# SUN PEAKS™ RESORT

CANADA'S ALPINE VILLAGE

# TABLE OF CONTENTS


## 1. INTRODUCTION

| | | |
|---|---|---|
| .1 | Location and Regional Context | I - 1 |
| .2 | Historical Perspective of the Resort Development | I - 4 |
| .3 | Planning Issues | I - 22 |
| .4 | Glossary | I - 23 |

## II. INVENTORY

| | | |
|---|---|---|
| .1 | Introduction | II - 1 |
| .2 | Physiography | II - 2 |
| .3 | Climate/Solar Shading and Solar Radiation Analysis | II - 4 |
| .4 | Avalanche | II - 10 |
| .5 | Existing Mountain Facilities | II - 12 |
| .6 | Mountain Capacity Analysis | II - 33 |
| .7 | Lift and Trail Balance Statement | II - 35 |
| .8 | Snowmaking | II - 37 |
| .9 | Snow Grooming Equipment | II - 38 |
| .10 | Base Area Facilities | II - 41 |
| .11 | Base Area Staging Capacity | II - 47 |
| .12 | Skier/Snowboarder Service Floorspace | II - 49 |
| .13 | Commercial Floorspace Inventory | II - 62 |
| .14 | Ski Area Facilities Balance | II - 64 |
| .15 | Independent Recreation Facilities | II - 66 |
| .17 | Summary | II - 68 |

## III. MARKET

| | | |
|---|---|---|
| .1 | Ski Industry Overview | III - 1 |
| .2 | Sun Peaks Skier Visit Analysis | III - 3 |
| .3 | Sun Peaks Summer Lift Visits Analysis | III - 6 |
| .4 | Golf Rounds | III - 7 |

## IV. DEVELOPMENT ANALYSIS


| | | |
|---|---|---|
| .1 | Planning Parameters | IV - 1 |
| .2 | Mountain Design Analysis | IV - 1 |
| .3 | Terrain Capacity Analysis | IV - 2 |
| .4 | Base Area Design Analysis | IV - 6 |
| .5 | Walking Distances | IV - 8 |
| .6 | Slope Analysis | IV - 8 |
| .7 | Aspect Analysis and Solar Analysis | IV - 8 |
| .8 | Watershed Constraints | IV - 9 |
| .9 | Base Area Development Capability | IV - 10 |


## V. MOUNTAIN FACILITIES


| | | |
|---|---|---|
| .1 | Goals and Objectives | V - 1 |
| .2 | Phase 2b | V - 4 |
| .3 | Phase 3 | V - 8 |
| .4 | Phase 4 | V - 14 |
| .5 | Grooming Requirements and Maintenance Shop | V - 28 |
| .6 | Proposed Snowmaking | V - 31 |
| .7 | Skier Services | V - 33 |


## VI. BASE AREA FACILITIES


| | | |
|---|---|---|
| .1 | Introduction | VI - 1 |
| .2 | Goals and Objectives | VI - 3 |
| .3 | Land Use Concept | VI - 4 |
| .4 | Development Program | VI - 6 |
| .5 | Base Area Capacity and Skier Staging | VI - 17 |
| .6 | Commercial Space Use Program | VI - 22 |
| .7 | Development Phasing | VI - 25 |
| .8 | Village Design Principles | VI - 26 |
| .9 | Village Plans – Village at Sun Peaks | VI - 31 |
| .10 | East Village Plan | VI - 34 |
| .11 | Winter and Summer Recreational Master Plans | VI - 39 |
| .12 | Municipal Facilities | VI - 45 |
| .13 | Proposed Eastern Access Road | VI - 46 |

## APPENDIX 1

Revised Schedule D to Sun Peaks Master Development Agreement

# LIST OF TABLES


| | | |
|---|---|---|
| II.1 | Lift Specifications - Existing Area – 2018/19 | II - 13 |
| II.2 | International Ski/Snowboard Trail Standards | II - 16 |
| II.3 | Skier/Snowboarder Skill Classifications | II - 16 |
| II.4 | Ski/Snowboard Trail Inventory - Existing Area – 2019/19 | II - 18 |
| II.5 | Worldwide Comparison of Ski/Snowboard Trail Densities | II - 24 |
| II.6 | Ski/Snowboard Trail Carrying Capacity - Existing Area – 2018/19 | II - 27 |
| II.7 | Cumulative Trail Balance Statement | II - 32 |
| II.8 | Skiing and Snowboarding Demand by Skill Classification | II - 33 |
| II.9 | Planning Parameters | II - 34 |
| II.10 | Skier Carrying Capacity | II - 35 |
| II.11 | Trail Balance by Lift System | II - 36 |
| II.12 | Grooming Equipment Inventory 2019/20 | II - 39 |
| II.13 | Existing Trail Grooming | II - 40 |
| II.14 | Existing Parking Inventory | II - 42 |
| II.15 | Existing and Committed Accommodation Summary 2019 | II - 43 |
| II.16 | Existing and Committed Accommodation Inventory 2019 | II - 45 |
| II.17 | Bed Unit Occupancy and Skier Participation Rates | II - 46 |
| II.18 | Skiers Generated from On-Mountain Accommodation | II - 46 |
| II.19 | Existing Base Area Staging Capacity | II - 48 |
| II.20 | Skier Service Floor Area Inventory | II - 51 |
| II.21 | Skier Service Space Inventory Including Other Rental Operators And Food & Beverage Outlets open for Lunch | II - 53 |
| II.22 | Skier Service Floor Area Standards | II - 55 |
| II.23 | Existing Skier Service Floorspace Analysis Space Used by SPR LLP | II - 57 |
| II.24 | Skier Service Floorspace Analysis Including Other Rental Operators and Food & Beverage Outlets open for Lunch | II - 58 |
| II.25 | Existing Restaurant/Bar Seat Inventory | II - 60 |
| II.26 | Commercial Floorspace Inventory | II - 63 |

| | | |
|---|---|---|
| II.27 | British Columbia Commercial Alpine Ski Policy Resort Rating System - Sun Peaks Resort | II - 69 |
| II.28 | Sun Peaks Resort Existing (2019) SAOT Calculation | II - 70 |
| III.1 | Historic Skier Visits – Canada 2008/09 to 2018/19 | III - 1 |
| III.2 | Historic Skier Visits United States - 2008/09 to 2018/19 | III - 2 |
| III.3 | Skier Visit Analysis – 2008/09 to 2018/19 | III - 4 |
| III.4 | Summer Lift Visit Analysis 2009 to 2019 | III - 6 |
| III.5 | Summer Golf Rounds – 2000 to 2019 | III - 7 |
| IV.1 | Planning Parameters | IV - 1 |
| IV.2 | Terrain Capacity Analysis | IV - 4 |
| IV.3 | Skier Skill Level Terrain Balance Statement | IV - 5 |
| IV.4 | Development Density Assumptions | IV - 10 |
| IV.5 | Phase 4 Development Capability | IV - 11 |
| V.1 | Master Plan Development Summary | V - 3 |
| V.2 | Lift Specifications Phase 2B | V - 6 |
| V.3 | Cumulative Trail Balance – Phase 2B | V - 7 |
| V.4 | Lift Specifications Phase 3 | V - 12 |
| V.5 | Cumulative Trail Balance – Phase 3 | V - 13 |
| V.6 | Lift Specifications – Phase 4 | V - 18 |
| V.7 | Trail Inventory – Phase 4 | V - 20 |
| V.8 | Cumulative Trail Balance - Phase 4 | V - 26 |
| V.9 | Major Lift vs. Trail Capacity Phase 4 | V - 27 |
| V.10 | Grooming Requirements – Based on One Shift per Night | V - 29 |
| V.11 | Grooming Machine Service Bay Requirements | V - 30 |
| V.12 | Recommended Skier Services Program | V - 34 |
| VI.1 | Bed Unit Entitlement Based on MDA SAOT Formula | VI - 7 |
| VI.2 | Land Use Summary | VI - 12 |
| VI.3A | Land Use Program, Village Core and Tourist Accommodation | VI - 13 |
| VI.3B | Land Use Program, Tourist Pension and Multi-Family | VI - 14 |
| VI.3C | Land Use Program, Single Family & Non-Market Community Housing | VI - 15 |
| VI.3D | Land Use Program, Service and Recreation, Pre Development Agreement | VI – 16 |

VI.4 Bed Unit Occupancy and Skier Participation Rates VI - 18
VI.5 Skiers and Guests Generated from Resort Area Accommodation VI - 19
VI.6 Resort Program VI - 20
VI.7 Day Visitor Parking at Phase 4 VI - 21
VI.8 Phase 4 Base Area Skier Staging Analysis VI - 21
VI.9 Commercial Space Use Program VI - 22
VI.10 Central Village Development Program VI - 33
VI.11 East Village Development Program VI - 36
VI.12A East Village – Building E-A VI - 36
VI.2B East Village – Building E-B VI - 37
VI.12C East Village – Building E-C VI - 37
VI.12D East Village – Building E-D VI - 37
VI.12E East Village – Building E-E VI - 37
VI.12F East Village – Building E-F VI - 38
VI.12G East Village – Building E-G VI - 38
VI.12H East Village – Building E-I VI - 38
VI.12I East Village – Building E-J VI - 38

## LIST OF PLATES

I.1 Critical Resort Elements I - 22

II.1 Average Snowpack Data II - 5
II.2 End of November Snowpack versus Elevation II - 6
II.3 Average Monthly Snowfall II - 7
II.4 Ski Pointer II - 8
II.5 Worldwide Slider Densities II - 25
II.6 Cumulative Trail Balance II - 32
II.7 Skier/Snowboarder Skill Class Distribution II - 34
II.8 Lift vs. Trail Capacity II - 36
II.9 Skier Service Function Capacities - SPRC Buildings Only and SPRC with Village Businesses II - 59
II.10 Area Facilities Balance II - 65

III.1 Historical Annual Skier Visits B. C. & AB – 1984/85 TO 2018/19 III - 1

III.2 Sun Peaks Resort Historic Skier Visitation 2007/08 TO 2018/19 III – 5
III.3 Daily Skier Visits – 2018/19 Season III - 5
III.4 Sun Peaks Summer Visit Analysis – 2009 to 2019 III - 7

IV.1 Terrain Balance Statement IV - 5

V.1 Phase 2b Trail Balance V - 7
V.2 Phase 2b Lift vs. Trail Capacity V - 8
V.3 Phase 3 Trail Balance V - 13
V.4 Phase 3 Lift vs. Trail Capacity V - 14
V.5 Phase 4 Trail Balance V - 26
V.6 Phase 4 Major Lift vs. Trail Capacity – Phase 4 V - 28

## LIST OF FIGURES

1. Area Location
2. Regional Context
3. Sun Peaks Controlled Recreation Boundary Map

4. Aspect Analysis
5a. Solar Analysis - 9:00 a.m.
5b. Solar Analysis - 12:00
5c. Solar Analysis - 3:00 p.m.
5d. Solar Radiation Analysis
6. Existing Mountain Facilities
7. Existing Snowmaking Plan
8. Existing Base Area Land Use
9. Existing Village Area Plan
10a. Existing Resort Recreation Facilities - Winter
10b. Existing Resort Recreation Facilities - Summer

11. Mountain Slope / Terrain Capacity Analysis
12. Base Area Slope / Development Capability Analysis – Phase 4

13. Mountain Master Plan – Phase 2b
14. Mountain Master Plan – Phase 3
15. Resort Master Plan – Phase 4
16. Snowmaking Master Plan

17. Base Area Land Use & Parcelization Plan
18. Base Area Skier Staging Analysis
19. Base Area Phasing Plan
20. Central Village Schematic Plan
21. Central Village Parking & Circulation Plan
22. East Village Schematic Plan
23. East Village Parking & Circulation Plan
24. East Village Sections
25a. Valley Recreation Facilities – Winter
25b. Resort Recreation Facilities – Winter
26a. Valley Recreation Facilities – Summer
26b. Resort Recreation Facilities - Summer

# I. INTRODUCTION

Sun Peaks Resort LLP (Sun Peaks) has retained Ecosign Mountain Resort Planners, Ltd. to prepare an update to the Sun Peaks Resort Master Plan. The first Sun Peaks Master Plan was prepared by Ecosign and approved by the Province of British Columbia in 1993. The Master Plan provided a detailed framework for mountain improvements and the associated development of base area facilities in four phases. In 1993, Sun Peaks and the Province signed a Master Development Agreement for development of the area within the Sun Peaks Controlled Recreation Area (CRA) in accordance with the Sun Peaks Master Plan. Since then, the Sun Peaks Master Plan has been updated and revised in 2001, 2006 and most recently 2013. These periodic updates are required by the Province to ensure that the information describing the existing status of the resort and the vision for future development remain current.

The Sun Peaks Resort Master Plan Update 2020 contains an inventory of the existing recreation improvements, accommodation, service facilities and infrastructure located within its CRA in 2020. The future recreational development potential of the skiing terrain within the CRA, as well as the accommodation development potential of the Base Area Lands are described in the Development Analysis section. The Master Plan update 2020 has some significant changes to the prior updates due to new and highly accurate Lidar mapping of the entire CRA and a strategic shift in real estate development away from low density single family lots to medium density townhomes and condominiums. The Mountain Facilities section of this report outlines Sun Peaks' future plans for proposed recreation improvements and future adventure tourism activities at Sun Peaks Resort. Future plans for accommodation development and supporting commercial and skier services required at each of the mountain's valley staging areas are outlined in the Base Area Facilities section.

## .1 Location and Regional Context

Sun Peaks Resort is located within the traditional territory of the Secwepemc people. Today, there are 17 Shuswap bands who make up the Secwepemc Nation. The traditional territory of the Secwepemc people is approximately 180,000 square kilometres from west of the Fraser River to east of the Rocky Mountains, and north to the upper Fraser River and south to near Vernon, Lower Arrow Lakes and over to and near Invermere. The high country of Tod Mountain (the geographic feature on which the original resort that became

Sun Peaks was founded) was called “Skwelkwek’welt’ by the Secwepemc people. Based on ethnographic and historical sources, the high country of the Mount Tod’s alpine area was used by the Secwepemc people for hunting and gathering during the Summer and early Fall periods. The alpine areas offered alpine plants and herbs that only grew in the higher elevations.

The resort is situated on Mount Tod in the McGillivray Creek Valley, approximately 40 kilometres (“as the crow flies”) northeast of Kamloops, British Columbia. Mount Tod, with a summit elevation of 2,152 metres, is located at the western edge of the Shuswap Highlands to the west of the Monashee Mountains. Figure 1 illustrates the Area Location of Sun Peaks Resort. The ski area and the future base area lands are situated on Crown Land and are covered by a Master Development Agreement between the Province of British Columbia and Sun Peaks Resort LLP (SPRLLP). The boundaries of the CRA coincide with the boundaries of the Sun Peaks Resort Municipality (SPMRM) established in 2010 by the Province of BC to provide local government to the growing resort community.

*View of Sun Peaks Resort - Winter*

*View of Sun Peaks Resort – Summer*

Sun Peaks Resort is accessed from the city of Kamloops by driving north on the four-lane Yellowhead Highway (Hwy. 5) for 24 kilometres. From Hwy. 5, it is a 31 kilometre easterly drive to the resort on a paved two-lane road named Tod Mountain Road for the first kilometre, then the Heffley-Louis Creek Road for the next 22 kilometres and Sun Peaks Road for the last 8 kilometres from the Village of Whitecroft as illustrated in Figure 2 Regional Context. In the summer, the resort may be accessed by travellers coming from the east on the TransCanada Highway by crossing the Thompson River at Chase or Pinatan and taking the Kamloops-Shuswap Road and the McGillivray Lake Forest Service Road (FSR) to the Tod Mountain Forest Service Road as shown in Figure 2. The McGillivray Lake FSR and the Tod Mountain FSR are currently unpaved. The Tod Mountain FSR has been closed during the winter for at least 25 years since it conflicts with ski trails. The McGillivray Lake FSR is usually not ploughed in the winter unless there is active logging.

The City of Kamloops is one of the major interior cities in the Province with important highway and rail transportation junctions, as well as the Kamloops Regional Airport. The

2016 population of the City of Kamloops was 90,280 and the Kamloops census area population was 103,811, up 5.4% since the 2011 census. Air Canada provides regular service to the Kamloops airport from Vancouver and Calgary and West Jet has direct service from Calgary to Kamloops. Central Mountain Air has scheduled flights to Fort St. John, Smithers, Terrace, Prince George and Kelowna. Kamloops is located 360 kilometres north of Vancouver, British Columbia and is accessed via the four-lane Trans Canada (#1) and Coquihalla (#5) Highways. Metro Vancouver is Canada's third largest urban area, with a population of approximately 2.46 million people and is growing at a rate of 2% per annum. Driving time from downtown Vancouver to the resort is approximately 5 hours.

Due to its proximity to Shuswap Lake, the Thompson River and many other recreational facilities (golfing, hunting and fishing), Kamloops has a strong, well established summer tourism market. This location provides excellent potential to attract regional visitors from the Central Okanagan area, the lower Mainland of Vancouver, as well as north-western Washington State and from further out destination markets as they travel through Kamloops to/from Banff, Jasper, Vancouver and Whistler. Figure 2 illustrates the Regional Context of Sun Peaks Resort.

## .2 Historical Perspective of the Resort Development

Tod Mountain was named after a famous fur trader, John Tod, who was a chief trader for the Hudson's Bay Company in the early 1840's. The mountain was originally developed for alpine skiing in the early 1960's. Harold (Harry) Burfield is remembered as a colourful character who ran the original ski shop at the mountain, and another in Kamloops.

In 1961, the Burfield Lodge and Burfield double chairlift were opened. In 1972, the Shuswap double chairlift was constructed and temporary day lodge facilities were built in the new Shuswap base. The Shuswap day lodge was constructed in 1974 and the Crystal triple chairlift was installed for the 1979 ski season. Development at Tod Mountain continued and in 1988, a 49-lot subdivision across the valley from the Burfield lodge was constructed. Burfield Heights, a 36-unit townhouse development above the Burfield Lodge was also developed around the same time. By 1990, the paving of the access road from Whitecroft Village to both day lodges was completed.

In April of 1992, Nippon Cable Company Ltd., of Tokyo, Japan, purchased Tod Mountain. Nippon Cable Company Ltd. operates five ski resorts and one sightseeing resort in Japan, owns the Harvest Golf Club in Kelowna and has a 25% ownership of Whistler Blackcomb. Nippon Cable's strategy for Tod Mountain was to upgrade lift and trail systems and transform the area into a major four-season, destination resort with all amenities. Ecosign Mountain Resort Planners, Ltd. was retained to develop a Master Plan for the resort and the Tod Mountain Master Plan was completed in March 1993.

On April 13, 1993, the Province of British Columbia entered into an agreement ("the Development Agreement") with the Sun Peaks Resort Corporation ("SPRC"), now Sun Peaks Resort LLP, to expand the mountain and base facilities at Tod Mountain in accordance with the Master Plan. Shortly after the Development Agreement was signed, Nippon Cable changed the name of the ski area to the Sun Peaks Resort. The agreement gives Sun Peaks the right to develop ski facilities within a Controlled Recreation Area of 4,140 hectares and purchase Crown Land for base area facilities within the 867 hectares of Base Area Lands. Figure 3 illustrates the boundaries of the Controlled Recreation Area and the Base Area Lands at Sun Peaks Resort.

Over the past 28 years, considerable development has occurred, transforming the old Tod Mountain ski area into Sun Peaks Resort, a four-season mountain community. This development has accounted for a substantial percentage of the building activity in the Thompson-Nicola Regional District during this period including extensive improvements to the mountain, the construction of various recreational amenities and the development of 1,850 new units of public and private accommodation.

In 1995, the Sun Peaks Mountain Resort Improvement District was created to provide local government services such as firefighting and street lighting to the new resort community. A Fire Hall was constructed in 1996 and a volunteer firefighting force created. In June 2010, following a favourable vote on a referendum of local residents, the Provincial government incorporated the Sun Peaks Mountain Resort Municipality (SPMRM). The boundaries of the Municipality are the same as the Controlled Recreational Area. The new Sun Peaks Municipality took over the services of the Improvement District and the responsibility of land use planning from the Thompson-Nicola Regional District. The Sun Peaks Official Community Plan, adopted in 2016, is closely aligned with the Sun Peaks Master Plan. In 2018, the municipality took over ownership and operation of the water

supply, sewage collection and treatment and stormwater collection functions of the Sun Peaks Utility Co., Ltd.

The Sun Peaks Mountain Resort Association, operating as Tourism Sun Peaks, was created in 1996 to market the resort worldwide. Tourism Sun Peaks' role is to promote the destination as a whole, increase visitation and develop new markets. Tourism Sun Peaks is funded by contributions from its membership which includes all resort property owners and all businesses operating within the resort.

**Mountain Development Since 1992**

Nippon Cable has invested approximately $ 68.4 million in upgrades to the mountain facilities since 1992. Improvements were underway immediately after the purchase was completed, with the installation of a T-bar in the West Bowl during the summer of 1992. During the summer of 1993, after the completion of the Master Plan and the Development Agreement with the Province, the old Shuswap double chairlift was replaced with the Sunburst Express, a high speed, detachable quadruple chairlift equipped with weatherproof bubbles. A total of 33 hectares of new terrain was opened on Sundance Ridge, serviced by the Sundance fixed grip quadruple chairlift.
A beginner area was created to the east of the Sundance Quad, serviced by the Village Platter lift. A mountain restaurant with seating for 100 was constructed at the top of the Sunburst Express and an extensive trail summer grooming program commenced.

In 1994, the 20,000 square foot (1,860 m²) Village Day Lodge was constructed at the base of the Sunburst and Sundance lifts, and the old Shuswap Lodge was renovated and renamed "Bento's". The Village Day Lodge provides many needed skier services, including a restaurant and bar, as well as rental and retail facilities. A snowboard terrain park was developed on Sundance Ridge. Sun Peaks won the Snow Country Award for best trail design in 1994. The Sundance Ridge terrain was doubled in 1995 and the Sundance Quad was converted to a detachable grip express quad lift and extended to the top of the ridge. In 1997, the old Burfield double chair was replaced with a new fixed grip quadruple chairlift.

In 1994, the first phase of the snowmaking system was constructed, utilizing the village water system. This system provided coverage to the beginner terrain serviced by the Village Platter, the terrain under the Sundance fixed quad and the lower section of Five

Mile to the 1,300-metre elevation. In 1996, a new 121,100 cubic metres (32 million U.S. gallons) reservoir was constructed at the 1,750-metre elevation and a gravity fed snowmaking distribution system was constructed on the Five Mile trail.

The creation of new trails and improvements to the existing trail network has been carried out over the past twenty-eight years. New runs were cut in 1997 in preparation for the Morrisey Express lift which was installed in 2002. Lift improvements in 1997 included the replacement of the Burfield double chairlift with a new quadruple chairlift, installation of a moving carpet lift and the increase in capacity of the Sunburst Express.

In 1999, the capacity on the Sunburst Express, Sundance Express and Village platter were all increased. The Mount Morrisey beginner platter and additional ski trails on Mount Morrisey were installed in 2001. A year later, the Morrisey Express was installed. In 2002, SPRC provided the land and a joint venture consisting of local investors, including the Little Shuswap and Whispering Pines Indian Bands, constructed the Little Shuswap Lodge at the Burfield Base to provide staff accommodation. In 2003, the size of the children's space was increased and a tubing facility was constructed. The following year, a moving carpet lift was installed for the tube facility, the Great White Circle was opened with the installation of the "Back in Time" bridge and the capacity on the Morrisey Express was increased.

During the 2005 summer season, the first phase of construction of the Nancy Greene International Race Centre began with the clearing of the race trails. In 2006, the Elevation Quad Chairlift was installed to provide a lift that allowed return cycle skiing without having to ski down the Five Mile Trail to the base area. Snowmaking lines were installed from the top to bottom of the course to ensure the ability for early season openings. In the years leading up to the 2010 Olympic Winter Games, the Austrian Ski Team trained at the Race Centre. Also, during 2005, the children's building known as the Schoolhouse was moved to the top of the Village platter lift. A second magic carpet lift was installed extending from the bottom of the Village Platter to the bottom of the tubing hill, to expand the beginner terrain and also to facilitate access to the tubing hill.

The umbrella bar and washroom facilities were installed at the base of the Morrisey Express in 2006. Clearing for the future trails on Orient Ridge began in 2006 and continued in 2007 with five new trails below the East Village Ski Way being completed. In 2008, the Whispering Pine Lodge staff housing was completed by the same joint venture

group that constructed the Little Shuswap Lodge. The Bentos Day Lodge kitchen was upgraded in 2010 and the heating and ventilation system was replaced in 2011.

In 2016, the Resort and the Sun Peaks Mountain Resort Municipality (SPMRM) commenced construction of the Sun Peaks Community Health Centre with occupancy achieved in December 2017. The health centre and the ski patrol share the ground floor of this building and the second floor provides administration and employee space for the ski area. The relocation of ski patrol functions to the Sun Peaks Community Health Centre freed up space in Bento's Day Lodge for 154 more seats. In 2017, the Resort invested $ 3.0 million to expand and renovate the mid-mountain Sunburst Lodge and renovate and rebrand Bento's as The Annex. Total indoor seating in the Sunburst Lodge was increased to 288 seats and in The Annex to 500.

In 2018 and 2019, the resort added 36 quadruple chairs to the Sundance Express to bring its capacity to 2,491 pph. The resort also invested $ 3.4 million to install the Orient Quad chairlift with an initial capacity of 1,022 pph. This new chairlift improved the connection between the north and south sides of the resort and also added new terrain on a fourth mountain. All skiers can now come out of overnight accommodation in the east valley area and with a short ride up the Orient Quad are able to slide to the Sun Peaks Village Centre.

**Base Area Development Since 1993**

In 1994, Sun Peaks LLP commenced an aggressive base area development program, constructing roads and underground infrastructure for 60 single-family lots, 3 pension lots, 9 village hotel and condotel properties and 3 multi-family development parcels. The serviced area was expanded to the east of the Village to two tourist accommodation parcels during 1995, with the construction of Village Place. Sundance Road was constructed to service a multi-family townhouse parcel, a pension site and 16 ski-in/ski-out single-family lots in 1997. An infill site on the golf course between the Burfield base and the Village for a small lot, single-family strata development was also serviced during 1997. In 1998, roads and services were installed for a tourist accommodation site on Valley Drive. More recently, services have been extended to the east of the Village as far as the 15$^{th}$ tee on the golf course. Infrastructure is now in place to supply a community of approximately 7,000 beds at Sun Peaks Resort. The underground infrastructure includes a community

water supply and sewage collection system, a piped propane gas distribution system, electricity, telephone and cable TV.

Accommodation

SPRC began selling parcels for development by third parties in 1994. Since then, a number of developers, investors and families have contributed to the rapid pace of development at Sun Peaks, constructing first class accommodation in accordance with strict design guidelines. As of the 2019/20 ski season, there are a total of 1,921 accommodation units at Sun Peaks Resort, containing 7,597 bed units. Once construction is complete in the serviced developed parcels in the Village and the existing subdivisions, Sun Peaks will contain a total of 2,217 units and 9,000 bed units with approximately 11,000 pillows. Approximately 53 percent of the existing accommodation is public and consists of the hotels and condotels in Sun Peaks Village, as well as five tourist accommodation developments east of the Village and three pensions. The private beds are split relatively evenly between multi-family and single-family and duplex dwellings.

The slowdown in accommodation development at Sun Peaks following the 2008 recession ended shortly after the Sun Peaks Master Plan Update 2013 was submitted. Village Walk, a 24-unit townhouse project was completed in 2018. The Echo Landing project which consists of 48 townhouse and stacked townhouse units was completed for the 2019/20 ski season.

Rejuvenation of the original Burfield Base area commenced with construction of The Burfield, a pod style hotel on the old hostel site. Then in 2018, Meranti Developments began construction on Peaks West a ten building, 62-unit project consisting of walk-up apartments above neighbourhood commercial spaces and townhouses on the vacant site next to the Burfield Heights townhouses. The developer of The Burfield is proceeding with The Burfield West, an eleven-unit project on the property immediately to the west. In addition, approximately 35 new chalets have been constructed in the 7 single family neighbourhoods.

The pedestrian Village at Sun Peaks has taken shape with the completion of the Village Day Lodge, the Sundance, Hearthstone and Fireside Lodges, the Sun Peaks Grand Hotel and Residences, Nancy Greene's Cahilty Lodge, the Heffley Inn, Stumböck’s Sun

Peaks Lodge and the Kookaburra Lodge. In 2019, the Heffley Inn was purchased by the Sun Peaks Lodge and is under renovation. This tightly knit arrangement of 10 buildings now contains almost 700 hotel rooms and condominium units including 1,968 bed units, 18 restaurants, bars and food outlets and 21 shops.

Additional public accommodation is also provided in the 9 tourist accommodation properties of Village Walk, Snow Creek Village, Timberline Village, Crystal Forest, Trapper's Landing, Stone's Throw, Settler's Crossing, Bridge Gate and Echo Landing to the east of the Village. Together, these developments contain 432 units and 1,903 bed units. The Horie Sunlodge and Eagle Court Pensions are bed and breakfast style accommodation and provide an additional 60 bed units. To ensure that the properties at Sun Peaks that were constructed for public accommodation remain available for short term rental by tourists, regardless of the ownership, rental management covenants have been registered against the title to the units requiring that they be available for nightly rental when the owner is not occupying them. For most of the village condotel properties, the rental management covenant also limits the owner's use so that the units are available for tourists most of the time.

There are now a total of 9 townhouse style developments along the golf course and to the east of the Village. Together, these projects contain 319 units (1,605 bed units). Since 1995, 218 single-family homes and duplex units have been constructed in the Sunburst Estates, Fairways Drive, Sundance Estates, Bella Vista, Mountain View, Lookout Ridge and Burfield Drive subdivisions. Additionally, 51 units of the Cabins and the Cottages at Sun Peaks, a clustered single-family home strata development nestled between the 3rd and 5th holes of the golf course have been completed.

*Sun Peaks Village*

*Sun Peaks Resort Village Accommodation*

*Bridge Gate Ski-in/Ski-Out Townhouse on Golf Course*

*Single Family Home*

Sun Peaks acted quickly to provide the recreational amenities necessary for a four-season resort, investing $12 million since 1994 in non-skiing, recreational facilities. In 1994, the front nine holes of the Sun Peaks Resort Golf Course were constructed, and they opened for play in August of 1995. This scenic resort golf course links the original Burfield base with the new Village and has successfully opened up the vistas in the McGillivray Creek Valley.

The Village Day Lodge serves as the clubhouse, providing golfers with a pro shop, restaurant, bar and locker room facilities. A putting green and driving range were installed in 1997 and the back nine was completed and opened for play in 2005. This 18-hole golf course was designed by Graham Cooke and has a total length of 6,352 yards with tee placements to offer challenges to golfers of all abilities.

*Sun Peaks Resort Golf Course*

The Sun Peaks Sports Centre was officially opened to the public in February 1997 with the following amenities:

- 250 sq. m. recreation centre for fitness programs, partys and teen nights.
- Two tennis courts with night lighting.
- A 14-metre diameter, round heated pool with indoor access from heated change/locker rooms with shower and restroom facilities.
- Children's splash pool and outdoor hot tub.

*Sun Peaks Sports Centre Pools*

In 1997, the McGillivray Lake Outpost was completed to provide a waterfront recreation facility on McGillivray Lake, as well as a winter cross-country destination warming hut. In 1998, a new dock facility was added to the McGillivray Outpost so that canoes, kayaks and row boats could better utilize the lake for fishing and other water sports.

A paved and lit, multi-purpose valley trail network linking all the development parcels continues to be expanded each year. Extensive mountain biking, cross-country and hiking trails have been constructed, with new additions each year. Most recently 12 kilometres of beginner and intermediate flow style trails were constructed in the bike park in 2018 and 2019 resulting in a 177% growth in visitor days in the mountain bike park over the past five years.


*McGillivray Lake Outpost*

MCC Action Carts

In 2015, an exciting new summer activity, Mountain Cross Carts (MCC) was added. MCC Carts consist of a paved track from the top of the Village platter lift to the bottom that allows gravity powered carts to race down the hill for a timed run. The carts are transported to the top of the track (with the driver sitting in the seat of the cart) by way of a hook on the end of the surface lift tow line that attaches to the frame of the cart. The path under the platter lift is also paved so that the carts can be towed to the top of the lift. At the top of the hill, there is a proprietary detachment system that safely releases the cart from the lift and the driver drives the cart to the start line. This activity has grown in popularity over the past five summers.

*MCC Carts at Sun Peaks*

Sun Peaks Resort provides the following winter recreational activities and facilities.

- Alpine Skiing and Snowboarding
- Cross-Country Skiing
- Snowshoeing
- Terrain Park
- Snowmobiling
- Ice Skating
- Horse-drawn Sleigh Rides, Dog-sled Rides
- Tubing, Sledding and Snowplay
- Lift Accessed Sightseeing
- Bungee Trampoline
- Fondue Dinners and Torchlight Skiing at the Sunburst Lodge
- Swimming and Hot tubs at the Sun Peaks Sports Centre

Summer recreational activities at Sun Peaks Resort include the following:

- Dining and Shopping in Pedestrian Village
- Scenic Chairlift Rides
- Mountain Restaurant
- Lift Serviced Mountain Biking Park and Trails
- Hiking
- Tennis
- Geocaching
- Swimming (Pools and Lake)
- Walking, Roller Blading and Cycling Paved Valley Trail
- 18-hole Golf Course and Practice Fairway
- Summer Flower Blossom Festival
- Music Festivals, Symphony performances, Farmers Market
- Horseback Riding
- Strolling through Woodland (Wildflower) Interpretive Garden
- Fly Fishing, Kayaking and Canoeing at McGillivray Lake (serviced by cabin & dock facilities)
- Voyageur Canoe Tours
- Stand Up Paddle Boarding
- Massage Therapy, Spa
- MCC Gravity Carts on Platter Lift

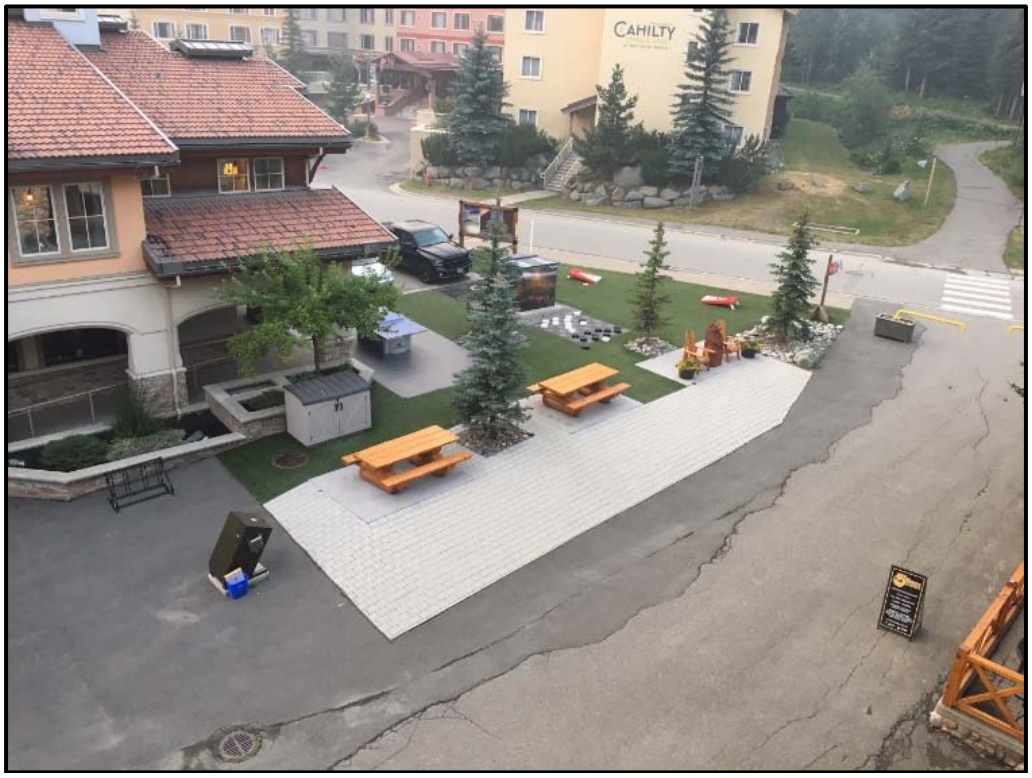
**Municipal Facilities**

The Sun Peaks Mountain Resort Municipality (SPMRM) has been busy building new community facilities over the past six years since the 2013 Master Plan Update. In 2016 they built an artificial surface NHL size rink in the Village which opened in February 2017. They applied for and received a government grant to cover the rink in 2018 and construction of the roof with a connection to the existing Sports Centre is now underway. The new facility will be known as the Sun Peaks Centre and contain meeting space and a fitness

gym in addition to the arena. The Sun Peaks Community Health Centre opened in 2017. SPMRM has also built a “pocket park” in the Village and a valley trail between the Burfield base and the Village along the north side of Sun Peaks Road. The first Official Community Plan for the Sun Peaks Mountain Resort Municipality was adopted in 2014.

*Sun Peaks Artificial Ice Rink*

*Sun Peaks Community Health Centre*




*Village Pocket Park*

**Non- Market Community Housing**

A Sun Peaks Housing Authority has been incorporated. The Housing Authority with the assistance of the Municipality will manage and oversee affordable non-market employee housing in Sun Peaks. The plan is to encourage where possible employers to invest in affordable employee housing for seasonal workers. The Housing Authority working with builder/developers with assistance of Municipal financial incentives will undertake to see the development of non-market employee rental and ownership housing throughout the Municipality on the lands now identified for non-market community housing in this Master Plan Update.

**Education**

In 2010 a local non-profit association (Sun Peaks Education Society) was established to offer kindergarten to Grade 7 children a mountain based education at the resort. The society rented the “Schoolhouse” a children’s snow school building located at the top of the Village Platter from Sun Peaks LLP. Only two years later, in August 2012, the SPMRM,

School District 73 and the Society partnered to offer a publicly funded community school in Sun Peaks for kindergarten to Grade 6, the Sun Peaks Elementary School.
Since then portables have been added to the site as the enrollment has continued to grow. The School District is currently commencing the process to obtain capital funding for a permanent school at Sun Peaks.


*Sun Peaks Elementary School*

The Society continues to operate a high school program for Grades 7 to 12 through the Sun Peaks Secondary Academy. The high school uses a temporary facility located in the Sun Peaks main day visitor parking lot and the program is fully funded through the community.

*Sun Peaks Academy*

## .3 Planning Issues

The successful design and operation of a mountain resort requires a solid footing on three separate pillars. The three critical resort elements, as illustrated in Plate I.1, are: physical, market and economic characteristics and factors.

The physical site characteristics include:

- environmental resources including water, air, soil, vegetation and wildlife
- terrain
- climate
- natural hazards
- visual resources
- recreational resources

**CRITICAL RESORT ELEMENTS**

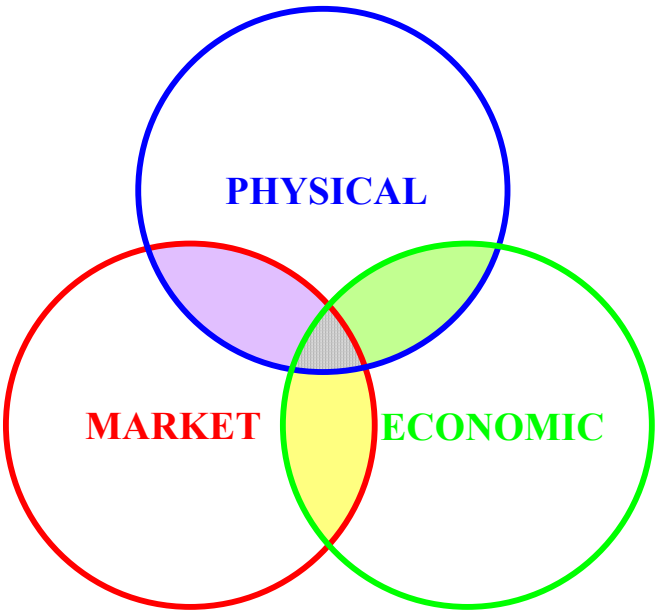



**PLATE I.1**

The master planning process incorporates research by scientists, ecologists and recreational planners to document the physical characteristics of each individual site with air photos, topographical maps, three-dimensional computer models, on-site field work and surveying, and analytical planning technologies.

The next critical element necessary for a feasible mountain resort deals with the market characteristics including:

- access to the site
- the size and proximity of local, regional and destination markets
- population demographics such as: age, income and education
- population dynamics such as: growth, aging, and social trends, for example, fitness

Finally, there are economic factors and characteristics to be considered such as:

- resort capacity
- length of operating season (winter and summer)
- infrastructure cost and availability
- capital costs of facilities
- operating efficiency
- revenue sources and pricing
- human resources

Every resort possesses a different blend of these characteristics. It is very important to understand and document the balance between the physical, market and economic characteristics of each individual project.

## .4 Glossary

The winter resort industry has a number of terms and technical jargon specific to development, hence, a glossary is provided:

1. **Skier Visit -** One person visiting a ski/snowboard area for all or part of a day or night for the purpose of skiing or snowboarding. This is the total number of lift tickets issued. Skier visits include a person holding a full-day, half-day, night, complimentary, adult, child, season, or any other ticket type that gives them the use of an area's facilities.

2. **Rated Uphill Capacity -** The manufacturer's rated number of skiers per hour a lift can transport to the top of the lift. An area's hourly capacity is the sum of the individual lifts.

3. **VTM/Hour (000) - (Vertical Transport Metres Per Hour) -** The number of people lifted 1,000 vertical metres in one hour (vertical rise of a lift, times the lift capacity per hour, divided by 1,000). An area's total VTM, is the sum of VTM for all lifts.

4. **VTM Demand/Skier/Day -** The amount of vertical skied/snowboarded (demanded) each day by a skier.

5. **Skier (Comfortable) Carrying Capacity (SCC) -** The number of skiers that a given ski/snowboard area can comfortably support on the slopes and lifts without overcrowding, or those that may be accommodated at one time and still preserve a congenial environment. An area's comfortable carrying capacity is a function of VTM demand per skier, VTM supplied per hour, difficulty of terrain and scope of support facilities.

6. **Utilization -** Is measured, as a percent, of skier carrying capacity. Comfortable Seasonal Capacity is the product of an area's daily skier carrying capacity times its days of operation. Utilization compares actual skier visits to calculated comfortable seasonal capacity.

7. **Terrain Pod -** a contiguous area of land deemed suitable for lift and trail development due to its slope gradients, exposure and fall line characteristics.

# II. INVENTORY

## .1 Introduction

The inventory stage includes the identification, analysis and mapping of all on-site and off-site factors which may affect the development potential of Sun Peaks Resort. The inventory data includes: the land status, climatic, biophysical and physiographic characteristics of the study area, as well as an analysis of the existing mountain resort area. The study area identified for mountain planning purposes, encompasses about 4,200 hectares in and around Sun Peaks Resort. Through an understanding of the site's existing conditions and natural process, environmentally sensitive areas can largely be avoided and natural development opportunities maximized.

As a prelude to discussing the mountain's characteristics, it is appropriate to familiarize the reader with the basic requirements of resort area development. Mountain resort area development is generally considered to be a non-consumptive resource use of the land. The development of lifts and trails requires the use of 30-60 percent of the area in small, heavily developed zones. Lift right-of-ways are characteristically 12 to 15 metres in width, while trails vary between 30 and 50 metres wide. Following rough grading by practices selected for each site, the trails require fine grooming and seeding to establish a grass cover which prevents erosion. This also helps to minimize hazards and damage to skiers and snowboarders' equipment during low snowpack periods and possible damage to the area's snow grooming fleet. Lifts are generally aerial cable systems used to transport skiers up the mountain, with steel towers and concrete foundations every 45 to 75 metres.

*Sun Peaks Village Base Area*

Mountain resort base area development generally includes a paved access road, parking lots, buildings for accommodation, a daylodge and a maintenance centre. Additionally, appropriate power, water supply and sewage disposal facilities are required to support the base area improvements. The physical site characteristics discussed in this section all interact to aid the planning team when assessing the capability of the natural systems to support resort development.

## .2 Physiography

The quality and feasibility of a mountain resort site is highly dependent upon the topographic characteristics of each individual site. Physiographic features which substantially affect mountain resort development in particular include: aspect (exposure), slope gradients, fall line patterns and elevation.

**Landform**

The landform around the Sun Peaks Resort area is characterized by relatively flat valley bottoms bounded by steep slopes rising up to rolling plateaus on the tops of the mountains. The Sun Peaks ski area is typical of the surrounding area but with many local peaks dotting the highest elevations, rather than a plateau. The areas to the northeast and south of the ski area are also similar to the surrounding area, with large plateaus stretching far off the study area mapping. The slopes to the east and southeast of the existing ski area have gentler slopes on the lower elevations, which are more suitable for intermediate, rather than expert level skiers and snowboarders.

The Mount Tod Summit lies at 2,152-meter elevation in the northern part of the study area and is separated from the existing ski area by several local peaks and a drainage which has relatively gentle slopes at the upper elevations but drops off sharply into a steep sided valley at the 1,950-metre elevation. The study area is bisected by McGillivray Creek in the southern corner of the study area, flowing first to the north and then turning towards the west and leaving the valley at the 1,150-meter elevation. The McGillivray Creek Valley is reasonably wide (500 meters) and flat at the upper elevations and slowly narrows as it approaches the lower western end of the resort. Both the resort area base facilities and the present real estate developments are located in this valley adjacent to the lift and trail systems.

The Sun Peaks base area lands consist of approximately 438 hectares of valley land. These valley lands take in the Burfield base area at the 1,170-metre elevation, the Sun Peaks Village base at the 1,250-metre elevation and real estate and golf course lands that follow McGillivray Creek up to the 1,330-metre elevation. The valley lies approximately east to west between the Village base and the Burfield base and lies in a northwest to southeast orientation east of the Village base. The Sun Peaks valley is fairly narrow in configuration and surrounded by steep slopes (in excess of 30%) between the Burfield and Village bases. The valley widens significantly to the east of the Village.

**Aspect Analysis**

An aspect analysis was completed to identify the various exposures of the Sun Peaks Resort lands and includes zones with southern through northern aspects. The optimum aspect for ski area development is northern and eastern slopes for better quality snow but ideal for mountain resort development is a south-southwestern exposure. This analysis identifies that the Sun Peaks Village area lies on predominantly south and southwest exposures and hence a warm place in the valley. Figure 4 graphically illustrates the Sun Peaks Aspect Analysis.

The exposures in the existing ski area on Mount Tod are generally south to southeast, and east. These exposures ensure that skiers and snowboarders get warmth from the sun during cold, sunny days, but may also cause problems with snow retention in the warm spring season on the lower elevations. The exposures within the entire study area encompass the 360º range, with areas to the south of the existing area on Mount Morrisey having northerly and north-easterly exposures and areas to the east having southerly and south-westerly exposures. The area surrounding Mount Tod has exposures in every direction due to the conical shape of Mount Tod and the local peaks surrounding it.

**Fall Lines**

The fall lines in the southeast half of the study area are generally parallel, indicating a uniform slope. These fall lines flow a long distance, parallel to each other, before collecting in the various drainages and ultimately flowing down into McGillivray Creek. The fall lines in the northwestern half of the study area flow in every direction, frequently changing direction and collecting or dispersing. This complicated pattern of fall lines is due to the many small peaks and valleys in this portion of the study area.

**Elevation**

The potential vertical drop available for lift serviced skiing plays an important role in site suitability since it determines the length of the ski trails and also the vertical transport metres (VTM) that can be supplied to the skiing/snowboarding public. Essentially, the more vertical the better, as many skiers use vertical rise as a basic yardstick of winter resort area desirability.

Elevations in the study area range from 2,152 metres at the peak of Mount Tod to 1,160 metres to the west of the Burfield Base. The study area consists of many local peaks, mostly between the existing ski area and Mount Tod. The total available vertical is approximately 990 metres, with a few individual slopes in the 450 to 750 metre vertical drop range. The Burfield Chairlift alone has a vertical drop of 882 metres.

## .3 Climate/Solar Shading and Solar Radiation Analysis

Sun Peaks is in the semi-arid climatic zone of the interior of British Columbia. During the winter, the weather is generally cold with a high percentage of sunny days. There are periods during the winter where temperatures can drop as low as -35 degrees Celsius.

**Snowpack**

Snowpack is one of the most important factors in determining the length of season and the feasibility of a winter sports recreation facility. Ski areas are generally considered feasible with natural snow if there is a 90 percent probability of a 60 centimeters snowpack by December 15. In order to achieve good skiing and snowboarding conditions with this amount of snow, all trails must be fine summer groomed and revegetated with grass and legume ground cover. Given suitable snowmaking temperatures and water availability, snowmaking systems can enhance the natural snowpack and extend the season with earlier openings and quality late spring skiing conditions.

Since 1994, the management of Sun Peaks has kept detailed information on snowpack and snowfall at three different elevations (valley at 1,306 m., mid mountain at 1,825 m. and mountain top at 2,061 m.). Data has also been kept for the mid mountain site since 1972, and after a cursory analysis, it seems to correspond well with the data since 1994. Therefore, we will use the more detailed data for snowfall and snowpack analysis below. The snowpack present at the end of November over twenty-three of the last twenty-five (two years with no data) has averaged about 40 centimetres of depth in the valley with 72 cm at mid mountain. Seven of the twenty-four years measured had 25 cm. or less of snowpack in the valley and seven years had less than 60 cm. at mid mountain. Snowpacks in the valley increase until February and then begin to decrease in March, whereas the snowpack at mid mountain and mountain top increases through March. By the end of April, snow in the valley is often gone. Average end of month snowpacks for the twenty-four year period at the Village, mid-mountain and the top of the Crystal Chair are illustrated in Plate II.1.

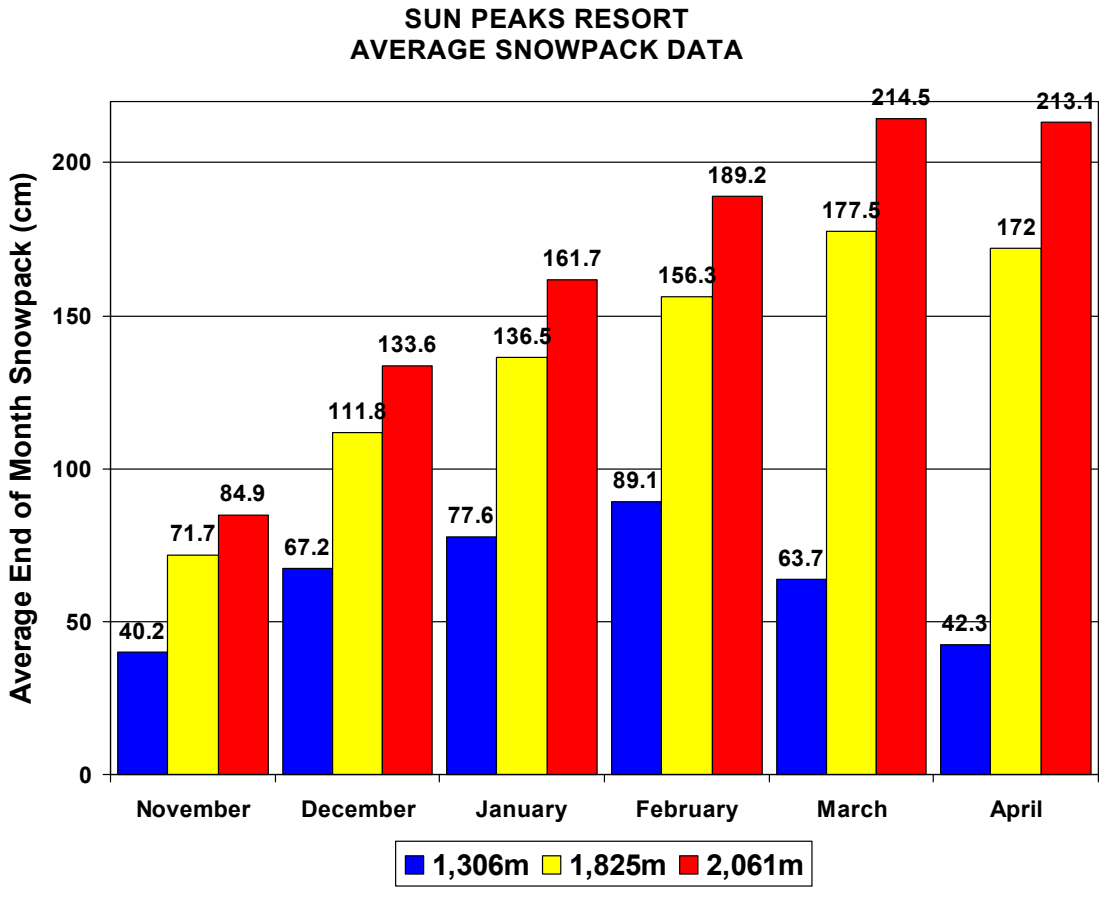



**PLATE II.1**

Plate II.2 graphically illustrates that over the last twenty-five seasons, the end of November snowpack has increased with elevation in most years, as would be expected. The graph also shows a wide variation of snowpack at the end of November, ranging from 0 cm. in the valley, up to 123 cm. at the mountain top.

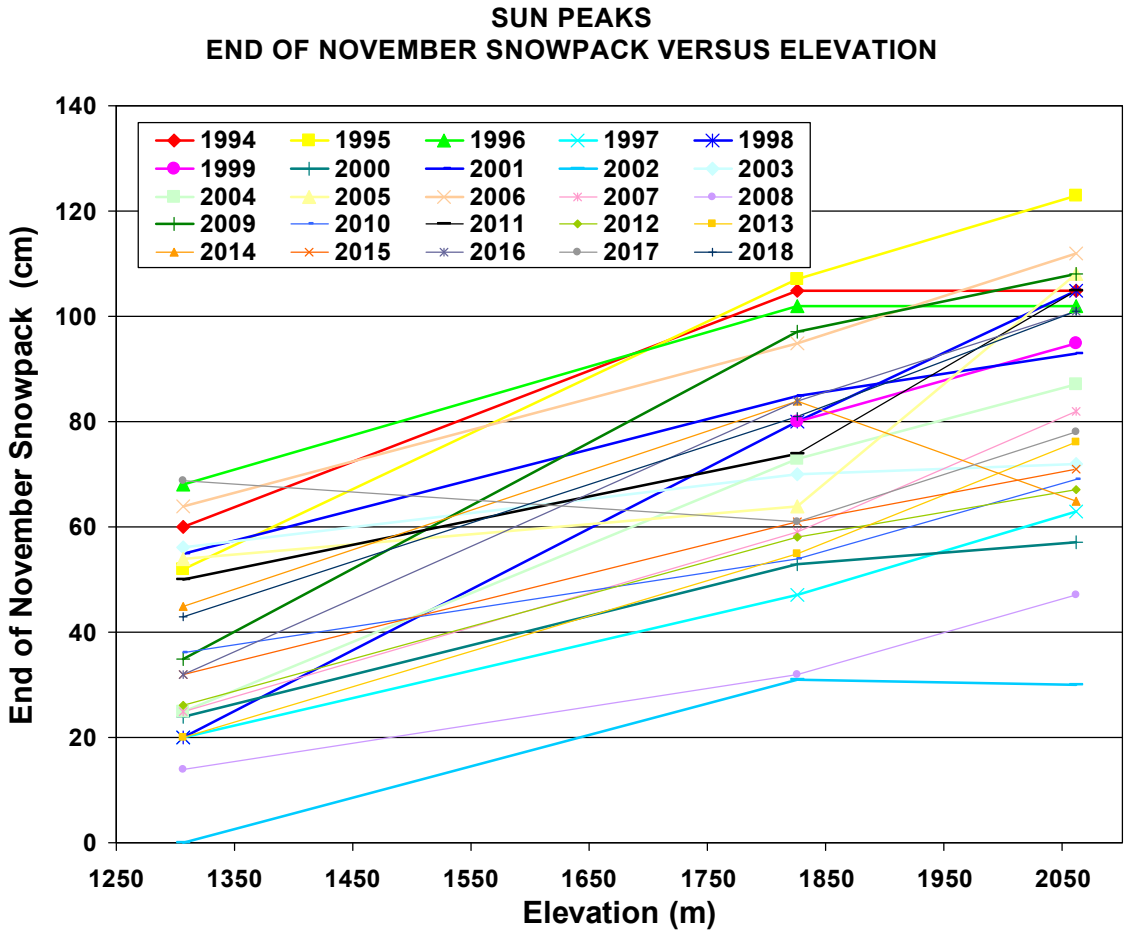



**PLATE II.2**

Over the last twenty-four years, the mid-mountain snowfall between the beginning of November and the end of March has averaged 459 cm. (181 inches). The mountain top experiences a similar amount of snowfall (504 cm.), while the base area experiences significantly less, at 351 cm. Average monthly snowfalls for the valley, mid-mountain and mountain-top for the last twenty-four years are illustrated in Plate II.3. The valley receives the highest snowfalls during the months of December and January, whereas the mid and upper mountain zones receive good snow falls all winter season.

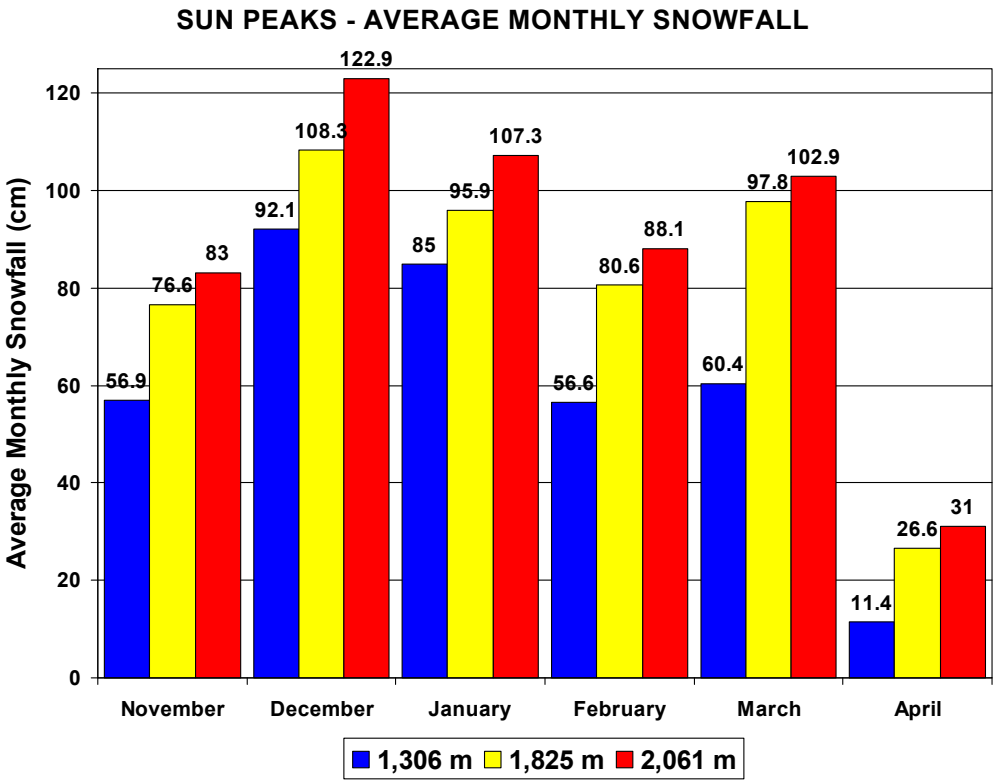



**PLATE II.3**

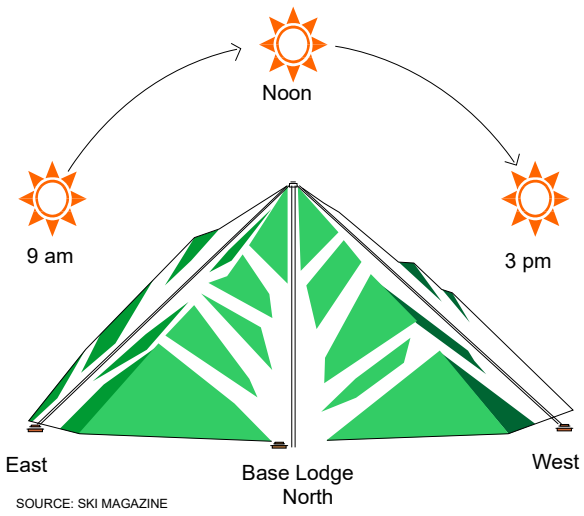
## Microclimate

While regional climate patterns are primarily concerned with evaluating total resort feasibility, a thorough understanding of microclimate provides essential input for the site-specific design process. Microclimate is basically the climate near the ground where surface influences such as lakes, swamps, mountain slopes and valleys, and vegetation dramatically influence the local climate.

## Solar Analysis

Most skiers and snowboarders are highly aware of the sun's influence on snow quality. While skiers and snowboarders prefer to ski in the sun, they will not do so if the snow is sticky or mushy due to intense solar radiation. As illustrated in Plate II.4, skiers will follow the sun throughout the day, using eastern exposures in the morning, southern exposures at noon and western exposures in the afternoon. As a general rule, southern slopes are the warmest, eastern and western slopes the next warmest and northern slopes the coolest.

SKI POINTER




SOURCE: SKI MAGAZINE

**IN SPRING, STAY AHEAD OF THE SUN**

***By John Fry***
***Contributing Editor***

The trick to enjoyable spring skiing is to catch the snow as it becomes granular corn before it gets slushy. A good strategy is to keep one eye on the slopes and the other on the sun.

In the morning, after a frosty night, look for east-facing and southeast-facing slopes that catch the early sun. They will be the first to soften up.

As the sun climbs higher and moves into the southern sky, move with it. Ski the north-facing slopes early before they become sloppy.

Finally, move to the west-facing slopes in the afternoon to search for good corn snow.

Smart scrutiny of the weather and terrain will improve your day of skiing.

**PLATE II.4**

Snowpack retention is a critical concern for any snow resort operation and for this reason, slopes and trails should naturally be located where the snowpack remains for the longest period. We have prepared a detailed solar analysis to determine the areas of topographic shading at 9:00 a.m., noon and 3:00 p.m., on selected days of the winter season.

On December 22nd at 9:00 a.m., as illustrated in Figure 5a, most of the existing ski area is in the sunshine, except for the north and west facing slopes on Mount Morrisey and the west facing slopes between the top of the Burfield Quad and the bottom of the West Bowl T-Bar. Most of the valley bottom, from the Village Base and to the west, is in the shade at this time. Most of the south side of the valley is also in the shade at this time, due to the steep north facing slopes bounding the south side of the valley. There are scattered shadows in the northern portion of the study area, surrounding the peak of Mount Tod, as well as a large area of shadow on the steep north facing slopes to the northwest of the uppermost lift (West Bowl T-Bar). By January 22, the shadows have retreated in all areas, but most of the valley west of the Sun Peaks Grand Hotel is still shaded. The base of the Orient Quad and the East Village site is in full sunshine.

The shadows on February 23 at 9:00 a.m. have retreated substantially, leaving some of the valley in shade, but bathing both the Sun Peaks Village and Burfield base areas in sunshine. On this date, there are only small pockets of shading within the study area, except for two large areas of shading; one in the drainage to the northwest of the T-Bar and the other on the north facing slopes bordering the main valley.

Figure 5b illustrates the sun/shadow relationship at 12:00 noon on the selected days. The Burfield base and the Village area from the Annex to the Sun Peaks Grand Hotel are shaded on December 22, but the Village is in sunshine on and after January 22 and the Burfield Base is sunlit on and after February 23. The only areas shaded on February 23 at noon, are on the steep slopes to the south of the Burfield Base above the Burfield Drive subdivision.

Figure 5c shows that most of the northern corner of the study area is shaded at 3:00 p.m. on December 22, as is most of the southern corner and the entire McGillivray Valley within the study area. All of the ski terrain serviced by the Sundance Express and most of the terrain serviced by the Sunburst Express and the Burfield Quad is sunlit while the slopes serviced by the Crystal Chair and Morrisey Express are in the shade. By January 22 at 3:00 p.m., the shading has retreated slightly, with the only significant change being at the Village Base, which is now bathed in sunlight. By February 23, the shadows have retreated significantly, bathing most of the ski area and the McGillivray Valley in sunlight. The only significant shading at this time is on the ridge to the north of the Crystal Chair and on the northwest facing slopes served by the Morrisey Express.

**Solar Radiation Analysis**

Predicting the potential amount of solar radiation is important in the planning of a ski resort. The amount of solar radiation impacting the surface varies strongly with elevation, slope, aspect and solar shading from surrounding topographic features. Topographic shading decreases the temperature near the ground which causes the snow to last longer. Even small changes in aspect can result in substantial differences in surface warming.

With this in mind, we have calculated the cumulative quantity of potential incoming solar radiation for each month during the winter ski season from December 1, 2009 to March 31, 2010. We have utilized software created and developed by Ivan Mészároš and Pavol Miklánek of the Institute of Hydrology of SAS in Bratislava, Slovakia called SOLEI.

The time of year, sun position (azimuth and altitude), shadows cast by surrounding terrain, terrain slope, aspect and elevation are all analyzed to simulate and calculate direct, diffuse and reflected radiation. By combining these radiation values an accurate representation of potential energy incoming in Kilowatt-hours per square meter over the entire study area is determined. The calculation is repeated every 15 minutes from sunrise to sunset for each day in a grid system. Figure 5d illustrates the Sun Peaks Solar Radiation Analysis.

In summary, the area surrounding the Village Base seems to be the most frequently sunlit part of the McGillivray Valley, and most of the existing ski area is sunlit for all of the dates and times analyzed. The area to the north of the existing ski area is sunlit during most of the times analyzed, and the slopes to the south of the Burfield Base are generally partially or totally shaded. The slopes to the east of the Village Base and the McGillivray Valley, upstream of the Sun Peaks Village, are sunlit at most times.

# 4 Avalanche

Avalanches within ski areas are generally divided into two categories:

1. Slopes which, under normal circumstances, present an avalanche hazard for part of the winter season and, with the proper preparation and control, can be used for ski terrain. These trails are steep, advanced and expert terrain which may be dangerous early in the winter but can usually be stabilized and opened for regular skiing.

2. The second category indicates the minority of avalanche prone slopes within the ski area which, due to their steepness and wind transport patterns, are capable of generating recurring avalanche problems throughout the entire winter season. These types of avalanches require continuous monitoring and control measures.

Sun Peaks staff provided the planning team with information on the location of avalanches within the existing Controlled Recreation Area. Only two natural occurring avalanches have been observed. During the 1995/96 season, an above average snowfall season, an avalanche started in the Inner Gills area and ran down across the 5 Mile trail.

Prior to the opening of the 1997/98 season, and any avalanche control work, an avalanche occurred on Kukamungas which has a steepest 30 metre vertical pitch of 67 percent. This avalanche was released by a skier that hiked to the top of the mountain before it was officially open. The only other observed avalanche is one that was released with explosives at the top of the Chief near the top of the Burfield lift. This avalanche ran into Crystal Bowl. Another area of potential avalanche is the large road cut banks on the upper side of the Homesteader Trail. These banks are controlled as required.

In March of 1996, Mr. Chris Stethem of Snow Safety Services undertook a study of the avalanche potential of both the existing area and future phases of Master Plan development. Mr. Stethem's report dated May 13, 1996 is summarized as follows:

Avalanche hazard has been observed to develop infrequently at Sun Peaks. There are three primary sources of this hazard.

- Early season deep instability within the ski area from buried weak layers
- Occasional major storm activity and wind transport of snow within the ski area
- Avalanches originating along the boundary (e.g. above Five Mile trail) running into the ski area

Potentially hazardous avalanches may be observed during early winter, when weak layers form and are buried prior to extensive skier compaction. These are most likely in the steeper, open slopes and glades near treeline at Sun Peaks where the wind effect can contribute to avalanche formation. Wherever buried weak layers are thought to be present, explosive control by hand charging could be employed but have not been required since 2001. Ski cutting or ski control should be restricted to small slopes with safe run-outs when such conditions are present.

Occasionally, during the winter season, major snowfalls accompanied by wind result in formation of new snow avalanche hazard, particularly on terrain features in the lee of the wind. Control measures during such periods may include hand charging of larger slopes, ski cutting and ski compaction, and temporary closures of hazardous slopes, if required.

In most of the existing area, once the early season hazard from buried weak layers is reduced, compaction is the key to stabilization of the snowpack. As each layer is deposited, it is broken up and packed down into a strong, relatively uniform snow cover. Regular travel through potential avalanche sites during storms and periods of wind transport is the key to recognizing when potential hazard is building faster than ski compaction is reducing it.

Lift serviced terrain on the ridge to the north of the Burfield and Crystal chairs lies in a series of steep, northeast facing glades and open slopes at treeline which include Easy Out, Main Face, Elevator, Executioner and the Funnel. These areas are in the lee of prevailing south-westerly storm winds. Access control to Easy Out and Main Face will require a temporary closure sign and line located near the present northeast ski area boundary. Control of this area will be by explosive hand charges during suspected deep instability of major storms. Ski control (ski cutting) would be applied during moderate snowfall, or as a clean-up measure.

Since 2001, known starting zones in the Crystal Bowl, Headwalls and other in-bounds areas have been boot packed as early as is practical in November. This treatment has proven to be useful in reducing bad layers near the ground surface. As part of the development of Gil's, we will undertake a snow study and avalanche forecasting program.

## .5 Existing Mountain Facilities

### Lifts

Sun Peaks currently owns and operates thirteen lifts, including three detachable quadruple chairlifts (one equipped with protective Lexan bubbles), three fixed grip quadruple chairlifts, one triple chairlift, one T-bar, two platter lifts and three moving carpets (plus a third moving carpet for tubing). The technical specifications for Sun Peaks existing lift system are listed in Table II.1.

*Sunburst Express Detachable Quadruple Chairlift with Bubble Cover (D4C-B)*

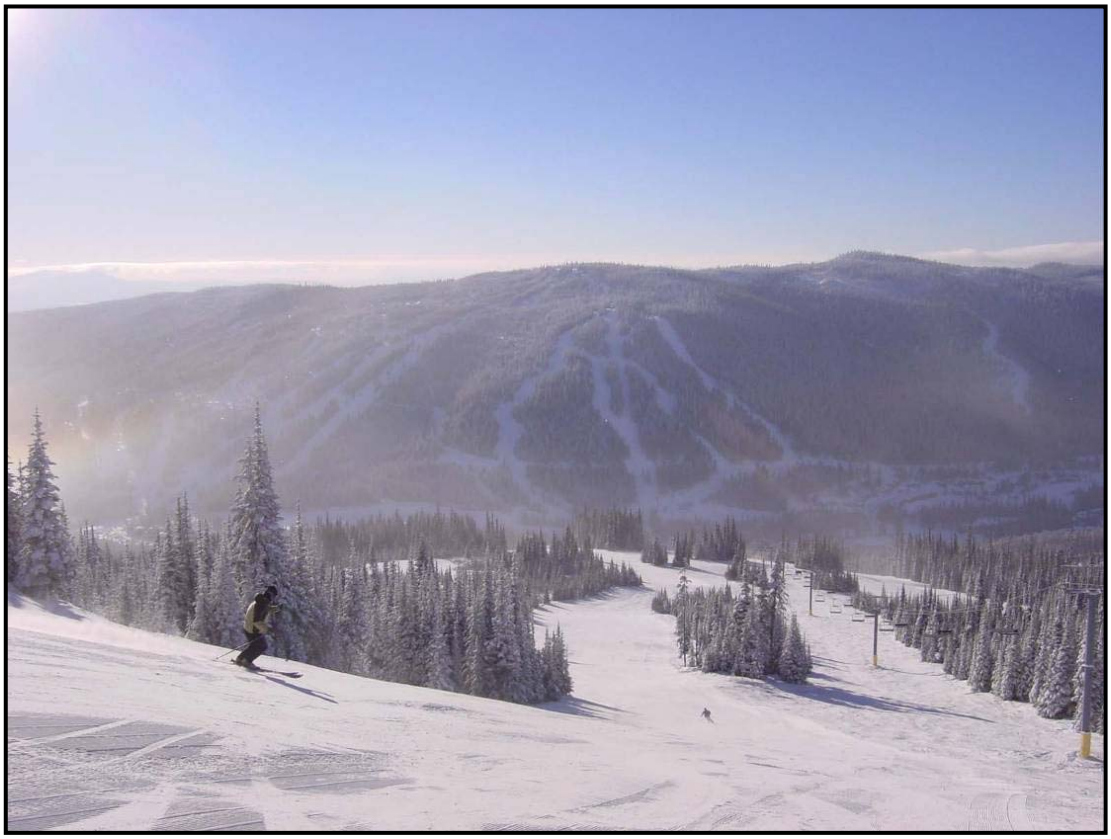
**TABLE II.1**
**SUN PEAKS**
**LIFT SPECIFICATIONS - EXISTING AREA 2019/2020**

| **Lift Number** | **1** | **2** | **3** | **4** | **5** | **6** | **9** | **10** | **14** | **16** | **18A** | **18C** | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lift Name** | **Burfield** | **Sunburst Express** | **Crystal** | **Village Platter** | **West Bowl** | **Sundance Express** | **Elevation** | **Morrisey Platter** | **Morrisey Express** | **Orient Chair** | **Village Carpet** | **Carpet** | |
| **Lift Type** | **4C** | **D4C-B** | **3C** | **P** | **T-B** | **D4C** | **4C** | **P** | **D4C** | **4C** | **MC** | **MC** | **TOTAL** |
| **Year Installed** | 1997 | 1993/99 | 1979 | 1993/99 | 1992 | 1995/18 | 2006 | 2001 | 2002/04 | 2018 | | | |
| Top Elevation m. | 2,082 | 1,851 | 2,061 | 1,309 | 2,071 | 1,732 | 1,862 | 1,347 | 1,674 | 1,529 | 1,285 | 1,268 | |
| Middle Station m. | 1,782 | | | | | | | | | | | | |
| Bottom Elevation m. | 1,200 | 1,256 | 1,767 | 1,257 | 1,904 | 1,257 | 1,549 | 1,258 | 1,279 | 1,278 | 1,258 | 1,259 | |
| Total Vertical m. | 882 | 595 | 294 | 52 | 167 | 475 | 313 | 89 | 395 | 251 | 27 | 9 | 3,549 |
| Horizontal Distance m. | 2,762 | 2,290 | 930 | 347 | 700 | 1,985 | 1,072 | 420 | 1,747 | 1,048 | 148 | 58 | |
| Slope Distance m. | 2,899 | 2,378 | 978 | 353 | 720 | 2,041 | 1,117 | 429 | 1,791 | 1,084 | 150 | 59 | 14,000 |
| Average Slope % | 32% | 26% | 32% | 15% | 24% | 24% | 29% | 21% | 23% | 24% | 18% | 15% | 26% |
| Rated Capacity | 464 | 2,294 | 2,005 | 722 | 698 | 2,491 | 1,822 | 654 | 1,844 | 1,022 | 800 | 800 | 15,616 |
| V.T.M./Hr.(000) | 409 | 1,365 | 589 | 38 | 117 | 1,183 | 570 | 58 | 728 | 256 | 13 | 13 | 5,223 |
| Rope Speed m/sec. | 2.3 | 5.1 | 2.3 | 2.2 | 2.2 | 5.0 | 2.3 | 2.2 | 5.0 | 2.3 | 0.6 | 0.6 | |
| Trip Time min. | 21.0 | 7.8 | 7.1 | 2.7 | 5.4 | 6.8 | 8.1 | 3.3 | 6.0 | 7.9 | 4.2 | 1.6 | |
| Drive Output | 225KW | 543KW | 213KW | 16KW | 60KW | 465KW | | 23KW | 448KW | | | | |
| Operating Hr./Day | 7.0 | 7.0 | 6.8 | 7.0 | 6.5 | 7.0 | 6.8 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | |
| V.T.M. Demand/Day | 5,850 | 4,314 | 4,600 | 1,699 | 3,770 | 2,993 | 4,474 | 600 | 3,466 | 2,795 | | | |
| Loading Eff. % | 95% | 95% | 85% | 80% | 95% | 95% | 90% | 80% | 95% | 85% | | | |
| Access Reduction | 11% | 22% | 3% | 0% | 0% | 19% | 0% | 10% | 5% | 34% | 0% | | |
| **SCC Skiers/Day** | **420** | **1,640** | **720** | **120** | **190** | **2,140** | **770** | **120** | **1,330** | **360** | **120** | **90** | **8,020** |

The layout of the existing lift system is graphically illustrated in plan view on the Existing Mountain Facilities Map (Figure 6). Existing lifts at Sun Peaks have a total skiable vertical of 882 metres (2,893 feet). The lifts have a total rated capacity of 15,563 passengers per hour and produce a total of 5.193 million vertical transport metres per hour.

*New Orient Quad Lift and Terrain*

*Orient Quad Lower Lift Terminal*



*Sundance Terrain*

## Trail Inventory

To provide an accurate inventory of Sun Peaks existing trail system, the trails have been classified in concert with the International Ski/Snowboard Trail Standards (Table II.2), as well as the seven skier skill classification levels exhibited in Table II.3. Trails are classified via an evaluation of the following parameters: slope width, average gradient and the steepest 30 metre vertical pitch. Since the average slope gradient of a trail is generally much lower than the steepest 30 metre vertical pitch, trails are usually classified to ensure that the steepest 30 metre vertical pitch falls within the acceptable terrain gradients listed in Table II.3. Furthermore, a gentle novice trail cannot suddenly turn into an advanced trail for obvious reasons.

**TABLE II.2**
**INTERNATIONAL SKI/SNOWBOARD TRAIL STANDARDS**

| TRAIL DESIGNATION | ABILITY LEVELS |
|---|---|
| Easier | Beginner & Novice Skiers |
| More Difficult | Intermediate Skiers |
| Most Difficult | Advanced & Expert Skiers |

**TABLE II.3**
**SKIER/SNOWBOARDER / SKILL CLASSIFICATIONS**

| Skill Classifications | | Acceptable Terrain Gradients | Maximum Gradients |
|---|---|---|---|
| 1 | Beginner | 8 - 15% | 20% |
| 2 | Novice | 15 - 25% | 30% |
| 3 | Low Intermediate | 25 - 35% | 40% |
| 4 | Intermediate | 30 - 40% | 45% |
| 5 | High Intermediate | 35 - 45% | 50% |
| 6 | Advanced | 45 - 60% | 65% |
| 7 | Expert | 60% + | |

The existing trails at Sun Peaks have been plotted on the topographic base map at a scale of 1:5,000 with 5-metre contours, as illustrated on Figure 6 (the Existing Mountain Facilities). The present trail system, as listed in Table II.4, includes 159 numbered trails covering a total of 611 hectares. The combined trails have a length of 114 kilometres while combined with skiways reach a total of 127.4 kms.

In general, the trails have been assigned to the lift which is used for return cycle skiing on that particular trail. Trails that are serviced by more than one lift in series are split in proportion to the vertical rise of each lift.

*Crystal, Sunburst and Sundance Terrain viewed from Mt. Morrisey*

*Headwall Terrain*

## TABLE II.4
## SKI/SNOWBOARD TRAIL INVENTORY - EXISTING AREA – 2018/19

| Trail Name | | Trail No. | Skill Class | Elevation Top Meters | Elevation Bottom Meters | Total Vert. Meters | Horz. Dist. Meters | Slope Dist. Meters | Percent Slope Avg. | Percent Slope Steep. | Avg. Width Meters | Slope Area Ha. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lift 1 - Upper Burfield | | | | | | | | | | | | |
| Westsyde | | 1A-I | 4 | 2,080 | 1,905 | 175 | 917 | 934 | 19% | 37% | 19 | 1.81 |
| Round-A-Bout | | 1A-II | 4 | 1,900 | 1,785 | 115 | 1,521 | 1,525 | 8% | 29% | 8 | 1.16 |
| Kookamungas | | 1B | 6 | 2,075 | 1,970 | 105 | 294 | 312 | 36% | 50% | 63 | 1.98 |
| Sunnyside | | 1C | 7 | 2,070 | 1,905 | 165 | 441 | 471 | 37% | 68% | 270 | 12.72 |
| Father Tom's | 35% area | 1D | 6 | 1,870 | 1,820 | 50 | 148 | 156 | 34% | 41% | 91 | 0.50 |
| 7 Mile Road / Lower Expo | 35% area | 1E | 6 | 1,900 | 1,240 | 660 | 1,306 | 1,463 | 51% | 51% | 49 | 2.50 |
| Toilet Bowl | | 1F | 6 | 2,065 | 1,865 | 200 | 921 | 942 | 22% | 48% | 99 | 9.35 |
| Nose of the Chief | | 1G | 6 | 1,995 | 1,825 | 170 | 607 | 630 | 28% | 51% | 68 | 4.26 |
| Chief Shoulder | | 1H | 6 | 2,080 | 1,780 | 300 | 1,406 | 1,438 | 21% | 54% | 72 | 10.38 |
| Chief | | 1I | 6 | 2,070 | 2,015 | 55 | 125 | 137 | 44% | 55% | 338 | 4.62 |
| | 35% area | 1J | 6 | 1,793 | 1,650 | 143 | 1,026 | 1,036 | 14% | 17% | 19 | 0.68 |
| Roller Coaster | 35% area | 1K | 7 | 1,695 | 1,500 | 195 | 532 | 567 | 37% | 65% | 28 | 0.56 |
| Upper Expo | 35% area | 1L | 7 | 1,780 | 1,455 | 325 | 815 | 877 | 40% | 71% | 42 | 1.29 |
| Challenger | 35% area | 1M | 7 | 1,835 | 1,390 | 445 | 1,434 | 1,501 | 31% | 70% | 36 | 1.90 |
| Back Door | | 1N | 6 | 2,080 | 1,975 | 105 | 315 | 332 | 33% | 48% | 148 | 4.91 |
| Lower Munro Ridge | 25% area | 1O | 4 | 1,655 | 1,202 | 453 | 1,863 | 1,917 | 24% | 46% | 37 | 1.77 |
| Freddy's | 35% area | 1P | 7 | 1,780 | 1,445 | 335 | 643 | 725 | 52% | 81% | 38 | 0.97 |
| Mid Mountain | | 1Q | 6 | 1,880 | 1,795 | 85 | 590 | 596 | 14% | 48% | 67 | 3.98 |
| Total Lift 1 | | 18 | | | | | | 15,560 | | | | 65.34 |
| | | | | | | | | | | | | |
| Lift 1 - Lower Burfield | | | | | | | | | | | | |
| Father Tom's | 65% area | 1D | 6 | 1,870 | 1,820 | 50 | 148 | 156 | 34% | 41% | 91 | 0.92 |
| 7 Mile Road / Lower Expo | 65% area | 1E | 6 | 1,900 | 1,240 | 660 | 1,306 | 1,463 | 51% | 51% | 49 | 4.65 |
| | 65% area | 1J | 6 | 1,793 | 1,650 | 143 | 1,026 | 1,036 | 14% | 17% | 19 | 1.26 |
| Roller Coaster | 65% area | 1K | 7 | 1,695 | 1,500 | 195 | 532 | 567 | 37% | 65% | 28 | 1.05 |
| Upper Expo | 65% area | 1L | 7 | 1,780 | 1,455 | 325 | 815 | 877 | 40% | 71% | 42 | 2.40 |
| Challenger | 65% area | 1M | 7 | 1,835 | 1,390 | 445 | 1,434 | 1,501 | 31% | 70% | 36 | 3.53 |
| Lower Munro Ridge | 50% area | 1O | 4 | 1,655 | 1,202 | 453 | 1,863 | 1,917 | 24% | 46% | 37 | 3.54 |
| Freddy's | 65% area | 1P | 7 | 1,780 | 1,445 | 335 | 643 | 725 | 52% | 81% | 38 | 1.79 |
| Total Lower Burfield | | 0 | (not including partial trails) | | | | | 0 | (not including partial trails) | | | 19.14 |
| | | | | | | | | | | | | |
| Lift 2 - Sunburst | | | | | | | | | | | | |
| Cahilty / Upper 5 Mile | 80% area | 2A | 2 | 1,850 | 1,589 | 261 | 1,395 | 1,419 | 19% | 29% | 55 | 6.21 |
| Lower 5 Mile | 40% Class 2 | 2B | 2 | 1,589 | 1,257 | 332 | 2,070 | 2,096 | 16% | 21% | 48 | 4.03 |
| Lower 5 Mile | 30% Class 3 | 2B | 3 | 1,589 | 1,257 | 332 | 2,070 | 2,096 | 16% | 21% | 48 | 3.02 |
| Lower 5 Mile | 30% Class 6 | 2B | 6 | 1,589 | 1,257 | 332 | 2,070 | 2,096 | 16% | 21% | 48 | 3.02 |
| Distributor | 50% Class 5 | 2E | 5 | 1,820 | 1,690 | 130 | 768 | 779 | 17% | 29% | 30 | 1.18 |
| Distributor | 50% Class 6 | 2E | 6 | 1,820 | 1,690 | 130 | 768 | 779 | 17% | 29% | 30 | 1.18 |
| Bluff | 50% area | 2F | 6 | 1,785 | 1,535 | 250 | 697 | 740 | 36% | 63% | 47 | 1.75 |
| Sting | | 2G | 6 | 1,721 | 1,505 | 216 | 560 | 600 | 39% | 54% | 41 | 2.43 |
| Intimidator | | 2H | 6 | 1,710 | 1,460 | 250 | 617 | 666 | 41% | 61% | 41 | 2.70 |
| 5th Avenue | | 2I | 6 | 1,710 | 1,455 | 255 | 676 | 722 | 38% | 54% | 36 | 2.57 |
| Broadway | | 2J | 6 | 1,665 | 1,315 | 350 | 1,045 | 1,102 | 33% | 52% | 70 | 7.72 |
| Exhibition | | 2K | 5 | 1,850 | 1,265 | 585 | 2,231 | 2,306 | 26% | 47% | 60 | 13.74 |
| Cruiser | | 2L | 4 | 1,810 | 1,270 | 540 | 1,894 | 1,969 | 29% | 44% | 51 | 10.14 |
| Upper Munro Ridge / Blazer | | 2M | 4 | 1,848 | 1,282 | 566 | 2,090 | 2,165 | 27% | 42% | 36 | 7.85 |
| Runaway Lane | | 2N | 5 | 1,575 | 1,300 | 275 | 789 | 836 | 35% | 49% | 28 | 2.33 |
| Tighten Yer Boots | | 2O | 6 | 1,540 | 1,305 | 235 | 880 | 911 | 27% | 63% | 26 | 2.40 |
| | | 2P | 5 | 1,758 | 1,730 | 28 | 135 | 138 | 21% | 35% | 21 | 0.29 |
| U. Munro Ridge / L. Trans Canada | 30% area | 2R | 4 | 1,828 | 1,772 | 56 | 310 | 315 | 18% | 24% | 24 | 0.23 |
| Cariboo Glades | 50% area | 2U | 7 | 1,820 | 1,560 | 260 | 844 | 883 | 31% | 57% | 107 | 4.72 |

## TABLE II.4 CONT.
## SKI/SNOWBOARD TRAIL INVENTORY - EXISTING AREA – 2018/19

| Trail Name | | Trail No. | Skill Class | Elevation Top Meters | Elevation Bottom Meters | Total Vert. Meters | Horz. Dist. Meters | Slope Dist. Meters | Percent Slope Avg. | Percent Slope Steep. | Avg. Width Meters | Slope Area Ha. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lift 2 (continued) | | | | | | | | | | | | |
| Bluff Glades | | 2V | 7 | 1,785 | 1,540 | 245 | 724 | 764 | 34% | 57% | 142 | 10.88 |
| Cruiser Glades | | 2X | 7 | 1,725 | 1,365 | 360 | 1,066 | 1,125 | 34% | 50% | 123 | 13.87 |
| Blazer Glades | | 2Y | 6 | 1,600 | 1,350 | 250 | 667 | 712 | 37% | 44% | 146 | 10.38 |
| Runaway Lane Glades | | 2Z | 7 | 1,555 | 1,335 | 220 | 588 | 628 | 37% | 60% | 195 | 12.25 |
| Lower Munro Ridge | 25% area | 1O | 4 | 1,655 | 1,202 | 453 | 1,863 | 1,917 | 24% | 46% | 37 | 1.77 |
| Chute | 40% area | 3I | 7 | 2,040 | 1,780 | 260 | 676 | 724 | 38% | 67% | 67 | 1.93 |
| Spillway | 40% area | 3J | 6 | 2,059 | 1,770 | 289 | 1,092 | 1,130 | 26% | 53% | 36 | 1.63 |
| Last Chance | 40% area | 3K | 5 | 1,970 | 1,845 | 125 | 439 | 456 | 28% | 46% | 44 | 0.81 |
| Mid 5 Mile | 40% area | 3L | 2 | 2,059 | 1,755 | 304 | 2,066 | 2,088 | 15% | 16% | 20 | 1.67 |
| Pink Flamingos | 40% area | 3N | 7 | 1,965 | 1,865 | 100 | 247 | 266 | 40% | 70% | 139 | 1.48 |
| The Other Way | 15% area | 3Q | 3 | 1,840 | 1,600 | 240 | 1,480 | 1,499 | 16% | 25% | 21 | 0.46 |
| The Other Way | 20% area | 3Q | 6 | 1,840 | 1,600 | 240 | 1,480 | 1,499 | 16% | 25% | 21 | 0.62 |
| White Rabbit | 40% area | 3R | 6 | 1,920 | 1,805 | 115 | 719 | 728 | 16% | 41% | 41 | 1.20 |
| Rice Bowl | 40% area | 3S | 6 | 2,010 | 1,970 | 40 | 125 | 131 | 32% | 45% | 65 | 0.34 |
| Crystal Lane | 10% area | 3V | 4 | 1,850 | 1,770 | 80 | 594 | 599 | 13% | 20% | 32 | 0.19 |
| Chillway Glades | 40% area | 3CC | 7 | 2,040 | 1,760 | 280 | 838 | 884 | 33% | 63% | 104 | 3.68 |
| | | C | 2 | 1,537 | 1,508 | 29 | 190 | 192 | 15% | 15% | 15 | 0.28 |
| Shortcut | | 4 | 4 | 1,635 | 1,535 | 100 | 612 | 620 | 16% | 17% | 5 | 0.29 |
| | | 5 | 2 | 1,300 | 1,280 | 20 | 107 | 109 | 19% | 19% | 32 | 0.35 |
| Total Lift 2 | | 23 | (not including partial 2B, 2E or 1's & 3's) | | | | | 21,800 | (not including partial 2B, 2E or 1s & 3 | | | 141.59 |
| Lift 3 - Crystal | | | | | | | | | | | | |
| Crystal Run | | 3A | 4 | 2,059 | 1,910 | 149 | 737 | 752 | 20% | 33% | 15 | 1.14 |
| Crystal Bowl - West | | 3B | 6 | 2,045 | 1,920 | 125 | 368 | 389 | 34% | 53% | 127 | 4.95 |
| Crystal Bowl - East | | 3C | 5 | 2,059 | 1,935 | 124 | 401 | 420 | 31% | 45% | 70 | 2.92 |
| Blue Line | | 3D | 4 | 2,059 | 1,770 | 289 | 1,094 | 1,132 | 26% | 42% | 50 | 5.61 |
| East Bushwhacker | | 3E | 5 | 1,905 | 1,820 | 85 | 244 | 258 | 35% | 48% | 66 | 1.72 |
| Sacred Face / Headwalls | | 3F | 7 | 2,025 | 1,890 | 135 | 263 | 296 | 51% | 68% | 195 | 5.78 |
| Lunch Time | | 3G | 4 | 1,925 | 1,840 | 85 | 576 | 582 | 15% | 29% | 31 | 1.83 |
| Hat Trick / Green Door | | 3H | 6 | 2,040 | 1,855 | 185 | 436 | 474 | 42% | 61% | 148 | 7.02 |
| Chute | 40% area | 3I | 7 | 2,040 | 1,780 | 260 | 676 | 724 | 38% | 67% | 67 | 1.93 |
| Spillway | 40% area | 3J | 6 | 2,059 | 1,770 | 289 | 1,092 | 1,130 | 26% | 53% | 36 | 1.63 |
| Last Chance | 40% area | 3K | 5 | 1,970 | 1,845 | 125 | 439 | 456 | 28% | 46% | 44 | 0.81 |
| Mid 5 Mile | 40% area | 3L | 2 | 2,059 | 1,755 | 304 | 2,066 | 2,088 | 15% | 16% | 20 | 1.67 |
| Ralph's Reach / Highway 22 | | 3M | 4 | 1,955 | 1,800 | 155 | 550 | 571 | 28% | 45% | 57 | 3.28 |
| Pink Flamingos | 40% area | 3N | 7 | 1,965 | 1,865 | 100 | 247 | 266 | 40% | 70% | 139 | 1.48 |
| Highway 22A | | 3O | 4 | 1,980 | 1,895 | 85 | 270 | 283 | 31% | 43% | 49 | 1.39 |
| | | 3P | 6 | 1,845 | 1,825 | 20 | 125 | 127 | 16% | 16% | 23 | 0.29 |
| The Other Way | 15% area | 3Q | 3 | 1,840 | 1,600 | 240 | 1,480 | 1,499 | 16% | 25% | 21 | 0.46 |
| The Other Way | 35% area | 3Q | 6 | 1,840 | 1,600 | 240 | 1,480 | 1,499 | 16% | 25% | 21 | 1.08 |
| White Rabbit | 40% area | 3R | 6 | 1,920 | 1,805 | 115 | 719 | 728 | 16% | 41% | 41 | 1.20 |
| Rice Bowl | 40% area | 3S | 6 | 2,010 | 1,970 | 40 | 125 | 131 | 32% | 45% | 65 | 0.34 |
| Hotshot | | 3T | 4 | 1,925 | 1,770 | 155 | 500 | 523 | 31% | 45% | 65 | 3.40 |
| West Bushwhacker | | 3U | 4 | 1,915 | 1,800 | 115 | 303 | 324 | 38% | 40% | 66 | 2.13 |
| Crystal Lane | 10% Class 2 | 3V | 2 | 1,850 | 1,770 | 80 | 594 | 599 | 13% | 20% | 32 | 0.19 |
| Crystal Lane | 30% Class 5 | 3V | 5 | 1,850 | 1,770 | 80 | 594 | 599 | 13% | 20% | 32 | 0.58 |
| Crystal Lane | 30% Class 6 | 3V | 6 | 1,850 | 1,770 | 80 | 594 | 599 | 13% | 20% | 32 | 0.58 |
| Crystal Glades I | | 3W | 5 | 1,875 | 1,830 | 45 | 138 | 145 | 33% | 39% | 83 | 1.21 |
| Crystal Glades II | | 3X | 5 | 1,885 | 1,805 | 80 | 335 | 344 | 24% | 38% | 61 | 2.10 |
| Crystal Glades III | | 3Y | 5 | 1,865 | 1,775 | 90 | 287 | 301 | 31% | 36% | 82 | 2.47 |
| Bushwhacker Glades I | | 3Z | 5 | 1,850 | 1,770 | 80 | 264 | 276 | 30% | 31% | 75 | 2.08 |
| Bushwhacker Glades II | | 3AA | 5 | 1,900 | 1,810 | 90 | 244 | 260 | 37% | 41% | 66 | 1.73 |
| Bushwhacker Glades III | | 3BB | 5 | 1,900 | 1,830 | 70 | 241 | 251 | 29% | 40% | 76 | 1.92 |
| Chillway Glades | 40% area | 3CC | 7 | 2,040 | 1,760 | 280 | 838 | 884 | 33% | 63% | 104 | 3.68 |
| U. Munro Ridge / L. Trans Canada | 10% Class 2 | 2R | 2 | 1,830 | 1,770 | 60 | 311 | 317 | 19% | 20% | 24 | 0.08 |
| U. Munro Ridge / L. Trans Canada | 30% Class 5 | 2R | 5 | 1,830 | 1,770 | 60 | 311 | 317 | 19% | 20% | 24 | 0.23 |
| U. Munro Ridge / L. Trans Canada | 30% Class 6 | 2R | 6 | 1,830 | 1,770 | 60 | 311 | 317 | 19% | 20% | 24 | 0.23 |
| Total Lift 3 | | 30 | (not including 2R & partial 3V) | | | | | 17,714 | (not including 2R & partial 3V) | | | 69.13 |

## TABLE II.4 CONT.
## SKI/SNOWBOARD TRAIL INVENTORY - EXISTING AREA – 2018/19

| Trail Name | | Trail No. | Skill Class | Elevation Top Meters | Elevation Bottom Meters | Total Vert. Meters | Horz. Dist. Meters | Slope Dist. Meters | Percent Slope Avg. | Percent Slope Steep. | Avg. Width Meters | Slope Area Ha. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lift 4 - Village Platter | | | | | | | | | | | | |
| Sunbeam | | 4A | 2 | 1,308 | 1,258 | 50 | 319 | 323 | 16% | 23% | 46 | 1.48 |
| Gentle Giant | | 4B | 1 | 1,308 | 1,258 | 50 | 587 | 589 | 9% | 9% | 17 | 1.00 |
| Cowabunga | | 4C | 2 | 1,300 | 1,275 | 25 | 144 | 146 | 17% | 20% | 19 | 0.28 |
| Total Lift 4 | | 3 | | | | | | 1,058 | | | | 2.76 |
| Lift 5 - West Bowl T-Bar | | | | | | | | | | | | |
| Harry's Run | | 5A | 4 | 2,042 | 1,907 | 135 | 620 | 635 | 22% | 29% | 94 | 5.99 |
| Long Draw | | 5B | 4 | 2,050 | 1,940 | 110 | 424 | 438 | 26% | 34% | 73 | 3.21 |
| Fall Line | | 5C | 4 | 2,070 | 1,905 | 165 | 693 | 712 | 24% | 38% | 60 | 4.28 |
| The Spine | | 5D | 4 | 2,057 | 1,947 | 110 | 526 | 537 | 21% | 35% | 69 | 3.69 |
| Short Draw | | 5E | 4 | 2,070 | 1,961 | 109 | 622 | 631 | 18% | 30% | 39 | 2.44 |
| Total Lift 5 | | 5 | | | | | | 2,954 | | | | 19.61 |
| Lift 6 - Sundance | | | | | | | | | | | | |
| Lower Homesteader | | 6A | 2 | 1,610 | 1,258 | 352 | 2,177 | 2,205 | 16% | 22% | 34 | 7.50 |
| Sunseeker | | 6C | 3 | 1,525 | 1,258 | 267 | 1,132 | 1,163 | 24% | 34% | 73 | 8.50 |
| Lower Terrain Park | | 6D | 3 | 1,420 | 1,285 | 135 | 527 | 544 | 26% | 34% | 52 | 2.82 |
| Lower Sundance | | 6E | 3 | 1,545 | 1,300 | 245 | 884 | 917 | 28% | 33% | 68 | 6.26 |
| Upper Sundance / Sunrise | | 6F | 4 | 1,550 | 1,345 | 205 | 690 | 720 | 30% | 38% | 59 | 4.25 |
| Upper Homesteader | | 6G | 2 | 1,730 | 1,590 | 140 | 1,564 | 1,570 | 9% | 10% | 11 | 1.68 |
| Grannie Greene's | | 6H | 3 | 1,730 | 1,465 | 265 | 1,061 | 1,094 | 25% | 33% | 47 | 5.16 |
| Sundowner | | 6L | 3 | 1,730 | 1,355 | 375 | 1,577 | 1,621 | 24% | 33% | 56 | 9.05 |
| | | 6M | 4 | 1,730 | 1,550 | 180 | 845 | 864 | 21% | 41% | 40 | 3.45 |
| Peak-A-Boo | | 6N | 5 | 1,715 | 1,465 | 250 | 802 | 840 | 31% | 41% | 28 | 2.37 |
| Upper Three Bears | | 6P | 4 | 1,695 | 1,565 | 130 | 525 | 541 | 25% | 35% | 65 | 3.49 |
| Lower Three Bears | | 6Q | 4 | 1,575 | 1,410 | 165 | 601 | 623 | 27% | 40% | 29 | 1.78 |
| Grannie Greene's Glades | | 6R | 4 | 1,725 | 1,540 | 185 | 702 | 726 | 26% | 35% | 127 | 9.26 |
| | | 6S | 4 | 1,665 | 1,520 | 145 | 440 | 463 | 33% | 35% | 203 | 9.42 |
| Lonesome Fir Glades | | 6T | 4 | 1,695 | 1,465 | 230 | 893 | 922 | 26% | 34% | 335 | 30.88 |
| Rambler | | 6U | 2 | 1,730 | 1,342 | 388 | 2,495 | 2,525 | 16% | 26% | 20 | 5.14 |
| Lower Rambler | 50% Class 2 | 6V | 2 | 1,342 | 1,258 | 84 | 565 | 571 | 15% | 19% | 43 | 2.48 |
| Lower Rambler | 50% Class 4 | 6V | 4 | 1,342 | 1,258 | 84 | 565 | 571 | 15% | 19% | 43 | 2.48 |
| Lone Fir West | | 6W | 3 | 1,650 | 1,530 | 120 | 639 | 650 | 19% | 26% | 18 | 1.19 |
| Home Instead | | 6X | 2 | 1,430 | 1,370 | 60 | 388 | 393 | 15% | 23% | 19 | 0.75 |
| Bug Out Glades | | 6Y | 4 | 1,725 | 1,475 | 250 | 939 | 972 | 27% | 42% | 233 | 22.68 |
| Total Lift 6 | | 20 | | (not including partial 6V) | | | | 19,924 | (not including partial 6V) | | | 140.59 |
| Lift 9 - Elevation | | | | | | | | | | | | |
| Cariboo | | 9A | 6 | 1,835 | 1,550 | 285 | 981 | 1,022 | 29% | 59% | 55 | 5.63 |
| Coquihalla Glades | | 9B | 6 | 1,795 | 1,580 | 215 | 718 | 749 | 30% | 54% | 118 | 8.84 |
| OSV | | 9C | 4 | 1,845 | 1,570 | 275 | 1,047 | 1,083 | 26% | 39% | 61 | 6.59 |
| Cahilty Glades | | 9D | 5 | 1,835 | 1,660 | 175 | 597 | 622 | 29% | 45% | 177 | 11.04 |
| Coquihalla | | 9E | 5 | 1,850 | 1,765 | 85 | 340 | 350 | 25% | 38% | 55 | 1.92 |
| Hully Gully | | 9F | 4 | 1,750 | 1,655 | 95 | 469 | 479 | 20% | 30% | 23 | 1.11 |
| Cahilty / Upper 5 Mile | 20% area | 2A | 2 | 1,850 | 1,589 | 261 | 1,395 | 1,419 | 19% | 29% | 55 | 1.55 |
| Bluff | 50% area | 2F | 6 | 1,785 | 1,535 | 250 | 697 | 740 | 36% | 63% | 47 | 1.75 |
| Cariboo Glades | 50% area | 2U | 7 | 1,820 | 1,560 | 260 | 844 | 883 | 31% | 57% | 107 | 4.72 |
| Chute | 20% area | 3I | 7 | 2,040 | 1,780 | 260 | 676 | 724 | 38% | 67% | 67 | 0.96 |
| Spillway | 20% area | 3J | 6 | 2,059 | 1,770 | 289 | 1,092 | 1,130 | 26% | 53% | 36 | 0.82 |
| Last Chance | 20% area | 3K | 5 | 1,970 | 1,845 | 125 | 439 | 456 | 28% | 46% | 44 | 0.40 |
| Mid 5 Mile | 20% area | 3L | 2 | 2,059 | 1,755 | 304 | 2,066 | 2,088 | 15% | 16% | 20 | 0.84 |
| Pink Flamingos | 20% area | 3N | 7 | 1,965 | 1,865 | 100 | 247 | 266 | 40% | 70% | 139 | 0.74 |
| The Other Way | 5% area | 3Q | 3 | 1,840 | 1,600 | 240 | 1,480 | 1,499 | 16% | 25% | 21 | 0.15 |
| The Other Way | 10% area | 3Q | 6 | 1,840 | 1,600 | 240 | 1,480 | 1,499 | 16% | 25% | 21 | 0.31 |
| White Rabbit | 20% area | 3R | 6 | 1,920 | 1,805 | 115 | 719 | 728 | 16% | 41% | 41 | 0.60 |
| Rice Bowl | 20% area | 3S | 6 | 2,010 | 1,970 | 40 | 125 | 131 | 32% | 45% | 65 | 0.17 |
| Chillway Glades | 20% area | 3CC | 7 | 2,040 | 1,760 | 280 | 838 | 884 | 33% | 63% | 104 | 1.84 |
| Total Lift 9 | | 6 | | (not including partials) | | | | 4,305 | (not including partials) | | | 49.98 |

## TABLE II.4 CONT.
## SKI/SNOWBOARD TRAIL INVENTORY - EXISTING AREA – 2018/19

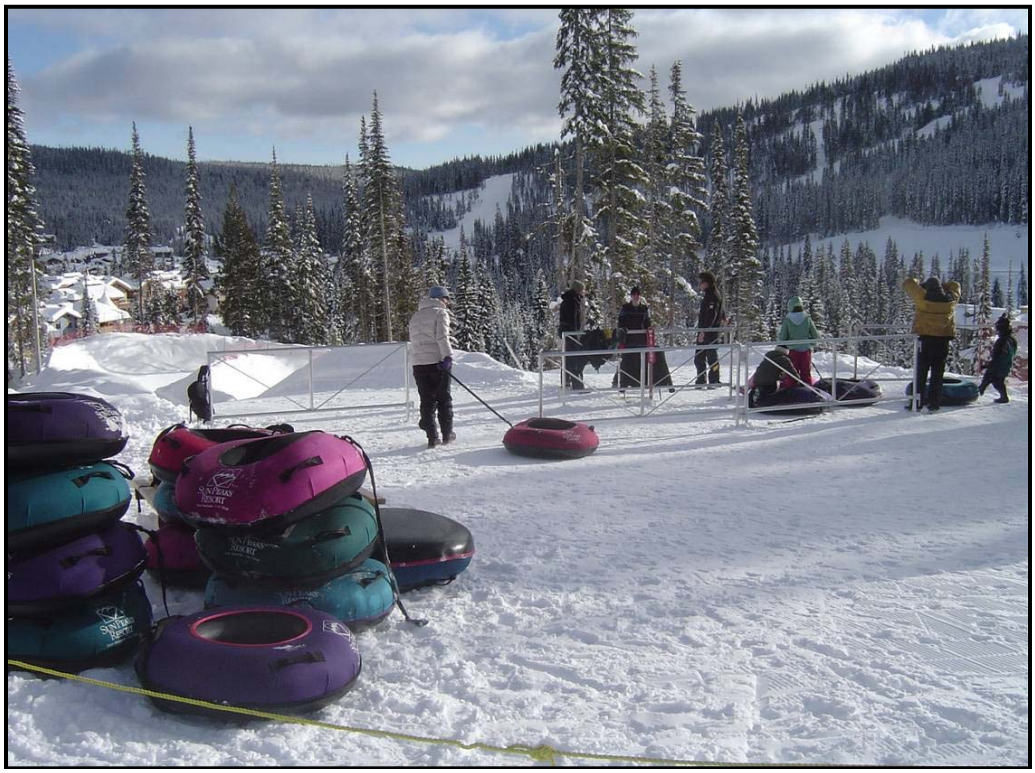
| Trail Name | | Trail No. | Skill Class | Elevation Top Meters | Elevation Bottom Meters | Total Vert. Meters | Horz. Dist. Meters | Slope Dist. Meters | Percent Slope Avg. | Percent Slope Steep. | Avg. Width Meters | Slope Area Ha. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lift 10 - Morrisey Platter | | | | | | | | | | | | |
| Downtown | | 10A | 1 | 1,285 | 1,260 | 25 | 207 | 209 | 12% | 13% | 27 | 0.55 |
| Lower Grand Return | | 10B | 3 | 1,345 | 1,260 | 85 | 370 | 380 | 23% | 37% | 24 | 0.90 |
| Total Lift 10 | | 2 | | | | | | 588 | | | | 1.45 |
| | | | | | | | | | | | | |
| Lift 14 - Morrisey Express | | | | | | | | | | | | |
| Mid-Life Crisis | | 14A | 3 | 1,672 | 1,305 | 367 | 1,644 | 1,684 | 22% | 35% | 41 | 6.88 |
| Upper Showboat | | 14B | 3 | 1,615 | 1,540 | 75 | 487 | 493 | 15% | 17% | 21 | 1.02 |
| Lower Showboat | | 14C | 3 | 1,525 | 1,285 | 240 | 867 | 900 | 28% | 33% | 37 | 3.34 |
| C.C. Riders | | 14D | 3 | 1,655 | 1,525 | 130 | 803 | 813 | 16% | 25% | 37 | 3.01 |
| Telly Gram | | 14E | 3 | 1,560 | 1,285 | 275 | 1,076 | 1,111 | 26% | 33% | 33 | 3.70 |
| Still Smokin East | | 14F-I | 5 | 1,670 | 1,350 | 320 | 1,608 | 1,640 | 20% | 46% | 32 | 5.18 |
| Still Smokin West | | 14F-II | 5 | 1,545 | 1,440 | 105 | 436 | 448 | 24% | 30% | 18 | 0.82 |
| Upper Home Run | | 14G | 5 | 1,580 | 1,565 | 15 | 164 | 165 | 9% | 10% | 15 | 0.24 |
| I'Dunno | | 14H | 3 | 1,655 | 1,300 | 355 | 1,823 | 1,857 | 19% | 31% | 34 | 6.28 |
| Shiner | | 14I | 3 | 1,450 | 1,340 | 110 | 543 | 554 | 20% | 22% | 31 | 1.72 |
| Out of the Woods | | 14J | 3 | 1,550 | 1,370 | 180 | 796 | 816 | 23% | 34% | 26 | 2.13 |
| | | 14K | 3 | 1,545 | 1,525 | 20 | 161 | 162 | 12% | 13% | 11 | 0.18 |
| Second Growth | | 14L | 3 | 1,585 | 1,390 | 195 | 1,046 | 1,064 | 19% | 29% | 29 | 3.06 |
| The Sticks | | 14M | 2 | 1,672 | 1,280 | 392 | 2,847 | 2,874 | 14% | 31% | 25 | 7.10 |
| Grand Return | | 14N | 4 | 1,660 | 1,325 | 335 | 1,529 | 1,565 | 22% | 38% | 31 | 4.92 |
| Cover Shot | | 14O | 6 | 1,510 | 1,385 | 125 | 352 | 374 | 36% | 55% | 38 | 1.41 |
| Spin Cycle | | 14P | 6 | 1,560 | 1,285 | 275 | 701 | 753 | 39% | 57% | 25 | 1.85 |
| Agitator | | 14Q | 6 | 1,590 | 1,305 | 285 | 994 | 1,034 | 29% | 59% | 24 | 2.50 |
| Static Cling | | 14R | 6 | 1,580 | 1,305 | 275 | 706 | 758 | 39% | 65% | 32 | 2.46 |
| Lower Shiner | | 14S | 2 | 1,340 | 1,280 | 60 | 326 | 331 | 18% | 22% | 27 | 0.89 |
| Upper In-Tatters | | 8B-I | 6 | 1,580 | 1,450 | 130 | 537 | 553 | 24% | 60% | 32 | 1.75 |
| Upper Wringer | | 8C-I | 6 | 1,620 | 1,470 | 150 | 570 | 589 | 26% | 44% | 30 | 1.77 |
| Upper Tumble Dry | | 8F | 6 | 1,670 | 1,530 | 140 | 794 | 806 | 18% | 39% | 32 | 2.61 |
| Lint Trap | | 8G-I | 6 | 1,660 | 1,520 | 140 | 842 | 854 | 17% | 27% | 26 | 2.23 |
| Anticipation | 70% area | F | 5 | 1,350 | 1,280 | 70 | 653 | 657 | 11% | 12% | 3 | 0.14 |
| Total Lift 14 | | 25 | | | | | | 22,855 ' | | | | 67.19 |
| | | | | | | | | | | | | |
| Lift 16 - Orient Chair | | | | | | | | | | | | |
| Carpe Diem | | 16A | 3 | 1,500 | 1,380 | 120 | 549 | 562 | 22% | 34% | 28 | 1.58 |
| Chikamichi | | 16B | 3 | 1,507 | 1,297 | 210 | 990 | 1,012 | 21% | 34% | 20 | 1.99 |
| Ca M'a Fait Plaisir | | 16C | 4 | 1,460 | 1,315 | 145 | 579 | 597 | 25% | 43% | 27 | 1.59 |
| Fair Dinkum | | 16D | 3 | 1,510 | 1,330 | 180 | 568 | 596 | 32% | 34% | 33 | 1.95 |
| Upper Hasta La Vista | | 16E | 3 | 1,525 | 1,385 | 140 | 422 | 445 | 33% | 37% | 38 | 1.70 |
| Upper Czesc | | 16F-I | 2 | 1,525 | 1,490 | 35 | 197 | 200 | 18% | 25% | 20 | 0.41 |
| Lower Czesc | | 16F-II | 4 | 1,485 | 1,335 | 150 | 468 | 491 | 32% | 40% | 30 | 1.46 |
| Ausfahrt | | 16G | 3 | 1,470 | 1,355 | 115 | 491 | 504 | 23% | 35% | 21 | 1.06 |
| | | 16I | 2 | 1,405 | 1,280 | 125 | 1,210 | 1,216 | 10% | 19% | 18 | 2.22 |
| | | K-I | 2 | 1,517 | 1,405 | 112 | 1,005 | 1,011 | 11% | 25% | 10 | 0.98 |
| | | L1 | 2 | 1,525 | 1,502 | 23 | 320 | 321 | 7% | 7% | 8 | 0.25 |
| Total Lift 16 | | 11 | | | | | | 6,956 | | | | 15.19 |

## TABLE II.4 CONT.
## SKI/SNOWBOARD TRAIL INVENTORY - EXISTING AREA – 2018/19

| Trail Name | | Trail No. | Skill Class | Elevation Top Meters | Elevation Bottom Meters | Total Vert. Meters | Horz. Dist. Meters | Slope Dist. Meters | Percent Slope Avg. | Percent Slope Steep. | Avg. Width Meters | Slope Area Ha. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lift 18A | | | | | | | | | | | | |
| | | 18A | 1 | 1,282 | 1,257 | 25 | 190 | 192 | 13% | 13% | 27 | 0.52 |
| Total Lift 18A | | 1 | | | | | | 192 | | | | 0.52 |
| Lift 18C | | | | | | | | | | | | |
| | | 18C | 1 | 1,267 | 1,260 | 7 | 83 | 83 | 8% | 8% | 30 | 0.25 |
| Total Lift 18C | | 1 | | | | | | 83 | | | | 0.25 |
| Total All Lifts | | 144 | | | | | | 113.9 km | | | | 592.5 |
| Skiways & Transport Trails | | | | | | | | | | | | |
| Alley | | A | 4 | 1,765 | 1,745 | 20 | 224 | 225 | 9% | 10% | 15 | 0.34 |
| | Lightly Used | B | 2 | 1,425 | 1,253 | 172 | 2,090 | 2,097 | 8% | 8% | 6 | 1.20 |
| Main Village Connector | | E | 2 | 1,605 | 1,515 | 90 | 962 | 966 | 9% | 10% | 7 | 0.72 |
| Anticipation | 30% area | F | 2 | 1,350 | 1,280 | 70 | 653 | 657 | 11% | 12% | 3 | 0.06 |
| Mid Home Run | | G-I | 3 | 1,405 | 1,350 | 55 | 490 | 493 | 11% | 12% | 8 | 0.38 |
| Lower Home Run | | G-II | 2 | 1,345 | 1,270 | 75 | 1,020 | 1,023 | 7% | 8% | 9 | 0.87 |
| Back in Time | | H | 4 | 1,672 | 1,195 | 477 | 3,407 | 3,440 | 14% | 39% | 12 | 4.19 |
| | | K-II | 2 | 1,383 | 1,280 | 103 | 1,205 | 1,209 | 9% | 11% | 11 | 1.32 |
| | | L2 | 2 | 1,502 | 1,435 | 67 | 680 | 683 | 10% | 10% | 8 | 0.53 |
| Mid-Burfield to Crystal | | 6 | 4 | 1,780 | 1,770 | 10 | 615 | 615 | 2% | 2% | 6 | 0.34 |
| Burfield to Crystal | | 7 | 2 | 2,070 | 2,055 | 15 | 101 | 102 | 15% | 15% | 20 | 0.20 |
| Lower In-Tatters | | 8B-II | 7 | 1,445 | 1,280 | 165 | 342 | 380 | 48% | 70% | 44 | 1.69 |
| Lower Wringer | | 8C-II | 6 | 1,460 | 1,265 | 195 | 400 | 445 | 49% | 54% | 57 | 2.54 |
| Lower Tumble Dry | | 8G-II | 6 | 1,520 | 1,265 | 255 | 781 | 822 | 33% | 50% | 40 | 3.27 |
| Fairways Ski-Back | | | 2 | 1,305 | 1,250 | 55 | 734 | 736 | 7% | 8% | 8 | 0.62 |
| Condo Access | | | 2 | 1,310 | 1,280 | 30 | 292 | 294 | 10% | 11% | 9 | 0.25 |
| Total Skiways | | 15 | (not including F) | | | | | 13,530 | (not including F) | | | 18.52 |
| TOTAL | | 159 | | | | | | 127.4 km | | | | 611.0 |

*Crystal Bowl Terrain*

*Terrain Park*



*Top of Tube Time Carpet Lift*

## Skier Densities

Ecosign has performed on-site research to determine comfortable and safe skiing and snowboarding densities at mountain resorts in many parts of the world. The research consisted of performing on-site guest surveys while simultaneously taking aerial photos of the trails by helicopter. One of the questions on the survey asks skiers and snowboarders their subjective opinion of the crowding on the particular trail they were on. Their opinions were then compared with the actual densities recorded in the photos.

From these comparisons, we estimated densities which provide skiers with a high quality, comfortable experience, resulting in good memories and the likelihood of return visits. Densities used in planning mountain resort areas in different parts of the world are listed in Table II.5 and shown graphically in Plate II.5. This includes densities measured by Ted Farwell and Associates for Eastern North America.

**TABLE II.5**
**WORLDWIDE COMPARISON OF SKI/SNOWBOARD TRAIL DENSITIES**

| Skill Classification | 1<br>Beginner | 2<br>Novice | 3<br>Low Intermediate | 4<br>Intermediate | 5<br>High Intermediate | 6<br>Advanced | 7<br>Expert |
|---|---|---|---|---|---|---|---|
| **Western N. America Destination** | | | | | | | |
| SAOT (skiers/ha.) | 50 | 50 | 40 | 40 | 30 | 15 | 20 |
| On-Slope (skiers/ha.) | 20 | 20 | 15 | 15 | 12 | 7 | 10 |
| **European** | | | | | | | |
| SAOT (skiers/ha.) | 75 | 75 | 60 | 60 | 45 | 22 | 30 |
| On-Slope (skiers/ha.) | 30 | 30 | 23 | 23 | 18 | 10 | 15 |
| **Eastern N. America Regional** | | | | | | | |
| SAOT (skiers/ha.) | 135 | 100 | 80 | 80 | 60 | 30 | 40 |
| On-Slope (skiers/ha.) | 54 | 40 | 30 | 30 | 24 | 14 | 20 |
| **Australia** | | | | | | | |
| SAOT (skiers/ha.) | 135 | 100 | 80 | 80 | 60 | 30 | 40 |
| On-Slope (skiers/ha.) | 55 | 40 | 30 | 30 | 25 | 15 | 20 |
| **Japan** | | | | | | | |
| SAOT (skiers/ha.) | 156 | 156 | 125 | 125 | 97 | 55 | 70 |
| On-Slope (skiers/ha.) | 62 | 62 | 47 | 47 | 39 | 26 | 35 |
| **Farwell - Eastern N. America** | | | | | | | |
| SAOT (skiers/ha.) | 250 | 150 | 125 | 86 | 50 | 37 | 37 |
| On-Slope (skiers/ha.) | 110 | 66 | 55 | 37 | 22 | 16 | 16 |

In areas such as Europe, western Canada and the western United States, skier densities are relatively low compared to the densities at snow resort areas in Japan or Australia, where skiers and snowboarders have been historically conditioned to higher densities. For example, densities in Japan used to be three times the densities found in western North American destination resorts but the new trends is for lower densities and higher quality in Japan.

Listed in Table II.6 are the "SAOT" (Skiers At One Time) densities and the “On-Slope” densities. The SAOT is based on the total number of skiers at the area, including skiers and snowboarders in lift queues, riding lifts, in restaurants and on the trails. The "On-Slope" densities take into account only those skiers and snowboarders actually on the trails at any given time. As shown in Table II.6, acceptable slope densities tend to decrease as the proficiency of the skiers increases. The lower density for better skiers occurs due to their increased speed, and therefore, longer stopping distances and the general increase in space needed to avoid obstacles and other skiers. As listed, the exception to this rule is that slope densities increase slightly on expert terrain since these steep, ungroomed slopes dictate controlled, short radius turns. Under these conditions, experts have lower speeds and require less space for safe skiing and snowboarding.

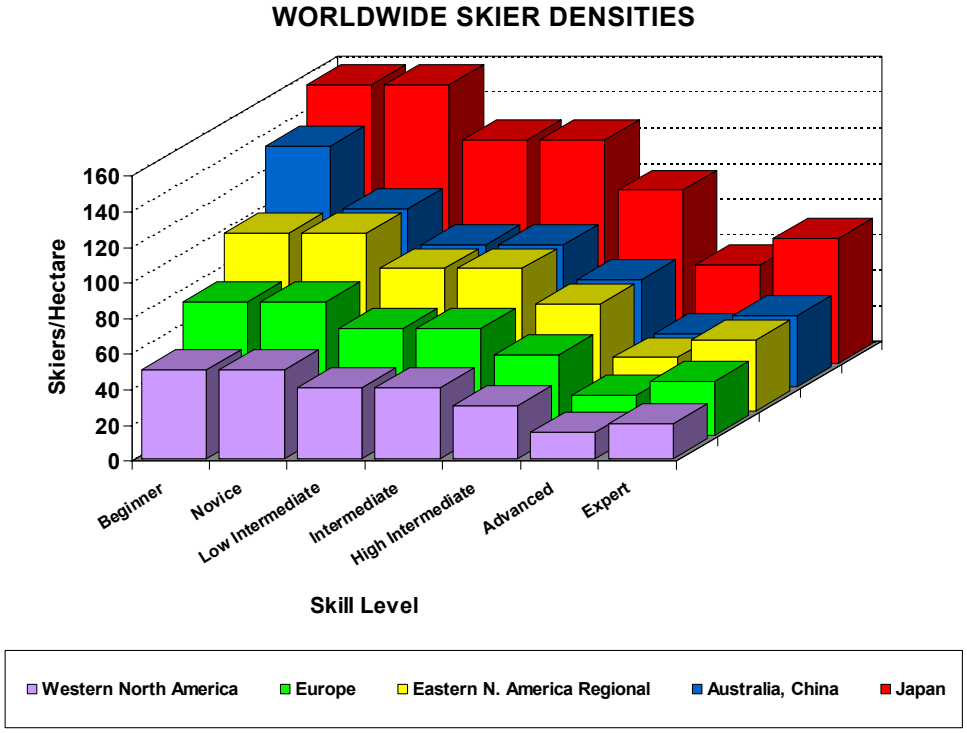



**PLATE II.5**

To accurately portray the terrain balance of the ski resort area, we computed the terrain available to each of the seven skill classifications and then multiplied by the appropriate densities to illustrate the distribution of terrain available to each skill level. This exercise is often referred to as “area balancing” and provides management and the planning team with the data necessary to compare the trail development with the apparent proportions of the market. As listed in Table II.6, Sun Peaks Resort has a total of 611hectares of trails, skiways and gladed zones with the ability to comfortably accommodate approximately 12,860 skiers per day.

*Gladed Ski Terrain*

## TABLE II.6
## SKI/SNOWBOARD TRAIL CARRYING CAPACITY - EXISTING AREA – 2018/19

| Trail Name | | Trail No. | Skill Class | Total Vert. Meters | Slope Dist. Meters | Avg. Width Meters | Slope Area Ha. | Skiers At Area Density | Skiers At Area Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lift 1 - Upper Burfield | | | | | | | | | | |
| Westsyde | | 1A-I | 4 | 175 | 934 | 19 | 1.81 | 40 | 70 | |
| Round-A-Bout | | 1A-II | 4 | 115 | 1,525 | 8 | 1.16 | 40 | 45 | |
| Kookamungas | | 1B | 6 | 105 | 312 | 63 | 1.98 | 15 | 30 | |
| Sunnyside | | 1C | 7 | 165 | 471 | 270 | 12.72 | 4 | 50 | Gladed |
| Father Tom's | 35% area | 1D | 6 | 50 | 156 | 91 | 0.50 | 9 | 5 | Sparse |
| 7 Mile Road / Lower Expo | 35% area | 1E | 6 | 660 | 1,463 | 49 | 2.50 | 15 | 40 | |
| Toilet Bowl | | 1F | 6 | 200 | 942 | 99 | 9.35 | 9 | 85 | Sparse |
| Nose of the Chief | | 1G | 6 | 170 | 630 | 68 | 4.26 | 9 | 40 | Sparse |
| Chief Shoulder | | 1H | 6 | 300 | 1,438 | 72 | 10.38 | 3 | 30 | Open Bowl |
| Chief | | 1I | 6 | 55 | 137 | 338 | 4.62 | 3 | 15 | Open Bowl |
| | 35% area | 1J | 6 | 143 | 1,036 | 19 | 0.68 | 15 | 10 | |
| Roller Coaster | 35% area | 1K | 7 | 195 | 567 | 28 | 0.56 | 20 | 10 | |
| Upper Expo | 35% area | 1L | 7 | 325 | 877 | 42 | 1.29 | 20 | 25 | |
| Challenger | 35% area | 1M | 7 | 445 | 1,501 | 36 | 1.90 | 12 | 25 | Sparse |
| Back Door | | 1N | 6 | 105 | 332 | 148 | 4.91 | 3 | 15 | Gladed |
| Lower Munro Ridge | 25% area | 1O | 4 | 453 | 1,917 | 37 | 1.77 | 40 | 70 | |
| Freddy's | 35% area | 1P | 7 | 335 | 725 | 38 | 0.97 | 4 | 5 | Gladed |
| Mid Mountain | | 1Q | 6 | 85 | 596 | 67 | 3.98 | 3 | 10 | Gladed |
| Total Lift 1 | | | | | | | 65.34 | | 580 | |
| | | | | | | | | | | |
| Lift 1 - Lower Burfield | | | | | | | | | | |
| Father Tom's | 65% area | 1D | 6 | 50 | 156 | 91 | 0.92 | 9 | 10 | Sparse |
| 7 Mile Road / Lower Expo | 65% area | 1E | 6 | 660 | 1,463 | 49 | 4.65 | 15 | 70 | |
| | 65% area | 1J | 6 | 143 | 1,036 | 19 | 1.26 | 15 | 20 | |
| Roller Coaster | 65% area | 1K | 7 | 195 | 567 | 28 | 1.05 | 20 | 20 | |
| Upper Expo | 65% area | 1L | 7 | 325 | 877 | 42 | 2.40 | 20 | 50 | |
| Challenger | 65% area | 1M | 7 | 445 | 1,501 | 36 | 3.53 | 12 | 40 | Sparse |
| Lower Munro Ridge | 50% area | 1O | 4 | 453 | 1,917 | 37 | 3.54 | 40 | 140 | |
| Freddy's | 65% area | 1P | 7 | 335 | 725 | 38 | 1.79 | 4 | 5 | Gladed |
| Total Lower Burfield | | | | | | | 19.14 | | 355 | |
| | | | | | | | | | | |
| Lift 2 - Sunburst | | | | | | | | | | |
| Cahilty / Upper 5 Mile | 80% area | 2A | 2 | 261 | 1,419 | 55 | 6.21 | 50 | 310 | |
| Lower 5 Mile | 40% Class 2 | 2B | 2 | 332 | 2,096 | 48 | 4.03 | 50 | 200 | |
| Lower 5 Mile | 30% Class 3 | 2B | 3 | 332 | 2,096 | 48 | 3.02 | 40 | 120 | |
| Lower 5 Mile | 30% Class 6 | 2B | 6 | 332 | 2,096 | 48 | 3.02 | 15 | 45 | |
| Distributor | 50% Class 5 | 2E | 5 | 130 | 779 | 30 | 1.18 | 30 | 35 | |
| Distributor | 50% Class 6 | 2E | 6 | 130 | 779 | 30 | 1.18 | 15 | 20 | |
| Bluff | 50% area | 2F | 6 | 250 | 740 | 47 | 1.75 | 15 | 25 | |
| Sting | | 2G | 6 | 216 | 600 | 41 | 2.43 | 15 | 35 | |
| Intimidator | | 2H | 6 | 250 | 666 | 41 | 2.70 | 15 | 40 | |
| 5th Avenue | | 2I | 6 | 255 | 722 | 36 | 2.57 | 15 | 40 | |
| Broadway | | 2J | 6 | 350 | 1,102 | 70 | 7.72 | 15 | 115 | |
| Exhibition | | 2K | 5 | 585 | 2,306 | 60 | 13.74 | 30 | 410 | |
| Cruiser | | 2L | 4 | 540 | 1,969 | 51 | 10.14 | 40 | 405 | |
| Upper Munro Ridge / Blazer | | 2M | 4 | 566 | 2,165 | 36 | 7.85 | 40 | 315 | |
| Runaway Lane | | 2N | 5 | 275 | 836 | 28 | 2.33 | 30 | 70 | |
| Tighten Yer Boots | | 2O | 6 | 235 | 911 | 26 | 2.40 | 3 | 5 | Gladed |
| | | 2P | 5 | 28 | 138 | 21 | 0.29 | 30 | 10 | |
| U. Munro Ridge / L. Trans Canada | 30% area | 2R | 4 | 56 | 315 | 24 | 0.23 | 40 | 10 | |
| Cariboo Glades | 50% area | 2U | 7 | 260 | 883 | 107 | 4.72 | 4 | 20 | Gladed |

## TABLE II.6 CONT.
## SKI/SNOWBOARD TRAIL CARRYING CAPACITY - EXISTING AREA – 2018/19

| Trail Name | | Trail No. | Skill Class | Total Vert. Meters | Slope Dist. Meters | Avg. Width Meters | Slope Area Ha. | Skiers At Area Density | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lift 2 (continued) | | | | | | | | | | |
| Bluff Glades | | 2V | 7 | 245 | 764 | 142 | 10.88 | 4 | 45 | Gladed |
| Cruiser Glades | | 2X | 7 | 360 | 1,125 | 123 | 13.87 | 4 | 55 | Gladed |
| Blazer Glades | | 2Y | 6 | 250 | 712 | 146 | 10.38 | 3 | 30 | Gladed |
| Runaway Lane Glades | | 2Z | 7 | 220 | 628 | 195 | 12.25 | 4 | 50 | Gladed |
| Lower Munro Ridge | 25% area | 1O | 4 | 453 | 1,917 | 37 | 1.77 | 40 | 70 | |
| Chute | 40% area | 3I | 7 | 260 | 724 | 67 | 1.93 | 20 | 40 | |
| Spillway | 40% area | 3J | 6 | 289 | 1,130 | 36 | 1.63 | 15 | 25 | |
| Last Chance | 40% area | 3K | 5 | 125 | 456 | 44 | 0.81 | 30 | 25 | |
| Mid 5 Mile | 40% area | 3L | 2 | 304 | 2,088 | 20 | 1.67 | 50 | 85 | |
| Pink Flamingos | 40% area | 3N | 7 | 100 | 266 | 139 | 1.48 | 4 | 5 | Gladed |
| The Other Way | 15% area | 3Q | 3 | 240 | 1,499 | 21 | 0.46 | 40 | 20 | |
| The Other Way | 20% area | 3Q | 6 | 240 | 1,499 | 21 | 0.62 | 15 | 10 | |
| White Rabbit | 40% area | 3R | 6 | 115 | 728 | 41 | 1.20 | 9 | 10 | Sparse |
| Rice Bowl | 40% area | 3S | 6 | 40 | 131 | 65 | 0.34 | 9 | 5 | Sparse |
| Crystal Lane | 10% area | 3V | 4 | 80 | 599 | 32 | 0.19 | 40 | 10 | |
| Chillway Glades | 40% area | 3CC | 7 | 280 | 884 | 104 | 3.68 | 4 | 15 | Gladed |
| | | C | 2 | 29 | 192 | 15 | 0.28 | 50 | 15 | |
| Shortcut | | 4 | 4 | 100 | 620 | 5 | 0.29 | 40 | 10 | |
| | | 5 | 2 | 20 | 109 | 32 | 0.35 | 50 | 20 | |
| Total Lift 2 | | | | | | | 141.59 | | 2,775 | |
| | | | | | | | | | | |
| Lift 3 - Crystal | | | | | | | | | | |
| Crystal Run | | 3A | 4 | 149 | 752 | 15 | 1.14 | 8 | 10 | Open Bowl |
| Crystal Bowl - West | | 3B | 6 | 125 | 389 | 127 | 4.95 | 3 | 15 | Open Bowl |
| Crystal Bowl - East | | 3C | 5 | 124 | 420 | 70 | 2.92 | 6 | 20 | Open Bowl |
| Blue Line | | 3D | 4 | 289 | 1,132 | 50 | 5.61 | 40 | 225 | |
| East Bushwhacker | | 3E | 5 | 85 | 258 | 66 | 1.72 | 30 | 50 | |
| Sacred Face / Headwalls | | 3F | 7 | 135 | 296 | 195 | 5.78 | 12 | 70 | Sparse |
| Lunch Time | | 3G | 4 | 85 | 582 | 31 | 1.83 | 40 | 75 | |
| Hat Trick / Green Door | | 3H | 6 | 185 | 474 | 148 | 7.02 | 9 | 65 | Sparse |
| Chute | 40% area | 3I | 7 | 260 | 724 | 67 | 1.93 | 20 | 40 | |
| Spillway | 40% area | 3J | 6 | 289 | 1,130 | 36 | 1.63 | 15 | 25 | |
| Last Chance | 40% area | 3K | 5 | 125 | 456 | 44 | 0.81 | 30 | 25 | |
| Mid 5 Mile | 40% area | 3L | 2 | 304 | 2,088 | 20 | 1.67 | 50 | 85 | |
| Ralph's Reach / Highway 22 | | 3M | 4 | 155 | 571 | 57 | 3.28 | 24 | 80 | Sparse |
| Pink Flamingos | 40% area | 3N | 7 | 100 | 266 | 139 | 1.48 | 4 | 5 | Gladed |
| Highway 22A | | 3O | 4 | 85 | 283 | 49 | 1.39 | 8 | 10 | Open Bowl |
| | | 3P | 6 | 20 | 127 | 23 | 0.29 | 15 | 5 | |
| The Other Way | 15% area | 3Q | 3 | 240 | 1,499 | 21 | 0.46 | 40 | 20 | |
| The Other Way | 35% area | 3Q | 6 | 240 | 1,499 | 21 | 1.08 | 15 | 15 | |
| White Rabbit | 40% area | 3R | 6 | 115 | 728 | 41 | 1.20 | 9 | 10 | Sparse |
| Rice Bowl | 40% area | 3S | 6 | 40 | 131 | 65 | 0.34 | 9 | 5 | Sparse |
| Hotshot | | 3T | 4 | 155 | 523 | 65 | 3.40 | 40 | 135 | |
| West Bushwhacker | | 3U | 4 | 115 | 324 | 66 | 2.13 | 40 | 85 | |
| Crystal Lane | 10% Class 2 | 3V | 2 | 80 | 599 | 32 | 0.19 | 50 | 10 | |
| Crystal Lane | 30% Class 5 | 3V | 5 | 80 | 599 | 32 | 0.58 | 30 | 15 | |
| Crystal Lane | 30% Class 6 | 3V | 6 | 80 | 599 | 32 | 0.58 | 15 | 10 | |
| Crystal Glades I | | 3W | 5 | 45 | 145 | 83 | 1.21 | 6 | 5 | Gladed |
| Crystal Glades II | | 3X | 5 | 80 | 344 | 61 | 2.10 | 6 | 15 | Gladed |
| Crystal Glades III | | 3Y | 5 | 90 | 301 | 82 | 2.47 | 6 | 15 | Gladed |
| Bushwhacker Glades I | | 3Z | 5 | 80 | 276 | 75 | 2.08 | 6 | 10 | Gladed |
| Bushwhacker Glades II | | 3AA | 5 | 90 | 260 | 66 | 1.73 | 6 | 10 | Gladed |
| Bushwhacker Glades III | | 3BB | 5 | 70 | 251 | 76 | 1.92 | 6 | 10 | Gladed |
| Chillway Glades | 40% area | 3CC | 7 | 280 | 884 | 104 | 3.68 | 4 | 15 | Gladed |
| U. Munro Ridge / L. Trans Canada | 10% Class 2 | 2R | 2 | 60 | 317 | 24 | 0.08 | 50 | 5 | |
| U. Munro Ridge / L. Trans Canada | 30% Class 5 | 2R | 5 | 60 | 317 | 24 | 0.23 | 30 | 5 | |
| U. Munro Ridge / L. Trans Canada | 30% Class 6 | 2R | 6 | 60 | 317 | 24 | 0.23 | 15 | 5 | |
| Total Lift 3 | | | | | | | 69.13 | | 1,205 | |

## TABLE II.6 CONT.
## SKI/SNOWBOARD TRAIL CARRYING CAPACITY - EXISTING AREA – 2018/19

| Trail Name | | Trail No. | Skill Class | Total Vert. Meters | Slope Dist. Meters | Avg. Width Meters | Slope Area Ha. | Skiers At Area Density | Total | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lift 4 - Village Platter | | | | | | | | | | |
| Sunbeam | | 4A | 2 | 50 | 323 | 46 | 1.48 | 50 | 75 | |
| Gentle Giant | | 4B | 1 | 50 | 589 | 17 | 1.00 | 50 | 50 | |
| Cowabunga | | 4C | 2 | 25 | 146 | 19 | 0.28 | 50 | 15 | |
| Total Lift 4 | | | | | | | 2.76 | | 140 | |
| Lift 5 - West Bowl T-Bar | | | | | | | | | | |
| Harry's Run | | 5A | 4 | 135 | 635 | 94 | 5.99 | 24 | 145 | Sparse |
| Long Draw | | 5B | 4 | 110 | 438 | 73 | 3.21 | 8 | 25 | Open Bowl |
| Fall Line | | 5C | 4 | 165 | 712 | 60 | 4.28 | 8 | 35 | Open Bowl |
| The Spine | | 5D | 4 | 110 | 537 | 69 | 3.69 | 24 | 90 | Sparse |
| Short Draw | | 5E | 4 | 109 | 631 | 39 | 2.44 | 24 | 60 | Sparse |
| Total Lift 5 | | | | | | | 19.61 | | 355 | |
| Lift 6 - Sundance | | | | | | | | | | |
| Lower Homesteader | | 6A | 2 | 352 | 2,205 | 34 | 7.50 | 50 | 375 | |
| Sunseeker | | 6C | 3 | 267 | 1,163 | 73 | 8.50 | 40 | 340 | |
| Lower Terrain Park | | 6D | 3 | 135 | 544 | 52 | 2.82 | 40 | 115 | |
| Lower Sundance | | 6E | 3 | 245 | 917 | 68 | 6.26 | 40 | 250 | |
| Upper Sundance / Sunrise | | 6F | 4 | 205 | 720 | 59 | 4.25 | 40 | 170 | |
| Upper Homesteader | | 6G | 2 | 140 | 1,570 | 11 | 1.68 | 50 | 85 | |
| Grannie Greene's | | 6H | 3 | 265 | 1,094 | 47 | 5.16 | 40 | 205 | |
| Sundowner | | 6L | 3 | 375 | 1,621 | 56 | 9.05 | 40 | 360 | |
| | | 6M | 4 | 180 | 864 | 40 | 3.45 | 40 | 140 | |
| Peak-A-Boo | | 6N | 5 | 250 | 840 | 28 | 2.37 | 30 | 70 | |
| Upper Three Bears | | 6P | 4 | 130 | 541 | 65 | 3.49 | 8 | 30 | Gladed |
| Lower Three Bears | | 6Q | 4 | 165 | 623 | 29 | 1.78 | 40 | 70 | |
| Grannie Greene's Glades | | 6R | 4 | 185 | 726 | 127 | 9.26 | 8 | 75 | Gladed |
| | | 6S | 4 | 145 | 463 | 203 | 9.42 | 8 | 75 | Gladed |
| Lonesome Fir Glades | | 6T | 4 | 230 | 922 | 335 | 30.88 | 8 | 245 | Gladed |
| Rambler | | 6U | 2 | 388 | 2,525 | 20 | 5.14 | 50 | 255 | |
| Lower Rambler | 50% Class 2 | 6V | 2 | 84 | 571 | 43 | 2.48 | 50 | 125 | |
| Lower Rambler | 50% Class 4 | 6V | 4 | 84 | 571 | 43 | 2.48 | 40 | 100 | |
| Lone Fir West | | 6W | 3 | 120 | 650 | 18 | 1.19 | 40 | 50 | |
| Home Instead | | 6X | 2 | 60 | 393 | 19 | 0.75 | 50 | 40 | |
| Bug Out Glades | | 6Y | 4 | 250 | 972 | 233 | 22.68 | 8 | 180 | Gladed |
| Total Lift 6 | | | | | | | 140.59 | | 3,355 | |
| Lift 9 - Elevation | | | | | | | | | | |
| Cariboo | | 9A | 6 | 285 | 1,022 | 55 | 5.63 | 15 | 85 | |
| Coquihalla Glades | | 9B | 6 | 215 | 749 | 118 | 8.84 | 3 | 25 | Gladed |
| OSV | | 9C | 4 | 275 | 1,083 | 61 | 6.59 | 40 | 265 | |
| Cahilty Glades | | 9D | 5 | 175 | 622 | 177 | 11.04 | 6 | 65 | Gladed |
| Coquihalla | | 9E | 5 | 85 | 350 | 55 | 1.92 | 30 | 60 | |
| Hully Gully | | 9F | 4 | 95 | 479 | 23 | 1.11 | 40 | 45 | |
| Cahilty / Upper 5 Mile | 20% area | 2A | 2 | 261 | 1,419 | 55 | 1.55 | 50 | 80 | |
| Bluff | 50% area | 2F | 6 | 250 | 740 | 47 | 1.75 | 15 | 25 | |
| Cariboo Glades | 50% area | 2U | 7 | 260 | 883 | 107 | 4.72 | 4 | 20 | Gladed |
| Chute | 20% area | 3I | 7 | 260 | 724 | 67 | 0.96 | 20 | 20 | |
| Spillway | 20% area | 3J | 6 | 289 | 1,130 | 36 | 0.82 | 15 | 10 | |
| Last Chance | 20% area | 3K | 5 | 125 | 456 | 44 | 0.40 | 30 | 10 | |
| Mid 5 Mile | 20% area | 3L | 2 | 304 | 2,088 | 20 | 0.84 | 50 | 40 | |
| Pink Flamingos | 20% area | 3N | 7 | 100 | 266 | 139 | 0.74 | 4 | 5 | Gladed |
| The Other Way | 5% area | 3Q | 3 | 240 | 1,499 | 21 | 0.15 | 40 | 5 | |
| The Other Way | 10% area | 3Q | 6 | 240 | 1,499 | 21 | 0.31 | 15 | 5 | |
| White Rabbit | 20% area | 3R | 6 | 115 | 728 | 41 | 0.60 | 9 | 5 | Sparse |
| Rice Bowl | 20% area | 3S | 6 | 40 | 131 | 65 | 0.17 | 9 | 0 | Sparse |
| Chillway Glades | 20% area | 3CC | 7 | 280 | 884 | 104 | 1.84 | 4 | 5 | Gladed |
| Total Lift 9 | | | | | | | 49.98 | | 775 | |

## TABLE II.6 CONT.
## SKI/SNOWBOARD TRAIL CARRYING CAPACITY - EXISTING AREA – 2018/19

| Trail Name | | Trail No. | Skill Class | Total Vert. Meters | Slope Dist. Meters | Avg. Width Meters | Slope Area Ha. | Skiers At Area Density | Total |
|---|---|---|---|---|---|---|---|---|---|
| Lift 10 - Morrisey Platter | | | | | | | | | |
| Downtown | | 10A | 1 | 25 | 209 | 27 | 0.55 | 50 | 30 |
| Lower Grand Return | | 10B | 3 | 85 | 380 | 24 | 0.90 | 40 | 35 |
| Total Lift 10 | | | | | | | 1.45 | | 65 |
| | | | | | | | | | |
| Lift 14 - Morrisey Express | | | | | | | | | |
| Mid-Life Crisis | | 14A | 3 | 367 | 1,684 | 41 | 6.88 | 24 | 165 |
| Upper Showboat | | 14B | 3 | 75 | 493 | 21 | 1.02 | 40 | 40 |
| Lower Showboat | | 14C | 3 | 240 | 900 | 37 | 3.34 | 40 | 135 |
| C.C. Riders | | 14D | 3 | 130 | 813 | 37 | 3.01 | 24 | 70 |
| Telly Gram | | 14E | 3 | 275 | 1,111 | 33 | 3.70 | 40 | 150 |
| Still Smokin East | | 14F-I | 5 | 320 | 1,640 | 32 | 5.18 | 30 | 155 |
| Still Smokin West | | 14F-II | 5 | 105 | 448 | 18 | 0.82 | 30 | 25 |
| Upper Home Run | | 14G | 5 | 15 | 165 | 15 | 0.24 | 30 | 5 |
| I'Dunno | | 14H | 3 | 355 | 1,857 | 34 | 6.28 | 24 | 150 |
| Shiner | | 14I | 3 | 110 | 554 | 31 | 1.72 | 40 | 70 |
| Out of the Woods | | 14J | 3 | 180 | 816 | 26 | 2.13 | 40 | 85 |
| | | 14K | 3 | 20 | 162 | 11 | 0.18 | 40 | 5 |
| Second Growth | | 14L | 3 | 195 | 1,064 | 29 | 3.06 | 40 | 120 |
| The Sticks | | 14M | 2 | 392 | 2,874 | 25 | 7.10 | 30 | 215 |
| Grand Return | | 14N | 4 | 335 | 1,565 | 31 | 4.92 | 40 | 195 |
| Cover Shot | | 14O | 6 | 125 | 374 | 38 | 1.41 | 15 | 20 |
| Spin Cycle | | 14P | 6 | 275 | 753 | 25 | 1.85 | 15 | 30 |
| Agitator | | 14Q | 6 | 285 | 1,034 | 24 | 2.50 | 15 | 40 |
| Static Cling | | 14R | 6 | 275 | 758 | 32 | 2.46 | 15 | 35 |
| Lower Shiner | | 14S | 2 | 60 | 331 | 27 | 0.89 | 50 | 45 |
| Upper In-Tatters | | 8B-I | 6 | 130 | 553 | 32 | 1.75 | 15 | 25 |
| Upper Wringer | | 8C-I | 6 | 150 | 589 | 30 | 1.77 | 15 | 25 |
| Upper Tumble Dry | | 8F | 6 | 140 | 806 | 32 | 2.61 | 15 | 40 |
| Lint Trap | | 8G-I | 6 | 140 | 854 | 26 | 2.23 | 15 | 35 |
| Anticipation | 70% area | F | 5 | 70 | 657 | 3 | 0.14 | 30 | 5 |
| Total Lift 14 | | | | | | | 67.19 | | 1,885 |
| | | | | | | | | | |
| Lift 16 - Orient Chair | | | | | | | | | |
| Carpe Diem | | 16A | 3 | 120 | 562 | 28 | 1.58 | 40 | 65 |
| Chikamichi | | 16B | 3 | 210 | 1,012 | 20 | 1.99 | 40 | 80 |
| Ca M'a Fait Plaisir | | 16C | 4 | 145 | 597 | 27 | 1.59 | 40 | 65 |
| Fair Dinkum | | 16D | 3 | 180 | 596 | 33 | 1.95 | 40 | 80 |
| Upper Hasta La Vista | | 16E | 3 | 140 | 445 | 38 | 1.70 | 40 | 70 |
| Upper Czesc | | 16F-I | 2 | 35 | 200 | 20 | 0.41 | 50 | 20 |
| Lower Czesc | | 16F-II | 4 | 150 | 491 | 30 | 1.46 | 40 | 60 |
| Ausfahrt | | 16G | 3 | 115 | 504 | 21 | 1.06 | 40 | 40 |
| | | 16I | 2 | 125 | 1,216 | 18 | 2.22 | 50 | 110 |
| | | K-I | 2 | 112 | 1,011 | 10 | 0.98 | 50 | 50 |
| | | L1 | 2 | 23 | 321 | 8 | 0.25 | 50 | 15 |
| Total Lift 16 | | | | | | | 15.19 | | 655 |

**TABLE II.6 CONT.**
**SKI/SNOWBOARD TRAIL CARRYING CAPACITY - EXISTING AREA – 2018/19**

| Trail Name | | Trail No. | Skill Class | Total Vert. Meters | Slope Dist. Meters | Avg. Width Meters | Slope Area Ha. | Skiers At Area Density | Total |
|---|---|---|---|---|---|---|---|---|---|
| Lift 18A | | | | | | | | | |
| | | 18A | 1 | 25 | 192 | 27 | 0.52 | 75 | 40 |
| Total Lift 18A | | 1 | | | 192 | | 0.52 | | 40 |
| Lift 18C | | | | | | | | | |
| | | 18C | 1 | 7 | 83 | 30 | 0.25 | 75 | 20 |
| Total Lift 18C | | 1 | | | 83 | | 0.25 | | 20 |
| Total All Lifts | | | | | | | 592.5 Ha | | 12,185 |
| Skiways & Transport Trails | | | | | | | | | |
| Alley | | A | 4 | 20 | 225 | 15 | 0.34 | 40 | 15 |
| | Lightly Used | B | 2 | 172 | 2,097 | 6 | 1.20 | 5 | 5 |
| Main Village Connector | | E | 2 | 90 | 966 | 7 | 0.72 | 50 | 35 |
| Anticipation | 30% area | F | 2 | 70 | 657 | 3 | 0.06 | 50 | 5 |
| Mid Home Run | | G-I | 3 | 55 | 493 | 8 | 0.38 | 40 | 15 |
| Lower Home Run | | G-II | 2 | 75 | 1,023 | 9 | 0.87 | 50 | 45 |
| Back in Time | | H | 4 | 477 | 3,440 | 12 | 4.19 | 40 | 170 |
| | | K-II | 2 | 103 | 1,209 | 11 | 1.32 | 50 | 65 |
| | | L2 | 2 | 67 | 683 | 8 | 0.53 | 50 | 25 |
| Mid-Burfield to Crystal | | 6 | 4 | 10 | 615 | 6 | 0.34 | 40 | 15 |
| Burfield to Crystal | | 7 | 2 | 15 | 102 | 20 | 0.20 | 50 | 10 |
| Lower In-Tatters | | 8B-II | 7 | 165 | 380 | 44 | 1.69 | 20 | 35 |
| Lower Wringer | | 8C-II | 6 | 195 | 445 | 57 | 2.54 | 15 | 40 |
| Lower Tumble Dry | | 8G-II | 6 | 255 | 822 | 40 | 3.27 | 15 | 50 |
| Fairways Ski-Back | | | 2 | 55 | 736 | 8 | 0.62 | 50 | 30 |
| Condo Access | | | 2 | 30 | 294 | 9 | 0.25 | 50 | 15 |
| Total Skiways | | | | | | | 18.52 | | 575 |
| TOTAL | | 159 | | | 127.4 | | 611.0 Ha | | 12,760 |

## Cumulative Trail Balance

The Cumulative Trail Balance Statement, as listed in Table II.7, shows the balance of the existing trails according to the seven skill classifications and compares them to the balance of the skier/snowboarder market. Plate II.6 indicates that the presently developed trails at Sun Peaks are fairly well balanced, with a noticeable excess of novice and low intermediate terrain and shortages of beginner and high intermediate terrain.

## TABLE II.7
## CUMULATIVE TRAIL BALANCE STATEMENT

| Skill Classification | | Hectares | Skiers | Balance | Ideal |
|---|---|---|---|---|---|
| 1 | Beginner | 2.3 | 140 | 1.1% | 5% |
| 2 | Novice | 48.0 | 2,275 | 18.6% | 10% |
| 3 | Low Intermediate | 77.6 | 2,845 | 23.3% | 20% |
| 4 | Intermediate | 170.5 | 3,835 | 31.4% | 30% |
| 5 | High Intermediate | 58.2 | 1,125 | 9.2% | 20% |
| 6 | Advanced | 139.9 | 1,345 | 11.0% | 10% |
| 7 | Expert | 96.2 | 640 | 5.2% | 5% |
| | **TOTALS** | **592.7** | **12,205** | **100%** | **100%** |

| | | |
|---|---|---|
| Average Density = | 13.4 | Skiers/Hectare |
| Optimum Density = | 37.3 | Skiers/Hectare |
| Weighted Demand = | 3,816 | VTM/Skier/Day |

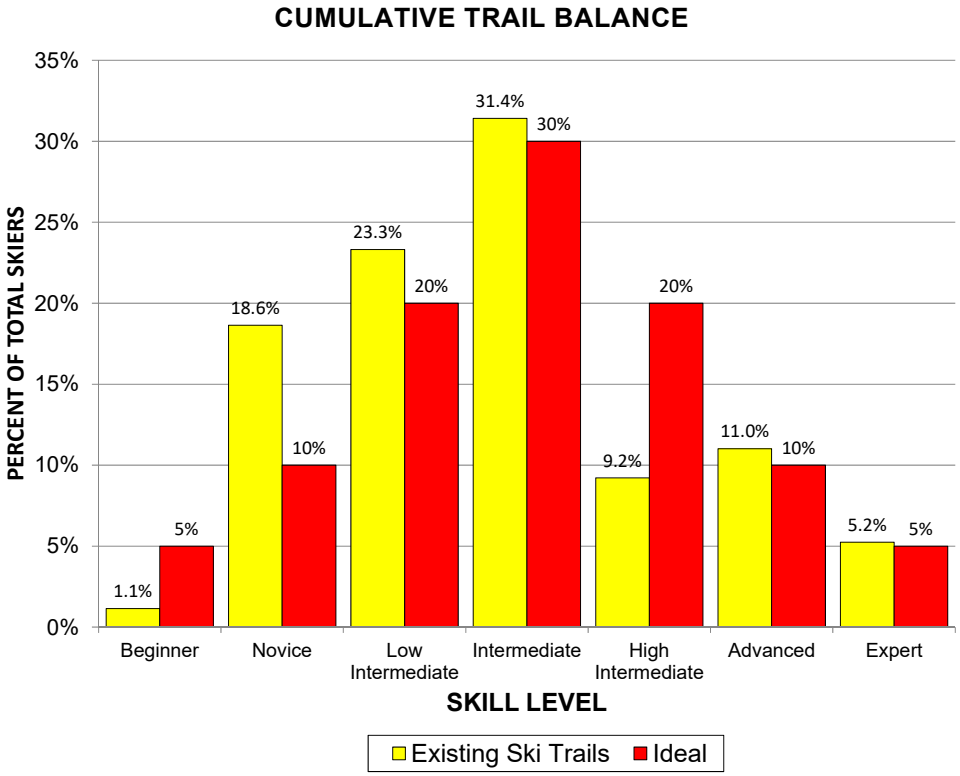



**PLATE II.6**

The existing trail balance, using the three international skill classifications (Easier, More Difficult and Most Difficult), is 20%:64%:15%, as compared to an ideal of 15%:70%:15%.

# .6 Mountain Capacity Analysis

## Skier Carrying Capacity

The determination of an area's Skier Carrying Capacity (SCC) is perhaps the most critical step in snow resort area planning. Often referred to as the "Comfortable Carrying Capacity" or "Skiers At One Time", this figure represents the number of skiers and snowboarders that can be safely supported by an area's lift and trail system, while providing a quality experience to each ability level. Skier Carrying Capacity is determined via the integration of lift capacity, operating hours, acceptable slope densities, slope gradients, skill classifications and vertical metres of lift serviced terrain.

Each skier ability level places different demands upon an area's lift and trail system. Empirical observations have determined that each skier ability level will ski a relatively constant number of vertical metres per day. As the proficiency of the skier increases, the demand for vertical metres also increases. During the past several years, Ecosign has undertaken and reviewed substantial research dealing with skiing demand, skill distribution and densities. These reviews have continued to support the bell curve distribution of skier skill levels (Table II.8, Plate II.7) and the current normal vertical skiing demands.

**TABLE II.8**
**SUN PEAKS**
**SKIING AND SNOWBOARDING DEMAND BY SKILL CLASSIFICATION**

| Skill Classification | Planning Goals | Skier Demand VTM/Day | | |
|---|---|---|---|---|
| | | Low | Average | High |
| 1 Beginner | 5% | 610 | 705 | 940 |
| 2 Novice | 10% | 1,370 | 1,595 | 2,120 |
| 3 Low Intermediate | 20% | 1,830 | 2,125 | 2,825 |
| 4 Intermediate | 30% | 2,440 | 2,830 | 3,770 |
| 5 High Intermediate | 20% | 3,290 | 3,840 | 5,085 |
| 6 Advanced | 10% | 3,840 | 4,460 | 5,935 |
| 7 Expert | 5% | 5,485 | 6,370 | 8,475 |
| **Weighted Average** | | **2,582** | **3,001** | **3,989** |

*Note: Demand based on a 6 hour sliding day for classes 3 to 7 and a 5 hour sliding day for Classes 1 and 2.*

In Europe, western Canada and the western United States, we use the industry high VTM demand to ensure a quality, uncrowded skiing and snowboarding experience for the better conditioned, more aggressive skiers. The average level of demand is commonly found in Japan, Australia and Korea.

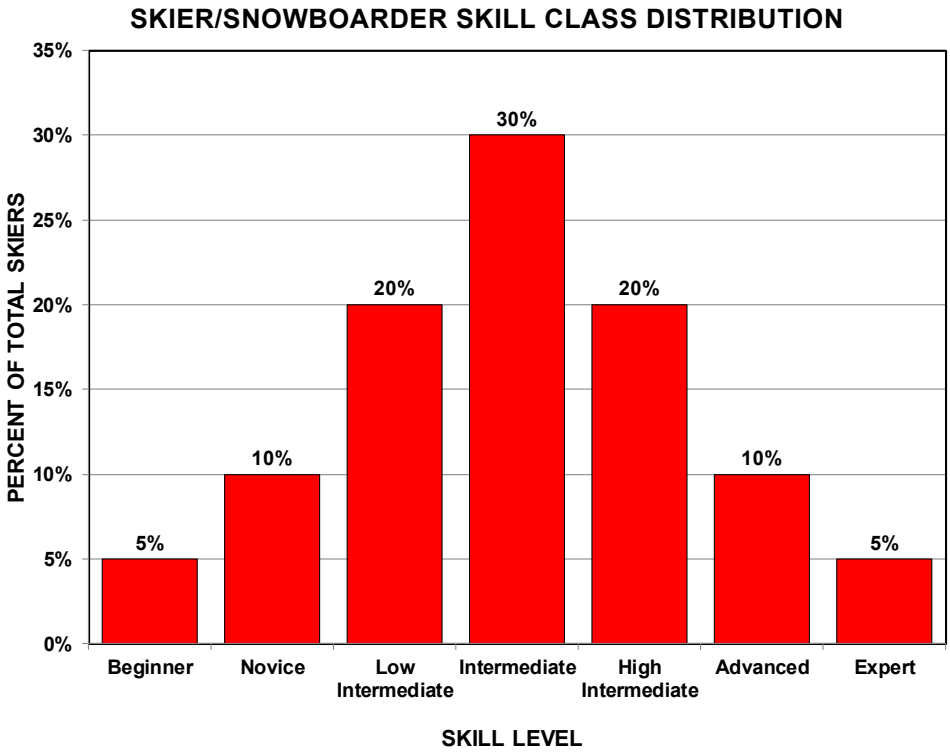



**PLATE II.7**

Table II.9 summarizes the planning parameters which will be used for evaluating and planning the Sun Peaks Resort winter sports complex.

**TABLE II.9**
**SUN PEAKS**
**PLANNING PARAMETERS**

| Skill Classifications | Planning Goals | Acceptable Terrain Gradients | Skier Demand VTM/Day | Skiers per hectare | |
|---|---|---|---|---|---|
| | | | | At Area | On Trail |
| 1 Beginner | 5% | 8 - 15% | 940 | 50 | 20 |
| 2 Novice | 10% | 15 - 25% | 2120 | 50 | 20 |
| 3 Low Intermediate | 20% | 25 - 35% | 2825 | 40 | 15 |
| 4 Intermediate | 30% | 30 - 40% | 3770 | 40 | 15 |
| 5 High Intermediate | 20% | 35 - 45% | 5085 | 30 | 12 |
| 6 Advanced | 10% | 45 - 60% | 5935 | 15 | 7 |
| 7 Expert | 5% | 60% + | 8475 | 20 | 10 |

**Sun Peaks SCC Analysis**

Based upon the design VTM demand, we have calculated the Skier Carrying Capacity (SCC) of Sun Peaks existing lift facilities. Based upon this analysis, we estimate that the existing lift system can comfortably accommodate approximately 8,020 skiers per day (Table II.10). The capacity analysis assumes that skiers are distributed throughout the mountain, with waiting time for each lift equal to the lift's ride time, except on detachable, high speed lifts where the waiting time is double the ride time. The other main assumption is that the VTM demand on each lift is determined by the terrain balance of the trails serviced by that lift.

**TABLE II. 10**
**SUN PEAKS**
**2018/19 SKIER CARRYING CAPACITY**

| Lift No. | Lift Name | Lift Type | Hourly Capacity | Vertical Meters | VTM/Hr (000) | VTM Demand | Loading Effic. | Access Reduc. | SCC |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Burfield Chair | 4C | 464 | 882 | 409 | 5,850 | 95% | 11% | **420** |
| 2 | Sunburst Express | D4C-B | 2,294 | 595 | 1,365 | 4,314 | 95% | 22% | **1,640** |
| 3 | Crystal Chair | 3C | 2,005 | 294 | 589 | 4,600 | 85% | 3% | **720** |
| 4 | Village Platter | P | 722 | 52 | 38 | 1,699 | 80% | 0% | **120** |
| 5 | West Bowl | T-B | 698 | 167 | 117 | 3,770 | 95% | 0% | **190** |
| 6 | Sundance Express | D4C | 2,491 | 475 | 1,183 | 2,993 | 95% | 19% | **2,140** |
| 9 | Elevation | 4C | 1,822 | 313 | 570 | 4,474 | 90% | 0% | **770** |
| 10 | Morrisey Platter | P | 654 | 89 | 58 | 600 | 80% | 10% | **120** |
| 14 | Morrisey Express | D4C | 1,844 | 395 | 728 | 3,466 | 95% | 5% | **1,330** |
| 16 | Orient Chair | 4C | 1,022 | 251 | 256 | 2,795 | 85% | 34% | 360 |
| 18A | Village Carpet | MC | 800 | 27 | 13 | | | 0% | **120** |
| 18C | Carpet | MC | 800 | 9 | 13 | | | | **90** |
| **Total** | | | **15,616** | | **5,339** | | | | **8,020** |

## .7 Lift and Trail Balance Statement

The trail balance by lift system (Table II.11) portrays the relationship between each of the major lift and trail systems, as well as the proportionate amount of terrain available to each skier/snowboarder skill level in each lift system.

In general, Sun Peaks has an excess of return cycle skiing trail capacity, at 12,185 (plus 575 skiers per day capacity of skiways and transport trails), as compared to a lift capacity of 8,020 skiers per day. Plate II.8 graphically illustrates the relationship between lift and trail capacities for each of Sun Peaks lift systems.

## TABLE II.11
## TRAIL BALANCE BY LIFT SYSTEM 2018/19

| Lift No. | 1 | 2 | 3 | 4 | 5 | 6 | 9 | 10 | 14 | 16 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lift Name | Burfield | Sunburst Express | Crystal | Village Platter | West Bowl | Sundance | Elevation | Morrisey Platter | Morrisey Express | Orient Chair | |
| Lift Type | 4C | D4C-B | 3C | P | T-B | D4C | 4C | P | D4C | 4C | |
| Lift Capacity | 420 | 1,640 | 720 | 120 | 190 | 2,140 | 770 | 120 | 1,330 | 360 | Skiers/Day |
| Trail Capacity | 925 | 2,775 | 1,205 | 140 | 355 | 3,355 | 775 | 65 | 1,885 | 655 | Skiers/Day |
| Trails:Lifts | 220% | 169% | 167% | 117% | 187% | 157% | 101% | 54% | 142% | 182% | |
| Average Density | 6.5 | 11.6 | 10.4 | 43.5 | 9.7 | 15.2 | 15.4 | 82.8 | 19.8 | 23.7 | Skiers/Hectare |
| Optimum Density | 24.1 | 35.0 | 34.0 | 50.0 | 40.0 | 42.4 | 33.5 | 44.6 | 37.1 | 43.0 | Skiers/Hectare |
| Demand VTM | 5,850 | 4,314 | 4,600 | 1,699 | 3,770 | 2,993 | 4,474 | 600 | 3,466 | 2,795 | VTM/Skier/Day |
| **Balance** | | | | | | | | | | | |
| Beginner | 0% | 0% | 0% | 36% | 0% | 0% | 0% | 46% | 0% | 0% | |
| Novice | 0% | 23% | 8% | 64% | 0% | 26% | 15% | 0% | 14% | 30% | |
| Low Intermediate | 0% | 5% | 2% | 0% | 0% | 39% | 1% | 54% | 53% | 51% | |
| Intermediate | 32% | 30% | 51% | 0% | 100% | 32% | 40% | 0% | 10% | 19% | |
| High Intermediate | 0% | 20% | 15% | 0% | 0% | 2% | 17% | 0% | 10% | 0% | |
| Advanced | 47% | 15% | 13% | 0% | 0% | 0% | 20% | 0% | 13% | 0% | |
| Expert | 20% | 8% | 11% | 0% | 0% | 0% | 6% | 0% | 0% | 0% | |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | |

## LIFT VS. TRAIL CAPACITY

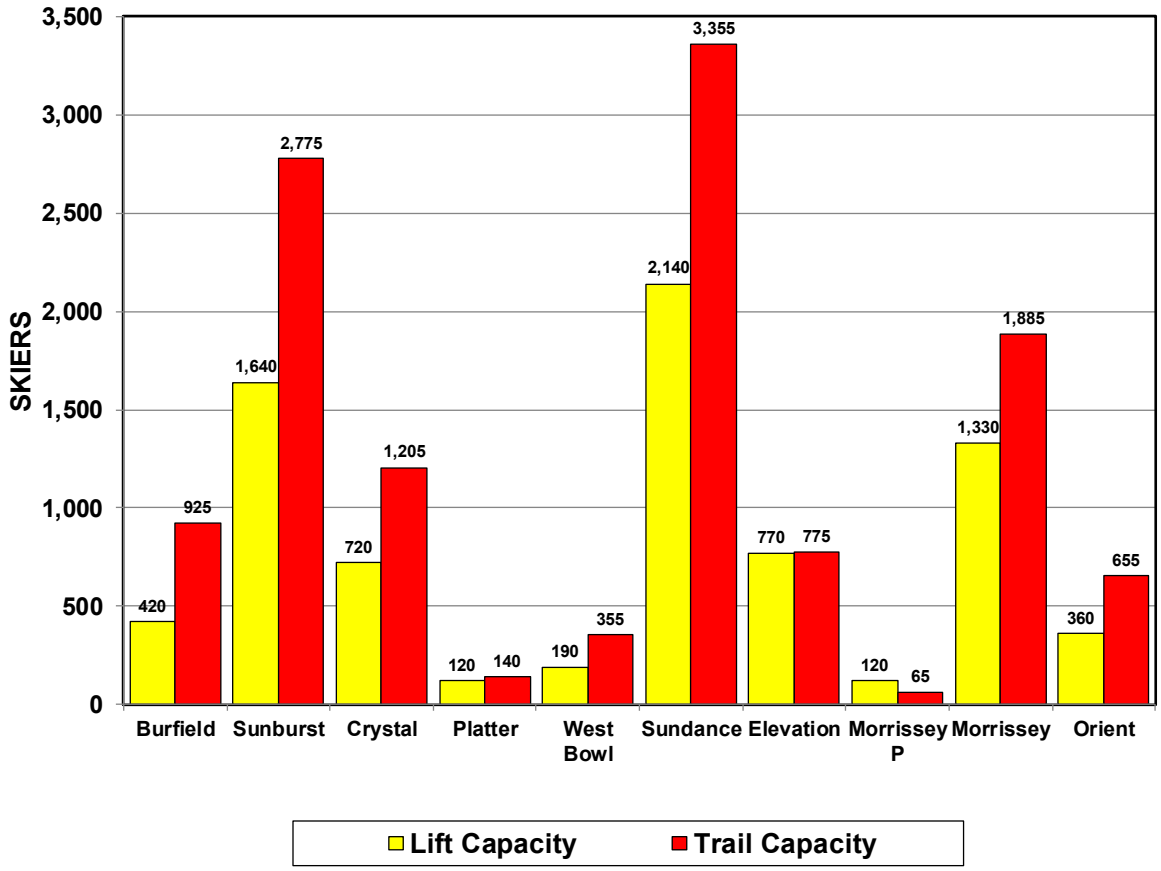



**PLATE II.8**

## .8 Snowmaking

Sun Peaks has snowmaking coverage in place at the Village Base area, on Five Mile/Cahilty, Sunrise/Sundance and Coquihalla trails and in the Tube Town tubing zone. This snowmaking system covers a total of approximately 51 hectares to improve skiing, snowboarding and tubing conditions when natural snowpack is limited. The snowmaking coverage is illustrated on the Existing Snowmaking Plan (Figure 7).

*Snowmaking*

The water used for snowmaking is obtained from a 121,100 $m^3$ (32 MUSG) reservoir located at the 1,750-metre elevation on the northern portion of the Sun Peaks Controlled Recreation Area permit. This reservoir is filled during the spring freshet via a pipeline from the 5 Mile Creek with an intake at the 1,775-metre elevation. The snowmaking distribution lines below the 1,600-metre elevation are gravity fed from this reservoir. Any snowmaking above this critical elevation requires booster pumping, through a pump station installed on the side of the Five-Mile run in 2005.

## .9 Snow Grooming Equipment

Machine grooming (snow farming) of ski trails is an essential component of mountain operations, with new grooming techniques revolutionizing many aspects of today's snow resort business. Present industry guidelines recommend the grooming of all trails with beginner to high intermediate skill classifications. Swing, or night shift grooming has become the rule in the industry, as it allows a longer period for groomed trails to cure (set up) while eliminating hazardous conflicts between skiers and machines. An effective summer grooming program (seeding and mulching) can save appreciable wear and tear on expensive snow grooming equipment, as well as produce earlier opening dates and lower snowmaking costs. Modern snow grooming machines come with many features and a selection of implements are available for optimizing the quality of grooming and the time required to groom the slopes. Quick change hydraulic couplings and attachment fasteners have reduced the time and manpower required to change implements, allowing the groomer to use the right implement for the job, even in changing snow conditions during a single shift. Grooming requirements change over time, due to climatic conditions and the extent of skier traffic on the trail, therefore, a good selection of grooming implements such as all-way blades, power tillers and compactor bars are necessary to increase the efficiency of the grooming fleet and to provide skiers with an ideal snow surface every day.

*Snow grooming at Sun Peaks*

Sun Peaks presently operates the snow grooming equipment listed in Table II.12. A total of ten grooming machines are used for trail grooming and snowmaking, including two winch cats for steep terrain, two ParkPro's used for terrain park grooming and one primary X-County groomer and an older backup X-County groomer.

**TABLE II.12**
**GROOMING EQUIPMENT INVENTORY 2019/20**

| Machine Number | Model | Model Year | Engine Hours April 2020 |
|---|---|---|---|
| **321** | PB400 X-Country Backup | 2013 | 10,655 |
| **322** | PB400 X-Country | 2014 | 10,097 |
| **323** | PB400 W (2010) | 2012 | 10,543 |
| **324** | PB400 | 2010 | 10,192 |
| **325** | PB400 W | 2017 | 5,435 |
| **326** | PB400 ParkPro | 2017 | 5,826 |
| **327** | PB400 | 2018 | 3,608 |
| **328** | PB400 ParkPro | 2018 | 3,608 |
| **329** | PB400 | 2019 | 1,708 |
| **330** | PB400 W | 2019 | 1,708 |
| **AVERAGE** | | | **6,338** |

It is recommended that one fully operable grooming machine be available each nightly shift for every 25 hectares of groomable terrain. Due to the fact that Sun Peaks has more than double the trail capacity compared to lift capacity, it is our recommendation that Sun Peaks groom the trails in skill classes 1 to 3 each night, skill class 4 every second night and skill class 5 every third night. The nightly grooming requirements are listed in Table II.13.

To maximize the capital investment in grooming equipment, the fleet is double shifted as much as possible. A relatively new grooming fleet, with an average of less than 6,000 hours per machine, can achieve a machine availability of 90 percent or greater. Sun Peaks current grooming requirements, ***based on one nightly shift***, are shown in the last rows of Table II.13.

**TABLE II.13**
**EXISTING TRAIL GROOMING**

| PHASE 2A EXISTING AREA Groomable Terrain | | Interval (Days) | Daily Grooming |
|---|---|---|---|
| Class 1 | 2.3 hectares | 1 | 2.3 hectares |
| Class 2 | 48.1 hectares | 1 | 48.1 hectares |
| Class 3 | 77.6 hectares | 1 | 77.6 hectares |
| Class 4 | 170.5 hectares | 2 | 85.3 hectares |
| Class 5 | 58.2 hectares | 3 | 19.4 hectares |
| Groomable Class 6 | 96.2 hectares | 7 | 13.7 hectares |
| Total | 452.9 hectares | | 246.4 hectares |

| | |
|---|---|
| **Recommended Machines** | 9 Standard Grooming Machines |
| | 2 Winch Equipped Grooming Machines |
| | 1 Terrain Park Grooming Machine |

As listed in the Inventory, Sun Peaks has one machine which is dedicated to the Terrain Park and a second machine as a backup that can also be used for regular slope grooming. The three PB 400s and three winch cats can also be used to perform the nightly grooming. It should be noted that snowmaking places added demands on the grooming fleet and, since the area relies on a certain amount of snowmaking coverage early in the season, we estimate that at times additional grooming will be required during periods when both snowmaking and grooming are taking place.

Assuming that the two newer winch cats are used to groom steeper slopes, one ParkPro cat is allocated to the terrain park and the remaining 5 grooming machines are utilized for regular grooming activities, the number of skiers serviced by the grooming fleet can be estimated as follows.

Normal Machines

| No. of Machines | | Percent Availability | | 25 Ha. Per Machine | | Density Of Area | | Grooming Interval (Days) | = | Skiers Serviced |
|---|---|---|---|---|---|---|---|---|---|---|
| 5 | x | 90% | x | 25 | x | 28.7 | x | 1.40 | = | 4,520 |

Winch Machines

| No. of Machines | | Percent Availability | | 5 Ha. Per Machine | | Density Of Area | | Grooming Interval (Days) | + | Class 6 & 7 Not Serviced | = | Skiers Serviced |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | x | 90% | x | 5 | x | 15 | x | 7 | + | 1,985 | = | 3,275 |

We estimate that the existing grooming fleet can support 7,795 skiers per day.

### Maintenance Facility

Sun Peaks has three service bays at the Burfield base and three service bays at mid-mountain. The Burfield service facility encompasses a total of 501 square metres (5,390 square feet) of floorspace and is used mainly for road vehicles. The building is broken into 3 separate areas with Electrical Maintenance occupying 960 sq. ft.; Lift and Vehicle Maintenance occupying 2,493 sq. ft. and Building Maintenance occupying 1,937 sq. ft. The vehicle maintenance portion has two bay entrances, a parts storage area and a lift maintenance area, and encompasses approximately 231 square metres (2,493 square feet). The building maintenance bay is located directly adjacent to the vehicle maintenance bays and encompasses a total of 897 square feet (bay area only).

The mid-mountain facility encompasses a total of 445 square metres (1,528) square feet) on the main level and 44 square metres (144) square feet) in a small mezzanine. The mid-mountain facility is used mainly for snowcat and snowmaking maintenance, and has three double bays.

Normally, an area should have one bay for each snowcat that is approximately 60 square metres (640 square feet) in size, as a rule of thumb. The bays are used for more than just the snowcat fleet and would accommodate lift, vehicle and building maintenance. Snowmaking requires additional space for the maintenance of equipment and hoses, etc.

## .10 Base Area Facilities

### Day Visitor Parking

Ecosign has completed an inventory of the surface area and capacities of the existing parking lots at Sun Peaks Resort, as listed in Table II.14. Parking capacities for Lots 1 to 3 have been calculated assuming a density of 340 cars per hectare. This density can be achieved when the parking lots are well designed, and parking attendants are used to ensure people park closely together. For the unsupervised Lots 5 and 6, a density of 250 vehicles per hectare has been assumed. Parking attendants are only used during the peak weekends and holiday periods since the parking lots do not fill to capacity the rest of the time. Lots 1, 2, 3 and 5 are used by skiers as they have the closest proximity to the lifts. Lot 6 is used for snowmobilers accessing the snowmobile trails via the McGillivray Lake Forest Service Road.

Lots 1 and 3 are also used by mountain employees and employees of the Village businesses. Lot 5, located near the base of the Orient and Morrisey lifts is used by both downhill and cross-country skiers. Assuming an average of 2.5 skiers/snowboarders per vehicle, Lots 1 to 5 are capable of accommodating approximately 3,035 skiers.

**TABLE II.14**
**SUN PEAKS RESORT**
**EXISTING PARKING INVENTORY**

| Lot Number | Location | Area ha. | Cars per ha. | Total Cars | Percent Skiers | Skiers per Car | Skiers |
|---|---|---|---|---|---|---|---|
| P1 | Burfield Base | 0.23 | 340 | 78 | 60% | 2.5 | 117 |
| P2 | Main Day Skier Lot | 2.61 | 340 | 887 | 95% | 2.5 | 2,108 |
| P3 | Village Day Lodge | 0.50 | n.a. | 133 | 90% | 2.5 | 299 |
| P5 | East Village / Nordic Centre | 1.09 | 250 | 273 | 75% | 2.5 | 511 |
| P6 | Snowmobile Access (Parcel 35) | 0.23 | 250 | 58 | 0% | | - |
| **Total** | | **4.66** | | **1,429** | | | **3,035** |

## Resort Accommodation

Ecosign has prepared an inventory of the public and private accommodation units in place at Sun Peaks Resort for the 2019/20 winter season. In addition, sites that have been serviced and zoned for development are included in the inventory under the proposed category. It is anticipated that build-out of these sites will occur over the next 2 to 3 years. The purpose of this inventory is to identify the current and committed capacity to accommodate visitors in the Sun Peaks resort.

The new accommodation projects completed since the 2013 Master Plan Update are the redevelopment of the old Hostel into the Burfield Pod Hotel, the Village Walk townhouse project on Parcel N and the 48 unit Echo Landing townhouse and walk-up apartment project on Parcel 61. In addition, approximately 35 new single homes have been built in the Fairways, Sundance, Bella Vista, Lookout Ridge and Mountain View neighbourhoods. Construction is currently underway on the Peaks West project in the Burfield base area. The Burfield West project proposed for Parcel 70 between The Burfield and the skier bridge across McGillivray Creek is now under construction and is expected to be open by the end of 2020.

As summarized in Table II.15, there are currently a total of 1,921 accommodation units at Sun Peaks Resort, containing just over 7,400 bed units. Once construction is complete in the serviced developed parcels in the Village and the existing subdivisions, Sun Peaks will contain a total of 2,284 units and approximately 8,700 bed units.

Approximately 53 percent of the existing accommodation is public and consists of the hotels and condotels in Sun Peaks Village, as well as several tourist accommodation developments east of the Village. Although all the accommodation parcels with Tourist Accommodation zoning allow nightly rentals, only those properties that have a rental management covenant requiring nightly rentals are classified as public accommodation in this table. The private beds are split relatively evenly between townhouse and single-family/duplex dwellings. There are 107 employee housing units in the Burfield Cabins, Whispering Pines, Little Shuswap and Big Bear Lodges.

**TABLE II.15**
**SUN PEAKS RESORT**
**EXISTING & COMMITTED ACCOMMODATION SUMMARY 2019**

| | EXISTING | | | EXISTING & COMMITTED | | |
|---|---|---|---|---|---|---|
| | Units | Bed Units | Percent of BU's | Units | Bed Units | Percent of BU's |
| Hotel/Condotel | 724 | 2,146 | 29% | 783 | 2,339 | 27% |
| Tourist Accommodation | 435 | 1,763 | 24% | 590 | 2,374 | 27% |
| Pension/B& B | 3 | 60 | 1% | 3 | 60 | 1% |
| **Total Public** | **1,162** | **3,969** | **53%** | **1,376** | **4,773** | **55%** |
| Single-Family & Duplex | 345 | 1,934 | 26% | 430 | 2,430 | 28% |
| Multi-Family | 307 | 1,523 | 21% | 313 | 1,523 | 17% |
| Employee | 107 | n.a. | 0% | 165 | n.a. | 0% |
| **Total Private** | **759** | **3,457** | **47%** | **908** | **3,953** | **45%** |
| **TOTAL** | **1,921** | **7,426** | **100%** | **2,284** | **8,726** | **100%** |

*NOTE: The above committed totals include the privately owned lands serviced before the development agreement between SPRLLP and the Province (945 BU).*

Table II.16 contains a list of all the properties contained in this inventory. The percentage of units and bed units for each development parcel that are located within skier/snowboarder walking distance (SWD) of the lifts is also identified. Skier walking distance is defined as the distance a person walking in ski boots and carrying ski equipment can comfortably walk in 10 minutes. Assuming a walking speed of 2.7 km/hr., this translates into a distance of 450 metres over level ground. For each 10 metres of vertical grade change, the SWD is reduced by 40 metres. Skier walking distance is

measured from the base of the valley lifts or from the edge of a ski trail that can be used to ski down to a valley lift. Approximately 82% of the committed accommodation is within SWD of one of the existing valley lifts. Some of the properties that are currently beyond SWD of the existing lifts will be within walking distance of future lifts proposed in this Master Plan. Figure 8 graphically illustrates the Sun Peaks Existing Base Area Land Use and Figure 9 illustrates the Existing Village Area Plan.

*Sun Peaks Village Street*

*Sun Peaks Grand Hotel*

ecosign
Mountain Resort Planners Ltd.

# TABLE II.16
# EXISTING AND COMMITTED ACCOMMODATION INVENTORY 2019

| Parcel # | | DEVELOPMENT TYPE | Zoning | UNITS Existing | UNITS Proposed | UNITS Total | B.U.'s / Unit | BED UNITS Existing | BED UNITS Proposed | BED UNITS Total | Walk/Ski to Lifts |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **PRE-DEVELOPMENT AGREEMENT** | | | | | | | | | | | |
| **Public Accommodation** | | | | | | | | | | | |
| 3 | Peaks West | Tourist Accomm. | RC-1 | | 64 | 64 | 4.0 | | 256 | 256 | 100% |
| 71 | The Burfield (old hostel) | Tourist Accomm. | RC-1 | 10 | | 10 | 3.2 | 32 | | 32 | 100% |
| 72 | Well Site - undeveloped | | RC-1 | | | | | | | | 100% |
| 73 | Single Family House | | RC-1 | 1 | | 1 | 6.0 | 6 | | 6 | 100% |
| 74 | Undeveloped | | RC-1 | | | | | | | | |
| **Public Accommodation Total** | | | | **11** | **64** | **75** | **3.9** | **38** | **256** | **294** | **100%** |
| **Private Accommodation** | | | | | | | | | | | |
| 1 | Burfield Heights - Strata K-18 | Multi-family | R-3 | 36 | - | 36 | 4.0 | 144 | - | 144 | 100% |
| 2 | Burfield Drive | Duplex, Triplex | R1/RC-1 | 85 | 14 | 99 | 5.0 | 425 | 70 | 495 | 37% |
| 14 | *Burfield Lodge and Cabins* | *Admin./Emp. House* | *LR-1* | *6* | - | *6* | *2.0* | *12* | - | *12* | *100%* |
| 15 | Undeveloped | | *LR-1* | | | | | | | | |
| 37 | *WPL / LSL / BBL* | *Employee Housing* | *IL1* | *101* | *58* | *159* | *2.0* | *n.a.* | *n.a.* | *n.a.* | *100%* |
| **Private Accommodation Total** | | | | **228** | **72** | **300** | 2.2 | **581** | **70** | **651** | **52%** |
| **PRE-DEVELOPMENT AGREEMENT TOTALS** | | | | **239** | **136** | **375** | **2.5** | **619** | **326** | **945** | **67%** |
| **PHASE 1 & 2 (1994-2019 DEVELOPMENT PARCELS)** | | | | | | | | | | | |
| **Public Accommodation** | | | | | | | | | | | |
| A | Sundance Lodge | Condotel | CC1 | 84 | | 84 | 2.2 | 186 | | 186 | 100% |
| B | Hearthstone Lodge | Condotel | CC1 | 70 | | 70 | 2.5 | 172 | | 172 | 100% |
| C | Undeveloped | Condotel | CC1 | | 59 | 59 | 2.5 | | 193 | 193 | 100% |
| D | Stumbock's Sun Peaks Lodge | Hotel | CC1 | 44 | | 44 | 1.7 | 74 | | 74 | 100% |
| F/G/H | Sun Peaks Grand Hotel | Hotel | CC1 | 220 | | 220 | 2.6 | 580 | | 580 | 100% |
| I/J | The Residences at SP Grand | Condotel | CC1 | 41 | | 41 | - | 216 | | 216 | 100% |
| K | Nancy Greene's Cahilty Lodge | Condotel | CC1 | 126 | | 126 | 2.9 | 362 | | 362 | 100% |
| L | Heffley Inn | Hotel | CC1 | 26 | | 26 | 2.3 | 59 | | 59 | 100% |
| M | Fireside Inn | Condotel | CC1 | 72 | | 72 | 2.9 | 211 | | 211 | 100% |
| N | Kookaburra Lodge | Condotel | CC1 | 17 | | 17 | 5.5 | 93 | | 93 | 100% |
| Q | Village Walk | Townhouse | CC1 | 24 | | 24 | 8.0 | 193 | | 193 | 100% |
| **Village Core Subtotal** | | | | **724** | **59** | **783** | **3.0** | **2,146** | **193** | **2,339** | **100%** |
| 4 | Horie Sunlodge | Pension | TP1 | 1 | | 1 | 20.0 | 20 | | 20 | 100% |
| 7 | The Pinnacles | Pension | TP1 | 2 | | 2 | 20.0 | 40 | | 40 | 100% |
| 33 | Bridge Gate | Tourist Accomm. | TA1 | 16 | | 16 | 9.6 | 153 | | 153 | 100% |
| 35 | Condominium Development Site | Tourist Accomm. | TA3 | | 80 | 80 | 3.8 | | 300 | 300 | 100% |
| 39 | Snow Creek Villas | Tourist Accomm. | TA1 | 52 | | 52 | 3.6 | 185 | | 185 | 100% |
| 40 | Timberline Village | Tourist Accomm. | TA2 | 60 | | 60 | 3.2 | 192 | | 192 | 100% |
| 47 | Crystal Forest | Tourist Accomm. | TA2 | 72 | | 72 | 3.3 | 238 | | 238 | 100% |
| 48 | Trapper's Landing | Tourist Accomm. | TA1 | 40 | | 40 | 6.0 | 238 | | 238 | 100% |
| 59 | Stone's Throw | Tourist Accomm. | TA2 | 60 | | 60 | 3.8 | 230 | | 230 | 100% |
| 60 | Settler's Crossing | Tourist Accomm. | TA2 | 76 | | 76 | 3.4 | 257 | | 257 | 100% |
| 61 | Echo Landing | Tourist Accomm. | TA2 | 48 | | 48 | 4.8 | 232 | - | 232 | 100% |
| 70 | Burfield West | Tourist Accomm. | RC-1 | | 11 | 11 | 5.0 | | 55 | 55 | 100% |
| **Outside Village Subtotal** | | | | **427** | **91** | **518** | **4.1** | **1,785** | **355** | **2,140** | **100%** |
| **Public Accommodation Added, 1994-2019** | | | | **1,151** | **150** | **1,301** | **3.4** | **3,931** | **548** | **4,479** | **100%** |
| **Sub-total Public Accommodation at Fall 2019** | | | | **1,162** | **214** | **1,376** | **3.5** | **3,969** | **804** | **4,773** | **100%** |
| **Private Accommodation** | | | | | | | | | | | |
| 5A | Alpine Greens | Multi-family | RM2 | 26 | | 26 | 3.7 | 96 | | 96 | 0% |
| 5B | The Peaks | Multi-family | RM2 | 32 | | 32 | 4.0 | 129 | | 129 | 25% |
| 6 | Sun Mountain Villas | Multi-family | RM2 | 24 | | 24 | 3.5 | 84 | | 84 | 0% |
| 8 | Fairway Cabins/Cottages | Single Family-Strata | RS2 | 51 | | 51 | 5.0 | 255 | | 255 | 0% |
| 9 | Sunburst Estates | Single Family | RS1 | 37 | 1 | 38 | 6.0 | 222 | 6 | 228 | 40% |
| 10 | Mountain View | Single Family | RS1 | 22 | 23 | 45 | 6.0 | 132 | 138 | 270 | 0% |
| 11 | The Fairways | Single Family | RS1 | 62 | 7 | 69 | 6.0 | 372 | 42 | 414 | 19% |
| 18 | McGillivray Creek | Multi-family | RM2 | 40 | | 40 | 4.7 | 189 | | 189 | 100% |
| 28 | Lookout Ridge | Single Family | RS1 | 17 | 29 | 46 | 6.0 | 102 | 174 | 276 | 100% |
| 31 | Woodhaven | Tourist Accomm. | TA1 | 48 | | 48 | 6.0 | 289 | | 289 | 100% |
| 42 | Forest Trails | Multi-family | RM2 | 36 | | 36 | 3.8 | 138 | | 138 | 100% |
| 43 | Powder Ridge | Multi-family | RM3 | 7 | | 7 | 7.0 | 49 | | 49 | 100% |
| 44 | Sundance Estates | Single Family | RS1 | 49 | 2 | 51 | 6.0 | 294 | 12 | 306 | 100% |
| 45 | Bella Vista | SF-Bare Land Strata | RS1 | 22 | 9 | 31 | 6.0 | 132 | 54 | 186 | 100% |
| 46 | Trail's Edge | Tourist Accomm. | TA1 | 58 | | 58 | 6.8 | 393 | | 393 | 100% |
| **Private Accommodation Added, 1994-2019** | | | | **531** | **71** | **602** | **5.5** | **2,876** | **426** | **3,302** | **61%** |
| **Sub-total Private Accommodation at Fall 2019** | | | | **759** | **143** | **902** | **4.4** | **3,457** | **496** | **3,953** | **60%** |
| **Total Existing & Committed Accommodation - 2019** | | | | **1,921** | **357** | **2,278** | **3.8** | **7,426** | **1,300** | **8,726** | **82%** |

Skiers from Accommodation

By making assumptions of bed unit occupancy and skier participation rates, we can determine the estimated visitors generated by the on-mountain accommodation. We have assumed the rates outlined in Table II.17 for a typical weekend day during the peak winter season. Higher occupancy rates may be experienced during the Christmas and American President's week school holidays.

**TABLE II.17**
**BED UNIT OCCUPANCY AND SKIER PARTICIPATION RATES**

| ASSUMPTIONS | Unit Occupancy | Bed Unit Occupancy | Bed Unit Yield | Percent Skiers | Skier Yield |
|---|---|---|---|---|---|
| Hotel/Condotel/Pension | 95% | 85% | 81% | 80% | 65% |
| Tourist Accommodation | 90% | 85% | 77% | 80% | 61% |
| Multi-family | 85% | 80% | 68% | 75% | 51% |
| Single Family/Duplex | 80% | 75% | 60% | 75% | 45% |
| Employee | 100% | 95% | 95% | 25% | 24% |

Using the skier yields outlined in Table II.17, the skiers generated from on-mountain accommodation on a typical peak winter weekend day is estimated at 4,196 for the 2019/20 season and 4,942 when buildout of the serviced development parcels is complete, as shown in Table II.18.

**TABLE II.18**
**SUN PEAKS RESORT**
**SKIERS GENERATED FROM ON-MOUNTAIN ACCOMMODATION**

| | EXISTING | | | | | EXISTING & COMMITTED | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Bed Units | Bed Unit Yield | Over-night People | Percent Skiers | Skiers | Bed Units | Bed Unit Yield | Over-night People | Percent Skiers | Skiers |
| Hotel/Condotel | 2,146 | 81% | 1,709 | 80% | 1,380 | 2,339 | 81% | 1,889 | 80% | 1,504 |
| Tourist Accommodation | 590 | 77% | 1,350 | 80% | 1,080 | 2,374 | 77% | 1,816 | 80% | 1,453 |
| Pension/B& B | 60 | 81% | 48 | 80% | 39 | 60 | 81% | 48 | 80% | 39 |
| **Total Public** | **2,796** | **111%** | **3,107** | **80%** | **2,498** | **4,773** | **79%** | **3,753** | **80%** | **2,996** |
| Single Family & Duplex | 1,934 | 60% | 1,159 | 75% | 869 | 2,430 | 68% | 1,458 | 75% | 1,094 |
| Multi-Family | 1,523 | 68% | 1,025 | 75% | 769 | 1,523 | 60% | 1,027 | 75% | 770 |
| Employee | n.a. | 95% | 238 | 25% | 60 | n.a. | 95% | 327 | 25% | 82 |
| **Total Private** | **3,457** | **70%** | **2,422** | **70%** | **1,698** | **3,953** | **71%** | **2,813** | **69%** | **1,946** |
| **TOTAL** | **6,253** | **88%** | **5,529** | **76%** | **4,196** | **8,726** | **75%** | **6,566** | **75%** | **4,942** |

*NOTE: The above totals include the pre-development lands.*

Of the 4,196 skiers/snowboarders from on-mountain accommodation on a peak weekend during 2019/2020, 85 percent, or 3,565 skiers may originate from accommodation within walking distance of the lifts or a ski trail leading to the lifts. The remaining 631 skiers would be beyond a comfortable walking distance and would most likely drive to one of the day skier parking lots or take the Sun Peaks Shuttle.

## .11 Base Area Staging Capacity

The base area staging capacity is the number of skiers the base area can supply to the mountain. For this process, skiers are divided into two groups: “Day Skiers”, who are skiers that originate from outside the area and are coming to ski for one day only, and “Overnight Skiers”, who are skiers generated from accommodation within the resort. Overnight Skiers are further divided into those staying in ski-in/ski-out accommodation close to the lift bases and those who must drive or take public transportation to get to the ski lifts. If overnight skiers use their car to get to the lifts, there will be less parking available for day skiers from outside the resort.

For the 2018/19 ski season Sun Peaks ran a shuttle system that circulated around the valley brining skiers and employees into the Village. The complete circuit takes approximately 40 minutes, however, since the Village is at the approximate centre of the resort, the frequency of drop-off/pick-up at the Village is every 20 minutes. Between 8:15 a.m. and noon, the shuttle makes 10 stops at the Village Daylodge. The capacity of the shuttle bus is 35 passengers. If 60% of the riders are skiers, this shuttle system has the capacity to deliver 210 skiers to the lifts. Additionally, some skiers may be dropped off by family members who are not skiing.

Therefore, the theoretical base area staging capacity is the sum of those skiers staying in ski-in/ski-out accommodation during peak times, the skiers that can park in the day visitor parking lots and those who are dropped off by the shuttle or private vehicles. The theoretical base area staging capacity of Sun Peaks in 2018/19 is approximately 6,800 skiers as shown in Table II.19. A peak day of 6,876 skiers (1% above the theoretical base area capacity) occurred during the 2018 Christmas vacation period. The base area staging capacity at 6,800 skiers is only 85% of the Skier Carrying Capacity of 8,020 skiers. Until more accommodation and parking is provided, the base area at Sun Peaks cannot comfortably supply sufficient skiers to meet the Skier Carrying Capacity of the lift system.

**TABLE II.19**
**SUN PEAKS RESORT**
**EXISTING BASE AREA STAGING CAPACITY**

| | |
|---|---|
| Skiers from accommodation within walking distance of lifts | 3,565 |
| Skiers from parking | 3,035 |
| Skiers from Valley Shuttle | 210 |
| **Total Skiers** | **6,810** |

*Sunburst Express with Sun Peaks Village*

## .12 Skier/Snowboarder Service Floorspace

Skier/snowboarder service functions are facilities specifically related to the operation and management of the resort area and can be grouped into three main categories including:

**Staging Facilities**: Those facilities required by skiers when first arriving at the resort

**Commercial Facilities**: Those facilities required by skiers once they have staged up the mountain

**Operational Facilities**: Those facilities required in the management and operation of the resort

Staging facilities include ticket sales, public lockers, equipment rental and repair, ski/snowboard school, nursery/daycare, and accessory retail sales (related to the operation of the area only). Commercial facilities include food service seating (including bar seating), kitchen and food storage, and restrooms. Operational facilities include administration space, employee lockers, and first aid and patrol.

### Existing Skier Services Floorspace Inventory

In 1977, the United States Forest Service performed a detailed inventory of skier service facilities at Western U.S. resorts. This inventory was tabulated and broken down into 12 service functions. Ecosign has since updated this database using the U.S.F.S. format to provide current skier service standards for both North American and European day ski areas, regional resorts and destination resorts.

With the help of staff at Sun Peaks, we have prepared an inventory of the skier service facilities at Sun Peaks Resort. Sun Peaks supplied Ecosign with plans of each of the skier service buildings at the resort. The existing built floor area has been allocated to the 12 primary skier service functions, as summarized in Table II.20.

Buildings owned by Sun Peaks Resort LLP have a total floor area of approximately 6,800 square metres. Of this total, approximately 380 square metres are leased to other users including the elementary and high schools. Currently, the Sun Peaks has only one on-mountain restaurant, the Sunburst Lodge, which is located at the top of the Sunburst Express chairlift. The Top of the World Hut, originally built as a warming hut and located near the top of the Burfield Chair, is currently used for ski patrol and the trailer behind it is used for the weather station. There are outhouse style washrooms at the top of Burfield, Morrisey and Sundance. The Ski Patrol uses a portion of the lift building at the top of Morrisey. The remainder of the skier service floorspace is located at the base of the mountain either at the Burfield Base or in the Sun Peaks Village. Most of the skier staging facilities are provided in the Village Daylodge, the Annex, Children's Centre and the Health Centre as well as a few smaller buildings in their immediate vicinity. SPR LLP also leases space for retail equipment, rental and repair in the Time to Ride shop in Sundance Lodge, the Elevation, North Face and Fall Line Tuning shops in the Sun Peaks Grand and the Patagonia store in the Residences at Sun Peaks Grand. The total skier service space currently controlled by SPR LLP is just over 8,000 square metres.

*Renovated Sunburst Lodge*

ecosign
Mountain Resort Planners Ltd.

# TABLE II.20
# SUN PEAKS RESORT
# SKIER SERVICE FLOOR AREA INVENTORY

| 5 | Burfield Lodge m² | Little Shuswap Lodge m² | Annex Cafeteria m² | Bento's Trailer m² | Village Daylodge m² | Sundance Kids m² | Health Hut m² | School House m² | Umbrella Bar m² | Staff Accom. m² | Sunburst Lodge m² | Top of Morrisey m² | TOTW Hut & Trailer m² | TOTAL SPRLLP Owned m² | Sun Peaks Health Centre m² | Sundance Rent / Retail m² | Grand Rent / Retail m² | Residences Rent / Retail m² | TOTAL SPRLLP Operated m² |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Staging Facilities** | | | | | | | | | | | | | | | - | | | | |
| Ticket Sales | 2.0 | - | - | - | 21.9 | - | - | - | | - | - | | - | **24** | - | - | - | - | **24** |
| Public Lockers | 48.8 | - | 14.4 | - | 114.4 | - | - | - | | - | - | | - | **178** | - | - | - | - | **178** |
| Equipment Rental & Repair | - | - | - | - | 209.5 | - | - | - | | - | - | | - | **210** | - | 61 | 430 | - | **701** |
| Ski School/Guest Services | - | - | - | - | 108.8 | - | - | | | - | 11 | | - | **120** | - | - | - | - | **120** |
| Day Care | - | - | - | - | - | 307 | - | - | | - | - | | - | **307** | - | - | - | - | **307** |
| **Sub-total Staging Facilities** | **50.8** | - | **14.4** | - | **454.6** | **307** | - | | | - | **11** | - | - | **837** | - | **61** | **430** | - | **1,328** |
| **Commercial Facilities** | | | | | | | | | | | | | | | - | | | - | |
| Food & Beverage Seating | - | - | 357.2 | - | 236.1 | - | - | | 20 | - | 174 | | - | **788** | - | - | - | - | **788** |
| Kitchen & Scramble | - | - | 321.4 | - | 204.0 | - | - | | 10 | - | 117 | | - | **652** | - | - | - | - | **652** |
| Rest Rooms | 24.2 | - | 76.2 | - | 85.6 | - | - | | | - | 38 | 12 | 12 | **248** | - | - | - | - | **248** |
| Accessory Retail Sales | - | - | - | - | 81.3 | - | - | | | - | - | | - | **81** | - | 61 | 197 | 83 | **339** |
| **Sub-total Commercial Facilities** | 24.2 | - | 754.8 | - | 607.0 | - | - | | 30 | - | 329 | 12 | 12 | **1,769** | - | 61 | 83 | 83 | **2,027** |
| **Operational Facilities** | | | | | | | | | | | | | | | - | | | - | |
| First Aid & Ski Patrol | - | - | - | - | - | - | | - | | - | - | 15 | 72 | **87** | 122 | - | - | - | **210** |
| Administration | 598.9 | 158.9 | 8.2 | 45.0 | 136.4 | 72 | - | - | | 159 | - | | - | **1,178** | 93 | - | - | - | **1,271** |
| Employee Lockers | - | - | 20.4 | - | 52.1 | 82 | | - | | - | - | | - | **154** | 166 | - | - | - | **320** |
| **Sub-total Operational Facilities** | 598.9 | 158.9 | 28.6 | 45.0 | 188.5 | 153 | | - | - | 159 | - | 15 | 72 | **1,419** | 381 | - | - | - | **1,801** |
| **Sub-total Functional Facilities** | 673.9 | 158.9 | 797.9 | 45.0 | 1,250.1 | 460 | | | 30 | 159 | 340 | 27 | 84 | **4,026** | 381 | 122 | 627 | 83 | **5,156** |
| Storage | 159.2 | 58.9 | 63.0 | 45.0 | 48.5 | 11 | - | | | 59 | 100 | | - | **544** | 22 | - | - | - | **566** |
| Circ./Walls/Waste/Mech. | 270.3 | 84.3 | 271.6 | - | 622.5 | 63 | - | | 14 | 84 | 266 | | - | **1,676** | 259 | - | - | - | **1,935** |
| **Total Skier Service Space** | **1,103.4** | **479.1** | **1,132.5** | **90.0** | **1,921.1** | **534** | | | **44** | **302** | **705** | **27** | **84** | **6,246** | **662** | **122** | **627** | **83** | **7,657** |
| SPR LLP Gross Building Area | 1,103.4 | 479.1 | 1,132.5 | 90.0 | 1,921.1 | 534 | 35 | 169 | 44 | 479 | 705 | 27 | 84 | **6,804** | | | | | **6,804** |
| Non Skier Service Uses | - | | - | - | - | - | 35 | 169 | | 177 | - | | - | **381** | 349 | | | | **730** |

*Renovated Sunburst Lodge*

*Top of the World Hut*

*Renovated Annex*

*Renovated Annex*

In addition to the skier service space provided by Sun Peaks, three other shops within the village (Jardines, McSporties and Free Fall Sports) offer ski and snowboard equipment rentals as well as equipment sales. These three shops provide an additional 151 square metres of rental equipment and 161 square metres of equipment retail space. Many of the village restaurants and fast food outlets are open and serve skiers during the lunch period, because of the proximity of the village to the ski slopes. The total floor space dedicated to food and beverage outlets in the village that are open during the lunch hour period is 2,137 m². When the village equipment rental/retail space and food and beverage outlets are included, the total skier service space at Sun Peaks Resort is 10,460 square metres, as shown in Table II.21.

**TABLE II.21**
**SUN PEAKS RESORT**
**SKIER SERVICE SPACE INVENTORY INCLUDING OTHER RENTAL OPERATORS AND FOOD & BEVERAGE OUTLETS OPEN FOR LUNCH**

| 5 | TOTAL SPRLLP Owned m² | TOTAL SPRLLP Operated m² | Jardines m² | McSporties m² | Free Fall Sports Fireside m² | Village F&B Outlets m² | Total Skier Services |
|---|---|---|---|---|---|---|---|
| **Staging Facilities** | | | | | | | |
| Ticket Sales | **24** | **24** | | | | | **24** |
| Public Lockers | **178** | **178** | | | | | **178** |
| Equipment Rental & Repair | **210** | **701** | 88 | 40 | 23 | | **852** |
| Ski School/Guest Services | **120** | **120** | - | - | | | **120** |
| Day Care | **307** | **307** | - | - | | | **307** |
| **Sub-total Staging Facilities** | **837** | **1,328** | **88** | **40** | **23** | **-** | **1,479** |
| **Commercial Facilities** | | | | | | | |
| Food & Beverage Seating | **788** | **788** | | | | 1,425 | **2,213** |
| Kitchen & Scramble | **652** | **652** | | | | 712 | **1,365** |
| Rest Rooms | **248** | **248** | | | | | **248** |
| Accessory Retail Sales | **81** | **339** | 84 | 28 | 49 | | **501** |
| **Sub-total Commercial Facilities** | **1,769** | **2,027** | **84** | **28** | **49** | **2,137** | **4,325** |
| **Operational Facilities** | | | | | | | |
| First Aid & Ski Patrol | **87** | **210** | | | | | **210** |
| Administration | **1,178** | **1,271** | | | | | **1,271** |
| Employee Lockers | **154** | **320** | | | | | **320** |
| **Sub-total Operational Facilities** | **1,419** | **1,801** | - | - | | | **1,801** |
| **Sub-total Functional Facilities** | **4,026** | **5,156** | **172** | **68** | **72** | **2,137** | **7,605** |
| Storage | **544** | **566** | | | | | **566** |
| Circ./Walls/Waste/Mech. | **1,676** | **1,935** | | | | | **1,935** |
| **Total Skier Service Space** | **6,246** | **7,657** | **172** | **68** | **72** | **2,137** | **10,106** |
| SPR LLP Gross Building Area | **6,804** | **6,804** | | | | | |
| Non Skier Service Uses | **381** | **730** | | | | | |


*Village Daylodge*


*Umbrella Bar at Orient Base*

## Skier Service Space Analysis

Table II.22 lists Ecosign's planning standards for the amount of skier service space recommended per skier for each of the 12 basic skier service functions at a day skier area and a destination resort and also shows the average of these two standards. In addition to the functional space, at least 25% more floor area is required to allow for circulation space and mechanical / electrical equipment rooms. Usually another 10% is provided as storage space. These standards have been developed over several years and incorporate data from destination resorts in Europe, North America and Asia, and are used as a benchmark to evaluate the existing services at a resort. These planning standards are average requirements. Since each ski resort caters to a unique market, adjustments to the standards may be required to meet demand for specific services. For instance an area with a large amount of ski-in/ski-out accommodation, where it is easy for guests to return to their lodging for lunch would not need as much food service seating as an area where it was inconvenient for skiers to return to their lodging for lunch. Similarly, an area with a high proportion of beginner skiers would need much more space dedicated to equipment rental and ski school facilities than the average resort.

**TABLE II.22**
**SKIER SERVICE FLOOR AREA STANDARDS**

| | Square Metres Per Skier | | |
|---|---|---|---|
| **Guest Service Function** | **Ski Area** | **Average** | **Resort Area** |
| **Staging Facilities** | | | |
| Ticket Sales | 0.009 | 0.012 | 0.014 |
| Public Lockers | 0.065 | 0.088 | 0.111 |
| Equipment & Repair | 0.074 | 0.084 | 0.093 |
| Guest Services/Ski School | 0.023 | 0.035 | 0.046 |
| Children's Programs | 0.033 | 0.039 | 0.046 |
| **Commercial Facilities** | | | |
| Food Service Seating | 0.300 | 0.336 | 0.372 |
| Kitchen & Scramble | 0.150 | 0.168 | 0.186 |
| Restrooms | 0.075 | 0.084 | 0.093 |
| Accessory/Retail Sales | 0.037 | 0.053 | 0.070 |
| **Operational Facilities** | | | |
| Administration | 0.056 | 0.074 | 0.093 |
| Employee Facilities | 0.028 | 0.037 | 0.046 |
| First Aid & Ski Patrol | 0.023 | 0.028 | 0.033 |
| **Subtotal all Facilities** | **0.873** | **1.038** | **1.203** |
| Storage @ 10% | 0.087 | 0.104 | 0.120 |
| Circ./Walls/Waste/Mech. @ 25% | 0.218 | 0.260 | 0.301 |
| **Total Gross Floor Area ($m^2$)** | **1.179** | **1.402** | **1.624** |

Table II.23, the Existing Skier Service Floorspace Analysis, compares the existing skier service space at Sun Peaks Resort to Ecosign's planning standards for destination resorts. Typically, this analysis is carried out using a Design Day of 80% of the area's Skier Carrying Capacity since it is not practical to build facilities to meet the requirements of peak day levels that may only be achieved a few times per season. If the facilities are built to meet the design day, they can be expected to be exceeded a few times during the peak holiday periods. On these days, the skier service facilities would seem somewhat overcrowded, but could still function. However, at Sun Peaks business levels have not yet reached the area's skier carrying capacity. The average of the top ten busiest days recorded during the past 10 ski seasons is approximately 5,100 skiers or 64% of the area's Skier Carrying Capacity of 8,020 skiers.

As listed in Table II.23, Sun Peaks Resort presently provides approximately 87% percent of the recommended functional space for a destination ski area, based on Ecosign's standards. This table indicates shortages in many of the 12 skier service categories such as ticketing, guest services, food and beverage and public washrooms. Areas that appear to have more than adequate space are children's programs, employee lockers and administration space. However, since Sun Peaks is recognized as a family area, a larger than average children's facility is needed. Similarly, although the analysis indicates a shortage in ticket sales space, due to the high number of season's passes and the fact that a high proportion of the destination skiers receive their tickets as part of a package from the hotel front desks, ticket sales floor area is actually not in short supply.

As mentioned previously, since the commercial space in the Village at Sun Peaks is so convenient for skiers, third party commercial operators are fulfilling some of the skier service requirements. Table II. 24 repeats the skier service space analysis with the inclusion of the facilities offered by other village businesses. The Accessory Retail Space that is owned and/or operated by Sun Peaks appears to be slightly under-sized for the design day, however when the equipment oriented retail space provided by other operators is included, there appears to be a surplus.

**TABLE II.23**
**EXISTING SKIER SERVICE FLOORSPACE ANALYSIS**
**SPACE USED BY SPR LLP**

| | | |
|---|---|---|
| *Skier Carrying Capacity =* | *8,020* | *Skiers* |
| *80% of SCC =* | *6,416* | *Skiers* |
| *Current Business Levels* | *5,130* | *Skiers (Average of Top 10 - Last 10 Years)* |
| *Peak Day 2018/19* | *6,876* | *Skiers* |

| | Existing Area Used by SPRC | | ECOSIGN STANDARDS | | | | Theo. |
|---|---|---|---|---|---|---|---|
| Skier Service Function | Floor Space m² | m² per skier | Theo. m² per skier | Theo. Req'd Space m² | +/- Req'd Space m² | % of Ecosign Stds. | Skiers Served by SPR Space |
| **Staging Facilities** | | | | | | | |
| Ticket Sales | 24 | 0.005 | 0.014 | 71 | (48) | 33% | 1,715 |
| Public Lockers | 178 | 0.035 | 0.065 | 334 | (156) | 53% | 2,731 |
| Equipment Rental & Repair | 701 | 0.137 | 0.093 | 477 | 224 | 147% | 7,540 |
| Ski School/Guest Services | 120 | 0.023 | 0.046 | 238 | (119) | 50% | 2,573 |
| Children's Programs | 307 | 0.060 | 0.046 | 238 | 68 | 129% | 6,598 |
| **Sub-total Staging** | **1,328** | **0.259** | **0.265** | **1,358** | **(30)** | **98%** | **5,016** |
| **Commercial Facilities** | | | | | | | |
| Food & Beverage Seating | 788 | 0.154 | 0.372 | 1,906 | (1,118) | 41% | 2,120 |
| Kitchen & Scramble | 652 | 0.127 | 0.186 | 953 | (301) | 68% | 3,510 |
| Rest Rooms | 248 | 0.048 | 0.093 | 477 | (229) | 52% | 2,666 |
| Accessory Retail Sales | 339 | 0.066 | 0.070 | 357 | (18) | 95% | 4,870 |
| **Sub-total Commercial** | **2,027** | **0.395** | **0.720** | **3,693** | **(1,666)** | **55%** | **2,816** |
| **Operational Facilities** | | | | | | | |
| First Aid & Ski Patrol | 210 | 0.041 | 0.033 | 167 | 43 | 126% | 6,451 |
| Administration | 1,271 | 0.248 | 0.093 | 477 | 794 | 267% | 13,676 |
| Employee Lockers | 320 | 0.062 | 0.046 | 238 | 82 | 134% | 6,898 |
| **Sub-total Operational** | **1,801** | 0.351 | **0.172** | **882** | **919** | **204%** | **10,478** |
| **Net Total Functional Facilities** | **5,156** | **1.005** | **1.157** | **5,933** | **(778)** | **87%** | **4,458** |
| Storage @ 10% | 566 | 0.110 | 0.116 | 593 | (27) | 95% | 4,897 |
| Circ./Walls/Waste/Mech.@ 25% | 1,935 | 0.377 | 0.289 | 1,483 | 452 | 130% | 6,692 |
| **Total Gross Floor Area** | **7,657** | **1.493** | **1.561** | **8,010** | **(353)** | **96%** | **4,904** |

Table II.24 also indicates the impact of the village Food and Beverage outlets on the overall supply of skier service space at Sun Peaks Resort. Since it is very easy to ski into the village, many skiers choose to have lunch in one of the food and beverage outlets in the village. When these outlets are included in the analysis, there appears to be almost sufficient food services space at the resort to meet the Design Day.

**TABLE II.24**
**SKIER SERVICE FLOORSPACE ANALYSIS INCLUDING OTHER RENTAL OPERATORS AND FOOD & BEVERAGE OUTLETS OPEN FOR LUNCH**

| | | |
|---|---|---|
| *Skier Carrying Capacity =* | *8,020* | *Skiers* |
| *80% of SCC =* | *6,416* | *Skiers* |
| *Current Business Levels* | *5,130* | *Skiers (Average of Top 10 - Last 10 Years)* |
| *Peak Day 2018/19* | *6,876* | *Skiers* |

| | Existing Area Other Village | | ECOSIGN STANDARDS | | | | Theo. |
|---|---|---|---|---|---|---|---|
| Skier Service Function | Floor Space m² | m² per skier | Theo. m² per skier | Theo. Req'd Space m² | +/- Req'd Space m² | % of Ecosign Stds. | Skiers Served Incl. Village |
| **Staging Facilities** | | | | | | | |
| Ticket Sales | 24 | 0.005 | 0.014 | 71 | (48) | 33% | 1,715 |
| Public Lockers | 178 | 0.035 | 0.065 | 334 | (156) | 53% | 2,731 |
| Equipment Rental & Repair | 852 | 0.166 | 0.093 | 477 | 375 | 179% | 9,166 |
| Ski School/Guest Services | 120 | 0.023 | 0.046 | 238 | (119) | 50% | 2,573 |
| Children's Programs | 307 | 0.060 | 0.046 | 238 | 68 | 129% | 6,598 |
| **Sub-total Staging** | **1,479** | **0.288** | **0.265** | **1,358** | **121** | **109%** | **5,586** |
| **Commercial Facilities** | | | | | | | |
| Food & Beverage Seating | 2,213 | 0.431 | 0.372 | 1,906 | 306 | 116% | 5,954 |
| Kitchen & Scramble | 1,365 | 0.266 | 0.186 | 953 | 411 | 143% | 7,344 |
| Rest Rooms | 248 | 0.048 | 0.093 | 477 | (229) | 52% | 2,666 |
| Accessory Retail Sales | 501 | 0.098 | 0.070 | 357 | 143 | 140% | 7,183 |
| **Sub-total Commercial** | **4,325** | **0.843** | **0.720** | **3,693** | **632** | **117%** | **6,008** |
| **Operational Facilities** | | | | | | | |
| First Aid & Ski Patrol | 210 | 0.041 | 0.033 | 167 | 43 | 126% | 6,451 |
| Administration | 1,271 | 0.248 | 0.093 | 477 | 794 | 267% | 13,676 |
| Employee Lockers | 320 | 0.062 | 0.046 | 238 | 82 | 134% | 6,898 |
| **Sub-total Operational** | **1,801** | **0.351** | **0.172** | **882** | **919** | **204%** | **10,478** |
| **Net Total Functional Facilities** | **7,605** | **1.482** | **1.157** | **5,933** | **1,672** | **128%** | **6,575** |
| Storage @ 10% | 566 | 0.110 | 0.116 | 593 | (27) | 95% | 4,897 |
| Circ./Walls/Waste/Mech.@ 25% | 1,935 | 0.377 | 0.289 | 1,483 | 452 | 130% | 6,692 |
| **Total Gross Floor Area** | **10,106** | **1.970** | **1.561** | **8,010** | **2,096** | **126%** | **6,473** |

Plate II.9 graphically indicates the results of the skier service analysis. The graph shows the theoretical number of skiers that can be served by the existing skier service facilities; blue indicates only those facilities operated by SPR LLP and green includes the other village operators. On an overall basis, there is sufficient built space for skier services to meet current business levels at Sun Peaks. However, most skier service facilities are undersized to meet a Design Day of 80% of the area's SCC. Discussions with management, confirm that there is a shortage of staging facilities for day skiers such as public lockers and guest services.

**SUN PEAKS RESORT**
**SKIER SERVICE FUNCTION CAPACITIES**
**SPRC ONLY AND SPRC WITH VILLAGE BUSINESSES**

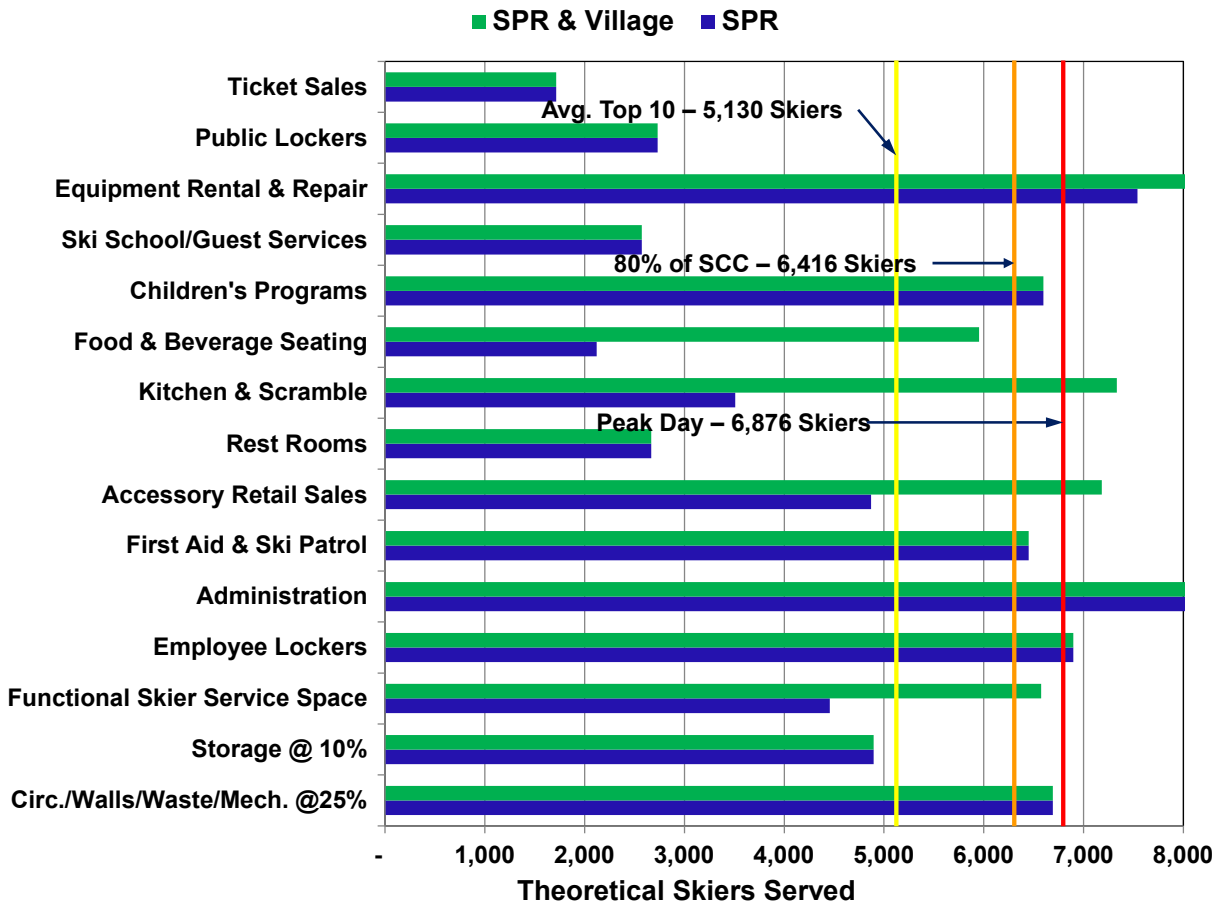



**PLATE II.9**

## Food Service Seating

Sun Peaks Resort currently offers a variety of food service facilities that are open to skiers, ranging from brown bag areas in the Annex to full service restaurants in the Village. An inventory of the food service seating at Sun Peaks is presented in Table II.25. SPRC operates food and beverage outlets in the Village Daylodge, The Annex, on the mountain at the Sunburst Lodge and the Umbrella Bar at the base of the Orient Chair. The Annex was completely renovated in 2017. The Sunburst Lodge had an addition to renovate the kitchen and servery and double the seating capacity the same year. These outlets contain 923 indoor seats and 237 outdoor seats.

There are seventeen other food and beverage outlets operating within the Village at Sun Peaks. These outlets contain a total of 930 indoor seats and 483 outdoor seats. Of the seventeen village food outlets, eleven are open during the lunch hour period during peak periods. These food outlets provide an additional 583 indoor and 469 outdoor seats during the lunch period.

**TABLE II.25**
**SUN PEAKS RESORT**
**EXISTING RESTAURANT/BAR SEAT INVENTORY**

| | Seats | | | Est. Turns per Seat | | Guests Served | | |
|---|---|---|---|---|---|---|---|---|
| **Restaurant/Bar** | **Indoor** | ***Outdoor*** | ***Total*** | **Indoor** | ***Outdoor*** | **Indoor** | ***Outdoor*** | ***Total*** |
| Masa's | 156 | *150* | *306* | 2.5 | *1.5* | 390 | *225* | *615* |
| Café Soleil | 8 | *15* | *23* | 8.0 | *4.0* | 64 | *60* | *124* |
| Annex - updated in 2017 | 495 | - | *495* | 3.0 | | 1,485 | - | *1,485* |
| Umbrella Café | 34 | *12* | *46* | 3.0 | *1.5* | 102 | *18* | *120* |
| Sunburst -updated in 2017 | 230 | *60* | *290* | 3.0 | *1.5* | 690 | *90* | *780* |
| **Sub-total SPRLLP** | **923** | ***237*** | ***1,160*** | | | **2,731** | ***393*** | ***3,124*** |
| **Sundance Lodge** | | | | | | | | |
| Bottom's Bar and Grill | 110 | 100 | *210* | 2.0 | 1.0 | 220 | *100* | *320* |
| Vertical Juice Café | 10 | 3 | *13* | 8.0 | 4.0 | 80 | *12* | *92* |
| Bollacco Caffe | 15 | *5* | *20* | 8.0 | 4.0 | 120 | *20* | *140* |
| **Hearthstone Lodge** | | | | | | | | |
| Bella Italia Ristorante 1. | 62 | *31* | *93* | | | | | |
| Tod Mountain Café/Creperie | 15 | *24* | *39* | 8.0 | 4.0 | 120 | *96* | *216* |
| Mountain High Pizza | 13 | *15* | *28* | 8.0 | 4.0 | 104 | *60* | *164* |
| Joe Poutine | 20 | *7* | *27* | 8.0 | 4.0 | 160 | *28* | *188* |
| Oya Restaurant 1. | 32 | *12* | *44* | - | - | - | - | - |
| **Sun Peaks Lodge** | | | | | | | | |
| Fondue Stube 1. | 72 | | *72* | - | - | - | - | - |
| **Sun Peaks Lodge Studios** | | | | | | | | |
| Mountain Tiger Take Out | 35 | | *35* | | | | | |
| Baby Doh's Mountain Fair | 12 | | *12* | | | | | |
| **Sun Peaks Grand Hotel & Conference** | | | | | | | | |
| Mantles Bar and Grill | 150 | *148* | *298* | 2.5 | 1.0 | 375 | *148* | *523* |
| **Sun Peaks Grand Residences** | | | | | | | | |
| Morrisey's Public House 1. | 58 | *40* | *98* | 2.0 | 1.0 | | | |
| M Room 1. | 60 | | *60* | | | - | - | - |
| **Nancy Greene Cahilty Lodge** | | | | | | | | |
| Cahilty Creek Bar & Grill | 103 | *60* | *163* | 2.5 | 1.0 | 258 | *60* | *318* |
| **Fireside Lodge** | | | | | | | | |
| Powder Hounds 1. | 60 | *23* | *83* | | | | | |
| 5 Forty Café & Deli | 31 | *7* | *38* | 3.0 | 1.5 | 93 | *11* | *104* |
| **Kookaburra Lodge** | | | | | | | | |
| Voyageur Bistro | 72 | *8* | *80* | 2.0 | 1.0 | 144 | *8* | *152* |
| **Sub-total Others** | **583** | ***469*** | ***1,168*** | | | **1,674** | ***543*** | ***2,217*** |
| **Total** | **1,506** | ***706*** | ***2,328*** | | | **4,405** | ***936*** | ***5,341*** |

*Notes: 1. Not included in total seat count because not open for lunch.*


*Patio at Masa's Bar and Grill, Sun Peaks Daylodge*

In general, the capacity of food service space at ski areas is calculated assuming a turnover of between 2 and 4 guests per seat during the lunch hour rush. The number of turns achieved is dependent on the type of establishment, the type of service provided and the duration of the lunch hour period. Each of the food and beverage outlets at Sun Peaks has been assigned a theoretical turnover rate as shown in Table II.25. Using these assumptions, the indoor seats operated by Sun Peaks can service approximately 2,731 skiers and the Village indoor seats can service another 1,674 skiers for a total lunch time indoor food service capacity of 4,405 skiers.

While there are a considerable number of outdoor seats at the resort, during the peak holiday periods of Christmas and President's Week, the weather is generally too cold to eat outside. The outdoor seating typically gets used in the spring and can provide service to approximately 940 skiers, as shown in Table II.25. Our analysis indicates a shortage of food service seating spaces to service the design day during cold weather. However, since most of the accommodation at Sun Peaks is ski-in/ski-out and equipped with kitchens, skiers do have the option of returning to their accommodation units for lunch.

## .13 Commercial Floorspace Inventory

An inventory of the existing commercial floorspace was completed for this Master Plan update in the summer of 2019 and reflects all commercial space that is available for the 2019/20 ski season. Since 1994, third party developers have constructed substantial commercial space on the ground floor of the Village hotel buildings. The food service outlets that are open during the lunch hour period were included in the Skier Service Floorspace Inventory and Analysis. Similarly, Masa's and the retail shop in the Village Daylodge have been included in the Commercial Floorspace Inventory, as these outlets are open in the evenings to cater to overnight guests at the resort. The Commercial Floorspace Inventory is summarized in Table II.26. There is currently approximately 16,734 m² of operational commercial floorspace at Sun Peaks Resort which works out to 1.1 square metres of commercial floorspace per bed unit. Current vacant commercial space is 922 square metres due to the recent construction of 1,200 m² of new commercial space as part of the Peaks West development.

The Sun Peaks Grand Hotel has a large conference facility including a ballroom that can accommodate a reception of 500 people, a large pre-function area, 6 other meeting rooms and a full banquet kitchen. Two of the other hotels also provide conference rooms. The Residences at Sun Peaks Grand has a large conference room which can provide additional seating for their restaurant. Public indoor recreation space is provided at the Sun Peaks Centre, which has a common room and change facilities for the outdoor pool and the ice surface which is being covered. The Kookaburra Lodge contains an athletic facility and a spa which will be relocated to the SPC once construction is complete. There is a second spa in the Grand Residences at Sun Peaks. The Sun Peaks Grand Hotel includes exercise facilities and a large outdoor pool for the use of hotel guests which has not been included in the commercial floorspace inventory. The Sun Peaks Mountain Resort Municipality is currently constructing a roof over the ice arena and large enclosed spaces for conferences, meetings and fitness.

Institutional uses at Sun Peaks include civic, health and educational facilities. The Sun Peaks Mountain Resort Municipality has offices on the ground floor of the Kookaburra Lodge which will be moved to the Sun Peaks Centre when Phase 2 of the SPCE is completed. The Sun Peaks Fire Hall is located in the Burfield Base. The Sun Peaks Community Health Centre is situated just west of the Annex in the Village. The Sun Peaks

Elementary School is located in temporary buildings on Sundance Drive and the Sun Peaks Academy provides high school curriculum in a temporary building near the Health Centre.

**TABLE II.26**
**SUN PEAKS RESORT**
**COMMERCIAL FLOORSPACE INVENTORY**

| | Retail m² | Restaurant Bar m² | Office m² | Public Recreation m² | Conference m² | Sub-total Commercial m² | Institutional m² | Skier Services m² | Vacant m² | Building Total m² |
|---|---|---|---|---|---|---|---|---|---|---|
| Burfield Lodge | - | - | - | - | - | - | | 1,103 | - | **1,103** |
| Burfield Warehouse/Staff Housing | 95 | - | | - | - | **95** | 30 | 272 | 82 | **479** |
| Peaks West | 250 | 125 | 78 | | | **453** | | | 764 | **1,217** |
| The Burfield | | 100 | | | | **100** | | | | **100** |
| Fire Hall | | | | | | - | 401 | | | **401** |
| The Annex Daylodge | | | | | | - | | 1,067 | | **1,067** |
| Bentos Trailer | | | | | | - | | 90 | | **90** |
| Medical Centre | | | | | | | 349 | 662 | | **1,011** |
| Childminding Building | | | | | | - | | 534 | | **534** |
| Sun Peaks Academy | | | | | | | 108 | | | **108** |
| Sun Peaks Elementary School | | | | | | | 580 | | | **580** |
| Village Day Lodge | | | - | - | - | | - | 1,921 | - | **1,921** |
| Sundance Lodge | 257 | 373 | - | - | - | **630** | - | | - | **630** |
| Hearthstone Lodge | 172 | 440 | - | - | 143 | **755** | - | - | - | **755** |
| Stumböck's Sun Peaks Lodge | 28 | 550 | - | 26 | - | **604** | - | 40 | - | **644** |
| Heffley Inn | - | 132 | - | - | - | **132** | - | - | - | **132** |
| Sun Peaks Grand Hotel | 354 | 690 | - | - | 1,488 | **2,532** | - | 560 | - | **3,092** |
| Nancy Greene's Cahilty Lodge | 31 | 276 | - | - | 60 | **368** | - | - | - | **368** |
| Fireside Lodge | 160 | 180 | - | - | - | **340** | - | - | 116 | **456** |
| The Residences at Sun Peaks Grand | 686 | 150 | 239 | 64 | 155 | **1,294** | - | - | - | **1,294** |
| Kookaburra Lodge | - | 153 | 234 | 165 | - | **553** | 98 | - | - | **651** |
| Sports Centre | - | - | - | 227 | - | **227** | | - | - | **227** |
| Sun Peaks Centre - under construction | | | | | | | | | | |
| **Total Space** | **2,034** | **3,171** | **551** | **482** | **1,845** | **8,083** | **1,566** | **6,249** | **962** | **16,860** |
| *Space per Public Bed Unit* | *0.51* | *0.80* | *0.14* | *0.12* | *0.46* | *2.04* | *0.39* | *1.57* | *0.24* | *4.25* |
| *Space per Total Bed Units* | *0.27* | *0.42* | *0.07* | *0.06* | *0.25* | *1.08* | *0.21* | *0.83* | *0.13* | *2.24* |

NOTES:
1. 2019 Warm Bed Units (Village & TA) 3,970
2. 2019 Total Bed Units 7,520
3. Recreation excludes hotel use only facilities
4. Office excludes front desk or hotel administration space
5. Institutional includes Fire Hall, Medical Centre, Schools, Municipal Offices

*Sun Peaks Community Health Centre*

*Sun Peaks Elementary School*

## .14 Ski Area Facilities Balance

The previous sections presented an inventory of the existing facilities related to operation of the ski area at Sun Peaks Resort and analyzed the daily capacity of the following operational elements; lifts, trails, grooming equipment, built space, restaurant seats and the base area staging capacity.

We have prepared a graphic representation of the overall balance of the ski area at Sun Peaks, as illustrated in Plate II.10. The area facilities balance graph illustrates that trail capacity at Sun Peaks far exceeds the capacity of the other operational elements. The trail capacity at Sun Peaks is almost double the lift carrying capacity of 8,020 skiers per day. This excess in trail capacity ensures a high quality, uncrowded experience for guests on the slopes.

The grooming fleet at Sun Peaks currently has capacity to service terrain for about 7,795 skiers per day. During times of new snowfall or when snowmaking is taking place, the current grooming fleet would be insufficient to provide adequate grooming service to the large terrain area, and an additional machine may be required.

Currently the overnight accommodation at Sun Peaks Resort, within walking distance of the lifts, has the potential to supply approximately 3,394 skiers per day during the typical peak periods. The existing parking lots can accommodate another 3,035 skiers and another 210 can come by the Valley Shuttle, bringing the base area staging capacity to 6,639 skiers. A peak day of 6,876 skiers was recorded in December 2018. If all the skier service space at Sun Peaks Resort, including that provided by private operators in the Village, was allocated at the recommended per skier floorspace ratio, it would be able to accommodate just over 5,100 skiers per day which is the average of the top 10 busiest days over the past 10 years. Food service seating can only meet the design day requirements when the weather is mild enough for people to use the outdoor seating. Some of the village food outlets that currently do not serve lunch could decide to provide a lunch service if they felt demand warranted it.

**SUN PEAKS RESORT**
**AREA FACILITIES BALANCE**

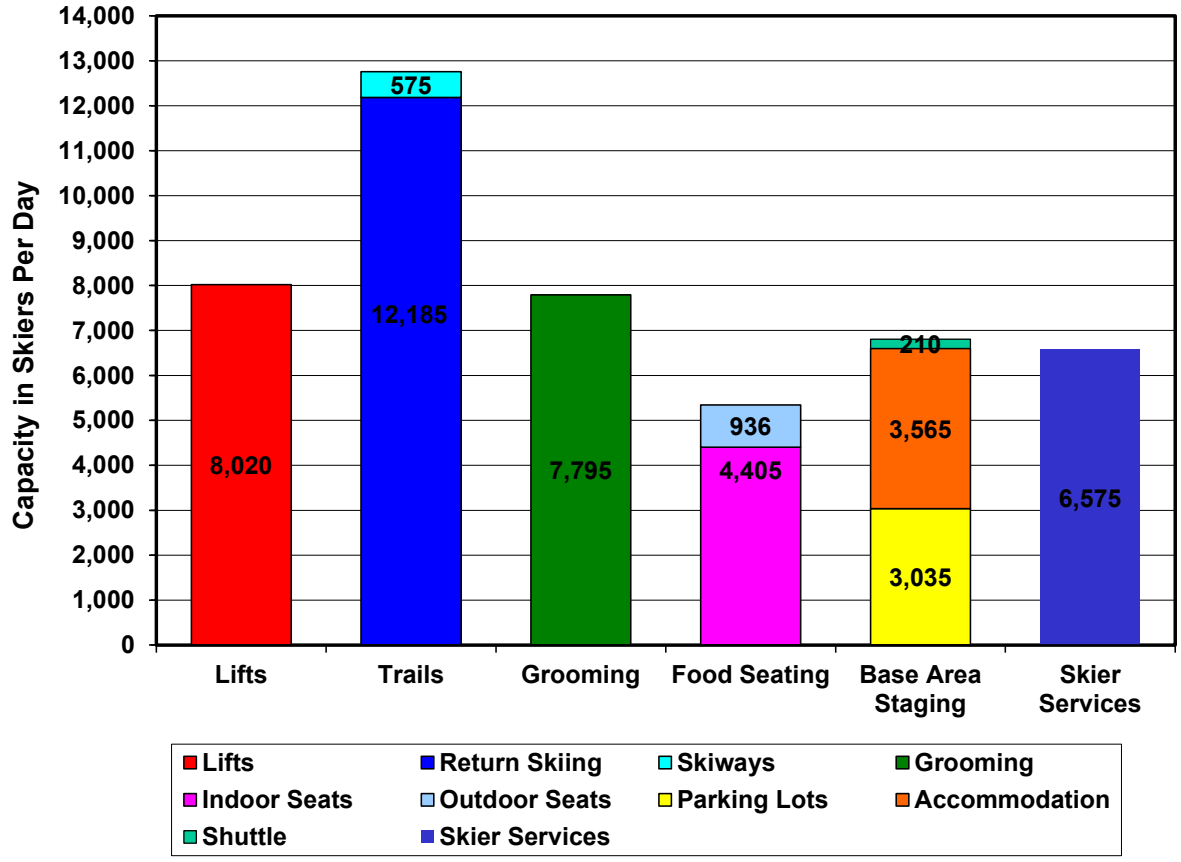



**PLATE II.10**

## .15 Independent Recreation Facilities

As outlined in the Introduction section, Sun Peaks has developed a wide range of alternative recreational facilities over the past twenty-five years including:

- Championship Golf Course - 18 hole, par 72 course designed by Graham Cooke. Golf Driving Range in front of Village Day Lodge
- Sun Peaks Sports Centre with indoor recreation space, outdoor pool and 2 tennis courts. The ownership and operation of this facility has now been taken over by the Sun Peaks Mountain Resort Municipality.
- New Sun Peaks Centre including covered artificial ice rink constructed by the Sun Peaks Mountain Resort Municipality.
- Downhill mountain bike park and cross-country mountain bike trail network and bike skills park
- Tubing Park
- McGillivray Lake Outpost and dock facility with canoe, kayak and stand-up paddleboard rentals
- Mountain Cross Cart lift and track system
- Cross-country ski trail network
- 8 kilometres of valley trail network
- Hiking trail network
- Horse Stables and Sleigh Rides

A number of operators have joined with the Sun Peaks Resort LLP to offer a wide range of recreational activities within the Controlled Recreational Area including:

| **Winter** | **Summer** |
|---|---|
| Horse Drawn Sleigh Rides | Carriage Wagon Rides |
| Snowmobile Tours | Horse Trail Rides & Riding Lessons |
| Snowshoe Rentals & Tours | Alpine Yoga |
| Ski Bike and Fat Tire Bike Rentals | Guided Fly Fishing |
| Alpine Fondue & Starlight Descents | XC Mountain Bike Tours |
| Snow Limo Tours | |
| Guided Ice Fishing | |

Figure 10a illustrates the existing resort recreation facilities for the winter season and Figure 10b shows the summer recreation facilities.

*Sun Peaks Golf Course*

*Sun Peaks MC Carts*

## .16 Summary

The ski area has a lift carrying capacity of 8,020 skiers provided on 7 chairlifts, one T-bar, 2 platters and 2 moving carpets. The available vertical drop is approximately 880 metres and the existing developed trail area, including glades and skiways, is 613 hectares (over 1,500 acres). The resort has an accommodation bed base of almost 7,516 bed units in 1,921 dwelling units. More than 50 percent of the existing bed base is public accommodation.

Public access to units zoned for tourist accommodation that are privately owned is protected through covenants on title that require the units to be available for nightly rental to tourists. The Village at Sun Peaks provides a good selection of restaurants, bars and shops, as well as a large conference facility in the Sun Peaks Grand Hotel. Year-round recreational facilities to appeal to a wide range of user groups have been constructed. A number of businesses operated by third parties are now providing additional recreational programs within the Controlled Recreation Area.

Development of the Sun Peaks Resort is governed by the B.C. Commercial Alpine Ski policy. Under this policy, the ski area operator earns the right to purchase Crown land and develop accommodation in the base area by constructing improvements such as ski lifts and other recreational improvements in the resort area. The amount of development potential earned by the ski area operator is measured in Bed Units, where one bed unit is equivalent to the floor area required to provide overnight accommodation for one person.

The rate at which a ski area operator earns Bed Units is based on the capacity of the lifts installed measured in terms of Skiers At One Time (SAOT), other recreational improvements and the classification of the resort. Since Sun Peaks and the B.C. Provincial Government signed a Development Agreement on April 13, 1993, they are governed under a rating system outlined in the “Guidelines for The Interpretation of the B.C. Commercial Alpine Ski Policy 1982”. These guidelines also outline the allocation of Bed Units for public and private accommodation according to the rating of the ski area. It is Ecosign’s opinion that the information collected in this Inventory section indicates Sun Peaks Resort is classified as a Type D Destination Resort under the 1982 Guidelines and Background Information for the Interpretation of the Ski Area Policy, as documented in Table II.27. Since Sun Peaks is now considered a Class D Destination Resort, due to the facilities already constructed, the ratio of SAOT to Bed Units is 105% as shown in Table II.27.

# TABLE II.27
# BRITISH COLUMBIA COMMERCIAL ALPINE SKI POLICY
# RESORT RATING SYSTEM
# SUN PEAKS RESORT

| | | 2019 |
|---|---|---|
| **A. VARIETY OF TERRAIN** | | |
| | Terrain Balance | 5 |
| | 1 - Over 35% of area either advanced or novice | |
| | 3 - 25 to 35% of area either advanced or novice | |
| | 5 - Ideal slope ratio | X |
| | Skier density per acre | 5 |
| | 1 - more than 35 skiers per acre | |
| | 3 - 15 to 35 skiers per acre | |
| | 5 - less than 15 skiers per acre | X |
| **B. ACCESSIBILITY** | | |
| | Travel time to major market | 6 |
| | 1 - less than 1 hour | |
| | 2 - 1 to 2 hours | |
| | 4 - 2 to 3 hours | |
| | 6 - greater than 3 hours | X |
| | Access (Mountain Road) | 2 |
| | 1 - Reasonable access (main highway with short access road) | |
| | 2 - Average access (some storm closures) | X |
| **C. POPULATION WITHIN 200 MILES** | | 4 |
| | 1 - 0 TO 30,000 | |
| | 2 - 30,000 TO 100,000 | |
| | 3 - 100,000 TO 250,000 | |
| | 4 - 250,000 TO 500,000 | X |
| | 5 - 500,000 + | |
| **D. UNIQUE QUALITIES OTHER THAN SKIING** | | 1 |
| | 0 - Nothing unusual. | |
| | 1 - Regional attraction | X |
| | 2 - National attraction | |
| **E. YEAR ROUND EXPERIENCE (Within 30 Minutes of Accommodation)** | | 4 |
| | 0 - Limited | |
| | 1 - Fair (3 or less tennis courts, swimming pool, etc.) | |
| | 2 - Good (3 to 6 tennis courts, 1 per 200 units, swimming pool, etc) | |
| | 4 - Excellent (18 hole golf course, tennis courts, 1 per 100 units, swimming p | X |
| **F. SITE QUALITY** | | |
| | Climate | 3 |
| | 1 - Cloudy, foggy, unpredictable temperatures, windy | |
| | 3 - Partly sunny, reliable temperatures, sometimes windy | X |
| | 5 - Sunny, reliable temperatures, little wind | |
| | Length of Season | 4 |
| | 0 - less than 100 days | |
| | 1 - 100 to 115 days | |
| | 2 - 115 to 130 days | |
| | 3 - 130 to 150 days | |
| | 4 - 150 days + | X |
| | Snow Conditions | 4 |
| | 0 - Dry less than 25% of season | |
| | 1 - Dry 25 to 50% of season | |
| | 2 - Dry 50 to 75% of season | |
| | 3 - Dry 75 to 90% of season | |
| | 4 - Dry over 90% of season | X |
| TOTAL POINTS | | 38 |
| AREA TYPE | | D |
| **ACCOMMODATION AS A PERCENT OF SAOT** | | **105%** |

The SAOT formula, as shown below, is a standardized measure used by the British Columbia Government to allocate development rights for resorts across the province at the time the Sun Peaks Development Agreement was signed.

The SAOT formula is as follows:

$$SAOT = \frac{CL \times VR \times LE \times HO}{VSD}$$

Where:

CL = Hourly **C**apacity of the **L**ift as measured in passengers per hour (pph)
VR = **V**ertical **R**ise of the lift
LE = **L**oading **E**fficiency of the lift
HO = **H**ours of **O**peration of the lift
VSD = **V**ertical **S**kied per **D**ay (Average 3,049 m except for Beginners)

The SAOT calculations for the existing condition are listed below in Table II.28. With the lifts and recreational facilities installed to date, Sun Peaks has earned 12,122 bed units.

**TABLE II.28**
**SUN PEAKS RESORT**
**EXISTING (2019) SAOT CALCULATION**

| Master Plan Phase | | PHASE 1 | | | | | | PHASE 2 | | | | **TOTAL** |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lift Number | | 3 | 5 | 2R | 4R | 6R | 1R | 10 | 14 | 9 | 16 | |
| Lift Name | | Crystal | West Bowl | Sunburst (Bubble) | Village | Sundance | Burfield | Morrisey Link | Morrisey Express | Elevation | Orient Quad | |
| Lift Type | | 3C | T-Bar | D4C/B | Platter | D4C | 4C | Platter | D4C | 4C | 4C | |
| Year Installed/Upgraded | Key | 1979 | 1992 | 1993/94 | 1993/1999 | 1995/2018 | 1997 | 2001 | 2002/04 | 2006 | 2018 | |
| Top Elevation (m) | | 2,061 | 2,069 | 1,850 | 1,307 | 1,730 | 2,080 | 1,349 | 1,674 | 1,865 | 1,529 | |
| Bottom Elevation (m) | | 1,766 | 1,903 | 1,255 | 1,255 | 1,255 | 1,199 | 1,257 | 1,279 | 1,552 | 1,278 | |
| Total Vertical (m) | A | 295 | 167 | 595 | 52 | 475 | 882 | 92 | 395 | 312 | 251 | **3,515** |
| Slope Distance (m) | | 978 | 720 | 2,378 | 353 | 2,040 | 2,899 | 454 | 1,791 | 1,117 | 1,084 | |
| Average Slope % | | 32% | 24% | 26% | 15% | 24% | 32% | 21% | 23% | 29% | 24% | |
| Hourly Capacity | B | 2,005 | 698 | 2,294 | 722 | 2,491 | 464 | 654 | 1,844 | 1,822 | 1,022 | **14,017** |
| VTM (000) | | 591 | 116 | 1,365 | 38 | 1,184 | 409 | 60 | 729 | 569 | 256 | **5,317** |
| Rope Speed m/sec. | | 2.2 | 5.1 | 2.2 | 2.2 | 5.0 | 2.3 | 2.3 | 5.0 | 2.3 | 2.3 | |
| Number of Carriers | | 160 | 61 | 152 | 65 | 144 | 83 | 65 | 99 | 123 | 68 | |
| Loading Efficiency** | C | 90% | 90% | 90% | 90% | 95% | 90% | 90% | 95% | 90% | 85% | |
| Hours of Operation** | D | 7.0 | 6.5 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | |
| Vertical Skied/Day** | E | 3,048 | 3,048 | 3,048 | 1,050 | 3,048 | 3,048 | 1,050 | 3,048 | 3,048 | 3,048 | |
| **SAOT**** | **F** | **1,223** | **223** | **2,821** | **225** | **2,583** | **845** | **361** | **1,589** | **1,176** | **500** | **11,546** |
| **Bed Units/SAOT %***** | **G** | **105%** | **105%** | **105%** | **105%** | **105%** | **105%** | **105%** | **105%** | **105%** | **105%** | |
| **Bed Units Earned****** | **H** | **1,284** | **234** | **2,962** | **236** | **2,712** | **887** | **379** | **1,668** | **1,235** | **525** | **12,122** |
| **Source* | | *Doppelmayr* | *Ogilvy* | *Ecosign* | *Ecosign* | *Ecosign* | *Ecosign* | *Ecosign* | *Ecosign* | *Ecosign* | *Ecosign* | |
| *Date* | | *20/04/1979* | *11/05/1992* | *08/12/1999* | *08/02/2004* | *14/03/2019* | *19/03/1998* | *19/01/2003* | *07/12/2004* | *01/03/2007* | *13/03/2019* | |

# III. MARKET

## .1 Ski Industry Overview

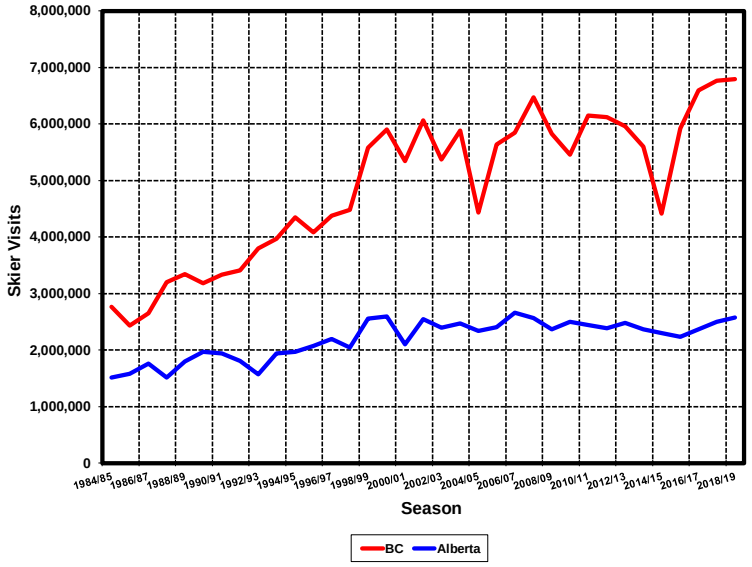
Canadian skier visits totaled 20.5 million during the 2018/19 season. As always, weather played an important role. Table III.1 lists the Historical Skier Visits for Canada from 2008/09 to 2018/19. Plate III.1 graphically illustrates the Historical Annual Skier Visits in British Columbia and Alberta from 1984/85 to 2018/19.

**TABLE III.1**
**HISTORICAL SKIER VISITS – CANADA - 2008/09 TO 2018/19**

| SEASON | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **BC-Yukon Total** | **5,667** | **5,330** | **5,972** | **6,091** | **5,960** | **5,610** | **4,457** | **5,694** | **6,621** | **6,789** | **7,014** |
| # Ski Areas / Resorts | 46 | 46 | 46 | 46 | 46 | 46 | 45 | 39 | 41 | 42 | 40 |
| **Alberta Total** | **2,300** | **2,448** | **2,345** | **2,383** | **2,486** | **2,091** | **2,187** | **2,285** | **2,357** | **2,470** | **2,303** |
| # Ski Areas / Resorts | 31 | 31 | 31 | 32 | 32 | 32 | 32 | 34 | 24 | 24 | 32 |
| **Manitoba / Saskatchewan** | **236** | **275** | **290** | **281** | **291** | **229** | **244** | **122** | **224** | **210** | **231** |
| # Ski Areas / Resorts | 14 | 14 | 14 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| **Ontario** | **3,443** | **3,418** | **3,362** | **3,028** | **3,070** | **3,370** | **3,420** | **2,360** | **3,090** | **3,550** | **4,232** |
| # Ski Areas / Resorts | 64 | 65 | 64 | 63 | 63 | 63 | 63 | 61 | 61 | | 61 |
| **Quebec** | **6,168** | **6,101** | **6,386** | **5,825** | **6,226** | **6,048** | **5,887** | **5,879** | **5,974** | **6,060** | **6,354** |
| # Ski Areas / Resorts | 79 | 78 | 75 | 75 | 72 | 72 | 74 | 76 | 75 | 75 | 76 |
| **Atlantic** | **508** | **515** | **494** | **440** | **450** | **450** | **510** | **490** | **430** | **460** | **458** |
| # Ski Areas / Resorts | 12 | 11 | 11 | 11 | 11 | 11 | 12 | 13 | 13 | 11 | 11 |
| **Total Canada** | **18,718** | **18,423** | **19,340** | **18,203** | **19,058** | **18,363** | **16,706** | **16,830** | **18,695** | **19,539** | **20,593** |
| # resorts | 288 | 286 | 281 | 282 | 279 | 279 | 279 | 199 | 188 | 125 | 195 |

*Source: CSC*

**HISTORICAL ANNUAL SKIER VISITS - BRITISH COLUMBIA & ALBERTA – 1984/85 TO 2018/19**




*Source: Canada West Ski Areas Association*

**PLATE III.1**

During the 2018/19 ski season, the United States recorded 59.3 million visits, nearing the record high of 60.5 million visits in 2010/11, as shown in Table III.2.

**TABLE III.2**
**HISTORIC SKIER VISITS – USA**
**2008/09 TO 2018/19**

| Season | Total Visits | Number of Areas |
|---|---|---|
| 2008-09 | 57,354 | 473 |
| 2009-10 | 59,787 | 471 |
| 2010-11 | 60,540 | 486 |
| 2011-12 | 50,966 | 474 |
| 2012-13 | 56,904 | 478 |
| 2013-14 | 56,491 | 470 |
| 2014-15 | 53,577 | 470 |
| 2015-16 | 52,792 | 464 |
| 2016-17 | 54,749 | 481 |
| 2017-18 | 53,273 | 472 |
| 2018-19 | 59,343 | 476 |

According to the 2018/19 NSAA Annual Economic Analysis, ski and resort area operators reported challenges including the following.

- Climate Change / Snow and Weather Conditions, Extreme Weather events
- Aging Demographics (average skier age of 39.0)
- Labour Shortages
- Economy, Exchange Rate
- Housing for Employees
- Increasing Costs for Tickets and Equipment
- Increasing use of Digital Devices, Virtual Experiences by Young People

Global

According to the Laurent Vanat's 2019 International Report on Snow and Mountain Tourism, globally, skier visitation has been fairly stable over the last 15 years with variations due to weather conditions. Skier visitation globally increased form 320 million visits during the 2015/16 season to 350 million during the 2017/18 season. This increase was due in part to emerging markets and resort development in China.

Positive factors that aim to increase participation long term include the following:

- Ski Pass Consolidation: Epic, Ikon, Mountain Collective, etc.
- Expanding Resort Offerings to Four-Season Operations and Expansion and/or Revitalization of Resort Amenities
- Snowmaking
- Special Events, Adventure Parks, Tubing, Water Parks, Action Karts, Zip Lines, Canopy Tours, Climbing Walls
- Strong Programs for First-Timers, Beginners and Families
- Club Events, Increase in Ethic Participation
- Strong Economy, Exchange Rates

## .2 Sun Peaks Skier Visit Analysis

Daily skier visit records for the past twelve ski seasons were analyzed. The results of this analysis are summarized in Table III.3 and Plate III.2. Annual skier visits at Sun Peaks had been growing rapidly until reaching a peak of 342,452 visits during the 2007/08 season. In 2008/09 visits dropped below 310,000 as a result of the abrupt slowdown in the world economy. Skier visits were slowly recovering and then a low snow year in 2014/15 knocked them back below 300,000. Since then, the last four years have shown substantial increases exceeding the 2007/08 record and climbing to a new high of 408,530 in 2017/18. The average annual skier visits over the past five-year period is approximately 368,500 skiers. The number of operating days has varied from 148 to 165 over the twelve years. Sun Peaks often offers early and late seasoning training for race clubs which extends the operating period.

**TABLE III.3**
**SUN PEAKS RESORT**
**SKIER VISIT ANALYSIS – 2008/09 TO 2018/19**

| Season Ending | Winter Skier Visits | Season Length (Days) | Average Skiers per Day | Peak Day Skiers | Average of Top 10 Days | Average of Top 15 Days | Average of Top 20 Days | Number of Days > 5,000 |
|---|---|---|---|---|---|---|---|---|
| 2008 | 342,452 | 149 | 2,298 | **6,866** | **5,423** | **5,101** | **4,837** | 6 |
| 2009 | 309,796 | 142 | 2,182 | 6,565 | 5,217 | 4,890 | 4,681 | 6 |
| 2010 | 331,207 | 150 | 2,208 | 5,850 | 5,038 | 4,715 | 4,499 | 4 |
| 2011 | 325,808 | 143 | 2,278 | 5,822 | 4,921 | 4,613 | 4,393 | 5 |
| 2012 | 319,000 | 152 | 2,099 | 6,076 | 5,006 | 4,616 | 4,362 | 5 |
| 2013 | 328,081 | 148 | 2,217 | 5,903 | 5,080 | 4,739 | 4,489 | 6 |
| 2014 | 317,446 | 148 | 2,145 | 5,931 | 4,790 | 4,514 | 4,338 | 4 |
| 2015 | 293,636 | 148 | 1,984 | 5,530 | 4,652 | 4,404 | 4,176 | 3 |
| 2016 | 361,106 | 155 | 2,330 | 5,873 | 5,158 | 4,867 | 4,633 | 6 |
| 2017 | 390,513 | 165 | 2,367 | 5,955 | 5,170 | 4,938 | 4,760 | 6 |
| 2018 | 408,530 | 160 | 2,553 | 5,744 | 5,094 | 4,912 | 4,754 | 5 |
| 2019 | 388,871 | 155 | 2,509 | 6,876 | 5,564 | 5,236 | 5,005 | 8 |
| *Avg. Last 5* | *368,531* | *157* | *2,349* | *5,996* | *5,128* | *4,871* | *4,665* | *6* |

The table also lists the number of skiers on the peak day, the average of the top 10, 15 and 20 busiest days and the average skiers per day for each of the past twelve ski seasons. The busiest days at Sun Peaks occur during the week between Christmas and New Year's and on the American President's Day long weekend and the following week. Business levels on these days have not increased significantly since 2007/08, although there has been overall business growth. A new peak day of 6,876 skiers, just ten more than the December 29, 2007 record of 6,866 was achieved on December 29, 2018. However, skier visit levels only exceed 5,000 skiers less than 10 days per season. The fact that the existing public accommodation in the resort is often at or near capacity during the holiday periods may be one of the reasons that there has been very little increase in peak visitation levels.

The growth in visitation that has occurred since 2014/2015 is due to an increase in mid-week visits during the months of January and February. Average visits per day throughout the most recent season was approximately 2,510 skiers, an increase of 9% since 2007/08. Plate III.3 illustrates the daily skier visits for the 2018/2019 ski season. The distribution pattern is typical of a regional destination resort with significant weekend and holiday peaks and the opportunity to increase annual skier visits by growing the mid-week business.

## SUN PEAKS RESORT
## HISTORIC SKIER VISITATION – 2007/08 TO 2018/19

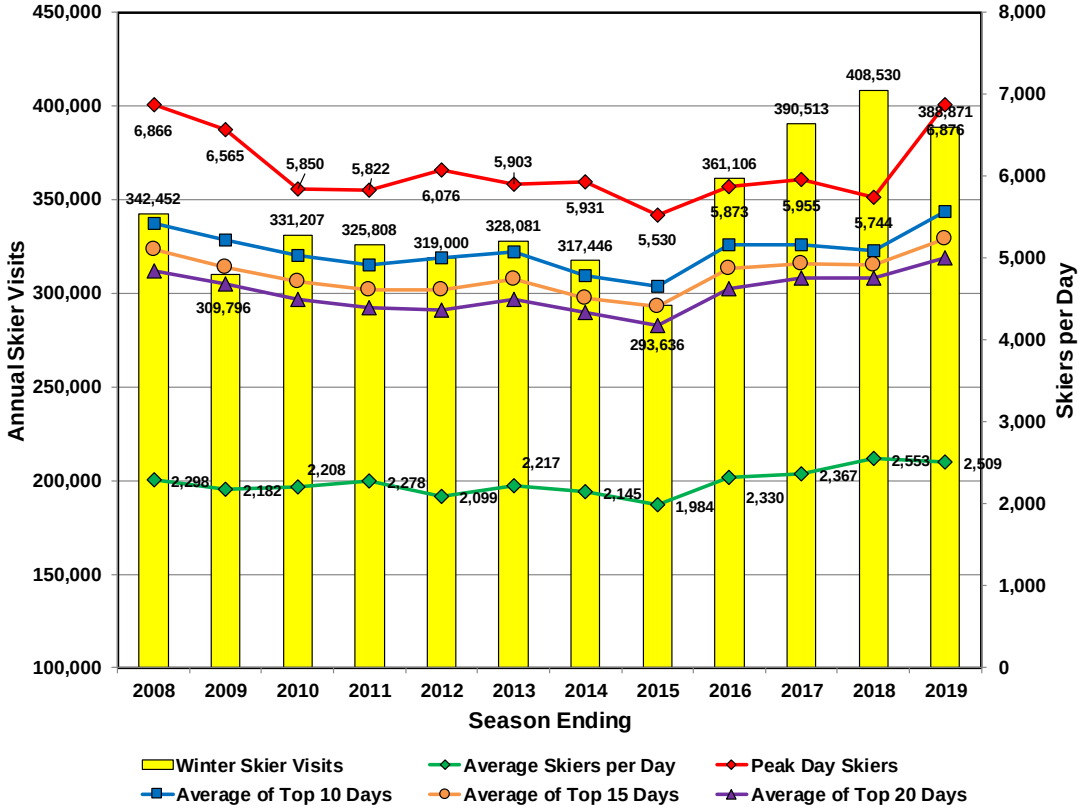



**PLATE III.2**

## DAILY SKIER VISITS – 2018/19 SKI SEASON

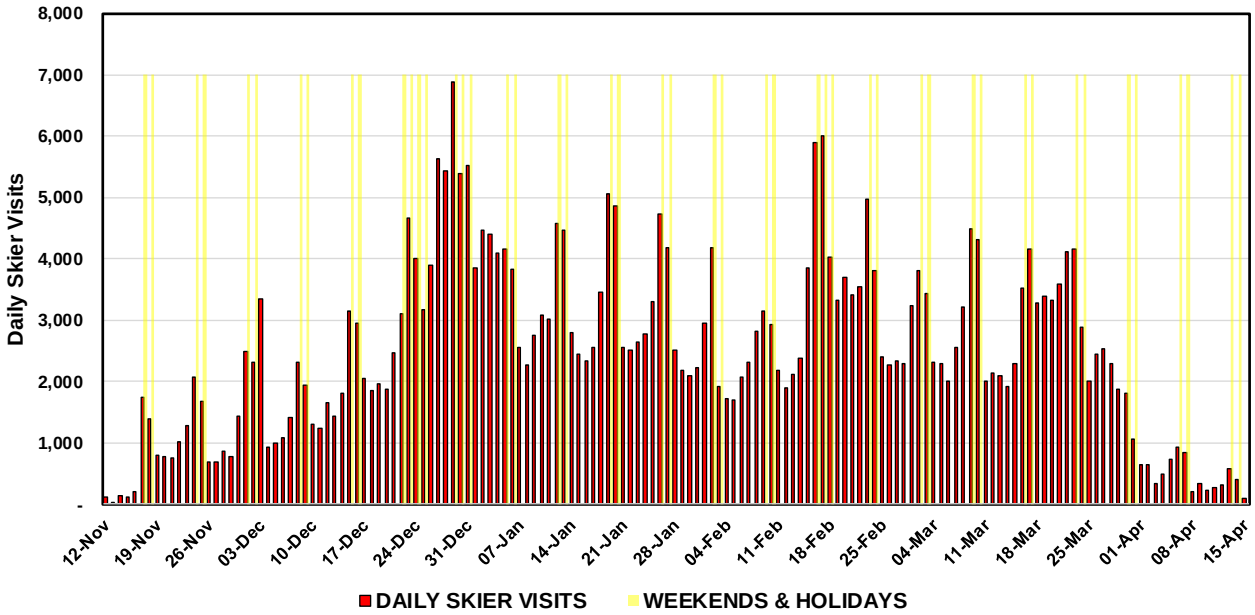



**PLATE III.3**

## .3 Sun Peaks Summer Lift Visits Analysis

Sun Peaks operates the Sunburst Express Quad for summer sightseeing and lift serviced downhill mountain biking. Records are kept of the number of lift visitors each day. The summer lift visits are separated between mountain bike park visits and sightseeing visits. Ecosign has prepared a summary of the summer lift visits for the past eleven seasons from 2009 to 2019. This summary is presented in Table III.4 and illustrated graphically in Plate III.4. There has been a substantial growth in total visits for four of the past five years resulting in an overall growth of 218% from 2014 to 2019. Sightseeing visits have grown by 95% while bike park visits grew by 277%. The greatest increase in bike park visitation occurred between 2018 and 2019 after a large investment in trails.

While SPRC experimented with the length of the summer lift operating season in the early years, since 2004 the length of the summer operating season has remained stable, starting near the third week of June and operating daily until Labour Day weekend, with some September weekend days, weather permitting. The average visits per day over the past eleven years has grown from 258 in 2009 to 494 in 2019, an increase of 90%. The peak day usually occurs over the August long weekend.

**TABLE III.4**
**SUN PEAKS RESORT**
**SUMMER LIFT VISIT ANALYSIS – 2009 TO 2019**

| Year | Sight-seeing Visits | Bike Park Visits | Total Summer Visits | Growth from Prior Year | Season Length (Days) | Average Visits per Day | Peak Day Visits |
|---|---|---|---|---|---|---|---|
| 2009 | 13,773 | 7,378 | 21,151 | 14% | 82 | 258 | 785 |
| 2010 | 10,589 | 6,514 | 17,103 | -19% | 79 | 216 | 563 |
| 2011 | 12,643 | 4,995 | 17,638 | 3% | 67 | 263 | 773 |
| 2012 | 12,855 | 5,363 | 18,218 | 3% | 71 | 257 | 860 |
| 2013 | 13,448 | 5,705 | 19,153 | 5% | 75 | 255 | 884 |
| 2014 | 14,041 | 5,418 | 19,459 | 2% | 76 | 256 | 874 |
| 2015 | 16,584 | 5,903 | 22,487 | 16% | 76 | 296 | 988 |
| 2016 | 21,586 | 6,736 | 28,322 | 26% | 78 | 363 | 911 |
| 2017 | 25,521 | 7,422 | 32,943 | 16% | 80 | 412 | 1,082 |
| 2018 | 24,875 | 8,424 | 33,299 | 1% | 81 | 411 | 1,105 |
| 2019 | **27,459** | **15,023** | **42,482** | 28% | 86 | **494** | **1,417** |
| ***Average Last 5*** | ***23,205*** | ***8,702*** | ***31,907*** | | ***80*** | ***395*** | ***1,101*** |

**SUN PEAKS SUMMER VISIT ANALYSIS**
**2009 TO 2019**

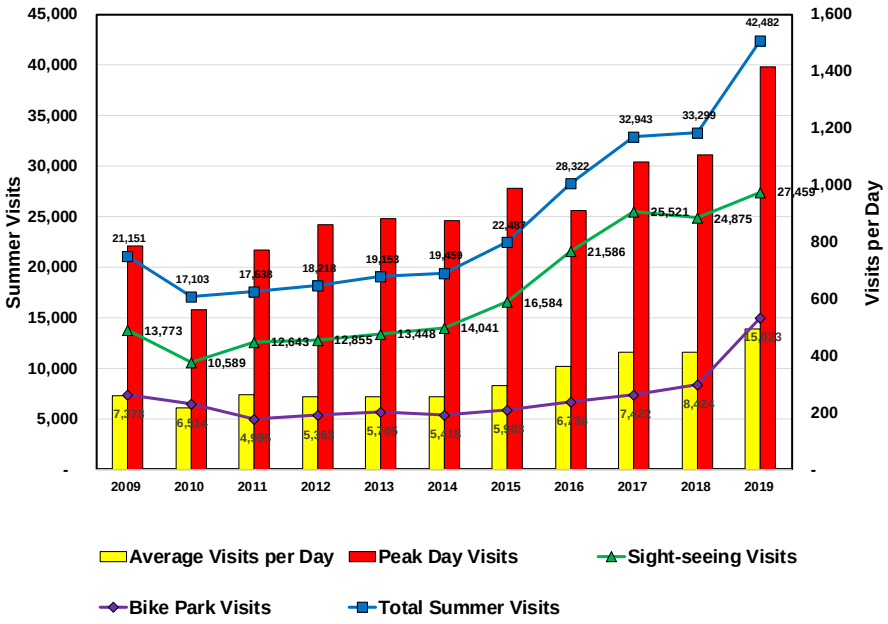



**PLATE III.4**

## .4 Golf Rounds

The number of golf rounds played at the Sun Peaks Golf Course for each of the past eleven years is summarized in Table III.5. Due to its high elevation, the Sun Peaks Golf Course is usually only open from mid-May to mid-September. Initially a nine hole course, the back nine opened late in the summer of 2005. Total annual golf rounds reached a peak of almost 12,000 in 2005 but have not exceeded 10,000 since 2019 indicating the declining popularity of golf in the general population.

**TABLE III.5**
**SUMMER GOLF ROUNDS – 2009 TO 2019**

| Year | Number of Golf Rounds |
|---|---|
| 2009 | 10,078 |
| 2010 | 9,269 |
| 2011 | 6,835 |
| 2012 | 8,900 |
| 2013 | 8,379 |
| 2014 | 7,354 |
| 2015 | 8,108 |
| 2016 | 7,814 |
| 2017 | 8,446 |
| 2018 | 6,726 |
| 2019 | 7,179 |
| *Average Last 5* | 7,655 |

# IV. DEVELOPMENT ANALYSIS

The purpose of the development analysis section is to blend the information and/or constraints identified in the Inventory and Market sections with acceptable winter resort industry planning and design parameters. Specifically, the constraints imposed by climate (natural snowpacks, wind, solar exposure), surficial geology (depth to bedrock, potential hazards, high water table) and visual quality objectives have "shrunk" the overall size of the potential development area.

## .1 Planning Parameters

In order to determine the potential skier carrying capacity of the terrain within the Sun Peaks study area, we will utilize the planning parameters established in the Inventory section of this report, and listed below in Table IV.1.

**TABLE IV.1**
**SUN PEAKS RESORT**
**PLANNING PARAMETERS**

| Skill Classification | Planning Goals | Acceptable Terrain Gradients | Skier Demand VTM/Hour | Skiers/Hectare | |
|---|---|---|---|---|---|
| | | | | On Trail | At Area |
| 1 Beginner | 5% | 8 - 15% | 940 | 20 | 50 |
| 2 Novice | 10% | 15 - 25% | 2,120 | 20 | 50 |
| 3 Low Intermediate | 20% | 25 - 35% | 2,325 | 15 | 40 |
| 4 Intermediate | 30% | 30 - 40% | 3,770 | 15 | 40 |
| 5 High Intermediate | 20% | 35 - 45% | 5,085 | 12 | 30 |
| 6 Advanced | 10% | 45 - 60% | 5,935 | 7 | 15 |
| 7 Expert | 5% | 60%+ | 8,475 | 10 | 20 |

## .2 Mountain Design Analysis

Accurate topographic mapping is a prerequisite for good mountain planning. During the technical assessment phase, the planning team commissioned new, highly accurate LiDAR topographic mapping, produced in 2018 by Eagle Mapping at a scale of 1:1,000 with 1-metre contours of the base lands and 1:5000 with 5-meter contours of the mountainous portions of the Controlled Recreational Area boundary (CRA). While the mapping covers terrain outside the CRA, we have only used mapping within the CRA which encompasses approximately 4,139 hectares.

Utilizing this new detailed topographic mapping, the most critical analysis map for the winter resort area design and evaluation process was prepared: the Slope Analysis Map. The Mountain Slope and Terrain Capacity Analysis Map (Figure 11), delineates the areas that can be negotiated by the various skier ability levels, as well as areas that are considered too flat or too steep for skiing and snowboarding. The natural slope gradients were carefully measured and colour-coded into the following five classifications:

| SLOPE GRADIENT | COLOUR | TYPE OF SKIING/ SNOWBOARDING |
|---|---|---|
| 0% to 8% | White | Too Flat |
| 8% to 25% | Green | Beginner & Novice Skiing |
| 25% to 45% | Yellow | Intermediate Skiing |
| 45% to 70% | Blue | Advanced and Expert Skiing |
| 70% + | Red | Extreme / Unskiable |

These maps were then utilized in the evaluation of the terrain and play a critical role in developing conceptual alternatives.

## .3 Terrain Capacity Analysis

We have analyzed the natural terrain within the Sun Peaks CRA which possesses good skiing and snowboarding potential to accurately establish the area's overall development potential. The Terrain Capacity Analysis (Figure 11) graphically illustrates major terrain "pods" within the study area which possess good potential for skiing and snowboarding development. The pods were selected by consulting the Slope Analysis Map and observing the following criteria:

- continuous fall line sliding from top to bottom
- suitable upper and lower lift terminal locations (e.g., 0.2 hectares less than 25 percent slope)
- good slope continuity to allow interesting sliding from top to bottom for one or more ability levels
- natural slope gradients primarily greater than 8 percent and less than 70 percent

Within each terrain pod, we then joined the upper and lower points to establish the total vertical rise, horizontal distance and, straight line slope and steepest 30-metre vertical pitch. The total pod area was calculated and major unskiable areas (slopes 70 percent+, local knolls, etc.) were subtracted. The above data comprises the inputs to our ski terrain capacity computer program. The final program input is a judgement which identifies the "primary" skill classification for each terrain pod. The program outputs are as follows:

**AVAILABLE SKI TERRAIN** - net developable, assuming 35 percent of usable terrain represents the maximum desirable development in forested areas and higher percentages in untreed alpine zones.

**TOTAL SKIERS** - in pod at acceptable densities.

**DEMAND VTM (000)** - vertical transport metres required to service the total skiers.

**LIFT CAPACITY/HR.** - the net hourly lift capacity necessary to maximize the development of each pod.

**SHELTER SQ. METRES** - the amount of built space required to adequately handle the number of guests.

**PARKING AREA IN HECTARES** - assuming 2.5 skiers per vehicle and 32 square metres of gross land per vehicle.

**TOTAL STAGING AREA IN HECTARES** - total land allowance for buildings, roads, parking, milling areas, etc.

The Terrain Capacity Analysis Map and program printout (Table IV.2) provide a reliable indication of the maximum development potential of each pod, the shelter and base terrain required to support the build-out of the mountain and the lift capacity necessary to balance with the terrain.

**TABLE IV.2**
**SUN PEAKS RESORT**
**TERRAIN CAPACITY ANALYSIS**

| Terrain Pod | Top Elevation m. | Bottom Elevation m. | Total Vertical m. | Horizontal Distance m. | Slope Distance m. | Average Slope % | Skill Class | Skier Density/Ha. | VTM Demand/Day | Total Area Ha. | % Ski Terrain Available | Available Ski Terrain | **Total Skiers** | Demand VTM (000) | Lift Capacity.Hr. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | 2,099 | 1,858 | 241 | 1,186 | 1,210 | 20% | 3 | 40 | 2,825 | 52.6 | 35% | 18.4 | **740** | 332 | 1,377 |
| **2** | 2,150 | 1,962 | 188 | 436 | 475 | 43% | 5 | 30 | 5,085 | 25.3 | 35% | 8.9 | **270** | 218 | 1,159 |
| **3** | 2,102 | 1,924 | 178 | 874 | 892 | 20% | 4 | 40 | 3,770 | 36.2 | 35% | 12.7 | **510** | 305 | 1,715 |
| **4** | 2,067 | 1,874 | 193 | 759 | 783 | 25% | 4 | 40 | 3,770 | 31.2 | 35% | 10.9 | **440** | 263 | 1,364 |
| **5** | 2,028 | 1,699 | 329 | 969 | 1,023 | 34% | 6 | 15 | 5,935 | 56.5 | 35% | 19.8 | **300** | 283 | 859 |
| **6** | 2,111 | 1,771 | 340 | 1,192 | 1,240 | 29% | 6 | 15 | 5,935 | 41.5 | 35% | 14.5 | **220** | 207 | 610 |
| **7** | 2,100 | 1,796 | 304 | 1,254 | 1,290 | 24% | 5 | 30 | 5,085 | 51.5 | 35% | 18.0 | **540** | 436 | 1,434 |
| **8** | 2,042 | 1,803 | 239 | 1,065 | 1,091 | 22% | 4 | 40 | 3,770 | 46.4 | 35% | 16.2 | **650** | 389 | 1,627 |
| **9** | 2,070 | 1,754 | 316 | 1,357 | 1,393 | 23% | 4 | 40 | 3,770 | 62.4 | 35% | 21.9 | **870** | 521 | 1,648 |
| **10** | 2,079 | 1,753 | 326 | 1,325 | 1,365 | 25% | 6 | 15 | 5,935 | 49.7 | 35% | 17.4 | **260** | 245 | 751 |
| **11** | 1,887 | 1,764 | 123 | 814 | 823 | 15% | 2 | 50 | 2,120 | 27.9 | 35% | 9.8 | **490** | 165 | 1,341 |
| **12** | 1,846 | 1,678 | 168 | 944 | 959 | 18% | 3 | 40 | 2,825 | 35.1 | 35% | 12.3 | **490** | 220 | 1,308 |
| **13** | 1,885 | 1,649 | 236 | 1,165 | 1,189 | 20% | 3 | 40 | 2,825 | 62.3 | 35% | 21.8 | **870** | 390 | 1,653 |
| **14** | 2,081 | 1,767 | 314 | 957 | 1,007 | 33% | 6 | 15 | 5,935 | 70.0 | 35% | 24.5 | **370** | 349 | 1,110 |
| **15** | 1,898 | 1,194 | 704 | 1,758 | 1,894 | 40% | 7 | 20 | 8,475 | 224.9 | 35% | 78.7 | **1,570** | 2,112 | 3,000 |
| **16** | 1,851 | 1,256 | 595 | 2,287 | 2,363 | 26% | 5 | 30 | 5,085 | 203.0 | 50% | 101.5 | **3,050** | 2,462 | 4,137 |
| **17** | 2,060 | 1,601 | 459 | 1,707 | 1,768 | 27% | 5 | 30 | 5,085 | 114.3 | 35% | 40.0 | **1,200** | 969 | 2,110 |
| **18** | 1,736 | 1,256 | 480 | 2,024 | 2,080 | 24% | 3 | 40 | 2,825 | 227.5 | 50% | 113.7 | **4,550** | 2,040 | 4,251 |
| **19** | 1,328 | 1,258 | 70 | 429 | 435 | 16% | 2 | 50 | 2,120 | 6.0 | 45% | 2.7 | **130** | 44 | 625 |
| **20** | 1,712 | 1,280 | 432 | 2,034 | 2,079 | 21% | 3 | 40 | 2,825 | 237.4 | 35% | 83.1 | **3,320** | 1,489 | 3,446 |
| **21** | 1,500 | 1,296 | 204 | 1,042 | 1,062 | 20% | 3 | 40 | 2,825 | 70.2 | 35% | 24.6 | **980** | 439 | 2,154 |
| **22** | 1,516 | 1,436 | 80 | 645 | 650 | 12% | 1 | 50 | 940 | 22.6 | 35% | 7.9 | **400** | 60 | 746 |
| **23** | 1,547 | 1,483 | 64 | 697 | 700 | 9% | 1 | 50 | 940 | 15.9 | 35% | 5.6 | **280** | 42 | 653 |
| **24** | 1,526 | 1,441 | 85 | 865 | 869 | 10% | 1 | 50 | 940 | 23.9 | 35% | 8.4 | **420** | 63 | 737 |
| **25** | 1,674 | 1,279 | 395 | 1,759 | 1,803 | 22% | 4 | 40 | 3,770 | 186.2 | 25% | 46.5 | **1,860** | 1,113 | 2,818 |
| **26** | 1,582 | 1,259 | 323 | 961 | 1,014 | 34% | 6 | 15 | 5,935 | 40.2 | 25% | 10.1 | **150** | 141 | 437 |
| **27** | 1,668 | 1,258 | 410 | 1,361 | 1,421 | 30% | 6 | 15 | 5,935 | 153.4 | 35% | 53.7 | **810** | 763 | 1,861 |
| **TOTAL** | | | 7,796 | | 32,878 | | | | | 2,174.0 | | 803.4 | **25,740** | | 44,931 |

The terrain in the Sun Peaks study area is comprised of 27 pods suitable for ski facility development covering 2,174 hectares. These pods have a potential of supporting approximately 25,740 skiers on 803.4 hectares of developed terrain at development densities ranging from 25 percent to 50 percent and at the design densities shown in Table IV.1. Sun Peaks has the second largest natural terrain capacity for any resort Ecosign has surveyed in Canada. Only Whistler Blackcomb has a larger potential area for skiing and boarding. The total skiable vertical within the pods is 908 metres, stretching from the top of Pod 3/Pod 6 at the top of the Gills (elevation 2,102 m) to the bottom of Pod 15 (elevation 1,194 m) in the Burfield Base area.

The Terrain Capacity Analysis also provides an indication of the general balance of the developable terrain. The Terrain Pod Balance Statement (Table IV.3, Plate IV.1) illustrates the skier skill level balance when compared to the skier market.

**TABLE IV.3**
**SUN PEAKS RESORT**
**SKIER SKILL LEVEL TERRAIN BALANCE STATEMENT**

| Skill Classification | Hectares | Skiers | Balance | Ideal |
|---|---|---|---|---|
| 1 Beginner | 21.8 | 1,100 | 4.3% | 5% |
| 2 Novice | 12.5 | 620 | 2.4% | 10% |
| 3 Low Intermediate | 273.9 | 10,950 | 42.5% | 20% |
| 4 Intermediate | 108.2 | 4,330 | 16.8% | 30% |
| 5 High Intermediate | 168.4 | 5,060 | 19.7% | 20% |
| 6 Advanced | 140.0 | 2,110 | 8.2% | 10% |
| 7 Expert | 78.7 | 1,570 | 6.1% | 5% |
| **Total** | **803.4** | **25,740** | **100%** | **100%** |

| | | |
|---|---|---|
| Optimum Density = | 35.4 | Skiers/Hectare |
| Weighted Demand = | 3,930 | VTM/Skier/Day |

**TERRAIN BALANCE STATEMENT**

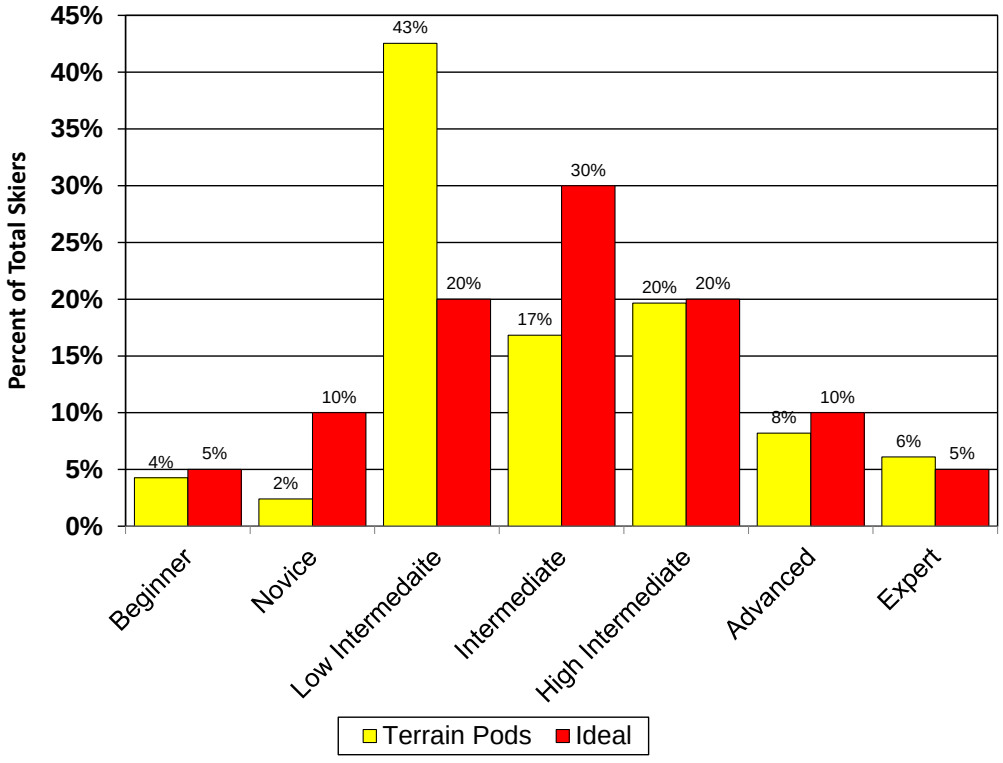



**PLATE IV.1**

The terrain pod balance shows that most of the skill classes are fairly well balanced, except for an excess of terrain in the low intermediate skill class and noticeable shortages in intermediate and novice skill classes. The beginner and novice skill classes account for 6.7 percent of the terrain, as compared to an ideal of 15 percent. The intermediate skill classes account for 79 percent, as compared to the ideal of 70 percent and the advanced and expert account for 14.3 percent, as compared to 15 percent. With detailed trail design, terrain from all skill classes will be used to attempt to ensure a trail distribution balanced with the market.

## .4 Base Area Design Analysis

The 1993 Sun Peaks Resort Area Master Plan included a comprehensive base area design analysis and an environmental inventory conducted by Environmental Management Associates of the base area lands within the Phase 3 boundary area. Biophysical opportunities and constraints of the site were identified and guided the development of the 1993 Master Plan. This analysis will continue to guide the evolution of the resort's development up to the end of Phase 3. For this Master Plan Update, the base area analysis has been expanded to include the Phase 4 base area lands on the "McGillivray Highlands". The purpose of this analysis is to identify the development potential of the last future expansion area within the current Controlled Recreation Boundary. Figure 12 illustrates the new Base Area Slope / Development Capability Analysis, which is focused on the land to the east of the existing developed base area. This analysis was completed using new topographic mapping prepared from the 2018 Lidar survey 1 metre contour intervals

The design criteria specific to mountain resort development, together with the site's detailed design analysis, forms the basis for the design methodology which was applied to create the base area master plan. Design criteria identified for Sun Peaks Resort which will continue to pilot the design and planning for the location of new facilities are noted as follows:

1. The base area should respond to the needs of the visitor. Base improvements must be completed in conjunction with the upgrading of mountain facilities. Improvements should complement the site and, where possible, maintain existing grades and vegetation to minimize site disturbance.

2. The base area structures should be aligned in conjunction with an access road to create a sense of arrival, and act as a visible landmark in guiding first-time visitors to Sun Peaks.

3. Morning sun should be maximized and co-ordinated with arrival activities.

4. Afternoon sun should be maximized and co-ordinated with lunchtime and afternoon activities.

5. The site's spectacular views and vistas should be maximized where possible.

6. Primary function zones (i.e. entry/arrival, primary services, secondary services, congregation, operational/service functions) should be arranged both horizontally and vertically to maximize visitor enjoyment and area revenues, while minimizing congestion, visitor confusion, and area management problems.

7. Pedestrian areas must be well defined, interconnect the parking lots to base structures, and focus pedestrian traffic through a centralized transition area that maximizes commercial opportunities.

8. Skier/Snowboarder movement should flow easily away from base structures to lift terminals, and from the trails back to the structures with negligible slope gradients.

9. Large vertical transitions should be minimized, although small vertical displacements can effectively be utilized to separate and define specific areas and activities.

10. Pedestrians should not be forced to cross major vehicular roadways, and walkways should be provided to interconnect the parking lots and base area structures.

11. A drop-off and pick-up zone is required for both cars and buses.

12. Parking lots should be designed to fill from the closest proximity to the base structures outward in order to minimize vehicular-pedestrian conflict. Parking lots should be visually unobtrusive, both from a distance and at close proximity. Parking lot grades should not exceed 5 percent longitudinally, or 3 percent cross-slope in order to facilitate easy pedestrian and vehicular movement on snow or ice.

13. The most distant parking stalls should not exceed comfortable skier/snowboarder walking distances noted below.

## .5 Walking Distances

As previously mentioned, it is important to provide all services, parking and recreational opportunities within a comfortable walking distance of the lifts. Research has indicated that up to 450 metres over level ground is a reasonable distance to expect people to walk while carrying equipment. Every 25 metres vertical change shortens this distance by 100 metres. This relationship has shaped the overall concept of the Sun Peaks Land Use Plan. If the resort is to be "pedestrian oriented", most development should lie within this circumference of a valley staging lift. Skier walking distances from existing and proposed staging lifts are identified on Figure 12.

## .6 Slope Analysis

Slope Analysis Plans at a scale of 1:2,500, with a contour interval of 5 metres, were completed by Ecosign for the Sun Peaks base area lands. The following slope zones are identified on the Base Area Slope Analysis Map.

| SLOPE GRADIENT | COLOUR | DEVELOPMENT SUITABILITY |
|---|---|---|
| **0 to 8%** | **White** | Suitable for roads, parking, high density village style developments, outdoor and indoor recreation and snow play zones with limited terrain modification |
| **8 to 15%** | **Green** | Ideal for medium density tourist accommodation in the form of low rise apartments or townhouses, beginner ski / snowboard terrain, tubing and snow play with some terrain modification to provide vehicle access. |
| **15 to 25%** | **Yellow** | Single-family chalet (low density) developments with substantial grading required to provide vehicle access. |
| **25 to 30%** | **Blue** | Marginal for single-family development. The grading required to provide road access and building footprints will require the use of retaining walls or rock stacks to support cut and fill slopes. |
| **40%+** | **Red** | Too steep for development.. |

## .7 Aspect Analysis and Solar Analysis

The Aspect Analysis (Figure 4) and Solar Analysis (Figures 5a, 5b and 5c) were consulted for potential impact on the Phase 4 lands. The exposures in the Phase 4 area are mostly west to southwest, with a variety of all exposures on the gently sloped highest plateau, where the top terminals of the lifts are planned to be located.

The west and southwest exposures ensure that skiers and snowboarders get warmth from the sun during cold, sunny days, but may also cause problems with snow retention in the warm spring season. However, since the Phase 4 ski slopes with west and southwest exposure are at elevations of 1,350 to 1,500 metres, snow burnoff is not expected to be a problem in this area.

The solar analysis of the Phase 4 lands indicates that the whole area lies in a "warmest" zone, with some small pockets on the lower northwest facing slopes being slightly cooler. Therefore, the solar exposure within the Phase 4 base lands is generally excellent for real estate development purposes.

## .8 Watershed Constraints

Subsequent to approval of the Tod Mountain Master Plan, in consultation with the provincial Ministry of the Environment and the federal Department of Fisheries and Oceans, Sun Peaks Resort Corporation agreed to amend the valley master plan to provide a minimum 15 metre setback zone on either side of McGillivray Creek and 7.5 metres on either side of all other creeks. The setback is intended to protect the riparian flora and fauna and no development shall take place within this zone with the case by case exception of the construction of valley trails. A 30-metre building setback has been established beside McGillivray Creek to meet Ministry of Environment flood proofing requirements. Development parcels have also been configured to avoid all minor drainages, either through drainage easements or property line configurations which respect natural drainages. The drainage setbacks have helped shape an integrated open space network which runs through the valley lands. The creeks at Sun Peaks are viewed as linear parks that are fully integrated into the Sun Peaks open space network.

## .9 Base Area Development Capability

The Base Area Slope Analysis/Development Capability Analysis Map (Figure 12) identifies the following development potential within the Sun Peaks Phase 4 base lands:

- Potential high-density development zones (village core, day visitor parking lots)
- Potential medium-density development zones (stacked townhouse and townhouse development)
- Potential low-density development zones (single-family parcels)
- Potential main road access to the Phase 4 lands

The high-density development zones are concentrated in areas with slope gradients from 0-8% in the area, which is either within skier walking distance of the lift terminals, or in areas which have potential for ski-in/ski out development. The medium-density development zones are located in zones with slope gradients from 8 to 15%, whereas the low density development zones are in the areas with slope gradients from 15 to 25 %.

In the calculations of the development potential of the Phase 4 lands, assumptions were used as shown in Table IV.4. These assumptions are consistent with densities in existing zoning in Sun Peaks.

**TABLE IV.4**
**SUN PEAKS RESORT**
**DEVELOPMENT DENSITY ASSUMPTIONS**

| Development Type | Units per ha. | Beds per Unit | Beds per ha. |
|---|---|---|---|
| Village Hotel & Condos | 100 | 3 | 300 |
| Stacked Townhouses | 40 | 4 | 160 |
| Townhouses | 25 | 5 | 125 |
| Single Family | 10 | 6 | 60 |

Table IV.5 is a summary calculation of the development potential of the Phase 4 McGillivray Highlands, as well as some newly identified parcels in the McGillivray Creek valley. A total of 215 hectares of developable land has been identified. Of this, 15 hectares are suitable for a village core and day skier parking, 51 hectares are suitable for medium density development. Land with potential for single-family parcels has a total area of 58 hectares and another 91 hectares of relatively flat land that can be used for additional recreation.

**TABLE IV.5**
**SUN PEAKS RESORT**
**PHASE 4 DEVELOPMENT CAPABILITY**

| Parcel Number | Development Suitability | Gross Area (ha.) | % Developable | Net Area (ha.) | Units per ha. | Beds per Unit | Beds per ha. | Potential Beds |
|---|---|---|---|---|---|---|---|---|
| **Higher Density Development** | | | | | | | | |
| 1 | Village Core | 4.0 | 80% | 3.2 | 100 | 3 | 300 | 960 |
| | Parking | 3.7 | | | | | | |
| 2 | Village Core | 7.2 | 80% | 5.8 | 100 | 3 | 160 | 922 |
| **Sub-total High Density** | | **14.9** | | **9.0** | | | | **1,882** |
| **Medium Density Development** | | | | | | | | |
| 3 | Stacked Townhouses | 3.5 | 70% | 2.5 | 40 | 4 | 160 | 392 |
| 4 | Stacked Townhouses | 1.3 | 80% | 1.0 | 40 | 4 | 160 | 166 |
| 6 | Townhouses | 5.8 | 70% | 4.1 | 25 | 5 | 125 | 508 |
| 11 | Townhouses | 1.5 | 80% | 1.2 | 25 | 5 | 125 | 150 |
| 12 | Townhouses | 3.1 | 70% | 2.2 | 25 | 5 | 125 | 271 |
| 13 | Townhouses | 2.4 | 80% | 1.9 | 25 | 5 | 125 | 240 |
| 16 | Townhouses | 5.6 | 70% | 3.9 | 25 | 5 | 125 | 490 |
| 17 | Townhouses | 9 | 70% | 6.3 | 25 | 5 | 125 | 788 |
| 20 | Townhouses | 3.1 | 70% | 2.2 | 25 | 5 | 125 | 271 |
| 21 | Townhouses | 15.8 | 60% | 9.5 | 25 | 5 | 125 | 1,185 |
| **Sub-total Medium Density** | | **51.1** | | **34.7** | | | | **4,461** |
| **Low Density Development** | | | | | | | | |
| 8 | | 9.0 | 70% | 6.3 | 10 | 6 | 60 | 378 |
| 9 | | 3.6 | 80% | 2.9 | 10 | 6 | 60 | 173 |
| 10 | | 28.7 | 60% | 17.2 | 10 | 6 | 60 | 1,033 |
| 14 | | 12.9 | 70% | 9.0 | 10 | 6 | 60 | 542 |
| 15 | | 0.7 | 80% | 0.6 | 10 | 6 | 60 | 34 |
| 18 | | 1.2 | 80% | 1.0 | 10 | 6 | 60 | 58 |
| 22 | | 1.8 | 80% | 1.4 | 10 | 6 | 60 | 86 |
| **Sub-total Low Density** | | **57.9** | | **38.4** | | | | **2,303** |
| **Recreation** | | | | | | | | |
| 5 | | 19.8 | 80% | 15.8 | | | | |
| 7 | | 15.0 | 80% | 12.0 | | | | |
| 19 | | 1.5 | 80% | 1.2 | | | | |
| 23 | | 29.6 | 80% | 23.7 | | | | |
| 24 | | 25.1 | 80% | 20.1 | | | | |
| **Sub-total Recreation** | | **91.0** | | **72.8** | | | | |
| **TOTALS** | | **214.9** | | **154.9** | | | | **8,646** |

The total potential for public and private beds in the areas outlined in Figure 12, is estimated at approximately 8,650 bed units. Since the Master Development Agreement with the Province limits the development at Sun Peaks to 23,342 bed units, there is more than enough land with slopes suitable for development to provide build out to the full allotment. This excess will allow Sun Peaks LLP to select only development sites that are either in close proximity to the existing infrastructure in the McGillivray Creek valley or to the area surrounding the lift connection to the rest of the resort.

# V. MOUNTAIN FACILITIES

## .1 Goals and Objectives

A ski area Master Plan involves planning the removal or replacement of existing equipment, integrated with the addition of new facilities over time. Modern mountain resorts require the most efficient and user-friendly lift and trail systems possible. It is, therefore, necessary to have a complete understanding of the total project at buildout so that facilities can be balanced, and capital invested effectively over time.

Over the last twenty-eight years, the on-going development of the Sun Peaks Master Plan has resulted in a day ski area evolving into a four-season resort with destination resort facilities including a large variety of skiing on four mountains, an eighteen-hole golf course, a resort village and a variety of accommodation. The alpine skiing/snowboarding at Sun Peaks is the primary focus of the resort in winter and the skiing facilities have been upgraded and developed to provide guests with a high-quality experience. The existing area has enough ski trails to service over 12,760 skiers per day, while the lifts can handle 8,020 skiers per day, providing low ski trail densities, and therefore, an extremely pleasant and uncrowded experience.

The Phase 4 Resort Master Plan for the development of the ski facilities at Sun Peaks is described in detail in the following section and illustrated on Figure 15.

**Objectives**

The objectives of the Sun Peaks Mountain Master Plan are as follows:

- Provide upgraded ski/snowboard facilities, such as new technology lifts, high quality grooming and guest service facilities in order to bring the total resort area up to, and beyond, the standards provided by the competition.
- Continue to provide a selection of ski trails with skier skill classes that are closely balanced to the skill level distribution of the market.
- Provide services in appropriate locations to service skiers in each zone of the mountain.

- Provide base staging areas with adequate capacity, and in locations to satisfy mountain access requirements. Lifts used for staging should be able to stage all skiers to the upper mountain within 1.5 hours, so that return cycle skiing/snowboarding can occur on these lifts starting relatively early in the morning, with minimal lift queues.
- Each phase of development should provide an optimally balanced facility, while at the same time move towards the ultimate goal.
- Define goals to guide management and inform public agencies during the ensuing 5-10-year period.

We have utilized a number and letter code to indicate the type of lift installations proposed. The coding is illustrated below.

| | |
|---|---|
| MC | Moving Carpet |
| P | Platter (surface lift) |
| TB | T-Bar (surface lift) |
| 3C | Triple Chairlift |
| 4C | Fixed Grip Quadruple Chairlift |
| D4C | Detachable Grip Quadruple Chairlift |
| D4C-B | Detachable Grip Quadruple Chairlift with protective bubbles |
| D6C | Detachable Grip Six-Passenger Chairlift |
| Combi | Detachable Grip 8-Passenger Chairs & 10-Passenger Gondolas |
| PG | Pulse Gondola (4x3x8) four groups of three cabins with 8 pax cabin |
| R | Replacement Lift (i.e. 3R) |

The Master Plan Development by Phase for Sun Peaks Resort is summarized in Table V.1.

**TABLE V.1**
**SUN PEAKS**
**MASTER PLAN DEVELOPMENT SUMMARY**

| Phase | Lifts Installed | SCC | Trails | Trail Capacity | Mtn. Restaurants/ Base Lodges |
|---|---|---|---|---|---|
| Existing 2019/20 Phase 1 & Phase 2A | Lift 1 - Burfield - 4C - 464 pph<br>Lift 2 - Sunburst - D4C-B - 2294 pph<br>Lift 3 - Crystal - 3C - 2005 pph<br>Lift 4 - Village Platter - P - 722 pph<br>Lift 5 - West Bowl - TB - 698 pph<br>Lift 6 - Sundance - D4C - 2491 pph<br>Lift 9 - Elevation - 4C - 1822pph<br>Lift 10 - Morrisey Platter - P - 654 pph<br>Lift 14 - Morrisey Express - D4C - 1844 pph<br>Lift 16 - Orient Ridge - 4C - 1022 pph<br>Lift 18A - Village Conveyor - MC - 800 pph<br>Lift 18C - Carpet - MC - 800 pph | 8,020 | 158 trails, skiways & gladed areas 610 ha. (1,508 acres) | 12,750 | The Annex<br>Village Daylodge<br>Sunburst Restaurant<br>Burfield Daylodge<br>Children's Building<br>Umbrella Bar |
| Phase 2B | *Shorten & Upgrade Capacity:*<br>Lift 1R - Burfield - 4C - 464 pph to 638 pph<br>move top terminal to 1,844m elevation<br>*Replace & Realign:*<br>Lift 3 - Crystal - 3C - 2005 pph<br>with Lift 3R - Crystal - 4C - 2400 pph<br>*Upgrade Capacity:*<br>Lift 16 - Orient Ridge - 4C - 1834 pph<br>Lift 2 - Sunburst - D4C/B - to 2509 pph<br>Lift 14 - Morrisey - D4C - to 2800 pph | 9,090 | 158 trails, skiways & gladed areas 614 ha. (1,517 acres) | 12,699 | East Village Building E-A for skier services |
| Phase 3 | *Replace & Realign:*<br>Lift 5 - West Bowl - D4C - 2400 pph<br>*Install:*<br>Lift 8 - West Morrisey - 4C - 2000 pph<br>Lift 12 - 4C - 2000 pph<br>Lift 15 - Gil's - D4C - 2400 pph<br>Lift 19 - Headwall Pulse 4x3x8 = 750/ph<br>Lift 17 - McGillivray Transfer - 4C - 2400 pph | 12,090 | 190 trails, skiways & gladed areas 695 (1,717 acres) | 15,059 | Morrisey Restaurant<br>Gil's Hut<br>Building BB (village)<br>Building DD (village)<br>Lift 17 - mini daylodge |
| Phase 4 | *Install:*<br>Lift 7 - Mount Tod - 4C - 2400pph<br>Lift 13a/b - 4C - 2400pph<br>Lift 20 - 4C - 2400 pph<br>Lift 24 - 4C - 1400 pph<br>*Upgrade Lift:*<br>Lift 2R - Sunburst - Combi D8C/10G - 3200 pph<br>Lift 6R - Sundance - D6C - 3600 pph<br>*Upgrade and Extend Lift:*<br>Lift 16R - Orient Express - D4C - 2400 pph | 14,830 | 225 trails, skiways & gladed areas 767 ha. (1,895 acres) | 18,104 | Orient Ridge Restaurant<br>East Day Visitor Base Daylodge |

## .2 Phase 2b

Since the last Master Plan, Sun Peaks has continued with implementation of Phase 2 of the mountain development. Phase 2a included the installation of the Elevation and the Orient fixed grip quad chairlifts and upgrading the capacity of the Sundance detachable quad chair from 1,994 persons per hour to 2,491 per hour, a 25% increase. Phase 2a included miscellaneous trail development, including one new easier trail on Sunburst (The Other Way) and six new trails on lower Orient Ridge.

The completion of Phase 2 (including Phase 2b) of the mountain development includes increasing the capacity of the Sunburst, Orient and Morrisey lifts by adding carriers, as well as some additional lift and trail development. The Sunburst Express Bubble Quad chair currently has a capacity of 2,294 pph but was installed with the capability of being upgraded to a maximum capacity of 2,509 pph, a 9% increase. The Orient fixed quad chair was installed during the summer of 2018 with initial capacity of 1,022 pph but by simply adding carriers, the rated capacity of this lift can be increased 76% to 1,834 pph in this phase when demand merits such an increase. Increasing the rated capacity to the design level will also result in an increase in SCC. Similarly, the Morrisey Express can be increased from 1,844 pph to 2,800 pph by adding 47 carriers.

*Orient Lift Base Area / Umbrella Bar*

Lift 3, the Crystal triple chairlift, will be replaced by a fixed grip quadruple chairlift with a new top terminal on the Top of the World, adjacent to the existing Burfield chairlift's top terminal, and the bottom terminal moved about 85 metres to the east. This lift will service the same terrain it currently serves, with the addition of the east facing slopes of the Chief and the terrain between the existing Burfield and Crystal top terminals. This new lift will have a vertical rise of 316 metres (increased from 293 metres) and a ride time of 7.3 minutes. The new Crystal Quad has a 20 percent increase in rated capacity to 2,400 pph and easier loading. Due to its increased vertical, capacity and loading efficiency, the SCC will rise slightly.

The Burfield Quad fixed grip chairlift (Lift 2) will be left in its current position from the Burfield base area up to Top of the World for the time being, with a capacity of 464 persons per hour. Sun Peaks will monitor ridership and loading of the Burfield quad at the bottom and the middle station during the winter of 2019/2020. The previous Master Plan envisioned that the Burfield would be shortened, with the top terminal moving down 230 vertical metres to the 1,844-metre elevation at Tower # 23. This shortening may allow Sun Peaks to increase the rated capacity on the Burfield quad 38% to approximately 638 pph. This increase in capacity will likely be necessary due to the anticipated increase in the number of people using the Burfield base to access the mountain due to the increase in day skier parking at that base and development of new beds in Peaks West, The Burfield and Burfield West developments. There will no longer be any significant return cycle skiing on the upper portion of the lift, but the whole lift will continue to provide return cycle skiing on the steep slopes above the Burfield base when conditions are suitable. The new top station offload will provide very easy and convenient access to the bottom of the new Crystal chair Lift 3R.

Table V.2 lists the Sun Peaks lift specifications for Phase 2B.

## TABLE V.2
## SUN PEAKS
## LIFT SPECIFICATIONS - PHASE 2B

| | Existing | | | | | | |
|---|---|---|---|---|---|---|---|
| **Lift Number** | **2** | **4** | **5** | **6** | **9** | **10** | **14** |
| **Lift Name** | **Sunburst Express** | **Village Platter** | **West Bowl** | **Sundance Express** | **Elevation** | **Morrisey Platter** | **Morrisey Express** |
| **Lift Type** | **D4C-B** | **P** | **T-B** | **D4C** | **4C** | **P** | **D4C** |
| **Year Installed** | 1993/99 | 1993/99 | 1992 | 1995/18 | 2006 | 2001 | 2002/04 |
| Top Elevation m. | 1,851 | 1,309 | 2,071 | 1,732 | 1,862 | 1,347 | 1,674 |
| Middle Station m. | | | | | | | |
| Bottom Elevation m. | 1,256 | 1,257 | 1,904 | 1,257 | 1,549 | 1,258 | 1,279 |
| Total Vertical m. | 595 | 52 | 167 | 475 | 313 | 89 | 395 |
| Horizontal Distance m. | 2,290 | 347 | 700 | 1,985 | 1,072 | 420 | 1,747 |
| Slope Distance m. | 2,378 | 353 | 720 | 2,041 | 1,117 | 429 | 1,791 |
| Average Slope % | 26% | 15% | 24% | 24% | 29% | 21% | 23% |
| Rated Capacity | 2,509 | 722 | 698 | 2,491 | 1,822 | 654 | 2,800 |
| V.T.M./Hr.(000) | 1,493 | 38 | 117 | 1,183 | 570 | 58 | 1,106 |
| Rope Speed m/sec. | 5.1 | 2.2 | 2.2 | 5.0 | 2.3 | 2.2 | 5.0 |
| Trip Time min. | 7.8 | 2.7 | 5.4 | 6.8 | 8.1 | 3.3 | 6.0 |
| Drive Output | 543KW | 16KW | 60KW | 465KW | | 23KW | 448KW |
| Operating Hr./Day | 7.0 | 7.0 | 6.5 | 7.0 | 6.8 | 7.0 | 7.0 |
| V.T.M. Demand/Day | 4,314 | 1,699 | 3,770 | 2,993 | 4,474 | 600 | 3,466 |
| Loading Eff. % | 95% | 80% | 95% | 95% | 90% | 80% | 95% |
| Access Reduction | 19% | 0% | 0% | 24% | 0% | 10% | 5% |
| **SCC Skiers/Day** | **1,860** | **120** | **190** | **1,980** | **770** | **120** | **2,020** |

| | | | | Phase 2B | | |
|---|---|---|---|---|---|---|
| **Lift Number** | **16** | **18A** | **18C** | **1R** | **3R** | |
| **Lift Name** | **Orient Chair** | **Village Carpet** | **Carpet** | **Burfield** | **Crystal** | |
| **Lift Type** | **4C** | **MC** | **MC** | **4C** | **4C** | **TOTAL** |
| **Year Installed** | 2018 | | | | 2020 | |
| Top Elevation m. | 1,529 | 1,285 | 1,268 | 1,844 | 2,082 | |
| Middle Station m. | | | | 1,782 | | |
| Bottom Elevation m. | 1,278 | 1,258 | 1,259 | 1,200 | 1,766 | |
| Total Vertical m. | 251 | 27 | 9 | 644 | 316 | 3,333 |
| Horizontal Distance m. | 1,048 | 148 | 58 | 1,970 | 959 | |
| Slope Distance m. | 1,084 | 150 | 59 | 2,073 | 1,010 | 13,205 |
| Average Slope % | 24% | 18% | 15% | 33% | 33% | 26% |
| Rated Capacity | 1,834 | 800 | 800 | 638 | 2,400 | 18,168 |
| V.T.M./Hr.(000) | 459 | 13 | 13 | 411 | 758 | 6,102 |
| Rope Speed m/sec. | 2.3 | 0.6 | 0.6 | 2.3 | 2.3 | |
| Trip Time min. | 7.9 | 4.2 | 1.6 | 15.0 | 7.3 | |
| Drive Output | | | | 225KW | 0 | |
| Operating Hr./Day | 7.0 | 7.0 | 7.0 | 7.0 | 6.8 | |
| V.T.M. Demand/Day | 2,795 | | | 5,908 | 4,956 | |
| Loading Eff. % | 85% | | | 85% | 85% | |
| Access Reduction | 24% | 0% | | 10% | 2% | |
| **SCC Skiers/Day** | **750** | **120** | **90** | **210** | **860** | **9,090** |

At the end of Phase 2B there will be a total of 158 trails, gladed zones and skiways covering approximately 614 hectares with a capacity of 12,699 skiers at one time. Figure 13 graphically illustrates the Sun Peaks Mountain Master Plan / Phase 2B.

As listed in Table V.3 and illustrated in Plate V.1, the Phase 2b ski trails have an excess of terrain in the novice and low intermediate skill classes and shortages in the beginner and high intermediate skill classes.

**TABLE V.3**
**CUMULATIVE TRAIL BALANCE – PHASE 2B**

| Lift SCC = | 8,020 |
|---|---|

| Skill Classification | Hectares | Skiers | Balance | Ideal |
|---|---|---|---|---|
| 1 Beginner | 2.3 | 140 | 1.1% | 5% |
| 2 Novice | 48.0 | 2,275 | 18.7% | 10% |
| 3 Low Intermediate | 77.6 | 2,845 | 23.3% | 20% |
| 4 Intermediate | 170.5 | 3,835 | 31.4% | 30% |
| 5 High Intermediate | 58.2 | 1,125 | 9.2% | 20% |
| 6 Advanced | 139.3 | 1,335 | 10.9% | 10% |
| 7 Expert | 96.2 | 640 | 5.2% | 5% |
| **TOTALS** | **592.1** | **12,195** | **100%** | **100%** |

| | | |
|---|---|---|
| Average Density = | 13.5 | Skiers/Hectare |
| Optimum Density = | 37.3 | Skiers/Hectare |
| Weighted Demand = | 3,814 | VTM/Skier/Day |

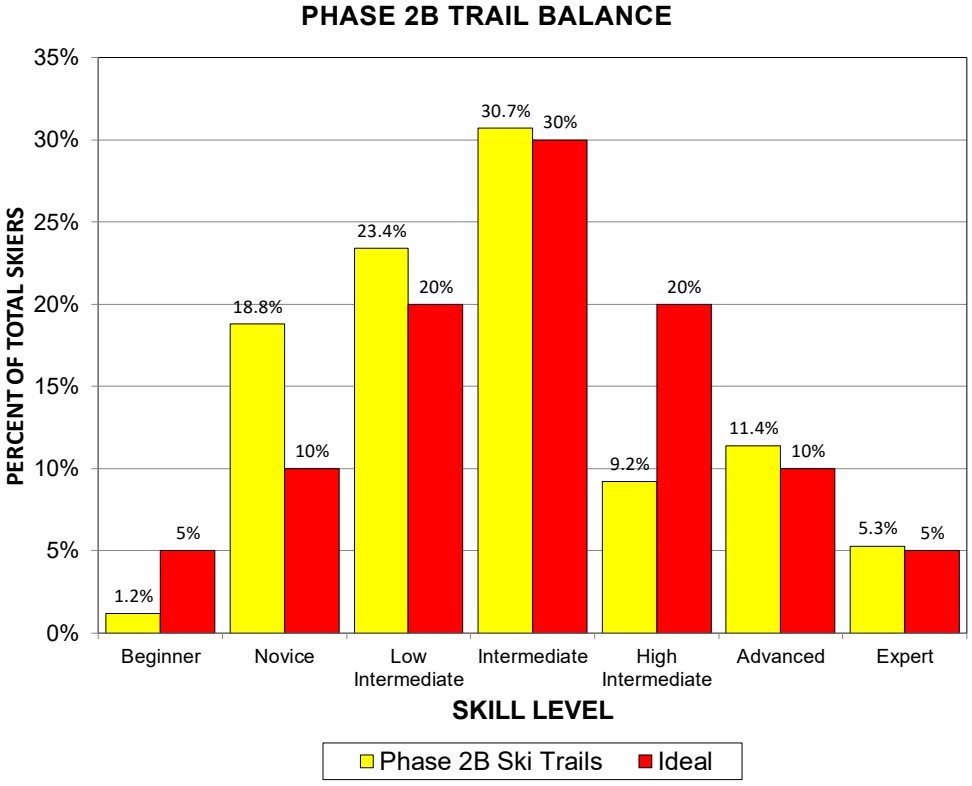



**PLATE V.1**

Plate V.2 illustrates the balance of lift and trail capacity in each lift serviced “pod” of skiing. With the exception of the novice lifts, the Morrisey Express, Elevation and the Orient, there is an excess of terrain capacity to lift capacity in each pod which will result in pleasant, uncrowded trails.

**PHASE 2B LIFT VS. TRAIL CAPACITY**

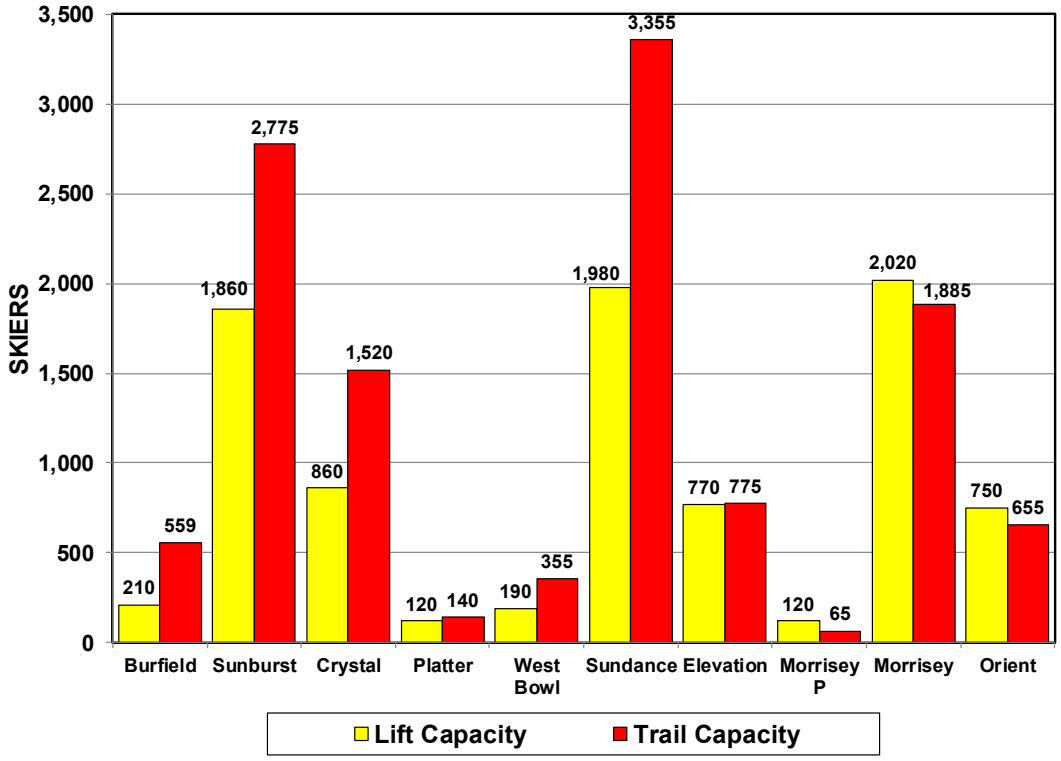



**PLATE V.2**

## .3 Phase 3

A total of six new lifts are proposed in the third major phase of development at Sun Peaks, as illustrated on Figure 14.

Lift 5R West Bowl Detachable Quad

The West Bowl T-Bar was installed as used equipment in 1992 and is just 720 metres long and has a capacity of 698 persons per hour. We propose to replace the West Bowl T-Bar with a large detachable grip chairlift Lift 5R, the West Bowl Detachable Quad chair.

Lift 5R has a new top terminal which lies about 250 metres to the east northeast of the existing Lift 5 T-Bar on top of a small mountain top we have called “Little Skunk” with a top elevation at 2,090 metres. This new lift has a vertical drop of 306 metres and a length of about 1,554 metres. With a capacity of 2,400 per hour, Lift 5R can accommodate 1,290 skiers at one time servicing 8 ski trails covering 28.6 ha.

Lift 8 West Morrisey Fixed Quad

Lift 8, the West Morrisey fixed grip quad chair, is proposed to be installed on the north facing slopes of Mount Morrisey. This lift will provide steeper skiing on north facing (good snow holding) slopes between the Village and the Burfield base. The trails serviced by this lift range from intermediate (on the existing “Back in Time” trail) to high intermediate, advanced and expert (on the existing “Static Cling” trail). This lift will have a vertical rise of 427 metres and a rated capacity of 2,000 pph which will result in a calculated SCC of approximately 930 skiers per day. This lift will also provide ski-in/ski-out access for a neighbourhood on the south side of the valley near “The Cabins”, Fairways Drive and Mountain View Drive.

Lift 15 Gil’s Detachable Quad

Lift 15, Gil’s, is a detachable grip high speed quadruple chairlift installed on the east facing slopes to the north of the existing lift serviced ski area to service return cycle skiing on steep terrain, with trails ranging from intermediate to expert. The top of this lift will be located at the peak of the area known as “The Gil’s” and the off-load will be at the 2,100-metre elevation. Lift 15 will have a vertical rise of 323 metres and be accessed from the West Bowl Quad, the Headwalls Pulse Gondola and the Crystal Chair via the Upper 5 Mile trail and a new section of trail to be constructed (15H). The high altitude and eastern exposure of terrain serviced by this lift provides excellent snow conditions for skiers in this pod. Lift 15 Gil’s is planned to service 12 ski trails, will be about 1,360 metres length and have a capacity of 2,400 pph, servicing 920 Skiers at One Time.

Lift 12 Far West Bowl Quad

Lift 12 is a fixed grip quad chairlift with a vertical rise of 175 metres and a slope length of about 739 metres. This relatively small lift does service a very interesting pod of intermediate terrain with four nice ski trails in mostly powder snow conditions.

Lift 19 Headwalls Pulse Gondola

Lift 19 is planned as a unique lift type that is attractive to foot passengers year-round. Lift 19 goes from the west side of the Sunburst Lodge at the 1,850 metres elevation rising up over the Headwalls ski terrain to the top of the existing Crystal triple chair at the 2,060 metres elevation for a vertical rise of 210 metres. The bottom station is just a few steps west of the Sunburst Lodge so foot passengers and skiers can access the lift for a ride to the top during winter and importantly summer seasons. We propose a 4x3x8 configuration, 4 groups of 3 cabins with 8 passengers per cabin which can transport up to 750 persons per hour. The resort can start with a 2x3x8 pulse gondola with a capacity of 515 p/h and add two groups of 3 cabins at a later date when and if needed. The prime objective for Lift 19 is year-round sightseeing operations but the lift will provide important capacity to fill the West Bowl and Gil's area terrain.

Lift 17a and 17b McGillivray Cross Valley Transfer Quad

The final lift in Phase 3 is the McGillivray Cross Valley Transfer quad that transports skiers from real estate developments on Parcels 25, 26, 50, 56, 57, 58 and even more Tourist Accommodation units on the east side of McGillivray Creek. Skiers can either load on the north end of Parcel 50 and then ride down and through the valley-bottom two-way load/offload or they can ski down from their unit to the valley bottom mid load. From either location, the lift will take them to the Morrisey side of the valley above the Sticks trail which they can use to ski down l to the bottom of the Morrissey Express or the Orient chairlifts. To return, after skiing down The Sticks (14M) or Second Growth (14L) they can ski down to the valley bottom station and ride about 370 metres up to the eastern terminus at Parcel 50. Design capacity is specified for a maximum of 2,400 p/h, however this lift will initially be installed at a lower capacity and then carriers will be added as demand builds from development of more beds.

At the completion of Phase 3, the Sun Peaks ski area will have a total of fourteen ski lifts with a combined daily SCC of approximately 12,090skiers per day. Table V.4 lists the lifts present at completion of Phase 3, their specifications, and the calculated SCC at completion of this phase.

## TABLE V.4
## LIFT SPECIFICATIONS - PHASE 3

| Development Phase | Existing | | | | | | | | | Phase 2b | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Lift Number | 2 | 4 | 6 | 9 | 10 | 14 | 16 | 18A | 18C | 1R | 3R |
| Lift Name | Sunburst Express | Village Platter | Sundance | Elevation | Morrisey Platter | Morrisey Express | Orient Express | Village Carpet | Carpet | Burfield | Crystal |
| Lift Type | D4C-B | P | D4C | 4C | P | D4C | 4C | MC | MC | 4C | 4C |
| Top Elevation m. | 1,851 | 1,309 | 1,732 | 1,862 | 1,347 | 1,674 | 1,529 | 1,285 | 1,268 | 1,844 | 2,082 |
| Bottom Elevation m. | 1,256 | 1,257 | 1,257 | 1,549 | 1,258 | 1,279 | 1,278 | 1,258 | 1,259 | 1,200 | 1,766 |
| Total Vertical m. | 595 | 52 | 475 | 313 | 89 | 395 | 251 | 27 | 9 | 644 | 316 |
| Horizontal Distance m. | 2,290 | 347 | 1,985 | 1,072 | 420 | 1,791 | 1,048 | 148 | 58 | 1,970 | 959 |
| Slope Distance m. | 2,378 | 353 | 2,041 | 1,117 | 429 | 1,834 | 1,084 | 150 | 59 | 2,073 | 1,010 |
| Average Slope % | 26% | 15% | 24% | 29% | 21% | 22% | 24% | 18% | 15% | 33% | 33% |
| Rated Capacity | 2,509 | 722 | 2,491 | 1,822 | 654 | 2,800 | 1,834 | 800 | 800 | 638 | 2,400 |
| V.T.M./Hr.(000) | 1,493 | 38 | 1,183 | 570 | 58 | 1,106 | 459 | 13 | 13 | 411 | 758 |
| Rope Speed m/sec. | 5.1 | 2.2 | 5.0 | 2.3 | 2.2 | 5.0 | 5.0 | 0.6 | 0.6 | 2.3 | 2.3 |
| Trip Time min. | 7.80 | 2.67 | 6.80 | 8.09 | 3.25 | 6.11 | 3.61 | 4.17 | 1.64 | 15.02 | 7.32 |
| Operating Hr./Day | 7.0 | 7.0 | 7.0 | 6.8 | 7.0 | 7.0 | 7.0 | | | 7.0 | 6.8 |
| V.T.M. Demand/Day | 4,312 | 1,699 | 3,003 | 4,483 | 600 | 3,286 | 2,795 | | | 5,941 | 4,886 |
| Loading Eff. % | 95% | 80% | 95% | 85% | 80% | 95% | 85% | | | 85% | 85% |
| Access Reduction | 27% | 0% | 29% | 0% | 10% | 9% | 32% | | | 46% | 26% |
| **SCC Skiers/Day** | **1,680** | **120** | **1,860** | **730** | **120** | **2,050** | **660** | **120** | **90** | **120** | **660** |

| Development Phase | Phase 3 | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Lift Number | 5R | 8 | 12 | 15 | 17a | 17b | 19 | |
| Lift Name | West Bowl | West Morrisey | Far West | Gil's | McGillivray I | McGillivray II | Headwall Pulse | |
| Lift Type | D4C | 4C | 4C | D4C | 4C | 4C | PG | TOTAL |
| Top Elevation m. | 2,090 | 1,677 | 2,070 | 2,100 | 1,360 | 1,396 | 2,060 | |
| Bottom Elevation m. | 1,784 | 1,250 | 1,895 | 1,777 | 1,303 | 1,303 | 1,850 | |
| Total Vertical m. | 306 | 427 | 175 | 323 | 57 | 93 | 210 | 4,756 |
| Horizontal Distance m. | 1,524 | 1,420 | 718 | 1,321 | 367 | 490 | 649 | |
| Slope Distance m. | 1,554 | 1,483 | 739 | 1,360 | 371 | 499 | 682 | 19,216 |
| Average Slope % | 20% | 30% | 24% | 24% | 16% | 19% | 32% | 26% |
| Rated Capacity | 2,400 | 2,000 | 2,000 | 2,400 | 2,400 | 2,400 | 750 | 29,420 |
| V.T.M./Hr.(000) | 734 | 854 | 350 | 775 | 137 | 223 | 157 | 9,333 |
| Rope Speed m/sec. | 5.0 | 2.2 | 2.3 | 5.0 | 2.2 | 2.2 | 6.0 | |
| Trip Time min. | 5.18 | 11.23 | 5.36 | 4.53 | 2.81 | 3.78 | 2.30 | |
| Operating Hr./Day | 6.8 | 7.0 | 6.3 | 6.0 | 7.0 | 7.0 | 6.0 | 6.0 |
| V.T.M. Demand/Day | 3,368 | 5,402 | 3,035 | 4,705 | 2,120 | 2,120 | 6,066 | |
| Loading Eff. % | 95% | 85% | 85% | 95% | 85% | 85% | 95% | |
| Access Reduction | 8% | 1% | 0% | 2% | 100% | 100% | 15% | |
| **SCC Skiers/Day** | **1,290** | **930** | **610** | **920** | **0** | **0** | **130** | **12,090** |

*Note: Rated capacity of two section Lift 17 only counted once in totals*

The Cumulative Trail Balance (Table V.5) illustrates that the Phase 3 ski trail balance is changed very little from the Phase 2 development. When distributed by skill class, it still forms a fairly good balance with the distribution of the skill classes in the market. Plate V.3 shows that there are still excesses in the novice and low intermediate skill classes and shortages in the beginner and high intermediate skill classes.

**TABLE V.5**
**SUN PEAKS**
**CUMULATIVE TRAIL BALANCE - PHASE 3**

| Lift SCC = | 12,090 |
|---|---|

| Skill Classification | Hectares | Skiers | Balance | Ideal |
|---|---|---|---|---|
| 1 Beginner | 2.3 | 140 | 0.9% | 5% |
| 2 Novice | 56.3 | 2,630 | 17.5% | 10% |
| 3 Low Intermediate | 117.6 | 4,315 | 28.7% | 20% |
| 4 Intermediate | 177.3 | 4,310 | 28.6% | 30% |
| 5 High Intermediate | 57.8 | 1,120 | 7.4% | 20% |
| 6 Advanced | 162.5 | 1,664 | 11.0% | 10% |
| 7 Expert | 121.7 | 880 | 5.8% | 5% |
| **TOTALS** | **695.4** | **15,059** | **100%** | **100%** |

| | | |
|---|---|---|
| Average Density = | 17.4 | Skiers/Hectare |
| Optimum Density = | 37.2 | Skiers/Hectare |
| Weighted Demand = | 3,797 | VTM/Skier/Day |

**SUN PEAKS**
**PHASE 3 TRAIL BALANCE**

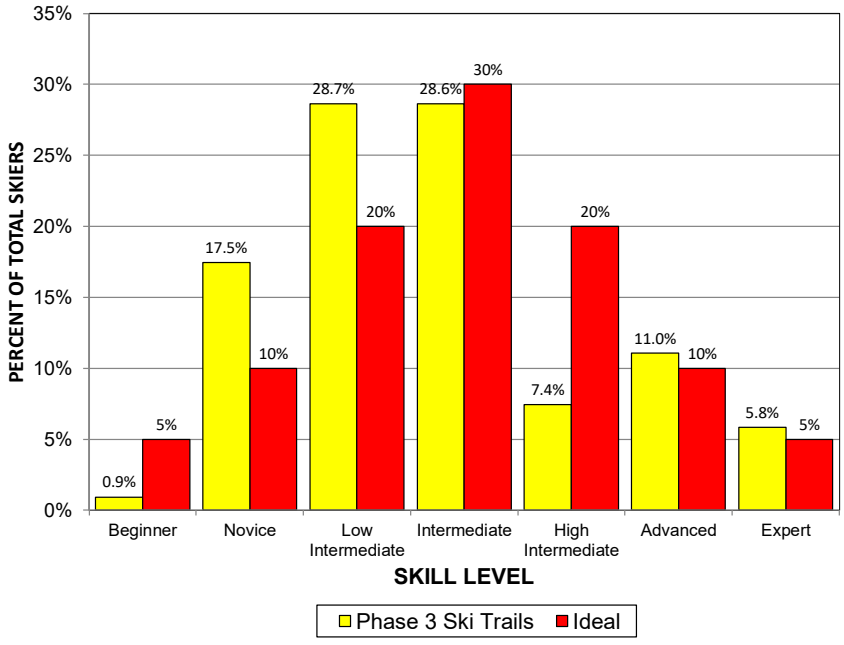



**PLATE V.3**

Plate V.4 graphically compares the capacities of the lifts and trails in each major lift system.

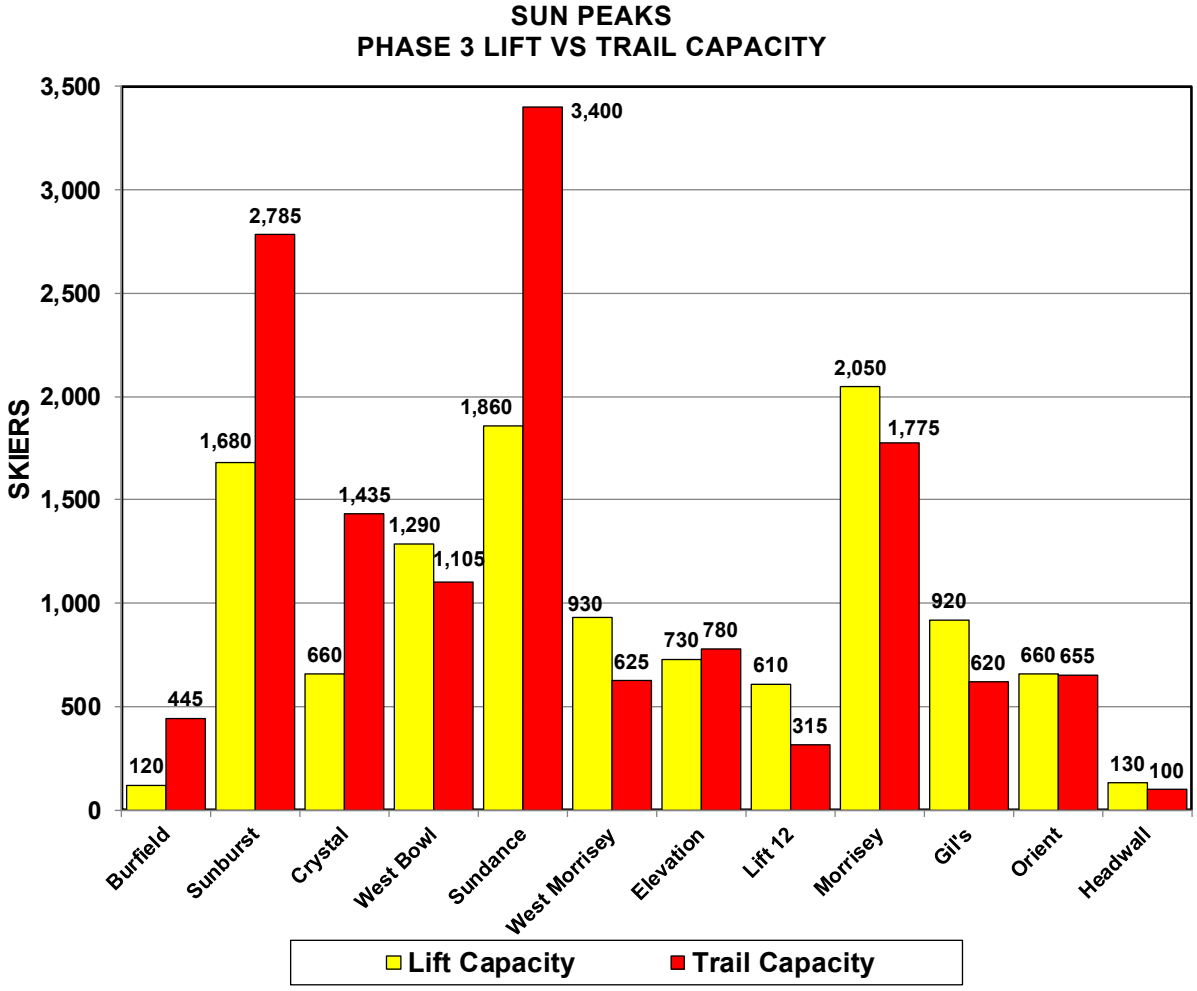



**PLATE V.4**

## .4 Phase 4

The final phase of development involves developing additional terrain extending towards the summit of Mount Tod, the upper part of Orient Ridge and installing lifts in the eastern end of the resort for access to the “Phase 4 McGillivray Highlands” and new beginner and novice return skiing. Buildout of Phase 4 is illustrated on Figure 15.

*Customer enjoying powder snow on Sunnyside Run, viewing northwards towards Mount Tod*

Lift 13 is an “up-and-over” fixed grip quadruple chairlift with two sections labelled as 13a and 13b. Bottom of lift 13a lies at the 2,050-metre elevation about 225 metres north of both Lift 5R West Bowl detachable quad and Lift 15 the Gil’s detachable quad chairlifts. Lift 13a is only 274 metres long with a 2-minute ride time up to the 2,110-metre elevation where skiers can offload and ski to bottom of Lift 13b or to Lift 12 4C or east to the Gil’s D4C. Lift 13a, therefore, is primarily for access to these three lifts as well as Lift 7, the Mount Tod fixed grip quad chair.

Lift 7 Mount Tod quad chair is a rather short lift, only about 500 metres in length, which services a large area of south facing terrain above treeline high alpine sliding in the intermediate to expert skill classes and also provides access to “slack country” skiing opportunities to the east down to the bottom of the Gil’s lift. The installation of this lift increases the total lift serviced vertical rise at Sun Peaks to 954 metres (3,129 feet).

Lift 16, the short-fixed grip Orient Ridge chairlift, is proposed to be revised with installation of a much longer detachable grip four-passenger chairlift that will rise to the 1,713-metre elevation. This extended chair will service novice to intermediate terrain on the slopes to the east of the Sundance chair.

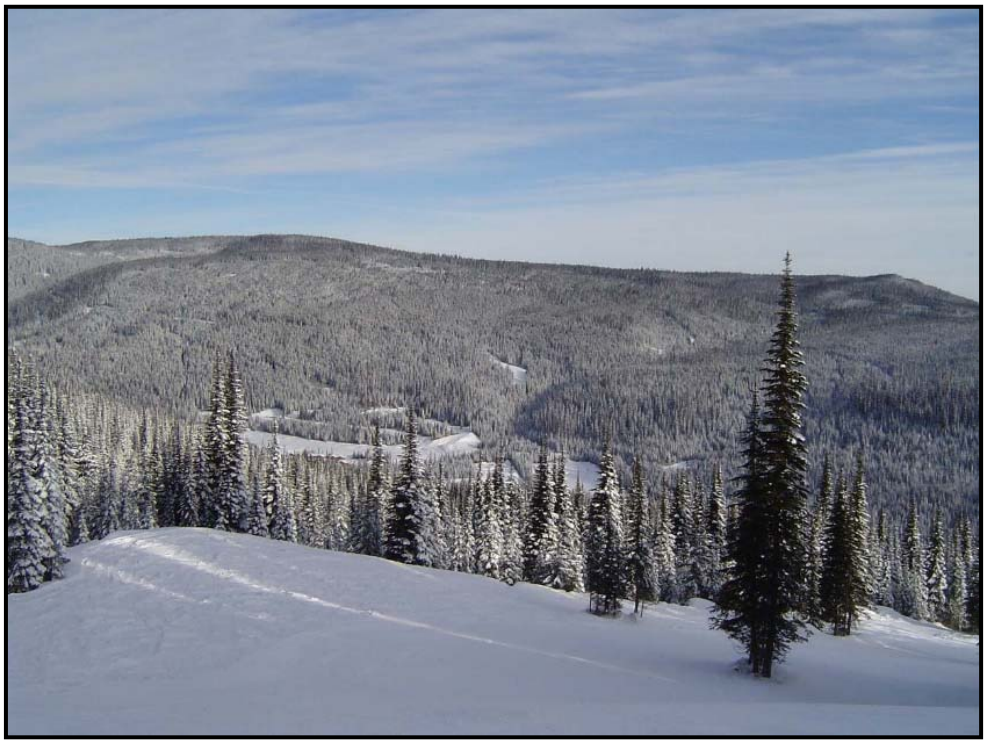
In addition to return cycle skiing, this extended lift will continue to provide ski-in/ski-out access for accommodation near the East Village and very important transport functions between the East Day Visitor Base on the “McGillivray Highlands”, the valley bottom accommodation (including the main Village) and the various parts of the expanded ski area. This lift will have a total vertical rise of 435 metres, a length of 2,125 metres and a ride time of approximately 7.1 minutes. A new mountain restaurant is planned on a knoll at the 1,512-metre elevation. This site has excellent sun exposure and commanding views of Mount Tod, Mount Morrisey and down the valley to the west.

Lift 20a and 20b is an “up-down-up” chair whose main purpose is access to and from the proposed East Day Visitor Base. Skiers moving from the East Base can slide down to the bottom station and ride up to a point where they can then slide down to the Orient or Morrisey chairs. Skiers moving back to the East Base can slide down from the top of the Orient chair and take the lift up to the centre of that base. In addition, novices coming from the East Day Visitor Base lands that intend on using the proposed Lift 24 facilities can ride Lift 20 up to Lift 24 and then use it again on their way back to the East Base.

Lift 24 is a fixed grip quadruple chairlift located on south facing slopes to the east of the Orient chair and to the north of the East Day Visitor Base. This lift and four novice trails are accessible from either Lift 20 or the Orient chair. Skiers eating lunch in the proposed mountain restaurant on the knoll just above this lift, can ski down to it and use it to return to the rest of the ski area. The calculated SCC for this lift is approximately 610 skiers per day. Ride time would be 6.6 minutes at a lift speed of 2.2 m/s and would lengthen to 9.7 minutes if the lift speed is reduced to 1.5 m/s for easier loading for beginners.

Given the many developments to the east, we believe it may be necessary to ultimately remove and replace the Sundance Express chair (Lift 6) with a new detachable six-passenger chairlift with a capacity of 3,200 persons per hour. This may be necessary to stage skiers out of the main Village over to the Orient Express and Morrisey Express zones. We also envision that Lift 2 the Sunburst detachable quad bubble chair will be replaced with a Combi lift with 8-passenger chairs mixed with 10-passenger gondolas (4 chairs for each gondola) for a combined capacity of about 3,200 persons per hour. The timing of the Sunburst replacement will depend upon the longevity of the existing lift which is estimated at 70,000 operating hours and/or the needs of the Resort for more capacity and gondola access to the Sunburst Lodge.

The Mountain Master Plan, Phase 4, as illustrated on Figure 15, will ultimately include a total of twenty-six ski lifts, including one pulse gondola, one 10G/8C Combi lift one detachable grip six-passenger chairlift, four detachable quadruple chairlifts, nine fixed grip quadruple chairlifts, four platter lifts and approximately two beginner moving carpet lifts, with a total combined rated capacity of about 41,186 passengers per hour, producing 11.8 million vertical transport metres per hour (VTM/hr.). The Phase 4 Mountain Master plan lift specifications are listed in Table V.6. The overall Phase 4 SCC will be approximately 14,830 skiers per day.



*Orient Ridge*

The Phase 4 trails are shown on Figure 15 and the Phase 4 ski trail specifications are listed in Table V.7. At completion of Phase 4, there will be 225 trails providing 177.5 kilometres of skiing on 767 hectares of terrain. The overall return skiing trail capacity of 18,104 skiers per day remains higher than the SCC of 14,830 skiers per day, chiefly due to the vast amount of open bowl area and the excess capacity of the existing trails on the Sunburst Chair.

# TABLE V.6
# LIFT SPECIFICATIONS - PHASE 4

| Development Phase | Existing | | | | | | Phase 2b | | Phase 3 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lift Number | 4 | 9 | 10 | 14 | 18A | 18C | 1R | 3R | 5 | 8 | 12 | 15 |
| Lift Name | Village Platter | Elevation | Morrisey Platter | Morrisey Express | Village Carpet | Carpet | Burfield | Crystal | West Bowl | West Morrisey | | Gil's |
| Lift Type | P | 4C | P | D4C | MC | MC | 4C | 4C | D4C | 4C | 4C | D4C |
| Top Elevation m. | 1,309 | 1,862 | 1,347 | 1,674 | 1,285 | 1,268 | 1,844 | 2,082 | 2,090 | 1,677 | 2,070 | 2,100 |
| Bottom Elevation m. | 1,257 | 1,549 | 1,258 | 1,279 | 1,258 | 1,259 | 1,200 | 1,766 | 1,784 | 1,250 | 1,895 | 1,777 |
| Total Vertical m. | 52 | 313 | 89 | 395 | 27 | 9 | 644 | 316 | 306 | 427 | 175 | 323 |
| Horizontal Distance m. | 347 | 1,072 | 420 | 1,791 | 148 | 58 | 1,970 | 959 | 1,524 | 1,420 | 718 | 1,321 |
| Slope Distance m. | 353 | 1,117 | 429 | 1,834 | 150 | 59 | 2,073 | 1,010 | 1,554 | 1,483 | 739 | 1,360 |
| Average Slope % | 15% | 29% | 21% | 22% | 18% | 15% | 33% | 33% | 20% | 30% | 24% | 24% |
| Rated Capacity | 722 | 1,822 | 654 | 2,800 | 800 | 800 | 638 | 2,400 | 2,400 | 2,000 | 2,000 | 2,400 |
| V.T.M./Hr.(000) | 38 | 570 | 58 | 1,106 | 13 | 13 | 411 | 758 | 734 | 854 | 350 | 775 |
| Rope Speed m/sec. | 2.2 | 2.3 | 2.2 | 5.0 | 0.6 | 0.6 | 2.3 | 2.3 | 5.0 | 2.2 | 2.3 | 5.0 |
| Trip Time min. | 2.67 | 8.09 | 3.25 | 6.11 | 4.17 | 1.64 | 15.02 | 7.32 | 5.18 | 11.23 | 5.36 | 4.53 |
| Operating Hr./Day | 7.0 | 6.8 | 7.0 | 7.0 | | | 7.0 | 6.8 | 6.8 | 7.0 | 6.3 | 6.0 |
| V.T.M. Demand/Day | 1,699 | 4,483 | 600 | 3,286 | | | 5,941 | 4,886 | 3,368 | 5,402 | 3,035 | 4,701 |
| Loading Eff. % | 80% | 85% | 80% | 95% | | | 85% | 85% | 95% | 85% | 85% | 95% |
| Access Reduction | 0% | 0% | 10% | 13% | | | 36% | 32% | 16% | 1% | 0% | 8% |
| **SCC Skiers/Day** | **120** | **730** | **120** | **1,960** | **120** | **90** | **150** | **610** | **1,170** | **930** | **610** | **870** |

| Development Phase | Phase 3 | | | Phase 4 | | | Phase 4 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lift Number | 17a | 17b | 19 | 2R | 6R | 7 | 13a | 13b | 16R | 20a | 20b | 24 | |
| Lift Name | McGillivray I | McGillivray II | Headwall Pulse | Sunburst Express | Sundance | Mount Tod | | | Orient Express | | | | |
| Lift Type | 4C | 4C | PG | D8C/10G | D6C | 4C | 4C | 4C | D4C | 4C | 4C | 4C | TOTAL |
| Top Elevation m. | 1,360 | 1,396 | 2,060 | 1,850 | 1,732 | 2,148 | 2,110 | 2,110 | 1,713 | 1,516 | 1,577 | 1,639 | |
| Bottom Elevation m. | 1,303 | 1,303 | 1,850 | 1,256 | 1,257 | 1,976 | 2,050 | 1,982 | 1,278 | 1,474 | 1,474 | 1,506 | |
| Total Vertical m. | 57 | 93 | 210 | 594 | 475 | 172 | 60 | 128 | 435 | 42 | 103 | 133 | 5,578 |
| Horizontal Distance m. | 367 | 490 | 649 | 2,290 | 1,985 | 471 | 267 | 657 | 2,080 | 520 | 525 | 860 | |
| Slope Distance m. | 371 | 499 | 682 | 2,378 | 2,041 | 501 | 274 | 669 | 2,125 | 522 | 535 | 870 | 23,628 |
| Average Slope % | 16% | 19% | 32% | 26% | 24% | 37% | 22% | 19% | 21% | 8% | 20% | 15% | 24% |
| Rated Capacity | 2,400 | 2,400 | 750 | 3,200 | 3,200 | 1,200 | 2,400 | 2,400 | 2,400 | 2,400 | 2,400 | 1,800 | 41,586 |
| V.T.M./Hr.(000) | 137 | 223 | 157 | 1,901 | 1,520 | 206 | 144 | 307 | 1,044 | 101 | 247 | 239 | 11,907 |
| Rope Speed m/sec. | 2.2 | 2.2 | 6.0 | 5.0 | 5.0 | 2.2 | 2.2 | 2.2 | 5.0 | 2.2 | 2.2 | 2.2 | |
| Trip Time min. | 2.81 | 3.78 | 2.30 | 7.93 | 6.80 | 3.80 | 2.07 | 5.07 | 7.08 | 3.95 | 4.05 | 6.59 | |
| Operating Hr./Day | 7.0 | 7.0 | 6.0 | 7.0 | 7.0 | 6.5 | 6.0 | 6.0 | 7.0 | 7.0 | 7.0 | 6.8 | 6.2 |
| V.T.M. Demand/Day | 2,120 | 2,120 | 6,066 | 4,312 | 3,003 | 3,875 | 4,263 | 4,263 | 2,730 | 2,120 | 2,120 | 2,120 | |
| Loading Eff. % | 85% | 85% | 95% | 95% | 90% | 85% | 85% | 85% | 95% | 85% | 85% | 80% | |
| Access Reduction | 100% | 100% | 18% | 24% | 31% | 0% | 8% | 4% | 45% | 100% | 100% | 0% | |
| **SCC Skiers/Day** | **0** | **0** | **120** | **2,230** | **2,190** | **290** | **160** | **350** | **1,400** | **0** | **0** | **610** | **14,830** |

*Note: Rated capacity of two section Lift 17 and Lift 20 only counted once each in totals.*

*Example of Pulse Gondola Lift*

*Example of Combi Lift D8C/D10G*

*Example of 6 Passenger Chairlift*

# TABLE V.7
# TRAIL INVENTORY - PHASE 4

| | | Trail | Skill | Elevation Top | Elevation Bottom | Total Vert. | Horz. Dist. | Slope Dist. | Percent Slope Avg. | Percent Slope Steep. | Avg. Width | Horz. Area | Slope Area | Skiers At Area Density | Skiers At Area Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | No. | Class | Metres | Metres | Metres | Metres | Metres | | | Metres | Ha. | Ha. | | | |
| Lift 1 - Burfield | | | | | | | | | | | | | | | | |
| 7 Mile Road / Lower Expo | 70% area | 1E | 6 | 1,780 | 1,240 | 540 | 3,341 | 3,384 | 16% | 51% | 16 | 5.28 | 3.75 | 15 | 55 | |
| Roller Coaster | | 1K | 7 | 1,695 | 1,500 | 195 | 532 | 567 | 37% | 65% | 28 | 1.51 | 1.61 | 20 | 30 | |
| Upper Expo | | 1L | 7 | 1,780 | 1,455 | 325 | 815 | 877 | 40% | 71% | 42 | 3.43 | 3.69 | 20 | 75 | |
| Challenger | | 1M | 7 | 1,835 | 1,390 | 445 | 1,434 | 1,501 | 31% | 70% | 36 | 5.19 | 5.43 | 12 | 65 | Sparse |
| Lower Munro Ridge | 75% area | 1O | 4 | 1,655 | 1,202 | 453 | 1,863 | 1,917 | 24% | 46% | 37 | 6.87 | 5.30 | 40 | 210 | |
| Freddy's | | 1P | 7 | 1,780 | 1,445 | 335 | 643 | 725 | 52% | 81% | 38 | 2.45 | 2.76 | 4 | 10 | Gladed |
| Westsyde | partial | 1A-I | 3 | 2,065 | 1,990 | 75 | 310 | 319 | 24% | 32% | 23 | 0.71 | 0.12 | 40 | 5 | |
| Round-A-Bout | partial | 1A-II | 3 | 1,900 | 1,785 | 115 | 1,521 | 1,525 | 8% | 29% | 8 | 1.16 | 0.19 | 40 | 10 | |
| Kookamungas | partial | 1B | 6 | 2,075 | 1,970 | 105 | 294 | 312 | 36% | 50% | 63 | 1.86 | 0.32 | 15 | 5 | |
| Sunnyside | partial | 1C | 7 | 2,070 | 1,905 | 165 | 441 | 471 | 37% | 68% | 270 | 11.91 | 2.09 | 4 | 10 | Gladed |
| Toilet Bowl | partial | 1F | 6 | 2,065 | 1,865 | 200 | 921 | 942 | 22% | 48% | 99 | 9.14 | 1.53 | 9 | 15 | Sparse |
| Back Door | partial | 1N | 6 | 2,080 | 1,975 | 105 | 315 | 332 | 33% | 48% | 148 | 4.66 | 0.81 | 3 | 2 | Gladed |
| Mid Mountain | partial | 1Q | 6 | 1,880 | 1,795 | 85 | 590 | 596 | 14% | 48% | 67 | 3.94 | 0.65 | 3 | 2 | Gladed |
| Total Lift 1 | | 13 | | | | | | 13,470 | | | | | 28.25 | | 494 | |
| Lift 2 - Sunburst | | | | | | | | | | | | | | | | |
| Cahilty / Upper 5 Mile | 80% area | 2A | 2 | 1,850 | 1,589 | 261 | 1,395 | 1,419 | 19% | 29% | 55 | 7.63 | 6.21 | 50 | 310 | |
| Lower 5 Mile | 40% Class 2 | 2B | 2 | 1,589 | 1,257 | 332 | 2,070 | 2,096 | 16% | 21% | 48 | 9.95 | 4.03 | 50 | 200 | |
| Lower 5 Mile | 30% Class 3 | 2B | 3 | 1,589 | 1,257 | 332 | 2,070 | 2,096 | 16% | 21% | 48 | 9.95 | 3.02 | 40 | 120 | |
| Lower 5 Mile | 30% Class 6 | 2B | 6 | 1,589 | 1,257 | 332 | 2,070 | 2,096 | 16% | 21% | 48 | 9.95 | 3.02 | 15 | 45 | |
| Distributor | 50% Class 5 | 2E | 5 | 1,820 | 1,690 | 130 | 768 | 779 | 17% | 29% | 30 | 2.33 | 1.18 | 30 | 35 | |
| Distributor | 50% Class 6 | 2E | 6 | 1,820 | 1,690 | 130 | 768 | 779 | 17% | 29% | 30 | 2.33 | 1.18 | 15 | 20 | |
| Bluff | 50% area | 2F | 6 | 1,785 | 1,535 | 250 | 697 | 740 | 36% | 63% | 47 | 3.29 | 1.75 | 15 | 25 | |
| Sting | | 2G | 6 | 1,721 | 1,505 | 216 | 560 | 600 | 39% | 54% | 41 | 2.27 | 2.43 | 15 | 35 | |
| Intimidator | | 2H | 6 | 1,710 | 1,460 | 250 | 617 | 666 | 41% | 61% | 41 | 2.50 | 2.70 | 15 | 40 | |
| 5th Avenue | | 2I | 6 | 1,710 | 1,455 | 255 | 676 | 722 | 38% | 54% | 36 | 2.40 | 2.57 | 15 | 40 | |
| Broadway | | 2J | 6 | 1,665 | 1,315 | 350 | 1,045 | 1,102 | 33% | 52% | 70 | 7.32 | 7.72 | 15 | 115 | |
| Exhibition | | 2K | 5 | 1,850 | 1,265 | 585 | 2,231 | 2,306 | 26% | 47% | 60 | 13.29 | 13.74 | 30 | 410 | |
| Cruiser | | 2L | 4 | 1,810 | 1,270 | 540 | 1,894 | 1,969 | 29% | 44% | 51 | 9.75 | 10.14 | 40 | 405 | |
| Upper Munro Ridge / Blazer | | 2M | 4 | 1,848 | 1,282 | 566 | 2,090 | 2,165 | 27% | 42% | 36 | 7.58 | 7.85 | 40 | 315 | |
| Runaway Lane | | 2N | 5 | 1,575 | 1,300 | 275 | 789 | 836 | 35% | 49% | 28 | 2.20 | 2.33 | 30 | 70 | |
| Tighten Yer Boots | | 2O | 6 | 1,540 | 1,305 | 235 | 880 | 911 | 27% | 63% | 26 | 2.32 | 2.40 | 3 | 5 | Gladed |
| | | 2P | 5 | 1,758 | 1,730 | 28 | 135 | 138 | 21% | 35% | 21 | 0.28 | 0.29 | 30 | 10 | |
| U. Munro/L. Trans Canada | 30% area | 2R | 4 | 1,828 | 1,772 | 56 | 310 | 315 | 18% | 24% | 24 | 0.75 | 0.23 | 40 | 10 | |
| Cariboo Glades | 50% area | 2U | 7 | 1,820 | 1,560 | 260 | 844 | 883 | 31% | 57% | 107 | 9.01 | 4.72 | 4 | 20 | Gladed |
| Bluff Glades | | 2V | 7 | 1,785 | 1,540 | 245 | 724 | 764 | 34% | 57% | 142 | 10.31 | 10.88 | 4 | 45 | Gladed |
| Cruiser Glades | | 2X | 7 | 1,725 | 1,365 | 360 | 1,066 | 1,125 | 34% | 50% | 123 | 13.14 | 13.87 | 4 | 55 | Gladed |
| Blazer Glades | | 2Y | 6 | 1,600 | 1,350 | 250 | 667 | 712 | 37% | 44% | 146 | 9.72 | 10.38 | 3 | 30 | Gladed |
| Runaway Lane Glades | | 2Z | 7 | 1,555 | 1,335 | 220 | 588 | 628 | 37% | 60% | 195 | 11.47 | 12.25 | 4 | 50 | Gladed |
| Lower Munro Ridge | 25% area | 1O | 4 | 1,655 | 1,202 | 453 | 1,863 | 1,917 | 24% | 46% | 37 | 6.87 | 1.77 | 40 | 70 | |
| Chute | 40% area | 3I | 7 | 2,040 | 1,780 | 260 | 676 | 724 | 38% | 67% | 67 | 4.50 | 1.93 | 20 | 40 | |
| Spillway | 40% area | 3J | 6 | 2,058 | 1,770 | 288 | 1,139 | 1,175 | 25% | 53% | 36 | 4.05 | 1.67 | 15 | 25 | |
| Last Chance | 40% area | 3K | 5 | 1,970 | 1,845 | 125 | 439 | 456 | 28% | 46% | 44 | 1.94 | 0.81 | 30 | 25 | |
| Mid 5 Mile | 40% area | 3L | 2 | 2,059 | 1,755 | 304 | 2,066 | 2,088 | 15% | 16% | 20 | 4.14 | 1.67 | 50 | 85 | |
| Pink Flamingos | 40% area | 3N | 7 | 1,965 | 1,865 | 100 | 247 | 266 | 40% | 70% | 139 | 3.44 | 1.48 | 4 | 5 | Gladed |
| The Other Way | 15% area | 3Q | 3 | 1,840 | 1,600 | 240 | 1,480 | 1,499 | 16% | 25% | 21 | 3.04 | 0.46 | 40 | 20 | |
| The Other Way | 20% area | 3Q | 6 | 1,840 | 1,600 | 240 | 1,480 | 1,499 | 16% | 25% | 21 | 3.04 | 0.62 | 15 | 10 | |
| White Rabbit | 40% area | 3R | 6 | 1,920 | 1,805 | 115 | 719 | 728 | 16% | 41% | 41 | 2.95 | 1.20 | 9 | 10 | Sparse |
| Rice Bowl | 40% area | 3S | 6 | 2,010 | 1,970 | 40 | 125 | 131 | 32% | 45% | 65 | 0.81 | 0.34 | 9 | 5 | Sparse |
| Crystal Lane | 30% area | 3V | 4 | 1,850 | 1,767 | 83 | 511 | 518 | 16% | 20% | 35 | 1.81 | 0.55 | 40 | 20 | |
| Chillway Glades | 40% area | 3CC | 7 | 2,040 | 1,760 | 280 | 838 | 884 | 33% | 63% | 104 | 8.73 | 3.68 | 4 | 15 | Gladed |
| | | C | 2 | 1,537 | 1,508 | 29 | 190 | 192 | 15% | 15% | 15 | 0.28 | 0.28 | 50 | 15 | |
| Shortcut | | 4 | 4 | 1,635 | 1,535 | 100 | 612 | 620 | 16% | 17% | 5 | 0.29 | 0.29 | 40 | 10 | |
| | | 5 | 2 | 1,300 | 1,280 | 20 | 107 | 109 | 19% | 19% | 32 | 0.34 | 0.35 | 50 | 20 | |
| Total Lift 2R | | 23 (not including partial 2B, 2E or 1's & 3's) | | | | | | 21,800 (not including partial 2B, 2E or 1's & 3's) | | | | | 141.99 | | 2,785 | |

# TABLE V.7 CONT.
# TRAIL INVENTORY - PHASE 4

| | | Trail No. | Skill Class | Elevation Top Metres | Elevation Bottom Metres | Total Vert. Metres | Horz. Dist. Metres | Slope Dist. Metres | Percent Slope Avg. | Percent Slope Steep. | Avg. Width Metres | Horz. Area Ha. | Slope Area Ha. | Skiers At Area Density | Skiers At Area Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lift 3 - Crystal | | | | | | | | | | | | | | | | |
| Crystal Run | | 3A | 4 | 2,075 | 1,767 | 308 | 1,458 | 1,490 | 21% | 33% | 32 | 4.71 | 4.81 | 8 | 40 | Open Bowl |
| Crystal Bowl - West | | 3B | 6 | 2,050 | 1,920 | 130 | 368 | 390 | 35% | 53% | 127 | 4.69 | 4.97 | 3 | 15 | Open Bowl |
| Crystal Bowl - East | | 3C | 5 | 2,050 | 1,935 | 115 | 349 | 367 | 33% | 45% | 68 | 2.39 | 2.52 | 6 | 15 | Open Bowl |
| Blue Line | | 3D | 4 | 2,045 | 1,910 | 135 | 507 | 525 | 27% | 42% | 40 | 2.03 | 2.10 | 40 | 85 | |
| East Bushwhacker | | 3E | 5 | 1,905 | 1,820 | 85 | 244 | 258 | 35% | 48% | 66 | 1.62 | 1.72 | 30 | 50 | |
| Sacred Face / Headwalls | | 3F | 7 | 2,025 | 1,890 | 135 | 263 | 296 | 51% | 68% | 195 | 5.14 | 5.78 | 12 | 70 | Sparse |
| Lunch Time | | 3G | 4 | 1,925 | 1,840 | 85 | 576 | 582 | 15% | 29% | 31 | 1.81 | 1.83 | 40 | 75 | |
| Hat Trick / Green Door | | 3H | 6 | 2,040 | 1,855 | 185 | 436 | 474 | 42% | 61% | 148 | 6.46 | 7.02 | 9 | 65 | Sparse |
| Chute | 40% area | 3I | 7 | 2,040 | 1,780 | 260 | 676 | 724 | 38% | 67% | 67 | 4.50 | 1.93 | 20 | 40 | |
| Spillway | 40% area | 3J | 6 | 2,058 | 1,770 | 288 | 1,139 | 1,175 | 25% | 53% | 36 | 4.05 | 1.67 | 15 | 25 | |
| Last Chance | 40% area | 3K | 5 | 1,970 | 1,845 | 125 | 439 | 456 | 28% | 46% | 44 | 1.94 | 0.81 | 30 | 25 | |
| Mid 5 Mile | 40% area | 3L | 2 | 2,080 | 1,755 | 325 | 2,238 | 2,261 | 15% | 16% | 20 | 4.45 | 1.80 | 50 | 90 | |
| Ralph's Reach / Highway 22 | | 3M | 4 | 1,955 | 1,800 | 155 | 550 | 571 | 28% | 45% | 57 | 3.16 | 3.28 | 24 | 80 | Sparse |
| Pink Flamingos | 40% area | 3N | 7 | 1,965 | 1,865 | 100 | 247 | 266 | 40% | 70% | 139 | 3.44 | 1.48 | 4 | 5 | Gladed |
| Highway 22A | | 3O | 4 | 1,980 | 1,895 | 85 | 270 | 283 | 31% | 43% | 49 | 1.33 | 1.39 | 8 | 10 | Open Bowl |
| | | 3P | 6 | 1,845 | 1,825 | 20 | 125 | 127 | 16% | 16% | 23 | 0.29 | 0.29 | 15 | 5 | |
| The Other Way | 15% area | 3Q | 3 | 1,840 | 1,600 | 240 | 1,480 | 1,499 | 16% | 25% | 21 | 3.04 | 0.46 | 40 | 20 | |
| The Other Way | 35% area | 3Q | 6 | 1,840 | 1,600 | 240 | 1,480 | 1,499 | 16% | 25% | 21 | 3.04 | 1.08 | 15 | 15 | |
| White Rabbit | 40% area | 3R | 6 | 1,920 | 1,805 | 115 | 719 | 728 | 16% | 41% | 41 | 2.95 | 1.20 | 9 | 10 | Sparse |
| Rice Bowl | 40% area | 3S | 6 | 2,010 | 1,970 | 40 | 125 | 131 | 32% | 45% | 65 | 0.81 | 0.34 | 9 | 5 | Sparse |
| Hotshot | | 3T | 4 | 1,925 | 1,770 | 155 | 500 | 523 | 31% | 45% | 65 | 3.25 | 3.40 | 40 | 135 | |
| West Bushwhacker | | 3U | 4 | 1,915 | 1,800 | 115 | 303 | 324 | 38% | 40% | 66 | 1.99 | 2.13 | 40 | 85 | |
| Crystal Lane | 10% Class 2 | 3V | 2 | 1,850 | 1,767 | 83 | 511 | 518 | 16% | 20% | 35 | 1.81 | 0.18 | 50 | 10 | |
| Crystal Lane | 30% Class 5 | 3V | 5 | 1,850 | 1,767 | 83 | 511 | 518 | 16% | 20% | 35 | 1.81 | 0.55 | 30 | 15 | |
| Crystal Lane | 30% Class 6 | 3V | 6 | 1,850 | 1,767 | 83 | 511 | 518 | 16% | 20% | 35 | 1.81 | 0.55 | 15 | 10 | |
| Crystal Glades I | | 3W | 5 | 1,875 | 1,830 | 45 | 138 | 145 | 33% | 39% | 83 | 1.15 | 1.21 | 6 | 5 | Gladed |
| Crystal Glades II | | 3X | 5 | 1,885 | 1,805 | 80 | 335 | 344 | 24% | 38% | 61 | 2.04 | 2.10 | 6 | 15 | Gladed |
| Crystal Glades III | | 3Y | 5 | 1,865 | 1,775 | 90 | 287 | 301 | 31% | 36% | 82 | 2.36 | 2.47 | 6 | 15 | Gladed |
| Bushwhacker Glades I | | 3Z | 5 | 1,850 | 1,770 | 80 | 264 | 276 | 30% | 31% | 75 | 1.99 | 2.08 | 6 | 10 | Gladed |
| Bushwhacker Glades II | | 3AA | 5 | 1,900 | 1,810 | 90 | 244 | 260 | 37% | 41% | 66 | 1.62 | 1.73 | 6 | 10 | Gladed |
| Bushwhacker Glades III | | 3BB | 5 | 1,900 | 1,830 | 70 | 241 | 251 | 29% | 40% | 76 | 1.84 | 1.92 | 6 | 10 | Gladed |
| Chillway Glades | 40% area | 3CC | 7 | 2,040 | 1,760 | 280 | 838 | 884 | 33% | 63% | 104 | 8.73 | 3.68 | 4 | 15 | Gladed |
| U. Munro Ridge / L. Trans Ca | 10% Class 2 | 2R | 2 | 1,830 | 1,770 | 60 | 311 | 317 | 19% | 20% | 24 | 0.75 | 0.08 | 50 | 5 | |
| U. Munro Ridge / L. Trans Ca | 30% Class 5 | 2R | 5 | 1,830 | 1,770 | 60 | 311 | 317 | 19% | 20% | 24 | 0.75 | 0.23 | 30 | 5 | |
| U. Munro Ridge / L. Trans Ca | 30% Class 6 | 2R | 6 | 1,830 | 1,770 | 60 | 311 | 317 | 19% | 20% | 24 | 0.75 | 0.23 | 15 | 5 | |
| Westsyde | partial | 1A-I | 3 | 2,065 | 1,990 | 75 | 310 | 319 | 24% | 32% | 23 | 0.71 | 0.61 | 40 | 25 | |
| Round-A-Bout | partial | 1A-II | 3 | 1,900 | 1,785 | 115 | 1,521 | 1,525 | 8% | 29% | 8 | 1.16 | 0.97 | 40 | 40 | |
| Kookamungas | partial | 1B | 6 | 2,075 | 1,970 | 105 | 294 | 312 | 36% | 50% | 63 | 1.86 | 1.66 | 15 | 25 | |
| Sunnyside | partial | 1C | 7 | 2,070 | 1,905 | 165 | 441 | 471 | 37% | 68% | 270 | 11.91 | 10.63 | 4 | 45 | Gladed |
| 7 Mile Road / Lower Expo | 30% area | 1E | 6 | 1,780 | 1,240 | 540 | 3,341 | 3,384 | 16% | 51% | 16 | 5.28 | 1.61 | 15 | 25 | |
| Toilet Bowl | partial | 1F | 6 | 2,065 | 1,865 | 200 | 921 | 942 | 22% | 48% | 99 | 9.14 | 7.82 | 9 | 70 | Sparse |
| Nose of the Chief | partial | 1G | 6 | 1,995 | 1,825 | 170 | 607 | 630 | 28% | 51% | 68 | 4.10 | 3.56 | 9 | 30 | Sparse |
| Chief Shoulder | | 1H | 6 | 2,080 | 1,780 | 300 | 1,434 | 1,465 | 21% | 54% | 71 | 10.18 | 10.40 | 3 | 30 | Open Bowl |
| Chief | | 1I | 6 | 2,070 | 2,015 | 55 | 125 | 137 | 44% | 55% | 318 | 3.97 | 4.34 | 3 | 15 | Open Bowl |
| Back Door | partial | 1N | 6 | 2,080 | 1,975 | 105 | 315 | 332 | 33% | 48% | 148 | 4.66 | 4.10 | 3 | 10 | Gladed |
| Mid Mountain | partial | 1Q | 6 | 1,880 | 1,795 | 85 | 590 | 596 | 14% | 48% | 67 | 3.94 | 3.33 | 3 | 10 | Gladed |
| Mid-Burfield to Crystal | | 6 | 4 | 1,780 | 1,770 | 10 | 615 | 615 | 2% | 2% | 6 | 0.34 | 0.34 | 40 | 15 | 0 |
| Total Lift 3 | | 30 | (not incl. partial 3Q, 3V or part. 1's & 3's) | | | | | 17,047 | (not incl. partial 3Q, 3V or part. 1's & 3's) | | | 118.37 | | | 1,435 | |
| Lift 4 - Village Platter | | | | | | | | | | | | | | | | |
| Sunbeam | | 4A | 2 | 1,308 | 1,258 | 50 | 319 | 323 | 16% | 23% | 46 | 1.46 | 1.48 | 50 | 75 | |
| Gentle Giant | | 4B | 1 | 1,308 | 1,258 | 50 | 587 | 589 | 9% | 9% | 17 | 1.00 | 1.00 | 50 | 50 | |
| Cowabunga | | 4C | 2 | 1,300 | 1,275 | 25 | 144 | 146 | 17% | 20% | 19 | 0.28 | 0.28 | 50 | 15 | |
| Total Lift 4R | | 3 | | | | | | 1,058 | | | | | 2.76 | | 140 | |

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# TABLE V.7 CONT.
# TRAIL INVENTORY
# PHASE 4

| | | Trail No. | Skill Class | Elevation Top Metres | Elevation Bottom Metres | Total Vert. Metres | Horz. Dist. Metres | Slope Dist. Metres | Percent Slope Avg. | Percent Slope Steep. | Avg. Width Metres | Horz. Area Ha. | Slope Area Ha. | Skiers At Area Density | Skiers At Area Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lift 5 - West Bowl | | | | | | | | | | | | | | | | |
| | | 5A | 3 | 2,088 | 1,805 | 283 | 1,802 | 1,824 | 16% | 36% | 24 | 4.34 | 4.39 | 40 | 175 | |
| | | 5B | 4 | 2,000 | 1,815 | 185 | 737 | 760 | 25% | 37% | 94 | 6.91 | 7.12 | 40 | 285 | |
| | | 5C | 4 | 2,015 | 1,890 | 125 | 471 | 487 | 27% | 44% | 77 | 3.63 | 3.76 | 40 | 150 | |
| | | 5D | 4 | 2,025 | 1,955 | 70 | 359 | 366 | 19% | 28% | 102 | 3.65 | 3.72 | 40 | 150 | |
| | | 5E | 3 | 2,088 | 1,975 | 113 | 599 | 610 | 19% | 29% | 39 | 2.31 | 2.35 | 40 | 95 | |
| | | 5F | 3 | 2,085 | 1,780 | 305 | 1,655 | 1,683 | 18% | 36% | 29 | 4.81 | 4.89 | 40 | 195 | |
| | | 5G | 3 | 1,855 | 1,790 | 65 | 301 | 308 | 22% | 35% | 31 | 0.93 | 0.95 | 40 | 40 | |
| Father Tom's | | 1D | 6 | 1,870 | 1,820 | 50 | 148 | 156 | 34% | 41% | 91 | 1.35 | 1.42 | 9 | 15 | Sparse |
| Total Lift 5 | | 8 | | | | | | 6,194 | | | | | 28.60 | | 1,105 | |
| Lift 6 - Sundance | | | | | | | | | | | | | | | | |
| Lower Homesteader | | 6A | 2 | 1,610 | 1,258 | 352 | 2,177 | 2,205 | 16% | 22% | 34 | 7.40 | 7.50 | 50 | 375 | |
| Sunseeker | | 6C | 3 | 1,525 | 1,258 | 267 | 1,132 | 1,163 | 24% | 34% | 73 | 8.27 | 8.50 | 40 | 340 | |
| Lower Terrain Park | | 6D | 3 | 1,420 | 1,285 | 135 | 527 | 544 | 26% | 34% | 52 | 2.73 | 2.82 | 40 | 115 | |
| Lower Sundance | | 6E | 3 | 1,545 | 1,300 | 245 | 884 | 917 | 28% | 33% | 68 | 6.03 | 6.26 | 40 | 250 | |
| Upper Sundance / Sunrise | | 6F | 4 | 1,550 | 1,345 | 205 | 690 | 720 | 30% | 38% | 59 | 4.07 | 4.25 | 40 | 170 | |
| Upper Homesteader | | 6G | 2 | 1,730 | 1,590 | 140 | 1,564 | 1,570 | 9% | 10% | 11 | 1.67 | 1.68 | 50 | 85 | |
| Grannie Greene's | | 6H | 3 | 1,730 | 1,465 | 265 | 1,061 | 1,094 | 25% | 33% | 47 | 5.01 | 5.16 | 40 | 205 | |
| Sundowner | | 6L | 3 | 1,730 | 1,355 | 375 | 1,577 | 1,621 | 24% | 33% | 56 | 8.80 | 9.05 | 40 | 360 | |
| | | 6M | 4 | 1,730 | 1,550 | 180 | 845 | 864 | 21% | 41% | 40 | 3.37 | 3.45 | 40 | 140 | |
| Peak-A-Boo | | 6N | 5 | 1,715 | 1,465 | 250 | 802 | 840 | 31% | 41% | 28 | 2.26 | 2.37 | 30 | 70 | |
| Upper Three Bears | | 6P | 4 | 1,695 | 1,565 | 130 | 525 | 541 | 25% | 35% | 65 | 3.39 | 3.49 | 8 | 30 | Gladed |
| Lower Three Bears | | 6Q | 4 | 1,575 | 1,410 | 165 | 601 | 623 | 27% | 40% | 29 | 1.72 | 1.78 | 40 | 70 | |
| Grannie Greene's Glades | | 6B | 4 | 1,725 | 1,540 | 185 | 702 | 726 | 26% | 35% | 255 | 17.90 | 18.51 | 8 | 150 | Gladed |
| | | 6T | 4 | 1,695 | 1,505 | 190 | 744 | 768 | 26% | 35% | 17 | 1.25 | 1.29 | 40 | 50 | |
| | | 6Z-I | 4 | 1,675 | 1,510 | 165 | 638 | 659 | 26% | 35% | 252 | 16.07 | 16.60 | 8 | 135 | Gladed |
| Lonesome Fir Glades | | 6Z-II | 4 | 1,710 | 1,465 | 245 | 975 | 1,005 | 25% | 34% | 129 | 12.58 | 12.97 | 8 | 105 | Gladed |
| Rambler | | 6U | 2 | 1,730 | 1,342 | 388 | 2,495 | 2,525 | 16% | 26% | 20 | 5.08 | 5.14 | 50 | 255 | |
| Lower Rambler | 50% Class 2 | 6V | 2 | 1,342 | 1,258 | 84 | 565 | 571 | 15% | 19% | 43 | 2.45 | 2.48 | 50 | 125 | |
| Lower Rambler | 50% Class 4 | 6V | 4 | 1,342 | 1,258 | 84 | 565 | 571 | 15% | 19% | 43 | 2.45 | 2.48 | 40 | 100 | |
| Lone Fir West | | 6W | 3 | 1,650 | 1,530 | 120 | 639 | 650 | 19% | 26% | 18 | 1.17 | 1.19 | 40 | 50 | |
| Home Instead | | 6X | 2 | 1,430 | 1,370 | 60 | 388 | 393 | 15% | 23% | 19 | 0.74 | 0.75 | 50 | 40 | |
| Bug Out Glades | | 6Y | 4 | 1,725 | 1,475 | 250 | 939 | 972 | 27% | 42% | 233 | 21.92 | 22.68 | 8 | 180 | Gladed |
| Total Lift 6 | | 21 | (not including partial 6V) | | | | | 20,971 | (not including partial 6V) | | | | 140.40 | | 3,400 | |
| Lift 7 - Mount Tod | | | | | | | | | | | | | | | | |
| | | 7A | 6 | 2,146 | 1,980 | 166 | 578 | 601 | 29% | 53% | 26 | 1.52 | 1.58 | 15 | 25 | |
| | | 7B | 6 | 2,140 | 1,978 | 162 | 508 | 533 | 32% | 53% | 33 | 1.68 | 1.76 | 15 | 25 | |
| | | 7C | 4 | 2,145 | 1,980 | 165 | 504 | 530 | 33% | 43% | 35 | 1.76 | 1.85 | 40 | 75 | |
| | | 7D | 4 | 2,095 | 1,980 | 115 | 374 | 391 | 31% | 41% | 34 | 1.29 | 1.35 | 40 | 55 | |
| | | 7E | 3 | 2,146 | 1,978 | 168 | 813 | 830 | 21% | 33% | 26 | 2.10 | 2.14 | 40 | 85 | |
| Total Lift 7 | | 5 | | | | | | 2,886 | | | | | 8.68 | | 265 | |
| Lift 8 - Lower Morrisey | | | | | | | | | | | | | | | | |
| Upper In-Tatters | | 8B-I | 6 | 1,580 | 1,450 | 130 | 537 | 553 | 24% | 60% | 32 | 1.70 | 1.75 | 15 | 25 | |
| Lower In-Tatters | | 8B-II | 7 | 1,445 | 1,280 | 165 | 342 | 380 | 48% | 70% | 44 | 1.52 | 1.69 | 20 | 35 | |
| Upper Wringer | | 8C-I | 6 | 1,620 | 1,470 | 150 | 570 | 589 | 26% | 44% | 30 | 1.71 | 1.77 | 15 | 25 | |
| Lower Wringer | | 8C-II | 6 | 1,460 | 1,265 | 195 | 400 | 445 | 49% | 54% | 57 | 2.28 | 2.54 | 15 | 40 | |
| Upper Tumble Dry | | 8F | 6 | 1,670 | 1,530 | 140 | 794 | 806 | 18% | 39% | 32 | 2.57 | 2.61 | 15 | 40 | |
| Lint Trap | | 8G-I | 6 | 1,660 | 1,520 | 140 | 842 | 854 | 17% | 27% | 26 | 2.20 | 2.23 | 15 | 35 | |
| Lower Tumble Dry | | 8G-II | 6 | 1,520 | 1,265 | 255 | 781 | 822 | 33% | 50% | 40 | 3.11 | 3.27 | 15 | 50 | |
| | | 8H-1 | 6 | 1,675 | 1,640 | 35 | 355 | 357 | 10% | 12% | 28 | 1.00 | 1.00 | 15 | 15 | |
| | | 8H-2 | 6 | 1,635 | 1,305 | 330 | 973 | 1,027 | 34% | 53% | 42 | 4.11 | 4.34 | 15 | 65 | |
| | | 8I | 6 | 1,355 | 1,290 | 65 | 309 | 316 | 21% | 51% | 34 | 1.05 | 1.07 | 15 | 15 | |
| | | 8J | 6 | 1,475 | 1,265 | 210 | 487 | 530 | 43% | 51% | 39 | 1.91 | 2.08 | 15 | 30 | |
| | | 8K | 6 | 1,590 | 1,345 | 245 | 622 | 669 | 39% | 59% | 45 | 2.81 | 3.02 | 15 | 45 | |
| | | H-1 | 4 | 1,675 | 1,330 | 345 | 2,281 | 2,307 | 15% | 39% | 14 | 3.29 | 3.33 | 40 | 135 | |
| | | M | 4 | 1,330 | 1,252 | 78 | 471 | 477 | 17% | 25% | 31 | 1.48 | 1.50 | 40 | 60 | |
| | | 1 | 6 | 1,520 | 1,420 | 100 | 703 | 710 | 14% | 15% | 7 | 0.51 | 0.52 | 15 | 10 | |
| Total Lift 8 | | 15 | | | | | | 10,841 | | | | | 32.72 | | 625 | |

# TABLE V.7 CONT.
# TRAIL INVENTORY - PHASE 4

| | | Trail No. | Skill Class | Elevation Top Metres | Elevation Bottom Metres | Total Vert. Metres | Horz. Dist. Metres | Slope Dist. Metres | Percent Slope Avg. | Percent Slope Steep. | Avg. Width Metres | Horz. Area Ha. | Slope Area Ha. | Skiers At Area Density | Skiers At Area Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lift 9 - Spillway | | | | | | | | | | | | | | | | |
| Cariboo | | 9A | 6 | 1,835 | 1,550 | 285 | 981 | 1,022 | 29% | 59% | 55 | 5.41 | 5.63 | 15 | 85 | |
| Coquihalla Glades | | 9B | 6 | 1,795 | 1,580 | 215 | 718 | 749 | 30% | 54% | 118 | 8.47 | 8.84 | 3 | 25 | Gladed |
| OSV | | 9C | 4 | 1,845 | 1,570 | 275 | 1,047 | 1,083 | 26% | 39% | 61 | 6.37 | 6.59 | 40 | 265 | |
| Cahilty Glades | | 9D | 5 | 1,835 | 1,660 | 175 | 597 | 622 | 29% | 45% | 177 | 10.59 | 11.04 | 6 | 65 | Gladed |
| Coquihalla | | 9E | 5 | 1,850 | 1,765 | 85 | 340 | 350 | 25% | 38% | 55 | 1.86 | 1.92 | 30 | 60 | |
| Hully Gully | | 9F | 4 | 1,750 | 1,655 | 95 | 469 | 479 | 20% | 30% | 23 | 1.09 | 1.11 | 40 | 45 | |
| Cahilty / Upper 5 Mile | 20% area | 2A | 2 | 1,850 | 1,589 | 261 | 1,395 | 1,419 | 19% | 29% | 55 | 7.63 | 1.55 | 50 | 80 | |
| Bluff | 50% area | 2F | 6 | 1,785 | 1,535 | 250 | 697 | 740 | 36% | 63% | 47 | 3.29 | 1.75 | 15 | 25 | |
| Cariboo Glades | 50% area | 2U | 7 | 1,820 | 1,560 | 260 | 844 | 883 | 31% | 57% | 107 | 9.01 | 4.72 | 4 | 20 | Gladed |
| Chute | 20% area | 3I | 7 | 2,040 | 1,780 | 260 | 676 | 724 | 38% | 67% | 67 | 4.50 | 0.96 | 20 | 20 | |
| Spillway | 20% area | 3J | 6 | 2,058 | 1,770 | 288 | 1,139 | 1,175 | 25% | 53% | 36 | 4.05 | 0.84 | 15 | 15 | |
| Last Chance | 20% area | 3K | 5 | 1,970 | 1,845 | 125 | 439 | 456 | 28% | 46% | 44 | 1.94 | 0.40 | 30 | 10 | |
| Mid 5 Mile | 20% area | 3L | 2 | 2,059 | 1,755 | 304 | 2,066 | 2,088 | 15% | 16% | 20 | 4.14 | 0.84 | 50 | 40 | |
| Pink Flamingos | 20% area | 3N | 7 | 1,965 | 1,865 | 100 | 247 | 266 | 40% | 70% | 139 | 3.44 | 0.74 | 4 | 5 | Gladed |
| The Other Way | 5% area | 3Q | 3 | 1,840 | 1,600 | 240 | 1,480 | 1,499 | 16% | 25% | 21 | 3.04 | 0.15 | 40 | 5 | |
| The Other Way | 10% area | 3Q | 6 | 1,840 | 1,600 | 240 | 1,480 | 1,499 | 16% | 25% | 21 | 3.04 | 0.31 | 15 | 5 | |
| White Rabbit | 20% area | 3R | 6 | 1,920 | 1,805 | 115 | 719 | 728 | 16% | 41% | 41 | 2.95 | 0.60 | 9 | 5 | Sparse |
| Rice Bowl | 20% area | 3S | 6 | 2,010 | 1,970 | 40 | 125 | 131 | 32% | 45% | 65 | 0.81 | 0.17 | 9 | 0 | Sparse |
| Chillway Glades | 20% area | 3CC | 7 | 2,040 | 1,760 | 280 | 838 | 884 | 33% | 63% | 104 | 8.73 | 1.84 | 4 | 5 | Gladed |
| Total Lift 9 | | 6 (not including partials) | | | | | | 4,305 (not including partials) | | | | | 50.00 | | 780 | |
| Lift 10 - Morrisey Platter | | | | | | | | | | | | | | | | |
| Downtown | | 10A | 1 | 1,285 | 1,260 | 25 | 207 | 209 | 12% | 13% | 27 | 0.55 | 0.55 | 50 | 30 | |
| Lower Grand Return | | 10B | 3 | 1,345 | 1,260 | 85 | 370 | 380 | 23% | 37% | 24 | 0.88 | 0.90 | 40 | 35 | |
| Total Lift 10 | | 2 | | | | | | 588 | | | | | 1.45 | | 65 | |
| Lift 12 | | | | | | | | | | | | | | | | |
| | | 12A | 4 | 2,040 | 1,905 | 135 | 568 | 584 | 24% | 45% | 31 | 1.76 | 1.81 | 40 | 70 | |
| | | 12B | 3 | 2,068 | 1,965 | 103 | 600 | 609 | 17% | 30% | 28 | 1.68 | 1.70 | 40 | 70 | |
| | | 12C | 3 | 2,068 | 1,975 | 93 | 363 | 375 | 26% | 38% | 34 | 1.22 | 1.26 | 40 | 50 | |
| | | 12D | 3 | 2,068 | 1,900 | 168 | 1,014 | 1,028 | 17% | 28% | 30 | 3.09 | 3.13 | 40 | 125 | |
| Total Lift 12 | | 4 | | | | | | 2,595 | | | | | 7.90 | | 315 | |
| Lift 13a - Mount Tod | | | | | | | | | | | | | | | | |
| | | 13A | 3 | 2,108 | 2,052 | 56 | 257 | 263 | 22% | 25% | 21 | 0.53 | 0.54 | 40 | 20 | |
| | | 13B | 5 | 2,085 | 2,050 | 35 | 158 | 162 | 22% | 48% | 71 | 1.12 | 1.15 | 30 | 35 | |
| Total Lift 13a | | 2 | | | | | | 425 | | | | | 1.69 | | 55 | |
| Lift 13b | | | | | | | | | | | | | | | | |
| | | 13C | 4 | 2,108 | 1,985 | 123 | 695 | 706 | 18% | 37% | 25 | 1.76 | 1.79 | 40 | 70 | |
| | | 13D | 4 | 2,108 | 1,985 | 123 | 737 | 747 | 17% | 41% | 28 | 2.03 | 2.06 | 40 | 80 | |
| | | 13E | 4 | 2,090 | 2,005 | 85 | 297 | 309 | 29% | 49% | 26 | 0.77 | 0.80 | 40 | 30 | |
| | | 13F | 4 | 2,055 | 2,005 | 50 | 193 | 199 | 26% | 32% | 31 | 0.59 | 0.61 | 40 | 25 | |
| Total Lift 13b | | 4 | | | | | | 1,961 | | | | | 5.26 | | 205 | |
| Lift 14 - Morrisey Express | | | | | | | | | | | | | | | | |
| Mid-Life Crisis | | 14A | 3 | 1,672 | 1,305 | 367 | 1,644 | 1,684 | 22% | 35% | 41 | 6.71 | 6.88 | 24 | 165 | Sparse |
| Upper Showboat | | 14B | 3 | 1,615 | 1,540 | 75 | 487 | 493 | 15% | 17% | 21 | 1.01 | 1.02 | 40 | 40 | |
| Lower Showboat | | 14C | 3 | 1,525 | 1,285 | 240 | 867 | 900 | 28% | 33% | 37 | 3.22 | 3.34 | 40 | 135 | |
| C.C. Riders | | 14D | 3 | 1,655 | 1,525 | 130 | 803 | 813 | 16% | 25% | 37 | 2.97 | 3.01 | 24 | 70 | Sparse |
| Telly Gram | | 14E | 3 | 1,560 | 1,285 | 275 | 1,076 | 1,111 | 26% | 33% | 33 | 3.58 | 3.70 | 40 | 150 | |
| Still Smokin East | | 14F-I | 5 | 1,670 | 1,350 | 320 | 1,608 | 1,640 | 20% | 46% | 32 | 5.08 | 5.18 | 30 | 155 | |
| Still Smokin West | | 14F-II | 5 | 1,545 | 1,440 | 105 | 436 | 448 | 24% | 30% | 18 | 0.80 | 0.82 | 30 | 25 | |
| Upper Home Run | | 14G | 5 | 1,580 | 1,565 | 15 | 164 | 165 | 9% | 10% | 15 | 0.24 | 0.24 | 30 | 5 | |
| I'Dunno | | 14H | 3 | 1,655 | 1,300 | 355 | 1,823 | 1,857 | 19% | 31% | 34 | 6.16 | 6.28 | 24 | 150 | Sparse |
| Shiner | | 14I | 3 | 1,450 | 1,340 | 110 | 543 | 554 | 20% | 22% | 31 | 1.69 | 1.72 | 40 | 70 | |
| Out of the Woods | | 14J | 3 | 1,550 | 1,370 | 180 | 796 | 816 | 23% | 34% | 26 | 2.08 | 2.13 | 40 | 85 | |
| | | 14K | 3 | 1,545 | 1,525 | 20 | 161 | 162 | 12% | 13% | 11 | 0.18 | 0.18 | 40 | 5 | |
| Second Growth | | 14L | 3 | 1,585 | 1,390 | 195 | 1,046 | 1,064 | 19% | 29% | 29 | 3.01 | 3.06 | 40 | 120 | |
| The Sticks | | 14M | 2 | 1,672 | 1,280 | 392 | 2,847 | 2,874 | 14% | 31% | 25 | 7.03 | 7.10 | 30 | 215 | Sparse |
| Grand Return | | 14N | 4 | 1,660 | 1,325 | 335 | 1,529 | 1,565 | 22% | 38% | 31 | 4.81 | 4.92 | 40 | 195 | |
| Cover Shot | | 14O | 6 | 1,510 | 1,385 | 125 | 352 | 374 | 36% | 55% | 38 | 1.33 | 1.41 | 15 | 20 | |
| Spin Cycle | | 14P | 6 | 1,560 | 1,285 | 275 | 701 | 753 | 39% | 57% | 25 | 1.72 | 1.85 | 15 | 30 | |
| Agitator | | 14Q | 6 | 1,590 | 1,305 | 285 | 994 | 1,034 | 29% | 59% | 24 | 2.40 | 2.50 | 15 | 40 | |
| Static Cling | | 14R | 6 | 1,580 | 1,305 | 275 | 706 | 758 | 39% | 65% | 32 | 2.29 | 2.46 | 15 | 35 | |
| Lower Shiner | | 14S | 2 | 1,340 | 1,280 | 60 | 326 | 331 | 18% | 22% | 27 | 0.88 | 0.89 | 50 | 45 | |
| Anticipation | 70% area | F | 5 | 1,350 | 1,280 | 70 | 653 | 657 | 11% | 12% | 3 | 0.20 | 0.14 | 30 | 5 | |
| Upper Home Run | | I | 3 | 1,580 | 1,570 | 10 | 366 | 366 | 3% | 5% | 6 | 0.21 | 0.21 | 40 | 10 | |
| | | J | 3 | 1,490 | 1,430 | 60 | 345 | 350 | 17% | 18% | 5 | 0.17 | 0.17 | 40 | 5 | |
| Total Lift 14 | | 23 | | | | | | 20,769 | | | | | 59.21 | | 1,775 | |

# TABLE V.7 CONT.
# TRAIL INVENTORY - PHASE 4

| | Trail No. | Skill Class | Elevation Top Metres | Elevation Bottom Metres | Total Vert. Metres | Horz. Dist. Metres | Slope Dist. Metres | Percent Slope Avg. | Percent Slope Steep. | Avg. Width Metres | Horz. Area Ha. | Slope Area Ha. | Skiers At Area Density | Skiers At Area Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lift 15 - Gil's | | | | | | | | | | | | | | | |
| | 15A | 3 | 2,100 | 2,030 | 70 | 558 | 562 | 13% | 15% | 29 | 1.62 | 1.63 | 40 | 65 | |
| | 15B | 3 | 2,065 | 1,775 | 290 | 1,437 | 1,466 | 20% | 37% | 32 | 4.63 | 4.72 | 40 | 190 | |
| | 15C | 3 | 1,925 | 1,775 | 150 | 885 | 898 | 17% | 29% | 31 | 2.77 | 2.81 | 40 | 110 | |
| | 15D | 6 | 2,075 | 1,980 | 95 | 188 | 211 | 51% | 55% | 45 | 0.85 | 0.95 | 15 | 15 | |
| | 15E | 3 | 2,088 | 2,050 | 38 | 289 | 291 | 13% | 16% | 31 | 0.91 | 0.92 | 40 | 35 | |
| | 15F | 6 | 2,055 | 1,830 | 225 | 944 | 970 | 24% | 54% | 34 | 3.25 | 3.34 | 15 | 50 | |
| | 15G | 7 | 2,095 | 1,780 | 315 | 1,074 | 1,119 | 29% | 90% | 34 | 3.60 | 3.75 | 20 | 75 | |
| | 15H | 7 | 2,050 | 1,790 | 260 | 983 | 1,017 | 26% | 69% | 20 | 1.97 | 2.04 | 20 | 40 | |
| | 15I | 3 | 1,890 | 1,855 | 35 | 141 | 145 | 25% | 28% | 28 | 0.39 | 0.40 | 40 | 15 | |
| | 15J | 7 | 2,088 | 1,990 | 98 | 267 | 284 | 37% | 64% | 128 | 3.41 | 3.63 | 4 | 15 | Gladed |
| | 15K | 7 | 2,050 | 1,940 | 110 | 402 | 417 | 27% | 63% | 106 | 4.26 | 4.42 | 4 | 20 | Gladed |
| | 15L | 7 | 2,015 | 1,855 | 160 | 438 | 466 | 37% | 52% | 109 | 4.77 | 5.08 | 4 | 20 | Gladed |
| | 15M | 7 | 1,995 | 1,885 | 110 | 290 | 310 | 38% | 65% | 103 | 2.98 | 3.19 | 4 | 15 | Gladed |
| Total Lift 15 | 13 | | | | | | 8,158 | | | | | 36.88 | | 665 | |
| Lift 16R - Orient Express | | | | | | | | | | | | | | | |
| Carpe Diem | 16A | 3 | 1,500 | 1,380 | 120 | 549 | 562 | 22% | 34% | 28 | 1.54 | 1.58 | 40 | 65 | |
| Chikamichi | 16B | 3 | 1,507 | 1,297 | 210 | 990 | 1,012 | 21% | 34% | 25 | 2.49 | 2.55 | 40 | 100 | |
| Ca M'a Fait Plaisir | 16C | 4 | 1,460 | 1,315 | 145 | 579 | 597 | 25% | 43% | 31 | 1.79 | 1.85 | 40 | 75 | |
| Fair Dinkum | 16D | 3 | 1,510 | 1,330 | 180 | 568 | 596 | 32% | 34% | 33 | 1.86 | 1.95 | 40 | 80 | |
| Upper Hasta La Vista | 16E | 3 | 1,525 | 1,385 | 140 | 422 | 445 | 33% | 37% | 38 | 1.61 | 1.70 | 40 | 70 | |
| Upper Czesc | 16F-I | 2 | 1,525 | 1,490 | 35 | 197 | 200 | 18% | 25% | 20 | 0.40 | 0.41 | 50 | 20 | |
| Lower Czesc | 16F-II | 4 | 1,485 | 1,335 | 150 | 468 | 491 | 32% | 40% | 30 | 1.39 | 1.46 | 40 | 60 | |
| Ausfahrt | 16G | 3 | 1,470 | 1,355 | 115 | 491 | 504 | 23% | 35% | 26 | 1.30 | 1.34 | 40 | 55 | |
| | 16I | 2 | 1,405 | 1,280 | 125 | 1,210 | 1,216 | 10% | 19% | 18 | 2.21 | 2.22 | 50 | 110 | |
| | K-I | 2 | 1,517 | 1,405 | 112 | 1,005 | 1,011 | 11% | 25% | 10 | 0.97 | 0.98 | 50 | 50 | |
| | L1 | 2 | 1,525 | 1,502 | 23 | 320 | 321 | 7% | 7% | 8 | 0.25 | 0.25 | 50 | 15 | |
| | 16J | 2 | 1,711 | 1,600 | 111 | 860 | 867 | 13% | 14% | 25 | 2.13 | 2.15 | 50 | 110 | |
| | 16K | 3 | 1,665 | 1,520 | 145 | 666 | 682 | 22% | 36% | 25 | 1.64 | 1.68 | 40 | 65 | |
| | 16L | 3 | 1,685 | 1,520 | 165 | 912 | 927 | 18% | 35% | 27 | 2.48 | 2.52 | 40 | 100 | |
| | 16M | 3 | 1,711 | 1,510 | 201 | 1,092 | 1,110 | 18% | 29% | 33 | 3.57 | 3.63 | 40 | 145 | |
| | 16N | 3 | 1,640 | 1,520 | 120 | 528 | 541 | 23% | 29% | 28 | 1.46 | 1.50 | 40 | 60 | |
| | 16O | 3 | 1,711 | 1,480 | 231 | 1,196 | 1,218 | 19% | 29% | 37 | 4.44 | 4.52 | 40 | 180 | |
| | 16P | 3 | 1,595 | 1,455 | 140 | 522 | 540 | 27% | 29% | 25 | 1.28 | 1.33 | 40 | 55 | |
| | 16Q | 4 | 1,625 | 1,475 | 150 | 622 | 640 | 24% | 46% | 29 | 1.79 | 1.84 | 40 | 75 | |
| | 16R | 3 | 1,695 | 1,425 | 270 | 1,664 | 1,686 | 16% | 25% | 29 | 4.81 | 4.87 | 40 | 195 | |
| | 16S | 2 | 1,711 | 1,405 | 306 | 2,891 | 2,907 | 11% | 20% | 16 | 4.64 | 4.67 | 50 | 235 | |
| Total Lift 16 | 21 | | | | | | 18,074 | | | | | 45.00 | | 1,920 | |
| Lift 17a - McGillivray | | | | | | | | | | | | | | | |
| | 17A | 2 | 1,358 | 1,305 | 53 | 927 | 929 | 6% | 12% | 16 | 1.49 | 1.49 | 50 | 75 | |
| Total Lift 17a | 1 | | | | | | 929 | | | | | 1.49 | | 75 | |
| Lift 17b - McGillivray | | | | | | | | | | | | | | | |
| | 17B | 2 | 1,380 | 1,305 | 75 | 542 | 547 | 14% | 27% | 12 | 0.67 | 0.68 | 50 | 35 | |
| Total Lift 17b | 1 | | | | | | 547 | | | | | 0.68 | | 35 | |
| Lift 18 | | | | | | | | | | | | | | | |
| | 18A | 1 | 1,282 | 1,259 | 23 | 170 | 172 | 14% | 14% | 31 | 0.52 | 0.52 | 75 | 40 | |
| | 18C | 1 | 1,267 | 1,260 | 7 | 83 | 83 | 8% | 8% | 30 | 0.25 | 0.25 | 75 | 20 | |
| Total Lift 18 | 2 | | | | | | 255 | | | | | 0.77 | | 60 | |
| Lift 19 - Headwall Tram | | | | | | | | | | | | | | | |
| Sacred Face / Headwalls | 3F | 7 | 2,025 | 1,890 | 135 | 263 | 296 | 51% | 68% | 195 | 5.14 | 2.89 | 12 | 35 | Sparse |
| Lunch Time | 3G | 4 | 1,925 | 1,840 | 85 | 576 | 582 | 15% | 29% | 31 | 1.81 | 0.92 | 40 | 35 | |
| Hat Trick / Green Door | 3H | 6 | 2,040 | 1,855 | 185 | 436 | 474 | 42% | 61% | 148 | 6.46 | 3.51 | 9 | 30 | Sparse |
| Total Lift 19 | 0 (not including partial trails) | | | | | | 0 (not including partial trails) | | | | | 7.32 | | 100 | |
| Lift 20a | | | | | | | | | | | | | | | |
| | 20C | 2 | 1,515 | 1,476 | 39 | 649 | 650 | 6% | 9% | 34 | 2.20 | 2.20 | 50 | 110 | |
| Total Lift 20 | 1 | | | | | | 650 | | | | | 2.20 | | 110 | |

## TABLE V.7 CONT.
## TRAIL INVENTORY - PHASE 4

| | | Trail No. | Skill Class | Elevation Top Metres | Elevation Bottom Metres | Total Vert. Metres | Horz. Dist. Metres | Slope Dist. Metres | Percent Slope Avg. | Percent Slope Steep. | Avg. Width Metres | Horz. Area Ha. | Slope Area Ha. | Skiers At Area Density | Skiers At Area Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Lift 20b | | | | | | | | | | | | | | | |
| | | 20A | 2 | 1,575 | 1,530 | 45 | 346 | 349 | 13% | 19% | 24 | 0.84 | 0.85 | 50 | 45 |
| | | 20B | 2 | 1,530 | 1,500 | 30 | 302 | 303 | 10% | 11% | 11 | 0.32 | 0.32 | 50 | 15 |
| Total Lift 20b | | 2 | | | | | | 652 | | | | | 1.17 | | 60 |
| Lift 24 | | | | | | | | | | | | | | | |
| | | 24A | 2 | 1,630 | 1,537 | 93 | 701 | 707 | 13% | 19% | 28 | 1.98 | 2.00 | 50 | 100 |
| | | 24B | 2 | 1,637 | 1,537 | 100 | 749 | 756 | 13% | 16% | 37 | 2.74 | 2.76 | 50 | 140 |
| | | 24C | 2 | 1,637 | 1,537 | 100 | 758 | 765 | 13% | 15% | 45 | 3.44 | 3.47 | 50 | 175 |
| | | 24D | 2 | 1,625 | 1,537 | 88 | 681 | 687 | 13% | 15% | 37 | 2.50 | 2.52 | 50 | 125 |
| Total Lift 24 | | 4 | | | | | | 2,914 | | | | | 10.75 | | 540 |
| Skiways & Transport Trails | | | | | | | | | | | | | | | |
| Alley | | A | 4 | 1,760 | 1,745 | 15 | 208 | 209 | 7% | 10% | 16 | 0.34 | 0.34 | 40 | 15 |
| | Lightly Used | B | 2 | 1,425 | 1,253 | 172 | 2,090 | 2,097 | 8% | 8% | 6 | 1.20 | 1.20 | 5 | 5 |
| Mount Morrisey Connection | | D | 2 | 1,395 | 1,315 | 80 | 779 | 783 | 10% | 11% | 8 | 0.62 | 0.62 | 50 | 30 |
| Main Village Connector | | E | 2 | 1,605 | 1,515 | 90 | 962 | 966 | 9% | 10% | 7 | 0.72 | 0.72 | 50 | 35 |
| Anticipation | 30% area | F | 2 | 1,350 | 1,280 | 70 | 653 | 657 | 11% | 12% | 3 | 0.20 | 0.06 | 50 | 5 |
| Mid Home Run | | G-I | 3 | 1,405 | 1,350 | 55 | 490 | 493 | 11% | 12% | 8 | 0.38 | 0.38 | 40 | 15 |
| Lower Home Run | | G-II | 2 | 1,345 | 1,270 | 75 | 1,020 | 1,023 | 7% | 8% | 9 | 0.87 | 0.87 | 50 | 45 |
| Lower Back in Time | | H-2 | 4 | 1,330 | 1,195 | 135 | 1,127 | 1,135 | 12% | 13% | 8 | 0.93 | 0.94 | 40 | 40 |
| | | K-II | 2 | 1,383 | 1,280 | 103 | 1,205 | 1,209 | 9% | 11% | 11 | 1.32 | 1.32 | 50 | 65 |
| | | L2 | 2 | 1,502 | 1,435 | 67 | 680 | 683 | 10% | 10% | 8 | 0.53 | 0.53 | 50 | 25 |
| | | N | 4 | 1,280 | 1,200 | 80 | 1,151 | 1,154 | 7% | 10% | 7 | 0.83 | 0.83 | 40 | 35 |
| | | O | 2 | 1,305 | 1,250 | 55 | 734 | 736 | 7% | 10% | 8 | 0.62 | 0.62 | 50 | 30 |
| | | 8 | 3 | 2,070 | 1,985 | 85 | 512 | 519 | 17% | 24% | 25 | 1.26 | 1.28 | 4 | 5 |
| | | 9 | 4 | 2,065 | 2,000 | 65 | 377 | 383 | 17% | 28% | 116 | 4.36 | 4.42 | 2 | 10 |
| | | 10 | 3 | 2,070 | 2,020 | 50 | 158 | 166 | 32% | 36% | 31 | 0.49 | 0.51 | 40 | 20 |
| | | 11 | 3 | 2,090 | 2,045 | 45 | 263 | 267 | 17% | 26% | 26 | 0.69 | 0.70 | 40 | 30 |
| | | 12 | 3 | 2,085 | 2,050 | 35 | 220 | 223 | 16% | 20% | 18 | 0.40 | 0.41 | 40 | 15 |
| | | 13 | 3 | 2,090 | 2,040 | 50 | 621 | 623 | 8% | 10% | 15 | 0.92 | 0.92 | 40 | 35 |
| | | 14 | 3 | 1,775 | 1,770 | 5 | 56 | 56 | 9% | 10% | 20 | 0.11 | 0.11 | 40 | 5 |
| Gil's Exit Skiway | | 15 | 3 | 1,790 | 1,740 | 50 | 2,074 | 2,075 | 2% | 10% | 12 | 2.44 | 2.44 | 4 | 10 |
| | | 16 | 6 | 1,915 | 1,845 | 70 | 152 | 167 | 46% | 47% | 47 | 0.71 | 0.78 | 15 | 10 |
| | | 17 | 3 | 1,440 | 1,305 | 135 | 911 | 921 | 15% | 31% | 21 | 1.93 | 1.95 | 40 | 80 |
| | | 18 | 4 | 1,985 | 1,905 | 80 | 867 | 871 | 9% | 14% | 18 | 1.53 | 1.54 | 40 | 60 |
| | | 19 | 4 | 2,050 | 1,925 | 125 | 639 | 651 | 20% | 31% | 36 | 2.33 | 2.37 | 40 | 95 |
| | | 20 | 3 | 2,085 | 2,025 | 60 | 271 | 278 | 22% | 33% | 39 | 1.05 | 1.08 | 40 | 45 |
| | | 21 | 2 | 1,545 | 1,505 | 40 | 534 | 535 | 7% | 10% | 25 | 1.34 | 1.34 | 50 | 65 |
| | | 22 | 3 | 1,480 | 1,345 | 135 | 766 | 778 | 18% | 32% | 31 | 2.36 | 2.40 | 40 | 95 |
| | | 23 | 2 | 1,515 | 1,370 | 145 | 1,139 | 1,148 | 13% | 22% | 27 | 3.06 | 3.08 | 50 | 155 |
| | | 24 | 3 | 2,100 | 2,046 | 54 | 300 | 305 | 18% | 31% | 14 | 0.41 | 0.42 | 40 | 15 |
| Total Other Pistes | | 28 (not including F) | | | | | | 20,453 (not including F) | | | | | 34.18 | | 1,095 |
| Total All Lifts | | 225 | | | | | | 177.5 km | | | | | 767.7 Ha | | 18,104 |

The trail balance by skill classification, as listed in Table V.8, shows that the Phase 4 trails have an unbalanced skill class distribution when compared to the overall North American market. Plate V.5 illustrates that Sun Peaks in Phase 4, will have excesses of low intermediate and novice terrain and a shortage of beginner, intermediate and high intermediate terrain.

## TABLE V.8
## CUMULATIVE TRAIL BALANCE - PHASE 4

| Lift SCC = | 14,830 |
|---|---|

| Skill Classification | Hectares | Skiers | Balance | Ideal |
|---|---|---|---|---|
| 1 Beginner | 2.3 | 140 | 0.8% | 5% |
| 2 Novice | 81.6 | 3,905 | 21.6% | 10% |
| 3 Low Intermediate | 145.2 | 5,415 | 29.9% | 20% |
| 4 Intermediate | 191.7 | 4,885 | 27.0% | 30% |
| 5 High Intermediate | 58.9 | 1,155 | 6.4% | 20% |
| 6 Advanced | 165.1 | 1,704 | 9.4% | 10% |
| 7 Expert | 122.8 | 900 | 5.0% | 5% |
| **TOTALS** | **767.7** | **18,104** | **100%** | **100%** |

| | | |
|---|---|---|
| Average Density = | 19.3 | Skiers/Hectare |
| Optimum Density = | 38.2 | Skiers/Hectare |
| Weighted Demand = | 3,631 | VTM/Skier/Day |

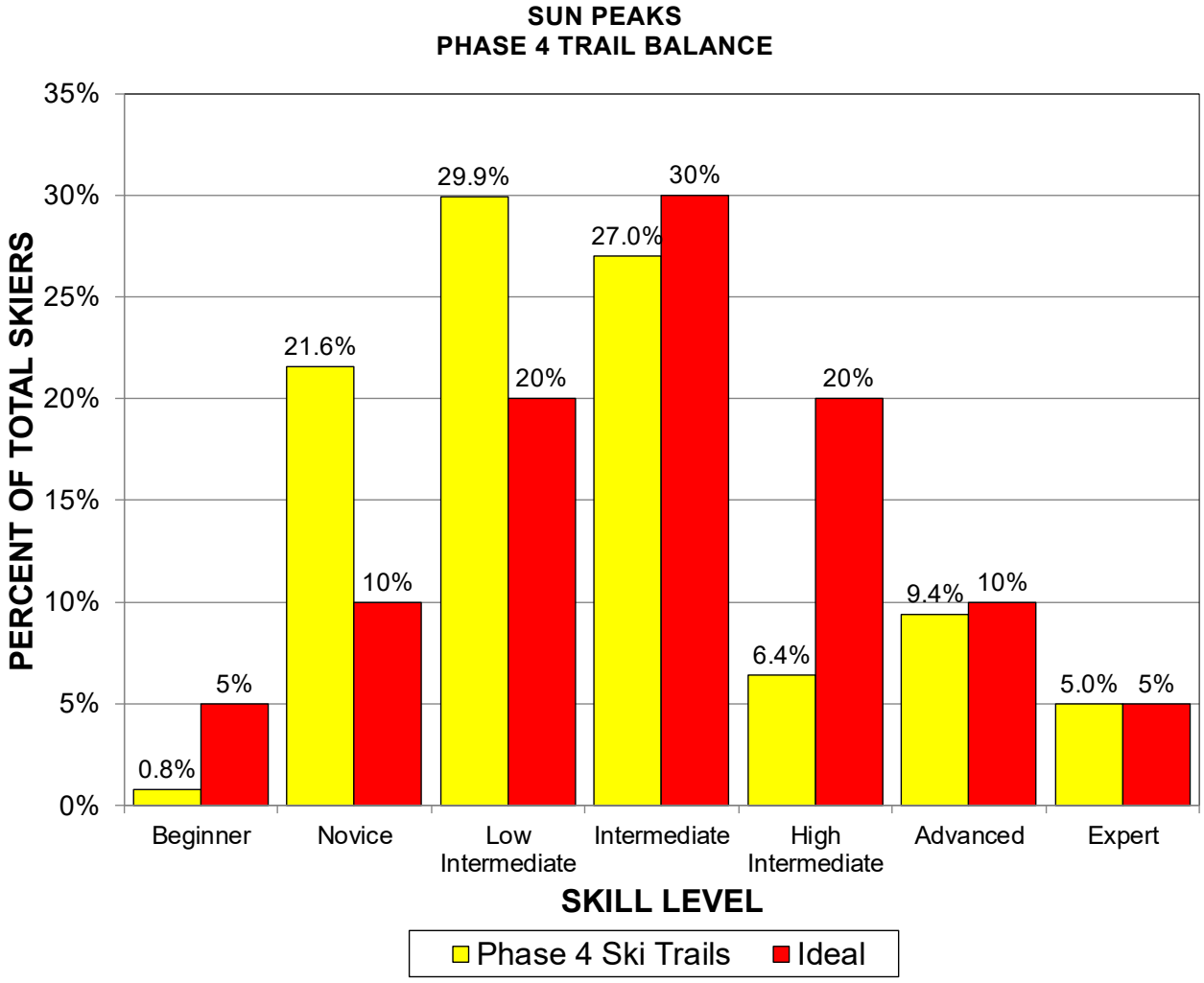


**PLATE V.5**

Table V.9 and Plate V.6 illustrates the Phase 4 balance between lift and trail capacities for each major lift system.

**TABLE V.9**
**MAJOR LIFT VS TRAIL CAPACITY**
**PHASE 4**

| Lift No. | 1R | 2R | 3R | 4 | 5 | 6R | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| Lift Name | Burfield | Sunburst Express | Crystal | Village Platter | West Bowl | Sundance | Mount Tod | West Morrisey | Elevation |
| Lift Type | 4C | D8C/10G | 4C | P | D4C | D6C | 4C | 4C | 4C |
| Lift Capacity | 150 | 2,230 | 610 | 120 | 1,170 | 2,190 | 290 | 930 | 730 |
| Trail Capacity | 445 | 2,785 | 1,435 | 140 | 1,105 | 3,400 | 265 | 625 | 780 |
| Trails:Lifts | 297% | 125% | 235% | 117% | 94% | 155% | 91% | 67% | 107% |
| Average Density | 6.7 | 15.7 | 5.2 | 43.5 | 40.9 | 15.6 | 33.4 | 28.4 | 14.6 |
| Optimum Density | 28.8 | 35.0 | 30.6 | 50.0 | 39.7 | 42.4 | 35.3 | 23.1 | 33.4 |
| Demand VTM | 5,941 | 4,312 | 4,886 | 1,699 | 3,368 | 3,003 | 3,875 | 5,402 | 4,483 |
| | | | | | | | | | |
| Balance | | | | | | | | | |
| Beginner | 0% | 0% | 0% | 36% | 0% | 0% | 0% | 0% | 0% |
| Novice | 0% | 23% | 7% | 64% | 0% | 26% | 0% | 0% | 15% |
| Low Intermediate | 0% | 5% | 6% | 0% | 46% | 39% | 32% | 0% | 1% |
| Intermediate | 47% | 30% | 37% | 0% | 53% | 33% | 49% | 31% | 40% |
| High Intermediate | 0% | 20% | 12% | 0% | 0% | 2% | 0% | 0% | 17% |
| Advanced | 12% | 15% | 26% | 0% | 1% | 0% | 19% | 63% | 21% |
| Expert | 40% | 8% | 12% | 0% | 0% | 0% | 0% | 6% | 6% |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

| Lift No. | 10 | 12 | 13a | 13b | 14 | 15 | 16R | 19 | 24 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Lift Name | Morrisey Platter | | | | Morrisey Express | Gil's | Orient Express | Headwall Pulse | | |
| Lift Type | P | 4C | 4C | 4C | D4C | D4C | D4C | PG | 4C | |
| Lift Capacity | 120 | 610 | 160 | 350 | 1,960 | 870 | 1,400 | 120 | 610 | Skiers/Day |
| Trail Capacity | 65 | 315 | 55 | 205 | 1,775 | 665 | 1,920 | 100 | 540 | Skiers/Day |
| Trails:Lifts | 54% | 52% | 34% | 59% | 91% | 76% | 137% | 83% | 89% | |
| Average Density | 82.8 | 77.2 | 94.7 | 66.5 | 33.1 | 23.6 | 31.1 | 16.4 | 56.7 | Skiers/Hectare |
| Optimum Density | 44.6 | 40.0 | 33.6 | 40.0 | 38.6 | 32.0 | 42.8 | 25.5 | 50.0 | Skiers/Hectare |
| Demand VTM | 600 | 3,035 | 4,263 | 3,770 | 3,286 | 4,701 | 2,730 | 6,066 | 2,120 | VTM/Skier/Day |
| | | | | | | | | | | |
| Balance | | | | | | | | | | |
| Beginner | 46% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | 0% | |
| Novice | 0% | 0% | 0% | 0% | 15% | 0% | 28% | 0% | 100% | |
| Low Intermediate | 54% | 78% | 36% | 0% | 57% | 62% | 61% | 0% | 0% | |
| Intermediate | 0% | 22% | 0% | 100% | 11% | 0% | 11% | 35% | 0% | |
| High Intermediate | 0% | 0% | 64% | 0% | 11% | 0% | 0% | 0% | 0% | |
| Advanced | 0% | 0% | 0% | 0% | 7% | 10% | 0% | 30% | 0% | |
| Expert | 0% | 0% | 0% | 0% | 0% | 28% | 0% | 35% | 0% | |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | |

**MAJOR LIFT VS TRAIL CAPACITY - PHASE 4**

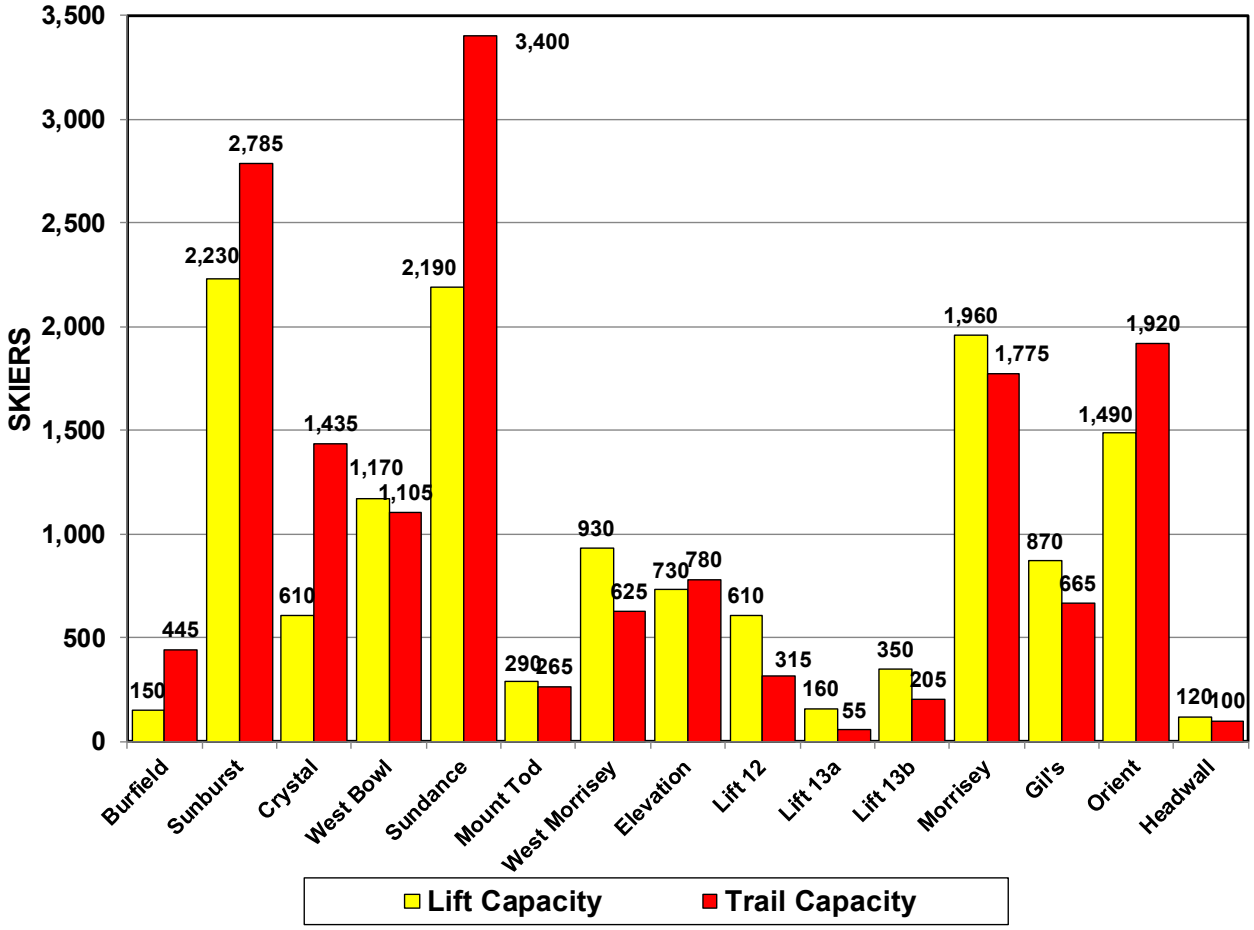


**PLATE V.6**

## .5 Grooming Requirements and Maintenance Shop

As stated in the Inventory section of this report, grooming is an essential component of mountain operations and any expansion of terrain must be matched by the expansion of the existing grooming fleet. Based on the methodology and assumptions outlined in the Inventory section, the grooming requirements for each phase of development are listed in Table V.10.

**TABLE V.10**
**SUN PEAKS - GROOMING REQUIREMENTS**
***BASED ON ONE SHIFT PER NIGHT***

| PHASE 2B Groomable Terrain | | | Interval (Days) | Daily Grooming | |
|---|---|---|---|---|---|
| Class 1 | 2.3 | hectares | 1 | 2.3 | hectares |
| Class 2 | 48.1 | hectares | 1 | 48.1 | hectares |
| Class 3 | 77.6 | hectares | 1 | 77.6 | hectares |
| Class 4 | 57.8 | hectares | 2 | 28.9 | hectares |
| Class 5 | 142.8 | hectares | 3 | 47.6 | hectares |
| Groomable Class 6 | 96.2 | hectares | 7 | 13.7 | hectares |
| Total | 424.8 | hectares | | 218.2 | hectares |

| Recommended Machines | |
|---|---|
| | 9 Standard Grooming Machines |
| | 2 Winch Equipped Grooming Machines |
| | 1 Terrain Park Grooming Machine |
| | 1 X-Crosscountry Grooming |

| PHASE 3 Groomable Terrain | | | Interval (Days) | Daily Grooming | |
|---|---|---|---|---|---|
| Class 1 | 2.3 | hectares | 1 | 2.3 | hectares |
| Class 2 | 56.3 | hectares | 1 | 56.3 | hectares |
| Class 3 | 117.0 | hectares | 1 | 117.0 | hectares |
| Class 4 | 177.3 | hectares | 2 | 88.7 | hectares |
| Class 5 | 57.8 | hectares | 3 | 19.3 | hectares |
| Groomable Class 6 | 162.5 | hectares | 7 | 23.2 | hectares |
| Total | 573.2 | hectares | | 306.7 | hectares |

| Recommended Machines | |
|---|---|
| | 12 Standard Grooming Machines |
| | 4 Winch Equipped Grooming Machines |
| | 1 Terrain Park Grooming Machine |
| | 1 X-Crosscountry Grooming |

| PHASE 4 Groomable Terrain | | | Interval (Days) | Daily Grooming | |
|---|---|---|---|---|---|
| Class 1 | 2.3 | hectares | 1 | 2.3 | hectares |
| Class 2 | 82.9 | hectares | 1 | 82.9 | hectares |
| Class 3 | 144.6 | hectares | 1 | 144.6 | hectares |
| Class 4 | 191.7 | hectares | 2 | 95.9 | hectares |
| Class 5 | 58.9 | hectares | 3 | 19.6 | hectares |
| Groomable Class 6 | 165.1 | hectares | 7 | 23.6 | hectares |
| Total | 645.5 | hectares | | 368.9 | hectares |

| Recommended Machines | |
|---|---|
| | 15 Standard Grooming Machines |
| | 4 Winch Equipped Grooming Machines |
| | 1 Terrain Park Grooming Machine |
| | 1 X-Crosscountry Grooming |

*Note:*
*Winch cat can groom approx. 5 ha. per shift when operating with winch.*
*20 ha. per shift when on a regular grooming shift*
*Calculations assume 1 grooming shift per night*

Sun Peaks currently has 10 front line grooming machines; one is used to groom the Terrain Park, and another is used to groom the Nordic ski trails.

**Maintenance Shop**

The existing maintenance shops are located at the Burfield Base (consisting of 2 bays of floorspace for ski operations, used for rubber tire vehicle machine maintenance, lift maintenance, parts storage and office space) and an on-mountain shop close to the top of the Sunburst lift containing 3 double bays, chiefly used for snowcats and snowmaking. This building is surrounded by a cleared area with a hard surface for machine and implement storage during both summer and winter. The cleared area is sheltered by trees on all sides to provide a physical and visual separation between the skiers and the maintenance area. The Morrisey maintenance shop is used for golf and skating maintenance only.

The maintenance floorspace requirements will increase as the area expands, therefore, expansion of these areas, or the establishment of new maintenance bases must be considered. The grooming machine service bay requirements are listed in Table V.11. The mid mountain maintenance facility was increased in size with the addition of two grooming machine maintenance bays during the end of Phase 1 or the beginning of Phase 2. The present ski area has a ratio of 1.25 “machine grooming shift” per standard size maintenance bay (10 machine shifts/8 bays) used for all maintenance purposes.

**TABLE V.11**
**SUN PEAKS**
**GROOMING MACHINE SERVICE BAY REQUIREMENTS**

| End of Phase | Number of Groomers | Maintenance Bays | | | | Ratio |
|---|---|---|---|---|---|---|
| | | Mid-Mtn | Burfield | Morrisey | TOTAL | |
| **Existing 2A** | 10 | 6 | 2 | 0 | 8 | 1.25 |
| **2B** | 13 | 10 | 2 | 0 | 12 | 1.08 |
| **3** | 18 | 10 | 2 | 2 | 14 | 1.29 |
| **4** | 21 | 10 | 2 | 4 | 16 | 1.31 |

By the end of Phase 2, the grooming machine maintenance facility will need to maintain enough machines to groom for a total of 13 shifts per day, including dedicated cross-country grooming machine and “park” machines. Another two double bays should be added at the mid mountain location. The increase in fleet size will also eventually result in the need for a new satellite maintenance facility. It is proposed that the snowcat maintenance be located near the base of Lift 14 the Morrisey Express adjacent to the golf course maintenance and storage facility. This location will reduce travel time for snowcats working on the Mount Morrisey side of the valley.

The grooming machines will utilize golf course maintenance bays during the winter months. During the summer, the grooming machines will be transported to the mid-mountain maintenance facility for their annual overhaul. During the winter months, golf course equipment will be stored in portions of the stable, or at the Burfield Base. During the summer, the golf course maintenance and storage facility at the Burfield Base will be converted to rubber tire vehicle maintenance and repair.

By the end of Phase 4, the trail grooming shifts will need to increase by five and the cross-country fleet is also increased. This increase in fleet size will result in a requirement for an additional two double maintenance bays. These new maintenance bays should be available at the Morrisey maintenance facility. At the end of Phase 4, a total of 17 grooming shifts will be required to groom the ski area.

## .6 Proposed Snowmaking

The current snowmaking system covers a total of 49.5 hectares on the Sunrise/Sundance, 5-Mile, Coquihalla and Village Platter trails (plus 1.5 ha. at Tube Town and the Village interface). The water used for snowmaking is obtained from a 32 million US gallon reservoir located at the 1,743-metre elevation on the northern portion of the Sun Peaks Controlled Recreation Area permit. This reservoir is filled during the spring freshet via a pipeline from the 5 Mile Creek, with an intake at the 1,775-metre elevation. The snowmaking distribution lines below the 1,600-metre elevation are gravity fed from this reservoir and snowmaking above this critical elevation uses booster pumping. Figure 16 illustrates the Sun Peaks Snowmaking Master Plan.

Snowmaking is proposed to be added gradually depending on demand, snow conditions and operational changes at Sun Peaks. All the proposed snowmaking takes place on existing trails in the Sunburst, Sundance and Morrisey zones and therefore, is not tied to the lift development phases. The proposed additions to the area covered by snowmaking are illustrated on Figure 16. An additional 98 hectares are proposed for snowmaking coverage which would increase the amount of terrain covered by snowmaking to approximately 150 hectares, or 19% of the Phase 4 skiable terrain. The next stage of snowmaking is proposed to take place on Lower Exhibition, Broadway, Sundowner and two new trails in the Spillway zone.

Snowmaking would then be added to Lower Cruiser and Lower Homesteader followed by Grannie Greene's, Upper Homesteader and Upper Sundance/Sunrise, all in the Sundance zone. This snowmaking expansion will allow Sun Peaks to operate return cycle skiing on the Sundance from top to bottom when there is insufficient natural snow. This snowmaking system will provide three top to bottom routes on the Sundance lift (Homesteader, Sundance, and Grannie Greene's). As the snowmaking system increases in size, a snowmaking building will be required. This building will be used for the storage and drying of hoses, maintenance and staging of the snowmaking equipment, and space for personnel. This building will be in close proximity to the Upper Five Mile pumphouse and will initially encompass approximately 120 square metres. A second snowmaking reservoir is proposed at the top of the Morrisey Express where two or three sewerage polishing lagoons are planned to complete the sewerage treatment and disposal system at Sun Peaks. The current plan is to take the treated effluent from the STP in the Burfield base and pump the treated effluent up the Back in Time ski run to two or three lagoons constructed at the top of Mount Morrisey. This effluent needs to stand for 90 days before it can be used for either snowmaking in winter or irrigation of the golf course in the summer. The Snowmaking Master Plan is presented on Figure 17.

Additional snowmaking on skiable terrain serviced by the Sunburst chairlift is proposed to provide more top to bottom routes on the Sunburst with continuous snowmaking. It is proposed that Bluff, Upper Exhibition, Upper Cruiser, and Upper 5 Mile will be serviced with snowmaking. Snowmaking is also proposed for three trails on Mount Morrisey; Grand Return, Midlife Crisis and The Sticks. When this system goes in, the lower part of Home Run will also receive snowmaking to facilitate the connection back to the village. Additionally, snowmaking is proposed for Three Bears/Mount Morrisey Connection to provide a snow made connection between the Sundance and Mount Morrisey pods. As discussed above, to supply water for the snowmaking on Mount Morrisey, we have proposed locating two reservoirs on the flat area south of the lift top stations. These reservoirs would be filled from the effluent from the sewage treatment lagoon; and allowed to settle for 90 days before it can be used for snowmaking or irrigation. Therefore, one reservoir would be receiving effluent each season, while the other reservoir would be utilizing effluent from the previous season.

## .7 Skier Services

Skier service facilities are those which provide functions specifically related to the operation and management of the ski area. For planning purposes, these services can generally be broken down into three distinct categories:

**Staging Facilities** - those services that are required as skiers arrive at the area.

**Commercial Services** - those services required throughout the day as skiers are on the mountain and during après-ski hours.

**Operational Facilities** - those services not directly required by skiers, but which are essential for the day-to-day operation of the ski area.

**Staging facilities** include ticket sales, public lockers, equipment rental and repair, ski school, and children's programs, and are located in the base areas. These services should be sized in relation to the number of skiers staging through each base area. Equipment retail and rental space can sometimes be leased in accommodation buildings in the resort centre, reducing the capital investment costs for the mountain operator.

**Commercial facilities** are located both in the base area and on the mountain and include food and bar seating, kitchen and serving areas, restrooms and accessory retail space. Restaurant space in the base area does not always need to be owned by the mountain operator, if the restaurant space in the village and accommodation buildings at the base is located close enough to the lifts to be convenient for skiers to use during the day. Restaurants on the mountain are, in most cases, the responsibility of the mountain operator. Restaurant seats should be planned relative to the number of skiers circulating in the vicinity of the proposed restaurant sites. Kitchens and restrooms must be sized in proportion to the amount of seating proposed for each restaurant.

**Operational facilities** are generally "back of the house" services and include administration, employee lockers and ski patrol facilities. These facilities will be located both on the mountain and in the base areas.

From experience at other resorts, Ecosign has developed approximate space requirements on a per skier basis for these facilities at destination resorts. On average, approximately 1.5 square metres of skier service facilities per skier on the Design Day are required. Generally, a Design Day of approximately 80% of the Mountain Capacity (SCC) is selected to avoid sizing these facilities to meet the peak day level of skier visits that may only be achieved once or twice per season. The recommended skier service program for Sun Peaks at the completion of Phases 2, 3 and 4 is outlined in Table V.12.

**TABLE V.12**
**SUN PEAKS RESORT**
**RECOMMENDED SKIER SERVICES PROGRAM**

| **Development Phase** | **Ecosign** | **2019/20** | **Phase 2** | | **Phase 3** | | **Phase 4** | |
|---|---|---|---|---|---|---|---|---|
| Mountain Capacity (SCC) | **Resort** | 8,020 | 9,090 | | 12,070 | | 14,830 | |
| Design Day (80% of SCC) | **Standards** | 6,420 | 7,270 | | 9,660 | | 11,860 | |
| **Skier Service Function** | **Theo. space per skier (m²)** | **Existing Space (m²)** | **Recomm. Space (m²)** | **Space to Add (m²)** | **Recomm. Space (m²)** | **Space to Add (m²)** | **Recomm. Space (m²)** | **Space to Add (m²)** |
| **Staging Facilities** | | | | | | | | |
| Ticket Sales | 0.014 | 24 | 101 | 77 | 135 | 33 | 165 | 31 |
| Public Lockers | 0.065 | 178 | 473 | 295 | 628 | 155 | 771 | 143 |
| Equipment Rental & Repair | 0.093 | 481 | 675 | 194 | 897 | 222 | 1,102 | 204 |
| Ski School / Guest Services | 0.046 | 120 | 338 | 218 | 449 | 111 | 551 | 102 |
| Children's Programs / Daycare | 0.046 | 307 | 338 | 31 | 449 | 111 | 551 | 102 |
| **Sub-total Staging** | **0.265** | **1,110** | **1,925** | **815** | **2,557** | **633** | **3,140** | **582** |
| **Commercial Facilities** | | | | | | | | |
| Food & Beverage Seating | 0.372 | 2,213 | 2,702 | 489 | 3,590 | 888 | 4,407 | 818 |
| Kitchen & Scramble | 0.186 | 1,365 | 1,351 | - 14 | 1,795 | 444 | 2,204 | 409 |
| Rest Rooms | 0.093 | 248 | 675 | 427 | 897 | 222 | 1,102 | 204 |
| Retail Sales | 0.070 | 442 | 507 | 65 | 673 | 167 | 826 | 153 |
| **Sub-total Commercial** | **0.720** | **4,268** | **5,234** | **966** | **6,955** | **1,721** | **8,539** | **1,584** |
| **Operational Facilities** | | | | | | | | |
| First Aid & Ski Patrol | 0.093 | 210 | 675 | 465 | 897 | 222 | 1,102 | 204 |
| Administration | 0.046 | 1,211 | 338 | | 449 | | 551 | |
| Employee Facilities/Lockers | 0.033 | 320 | 236 | | 314 | | 386 | 66 |
| **Sub-total Operational** | **0.172** | **1,741** | **1,249** | **465** | **1,660** | **222** | **2,038** | **270** |
| **Net Total Functional Space** | **1.157** | **7,119** | **8,408** | **2,246** | **11,173** | **2,576** | **13,717** | **2,436** |
| Storage @ 10% | 0.116 | 566 | 841 | 225 | 1,117 | 258 | 1,372 | 244 |
| Circ./Walls/Waste/Mech. @ 25% | 0.289 | 1,935 | 2,102 | 562 | 2,793 | 644 | 3,429 | 609 |
| **Total Gross Floor Area** | **1.561** | **9,620** | **11,351** | **3,033** | **15,083** | **3,477** | **18,518** | **3,289** |

Most skier service facilities for staging are currently provided in the Village at Sun Peaks, with ticket sales available at the Burfield base. Additional skier service facilities will be provided in the new East Village at the base of the Orient Ridge and Morrisey Express lifts and eventually in the Phase 4 East Day Visitor Base.

A small daylodge facility is also proposed at the top terminal of Lift 17a to provide tickets and possibly rentals for people staying in accommodation in the surrounding area. The East Day Visitor Base will be developed when the road from the TransCanada Highway at Chase to Sun Peaks is winterized. In addition to parking and lift connections to the rest of the ski area, a small daylodge with staging facilities for Alpine skiing and full skier services for Nordic skiing will be developed in this area. The gentle terrain will allow significant expansion to the Nordic ski network.

Food service is currently provided in the Village Daylodge, the Annex and the Sunburst Mountain restaurant, as well as in an increasing number of Village restaurants. Additional restaurants and washrooms will be located in the alpine in mountain restaurants or warming huts. Operational facilities are currently concentrated in the Burfield Base area with the resort's administration offices located in the Burfield Lodge. Ski patrol and employee lockers are located in the Village. Over time, new operational facilities will be developed in the Village and the East Village and additional patrol stations will be added, as illustrated on Figure 15.

Skier service facilities in the Village are currently provided in Buildings AA (Village Daylodge), CC (The Annex) and the Child Minding Building (BB), as well as in the commercial space of some of the Village accommodation properties. In the future, the ground floor of Village Building C, as well as Buildings DD are proposed to provide additional skier service space in the Central Village. In the East Village, skier services operated by SPRC will be located on the ground floor and walk-out basement level of Building E-A. Due to the ski-in/ski-out nature of both villages, additional services, such as sports rental and repair shops, sports retail shops and restaurants, will be located within the various village establishments and may be run by outside operators. Hotel operators in the village currently offer a variety of dining, bars and retail opportunities and more will be added as new village parcels are developed in both village locations. Since many of the runs return to the valley, it is easy for skiers to eat lunch at one of the many village restaurants or return to their condo or chalet for lunch.

Mountain restaurants are an important component of a resort's physical plant, as they provide skiers with "on-mountain facilities", such as washrooms, food and beverage seating and service, accessory retail sales, and sometimes ski school and information services. Mountain restaurants also add to the image, ambience and prestige of an area, and provide amenities for summer guests who are hiking, biking and sightseeing.

The existing Sunburst Lodge at the top of the Sunburst Express was doubled in size in 2017 to provide more seating capacity. Two other mountain restaurants are proposed; one at the top of Mount Morrisey and one on a prominent knoll on Orient Ridge. In addition, two warming huts are proposed; one to replace the existing washroom and patrol facilities at the Top of the World that are nearing the end of life, and a smaller one at the base of the Gil's lift.

We have shown the Gil's Hut and the Mount Morrisey mountain top restaurant in Phase 2, however, the actual timing of construction of the on-mountain top skier service facilities will depend on the installation of the lift facilities, the amount of food service space available to skiers in the villages and the desire to create new and unique dining experiences on the mountain. The exact size and location of each food service facility (whether new or expanded) will be determined at the detailed planning stage, immediately in advance of construction. Similarly, skier service space needs in the base will be addressed as each new base area building goes through detailed design.

*Orient Ridge Restaurant Site*

# VI. BASE AREA FACILITIES

## .1 Introduction

Sun Peaks Resort is located within the traditional territory of the Secwepemc people. Today, there are 17 Shuswap bands who make up the Secwepemc Nation. The traditional territory of the Secwepemc people is approximately 180,000 square kilometres from west of the Fraser River to east of the Rocky Mountains, and north to the upper Fraser River and south to near Vernon, Lower Arrow Lakes and over to and near Invermere. The high country of Tod Mountain (the geographic feature on which the original resort that became Sun Peaks was founded) was called “Skwelkwek’welt’ by the Secwepemc people. Based on ethnographic and historical sources, the high country of the Mount Tod’s alpine area was used by the Secwepemc people for hunting and gathering during the Summer and early Fall periods. The alpine areas offered alpine plants and herbs that only grew in the higher elevations.

Base Area Facilities located at the base of the mountain include the day skier staging areas, resort village, surrounding real estate development and other recreational facilities. The base area must be carefully planned to meet the primary needs of the forecast numbers of overnight and day visitors, as well as provide the extensive amenity package that is necessary to attract year-round visitors to ensure the success of a destination resort. The purpose of this section of the report is to describe the current plans for development of the base area lands at Sun Peaks Resort.

The 2020 Master Plan Update has been prepared using new 1-metre contour interval topography developed from Lidar surveying carried out in 2018. This more accurate topographic information has led to some adjustments to the proposed road alignments and development parcels to achieve a better fit with the natural landscape. The Sun Peaks Resort Mountain Resort Municipality has requested the inclusion of additional lands for community facilities and employee/resident housing and these land uses have been incorporated into the 2020 Master Plan. The most significant change to the base facilities from the 2013 Master Plan Update is that we have been able to locate all the market accommodation density allowed in the Master Development Agreement (23,342 Bed Units) in the McGillivray Creek Valley by switching some of the parcels east of the existing developed area that were originally proposed for single family lots to more compact townhouse and stacked townhouse style developments. There is also room within the proposed Land Use Program to provide an additional nine parcels

for SPMRM to use for the development of non-market community housing through a community housing society.

The McGillivray Highlands (former Phase 4 lands) are now planned to be used for an extension of the cross-country skiing and mountain bike trail networks, as well as other four-season recreational opportunities, instead of accommodation development. The second eighteen-hole golf course originally proposed for the McGillivray Highlands area has now been removed from the Master Plan. The existing Sun Peaks Golf Course is one of the highest elevation golf courses in British Columbia resulting in a relatively short operating season. With increasing interest in more active recreational activities, building a second course at least another 150 m higher in elevation is not the best recreational asset for Sun Peaks.

The new location of the cross-valley Lift 17 brings more of the gentler sloping sites within skier walking distance of one of the lift terminals or a ski trail to the valley terminal. Experience over the last ten years has shown a distinct market preference for a turn-key townhouse product over single family lots, since people have less time to build and maintain their second home or rental properties. Several of the lots sold over a decade ago remain undeveloped. The managed condominium properties allow the owners to enjoy more of their time at Sun Peaks without having to maintain their own exteriors and yards.

Another change is the re-alignment of the future road through the Valley to connect with the McGillivray Lake Forestry Road. More than twenty-five years has passed since the concept of a year-round access to the resort from the east TransCanada Highway near Chase was first suggested. To date, there has been no funding to upgrade the existing forestry roads. The new alignment extends from the north side of McGillivray Creek and along the lower side of the McGillivray Highlands offering a shorter more direct route to the existing McGillivray Lake Forestry Road and stays within the boundary of the Controlled Recreation Area and the Sun Peaks Mountain Resort Municipality. This route could initially be developed as the shortest summer emergency route to the east until such time as an all-weather road can be funded and constructed. The reconfiguration of the Phase 2, 3 and 4 real estate development lands and supporting infrastructure is illustrated on Figure 17, Base Area Land Use and Plan. Additional lands for community parks and playing fields have also been identified.

At the completion of Phase 4, the Sun Peaks Resorts base area lands will accommodate approximately 18,950 guests, residents, and employees (13,490 overnight skiers) within a bed base of 23,342 MDA market beds, 12.7 hectares of non-market community housing and the

private land holdings that existed prior to the MDA. The valley lands will include the following at buildout:

- Two Pedestrian Villages, containing approximately 1,310 hotel and condotel units
- A wide range of Commercial Space, including restaurants, retail shops and service-oriented establishments
- Facilities for various sizes and styles of conferences
- 47 hectares of tourist accommodation with rental covenants containing 1,940 units in apartment, stacked townhouse and townhouse configurations
- 35 hectares of townhouse and stacked townhouse style developments containing 1,210 units
- 80 hectares of single-and duplex family home sites with 616 lots
- Approximately 200 units of SPRLLP operated employee housing
- 9 parcels totalling 13.2 hectares for non-market community housing
- Six day lodges located within three base areas
- A par 72, 18-hole, 6,250 yard Resort Golf Course sited on 62 hectares of land
- Over 200 hectares of open space containing Multi-Use Trails, mountain streams and beautiful forests
- Tennis Courts
- Sun Peaks Centre – Arena with NHL size artificial ice surface, outdoor pool, exercise rooms and community space
- Community Parks, including Sports Fields
- Gas Station / Convenience Store
- Two Fire Stations
- Elementary School Site

## .2 Goals and Objectives

The design team identified six general goals and objectives specific to the expansion of Sun Peaks Resort, which provided a common guideline throughout the planning, and design process. These goals and objectives have continued to provide a framework for updating and refining the Master Plan, as listed below.

1. Create a high quality, year-round resort and recreational environment.
2. Balance all base area and village development with the mountain's lift and trail capacities.

3. Respect the site's existing and natural attributes.
4. Create a development that contributes to the local economy and provides employment opportunities.
5. Continue to plan development to minimize reliance on the automobile for in-resort transportation.
6. Identify lands suitable for non-market resident-restricted community housing.
7. Provide a diverse array of recreational amenities that are attractive to residents and a wide spectrum of clientele throughout the year.

## .3 Land Use Concept

**General**

The recreational amenities at Sun Peaks Resort have formed the basis for the Land Use Concept. A central resort village, alpine lift base and an 18-hole resort golf course are the conceptual anchors (fixed elements) which have shaped the Land Use Concept.
A governing principle in planning the valley land use has been to provide ski-in/ski-out access to all public accommodation parcels and as many of the private development parcels as possible to reduce the need for automobile use at the resort. A valley trail system provides a valuable pedestrian and cycling link between the various real estate parcels, resort amenities and the valley open space network.

As described in the earlier versions of the Sun Peaks Master Plan, the Village at Sun Peaks is located on a gently sloped area at the base of the Sunburst and Sundance Express quad chairlifts, with a warm, south-western exposure. The Village is bounded by ski trails to the north, McGillivray Creek and the Sun Peaks Golf Course to the south and hillside residential units to the east. The Village contains the resort's core public accommodation, recreation and commercial facilities. The Sun Peaks Centre, a project including an enclosed arena undertaken by the Sun Peaks Mountain Resort Municipality is a new element in the Central Village Zone.

Medium-density public accommodation has been placed on slopes overlooking the village site. The East Village has been proposed around the base of Lifts 14 and 16. Lower density developments, such as townhouses, stacked townhouses and chalets are located on the hillsides surrounding the valley floor, as well as around the golf course. These development areas include sites with slopes up to 30 percent, which are less feasible for higher density development. Support commercial, service, maintenance and light industrial uses have been

concentrated around the Burfield Base at the west end of the Resort. The municipally owned property in the East Village that was originally programmed for a community recreation centre is identified as a potential site for a permanent school now that the Sun Peaks Centre is under construction in the village. Preliminary planning indicates this site is large enough to accommodate a two-storey 3,750 m² community school with 600 m² double gymnasium, soccer field, baseball diamond, two tennis courts, playground, skate park and parking.

The proposed road network will eventually provide two access routes to and from the Resort. Currently, the only existing year-round access is from the west via Sun Peaks Road, which extends from the Tod Mountain Road in Whitecroft, through the Burfield Base and past the entrance to the Day Skier Parking Lot to Fairways Drive. At Fairways Drive, the name of the road changes to Creekside Way as it passes along the southern perimeter of the Village adjacent to McGillivray Creek and connects to Village Way. East of the Village, the name reverts to Sun Peaks Road where it terminates in a cul-de-sac at the entrance to the Bella Vista subdivision. From there, summer only access to the east is currently provided by the Tod Mountain Forest Service Road (FSR) which travels along the north side of the valley to connect with the McGillivray Lake FSR. The McGillivray Lake FSR runs south from Sun Peaks Resort to the north side of the South Thompson River between Pritchard and Chase, a distance of approximately 20 kilometres. There are existing bridges across the river at both Pritchard and Chase and these two bridges are connected on the north side of the river by a road known as the Kamloops-Shuswap Road. Access to the Trans-Canada Highway (Highway #1) can be achieved via either bridge, depending on whether one is heading south towards Vernon (Gore Creek Bridge at Pritchard) or east towards Salmon Arm (bridge at Chase).

The existing Tod Mountain FSR connection to the McGillivray Lake FSR will be closed and replaced with a road extending south-east from Valley Drive above the 13th hole of the golf course and extending toward Dave's Creek. The road will stay on the north side of McGillivray Creek and follow along the alignment of the Nuthatch cross-country trail until it meets the McGillivray Lake FSR. A second more south-easterly alternative is also shown on the plan. Only one of these through roads will be constructed. In the future, it is expected that the McGillivray Lake FSR and the Kamloops-Shuswap Road will be upgraded to provide a year-round, paved connection from the Trans Canada Highway at Chase to the Resort. The completion of this four-season eastern access was envisioned in the original Sun Peaks Master Plan in 1993. When the year round road is constructed, an East Day Visitor Base will be constructed just west of the McGillivray Lake FSR, as shown on Figure 17. This base will consist of parking, a daylodge for Alpine and Nordic skier services and a lift connection to the

rest of the ski area. Surrounding the East Day Visitor Base will be an extension of the winter and summer cross-country trail networks.

Within the Resort, Fairways Drive provides a secondary road network loop at the west end of the Valley, and Burfield Drive will eventually be extended over McGillivray Creek to connect with Sun Peaks Road. As development proceeds to the east, another loop will be created between the north and south sides of the valley crossing McGillivray Creek at the end of the East Village between the 11th and 12th holes of the golf course and again near the eastern extent of the existing development, as shown on Figure 17 – Base Area Land Use and Parcelization Plan.

An extensive valley trail network within the resort is intended to provide pedestrian access between the development parcels and throughout the Resort. While sidewalks have been provided in front of the two villages and along Sun Peaks Road, for the most part the valley trail network passes behind the development parcels and takes pedestrians away from the roads and into the open space network surrounding the golf course. The valley trail is a 2.5-metre wide asphalt paved path, designed with grades suitable for walking, cycling or roller blading. Portions of the valley trail network through the more developed areas will be provided with street lighting. In addition to the paved valley trail network, a wide variety of pedestrian and skier access routes are planned throughout the resort. All cul-de-sacs provide a pedestrian/skier route through to the lands beyond.

## .4 Development Program

### Bed Unit Entitlement

As outlined in Section II.17, under its Master Development Agreement (MDA) with the Province, Sun Peaks Resort LLP earns the right to purchase Crown Land and develop accommodation in the base area by constructing ski lifts and other recreational improvements. In the MDA, Sun Peaks has the right to earn up to 23,342 Bed Units by the end of Phase 4 of the Mountain Improvements. This total excludes the private lands either already developed or serviced at the time Nippon Cable purchased the resort in 1992. These lands are estimated to have the potential of providing 945 bed units, when fully developed under the existing zoning.

Since Sun Peaks Resort is now classified as a Type D Destination Resort, the ratio of Bed Units earned to Skiers at One Time is 105%. The SAOT and the earned Bed Units at each

future phase of development based on the mountain improvements outlined in Section V are calculated in Table VI.1. Although revisions in the lift plan have resulted in a higher SAOT for the 2020 Master Plan and thus a higher calculated bed unit entitlement, the 2020 Master Plan for the base area has limited the market bed units to the original 23,342 in the MDA. An updated Schedule D to the MDA is contained in Appendix 1.

**TABLE VI.1**
**BED UNIT ENTITLEMENT BASED ON MDA SAOT FORMULA**

| | 1994 to 2019 | Phase 2B | Phase 3 | Phase 4 | |
|---|---|---|---|---|---|
| Mountain SCC | 8,020 | 9,090 | 12,070 | 14,830 | |
| Mountain SAOT based on MDA formula | 11,546 | 12,060 | 20,160 | 24,425 | |
| Accommodation as a percent of SAOT | 105% | 105% | 105% | 105% | |
| *Calculated Bed Unit Allocation based on MDA formula* | *12,123* | *12,663* | *21,168* | *25,646* | |
| Bed Units in Each Phase of the 2020 MP Update | 7,470 | 4,461 | 7,150 | 4,261 | |
| Cumulative Bed Units at end of Phase | 7,470 | 11,931 | 19,081 | **23,342** | **MDA Limit** |
| Unallocated Bed Units at end of Phase | *4,654* | *732* | *2,087* | n.a. | |

## Zoning and Densities

At the completion of Phase 4, the mix of beds developed under the Development Agreement between Sun Peaks Resort LLP and the Province should contain a minimum of fifty percent public accommodation. Generally, the higher development densities have been reserved for public accommodation, while the lower density developments such as townhouses and single-family sites will contain private accommodation. Development densities have been assigned to parcels through zoning by providing a maximum floorspace ratio rather than listing a maximum number of dwelling units per hectare. For planning purposes, we have assumed that 1 bed unit is equivalent to 25 square metres of built accommodation floorspace. Future developers at Sun Peaks will have the flexibility to adjust unit sizes in response to market conditions, while still staying within the planned bed unit size limitations imposed in the Sun Peaks Master Plan.

Zoning regulations for Sun Peaks Resort were originally contained in the Thompson-Nicola Regional District Bylaw No. 1400, Sun Peaks Resort Area Zoning and administered by the Thompson-Nicola Regional District planning department. The Sun Peaks Mountain Resort Municipality has now taken over responsibility for the administration of land use planning within the resort and they have adopted the Sun Peaks Resort Area Zoning Bylaw No. 1400, as amended from time to time.

The B.C. Commercial Alpine Ski Policy and the more recent All Season Resort Policy have a requirement that a certain percentage of the accommodation developed at destination mountain resorts is used for tourist accommodation. This requirement ensures that resorts remain vibrant "lights-on" tourist areas rather than second home communities for the wealthy, with little or no public access. At Sun Peaks properties intended for public accommodation will have either a Commercial Core (CC), Tourist Accommodation (TA) or Tourist Pension (TP) zoning and be subject to covenants registered on the land parcels under the Land Title Act that require any units constructed on the parcel to be available for short-term rental to tourists. These covenants are necessary to ensure that properties developed as tourist accommodation remain available for tourist accommodation use, regardless of property ownership.

All the private townhouse accommodation constructed since 2003 at Sun Peaks also has the TA zoning, so that the owners have the right to rent them out to tourists on an occasional basis. However, since these properties do not have the covenant on title **requiring** that they be available for nightly rental when the owners aren't using them, their availability for nightly accommodation for tourists is at the discretion of the owner. Therefore, these units are not included in the public accommodation category in the tables.

The SPMRM has also allowed the rezoning of some existing single-family properties from Single Family One (RS-1) to Single Family One – Tourist Accommodation (RS-1A) to allow nightly rental of a limited number of chalets in the residential neighbourhoods. Going forward, it is the intent of SPRLLP and SPMRM to designate new single-family neighbourhoods as either RS-1 or RS-1A so that it is clear to the original and successive purchasers what type of occupancy is permitted in their neighbourhoods. Since the single-family homes with the RS-1A zoning do not have the covenant **requiring** nightly rental, they also have been classified as private beds in the summary tables.

**Public Accommodation**

Public accommodation at Sun Peaks Resort is concentrated in and around the two village areas, which will contain 33 percent of the total public beds at the completion of Phase 4. Currently, the Village at Sun Peaks contains 2,146 bed units and at buildout, will contain approximately 2,800 bed units. The East Village is planned to contain approximately 1,700 bed units. The remaining public beds are all located within walking/skiing distance of a valley staging lift. Thirteen tourist accommodation and pension parcels containing a total of 462 units and 2,001 bed units have been constructed since 1993. The Burfield West and Peaks West

projects currently under construction at the Burfield base are also zoned to allow nightly rentals. More public accommodation will be constructed near the bottom of the Mount Morrisey and Orient Ridge lifts in the East Village. There are also Tourist Accommodation parcels located near the terminals of future Lift 17, the cross-valley lift. By the end of Phase 4, the total public accommodation will be approximately 13,500 bed units.

The proposed densities for tourist accommodation parcels vary from 140 bed units per hectare (floorspace ratio of 0.35), for parcels on sloping sites, to 300 bed units per hectare (floorspace ratio of 0.75) for parcels on relatively flat sites. At buildout of Phase 4, Sun Peaks will contain 48 hectares of land developed for tourist accommodation, two pedestrian villages occupying 12 hectares and 5 tourist pensions occupying 1.4 hectares.

**Private Accommodation**

Currently, 48 percent of the accommodation at Sun Peaks (in terms of bed units) is private. Upon completion of Phase 4, we anticipate 42% of the market bed units will be in private accommodation units, including various styles and sizes of stacked townhouses, townhouses, and single-family chalets. The densities for private multi-family residential parcels vary from 140 bed units per hectare (floorspace ratio of 0.35) for townhouses on sloping lots to 220 bed units per hectare (floorspace ratio of 0.55) for stacked townhouse style developments on flatter terrain. Single-family homes have been assumed to contain 6 bed units and the floorspace ratio is limited to 0.35 through zoning. At buildout of Phase 4, the base area lands will contain approximately 35 hectares of private townhouse development and 80 hectares of single-family and duplex development.

**Employee Housing**

The Sun Peaks MDA did not identify a need for employee housing. At that time, it was anticipated that most of the employees working at the resort would choose to live in Kamloops or in the small settlements of Rayleigh, Heffley Creek and Whitecroft. The zoning for single family lots had an allowance for the inclusion of secondary suites for employee housing. However, as the resort has grown, more employees want to live at Sun Peaks. A four-building rental employee housing complex to be operated by Sun Peaks was approved for Parcel 37 adjacent in the Burfield base area. The Little Shuswap Lodge was constructed in 2003, the Whispering Pines Lodge in 2008 and the Big Bear Lodge in 2019. At completion, this four

building complex will house approximately 330 employees in 159 units. The adjacent parcel 15 is also planned to be developed for employee housing.

*Construction of the Big Bear Lodge Employee Housing*

**Community Housing**

According to Census Canada the permanent population of Sun Peaks almost doubled from 317 to 616 between 2011 and 2016 and the municipality estimates the 2019 permanent population is 790. The SPMRM, along with other communities in the Thompson Nicola Regional District recently completed a housing needs report. This report identified a need for non-market resident-restricted housing to preserve affordable rental and ownership options in perpetuity. One of the priority actions recommended in the report was to prioritize the acquisition of land for a Housing Authority. More recent updates to BC's All Season Resort Policy, have suggested that destination resorts outside of existing communities should consider planning for 10 to 20% employee/resident restricted housing. Therefore, nine parcels suitable for the development of non-market resident-restricted housing have been identified in this Master Plan Update as shown on Figure 17. These parcels have been labeled RM-EH.

A Sun Peaks Housing Authority has been incorporated. The Housing Authority with the assistance of the Municipality will manage and oversee affordable non-market employee housing in Sun Peaks. The plan is to encourage where possible employers to invest in

affordable employee housing for seasonal workers. The Housing Authority working with builder/developers with assistance of Municipal financial incentives will undertake to see the development of non-market employee rental and ownership housing throughout the Municipality on the lands identified in the Master Plan.

Preliminary development concepts for two serviced parcels on Sun Peaks Road across from the Burfield base (Parcels 69 and 74) were prepared for the SPMRM in 2019 and plans to transfer these lands to a municipal housing authority are underway. Two additional community housing parcels (75 and 76) on a future extension of Burfield Drive are planned in the Burfield area. In Phase 3 and 4, five parcels at the east end of the valley have also been earmarked for non-market housing. Our preliminary assessment is that these parcels collectively could provide approximately 400 units if developed with zoning similar to that proposed for the adjacent market housing parcels.


*Sun Peaks Grand and Sundance Lodge*

Land Use Summary

The Land Use Summary (Table VI.2) outlines the proposed land uses for the base area lands. As can be seen in this table, the base area lands within the McGillivray Creek Valley are capable of supporting the 23,342 bed units approved in the MDA, as well as the pre-existing development and nine parcels for non-market community housing. This result is a change from

the previous Sun Peaks Master Plan update which assumed that development would need to extend onto the McGillivray Highlands and contain a third resort village to accommodate all the development permitted within the MDA. By choosing more compact forms of development, Sun Peaks can maintain the pedestrian friendly atmosphere at the resort and avoid extending roads and infrastructure to higher elevations. This change frees up the McGillivray Highlands area for extensions to the existing winter and summer trail networks.

**TABLE VI.2**
**LAND USE SUMMARY**

| Land Use | Area (ha.) | Percent of Base Area Developed Lands | Skier Service Space (m²) | Comm-ercial Space * (m²) | Units | Bed Units | Percent of Total B.U.'s | Percent of Type |
|---|---|---|---|---|---|---|---|---|
| **Public Accommodation** | | | | | | | | |
| Village Hotel/Condotel | 10.25 | 4% | 11,114 | 19,740 | 1,311 | 4,498 | 19% | 33% |
| Tourist Accommodation | 46.97 | 17% | | | 1,922 | 8,941 | 38% | 66% |
| Tourist Pension | 1.39 | 0% | | | 5 | 100 | 0% | 1% |
| **Total Public Accommodation** | **58.61** | **21%** | **11,114** | **19,740** | **3,238** | **13,538** | **58%** | **100%** |
| **Private Accommodation** | | | | | | | | |
| Townhouse & Stacked Townhouse | 34.38 | 12% | | | 1,194 | 6,027 | 26% | 61% |
| Single Famiy - Nightly Rental Allowed | 15.28 | 5% | | | 178 | 1,068 | 5% | 11% |
| Single Family/Duplex | 64.75 | 23% | | | 460 | 2,709 | 12% | 28% |
| **Total Private Accommodation** | **114.41** | **40%** | **-** | **-** | **1,832** | **9,804** | **42%** | **100%** |
| **TOTAL ACCOMMODATION** | **173.02** | **61%** | **11,114** | **19,740** | **5,070** | **23,342** | **100%** | |
| Pre Development Agreement Parcels | 11.05 | 4% | 1,103 | 255 | 437 | 945 | | |
| SPRLLP Industrial/Employee Housing | 1.27 | 0% | | | 222 | n.a | | |
| Non Market Community Housing | 15.07 | 5% | | | 409 | n.a | | |
| Recreation, Golf, Parks | 67.25 | 24% | | 1,478 | | | | |
| Institutional (Fire Halls, School, Medical) | 2.97 | 1% | | 6,983 | | | | |
| Commercial, Industrial, Maintenance, Utilities | 4.25 | 2% | 272 | 1,810 | | | | |
| Day Skier Parking Lots | 7.64 | 3% | 1,000 | | | | | |
| **TOTAL DEVELOPED LANDS** | **282.53** | 100% | **13,489** | **30,266** | **6,138** | **24,287** | | |

* Commercial space includes F&B, Retail, Office, Conference and Indoor Recreation but excludes institutional space.

## Base Area Land Use and Parcelization Plan

An update of the Land Use Concept for Phases 1 to 4 is presented on Figure 17, the Base Area Land Use and Parcelization Plan. Tables VI.3A, 3B, 3C and 3D detail the proposed land use, zoning, parcel area, proposed density and number of private or public bed units allocated to each of the existing and proposed development parcels. The plan update accommodates a total of 23,342 market bed units in the 4 phases. The planning goal was to have over 50 percent of the total beds dedicated for public use. For the sites with TA zoning, Tables V.3A-D identify those which are intended for public nightly rentals. Units developed on these parcels will be sold with a rental use covenant that will require the unit to be placed in a rental management pool that will make the unit available for nightly rental to tourists when the owner is not at the resort.

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# TABLE VI.3A
# LAND USE PROGRAM
# VILLAGE CORE & TOURIST ACCOMMODATION

**VILLAGE**

| Parcel | Description | Proposed Zoning | Parcel Area (ha.) | Bed Units per ha. | Units | B.U. per Unit | Bed Units | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Public | Private | Total |
| A | Sundance Lodge | CC1 | 0.31 | n.a. | 84 | 2.2 | 186 | - | 186 |
| B | Hearthstone Lodge | CC1 | 0.35 | n.a. | 70 | 2.5 | 172 | - | 172 |
| C | Condotel & Skier Services | CC1 | 0.28 | n.a. | 59 | 3.3 | 193 | - | 193 |
| D | Stumbock's Sun Peaks Lodge | CC1 | 0.23 | n.a. | 44 | 1.7 | 74 | - | 74 |
| E | Village Pedestrian Street | CC1 | 0.68 | n.a. | - | - | - | - | - |
| F/G/H | Sun Peaks Grand Hotel & Conference | CC1 | 1.11 | n.a. | 220 | 2.6 | 580 | - | 580 |
| I/J | The Grand Residences | CC1 | 0.38 | n.a. | 41 | 5.3 | 216 | - | 216 |
| K | Nancy Greene's Cahilty Lodge | CC1 | 0.50 | n.a. | 123 | 2.9 | 362 | - | 362 |
| L | Heffley Inn | CC1 | 0.12 | n.a. | 26 | 2.3 | 59 | - | 59 |
| M | Fireside Lodge | CC1 | 0.39 | n.a. | 72 | 2.9 | 211 | - | 211 |
| N | Kookaburra Lodge | CC1 | 0.28 | n.a. | 17 | 5.5 | 93 | - | 93 |
| S | Condotel | CC1 | 1.33 | n.a. | 150 | 4.4 | 666 | - | 666 |
| E-A | Condotel & Daylodge | CC1 | 0.42 | n.a. | 81 | 3.7 | 301 | - | 301 |
| E-B | Condotel | CC1 | 0.37 | n.a. | 48 | 3.0 | 146 | - | 146 |
| E-C | Condotel | CC1 | 0.42 | n.a. | 39 | 5.2 | 202 | - | 202 |
| E-D | Condotel | CC1 | 0.22 | n.a. | 27 | 5.0 | 135 | - | 135 |
| E-E | Condotel | CC1 | 0.27 | n.a. | 36 | 4.9 | 176 | - | 176 |
| E-F | Condotel | CC1 | 0.45 | n.a. | 50 | 3.0 | 232 | - | 232 |
| E-G | Condotel | CC1 | 0.31 | n.a. | 30 | 5.1 | 154 | - | 154 |
| E-H | Common Parking Lot | CC1 | 0.40 | - | - | - | - | - | - |
| E-I | Condotel | CC1 | 0.43 | - | 33 | 4.9 | 163 | - | 163 |
| E-J | Condotel | CC1 | 0.35 | - | 61 | 2.9 | 177 | - | 177 |
| | Village Common Space | CC1 | 0.66 | - | - | - | - | - | - |
| **VILLAGE TOTAL** | | | **10.25** | **439** | **1,311** | **3.4** | **4,498** | **-** | **4,498** |

**TOURIST ACCOMMODATION (with rental covenant)**

| Parcel | Description | Proposed Zoning | Parcel Area (ha.) | Bed Units per ha. | Units | B.U. per Unit | Bed Units | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Public | Private | Total |
| Q | Village Walk Townhomes | CC1 | 0.81 | n.a. | 24 | 6.0 | 241 | - | 241 |
| 12 | Townhouse - Public | TA4 | 2.00 | 140 | 32 | 5.0 | 160 | - | 160 |
| 21 | Townhouse - Public | TA4 | 0.48 | 140 | 7 | 7.0 | 49 | - | 49 |
| 24 | Townhouse - Public | TA1 | 2.11 | 180 | 76 | 5.0 | 380 | - | 380 |
| 25 | Townhouse - Public | TA2 | 1.40 | 220 | 62 | 5.0 | 308 | - | 308 |
| 26 | Townhouse - Public | TA2 | 1.34 | 220 | 59 | 5.0 | 295 | - | 295 |
| 30 | High Density Condominium - Public | TA3 | 0.64 | 300 | 48 | 4.0 | 192 | - | 192 |
| 33 | Bridgegate - Public | TA1 | 0.85 | 180 | 16 | 9.6 | 153 | - | 153 |
| 34 | Townhouse - Public | TA1 | 0.90 | 180 | 23 | 4.5 | 106 | - | 106 |
| 35 | High Density Condominium - Public | TA3 | 1.05 | 300 | 40 | 4.4 | 175 | - | 175 |
| 38 | Townhouse - Public | TA1 | 1.48 | 180 | 52 | 5.0 | 266 | - | 266 |
| 39 | Snow Creek Village - Public | TA1 | 1.03 | 180 | 52 | 3.6 | 185 | - | 185 |
| 40 | Timberline Village - Public | TA2 | 0.87 | 220 | 60 | 3.2 | 192 | - | 192 |
| 41 | Townhouse - Public | TA4 | 1.44 | 140 | 45 | 4.5 | 202 | - | 202 |
| 47 | Crystal Forest - Public | TA2 | 1.08 | 220 | 72 | 3.3 | 238 | - | 238 |
| 48 | Trapper's Landing - Public | TA1 | 1.32 | 180 | 40 | 6.0 | 238 | - | 238 |
| 49 | Townhouse - Public | TA1 | 1.77 | 180 | 64 | 5.0 | 319 | - | 319 |
| 50 | Townhouse - Public | TA1 | 4.50 | 180 | 162 | 5.0 | 810 | - | 810 |
| 53 | Townhouse - Public | TA1 | 3.87 | 180 | 139 | 5.0 | 697 | - | 697 |
| 55 | High Density Condominium - Public | TA3 | 1.46 | 300 | 109 | 4.0 | 437 | - | 437 |
| 56 | Townhouse - Public | TA1 | 3.71 | 220 | 181 | 4.5 | 816 | - | 816 |
| 57 | Townhouse - Public | TA1 | 3.43 | 180 | 154 | 4.0 | 617 | - | 617 |
| 58 | Townhouse - Public | TA2 | 0.79 | 220 | 35 | 5.0 | 174 | - | 174 |
| 59 | Stone's Throw - Public | TA2 | 1.05 | 220 | 60 | 3.8 | 230 | - | 230 |
| 60 | Settler's Crossing - Public | TA2 | 1.17 | 220 | 76 | 3.4 | 257 | - | 257 |
| 61 | Echo Landing - Public | TA2 | 1.05 | 220 | 48 | 4.6 | 221 | - | 221 |
| 66 | Townhouse - Public | TA1 | 1.93 | 180 | 58 | 6.0 | 347 | - | 347 |
| 67 | Townhouse - Public | TA1 | 1.14 | 180 | 41 | 5.0 | 205 | - | 205 |
| 70 | The Burfield West | RC-1 | 0.21 | n.a. | 11 | 5.0 | 55 | - | 55 |
| 78 | Townhouse - Public | TA1 | 2.09 | 180 | 75 | 5.0 | 376 | - | 376 |
| **TOURIST ACCOMMODATION TOTAL** | | | **46.97** | **190** | **1,922** | **4.7** | **8,941** | **-** | **8,941** |

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# TABLE VI.3B
# LAND USE PROGRAM
# TOURIST PENSION & MULTI-FAMILY

**TOURIST PENSION**

| Parcel | Description | Proposed Zoning | Parcel Area (ha.) | Bed Units per ha. | Units | B.U. per Unit | Bed Units | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Public | Private | Total |
| 4 | Horie Sunlodge | TP1 | 0.21 | 95 | 1 | 20 | 20 | - | 20 |
| 7 | Pinnacles Lodge | TP1 | 0.57 | 70 | 2 | 20 | 40 | - | 40 |
| 23 | Tourist Pension | TP1 | 0.18 | 111 | 1 | 20 | 20 | - | 20 |
| 62 | Tourist Pension | TP1 | 0.43 | 47 | 1 | 20 | 20 | - | 20 |
| **TOURIST PENSION TOTAL** | | | **1.39** | **72** | **5** | **20.0** | **100** | **-** | **100** |

**MULTI-FAMILY OR TOURIST ACCOMMODATION WITHOUT COVENANT**

| Parcel | Description | Proposed Zoning | Parcel Area (ha.) | Bed Units per ha. | Units | B.U. per Unit | Bed Units | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Public | Private | Total |
| 5A | Alpine Greens | RM2 | 0.69 | 140 | 26 | 3.7 | - | 96 | 96 |
| 5B | The Peaks | RM2 | 0.92 | 140 | 32 | 4.0 | - | 129 | 129 |
| 6 | Sun Mountain Villas | RM2 | 0.60 | 140 | 24 | 3.5 | - | 84 | 84 |
| 18 | McGillivray Creek | RM2 | 1.35 | 140 | 40 | 5.0 | - | 189 | 189 |
| 31 | Woodhaven | TA1 | 1.61 | 180 | 46 | 6.3 | - | 289 | 289 |
| 36 a,b,c,d | Townhouse | TA1 | 2.37 | 180 | 84 | 5.4 | - | 456 | 456 |
| 42 | Forest Trails | RM2 | 1.03 | 140 | 36 | 3.8 | - | 138 | 138 |
| 43 | Powder Ridge | RM3 | 0.27 | 180 | 7 | 7.0 | - | 49 | 49 |
| 46 | Trail's Edge | TA1 | 2.18 | 180 | 58 | 6.8 | - | 393 | 393 |
| 51 | Townhouse | TA1 | 2.27 | 180 | 82 | 5.0 | - | 409 | 409 |
| 52 | Townhouse | TA1 | 1.70 | 180 | 61 | 5.0 | - | 306 | 306 |
| 54 | Townhouse | TA1 | 1.75 | 180 | 63 | 3.5 | - | 315 | 315 |
| 79 | Townhouse | TA1 | 3.57 | 180 | 129 | 5.0 | - | 643 | 643 |
| 82 | Townhouse | TA1 | 3.98 | 180 | 143 | 5.0 | - | 716 | 716 |
| 89 | Townhouse | TA1 | 0.92 | 180 | 33 | 5.0 | - | 166 | 166 |
| 91 | Townhouse | TA1 | 0.85 | 180 | 31 | 5.0 | - | 153 | 153 |
| 92 | Townhouse | TA1 | 0.96 | 180 | 35 | 5.0 | - | 173 | 173 |
| 93 | Townhouse | TA1 | 1.63 | 180 | 59 | 5.0 | - | 293 | 293 |
| 94 | Townhouse | TA1 | 0.91 | 180 | 33 | 5.0 | - | 164 | 164 |
| 96 | Townhouse | TA1 | 1.25 | 180 | 45 | 5.0 | - | 225 | 225 |
| 97 | Townhouse | TA1 | 0.60 | 180 | 22 | 5.0 | - | 108 | 108 |
| 98 | Townhouse | TA1 | 2.97 | 180 | 107 | 5.0 | - | 533 | 533 |
| **MULTI-FAMILY TOTAL** | | | **34.38** | **175** | **1,194** | **5.0** | **-** | **6,027** | **6,027** |

# TABLE VI.3C
# LAND USE PROGRAM
# SINGLE FAMILY & NON-MARKET COMMUNITY HOUSING

**SINGLE FAMILY**

| Parcel | Description | Proposed Zoning | Parcel Area (ha.) | Bed Units per ha. | Units | B.U. per Unit | Bed Units | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Public | Private | Total |
| 8 | Fairway Cabins/Cottages | RS2 | 3.50 | 73 | 51 | 5.0 | - | 255 | 255 |
| 9 | Sunburst Estates | RS1/1A | 4.22 | 54 | 38 | 6.0 | - | 228 | 228 |
| 10 | Mountain View | RS1 | 5.89 | 46 | 45 | 6.0 | - | 270 | 270 |
| 11A | The Fairways - Phase 1 | RS1/1A | 7.16 | 18 | 22 | 6.0 | - | 132 | 132 |
| 11 B,C,D,E | The Fairways - Phases 2, 3, 4, 5 | RS1/1A | 4.96 | - | 47 | 6.0 | - | 282 | 282 |
| 20 | Single Family - nightly rental allowed | RS1A | 1.74 | 69 | 20 | 6.0 | - | 120 | 120 |
| 22 | Single Family - nightly rental allowed | RS1A | 1.02 | 65 | 11 | 6.0 | - | 66 | 66 |
| 27 | Single Family - nightly rental allowed | RS1A | 1.03 | 44 | 11 | 6.0 | - | 66 | 66 |
| 28 | Lookout Ridge | RS1 | 6.22 | 44 | 46 | 6.0 | - | 276 | 276 |
| 29 | Single Family - nightly rental allowed | RS1A | 0.84 | 43 | 6 | 6.0 | - | 36 | 36 |
| 32 | Single Family - nightly rental allowed | RS1A | 2.65 | 48 | 20 | 6.0 | - | 120 | 120 |
| 44 | Sundance Estates | RS1/1A | 6.23 | 49 | 51 | 6.0 | - | 306 | 306 |
| 45 | Bella Vista - Bare land Strata | RS1 | 3.72 | 50 | 31 | 6.0 | - | 186 | 186 |
| 65 | Single Family - nightly rental allowed | RS1A | 3.08 | 60 | 31 | 6.0 | - | 186 | 186 |
| 68 | Single Family - nightly rental allowed | RS1A | 1.30 | 60 | 13 | 6.0 | - | 78 | 78 |
| 77a | Single Family - nightly rental allowed | RS1A | 1.11 | 38 | 7 | 6.0 | - | 42 | 42 |
| 77b | Single Family - nightly rental allowed | RS1A | 2.51 | 48 | 20 | 6.0 | - | 120 | 120 |
| 80 | Single Family | RS1 | 1.24 | 53 | 11 | 6.0 | - | 66 | 66 |
| 81 | Single Family | RS1 | 7.69 | 32 | 41 | 6.0 | - | 246 | 246 |
| 83 | Single Family | RS1 | 6.80 | 36 | 41 | 6.0 | - | 246 | 246 |
| 84 | Single Family | RS1 | 2.34 | 62 | 24 | 6.0 | - | 144 | 144 |
| 87 | Single Family | RS1 | 2.45 | 56 | 23 | 6.0 | - | 138 | 138 |
| 88 | Single Family | RS1 | 1.30 | 60 | 13 | 6.0 | - | 78 | 78 |
| 90 | Single Family | RS1 | 1.03 | 87 | 15 | 6.0 | - | 90 | 90 |
| **SINGLE FAMILY TOTAL** | | | **80.03** | **47** | **638** | **5.9** | **-** | **3,777** | **3,777** |
| **OUTSIDE VILLAGE ACCOMMODATION TOTAL** | | | **162.77** | **116** | **3,759** | **5.0** | **9,041** | **9,804** | **18,844** |
| **TOTAL MDA ACCOMMODATION** | | | **173.02** | **135** | **5,070** | **4.6** | **13,538** | **9,804** | **23,342** |
| **Percent of Total Bed Units Developed** | | | | | | | **58%** | **42%** | **100%** |

**NON-MARKET COMMUNITY HOUSING**

| Parcel | Description | Proposed Zoning | Parcel Area (ha.) | Bed Units per ha. | Est-imated Units | B.U. per Unit | Estimated Bed Units | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Public | Private | Total |
| *63* | *Townhouse - Community Housing* | *RM-EH* | *1.41* | *140* | *49* | *4.0* | - | *n.a.* | *n.a.* |
| *64* | *Townhouse - Community Housing* | *RM-EH* | *1.48* | *140* | *52* | *4.0* | - | *n.a.* | *n.a.* |
| *69* | *Apartment - Community Housing* | *RM-EH* | *0.52* | *220* | *38* | *2.0* | - | *n.a.* | *n.a.* |
| *74* | *Townhouse - Community Housing* | *RC-1* | *1.96* | *140* | *36* | *5.0* | | *n.a.* | *n.a.* |
| *75* | *Duplex - Community Housing* | *RM-EH* | *0.56* | *107* | *12* | *5.0* | - | *n.a.* | *n.a.* |
| *76* | *Townhouse - Community Housing* | *RM-EH* | *0.72* | *140* | *25* | *4.0* | - | *n.a.* | *n.a.* |
| *85* | *Townhouse - Community Housing* | *RM-EH* | *1.15* | *140* | *32* | *5.0* | - | *n.a.* | *n.a.* |
| *86* | *Townhouse - Community Housing* | *RM-EH* | *1.31* | *140* | *37* | *5.0* | - | *n.a.* | *n.a.* |
| *95* | *Townhouse - Community Housing* | *RM-EH* | *4.00* | *160* | *128* | *5.0* | - | *n.a.* | *n.a.* |
| **NON-MARKET COMMUNITY HOUSING TOTAL** | | | **13.11** | **-** | **409** | **-** | **-** | **-** | **-** |

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# TABLE VI.3D
# LAND USE PROGRAM
# SERVICE & RECREATION, PRE-DEVELOPMENT AGREEMENT

**SERVICE, COMMERCIAL & RECREATION**

| Parcel | Description | Proposed Zoning | Parcel Area (ha.) | Bed Units per ha. | Units | B.U. per Unit | Bed Units | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Public | Private | Total |
| AA | Village Daylodge | LR1 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| BB | Future Skier's Services - Children's / Snow | LR1 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| CC | The Annex Daylodge | LR1 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| DD | Future Skier Services | LR1 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| EE | Future Skier Services | LR1 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| GG | Medical Centre/Ski Patrol | RR-1 | 0.11 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| E-K | Fire Hall 2 | INS | 0.33 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| 13 | Gas & Convenience | CS1 | 0.38 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| 16 | Fire Hall | IL1 | 0.33 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| 17 | Industrial Site | IL1 | 1.52 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| 19 | Golf Maintenance | LR1 | 0.62 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| G1 | Golf Course Front Nine | OS1 | 26.03 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| G2 | Golf Course Back Nine | OS1 | 29.65 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| | Future School Site | INS | 2.20 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| O/R | Sun Peaks Centre | LR1 | 1.48 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| p1 | Snowmobile Creek Park | OS1 | 1.37 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| p2 | Community Park & Sports Fields | LP1 | 2.40 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| p3 | Community Park & Sports Fields | LP1 | 2.73 | - | - | - | - | - | - |
| p4 | Mosquito Creek Park | OS1 | 3.59 | - | - | - | - | - | - |
| | Sewage Treatment Plant | IL1 | 2.09 | - | | | | | |
| | Waste Transfer Station | IL1 | 0.34 | | | | | | |
| | PZ2 Reservoir | | 0.24 | | | | | | |
| | PZ3 Reservoir | | 0.25 | | | | | | |
| P1, P4, P6 | Burfield Day Skier Lots | | 1.34 | - | - | - | | | - |
| P2, P3 | Village Day Skier Lots | | 3.30 | - | - | - | - | - | - |
| P7 | East Day Visitor Parking | | 3.00 | | | | | | |
| **SERVICE, COMMERCIAL & RECREATION TOTAL** | | | **83.30** | | | | | | |
| **TOTAL DEVELOPED LAND** | | | **269.44** | | **5,479** | | **13,538** | **9,804** | **23,342** |

***PRE-DEVELOPMENT AGREEMENT***

| Parcel | Description | Existing Zoning | Parcel Area (ha.) | Bed Units per ha. | Units | B.U. per Unit | Bed Units | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Public | Private | Total |
| *1* | *Burfield Heights* | *R-3* | *0.94* | *n.a.* | *36* | *4* | *-* | *144* | *144* |
| *2* | *Burfield Drive (duplex, triplex)* | *R-1, RC-1* | *3.59* | *n.a.* | *99* | *5* | *-* | *495* | *495* |
| *3* | *Peaks West* | *RC-1* | *1.26* | *203* | *64* | *4* | *256* | *-* | *256* |
| *14* | *Burfield Cabins & Treehouse* | *LR1* | *2.24* | *n.a.* | *6* | *2* | *-* | *12* | *12* |
| *15* | *Light Industrial / Employee Housing* | *LR1* | *0.31* | *n.a.* | *63* | *n.a.* | *-* | *n.a.* | *n.a.* |
| *37* | *Light Industrial / Employee Housing* | *IL1* | *0.96* | *n.a.* | *159* | *n.a.* | *-* | *n.a.* | *n.a.* |
| *FF* | *Burfield Lodge Administration* | *RR-1* | *2.24* | *n.a.* | *n.a.* | *n.a.* | *n.a.* | *n.a.* | *n.a.* |
| *71* | *The Burfield* | *RC-1* | *0.12* | *180* | *10* | *3.2* | *32* | *-* | *32* |
| *72* | *Well Site* | *RC-1* | *0.58* | *n.a.* | *n.a.* | *n.a.* | *n.a.* | *n.a.* | *n.a.* |
| *73* | *Single Family House* | *RC-1* | *0.08* | *75* | *1* | *6* | *-* | *6* | *6* |
| ***PRE-DEVELOPMENT SUBTOTAL*** | | | *11.66* | | *437* | ***2.2*** | *288* | *657* | *945* |
| **TOTAL INCLUDING PRE-DEVELOPOMENT** | | | **281.10** | | **5,916** | **4.1** | **13,826** | **10,461** | **24,287** |

## .5 Base Area Capacity and Skier Staging

Detailed programming of the base area capacity ensures that sufficient base area facilities are provided to support both the day skiers and visitors at the resort. This analysis is completed for a weekend day during the peak winter holiday season. For the ski area to operate at capacity, the base area staging facilities (accommodation, parking and transit) must be large enough to comfortably accommodate skiers, other visitors, employees and residents. If there is insufficient parking and accommodation, the base area is unable to supply enough skiers to fill the lift and trail system. Ideally, the base area staging capacity should exceed the Skier Carrying Capacity (SCC) of the lift and trail systems so that each season there can be a few "peak days" where business levels can exceed the SCC and for the majority of weekends, the SCC is reached.

**Skiers from Accommodation**

As outlined in the Inventory Section, by making assumptions of bed unit occupancy and skier participation rates, we can determine the estimated skiers generated by the accommodation at the resort. When making these assumptions, it is important to realize the following three facts:

- It is very difficult to realize 100% unit occupancy, even in the most popular hotel, during the busiest holiday periods, as there are always cancellations due to changing plans.
- Even when a unit in a hotel or condotel is rented, not all of the beds will be occupied. For example, two people may book a hotel room that can sleep four, or a family of five might stay in a townhouse that could sleep eight, thereby not utilizing the beds within the occupied unit to its maximum capacity.
- At destination mountain resorts similar to Sun Peaks, between 70 and 90 percent of the overnight visitors will actually choose to go alpine skiing on a given day. This is the result of alternative recreational and social opportunities being offered within the resort area, as well as travel days and the fact that some guests are non-skiers.

Based on our experience at Sun Peaks, we have assumed the unit occupancy and bed unit occupancy rates outlined in Table VI.4 for a weekend day during the peak winter season. These two rates when multiplied together give the bed unit yield, or the number of overnight visitors per bed expected on a typical weekend day during the peak winter season for each category of accommodation. The bed unit yield is then multiplied by the skier participation rates to provide the skier yield for each type of accommodation.

**TABLE VI.4**
**PEAK BED UNIT OCCUPANCY AND SKIER PARTICIPATION RATES**

| ASSUMPTIONS | Unit Occupancy | Bed Unit Occupancy | Bed Unit Yield | Skier Partici-pation | Skier Yield |
|---|---|---|---|---|---|
| Hotel/Condotel/Pension | 95% | 85% | 81% | 80% | 65% |
| Tourist Accommodation | 90% | 80% | 72% | 80% | 58% |
| Multi-family | 80% | 80% | 64% | 75% | 48% |
| Single Family/Duplex | 75% | 75% | 56% | 70% | 39% |
| Employee / Community | 100% | 95% | 95% | 25% | 24% |

Using the bed unit yields from Table VI.4, at buildout the resort is estimated to be able to house 18,950 people during periods of peak occupancy including residents, guests and employees. The skiers generated from accommodation at the resort on a typical peak winter day is estimated at approximately 13,500 at the completion of Phase 4, as shown in Table VI.5 or approximately 90 percent of the Phase 4 mountain carrying capacity of 14,830 skiers. Of the skiers from overnight accommodation, approximately 10,560 will be staying in accommodation that is either ski-in/ski-out or within skier walking distance of one of the resort's staging lifts. The new location of Lift 17, the McGillivray Connector, allows most of the real estate at the east end of the resort to be ski-in/ski-out. In the morning, guests can ski or walk down from their accommodation to either the mid-load point at the valley bottom or the top station of 17b, take the lift up the Mt. Morrisey side and ski down to the Morrisey and Orient lifts. At the end of the day, guests staying in accommodation on the north side of the valley can ski directly home via the Orient Ridge trails, while those staying on the south side can return to their lodgings via the Mt. Morrisey trail system. Skiers staying outside of skier walking distance will either take the resort shuttle, get dropped off or drive and park in one of the day visitor lots.

**TABLE VI.5**
**OCCUPANTS AND SKIERS GENERATED FROM RESORT AREA ACCOMMODATION**

| PHASE 4 BUILDOUT | Bed Units | % of Total MDA Bed Units | Over Night People | Skiers Within SWD? | | |
|---|---|---|---|---|---|---|
| | | | | Yes | No | Total |
| **Public Accommodation** | | | | | | |
| Village Hotel/Condotel | 4,498 | 19% | 3,631 | 2,904 | - | 2,904 |
| Tourist Accommodation | 8,941 | 38% | 6,438 | 4,966 | 184 | 5,150 |
| Tourist Pensions | 100 | 0% | 80 | 65 | - | 65 |
| **Sub-Total Public** | **13,538** | **58%** | **10,149** | **7,935** | **184** | **8,119** |
| **Private Accommodation** | | | | | | |
| Multi Family (includes TA without Covenant) | 6,027 | 26% | 3,859 | 968 | 1,926 | 2,894 |
| Single Family | 3,777 | 16% | 2,126 | 1,031 | 455 | 1,486 |
| **Sub-Total Private** | **9,804** | **42%** | **5,985** | **1,999** | **2,381** | **4,380** |
| **SUB-TOTAL MDA MARKET ACCOMMODATION** | **23,342** | 100% | **16,134** | **9,934** | **2,565** | **12,499** |
| Pre Development Agreement Lands | 945 | n.a. | 583 | 304 | 133 | 437 |
| Employee / Non-Market Community Housing | n.a. | n.a. | 2,235 | 322 | 233 | 555 |
| **Sub-Total non MDA Accommodation** | **945** | | **2,818** | **626** | **366** | **992** |
| **TOTAL ACCOMMODATION** | **24,287** | | **18,952** | **10,560** | **2,931** | **13,491** |

## Day Skiers

In 1993, day skiers, including overnight skiers who were staying near Sun Peaks, but not at the Resort, comprised 87 percent of the skiers at the resort on a typical peak day. With the construction of the public and private accommodation units over the past twenty-six years, day skiers are now estimated to make up less than 40% of the total skiers on peak days and a much smaller proportion mid-week. The actual proportion of day skiers on any given day is difficult to determine without doing periodic lift line surveys since day skiers could be season pass holders, value card holders or those purchasing a single day ticket. The day skier market fluctuates considerably from weekend to weekend depending on snow and weather conditions. As the resort matures and more on-hill accommodation is provided, the balance between day and overnight visitors will continue to shift towards a higher proportion of overnight visitors throughout the season. We estimate that day skiers will make up less than 20 percent of the peak day totals by the end of Phase 4, as outlined in Table VI.6.

**TABLE VI.6**
**RESORT PROGRAM**

| | 2019/20 | PHASE 2 | PHASE 3 | PHASE 4 |
|---|---|---|---|---|
| **MOUNTAIN CAPACITY (SCC)** | **8,020** | **9,090** | **12,070** | **14,830** |
| **Developed Bed Units** | **7,518** | **12,018** | **19,168** | **23,342** |
| Overnight Guests / Residents / Employees | 5,816 | 9,909 | 15,668 | 18,952 |
| Overnight Skiers within Skier Walking Distance | 3,533 | 6,210 | 9,570 | 10,557 |
| Overnight Skiers beyond Skier Walking Distance | 611 | 830 | 1,549 | 2,934 |
| **Overnight Skiers** | **4,144** | **7,040** | **11,119** | **13,491** |
| **Day Skiers** | **2,634** | **2,600** | **2,100** | **2,120** |
| **TOTAL SKIERS** | **6,778** | **9,640** | **13,219** | **15,611** |
| Percent Overnight Skiers | 61% | 73% | 84% | 86% |
| Percent Day Skiers | 39% | 27% | 16% | 14% |

Day Visitor Parking

Adequate parking near the lifts must be provided for day skiers. In addition, parking and/or transportation to the lifts must be provided for those skiers at the Resort who are staying in accommodation beyond walking distance of a lift. Sun Peaks LLP and Tourism Sun Peaks have already partnered to provide a resort shuttle that circulates through the resort during the ski season allowing skiers and employees from either end of the resort to get to the base areas without needing to drive and park. The Village day skier parking lot (P2) will be expanded to the west to increase the parking capacity. A portion of the enlarged lot will be set aside for serviced RV parking, as shown on Figure 17. The short term lot in front of the Annex (P3) and future Building DD will continue to be used for short term parking for ski school drop-off and staff vehicles needing to come and go to the village; not for all day parking. Two short term lots; one in front of Building C and the one in front of the Sun Peaks Grand are reserved for short term commercial use.

Additional day visitor parking will be provided at the base of the Morrisey and Orient lifts (P5) on the site of the future East Village. The East Village has been phased to develop from west to east with the day visitor parking moving to the east end of the village as new buildings are constructed. Eventually, day visitor parking in the East Village area will be replaced with the East Day Visitor Base in Phase 4. The Burfield day visitor lots will be reconfigured, as shown on Figure 17 to provide additional day visitor parking at the entrance to the resort. Shortening the Burfield Lift (as described in the Mountain Facilities section), will increase its out of base staging capacity. Table VI.7 outlines the day visitor parking supply at the end of Phase 4. With the vehicle occupancy rates shown in the table and the assumed percent of skiers in the

vehicles using each lot, the parking lots are estimated to provide parking for 4,550 skiers at buildout. While many of these skiers will be day visitors from outside the resort, we anticipate some of the parking will be used by skiers staying in accommodation outside walking distance of the lifts.

**TABLE VI.7**
**DAY VISITOR PARKING AT PHASE 4**

| Lot Number | Location | Area ha. | Vehicles per hectare* | Total Vehicles | Percent Skier Vehicles | Skiers per Vehicle | Skiers from Parking |
|---|---|---|---|---|---|---|---|
| P1 | Burfield East - Upper - staff lot | 0.17 | 250 | 43 | 0% | n.a. | n.a. |
| P2 | Village Day Visitor Lot -cars | 3.08 | 340 | 1,047 | 80% | 2.5 | 2,093 |
| P2 | Village Day Skier Lot - buses | 0.07 | | 5 | 100% | 40 | 200 |
| P3 | Annex Short Term Drop-Off | 0.15 | 340 | 52 | 0% | 2.5 | - |
| | Village Drop-Off Loop | n.a. | n.a. | 21 | 0% | n.a. | n.a. |
| | Sun Peaks Grand Commercial | n.a. | n.a. | 65 | 0% | n.a. | n.a. |
| P4 | Burfield East - Lower | 0.54 | 340 | 184 | 90% | 2.5 | 413 |
| P5 | School and Sports Fields | 0.36 | | 55 | 0% | n.a. | n.a. |
| P6 | Burfield West | 0.63 | 340 | 214 | 90% | 2.5 | 536 |
| P7 | East Day Visitor Base | 3.00 | 250 | 750 | 70% | 2.5 | 1,313 |
| **Total** | | **8.00** | | **2,435** | | | **4,554** |

## Base Area Staging Capacity

The capacity of the base area to supply skiers during peak periods at the completion of Phase 4 is approximately 15,600 skiers on a peak day, as shown in Table VI.8. This table has been prepared assuming that guests will stage from the lift nearest to their accommodation. This information is presented graphically on Figure 18, the Base Area Staging Analysis.

**TABLE VI.8**
**PHASE 4 BASE AREA SKIER STAGING ANALYSIS**

| Skier Staging Analysis | Beds within SWD | Skiers from Beds within SWD | Parking Stalls | Skiers from Parking & Transit | Total Skiers |
|---|---|---|---|---|---|
| Burfield Base | 815 | 651 | 440 | 949 | 1,600 |
| Lift 8 | 434 | 171 | | | 171 |
| Village Base - beds and cars | 4,253 | 2,529 | 1,185 | 2,093 | 4,622 |
| - skiers by bus | | | 5 | 200 | 200 |
| - skiers by shuttle | | | | 500 | 500 |
| Morrisey & Orient Ridge | 6,004 | 3,436 | | | 3,436 |
| Lift 17 | 6,947 | 3,770 | | | 3,770 |
| East Day Visitor Base | | | 750 | 1,313 | 1,313 |
| **Within Skier Walking Distance** | **18,453** | **10,557** | **1,630** | **3,742** | **15,611** |
| Beyond Skier Walking Distance | 5,834 | 2,934 | (will use shuttle or parking) | | |
| **Total (Phases 1-4)** | **24,287** | **13,491** | | | |

*Includes Skiers from Pre-Development Agreement and Employee/ Community Housing*
*Skiers using Lift 17 to stage must ski down to either the Morrisey Express or Orient Express.*

## .6 Commercial Space Use Program

A significant amount of commercial floorspace is required for a successful mountain resort. Commercial facilities such as shops, restaurants, office space, conference space and indoor recreation facilities support the primary winter and summer activities such as skiing, mountain biking, hiking and golf. At completion of Phase 4, commercial space will be required to service the approximately 18,850 resort visitors, residents and employees who could be staying overnight at the resort during peak winter holiday periods.

The commercial floorspace program for Sun Peaks Resort (Table VI.9) lists recommended amounts of restaurant/bar, retail, office, conference, and recreation space at the completion of each phase of development. The commercial floorspace program is based on the estimated requirement of 1.0 m² of space per overnight visitor/resident at times of peak occupancy. The allocation between various commercial uses has been developed from research conducted by Ecosign at the following North American destination resorts: Whistler Village in Canada, and Sun Valley, Elkhorn and Northstar Villages located in the United States. Using the overall requirement of approximately 1.0 square metres of commercial floorspace per visitor, a total of about 18,950 m² of commercial space would be needed to serve the 18,950 overnight visitors expected at the completion of Phase 4.

**TABLE VI.9**
**COMMERCIAL SPACE USE PROGRAM**

| **Development Phase** | **Recom-** | **2019/20** | **Phase 2** | **Phase 3** | **Phase 4** |
|---|---|---|---|---|---|
| Number of Overnight Guests | **mended Space per Guest (m²)** | 6,204 | 9,878 | 15,521 | 18,949 |
| **Commercial Program** | | **Recommended Space (m²)** | | | |
| Retail | 0.22 | 1,009 | 2,205 | 3,465 | 4,230 |
| Restaurant/Bar | 0.36 | 1,619 | 3,538 | 5,559 | 6,786 |
| Office | 0.12 | 526 | 1,149 | 1,805 | 2,203 |
| Indoor Recreation | 0.13 | 589 | 1,286 | 2,021 | 2,468 |
| Conference | 0.17 | 778 | 1,700 | 2,671 | 3,261 |
| **Total Commercial Space** | **1.00** | **4,520** | **9,878** | **15,521** | **18,949** |

Commercial space is planned for the ground floors of the accommodation buildings in both villages. The Tourist Accommodation zones allow up to 30% of the floor space on a parcel to be devoted to commercial uses that support tourism. The new Peaks West development in the Burfield Base includes over 1,200 m² of commercial space and The Burfield has added a small restaurant. The Burfield West project also contains a small commercial component. Parcel 13 at the intersection of Industrial Drive and Sun Peaks Road is planned for a gas station and convenience store. There is an additional commercial site in the Burfield Base that currently is occupied by a single family home; however overtime it is likely to be redeveloped for commercial use.

Retail

Shopping is a recreational activity for many tourists. Retail shops enhance the atmosphere, activity and revenue opportunities for a resort. Retail space includes shops and souvenir stores, clothing, sporting goods, jewellery, and specialty shops as well as grocery and liquor stores. Each hotel or condotel within the villages should have a certain amount of retail space directly accessible from the pedestrian streets, plazas, and lobby areas. Both villages have been designed with this in mind and several retail establishments are already operating.

Restaurant/Bar

Food and beverage establishments include all styles of restaurants, delicatessens, fine dining, take-out and nightly entertainment establishments. The major attraction at many resorts, next to skiing, is the nightlife and fine dining. Quality and diversity in dining and entertainment opportunities brings a village to “life” in the evening hours. Restaurants located at street level in sunny locations allow for outdoor patios, which greatly enhance the overall ambience of the village. Most of the restaurants will be located in the two villages and the Burfield Base; however, the Tourist Accommodation zoning also permits restaurants in tourist lodges and inns.

Office

Office space will be located in some of the village buildings and in the Light Industrial Site at the Burfield Base.


*Patio at Masa's Restaurant in the Village Day Lodge*

## Recreation

Indoor recreation activities such as swimming, aerobics, exercise areas and spas are desirable to supplement winter skiing and provide alternative sports activities throughout the year. These amenities are important to promote year-round activity and attract guests throughout the summer months. Several of the existing village buildings have spas on their premises. The Sun Peaks Centre under construction in the Village core includes a covered ice rink, exercise space and an outdoor pool and tennis courts.

## Conference

Approximately 1,700 square metres of conference and meeting space has already been developed in the main village with the largest space being the conference centre in the Sun Peaks Grand Hotel. Located in close proximity to the conference centre, the Sun Peaks Centre will allow Sun Peaks to attract even larger conferences and conventions. Conference and meeting rooms are distributed through several of the other existing village hotels and the new hotels in the East Village will also include some meeting space.


*Farmers' Market in Sun Peaks Resort Village Stroll*

## .7 Development Phasing

The accommodation at Sun Peaks Resort is planned to expand as recreational amenities on the mountain and in the valley are developed. The phasing schedule developed in the 1993 Master Plan was designed to supply public beds to meet the minimum percentages required by the British Columbia Commercial Alpine Ski Policy in place at the time. Phase 1 was planned to have 35 percent public beds and this percentage was to increase to 50 percent by Phase 3, as the Resort underwent the transition from a regional to a destination resort. However, the market demand for properties that could produce a rental income has exceeded the demand for private accommodation. To meet this demand, several good tourist accommodation sites located near the village core, initially planned to be developed in later phases, were brought to the marketplace. Therefore, Sun Peaks Resort is in the enviable position of greatly exceeding its minimum requirement for public accommodation for Phase 1, although it still has not used up its bed unit entitlement for the recreation improvements it has constructed to date.

With the completion of the single-family subdivisions on Fairways Drive and Mountain View, most of the land between the Burfield base and the Village has been developed.

Remaining to develop in the Burfield base is a townhouse site above the Burfield Heights/Peaks West, the gas station site and two employee housing sites on the south side of Sun Peaks Road. The proposed extension of Burfield Drive will add two employee housing sites and an area for light industrial support. For the past ten years, Sun Peaks LLP has been focusing on the lands east of the Village that surround the golf course. There are still two undeveloped sites in the Central Village and the existing services extend past the East Village site. The expansion of skiable terrain is sensitive to market considerations, which in turn affects the phasing of residential development. Development parcels will be phased and offered for development as these considerations allow, keeping in mind the bed unit entitlements and the ratio of public to private beds which must be maintained. A tentative parcel phasing schedule based on current projections of market demand is shown on Figure 19, the Base Area Phasing Plan.

## .8 Village Design Principles

The original Sun Peaks Master Plan prepared in 1993, articulated a vision for a central pedestrian village to provide a focus for visitor activity at the Resort. The design of the village was inspired by traditional mountain towns in Europe. The village plan prepared by Ecosign contained a tightly knit arrangement of hotels, condotels and skier service buildings clustered around the base of the Sunburst and Sundance Express chairlifts. The architectural theme selected for the Village at Sun Peaks was influenced by the Sud-Tirol region of the European Alps with its variety of pastel coloured stucco buildings, low sloped roofs and interesting window treatments. A Building Scheme including design guidelines, building footprints and building envelopes was established to preserve the design intent as development sites were sold to third party developers. Since 1993, ten of the twelve village hotel sites have been developed predominantly in accordance with the original vision.

Sun Peaks Resort LLP constructed the Village Daylodge, the original Sun Peaks Sports Centre and the Children's Building and completed landscaping throughout the village area. The design principles used to shape the Village at Sun Peaks were also used for the design of the East Village and are summarized below.

**Building Orientation and Massing**

- Bring the lifts and ski trails into the village centre
- Preserve important view corridors
- Allow sun to penetrate the pedestrian spaces and gathering areas

- Let nature into the urban environment
- Fit buildings into the natural topography and avoid excessive regrading
- Keep buildings to a human scale (average 3 to 4 storeys)
- Ground floor level is used for shops, restaurants and skier services
- Use building modules to break up the appearance of large buildings
- A clock tower or other iconic feature can act as a focal point for gatherings


*Sun Peaks Resort Village Clock Tower*

**Pedestrian Environment**

- Provide pedestrian-only village streets by constructing underground parking and keeping vehicle access routes on the village perimeter
- Use covered arcades or awnings in front of the buildings along the pedestrian street to provide a sheltered route through the village during inclement weather
- Limit the village street grade to 6 percent, with more level grades in the squares. Provide each building with one or more ramped entrance to the pedestrian arcade from the pedestrian mall. Avoid steps within the arcade.
- Create interest by avoiding long straight “canyon like” pedestrian routes.

- Locate gathering spaces and outdoor patios in areas with good sun exposure and views.
- Provide seating using a combination of benches, steps and planter walls.
- Ground level storefronts, restaurants and outdoor patios enhance the pedestrian environment.

*Central Village Pedestrian Street*

**Architecture**

- Predominantly wood frame buildings over concrete parking garages and ground floor commercial space
- Building facades are a mix of pastel coloured stucco, stone and wood
- Provide a variety of intriguing window treatments
- Concrete tile roofs with gabled rooflines, variety of pitches and use of dormer windows
- Decks and balconies to provide useable outdoor space


*Variety of Building Facades*

Snow Management

- Maintain snow on the roofs by using cold roof design principles, limiting slopes to 5 in 12 and providing snow clips
- Use landscaping planters around the buildings to add visual interest to the streetscape and provide a safe place for snow falling from the roofs
- Maintain a thin layer of snow on the pedestrian streets to facilitate skiing down the street
- Ensure village pedestrian streets are wide enough to allow access for snow grooming machines


*Central Village with Snow on the Streets*

*Roof Surface and Snow Clips – Village at Sun Peaks*

## .9 Village Plans - Village at Sun Peaks

Figure 20, the Central Village Schematic Plan graphically depicts the horizontal layout of the village indicating pedestrian areas, building footprints and roof lines and roadways. Buildings shown in deep red on the plan have already been constructed, while those shown in pink are proposed. Most of the village buildings are limited to 3 or 4 storeys in height, although Parcel S on the eastern edge of the Village up against the ski slope has the ability to absorb a taller building without negatively impacting its neighbours. The traffic circulation and underground parking layout are shown on Figure 21, Central Village Parking & Circulation Plan.

The key pedestrian gateway to the Village is via the main resort drop-off adjacent to the Village Daylodge (AA) and the Sundance Lodge (A). The arriving visitors are greeted by an intriguing view of the narrow winding street between the Hearthstone (B) and Sundance Lodges, as well as the scenic covered bridge which crosses McGillivray Creek to the golf course. The village street leads to the main village square which is framed on the east by the Sun Peaks Grand Hotel (F/G/H) and open to the slopes on the north side. The clock tower on the northeast corner of the Sundance Lodge provides a focal point and a meeting place for resort guests. A large restaurant terrace on the Sun Peaks Grand overlooks the Village Square and the ski slopes. The ski slope passes behind the Nancy Greene Cahilty Lodge (K) and the conference wing of the Sun Peaks Grand.


*Sun Peaks Village Square*

The main pedestrian mall continues east from the village square past the Sun Peaks Lodge (D) and the Sun Peaks Suites (L) to another landscaped pedestrian plaza bounded by the Sun Peaks Suites, the Fireside Lodge (M) and the Residences at the Sun Peaks Grand (I/J). After crossing Village Way, the pedestrian walkway extends to the east behind the new Sun Peaks Centre to the proposed condotel development (S). Pedestrians can walk a full circuit by crossing Village Way in front of the Sun Peaks Centre to walk along a valley trail behind the Village Walk Townhomes (Building Q) and the Kookaburra Lodge (Building N). This valley trail overlooks McGillivray Creek and includes various patios and terraces.

*Village Circle between Fireside Lodge and Heffley Inn*

Table VI.10 summarizes the intended programming for the Central Village at Sun Peaks. At completion, the Central Village will contain 19 buildings with a total gross floor area of 100,080 square metres. Approximately 9,240 square metres will be devoted to skier service facilities operated by the Sun Peaks Resort LLP. In addition, the Village will contain approximately 13,390 square metres of commercial space including restaurants, retail and office space, conference facilities and indoor recreational space and 980 m² of institutional space. The Village will contain approximately 3,000 public bed units, including the Village Walk townhouses on Parcel Q.

**TABLE VI.10**
**CENTRAL VILLAGE DEVELOPMENT PROGRAM**

| Parcel | Name | Parcel Area | Gross Floor Area m² | Skier Service Space m² | Institu-tional Space m² | Net Comm. Space m² | Gross Accomm. Space m² | Number of Units m² | Number of Bed Units m² | Ratio of Net to Gross m² |
|---|---|---|---|---|---|---|---|---|---|---|
| **AA** | Village Daylodge | | 1,921 | 1,921 | | | | | | |
| **BB** | Future Skier Services | | 2,526 | 2,526 | | | | | | |
| **CC** | The Annex | | 1,067 | 1,067 | | | | | | |
| **DD** | Future Skier Services | | 2,200 | 2,200 | | | | | | |
| **EE** | Children's Programs | | 169 | 169 | | | | | | |
| **GG** | Medical/Administration | 0.11 | 1,011 | 662 | 349 | - | | | | |
| **A** | Sundance Lodge | 0.31 | 5,355 | | | 630 | 4,725 | 84 | 186 | 75% |
| **B** | Hearthstone Lodge | 0.35 | 5,103 | | | 755 | 4,348 | 70 | 172 | 73% |
| **C** | Future Condotel | 0.28 | 5,665 | 694 | | 217 | 4,754 | 59 | 193 | 75% |
| **D** | Sun Peaks Lodge | 0.23 | 2,319 | | | 604 | 1,910 | 44 | 74 | 66% |
| **E** | Village Common Space | 0.68 | | | | | | | | |
| **F/G/H** | Sun Peaks Grand | 1.10 | 17,508 | 560 | | 2,532 | 14,546 | 222 | 580 | 59% |
| **I/J** | Grand Residences | 0.37 | 6,644 | | | 1,294 | 5,411 | 41 | 216 | 62% |
| **K** | N.G. Cahilty Lodge | 0.44 | 9,759 | | | 368 | 9,458 | 126 | 362 | 84% |
| **L** | Sun Peaks Suites | 0.12 | 1,714 | | | 132 | 1,581 | 26 | 59 | 60% |
| **M** | Fireside Lodge | 0.39 | 5,590 | | | 460 | 5,130 | 70 | 211 | 77% |
| **N** | Kookaburra Lodge | 0.84 | 2,950 | 98 | | 553 | 2,299 | 28 | 92 | 81% |
| **Q** | Village Walk Townhomes | 0.53 | 6,028 | | | | 6,028 | | 241 | |
| **O/R** | Sun Peaks Centre | 1.48 | 4,449 | | 633 | 3,816 | | | | |
| **S** | Future Condotel | 1.33 | 18,150 | | | 1,500 | 16,650 | 182 | 666 | 60% |
| | | **8.56** | **100,128** | **9,897** | **982** | **12,862** | **76,841** | **952** | **3,052** | 63% |

Two accommodation parcels in the Central Village still remain to be developed, as well as two additional skier services buildings located along the existing snow front. A brief description of the development intent of each of the undeveloped parcels follows.

Parcel BB – Skier Services Building

The Children's Centre is located on Parcel BB directly on the snowfront and across from the Village Daylodge, on the main skier drop-off loop. Eventually the Children's Centre will be replaced with a two-storey Building BB. The height of this building must be limited to avoid shading of the lift queuing area of the Sunburst Express; therefore, the second floor has been built into the roof and has a reduced footprint. Skier services planned for building BB include a learning centre (ski school), day care facilities, snack bar, public washrooms and lockers, staff lockers and lunchroom space for snow sport instructors and management staff, administration space for senior snow sport employees and meeting space.

Parcel DD – Skier Services Building

Parcel DD is located across from The Annex, on the day skier parking lot. Detailed programming of this building has not been undertaken at this time.

Parcel C – Condotel/Skier Services

Parcel C is situated on Creekside Way immediately south of the Village Daylodge. The intended use is for a condotel building with approximately 59 units and 193 public bed units. Gross floor space is planned at 5,670 square metres, with approximately 900 square metres of skier service/commercial space on the ground floor. The commercial space planned for the ground floor has good exposure because of the building's proximity to the skier drop-off loop at the Village Daylodge and the snow front.

Parcel S –Condotel

Parcel S, with an area of 1.33 hectares, is the largest of all the Central Village properties. Parcel S is located directly on the Gentle Giant ski run at the east end of the Central Village, behind the new Sun Peaks Centre. Since the site is on the north side of the village, against the ski hill, a taller building (maximum eight storeys) can fit on this site without impacting the sun exposure to other village buildings or the pedestrian areas. Development of this site is anticipated to occur in Phase 3.

## .10 East Village Plan

The East Village is situated on gently sloping ground between Valley Drive and the 11th hole of the Sun Peaks Resort Golf Course. The existing Morrisey Express and the Orient Ridge Quad chairlifts form a western anchor to the Village. A Fire Station, large community park and potential school site are the eastern anchors to the East Village. The total area of the East Village site is 4.33 hectares, including internal circulation roads. Figure 22, the East Village Schematic Plan illustrates the proposed layout of the buildings within the East Village.

**Massing**

The East Village has been designed using the same principles as the Central Village at Sun Peaks Resort. The buildings are 3 to 4 storeys in height and all accommodation parking is provided underground so that a car-free pedestrian street can be created. The Village Street slopes from east to west at approximately 5 percent, so those guests from the Village buildings and development parcels to the east will be able to ski/snowboard down to the lifts. At the west edge of the Village, adjacent to the lifts, skier services facilities are provided in Building E-A at a walk-out level overlooking the lifts. A stormwater pond separates the Village from the 11th fairway at the ski-front. The pedestrian street starts at the ski front and ends at the public park, where a valley trail and other walking trails continue. Two cross-sections through the East Village are shown on Figure 24.

**Circulation**

The Parking and Circulation Plan for the East Village is presented on Figure 23. Drop-off and underground parking access for Buildings E-A, E-B and E-C is on Valley Drive. There are two levels of parking under Building E-A. A road crossing the valley to service development parcels on the Mount Morrissey side intersects Valley Drive between Building E-I and E-K, the proposed site of a second Fire Station. A short public road from this cross valley connector road terminates in a cul-de-sac surrounded by Buildings E-D, E-G, E-H and E-I. Vehicle access to the Fire Hall on Parcel E-K and the community park will be through either a public road or a shared driveway since both parcels will have legal access along Valley Drive. Parcels E-E and E-F are landlocked. We have envisioned that Parcel E-E would be connected to Parcel E-D at the underground level and developed by the same ownership group. Similarly, Parcel E-F is connected to Parcel E-G. An alternate solution, if smaller development parcels are required, would be to provide legal access over the surface parking lot as was originally contemplated for the Sun Peaks Grand parcel. Commercial parking for the East Village is concentrated in the “Marketplace Square”, which contains approximately 90 surface spaces and another 90 spaces underground.

A summary of the development program for the East Village is presented in Table VI.11. The East Village contains 10 buildings with a total gross floor area of 50,335 square metres. Similar to the existing village the ground floor of buildings facing the pedestrian street will contain a mix of skier services, retail, food and beverage, conference and recreation space.

These buildings provide 1,686 bed units of accommodation based on 1 Bed Unit per 25 m² of gross accommodation floor area. We estimate the East Village will provide approximately 405 units if all the buildings are developed as condotels containing 1 or 2 bedroom units. A floor by floor floorspace analysis for each building is presented in Tables VI.12A through VI.12I. Although we have assumed each building will contain either 1-bedroom or 2-bedroom units to prepare this estimate (similar to the existing Village), we anticipate individual developers will choose to provide a mix of unit types and a variety of unit sizes in each building. A second Fire Hall is proposed on Parcel E-K.

**TABLE VI.11**
**EAST VILLAGE DEVELOMENT PROGRAM**

| Building | Area (ha.) | Gross Floor Area m² | Skier Services Space m² | Comm Space m² | Institu-tional m² | Gross Accom. m² | # of Units | Bed Units (1/25 m²) |
|---|---|---|---|---|---|---|---|---|
| E-A - Daylodge | | 8,926 | 1,217 | 196 | - | 7,513 | 81 | 301 |
| E-B - Condotel | | 4,585 | - | 945 | - | 3,640 | 48 | 146 |
| E-C - Condotel | | 6,218 | - | 1,208 | - | 5,052 | 39 | 202 |
| E-D - Condotel | | 4,140 | - | 770 | - | 3,370 | 27 | 135 |
| E-E - Condotel | | 5,410 | - | 1,000 | - | 4,410 | 36 | 176 |
| E-F - Condotel | 4.33 | 7,104 | - | 1,399 | - | 5,805 | 50 | 232 |
| E-G - Condotel | | 4,315 | - | 460 | - | 3,855 | 30 | 154 |
| E-I - Condotel | | 4,617 | - | 750 | - | 4,067 | 33 | 163 |
| E-J - Condotel | | 4,270 | - | 150 | | 4,420 | 61 | 177 |
| East Surface Lot | | | | | | | | |
| East Public UG | | | | | | | | |
| E-K - Fire Hall | 0.28 | 750 | - | - | 750 | | | |
| **TOTALS** | 4.61 | **50,335** | **1,217** | **6,878** | **750** | **42,132** | **405** | **1,686** |

**TABLE VI.12A**
**EAST VILLAGE – BUILDING E-A**

| Elev | Level | Gross Floor Area m² | Skier Services m² | Comm Space m² | Office Confer Recreat m² | Gross Accom. m² | Bed Units (1/25 m²) | Net to Gross Ratio | Net Accomm. Space m² | # of Units (1/55m²) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1279.6 to 1281.1 | Parking | | | | | 100 | 4 | | | |
| 1283 to 1284.5 | Pkg/Skier Serv | 1,696 | 1,217 | | | 479 | 19 | | - | |
| 1,288.00 | Main Level | 1,883 | | 195.90 | | 1,687 | 67 | | 1,181 | |
| 1,292.00 | Second Level | 1,881 | | | | 1,881 | 75 | 0.85 | 1,599 | 29 |
| 1,295.00 | Third Level | 1,881 | | | | 1,881 | 75 | 0.85 | 1,599 | 29 |
| 1,298.00 | Fourth Level | 1,486 | | | | 1,486 | 59 | 0.85 | 1,263 | 23 |
| | **Total** | **8,826** | **1,217** | **196** | **-** | **7,514** | **301** | **0.75** | **5,642** | **81** |

## TABLE VI.12B
## EAST VILLAGE – BUILDING E-B

| Elev (Split Level) | Level | Gross Floor Area m² | Skier Services m² | Comm Space m² | Office Confer Recreat | Gross Accom. m² | Bed Units (1/25 m²) | Net to Gross Ratio | Net Accomm. Space m² | # of Units (1/55m²) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1284/1285 | Parking | 100 | | | | 100 | 4 | | | |
| 1287.5/1288.5 | Lower Level | 1,095 | | 548 | 398 | 150 | 6 | | - | - |
| 1291.5 | Main Level | 1,270 | | | | 1,270 | 51 | 0.70 | 889 | 16 |
| 1295.5 | Second Level | 1,170 | | | | 1,170 | 47 | 0.85 | 995 | 18 |
| 1298.5 | Third Level | 950 | | | | 950 | 38 | 0.80 | 760 | 14 |
| | **Total** | **4,585** | **-** | **548** | **398** | **3,640** | **146** | **0.73** | **2,644** | **48** |

## TABLE VI.12C
## EAST VILLAGE – BUILDING E-C

| Elev | Level | Gross Floor Area m² | Skier Services m² | Comm Space m² | Office Confer Recreat | Gross Accom. m² | Bed Units (1/25 m²) | Net to Gross Ratio | Net Accomm. Space m² | # of Units (1/95m²) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1288-1289 | Parking | 100 | | | | 100 | 4 | | | |
| 1291-1294 | Lower Level | 1,416 | | 708 | 500 | 250 | 10 | - | - | - |
| 1,295.5 | Main Level | 1,786 | | | | 1,786 | 71 | 0.70 | 1,250 | 13 |
| 1,299.5 | Second Level | 1,796 | | | | 1,796 | 72 | 0.85 | 1,527 | 16 |
| 1,302.5 | Third Level | 1,120 | | | | 1,120 | 45 | 0.85 | 952 | 10 |
| | **Total** | **6,218** | **-** | **708** | **500** | **5,052** | **202** | **0.74** | **3,729** | **39** |

## TABLE VI.12D
## EAST VILLAGE – BUILDING E-D

| Elev | Level | Gross Floor Area m² | Skier Services m² | Comm Space m² | Office Confer Recreat | Gross Accom. m² | Bed Units (1/25 m²) | Net to Gross Ratio | Net Accomm. Space m² | # of Units (1/95m²) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1288 to 1289 | Parking | 150 | | | | 150 | 6 | | | |
| 1291 to 1294 | Main Level | 1,020 | | 770 | - | 250 | 10 | | | |
| 1296.5/97.5 | Second Level | 1,190 | | | | 1,190 | 48 | 0.85 | 1,012 | 11 |
| 1299.5/1300.5 | Third Level | 890 | | | | 890 | 36 | 0.85 | 757 | 8 |
| 1,302.5 | Fourth Level | 890 | | | | 890 | 36 | 0.85 | 757 | 8 |
| | **Total** | **4,140** | **-** | **770** | **-** | **3,370** | **135** | **0.75** | **2,525** | **27** |

## TABLE VI.12E
## EAST VILLAGE – BUILDING E-E

| Elev (Split Level) | Level | Gross Floor Area m² | Skier Services m² | Comm Space m² | Office Confer Recreat | Gross Accom. m² | Bed Units (1/25 m²) | Net to Gross Ratio | Net Accomm. Space m² | # of Units (1/95m²) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1285 to 1287 | Parking | 150 | | | | 150 | 6 | | | |
| 1288 to 1291 | Main Level | 1,370 | | 1,000 | - | 370 | 15 | | - | |
| 1,294.5 | Second Level | 1,800 | | | | 1,800 | 72 | 0.85 | 1,530 | 16 |
| 1,297.5 | Third Level | 1,340 | | | | 1,340 | 54 | 0.85 | 1,139 | 12 |
| 1,300.5 | Fourth Level | 900 | | | | 900 | 36 | 0.85 | 765 | 8 |
| | **Total** | **5,410** | **-** | **1,000** | **-** | **4,410** | **176** | **0.78** | **3,434** | **36** |

## TABLE VI.12F
## EAST VILLAGE – BUILDING E-F

| Elev | Level | Gross Floor Area m² | Skier Services m² | Comm Space m² | Office Confer Recreat m² | Gross Accom. m² | Bed Units (1/25 m²) | Net to Gross Ratio | Net Accomm. Space m² | # of Units (1/95m²) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1281 to 1284 | Parking | 100 | | | | 100 | 4 | | | |
| 1284.5 to 1287.5 | Main Level | 1,920 | | 1,152 | | 768 | 31 | 0.70 | 538 | 6 |
| 1288.5/1291.0 | Second Level | 2,280 | | 247 | | 2,033 | 81 | 0.85 | 1,728 | 18 |
| 1,294.0 | Third Level | 1,650 | | | | 1,650 | 66 | 0.85 | 1,403 | 15 |
| 1,297.0 | Fourth Level | 1,254 | | | | 1,254 | 50 | 0.85 | 1,066 | 11 |
| | **Total** | **7,104** | **-** | **1,399** | **-** | **5,805** | **232** | **0.82** | **4,734** | **50** |

## TABLE VI.12G
## EAST VILLAGE – BUILDING E-G

| Elev | Level | Gross Floor Area m² | Skier Services m² | Comm Space m² | Office Confer Recreat m² | Gross Accom. m² | Bed Units (1/25 m²) | Net to Gross Ratio | Net Accomm. Space m² | # of Units (1/95m²) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1285 to 1287 | Parking | 150 | | | | 150 | 6 | | | |
| 1288 to 1291 | Main Level | 1,150 | | 460 | | 690 | 28 | 0.60 | 414 | 4 |
| 1,294.5 | Second Level | 1,390 | | | | 1,390 | 56 | 0.85 | 1,182 | 12 |
| 1,297.5 | Third Level | 900 | | | | 900 | 36 | 0.85 | 765 | 8 |
| 1,300.5 | Fourth Level | 725 | | | | 725 | 29 | 0.85 | 616 | 6 |
| | **Total** | **4,315** | **-** | **460** | **-** | **3,855** | **154** | **0.77** | **2,977** | **30** |

## TABLE VI.12H
## EAST VILLAGE – BUILDING E-I

| Elev | Level | Gross Floor Area m² | Skier Services m² | Comm Space m² | Office Confer Recreat m² | Gross Accom. m² | Bed Units (1/25 m²) | Net to Gross Ratio | Net Accomm. Space m² | # of Units (1/95m²) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1287/1291 | Parking | 200 | | | | 200 | 8 | | | |
| 1290/1294 | Main Level | 1,581 | | 750 | | 831 | 33 | 0.70 | 582 | 6 |
| 1294/1298 | Second Level | 1,836 | | | | 1,836 | 73 | 0.85 | 1,561 | 16 |
| 1297/1301 | Third Level | 1,200 | | | | 1,200 | 48 | 0.85 | 1,020 | 11 |
| | **Total** | **4,617** | **-** | **750** | **-** | **4,067** | **163** | **0.78** | **3,162** | **33** |

## TABLE VI.12I
## EAST VILLAGE – BUILDING E-J

| Elev | Level | Gross Floor Area m² | Skier Services m² | Comm Space m² | Office Confer Recreat m² | Gross Accom. m² | Bed Units (1/25 m²) | Net to Gross Ratio | Net Accomm. Space m² | # of Units (1/55m²) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1289 to 1290 | Parking | 300 | | | | 300 | 12 | | | |
| 1292.5 to 1293.5 | Main Level | 1,220 | | | 150 | 1,070 | 43 | 0.70 | 749 | 14 |
| 1,297.5 | Second Level | 1,220 | | | | 1,220 | 49 | 0.85 | 1,037 | 19 |
| 1,300.5 | Third Level | 1,220 | | | | 1,220 | 49 | 0.85 | 1,037 | 19 |
| 1,303.5 | Fourth Level | 610 | | | | 610 | 24 | 0.80 | 488 | 9 |
| | **Total** | **4,270** | **-** | **-** | **150** | **4,420** | **177** | **0.75** | **3,311** | **61** |

## .11 Winter and Summer Recreation Master Plans

The base area development at Sun Peaks has been designed to ensure that an open space network flows throughout the Resort. Development surrounds an eighteen-hole golf course in the valley bottom surrounding McGillivray Creek. The ski trails descend into the developed areas to maximize the provision of ski-in/ski-out access. An extensive network of trails allows guests to walk, cycle, cross-country ski, snowshoe or roller blade throughout the resort. The Sun Peaks Centre, when complete will include exercise space, a covered arena, exercise and conference space, as well as the existing outdoor pool. Four Community Parks are proposed; the existing Snowmobile Creek Park provides green space around the lower reaches of Snowmobile Creek. The major community park in the East Village area (p2) when developed will include a baseball diamond, soccer field and skate park. The site is large enough to accommodate a Community School with a double gymnasium, should the School District decide to build such a facility. Another park (p3) with space for another soccer field is located in the valley bottom at the east end of the developed area. The fourth park (p4) includes a lookout and trail connection from development on Mount Morrisey along the Mosquito Creek watershed.

To attract more guests and compete with other Regional and Destination resorts, it is necessary to provide facilities and programming for a wide range of recreational and social activities. During the winter, these activities are designed to supplement and complement skiing and snowboarding, as well as provide entertainment for those guests who do not ski or snowboard. During the summer, there also should be a wide range of activities to attract guests to the resort and provide them with a full and enjoyable holiday visit. The Phase 4 lands offer the opportunity to extend the winter Nordic ski and snowshoe trail networks and summer cross-country mountain biking trails, as well as a wide range of other recreational activities.

Ecosign has prepared updated Winter and Summer Recreation Facilities Plans that illustrate the proposed recreation facilities and trail systems on the mountain and in the valley as the resort expands towards buildout. The existing trail networks will be expanded and modified to accommodate the expansion of the ski area and the continued development of accommodation in the valley. This section outlines the proposed additions or changes to the alternative recreational facilities at Sun Peaks.

## Winter

The winter recreation facilities and trail networks are shown on Figures 27a and 27b. The winter trail network has been designed to provide access throughout the resort for the various user groups (pedestrians, cross-country skiers, snowshoers, downhill skiers going to and from their accommodation) while minimizing conflict points.

### Cross-Country Skiing

Sun Peaks provides cross-country skiing trails close to the Village, stretching throughout the McGillivray Valley. These trails extend out to, and beyond McGillivray Lake. Modifications to the existing system will be required to accommodate development of the ski area and the valley. The proposed cross-country trail network is illustrated on the Winter Recreation Facilities Plan (Figures 25a and 25b). The dedicated cross-country trail system is shown in light blue. A new beginner loop is proposed through the front nine of the golf course so that people in the subdivisions west of the village can access the cross-country trail system from their homes. New beginner and intermediate trail loops are planned for the McGillivray Highlands area surrounding the proposed East Day Visitor Base, as well as links to the existing trail system. New trails are also proposed on the east side of the McGillivray FSR. Portions of the trail system within the valley will allow other user groups. These trails are indicated as multi-purpose on the plans and are shown with a dashed red line.

### Valley Trail System

The valley trail system is an important amenity connecting the various neighbourhoods and providing a pleasant and safe alternative to walking along the roads. The valley trail network will be expanded in step with the development of more accommodation parcels. Figure 25a shows the portions of the valley trail system at buildout that we anticipate will be cleared during the winter season; these trails are shown as a solid red line. Trail sections that are expected to be snow covered during the winter are marked as multi-purpose.

### Snowshoeing

Since snowshoeing tends to damage the surface for cross-country skiing, a dedicated snowshoe route extends from the Burfield base out to McGillivray Lake. Some modifications will be needed to the snowshoeing trails to accommodate development.

Figure 25b shows all snowshoe routes planned for the resort at buildout while Figure 25a shows the valley routes in more detail. Snowshoe trails are indicated in purple.

Snowmobiling

Currently the parking for private snowmobilers is provided on Parcel 35 above the 16th hole of the golf course. From there, the snowmobilers use the Tod Mountain Forest Service Road to access snowmobile trails in the backcountry. As the Resort develops toward the east, the Tod Mountain FSR will be closed and replaced with a Forest Service Road on the future McGillivray Road alignment. Snowmobile parking and snowmobile access routes will continue to be moved east of the developed area. Eventually in Phase 4, snowmobile parking will be provided just outside the Controlled Recreation Area in an existing gravel pit along the McGillivray Lake Forest Service Road, as shown on Figure 25b.

Horse Drawn Sleighs and Dog Sledding

Horse drawn sleigh rides operate over the multi-purpose trail system through the Village and surrounding subdivisions and to the McGillivray Lake Outpost cabin. Currently, the dog sled operations use the same trails that are used for sleigh rides out to McGillivray Lake but are not permitted in the developed area. As development moves to the east, the dog sled operation will have to move further out. Figures 25a and 25b show the start of a proposed trail for dog sled use just east of the Phase 4 development boundary. This trail would follow the McGillivray Creek valley out to McGillivray Lake on the opposite side of the creek from the cross-country trail.

**Summer**

During the summer, alternative activities will be critical to the success of the resort as a year-round resort. The sunny, dry summer climate at Sun Peaks is ideal for outdoor activities and due to the elevation, summer temperatures at Sun Peaks are relatively mild compared to the surrounding Kamloops region. The summer recreation facilities and trail networks are illustrated on Figure 26a Valley Recreation Facilities – Summer and 26b Resort Recreation Facilities - Summer. Similar to the winter trail system, the summer trail network has been designed to minimize conflict between user groups, while still allowing all the user groups access throughout the Resort.

Valley Trail System

As mentioned previously, the valley trail system will be expanded as development proceeds to the east. The full valley trails system for development to the end of Phase 4 is illustrated on Figure 26a.

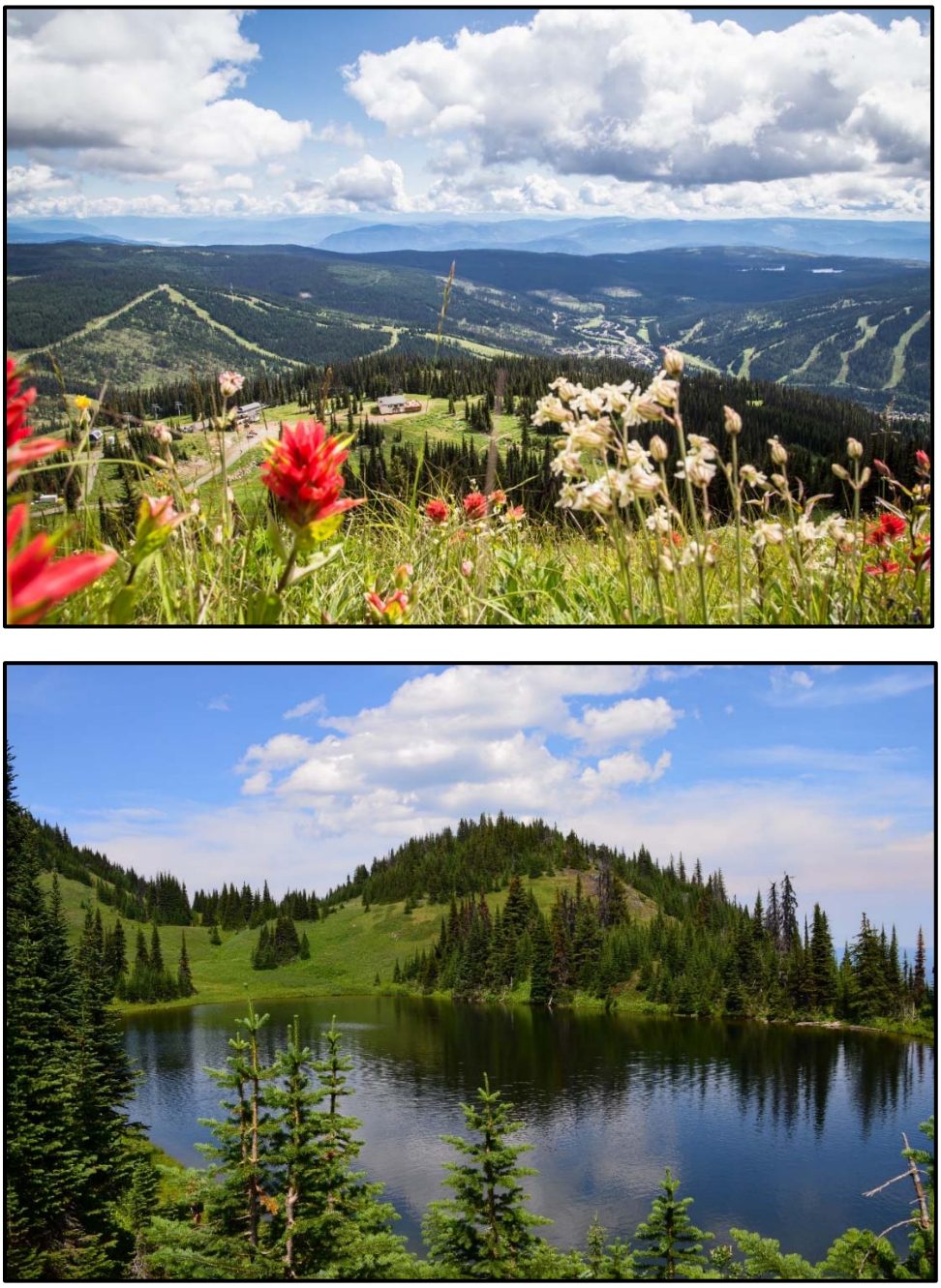
Mountain Biking

The existing mountain biking trails and those expected to be constructed within the next 5 years are shown in blue on Figures 26a and 26b. The downhill mountain bike park currently operates from the Sunburst Express chairlift. There are opportunities to create additional trails in this area as demand increases. Downhill mountain biking will be extended onto the Sundance Express in the near future and the proposed trails for this area are also shown as blue lines on the plans. There is an extensive cross-country mountain bike trail network to the east of the mountain bike park and extending onto Mount Morrisey. The cross-country trail network is overseen by the Sun Peaks Recreational Trail Association (SPRTA). SPRTA must review any expansions to the existing trail network with Sun Peaks LLP to ensure they do not conflict with other recreation activities occurring within the resort or future development sites. The trails SPRTA expects to build in the next few years are shown as blue dashed lines. Mountain biking has been excluded from the alpine area around Mount Tod, as this area has been preserved for hikers.

*Mountain Biking at Sun Peaks*

Hiking and Sightseeing

The hiking trail network is indicated in purple on Figures 26a and 26b. The Sunburst Express chairlift is used to provide sightseeing access in the summer and there are loop trails of varying length originating from the top of the lift. Expansions to the hiking trail network are planned to coincide with development as it moves further east.



*Alpine Hiking and Sightseeing Vistas at Sun Peaks*

Horseback Riding

Sun Peaks currently offers horseback riding and horse-drawn wagon rides throughout the summer months. A stable, located at the Burfield base, provides the staging area for horseback riding tours throughout the area. The proposed horseback riding trail network is shown on Figures 26a and 26b.

Waterfront Activities

Sun Peaks LLP has a recreational lease on McGillivray Lake. Facilities at the lake include the McGillivray Lake Outpost where guests can rent canoes, kayaks and stand up paddleboards. Also located on the lake is a BC Forestry picnic area, boat launch and camping area.

*Stand Up Paddleboarding on McGillivray Lake*

Golf

Golfers can enjoy the eighteen hole Sun Peaks Resort Golf Course or choose from several championship courses in the Kamloops area.

*Sun Peaks Golf Course*

## .12 Municipal Facilities

Since the 1993 Master Plan was completed, Sun Peaks Resort LLP and members of the evolving community at Sun Peaks Resort have identified the need for some civic facilities within the Resort. A Community Fire Hall was constructed by Sun Peaks LLP at the Burfield Base in 1996. As previously mentioned, the Sun Peaks Mountain Resort Municipality (SPMRM), established in 2010, has taken over operation of the Sun Peaks Sports Centre. In 2019, they started construction of the new Sun Peaks Centre. The first phase includes an expansion to the existing Sports Centre, the construction of a roof over the ice surface and the addition of dressing rooms and washroom facilities on the east side of the site. The 2020 Master Plan has identified nine sites for non-market community housing development, two new parks and a location for a second Fire Hall in the East Village.

## .13 Proposed Eastern Access Road

The concept of a two lane, paved, all-weather road from the Trans Canada Highway (#1) at Chase to Sun Peaks Resort was included in the first Sun Peaks Resort Master Plan in 1993. Even before the Master Plan was created the local Chase Chamber of Commerce and the Little Shuswap Indian Band had proposed access to the Tod Mountain Ski Area from the Chase area. This 35-kilometre upgrade of existing forestry roads would connect Sun Peaks Resort to the Trans Canada Highway east of Kamloops and bring the Towns of Chase, Salmon Arm, Sicamous and other points within the local market area to Sun Peaks Resort without the need to travel via Kamloops. This route would reduce the travel time to Sun Peaks from the east by approximately one hour and is supported by the Little Shuswap Indian Band and the communities of Sun Peaks Mountain Resort Municipality, Chase and Salmon Arm.

This planned road will have a beneficial impact on the local market for Sun Peaks Resort by expanding the current local market area to include the Okanagan region to the south. The regional market potential to the east in British Columbia would expand to include Golden and a portion of the Trans Canada Highway to Lake Louise, Alberta. Other Alberta destination visitors would also benefit, as there would be a similar one-hour reduction in the travel time to Sun Peaks Resort for all visitors traveling along the Trans Canada Highway from the east.

It has been estimated that the tour bus traffic along the Trans Canada Highway between Alberta and Vancouver is in the order of 15,000 buses per year. The Trans Canada Highway is also an extremely popular route for tourists driving their own vehicles. In the summer, the City of Kamloops often does not have the capacity to accommodate all the overnight visitors who require an overnight stop along the route. The proposed connection from the Trans Canada Highway to Sun Peaks would make it very convenient for travellers along this route to overnight at Sun Peaks Resort.