 4.4 Commercial Recreation Tenure & Guide Outfitter Territories

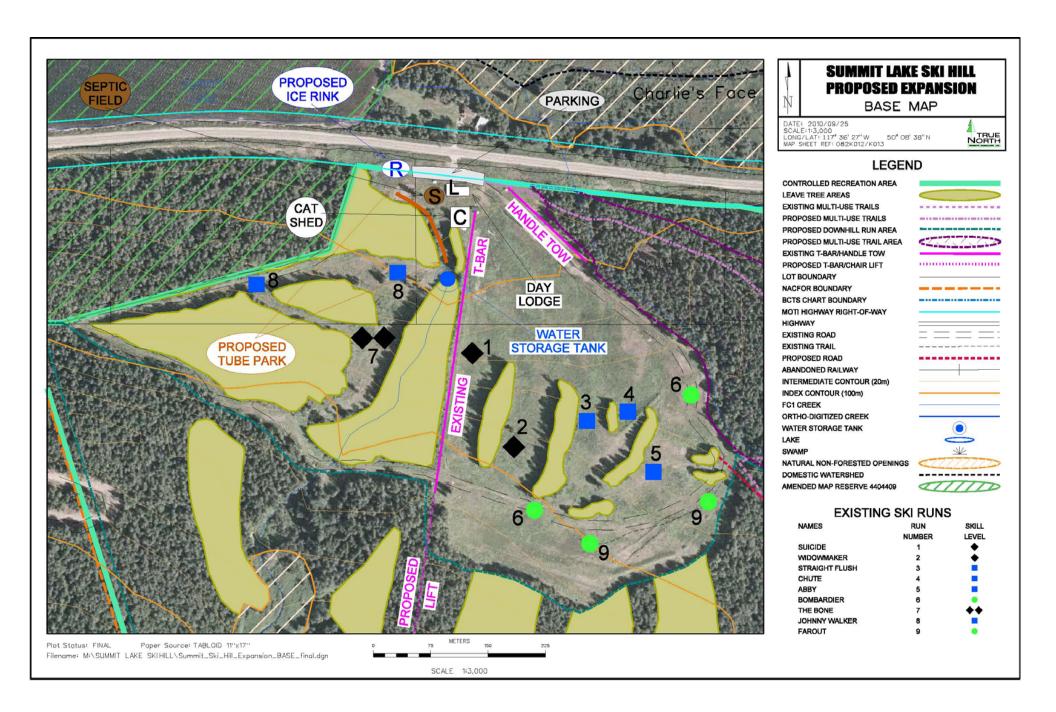
 The Controlled Recreation Area does not overlap with any existing Commercial Recreation tenure holders or Guide Outfitter Territories, but does overlap with Trapline Holder TR0417T009.

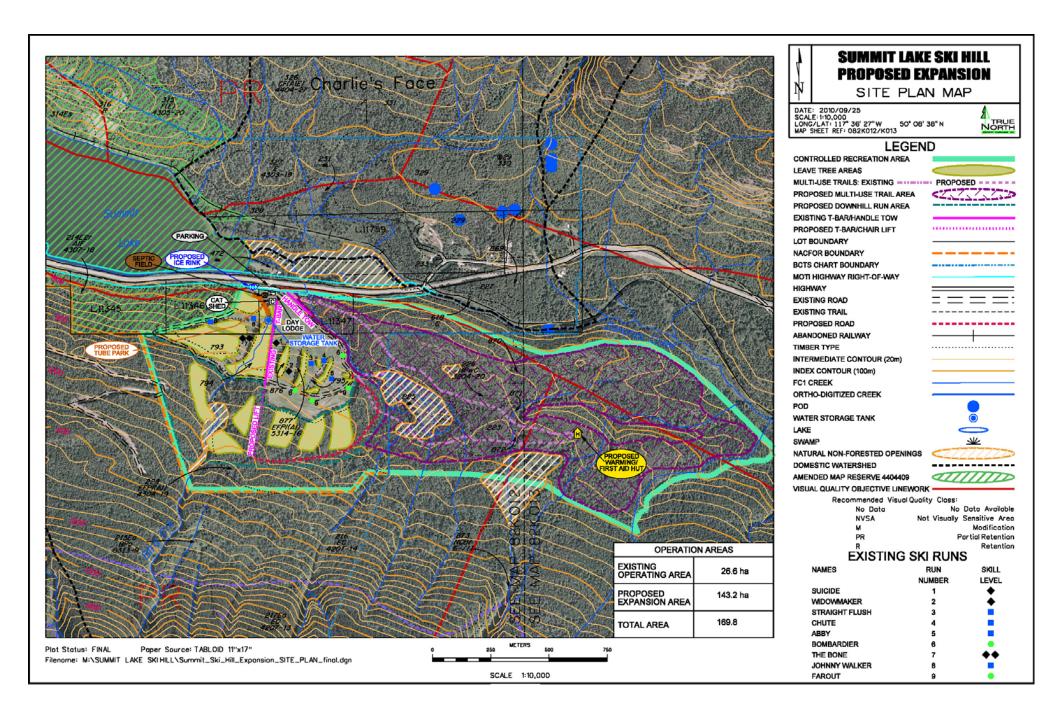
#### 4.5 Public Recreational Use

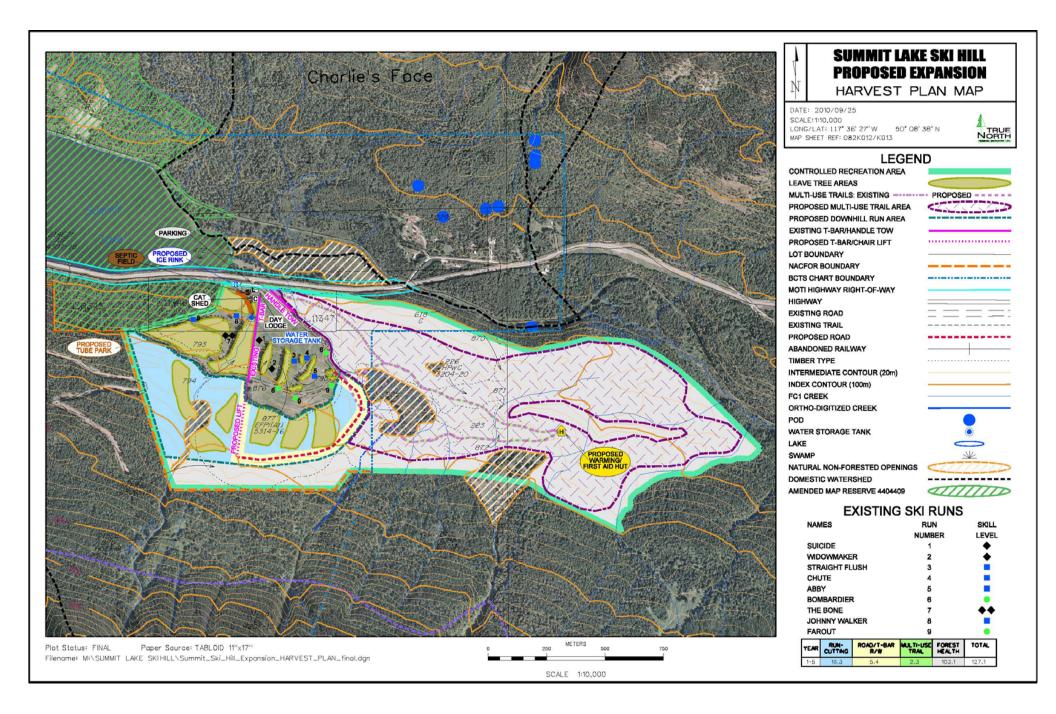
- The Rails to Trails Society currently has an Active Interest Parcel on the roughly 2.5km of existing railroad grade that is adjacent to, but not within the expansion area. This society is active throughout BC and converts/maintains unused railway grades to trails for cycling, hiking, snowshoeing, Nordic skiing and some motorized use. This concept has become popular in many countries. This particular Parcel is labeled Trail Maintenance and its SID is 893889 (Crown Lands File 4404926). It applies only to the railroad grade and this section is not currently being maintained or frequently utilized by recreationists. Most recreationists (hikers, cyclists, birders, snowshoers, and Nordic skiers) utilize the trails either behind Summit Lake or closer to Slocan. Contact with members of Slocan's Rails to Trails group will be made should any work in the expansion area affect their project.
- The Hill's Nordic Ski club has expressed interest in using the Multi-use trail area within the expansion area.

# Appendix 1 - Mapping









# Appendix 2 - Hazards and Safety Plan

From a safety and liability perspective you are required to have a Hazards and Safety Plan that meets or exceeds Workers Compensation Board and approved industry standards. Please note that you meet this requirement by checking off the appropriate box below and signing.

I certify that I have prepared Hazards and Safety F Board and approved industry standards and that my opera	
	Signed
Date	

Compensation

plan.