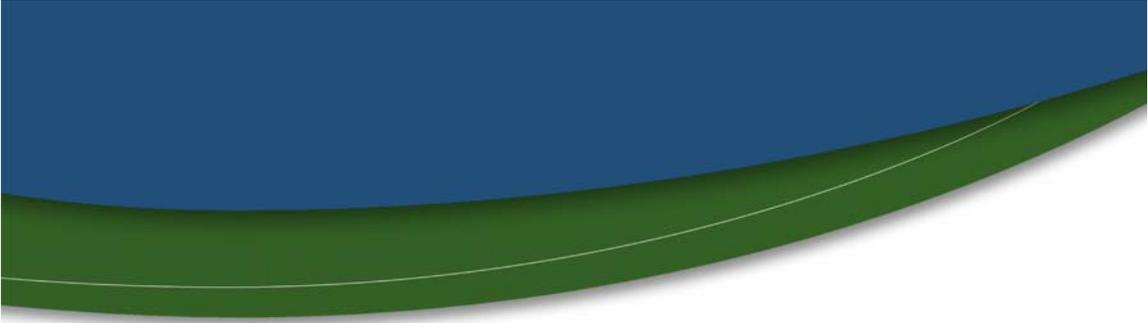


# **Jumbo Glacier Resort Master Plan**

## **Appendix 8-C** EAO Assessment Report



**JUMBO GLACIER RESORT PROJECT  
ASSESSMENT REPORT**

**With Respect to:**  
an Application for an Environmental Assessment Certificate  
pursuant to the *Environmental Assessment Act*, S.B.C. 2002, c. 43

**Prepared by:**  
**Environmental Assessment Office**

**August 3, 2004**

## Preamble

This report has been prepared by the Environmental Assessment Office (EAO), pursuant to section 17 of the *Environmental Assessment Act (EA Act)* to document the findings of its formal assessment of an application by Glacier Resorts Ltd. (the Proponent) to develop the Jumbo Glacier Resort Project in the Jumbo Creek valley, located approximately 55 km west of Invermere, British Columbia.

This report will be referred to the Minister of Sustainable Resource Management, the Minister of Water, Land and Air Protection, and the Minister of Small Business, and Economic Development, along with the Proponent's application (including the Project Report and Project Report Supplement), to assist the ministers in their decision on whether or not to grant an environmental assessment (EA) certificate for the Jumbo Glacier Resort Project.

Pursuant to section 6 of the *Public Consultation Policy Regulation*, the Assessment Report (along with any recommendations of the Executive Director, reasons for those recommendations, and the ministers' decision) will be made available through the EAO's Project Information Centre ([www.eao.gov.bc.ca](http://www.eao.gov.bc.ca)) within 45 days<sup>†</sup> after the Executive Director submits it to ministers.

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<sup>†</sup> On September 15, 2004, the Minister of Sustainable Resource Management ordered a 31-day extension to the time limits for both a decision by ministers and for making the Assessment Report and recommendations of the EAO publicly available through the Project Information Centre.

## Executive Summary

### Background

Glacier Resorts Ltd. (the Proponent) proposes a year-round ski resort in the Jumbo Creek valley, located in the Purcell Mountain Range approximately 55 km west of Invermere, British Columbia.

At full build-out, the proposed \$450 million Jumbo Glacier Report Project (the Project) would include an estimated 104 hectare (ha) resort base area consisting of a hotel with approximately 6,250 bed units (which includes 750 bed units for staff accommodation), condominium vacation homes, and associated amenities for the resort community. The Controlled Recreation Area (CRA) which includes areas licenced for ski runs and connecting territory, would encompass approximately 5,925 hectares (ha) and includes lift-serviced access to several nearby glaciers at an elevation of up to approximately 3,400 metres. The Project would provide approximately 3,750 person years of construction employment and create 750 to 800 permanent full-time jobs.

The Project is located in one of the few areas in the East Kootenay that provides easy motorized access into the Purcell Mountains and is a popular backcountry area for hunting and recreational use such as hiking and picnicking in the summer months. The area, and the Project, have been the subject of ongoing land use debate for over ten years, despite the Kootenay/Boundary Land Use Plan allowing resort development in the area. As a result, the context of the EA review is one in which the local community (public, local governments and First Nations) is divided on the Project.

### EA Review History

The Proponent originally proposed to develop the skiing potential of the upper Jumbo Creek valley in 1991 and was granted sole proponent status and permission to pursue the Project in 1993. Consideration of the Project under the Commercial Alpine Ski Policy (CASP) was postponed pending the completion of a land-use plan for the Kootenay region by the Commission on Resources and the Environment. In March 1995, the Province announced the Kootenay/Boundary Land Use Plan (KBLUP), which identified a ski resort development as an acceptable land use of the upper Jumbo Creek valley. The specifics of the project proposal were to be subject to an environmental assessment (EA). Review of the Project under CASP was again put on hold pending completion of the EA review under the *Environmental Assessment Act*, R.S.B.C. 1996, c.119 (*EA Act*), proclaimed on June 30, 1995.

On July 12, 1995 an Interim Agreement was concluded between former Ministry of Environment, Lands and Parks and the Proponent, confirming the Proponent's status as "sole proponent" and authorized access to Crown land to carry out investigations and assessments necessary for the EA review of the Project. The Interim Agreement also established the basis of the relationship between the parties and clarified roles and responsibilities and the linkage between CASP and the EA review process.

The EA review of the Project commenced in July 1995 with the submission of the Jumbo Glacier Alpine Resort Application for a Project Approval Certificate (the Application) to the Environmental Assessment Office (EAO). Government agencies (federal, provincial, and local), First Nations and the public were involved. Input received by the EAO during a 75-day public comment period helped to identify additional information needed to complete the EA review.

In December 1996, *Draft Project Report Specifications* were issued that proposed additional study and information requirements. The document was extensively reviewed by a Public Advisory Committee consisting of various interested public groups. A 65-day comment period was established to collect feedback from the public. Comments were also received from the Proponent. In May 1998, *Final Project Report Specifications* were issued that described additional information needed to complete the EA review.

The new *Environmental Assessment Act*, S.B.C. 2002, c.43, came into effect in December 2002 and the Proponent was provided until December 31, 2003 to submit the information required to complete the EA review. On December 30, 2003, the Proponent submitted the Project Report (including Master Plan Concept) to the EAO. On January 27, 2004, the EAO determined that the Proponent's submission contained most of the information required and took appropriate steps, including extending time limits for providing information during the EA review, to enable the thorough and timely review of the Project. The 180-day period for reviewing the Project Report began on February 5, 2004. The EAO established a 60-day public comment period on the Project Report (February 13 to April 13, 2004).

The Proponent submitted a Project Report Supplement (Migratory and Non-migratory Birds) on June 28, 2004, and a 9-day public comment period (July 1 to 9, 2004) was established for the review of this additional information.

### **EA Review Procedures**

On January 27, 2004, the EAO issued (under section 11 of the *EA Act*) an order that sets out the scope, procedures, and methods for the EA Review of the Project. For the purposes of the EA, the Project scope addresses the following on-site and off-site components and activities:

- a) the construction and operation of all on-site and off-site facilities which are installed exclusively or primarily for the benefit of the Project; and
- b) associated activities related to (or attributable to) resort operations, including:
  - i) the use of physical infrastructure built in the Toby/Jumbo Creek drainages;
  - ii) use of, or impacts on, infrastructure and services provided in the surrounding region; and
  - iii) impacts on First Nations traditional use of the area in the vicinity of the Project.

For on-site facilities (the resort site), the Project scope specifically includes the design, construction and operation of the following:

- a) ski runs, including circulation corridors;
- b) ski lift system;
- c) ski run maintenance facilities;
- d) rescue facilities;
- e) ski lodge;
- f) ski village;
- g) hotels, condominiums, townhouses, chalets, single family dwellings;
- h) on-site road system;
- i) water supply systems for all on-site components;
- j) solid waste disposal systems for all on-site components, including on-site (and if necessary, off-site) disposal facilities and systems;
- k) liquid waste disposal systems for all on-site components, including on-site (and if necessary, off-site) disposal facilities and systems; and
- l) relevant operational, environmental design and public safety considerations.

For off-site physical infrastructure (in the Toby/Jumbo Creek drainages), the Project scope specifically includes the design, construction and operation of the following:

- a) access road from Invermere to the proposed resort, with particular focus up-valley from Panorama Mountain Resort;
- b) bridges along the access road;
- c) related facilities such as gravel/borrow pits and maintenance yards (if any);
- d) proposed off-site parking facilities (*e.g.*, near the Mineral King mine site);
- e) the proposed electric transmission line hook-up to the integrated grid;
- f) telephone communications;
- g) any other project components for which an off-site location is proposed; and
- h) relevant operational, environmental design and public safety considerations.

For on-site activities and services and off-site activities, the Project scope specifically includes:

- a) activities based at, or originating from, the resort at each season, including any that would extend off-site to surrounding areas (*e.g.*, cross-country skiing, hiking, etc.); and
- b) on-site services required to operate the resort community.

The EAO has considered the potential environmental, economic, social, heritage and health effects of the Project. All practical means to prevent or reduce potential adverse effects of the Project have been considered.

### **First Nation Interests**

The Project is located within the asserted traditional territories of the Ktunaxa/Kinbasket Tribal Council (KKTC). One of its members Bands, the Shuswap Indian Band (Kinbasket), also asserted traditional interests. In addition, a group called the Sinixt Nation expressed interests in the proposed Project.

During the Application review (1995-1998), the KKTC, the Shuswap Indian Band and the Columbia Lake Indian Band accepted the EAO's invitation to participate on the Project Committee. The EAO provided financial assistance to the KKTC to participate. The KKTC and the Columbia Lake Indian Band indicated that they were opposed to the Project (*i.e.*, inconsistent with values, deal with aboriginal rights before alienating crown land, environmental reasons) while the Shuswap Indian Band indicated that it was open to the Project through participation in economic growth, which should not be put on hold until a treaty was concluded. A Sinixt representative expressed concerns about potential impacts on Grizzly bears.

The KKTC, the Shuswap Indian Band and the Columbia Lake Indian Band were invited to sit on the technical advisory committee established for the review of the Project Report. Both the KKTC (representing the Columbia Lake Indian Band as well as the whole Ktunaxa Nation) and the Shuswap Indian Band accepted the invitations to participate but only the Shuswap Indian Band participated on the technical advisory committee. The EAO offered the KKTC the opportunity to comment on the measures proposed to address the KKTC concerns and offered financial assistance to them to undertake the work.

The Shuswap Indian Band, after considering their studies, the Project Report, and the Proponent's willingness to conclude an economic agreement for the provision of utility services to the proposed resort, indicated that they were satisfied that their concerns had been addressed and declared their support for the Project. The Canadian Columbia River Inter-Tribal Fisheries Commission (CCRIFC) submitted technical comments (fisheries and aquatic resources, water

quality and quantity, riparian habitat) on behalf of the KKTC. In addition, the KKTC submitted detailed comments on a document prepared by the EAO for their review entitled, *Measures Proposed to Address Issues Identified by the Ktunaxa Nation*. The Sinixt group provided comments on the Project Report and expressed concerns about Grizzly bear, Westslope Cutthroat, Bull trout and the application of the *Species At Risk Act* (SARA).

The Proponent has made specific commitments to First Nations related to developing and maintaining ongoing relationships (e.g., ongoing consultation), environmental mitigation (e.g., First Nations Interpretive Centre), cultural/traditional use and archaeology (e.g., hunting and gathering accommodations), and employment and economic development (e.g., 5% employment equity, training, land). The Proponent has also committed to negotiate with the KKTC and the Shuswap Indian Band and attempt to conclude an impact management and benefits agreement prior to submission of the final Ski Area Master Plan and Master Development Agreement.

Based on the consultation activities undertaken by the Proponent and on the commitments made, the EAO is satisfied that the Proponent has sought to identify and assess the potential effects of the Project with respect to First Nations and that measures have been proposed to offset identified impacts on First Nations' interests.

### **Local Government Responses**

Local governments in the area requested that they be given the opportunity of providing their conclusions on the Project. The views they provided reflect differing viewpoints:

- the Village of Radium is in favour;
- the District of Invermere is opposed;
- the Regional District of the East Kootenay (RDEK) decided not to comment on the Project in order to avoid compromising its objectivity on future land use decisions;
- the Regional District of Central Kootenay expressed concerns about the Project if motorized access restrictions in adjacent drainages were required to mitigate impacts on grizzly bears. No such restrictions are being pursued.

### **Public Views and Interests**

Because of the degree of public interest in the Project, the EAO is providing, as part of the Assessment Report, information documenting the nature and extent of public views and interests (Appendix C).

There has been a considerable and sustained level of interest in the Project since the EA review began in 1995. The best indicator of the nature and extent of public views on the Project is represented by the feedback received during the 60-day formal public comment period on the Project Report during which the EAO received 5,839 written submissions from 4,755 identifiable individuals. The EAO solicits public comments on the substance of project applications. In the case of this EA review, most of the comments received were not on the Project Report itself, but rather expressions of opposition to, or support for, the Project. The analysis of these submissions indicates that:

- 432 people (15.1 %) of the approximately 2,858 population of the District of Invermere, the area closest to the Project area, made written submissions (374 opposed and 58 in favour);
- 13.1% of the population of the District of Invermere submitted written comments expressing opposition to the Project;

- the number and percentage of submissions from the broader local region was small compared to the total population (West Kootenay: 1,457/88,862 or 1.6%; East Kootenay: 954/56,291 or 1.7%);
- 50% of submissions were from outside the Kootenays;
- the level of public interest was consistent with the 1995-1998 review period;
- 91% of submissions were expressions of opposition to the Project; and
- the organized campaign of opposition did not result in the same level of international interest as has been seen in other campaigns in British Columbia.

Besides basic land use opposition, key issues identified by the public include: project feasibility; effects on local heli-ski operator; effects on Grizzly bears (including the related issue of possible motorized access restrictions in adjacent drainages to mitigate Grizzly bear impacts); global warming and the integrity of the glaciers; water quality; adequacy of groundwater supply; waste management facilities; and costs to taxpayers.

All public issues have been considered as part of the technical review process. The EAO is satisfied that the Proponent can implement appropriate measures to avoid or address any potential adverse effects related to these public issues that are within the scope of the assessment.

## **Summary of Key Review Issues**

### *Project Feasibility*

While the EAO does not typically look at feasibility, in attempting to coordinate with the CASP requirements, steps were taken in the EA review to conduct a conceptual assessment of project feasibility.

An independent study commissioned by the EAO in 1998, raised questions about the economic feasibility of the Project. As a result, the Proponent made design changes to the Project and had the adequacy with which they addressed the concerns assessed by a consulting firm that had worked on the original independent study. As well, the EAO had the firm that did the original independent assessment review the Proponent consultant's assessment. Both studies recommended that further information be provided as part of the Ski Area Master Plan planning process (including economic viability). This has been agreed to by the Proponent and is acceptable to the lead agencies.

On that basis, the EAO is satisfied that questions related to the conceptual feasibility of the Project have been answered and any unanswered questions can be addressed as part of the Ski Area Master Plan planning and approval process.

### *Grizzly Bears*

The Project is located in the Central Purcell Grizzly Bear Population Unit (GBPU), one of 49 such units in the Province designated as viable (stable and sufficiently productive to permit some hunting) under the Grizzly Bear Conservation Strategy.

A cumulative effects assessment concluded that in the absence of any measures to mitigate impacts on grizzly bears, the Project would increase the risk of grizzly bear mortality by 2.6% - 3.8% and reduce habitat effectiveness by 1.7% - 3.1% within the 3,977 km<sup>2</sup> study area.

The Proponent proposed both design changes and mitigation measures to prevent or reduce grizzly bear impacts including:

- 60% reduction in the size of the Controlled Recreation Area (CRA);

- avoiding development in areas more frequently used by Grizzly bears;
- a Grizzly Bear Management Plan;
- an Outdoor Recreation Management Plan;
- offsetting the loss of habitat effectiveness with new ski runs;
- partnership arrangements with local forest tenure holders and government to improve habitat effectiveness (silviculture) within and adjacent to the CRA;
- deactivation of unnecessary roads;
- strategic harvest of merchantable timber;
- reduction of the density of active roads in adjacent drainages by strategic deactivation, in consultation with other tenure holders; and
- monitoring and adaptive management to determine the effectiveness of proposed mitigation measure and to identify further measures that could be undertaken by the Proponent or government to reduce potential impacts should they be determined to be required.

Based on the information available, WLAP has determined that there is a low risk that the Project would result in a reduction of the grizzly bear population of such significance that the population in the Central Purcell GPBU would become threatened. This determination considers that: proposed mitigation for the area within and immediately adjacent to the CRA are fully applied; the Proponent will maintain its proposed monitoring program, and will adjust its mitigation programs to the fullest extent possible if resort-related impacts to Grizzly bear populations or habitat use are evident.

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on Grizzly bears (both in terms of mortality risk and habitat effectiveness, including habitat fragmentation) within and outside Jumbo Valley and can implement appropriate measures (e.g., garbage management, outdoor recreation management, adaptive management) to avoid or address any potential significant adverse effects

#### *Local Governance*

The current zoning for the project area (Rural Resource Zone) does not allow resort development and rezoning by the RDEK is required. Since creating a Mountain Resort Municipality from the outset is not possible under existing legislation, the Project will have to go through RDEK rezoning and the RDEK will be responsible for the development approval process if rezoning is approved. Once the Project develops sufficient permanent resident population, a Mountain Resort Municipality could be created. There are a variety of public and private options available to provide services.

In recognition of the challenges the RDEK faces with development approval processes for the resort, LWBC and the Ministry of Community, Aboriginal and Women's Services are prepared to explore ways of assisting the RDEK with their planning and zoning work (e.g., integration/harmonization with post-certificate permitting/approval processes).

#### *Implications for R.K. Heli-Ski Panorama Inc.'s Operations*

If approved, the Project would occupy approximately 4% of the 144,000 ha of land currently used for heli-skiing by R.K. Heli-Ski Panorama Inc. (R.K. Heli-Ski). The issue of competing tenure interests arises because R.K. Heli-Ski has a Licence of Occupation which grants non-exclusive surface rights for heli-skiing purposes. Overlapping tenures are common on Crown lands throughout the Province as the government strives to achieve the highest and best use from a provincial resource. In such situations, the government seeks a reasonable agreement that would meet the needs of all parties on the use of lands and resources.

The issues under consideration are: the impact the proposed Project may have on R.K. Heli-Ski's operations (e.g., the loss of skiable terrain in R.K. Heli-Ski tenure) and its implications; and how the situation will be addressed.

During the Project Report review period, the EAO and LWBC encouraged the Proponent and R.K. Heli-Ski to attempt to reach a mutually beneficial understanding. Those discussions were unsuccessful and resulted in the Proponent offering to purchase R.K. Heli-Ski if the Project were approved. R.K. Heli-Ski responded that the business was not for sale.

Given the disagreements over the impacts to R.K. Heli-Ski, the amount of skiable terrain potentially lost, and the need to provide advice to Ministers, the EAO engaged an independent consultant, Sierra Systems, to review and determine the significance of the potential impacts to R.K. Heli-Ski and the degree to which mitigation measures reduce or eliminate those potential impacts. The Proponent and R.K. Heli-Ski have been given the opportunity to review the Sierra Systems report and to provide comments to the EAO by August 13, 2004. Any comments received from the Proponent or R.K. Heli-Ski will be included in the consideration of the Proponent's Application.

Based on the information available, the EAO is satisfied that measures can be implemented (such as R.K. Heli-Ski making better use of other regions of its tenure and the Proponent allowing R.K. Heli-Ski access to the CRA and willingness to develop a synergistic relationship) to avoid or address any potential material effect on R.K. Heli-Ski.

In the event that the Project is approved, LWBC would proceed with the review and finalisation of the Ski Area Master Plan and Master Development Agreement. At that point, if R.K. Heli-Ski claimed harm to its business, it could invoke an arbitration process under its Licence to determine the extent, if any, of harm to R.K. Heli-Ski's business and, the quantification of any "material effect" on the exercise of its rights under the Licence.

#### *Impacts of Climate Change*

Although the proposal involves ski runs on a number of south-facing slopes, non-south-facing aspects are also well represented in the proposal. Given its elevation (1,700 to 3,419 metres), the Project is at less risk from the potential effects of climate change than most other ski resorts. It is unlikely that skiing activity would significantly impact on the glacier's extent. This view is generally supported by the United Nations' Environmental Programme's 5<sup>th</sup> World Conference on Sport and Environment.

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on snow wastage and glacier ablation and can implement appropriate measures to avoid or address any potential significant adverse effects.

#### *Avalanche Control at the Resort*

The Proponent's conceptual operating plan describes avalanche hazards in the vicinity of roads, ski lifts and ski runs; there is no avalanche hazard in the vicinity of any proposed residential and/or commercial structure. The technical assessment on avalanche hazards is sufficient to meet Ministry of Transportation requirements and the avalanche management and conceptual operations plan is sufficient. A ski area safety plan would be required prior to the start of operations that would provide details of areas of exposure and safety programs that would be established to avoid exposure to avalanche hazards.

Based on the information and commitments provided, the EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on avalanche control at the resort, and that the Proponent can implement appropriate measures to avoid or address any potential significant adverse effects.

#### *Wildfire Control at the Resort*

The Proponent has committed to complete a Fire Protection Plan to Ministry of Forests standards prior to commencing construction to address the design of the community and associated roads and emergency vehicular access.

Based on information and commitments provided, the EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on wildfire control at the resort and can implement appropriate measures to avoid or address any potential significant adverse effects.

#### *Liquid Waste Treatment and Disposal*

Tertiary treatment for domestic wastewater is proposed from project start-up. Wastewater would not be discharged into Jumbo Creek; treated water would be discharged to ground via an approved outfall and drainage field. It is the Proponent's responsibility to ensure the selected system is appropriate for site-specific conditions and has the capability to treat the effluent to ensure no significant impact to the receiving environment. The Proponent has committed to completing site-specific detailed Environmental Management Plans for non-point source waste control, prior to construction, and to conducting detailed environmental impact study as part of the *Municipal Sewage Regulation* registration process.

The EAO is satisfied that the Proponent has identified and assessed the potential impacts with respect to liquid waste treatment and disposal and that the Proponent can implement appropriate measures to avoid or address any potential significant adverse effects.

#### *Water Quality Issues*

During the construction and post construction phases of the Project, the Proponent has committed to implementing the most applicable best management practices to control the quality of run-off water. The Proponent has committed to completing site-specific detailed Environmental Management Plans for non-point source waste control, prior to construction, and to conducting detailed environmental impact study as part of the *Municipal Sewage Regulation* registration process.

The EAO is satisfied that, for the purpose of the EA review, the Proponent has identified and assessed the potential impacts with respect to water quality and that the Proponent can implement appropriate measures (e.g., Stormwater Management Plan, Sediment Control Plan) to avoid or address any potential significant adverse effects.

#### *Water Supply*

The EAO clarified additional information requirements with respect to water supply to include only information that could be feasibly provided in the absence of a drilling exploration program for groundwater. Although the requirement for a detailed assessment involving drilling was excluded, information regarding water supply was still assessed as part of the EA review.

Preliminary geotechnical and hydrogeological investigations indicated that there is a high likelihood of being sufficient groundwater supply available. The Proponent has agreed to conduct hydrogeological studies to confirm the availability of groundwater and to determine the zone of influence of the proposed wells. If the groundwater option does not prove to be feasible,

the Proponent will, prior to any resort construction, conduct appropriate investigative work to assess and determine the environmental impacts of the surface water option, as well as to propose any needed mitigation measures to deal with identified impacts.

Based on the Proponent's commitments, requirements and proposed conditions of certification, the EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on water supply and can implement appropriate measures (e.g., to undertake a drilling program to confirm the presence of adequate groundwater and determine whether groundwater withdrawal could affect stream flows) to avoid or address any potential significant adverse effects.

#### *On-site and Adjacent Outdoor Recreation Use*

The nature and extent of the on-site and adjacent outdoor recreational use, especially within the Jumbo Creek valley, may evolve and expand should the Project proceed. Based on the Proponent's commitments (e.g., not entering into agreements for recreational activities without Land and Water BC Inc.'s approval, consulting with the KKTC and the Shuswap Indian Band before entering into any agreements for recreational activities within the CRA, monitoring unsupervised public recreational use) and reasonable measures proposed to limit impacts to the area defined by the CRA and to reduce impacts to recreational uses of adjacent areas to the extent possible, along with the regulatory requirement of LWBC to manage (and consult on) future tenures, the EAO is satisfied that appropriate measures can be implemented to manage outdoor recreation uses in a manner consistent with the prevailing land use designation of the project area and to address any potential significant adverse effects.

#### *Cost to Taxpayers*

The Proponent has committed to design and pay for resort access road improvements in proportion with the Project phasing and in conformity with government policy, and that there will not be any additional infrastructure costs to local taxpayers. The EAO is satisfied that the Proponent has identified and assessed the potential effects of the Project with respect to infrastructure, government services and revenue impacts and can implement appropriate measures (e.g., providing or contracting for services) to avoid or address any potential significant adverse effects.

## **Conclusions**

The EAO is satisfied that:

- the Project Report and Project Report Supplement, together with additional information subsequently provided, adequately identified and assessed the potential significant adverse environmental, economic, social, heritage, and health effects of the Project, including potential effects on First Nations' interests;
- measures relating to the distribution of information about the Project have been carried out by the Proponent and there has been adequate public consultation;
- issues identified by the public, provincial agencies and local governments, where they were within the scope of the EA review, were adequately addressed by the Proponent during the review of the Application; and,
- there has been adequate consultation with the KKTC and the Shuswap Indian Band and measures have been proposed to offset identified impacts on First Nations' interests; and
- practical means have been identified to prevent or reduce to an acceptable level all potential significant adverse effects arising from the Project through the implementation of commitments and mitigation measures identified during the EA review and compliance with subsequent statutory permits, licences and approvals.

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## List of Abbreviations/Acronyms

BCAS.....	British Columbia Ambulance Service
CASP.....	Commercial Alpine Ski Policy
CAWS.....	Ministry of Community, Aboriginal and Women’s Services
CCRIFC.....	Canadian Columbia River Inter-Tribal Fisheries Commission
CEA.....	cumulative effects assessment
CEAA.....	Canadian Environmental Assessment Agency
CRA.....	Controlled Recreation Area
DFO.....	Fisheries and Oceans Canada
DOI.....	District of Invermere
EA.....	environmental assessment
<i>EA Act</i> .....	<i>Environmental Assessment Act</i>
EAO.....	Environmental Assessment Office
EC.....	Environment Canada
EIS.....	Environmental Impact Study
EMA.....	<i>Environmental Management Act</i>
EMP.....	Environmental Management Plan
EPA.....	Environmental Protection Agency
GBPU.....	Grizzly Bear Population Unit
JCCS.....	Jumbo Creek Conservation Society
KBLUP.....	Kootenay/Boundary Land Use Plan
KKTC.....	Ktunaxa/Kinbasket Tribal Council
LWBC.....	Land and Water BC Inc.
LWMP.....	Liquid Waste Management Plan
MDA.....	Master Development Agreement
MEM.....	Ministry of Energy and Mines
MHR.....	Ministry of Human Resources
MOF.....	Ministry of Forests
MOT.....	Ministry of Transportation
MRID.....	Mountain Resort Improvement District
MRM.....	Mountain Resort Municipality
MSR.....	<i>Municipal Sewage Regulation</i>
NFPA.....	National Fire Protection Association
OCP.....	Official Community Plan
Project, the.....	Jumbo Glacier Resort Project
Project Report, the.....	Project Report (and Master Plan Concept)
Proponent, the.....	Glacier Resorts Ltd.
PWC.....	Purcell Wilderness Conservancy
RDCK.....	Regional District of Central Kootenay
RDEK.....	Regional District of East Kootenay
SARA.....	<i>Species at Risk Act</i>
SBED.....	Ministry of Small Business and Economic Development
Specifications, the.....	Final Project Report Specifications (May 1998)
SRM.....	Ministry of Sustainable Resource Management
TUS.....	Traditional Use Study
WMA.....	<i>Waste Management Act</i>
WLAP.....	Ministry of Water, Land and Air Protection



## 1. Introduction

### 1.1. Purpose of the Report

The purpose of this Assessment Report is to:

- a) Summarize the review of the Application for an Environmental Assessment (EA) Certificate for the Jumbo Glacier Resort Project (the Project) submitted by Glacier Resorts Ltd. (the Proponent); and
- b) Report on potential environmental, economic, social, heritage and health effects of the Project, and determine whether potentially significant adverse effects can be prevented or reduced to an acceptable level by mitigation measures proposed by the Proponent.

### 1.2. Project Overview

The Proponent proposes a year-round ski resort in the Jumbo Creek valley located in the Purcell Mountain Range approximately 55 km west of Invermere, British Columbia (Figures 1 and 2).

At full build-out, the proposed \$450 million the Project would include an estimated 104 hectare (ha) resort base area consisting of a hotel with approximately 6,250 bed units (which includes 750 bed units for staff accommodation), condominium vacation homes, and associated amenities for the resort community. The Controlled Recreation Area (CRA) which includes areas licenced for ski runs and connecting territory, would encompass approximately 5,925 ha and includes lift-serviced access to several nearby glaciers at an elevation of up to approximately 3,400 metres (Figure 3). The Project would provide approximately 3,750 person years of construction employment and create 750 to 800 permanent full-time jobs.

In order to proceed, the Project requires an EA Certificate under the *B.C. Environmental Assessment Act (EA Act)*.

### 1.3. Project Proponent

Glacier Resorts Ltd. of Vancouver, British Columbia, has been the official Project Proponent since February 15, 1993. Pheidias Project Management Corporation (Pheidias) is the prime consultant and Project Manager, and acted as the authorised agent for Glacier Resorts Ltd. in performing all of the Proponent's functions under the *EA Act*.

### 1.4. Scope of the Project

The procedural order, issued under section 11 of the *EA Act* by the Environmental Assessment Office (EAO) (January 27, 2004), outlined those components of the Project that are to be considered for issuance of an EA Certificate (Appendix B).

For the purposes of the environmental assessment, the Project scope addresses the following on-site and off-site components and activities:

- a) the construction and operation of all on-site and off-site facilities which are installed exclusively or primarily for the benefit of the Project; and
- b) associated activities related to (or attributable to) resort operations, including:
  - i) the use of physical infrastructure built in the Toby/Jumbo Creek drainages;

- ii) use of, or impacts on, infrastructure and services provided in the surrounding region; and
- iii) impacts on First Nations traditional use of the area in the vicinity of the Project.

For on-site facilities (the resort site), the Project scope specifically includes the design, construction and operation of the following:

- a) ski runs, including circulation corridors;
- b) ski lift system;
- c) ski run maintenance facilities;
- d) rescue facilities;
- e) ski lodge;
- f) ski village;
- g) hotels, condominiums, townhouses, chalets, single family dwellings;
- h) on-site road system;
- i) water supply systems for all on-site components;
- j) solid waste disposal systems for all on-site components, including on-site (and if necessary, off-site) disposal facilities and systems;
- k) liquid waste disposal systems for all on-site components, including on-site (and if necessary, off-site) disposal facilities and systems; and
- l) relevant operational, environmental design and public safety considerations.

For off-site physical infrastructure (in the Toby/Jumbo Creek drainages), the Project scope specifically includes the design, construction and operation of the following:

- a) access road from Invermere to the proposed resort, with particular focus up-valley from Panorama Mountain Resort;
- b) bridges along the access road;
- c) related facilities such as gravel/borrow pits and maintenance yards (if any);
- d) proposed off-site parking facilities (e.g., near the Mineral King mine site);
- e) the proposed electric transmission line hook-up to the integrated grid;
- f) telephone communications;
- g) any other project components for which an off-site location is proposed; and
- h) relevant operational, environmental design and public safety considerations.

For on-site activities and services and off-site activities, the Project scope specifically includes:

- a) activities based at, or originating from, the resort at each season, including any that would extend off-site to surrounding areas (e.g., cross-country skiing, hiking, etc.); and
- b) on-site services required to operate the resort community.

### **1.5. Scope of the Assessment**

The procedural order, issued by the EAO (January 27, 2004), also outlined the required scope, procedures and methods for carrying out an assessment of the Project (Appendix B).

The scope of the assessment required consideration of the potential environmental, economic, social, heritage, and health effects, as identified in the document "Final Project Report Specifications, Reporting Requirements," (May 20, 1998). One exception to the specified reporting requirements has been made in the case of item D.2(A) #4 respecting groundwater. In this case, the information reporting requirements for groundwater supply and relationships to in-stream water flows in Jumbo Creek have been limited to those that do not rely on a groundwater drilling exploration program.

The assessment has also taken into account practical means to prevent, or reduce to an acceptable level, any potential significant adverse effects.

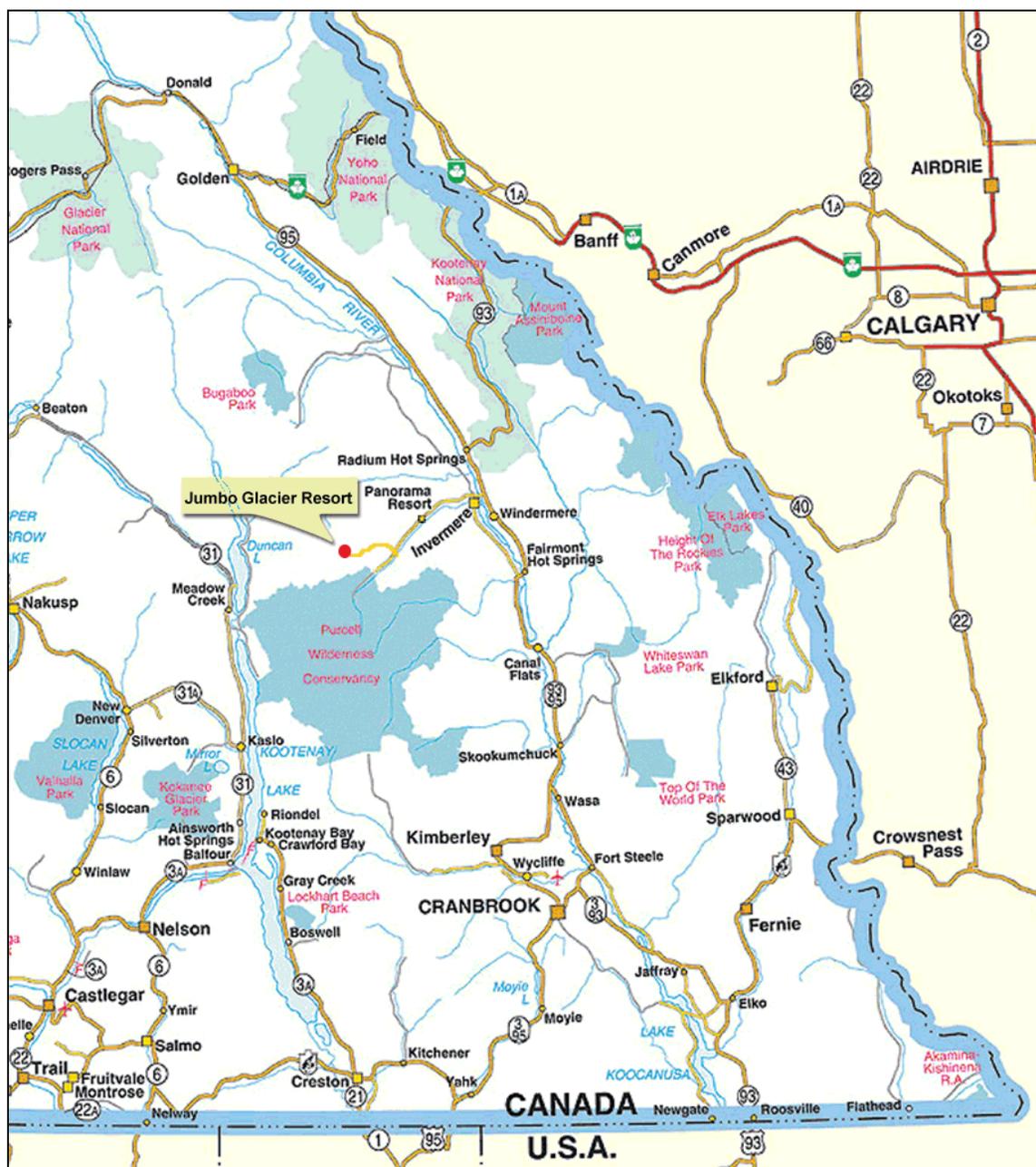


Figure 1. Location of the proposed Jumbo Glacier Resort Project.

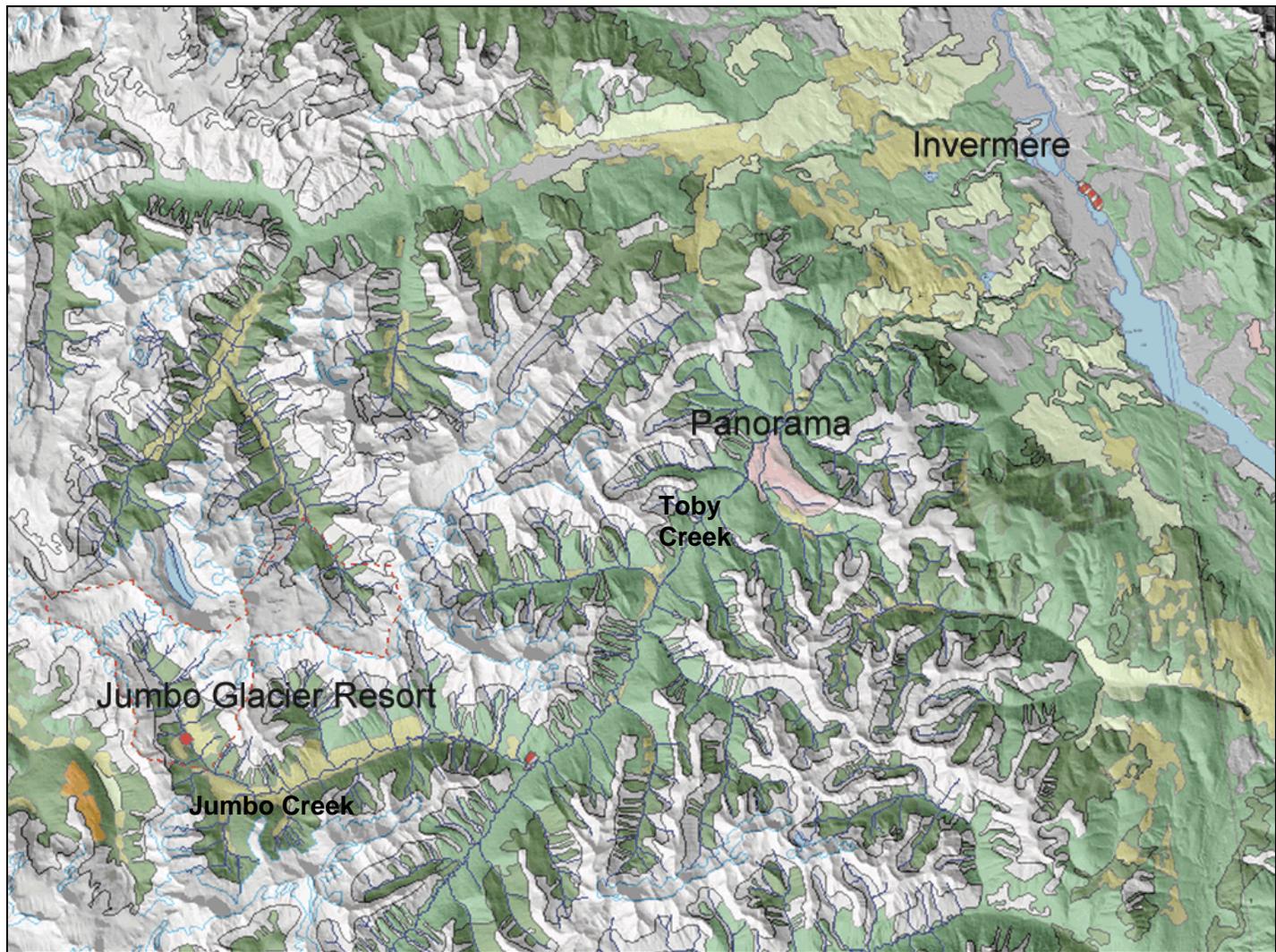


Figure 2. Location of the proposed Jumbo Glacier Resort Project relative to the Toby Creek and Jumbo Creek valleys.



## 2. Project Review Process and Context

### 2.1. Government Policy and Planning Decisions

Destination ski resorts on provincial Crown land are managed by Land and Water BC Inc. (LWBC) under the Commercial Alpine Ski Policy (CASP). The CASP outlines required processes, plans and other information for ski resort development proponents.

In April 1991, the Proponent submitted, to the former Ministry of Environment, Lands and Parks (MELP), an expression of interest under the CASP in developing the skiing potential of the upper Jumbo Creek valley. Following public and agency review, MELP issued a public call for proposals to undertake development of the area. In response, the Proponent submitted a proposal to develop a ski resort in Jumbo Creek valley (February 1993) and, after a competitive bidding process, was awarded sole proponent status under CASP (March 1993).

However, further consideration under CASP was deferred pending the completion of a land use plan for the East Kootenay region. A report by the Commission on Resources and the Environment (CORE) to the government (October 1994) stated that the land use planning process was not a suitable forum for making detailed technical decisions on specific land use allocations. CORE recommended that the area of the proposed Project be subject to an environmental assessment (EA) review to evaluate the compatibility of commercial resort development with other important values. In March 1995, the Province announced the Kootenay/Boundary Land Use Plan (KBLUP), which identified ski resort development as a potentially acceptable use of the upper Jumbo Creek valley within Jumbo-Upper Horseshief Special Resource Management Zone (SRMZ).

Review of the Project under CASP was again put on hold pending completion of the EA review under the *EA Act* proclaimed on June 30, 1995.

On July 12, 1995 an Interim Agreement was concluded between MELP and the Proponent, confirming the Proponent's status as "sole proponent" and authorized access to Crown land to carry out investigations and assessments necessary for the EA review of the Project. The Interim Agreement also established the basis of the relationship between the parties and clarified roles and responsibilities and the linkage between CASP and the EA review process.

The EA review of the Project commenced in July 1995 with the release of the Jumbo Glacier Alpine Resort Application for a Project Approval Certificate (the Application) for public review and comment, and the formation of a project review committee (composed of local, provincial and federal government agencies and First Nations) to guide the review.

In June 1997, the Kootenay/Boundary Land Use Plan – Implementation Strategy was released confirming the acceptability of a ski resort development as one of the strategies for the *Commercial Tourism* objective for the Jumbo-Upper Horseshief SMRZ, subject to the outcome of the EA review.

The EA review has attempted to incorporate CASP process requirements for evaluating the acceptability of the Project. If an EA Certificate is issued, the CASP process will resume at its final stage, entailing the review of a detailed Ski Area Master Plan and negotiation of a Master Development Agreement with the Proponent to permit Project development.

## 2.2. Provincial Environmental Assessment

The *EA Act* and accompanying regulations establish the framework for delivering environmental assessments. The EA review process generally includes four main elements:

- a) Opportunities for all interested parties, including First Nations, to identify issues and provide input;
- b) Technical studies of the relevant environmental, social, economic, heritage and/or health effects of the proposed Project;
- c) Identification of ways to prevent or minimize undesirable effects and enhance desirable effects; and
- d) Consideration of the input of all interested parties in compiling the assessment findings and making decisions about Project acceptability.

The Project is a reviewable project pursuant to Part 9 of the *Reviewable Projects Regulation* (BC Reg. 370/02). Part 9(4) requires a review for new ski resort development that has 2,000 or more bed units (where a 'bed unit' represents sleeping accommodation for one person), of which 600 or more are commercial bed units, and where assessment of the new facility does not include the dismantling and abandonment phases. Under the former *EA Act*, and its *Reviewable Projects Regulation*, section 53(1)(d), the Project was also deemed reviewable due to the threshold of 2,000 or more bed units.

The review began under the previous *Environmental Assessment Act*, R.S.B.C. 1996, c.119. When the new *Environmental Assessment Act*, S.B.C. 2002, c.43 was proclaimed on December 30, 2002, Transition Order #02-09 was issued describing the placement of the Project (Appendix A). On January 27, 2004, the section 11 Procedural Order was issued that described the scope, procedures and methods of the assessment of the Project (Appendix B).

EA is one component of British Columbia's overall land and resource management system. Other components include land use planning, land and resource tenuring, permitting and other review/approval mechanisms, and operations management. Each component, and its applicable laws, regulations, policies and technical guidelines, supports provincial goals for sustainable development, environmental protection and community stability.

## 2.3. Federal Environmental Assessment

Projects in British Columbia may be subject to a federal environmental assessment process under the *Canadian Environmental Assessment Act (CEA Act)*.

In the case of the Project, an initial determination by federal agencies identified the only potential trigger for application of the *CEA Act* was the possible need for an authorisation under section 35(2) of the *Fisheries Act* for habitat alteration in Jumbo Creek or Toby Creek, resulting from road upgrading or re-alignment, the construction of new stream crossings, or other Project-related activity. The Proponent completed the access route plan in 2003 and supplied it to the Department of Fisheries and Oceans (DFO).

On December 3, 2003, the Canadian Environmental Assessment Agency (CEAA) informed the Proponent that the *CEA Act* was not triggered as no authorizations appeared to be required under the *Navigable Waters Protection Act* or the *Fisheries Act*. This decision was based upon advice from the DFO and Environment Canada (EC) after a review of the Proponent's information and site visits.

CEAA informed the EAO of their decisions and requested that DFO be kept informed of road design and environmental management plans as they are developed.

#### **2.4. Project Application Review (July 1995 to May 1998)**

On June 30, 1995, when the former *Environmental Assessment Act*, R.S.B.C. 1996, c.119, took effect, the Minister of Environment, Lands and Parks and the Minister of Employment and Investment (the Responsible Minister as defined by the *EA Act*) signed a transition order, placing the Project at the initial application review stage of the EA review process. In July 1995, the Proponent submitted an application for a project approval certificate, initiating the EA review process.

##### **2.4.1 Jumbo Glacier Resort Project Committee**

Following receipt of the Proponent's application documents, the EAO established a project committee to steer the Project's review. The Project Committee, consisting of federal, provincial and local government agencies and First Nations, began review of the Proponent's documentation in July 1995, and held its first meeting in Cranbrook on August 2, 1995. Three other meetings were held on October 18, November 2, 1995 and February 26/27, 1997. Meeting attendees included both formal members and observers (usually present in the capacity of technical advisors to formal agency representatives).

##### **2.4.2 Public Review Process**

The public review process officially commenced with the publishing of a newspaper advertisement on July 14, 1995, announcing the availability of the Application for public review. A 75-day formal public comment period was initiated by the EAO from July 15, 1995 to September 28, 1995.

A number of mechanisms were used for public notification, access to information and consultation during the review of the Application. These included: advertising the availability of the Application and the Draft Project Report Specifications for public review and comment; the public comment review deadlines for both the Application (including two timeline extensions) and the draft Specifications; the locations of the satellite record repositories; and the locations and timing of open houses and public meetings.

Direct mail-outs were also utilised by the EAO to distribute documents to all members of the public who provided written comments on the Project during the review. These mail-outs included: August 1995 and December 1996 newsletters on the review; notices of two timeline extensions for the initial public comment period on the Application; a notice of the availability of the draft Specifications for public review; and notices of the two public meetings hosted by the EAO/Project Committee (held in Invermere and Nelson on September 14 and 20, 1995 respectively).

The EAO issued two newsletters on the review (in August 1995 and December 1996), and released another in June 1998 to coincide with the finalisation of the Project Report Specifications.

In accordance with the *EA Act*, the EAO provided access to the documentation generated during the review at its central Project Registry in Victoria, and also at six regional locations, including libraries and government agent offices.

General public consultation included: open houses by the Proponent to provide information on the Project to the public in key communities in the East and West Kootenays (including Invermere, Radium Hot Springs and Nelson); public meetings by the Proponent and the EAO / Project Committee in East and West Kootenay communities; and one-on-one meetings by the Proponent and the EAO/Project Committee members with identified public groups with a known interest in the Project.

Details of the notification, access to information and consultation measures employed for the review of the initial Application, as well as the subsequent preparation of draft Project Report Specifications by the Project Committee, are contained in a document prepared by the EAO, entitled: *Assessment of the Adequacy of Measures Being Implemented for Public and First Nations Notification, Access to Information and Consultation, December 13, 1996.*

An evaluation of public feedback received on the Application during the public comment period is attached to the December 13, 1996 *Draft Project Report Specifications.*

### **2.4.3 Public Advisory Committee**

During the summer and fall of 1995, the EAO received several requests from members of the public and public interest groups for the establishment of a public advisory committee (PAC). After consultation with the Project Committee and informal discussions with public interest groups, the EAO invited several groups to participate in a PAC for the Project, including representatives for East and West Kootenay environmental interests. A PAC was formed in January 1997, with a hired facilitator and a membership structured to review general issues raised by the public and contribute to the development of the Draft Project Report Specifications. Government and non-government experts participated in specific PAC discussions.

The PAC conveyed its final report and recommendations on the draft Specifications to the EAO on June 24, 1997 in a document, entitled: *Report of the Public Advisory Committee to the Project Committee for the Jumbo Alpine Resort – February 26, 1997.*

### **2.4.4 First Nations Review**

During this stage of the EA review, both the Columbia Lake and Shuswap Indian Bands, and the Ktunaxa/Kinbasket Tribal Council (KKTC) participated in the review of the Project as full members of the Project Committee.

In late 1995, these First Nations identified the technical scope of the issues raised by the Project which needed to be addressed from a First Nations perspective. Negotiations commenced in early 1996 among First Nations, the Proponent, the EAO and selected Project Committee members, with the intent to reach a mutual agreement on the details of a joint approach towards examining First Nations concerns, including potential impacts on the exercise of aboriginal rights. It is ultimately the responsibility of the Proponent to conduct and report on such assessments.

The negotiation process entailed the following steps:

- a First Nations community organizer hired in early 1996;
- preliminary interviews and discussions held with elders;
- an initial meeting held on February 28, 1996 between the First Nations and the Proponent to exchange information;

- KKTC staff development of a draft terms of reference for studies of First Nations traditional and cultural use of the Project area, in consultation with interested Band representatives;
- a second meeting, between First Nations, the EAO and MELP on March 26, 1996 to exchange information; and
- a third meeting, between First Nations, the Proponent and the EAO on May 2, 1996 to further define areas of agreement and issues which require further attention with respect to the Terms of Reference for studies of First Nations issues.

Based on these sessions, the scope and content of First Nations issues to be addressed were identified in direct discussions among the EAO, the Proponent and the Project Committee's First Nations representatives (see section 3.33).

#### **2.4.5 Project Report Specifications Development**

At its first meeting (August 2, 1995), the Project Committee concluded that the review of the Application was likely to reveal various unresolved impact issues, and that a second stage of the EA process (the Project Report review stage) would be required before the Project Committee could make its recommendations.

This requirement for a second review stage was reported publicly in the first Project Newsletter (August 1995), and the Proponent was advised of this requirement.

The Project Committee initiated this new stage by preparing draft Specifications (or Terms of Reference) for the Project Report, taking into account issues identified by the public during the initial 75-day formal public comment period held by EAO from July through September 1995, the Project Committee's responses to those issues, and the consultation adequacy assessment report (see Section 2.4.2). The *Draft Project Report Specifications* were issued by the EAO on December 18, 1996.

Following their release, the EAO conducted a 65-day public comment period on the *Draft Project Report Specifications*, from December 18, 1996 to February 20, 1997. The Project Committee received 350 separate public submissions during this period, in response to the invitation to comment on the *Draft Project Report Specifications*. The Committee's position on these individual public comments was documented in tabular form in the May 20, 1998 document entitled: *Project Committee/Review Agency Responses to Public Comments on the Draft Specifications, as Flagged in July 4, 1997 Chart: Tabulation of Public Comments Received during Public Comment Period on Draft Project Report Specifications – December 18, 1996 to February 20, 1997*.

The *Report of the Public Advisory Committee to the Project Committee for the Jumbo Alpine Resort – February 26, 1997* was received by the Project Committee on June 24, 1997, and its recommendations were assessed. The Project Committee reported its position on each recommendation in a May 20, 1998 document entitled: *Project Committee/Review Agency Responses to Public Advisory Committee's February 26, 1997 Report on the Draft Specifications*.

The Proponent received the *Draft Project Report Specifications* in December 1996 and the public comments. Both the PAC report and the EAO summary chart on the public submissions were forwarded to the Proponent in early July 1997.

The Proponent formally responded to the draft Specifications, as well as the public and PAC comments in September 1997 and January 1998. The Project Committee reported their responses in three separate documents:

1. *Project Committee/Review Agency Responses to Proponent's September 15, 1997 Comments on the Draft Specifications, and on Public and Public Advisory Committee Comments on the Draft Specifications*, finalised May 20, 1998;
2. *Project Committee/Review Agency Responses to Proponent's January 14, 1998 Comments on the Draft Specifications*, finalised May 20 1998; and
3. *Project Committee Responses to Proponent's January 22, 1998 Request for 'Required Clarifications'*, dated May 20, 1998.

On May 20, 1998 the EAO issued the Specifications, which reported on: issues that had been adequately addressed in the original Application; issues that were not within the scope of the EA review; and additional information required to complete the EA review.

The Proponent initiated studies and compiled information to develop the Project Report, consistent with the detailed requirements of the Specifications.

On December 30, 2002 the revised *EA Act* was proclaimed and Transition Order #02-09 was issued. It indicated that: the Project would require an environmental assessment certificate; the Proponent could not proceed without an assessment; and the previous review process would be replaced by one to be identified in an order to be issued under section 11 of the *EA Act*.

The Transition Order specified the process for consulting with members of the former Project Committee and others. It also required the Proponent to provide the additional information, as described in the Specifications, to the EAO by December 31, 2003.

## **2.5. Project Report Review (December 2003 to Present)**

### **2.5.1 Accepting the Project Report for Review**

On December 30, 2003 the Proponent submitted the Project Report (including Master Plan Concept) to the EAO. Missing information included bird survey results and some mapping details.

On January 27, 2004 the EAO issued a Time Limit Extension Order to enable the Proponent to complete the submission. Specifically, the Proponent was provided until February 12, 2004, to address outstanding concerns, and until July 15, 2004 to provide the results of bird studies identified in information requirement D.3 (D) of the Specifications.

The time limit extension enabled the Proponent to supply most of the required information prior to the start of the formal 180-day review period.

On June 28, 2004, the Proponent submitted the Project Report Supplement (Migratory and Non-migratory Birds) to the EAO. The Project Report Supplement was accepted for review and considered as part of the assessment.

## 2.5.2 Reviewing the Project Report

On January 27, 2004 the Project Report (including Master Plan Concept) was accepted for review by the EAO, and on February 5, 2004 the formal 180-day review period began. The EA review process included the following components:

- a Technical Advisory Committee to advise the EAO of the potential effects of the Project;
- a public involvement program, including public information and access to information, open houses, a 60-day public comment period on the Project Report, and a 9-day public comment period on the Project Report Supplement (Migratory and Non-migratory Birds);
- local government response documents (Appendix D);
- Proponent responses to public and agency comments; and
- the preparation of an Assessment Report and a Report on Public Views and Interests (Appendix C).

### 2.5.2.1 Technical Advisory Committee

In accordance with section 5.2.1 of the procedural order, the EAO established a Technical Advisory Committee (TAC) to advise the assessment of the Project (Appendix B).

Specific tasks of the TAC included:

- reviewing and commenting on the Project Report (and Project Report Supplement);
- reviewing written comments on the Project Report (and Project Report Supplement);
- reviewing the Proponent's responses to written comments;
- providing advice on issues raised during the course of the assessment; and
- providing advice on the assessment findings to be reported to Ministers at the conclusion of the environmental assessment review.

Three TAC meetings were held during the course of the review:

- Meeting No. 1: February 24, 2004, Invermere, B.C. - the technical and public review process was outlined and the Proponent presented the Project Report to the TAC.
- Meeting No. 2: April 1, 2004, Cranbrook, B.C. - an update on the status of the review was provided, and the public and preliminary agency comments were discussed.
- Meeting No. 3: May 18, 2004, Cranbrook, B.C. - the Proponent's responses to public and agency comments on the Project Report were discussed.

In addition, review agencies participated in public open houses in Invermere and Nelson, as well as in discussions with the EAO on specific issues, as needed.

### 2.5.2.2 First Nations Involvement

The EAO is the lead government agency responsible for ensuring that the government's legal obligations towards First Nations are fulfilled. The EAO follows the Provincial Consultation Policy (2002) which outlines the Province's approach to meeting its obligations towards First Nations. The EAO, like other provincial agencies, follows this policy, and also has statutory authority to impose additional consultation obligations on itself and proponents. Typically, this includes requiring proponents to consult with First Nations and providing First Nations with an opportunity to participate in the technical review of project issues. Decisions about potential

infringements on Aboriginal rights and/or title may include, but not be limited to, consideration of the following:

- information provided by First Nations who have expressed interests in the Project;
- information provided by the Proponent in its Application;
- consultation initiated by the Proponent and the EAO; and
- measures taken by the Proponent to prevent or mitigate adverse effects.

For a full description of First Nations involvement in the EA review, see section 3.33.

### 2.5.2.3 Public Involvement

#### *Proponent Activities*

As part of the EA review of the Project Report, the Proponent prepared a public consultation plan which was reviewed, and subsequently approved by the EAO. The plan included a public involvement program consisting of public meetings, presentations, open houses, including the physical and electronic display of project information.

The Proponent completed an executive summary of the Project Report, which was distributed as a newspaper insert throughout the East and West Kootenays and made available at public meetings/open houses, as well as through the Proponent's Project Information Centre in Invermere.

The Project Report and Master Plan Concept were made available through the Proponent's website online at [www.jumboglacierresort.com](http://www.jumboglacierresort.com). As requested by the EAO, printed copies of the Project Report were also made available through:

- the Invermere Public Library;
- the Cranbrook Public Library;
- the Nelson Public Library;
- the Argenta Community Library;
- the Silvertown Municipal Office; and
- the Government Agent's Office in Kaslo.

In addition, electronic copies were provided to Selkirk College and the University of Northern British Columbia on their requests.

The Proponent established a contact list of stakeholder groups in the region and placed advertisements in the following news publications, inviting other groups or individual members of the public to become involved in the public consultation process:

- the Cranbrook Daily Townsman;
- the East Kootenay Weekly ;
- the Kootenay Advertiser;
- the Invermere Valley Echo;
- the Nelson Daily News;
- the Nelson Express;
- the Golden Star; and
- the Kaslo Pennywise.

The Proponent also held meetings with key stakeholders including:

- the Columbia Valley Chamber of Commerce in Invermere;

- Panorama Mountain Resort /Intrawest Corporation in Vancouver;
- the Radium Rotary Club
- District of Invermere (DOI) Council;
- the Invermere Rotary Club;
- the Shuswap Indian Band Council;
- Regional District of East Kootenay (RDEK) representatives;
- KKTC representatives;
- Sinixt representatives;
- Focus group in Invermere (2 separate meetings);
- Selkirk College in Nelson;
- the Kootenay Mountaineering Club in Nelson; and
- the Cranbrook Chamber of Commerce.

The Proponent prepared the *Public Consultations Activities Report* (April 28, 2004), which summarized the information received from stakeholders during the consultation period, including public feedback from public open houses hosted by the EAO and attended by the Proponent.

#### *EAO Activities*

The EAO conducted the following activities as part of the EA review of the Project Report and Project Report Supplement:

- information on the Project (including the Project Report and Project Report Supplement) was made available through the EAO's Project Information Centre online at [www.eao.gov.bc.ca](http://www.eao.gov.bc.ca); printed copies of the Project Report were distributed to the Invermere, Cranbrook and Nelson Public libraries, the Argenta Community Library, Silvertown Municipal Office and the Government Agent's Office in Kaslo;
- the production and distribution of the following newsletters and key-issue fact sheets:
  - EA Review Update: *Environmental Assessment Review to Resume in 2004* (December 2003);
  - EA Fact Sheet: *Clarifying the EA Review Focus* (January 2004);
  - EA Review Update: *Project Report Review Begins* (February 2004);
  - EA Fact Sheet: *Land Use Planning* (March 2004);
  - EA Fact Sheet: *Access Road Upgrade & Maintenance* (March 2004);
  - EA Fact Sheet: *Implications for R.K. Heli-Ski Panorama Inc.'s operations* (March 2004);
  - EA Fact Sheet: *Assessing Impacts on Grizzly Bears* (March 2004);
  - EA Fact Sheet: *Impacts of Climate Change* (March 2004); and
  - EA Fact Sheet: *Assessing Project Feasibility* (March 2004);
- a 60-day period (February 13, 2004 to April 13, 2004) for the public to provide written comments on the Project Report;
- Public open houses hosted by the EAO, and attended by the Proponent, were held in conjunction with the public comment period, at Invermere on March 10, 2004 and in Nelson on March 11, 2004. An open house summary was produced and made available through the EAO's Project Information Centre ([www.eao.gov.bc.ca](http://www.eao.gov.bc.ca)).
- a 9-day period (July 1 to 9, 2004) for the public to provide written comments on the Project Report Supplement<sup>1</sup>;

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<sup>1</sup> The EAO issued public notice of a formal period for public review and comment on the Project Report Supplement on June 22, 2004. The notice was distributed to a list of individuals who had previously expressed interest in reviewing the additional information (collected at public Open Houses in March 2004).

All written comments were considered as part of the EA review process; the Proponent responded to all public issues. Written submissions and responses are available through the EAO's Project Information Centre ([www.eao.gov.bc.ca](http://www.eao.gov.bc.ca)).

In accordance with section 6.3.9 of the procedural order for the EA review, the EAO prepared a Report on Public Views and Interests which summarizes all public submissions received during the review of the Project (Appendix C).

#### 2.5.2.4 Local Government Response Documents

Local governments were invited to participate on the Technical Advisory Committee, as well as to submit an official response to the Project. The RDEK, the DOI, and the Regional District of Central Kootenay (RDCK) submitted review comments that were considered as part of the technical review process. Local Government Response Documents from RDEK, RDCK, the DOI and the Village of Radium Hot Springs are attached as Appendix D.

### 3. Issues Considered in the Environmental Assessment Review of the Application

Discussion of each issue is generally organized under the following headings:

<i>Background</i>	Summary description of the issue and the relevant information provided by the Proponent as part of the Application.
<i>Public review comments / Proponent responses</i>	Summary of public comments related to the issue based on input received during the review of the Project Report. The Proponent's responses to these issues is also provided. Public comments were distributed to review agencies to consider in preparing their comments.
<i>Agency review comments</i>	Summary of review agency comments.
<i>Proponent response and commitments</i>	Proponent responses to agency comments, including any additional clarification provided. Listing of commitments made by the Proponent to mitigate potential impacts.
<i>Conclusion</i>	EAO's conclusion with respect to the significance of potential impacts of the Project.

Coding in parenthesis after each issue heading (e.g., **3.13.4 Water Quality Issues (D.1D)**) reflects the index of issues as presented in the Specifications and the Project Report.

#### Part A      General

##### 3.1.      Project Scheduling (A.4)

Project implementation would occur in three consecutive stages, with full development taking 15 to 20 years.

Phase one proposes initial development at the base of Glacier Dome, located at the northern end of the Jumbo Creek valley (Figure 2). A tertiary sewer treatment plant would be constructed and

the development would be connected to the BC Hydro transmission system (or grid), with emergency power generation facilities providing a backup power supply. Water wells would be drilled and a propane system would be installed for heating the development. The first day lodge/hotel/condo complex and parking area would be built, including a small number of townhouses and single family chalets. The total anticipated capacity would be approximately 300 to 500 bed spaces. A gondola to the top of Glacier Dome would be installed, along with t-bar lifts located on the glacier for year-round operation. A teahouse would be constructed at the Glacier Dome gondola arrival station.

Phase two proposes construction of a resort village approximately one km south of the initial hotel/lodge/townhouse complex. Initial plans for the resort include a 300 room hotel (approximately 600 bed spaces), additional tourist facilities and recreational facilities. A new day skiers' parking area would also be constructed. The total base area required for this phase of the development is approximately 30 ha. Ski lifts from this site would be developed in stages, providing connections to Glacier Dome and to Jumbo Mountain glaciers and lookouts.

In phase three, the further development of services, commercial space and tourist accommodation would occur, completing the resort area. This would include the expansion of the existing day lodge and the final expansion of the day skiers' parking area.

In addition, up to 172 single family chalets would be constructed to the west of the proposed village. The total estimated area required for these vacation homes and associated roadways would be approximately 104 ha. The number of beds would increase to 5,502 for tourists and 750 for employees. Developments would include the addition of new ski lifts and the construction of the Farnham Creek day lodge as part of the expansion into Commander Glacier and Farnham Glacier.

### **3.2. Land Use and Land Use Planning (A.7)**

#### *Background*

The Specifications required the preparation of a summary of historical and current land uses within the zone of potential impact of the Project. The Proponent was required to provide maps of all government-issued tenures and operating approvals authorizing the use of land and resources in the Jumbo Creek valley including all adjacent drainages and any applicable local government zoning designations. The Specifications also required an evaluation of the implications of Project development within the context of the June 1997 Kootenay/Boundary Land Use Plan (KBLUP) – Implementation Strategy, with special focus on the values present in the Jumbo-Upper Horsethief and Upper Glacier Creek Special Resource Management Zones (SRMZ).

The KBLUP indicates that:

- the Project is located within the Jumbo-Upper Horsethief SRMZ, a land unit originally delineated as part of the 1993-1995 CORE planning process for the Kootenay region, and subsequently confirmed in the March 1995 land use planning decisions of government;
- within SRMZs, a full range of resource uses are permissible, where they respect sensitive natural and cultural values; and
- in July 1997, government approved the KBLUP – Implementation Strategy, which identified: general resource management direction applicable across the entire region; resource management guidelines applicable to specific geographic areas; and site-specific

management objectives and strategies for certain resource management zones, including the Jumbo-Upper Horsethief SRMZ.

The management objectives for the Jumbo-Upper Horsethief SRMZ are specified for the following values: commercial tourism; access management; recreation; general biodiversity; and ungulates. A ski resort development may be acceptable provided it is compatible with other recognized values. The review of the Project has considered the implications of the resort with respect to the July 1997 KBLUP – Implementation Strategy.

The Specifications were intended, in part, to ensure that the effects of the Project on the key natural and cultural values that occur in this SRMZ are assessed. The Upper Glacier SRMZ would also be assessed for any values that may potentially be affected by the Project.

#### *Public review comments/Proponent responses*

Many respondents referenced the recommendations of the KBLUP, as well as the CORE planning process, and the need to adhere to such planning process findings. There was a request that a backcountry recreation land use plan be implemented before any tenures were issued. One individual raised the concern that the proposed development is incompatible with the spirit of the Jumbo-Upper Horsethief SRMZ designation that they claimed precludes high intensity human development.

The Proponent responded that CORE specifically named the Project for approval subject to the *EA Act* process, as per recommendation number 75 of the East Kootenay Land Use Plan.

#### *Agency review comments*

The Ministry of Sustainable Resource Management (SRM) confirmed that the CORE process noted the Project would be subject to an environmental assessment. Furthermore, it is a stated KBLUP – Implementation Strategy objective for the Jumbo-Upper Horsethief SRMZ to maintain and enhance opportunities for resorts and commercial tourism, subject to the outcome of an environmental assessment process.

SRM further advised that potential impacts on other recognized values of the SRMZs have been assessed and reviewed by the respective lead agencies for each issue (e.g., WLAP for wildlife (see section 3.15.2)).

#### *Proponent response and commitments*

The Proponent agreed with SRM's comments.

#### *Conclusion*

The EAO is satisfied that the Proponent, having fulfilled the requirements for the Project to undergo an EA review, has adequately addressed the issue of land use and land use planning as per the KBLUP and KBLUP – Implementation Strategy. Based on the conclusions of the EA review, the Project is compatible with designated land use management objectives and strategies.

## **Part B Commercial Alpine Ski Policy (CASP) Process**

### **3.3. Present Status of Jumbo Glacier Proposal Under CASP Process (B.1)**

CASP is the primary government policy framework for new and existing alpine ski developments on Crown lands in British Columbia. Under CASP, the principle objective is to make additional Crown land available for commercial alpine ski use purposes, and to encourage the private sector to develop skiing facilities to meet provincial employment, revenue and backcountry recreation goals.

The CASP policy was originally released on August 18, 1982 and amended on December 1, 1995. The document *Commercial Alpine Ski Policy – Ski Area Guidelines*, updated in 1995 and released in 1996, now forms part of the CASP policy. These guidelines are used to plan and evaluate ski area development proposals.

The CASP review, which formally began in 1991, afforded the Proponent with sole proponent status in the upper Jumbo Creek valley for ski development purposes. This was confirmed in a July 1995 Interim Agreement which officially concluded the first stage of the CASP process.

On June 30, 1995 the *EA Act* was enacted and the responsibility for project review transferred to the EAO. If an EA Certificate is issued following the EA review, then the CASP process would resume at its final step, which includes the review of a detailed Ski Area Master Plan and the negotiation of a Master Development Agreement (MDA) between the Proponent and LWBC.

### **3.4. Formal Proposal Review under CASP Process and its Relationship to the EA Process (B.2)**

The Proponent's Application was reviewed in the context of the requirements for a draft Ski Area Master Plan submission at the CASP formal proposal review stage, including reference to other Ski Area Master Plans, and within the context of EA process requirements.

CASP formal proposal review requirements have been directly considered as part of the EA review process. The following considerations represent the specific CASP information requirements on a clause-by-clause basis:

- technical assessment of the area, including a detailed contour/topographic map;
- project description (phase 1 in detail, with subsequent phases in conceptual form, including infrastructure requirements);
- servicing and economic feasibility, including detailed 'pro forma' cash flow projections, development cost estimates and formal market study;
- environmental issues/hazards and remedial measures;
- land use issues and proposed resolution of conflicts, if any;
- summary of ownership and management structure in a detailed prospectus; and
- evidence of financial capability.

### **3.5. Preparation of a Ski Area Master Plan and its Relationship to EA Process (B.3)**

As part of the Project Report, the Proponent has prepared a master plan concept for the Project. This information is consistent with the Terms of Reference in CASP and would be used in the LWBC Ski Area Master Plan development process.

### 3.6. Assessment of Project Feasibility (B.4)

#### *Background*

The EAO does not typically look at feasibility as it is assumed that investors do their own due diligence before investing in projects. However, in attempting to coordinate the EA review with the CASP (which requires an independent assessment of feasibility to confirm that the proposal provides for a balanced and feasible ski development without ownership changes and bankruptcies), steps were taken in the EA review to conduct a conceptual assessment of Project feasibility, knowing that a more detailed assessment would be done by LWBC.

The Proponent provided information in the Application on the features of the Project, as well as preliminary cost estimates. As part of a phased assessment approach established for the EA review, the following occurred:

- the EAO commissioned an independent feasibility assessment;
- the Proponent provided an update of the market information and visitor projections, and estimates of skier visits and summer visitors by market origin; and
- LWBC requested additional information during the development of the Ski Area Master Plan.

In March 1999, Sno.engineering, commissioned by the EAO to do an independent feasibility review reported that: the market analysis needed revision; and there was insufficient information to assess financial feasibility. On that basis, Sno.engineering concluded that it was doubtful that the resort could achieve economic break-even given the financial structure proposed.

The Project Report (Volume 2, Section B.4, and Volumes 5 and 6 of the Master Plan Concept) included project design changes to address the concerns identified in the Sno.engineering report (e.g., simplification and reduction of lift system and of carrying capacity; removal of parking area & bus access facilities at Mineral King Mine site; and design of road improvements to minimize traffic speed). The Project Report also included the required information (including updated market information, sightseer and ski visitor projections, estimates of skier visits and summer visitors by market origin, and information on economic viability). Market origin was addressed by referring to the levels of ski activity and growth in Europe, Japan, the USA and Canada, and, by indicating that the proportion of skiers projected to stay in accommodation would rise from 30% to 67% (based on the bulk of growth outside of the local region). Proprietary information was provided by the Proponent to the EAO on a confidential basis. The Proponent's assessment was that the Project was feasible and viable given that the cash flow generated from real estate activity supplements the revenues generated from the ski operations.

#### *Public review comments*

Prior to the public comment period on the Project Report, the Jumbo Creek Conservation Society commented on the Sno.engineering report and indicated that the proposed Project should be rejected on the basis of feasibility, environmental and social concerns. During the public comment period further questions were raised about the impact the Project could have on other resorts in the area, as well as the viability of the Project (i.e., questionable market demand and profitability).

#### *Agency review comments*

The lead government agencies providing advice to the EAO on this issue are Ministry of Small Business and Economic Development (SBED) and LWBC. SBED advised that the market

forecasts, operating revenue and cost projections in the Project Report appeared to be reasonable. They agreed with the Proponent's analysis that the financial success of the resort was dependent upon the projected levels of real estate revenue resulting from investments. However, SBED asked for a number of clarifications related to: inconsistencies in information between the Project Report text and the Exhibit III Table (cost of capital/calculation of net present value, discount rate for net present value calculation, internal rate of return); the Proponent's statement that 'detailed financial structuring of the Project is in progress and changes may occur'; and, the potential timing, amount and availability of equity financing for the development.

LWBC indicated that it would require additional information from the Proponent through review and refinement of the Ski Area Master Plan, in the event that an EA Certificate is issued.

#### *Proponent response and commitments*

The Proponent reaffirmed the belief that the Project is viable and that ultimately, the onus is on the investors to assess the Project's ability to generate profits. The Proponent also noted that the growth in the ski sector both provincially, as well as regionally, was an indication that the Project would not negatively impact on existing ski resorts in the area. To support this contention, the Proponent noted support for the Project from the closest resort, Panorama Mountain Resort.

The Proponent noted that the resort location was an important feasibility consideration given its high elevation and reliance on glacier skiing (including skiing in summer months). If climate change and global warming magnified, the Project would be in a more favourable position than most resorts in British Columbia.

The Proponent provided clarification on and explanation to SBED, and noted that detailed financial structuring of the Project would remain in progress until the Project starts and it would not be feasible to specify the financial details before a firm project start date.

The Proponent has committed:

- to providing the following additional information as part of the Ski Area Master Plan planning process: economic viability (break even analysis) projections with targets for warm and employee beds, comfortable carrying capacity, road costs, market absorption of land projections, net lift ticket value, and partial capital investment for utilities. In addition, the Proponent will supply information on detailed capital costs for different operating department equipment and snow removal operating costs, and illustrations of 'off years' with a higher revenue loss and operating savings, if required by Land and Water BC Inc. This information will be provided in confidence to Land and Water BC Inc. (32)

#### *Additional considerations*

The Proponent commissioned Iris Environmental Systems to review the Project Report to confirm the extent to which it had taken into consideration the recommendations and/or responses from the public, consultants, and government agencies. The EAO had the SE Group (formerly Sno.engineering) conduct an independent critical review of the April 2004 draft report prepared by Iris Environmental Systems. SE Group identified two weaknesses in the draft report: it was not completed independently and it lacked a detailed evaluation and review of all facets of the proposed Project (specifically economic viability). SE Group concluded that there remained unanswered questions to be addressed in the Ski Area Master Plan planning process. This conclusion was consistent with Iris's own recommendation.

The information requirements identified by Iris Environmental Systems and SE Group include: economic viability (break even analysis); scope and extent of additional recreation facilities; assessment of warm and employee beds in early phases; information that base core area would meet commercial market demand for Comfortable Carrying Capacity (CCC); CCC and phasing; road costs; market absorption of land; net lift ticket value; ski industry risk management determinants; overall insurance and liability costs; detailed illustration of capital costs for different operating department equipment; snow removal operating costs; illustration of 'off years' with a higher revenue loss and operating savings; and partial capital investment for utilities if the provider has not secured full financing.

### *Conclusion*

The EAO is satisfied that many questions related to the conceptual feasibility of the Project have been answered and any unanswered questions can be addressed as part of the Ski Area Master Plan planning and approval process.

This is based on:

- LWBC's commitment to require the Proponent to provide additional information on Project feasibility to its satisfaction as part of the Ski Area Master Plan planning process;
- the Proponent's commitment to provide additional information; and
- SBED advice that questions raised about the feasibility of the Project can be addressed as part of the Ski Area Master Plan process with further information being provided to support the assumptions upon which the current conceptual feasibility is based.

## **Part C Specific Technical Resort Design and Management Issues**

### **3.7. Snow Wastage and Glacier Ablation (C.1)**

#### *Background*

The potential effects of solar and wind wastage on snow conditions over ski runs was assessed in the Application. The potential effects of glacier ablation (if any) on the extent of skiable terrain over the long-term were also assessed. The Specifications did not require further information on this issue.

#### *Public review comments/Proponent responses*

Concerns were raised regarding the potential impact of climate change (i.e., glacial melt) on the proposed Project's viability. A concern was raised regarding the cumulative impact on the environment from excessive use of the glacial ecosystem. A number of respondents felt that more extensive study of glacier ablation was warranted.

The Proponent responded that its technical consultants disagree with these predictions and stated that the proposal is not an excessive use of the glacier ecosystem.

#### *Agency review comments*

Glacial recession is outside of the scope of the Proponent's ability to predict. However, it is understood that these glaciers have a better opportunity of surviving global warming than most others (non-glacial ski resorts), given their elevation.

*Proponent response and commitments*

The Proponent agreed with agency comments.

*Conclusion*

Although the proposal involves ski runs on a number of south-facing slopes, non-south-facing aspects are also well represented in the proposal. Given its elevation (1,700 to 3,419 metres), the Project is at less risk from the potential effects of climate change than most other ski resorts. It is unlikely that skiing activity would significantly impact on the glacier's extent. This view is generally supported by the United Nations' Environmental Programme's 5<sup>th</sup> World Conference on Sport and Environment<sup>2</sup>.

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on snow wastage and glacier ablation and can implement appropriate measures to avoid or address any potential significant adverse effects.

**3.8. Glacier Management (C.2)***Background*

The effects of maintenance of ski runs on the glacier were addressed in the Application. The Specifications did not require further information on this issue.

*Public review comments/Proponent responses*

Concerns were expressed regarding the proposed use of snow cats and blasting techniques on crevasses. Maintaining the integrity of the glacier was a key concern. Many local respondents felt that Commander Glacier would be difficult and dangerous to manage for skiing. Concerns were also expressed about the impacts of salting of the glaciers.

The Proponent responded that there is no plan to blast and fill crevasses by use of snowcats to make them passable. There may be only one or two difficult ski runs where there may occasionally be a crevasse that requires the placement of a log raft for bridging.

Blasting, bulldozing and salting the glaciers have not been proposed, except possibly minimal salting for occasional racing.

*Agency review comments*

No further information was required by the Specifications. However, in response to public concerns, the Proponent was asked to clarify how potential impacts of salt application to glaciers in conjunction with race activities might be managed.

The Ministry of Water, Land and Air Protection (WLAP) stated it accepts the rationale of the Proponent that the unusually high elevation of the proposed ski terrain at the resort makes it possible to commit that salt would not be used for day-to-day operations. The Proponent has indicated that, on a few race days each year, race organizers may wish to apply salt to racing courses. Each use would have to be approved by WLAP. Based on the very minor volumes of

<sup>2</sup> Bürki, R., Elsasser, H. & Abegg, B. (2003, December). Climate change and winter sports: environmental and economic threats. IOC/UNEP 5th World Conference on Sport and Environment, Turin, Italy. Available online: [www.unep.org/home/documents/Burki\\_report.doc](http://www.unep.org/home/documents/Burki_report.doc).

salt use envisaged on an annual basis, WLAP does not require a specific impact assessment at this time, however the Proponent should include an ion analysis component to their commitment to undertake baseline water quality monitoring for the Project (See 3.13.4).

With respect to crevasses and skier safety, LWBC advised that conditions of a MDA oblige the Proponent to ensure that areas being skied are safe for the public. Crevasses will be addressed by using the technology currently available. The Ski Area Master Plan would ensure that areas being skied are safe for the public.

#### *Proponent response and commitments*

The Proponent advised that winter race events would be organized by other parties, but that the Proponent would take responsibility, together with race organizers, and would require responsible management of any races, including the potential use of artificial icing products. Use of such products is expected to be minimal, with no significant impacts anticipated. The Proponent would ensure that ski racing organizations would not engage in damaging practices.

The Proponent has committed:

- that salt will not be used to maintain runs for general public use (33).
- not to use salt or icing compounds except for the occasional ski race or summer race training by agreement with race organizers (34).
- that no artificial modification of the glaciers will occur, other than snow-covered structural passages (e.g., wooden rafts) over open crevasses and roping off of danger areas (35).

#### *Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of glacier management activities and that the Proponent can implement appropriate measures to avoid or address any potential significant adverse effects. Glacier modification will involve ski lift installation, conventional ski area grooming, and installation of log rafts where needed for access. No use of explosives or bulldozing is proposed. Conventional techniques for surface snow grooming will not adversely affect the glacier.

### **3.9. Avalanche Control at the Resort (C.3)**

#### *Background*

The management of avalanche hazard at the resort site required further assessment. The Specifications required the preparation of a detailed long-term avalanche hazard assessment for the resort, suitable for the planning and mitigation of avalanche hazard at the resort.

The Project Report (Volume 2, Section C.3, pages C-15 to C-17) and the Master Plan Concept (Volume 4, Sections 4.2.2, 4.2.8.3 and 4.2.8.4) describe the management of avalanche hazard at the resort. A conceptual operating plan is described for avalanche hazards in the vicinity of roads, ski lifts and ski runs. There is no avalanche hazard in the vicinity of any proposed residential and/or commercial structure.

#### *Public review comments/Proponent responses*

A few respondents raised concerns regarding the threat of avalanches at the resort location and the need for an avalanche control program. It was further emphasized that avalanche control was essential and the funding allocated by the Proponent was inadequate to meet these needs. As

well, the need for safety measures to protect the resort community as well as the wildlife population from avalanches was raised.

The Proponent responded that there is no threat of avalanches on proposed building sites and there is no avalanche terrain directly above the resort site. Avalanche experts have reviewed the Project and provided the necessary advice for lift layouts and future avalanche monitoring and safety programs. The Ministry of Transportation (MOT) requires a detailed avalanche safety management plan prior to the start of operations.

#### *Agency review comments*

MOT commented that the technical assessment completed by Peter Schaerer on avalanche hazards, which looked at the location of the resort placement outside the avalanche hazard area is sufficient to meet MOT requirements. The avalanche management and conceptual operations plan provided by the Proponent is sufficient to meet the needs of a conceptual operations plan and it is understood that further discussion of implementation details would occur prior to construction of the access road.

The conceptual operations plan in the vicinity of any residential and/or commercial structure meets MOT requirements at this stage of the proposal. Detailed analysis would be required prior to facility installation and/or construction of residential and commercial structures. This could be managed through the standard permitting processes. MOT, as one of their legislated responsibilities, defines the access requirements for subdivision approvals. Where potential for natural hazard conditions exist, the applicant is required to conduct a detailed analysis to confirm the site is safe for its intended use before permitting is provided.

#### *Proponent response and commitments*

The Proponent agreed with the MOT's comments and has committed to the following:

- that the proposed residential and commercial structures will be located completely outside the avalanche hazard area (36).
- that every attempt will be made to locate the ski run departure and arrival stations outside the mapped and potential avalanche runs as shown in the Master Plan layout (37).
- that a Ski Area Safety Plan will be filed prior to the start of operations which will provide details of areas of exposure and safety programs that will be established to avoid exposure to avalanche hazards (38).
- that avalanche control on ski runs will be accomplished by: using the skills of an avalanche hazard forecaster; using trained and certified ski patrol personnel; and appropriate methods including avalancher guns, explosives control, and trail closures (39).

#### *Conclusion*

Based on the information and commitments provided, the EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on avalanche control at the resort, and that the Proponent can implement appropriate measures to avoid or address any potential significant adverse effects. The technical assessment on avalanche hazards is sufficient to meet MOT requirements and the avalanche management and conceptual operations plan is sufficient. A ski area safety plan would be required prior to the start of operations that would provide details of areas of exposure and safety programs that would be established to avoid exposure to avalanche hazards.

### **3.10. Wildfire Control at the Resort (C.4)**

#### *Background*

The Specifications required an overview assessment of wildfire hazard and consideration of accessibility and reliability of emergency response.

The Master Plan Concept addresses fire protection design issues in Volume 7, Sections 7.5.3.7 (Fire Protection Services) and 7.5.3.8 (Resort Fire Prevention and Control). A Community Fire Protection Strategy report is included in Appendix 7-A of the Master Plan Concept. The strategy provides an overview of the wildfire hazard, and emergency response plans are outlined.

#### *Public review comments/Proponent responses*

Concerns were expressed about public safety in the event of a wildfire at the resort given there is only one access road. Furthermore, there was reference to BC's 2003 fire experience as well as the predictions for climate changes including drier periods. The need to identify the responsible body for protecting the resort from such fires was articulated.

The Proponent responded that the danger of forest fires has been examined and can be monitored and managed for the safety of the resort and its clients.

#### *Agency review comments*

Ministry of Forests (MOF) commented that the Proponent has provided an adequate "overview and commentary" with regard to the design of the community and associated roads and emergency vehicular access at the resort as specified in the original information requirements. The proposed resort is located at the upper end of a narrow valley, with singular access and no vehicular emergency/escape route available. There is potential for significant negative impacts to the resort in the event of wildfire and, as a result, there is risk to human life should such an event occur.

The Proponent has committed to completing a Fire Protection Plan to MOF standards if the Project is approved, which would address in detail the "design of the community and associated roads and emergency vehicular access", among other topics. MOF requested that the Proponent be directed to complete an MOF-approved plan within one year of commencing construction if the Project proceeds.

#### *Proponent response and commitments*

The Proponent responded that recommendations from a forestry consultant have been received and will be utilised to develop precautionary measures.

The Proponent has committed:

- to complete a Fire Protection Plan to Ministry of Forests' standards prior to commencing construction. The plan is to address, in detail, the design of the community and associated roads and emergency vehicular access, among other topics (40).
- that buildings will be sprinklered to meet National Fire Protection Association requirements (41).
- that a fire protection service will be established in accordance with the provisions of provincial policies and established guidelines (42).
- that all building will be sprinklered until a volunteer fire department is fully established and will provide the level of service expected under the B.C. Building Code (43).

- to develop guidelines for resort design and the use of materials to reduce and control the threat of fire (44).

### *Conclusion*

Based on information and commitments provided, the EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on wildfire control at the resort (e.g., Fire Protection Plan to MOF standards) and can implement appropriate measures to avoid or address any potential significant adverse effects.

## **3.11. Ski Lift Location and Design (C.5)**

### *Background*

The design of lift structures was addressed in the Application and will be addressed in the permitting stage. The Specifications did not require further information on this issue.

### *Public review comments/Proponent responses*

During the review of the Project Report, there was concern expressed over the issues that need to be addressed for the location and design of the ski lift. A comment was made that documentation should be made about the success or failures of glacier skiing at other resorts, in relation to the potential impact of uneven ice movement on tower structures. An alternative to the proposed mountain plan was submitted to reduce the impacts on the core operating requirements and costs.

The Proponent responded that the proposed ski area has several lifts, which are planned to be safe to operate. The ski runs have been reviewed on the ground by technical consultants.

### *Agency review comments*

LWBC is satisfied with the lift layout and design for the purposes of EA review. It is expected that this aspect of the Project would continue to be refined through the Ski Area Master Plan review process.

### *Proponent response and commitments*

The Proponent agrees with LWBC regarding further refinement that would be done through the Ski Area Master Plan review process, should the Project be approved.

### *Conclusion*

The Proponent has provided adequate lift location and design information for the purposes of EA review. Should the Project proceed, more detailed ski lift location and design information would be required for permitting by regulatory agencies. The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on ski lift location and design and that the Proponent can implement appropriate measures to avoid or address any potential significant adverse effects.

### 3.12. Environmental Design (C.6)

#### *Background*

The potential environmental design impacts of the Project were addressed in the Application. The Specifications did not require further information on this issue.

#### *Public review comments/Proponent responses*

No public comments received.

#### *Agency review comments*

No comments received.

#### *Proponent response and commitments*

No further responses required.

#### *Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project with respect to environmental design and that the Proponent can implement appropriate measures to avoid or address any potential significant adverse effects.

## **Part D Environmental, Resource Management and Technical Issues**

The Proponent has committed:

- to complete Environmental Management Plan(s) (EMP) to the reasonable satisfaction of the appropriate provincial government agency prior to construction start-up to include, as relevant, an (45):
  - Erosion and Sediment Control Plan;
  - Water Management Plan;
  - Solid Waste Management Plan;
  - Liquid Waste Management Plan;
  - Stormwater Management Plan;
  - Non-point Source Waste Discharge Control Plan;
  - Vegetation Management Plan;
  - Trail Management Plan;
  - Grizzly Bear Management Plan;
  - Outdoor Recreation Management Plan;
  - Air Quality Protection Plan;
  - Spill Contingency Plan;
  - Environmental Monitoring; and
  - Additional Monitoring Plans.
- to provide completed Environmental Management Plans to the Ktunaxa/Kinbasket Tribal Council and the Shuswap Indian Band for review and comment at the same time as submitting draft Environment Management Plans to the respective provincial government agencies (30).

- to implement, at its own cost, all mitigation measures and provisions of the related Environmental Management Plan components (e.g., Liquid Waste Management Plan, Solid Waste Management Plan, Grizzly Bear Management Plan, etc.) as proposed in the Project Report (46).

### **3.13. Waste Management (D.1)**

#### **3.13.1 Solid Waste Treatment and Disposal (D.1A)**

##### *Background*

Issues related to solid waste collection, treatment and disposal at the resort include location, design, and functioning of facilities, potential impacts and mitigation options, and arrangements for disposal at Regional District of East Kootenay (RDEK) landfill facilities.

The Specifications required that the Proponent document the proposed policies and infrastructure for reducing, reusing and recycling solid wastes including temporary storage, waste minimisation plans, and plans for management of household hazardous wastes. A commitment was required to conduct refuse collection and disposal in a clean and efficient manner which would not attract wildlife and also be compatible with regional and agency programs. An update on the status of discussions with the RDEK for landfill use was required, along with any details of firm arrangements that have been reached.

Volume 3 of the Project Report (Section D.1(A), page D-6 and Appendix 3-C, Section 4.0) provide the information required. The Master Plan Concept explains the proposed policies and infrastructure for solid waste management in Section 5.6 of Volume 5 (Infrastructure). The Proponent will focus on waste minimisation and recycling programs to match the programs in place in the RDEK, except for curbside collection of recyclables because of wildlife/human conflict potential. Dedicated recycling bins at on-mountain facilities will be provided and emptied daily and their contents taken to a central enclosed recycling depot in the resort village. Residents and guests will be encouraged to use the recycling depot as well.

All domestic waste will be placed in a fully enclosed waste transfer station(s) designed to be closed, minimize odours and be wildlife proof. A recognized waste management hauler will be contracted to collect and remove recyclable materials and solid waste. All overnight visitors will be required to keep refuse in enclosed wildlife proof areas before dropping off the waste at a transfer station. In the main transfer station, consideration will be given to freezing the waste to avoid odour problems.

The Proponent also indicated that they would consult with WLAP on appropriate ways to handle household hazardous waste, which is described in section 5.7 of Volume 5 of the Master Plan Concept. Collection of hazardous and special waste at the resort is not expected to be a regular occurrence and on rare occasions when it would need to be collected, it would be handled by approved contractors.

The Proponent reported on the status of discussions with the RDEK who indicated that the existing policies and provisions in the RDEK Draft Regional Solid Waste Management Plan cover the potential requirements of the Project, and that no special agreements or considerations will be necessary other than payment of appropriate fees like any other user.

*Public review comments/Proponent response*

There was concern about garbage as an attractant to wildlife, and that the lifespan of the Columbia Valley landfill site would be significantly reduced with the proposed development in place. As well, there was some concern that recyclable waste would be transported to the existing landfill site.

The Proponent responded that the Project is designed so that there will be no exposure of human garbage to wildlife. In the Project Report, the RDEK does not define the need for expansion of the existing landfill, indicating only that the additional fees will contribute to the operation of the RDEK programs. The Proponent has committed to focus on waste minimization and recycling programs.

*Agency review comments*

WLAP indicated that, in general, the plans are acceptable, although more detail will be needed eventually to ensure proper implementation. The Master Plan Concept states that developers will be required to install garbage burlers to minimize solid waste. This will add to liquid waste loadings and should be reviewed. The Master Plan Concept also states that recycling will be picked up from guest residences which conflicts with information provided in the Project Report.

WLAP agreed that the commitment by the Proponent to enter into an agreement with the RDEK, if required by both WLAP and RDEK, would be acceptable.

*Proponent response and commitments*

The Proponent responded to WLAP that the liquid waste loading will be determined during detailed design and at that point it will be possible to respond to the questions on garbage burlers. Garbage management planning will be done with the firmest objective of eliminating all possible attraction to wildlife, and conflicting choices will be resolved accordingly. It has been recommended that recycling be dropped off at the transfer station.

RDEK stated that an agreement is not necessary (as provided in Volume 5, page D-8 of the Project Report), as the resort will contribute through fees like any other users of RDEK facilities.

The Proponent has committed:

- to use a recognized waste management hauler to collect and remove solid waste and recyclables (47).
- to dispose of the non-recyclable refuse at the Regional District of East Kootenay landfill (48).
- to “a clean and efficient” manner to collect and dispose of refuse, in particular so that it will not attract wildlife, and to coordinate solid waste management with the programs of local and provincial government agencies (49).
- to enter into agreement with the Regional District of East Kootenay on solid waste disposal prior to construction if required by both the Ministry of Water, Land and Air Protection and the Regional District (50).

*Conclusion*

Based on information provided in the Project Report, and on the commitments made by the Proponent, the EAO is satisfied that the Proponent has identified and assessed the potential impacts with respect to solid waste treatment and disposal and that the Proponent can implement appropriate measures to avoid or address any potential significant adverse effects.

### 3.13.2 Liquid Waste Treatment and Disposal (D.1B)

#### *Background*

Issues related to liquid waste facilities at the resort include: location, design, and functioning of facilities; preparation of a liquid waste management plan and a Non-Point Source (NPS) discharge control plan for the Project; and potential impacts and mitigation options for potential NPS discharges associated with construction of the road upgrade and transmission line.

The Specifications required that the Proponent provide a plan for liquid waste disposal similar to a Liquid Waste Management Plan (LWMP) covering all aspects of liquid waste treatment and disposal (collection, treatment, disposal of domestic effluent and biosolids and stormwater/meltwater, i.e., NPS discharges). The plan must identify the preferred option in detail and that it will be capable of successful operation at full build-out. Potential impacts on water quality, fish and fish habitat in Jumbo Creek must be assessed and mitigated if impacts are significant. The plan must show that the receiving environment (the ground or Jumbo Creek) can assimilate the waste without significant impact. If ground disposal is the preferred treatment option, the plan must identify sufficient areas for full build-out requirements and provide a detailed hydrogeological/geotechnical study of the site(s). If discharge to Jumbo Creek is the preferred disposal option, the results of 'in situ' algal assays must be documented to address the sensitivity of Jumbo Creek to nutrient input.

Volume 3 of the Project Report (Section D.1(B), page D-17) provides the information required. Appendix 3-N provides the Liquid Waste Management Plan. The Master Plan Concept explains the proposed policies and infrastructure for liquid waste management in Sections 5.4 and 5.5 of Volume 5 (Infrastructure).

The Project Report indicates that the LWMP covers all aspects of liquid waste treatment and disposal, as directed by the Specifications. Projected peak wastewater flow from the resort at full build-out is estimated at 1,084 m<sup>3</sup>/day. The preferred option identified for liquid waste collection and treatment is a tertiary treatment plant similar to the Ecofluid design recently constructed at the Kicking Horse Mountain Resort. The treated effluent would be dispersed into appropriate soils approximately 1 km below the resort and upstream of the road on the north side of the drainage. Golder Associates Ltd.'s current assessment and review of previous reports indicates that suitable permeable granular soils are present along and, at least locally, upslope of the proposed access road. In-ground disposal of the tertiary treated wastewater can be achieved using a combination of conventional tile fields or deeper infiltration chambers. In Golder Associates Ltd.'s opinion, there will be no significant or detrimental impact on groundwater or surface water conditions in the Jumbo Valley. Wastewater will not be disposed into Jumbo Creek. The treated water will drain to an approved outfall and drainage field according to WLAP requirements. The details of wastewater treatment and disposal will be finalised during detailed project design and assessed as part of the Environmental Impact Study under the *Municipal Sewage Regulation* (MSR). The EMP outlines the conceptual plans for mitigating NPS discharges from road upgrading and transmission line construction.

#### *Public review comments/Proponent responses*

Respondents expressed interest in how the suspended solids from a sewage treatment plant would be removed and were concerned about potential health impacts due to the proximity of sewage disposal fields to watercourses. Respondents questioned the government's ability to enforce compliance for wastewater treatment, and whether alternatives for disposal had been explored. It was requested that the Project address the residence time of both supply aquifers and aquifers that

will receive wastewater. The effect of the addition of salt and fertilizers required for road and glacier maintenance was also a concern. A broader concern was raised regarding the Project's downstream impacts on the valued Columbia Valley Wetlands and the development of a Spill Contingency Plan was recommended.

The Proponent noted that the LWMP identifies the sludge handling plans for the tertiary treatment plant that will require approval in the Ski Area Master Plan and through the requirements of the *Municipal Sewage Regulation* (MSR). Thus, the Project, as designed, will have treated near-potable quality water dispersed to the ground in upper Jumbo Creek valley. As a result, there will be no significant impacts to aquatic ecosystems below. The Project Report and LWMP identify the alternatives that were explored, and the regulatory process under which it falls. The Proponent's studies identified that the in-ground disposal of treated effluent will result in a return to the groundwater regime of an equivalent volume to that obtained from the water supply wells which are located a short distance upstream of the resort site. Consequently, there are no significant or detrimental impacts on groundwater conditions in the valley.

In addition, the Proponent advised that there will be no salt or fertilizers used for "glacier maintenance". Even with the inclusion of some road salt, there is no evidence that there will be traceable impacts into the Columbia Valley Wetlands located 20 to 50 km below. The Proponent also noted that a Spill Contingency Plan is identified in the EMP (Appendix 3-C of the Project Report).

#### *Agency review comments*

WLAP had a number of comments about the lack of detailed information provided in the LWMP, noting that these details would be required in the EIS in the MSR registration process. For example, more stringent standards (e.g., for phosphorus removal) and additional land for in-ground effluent dispersal to accommodate build-out of the Project may be required. In addition, as seepage from the ground disposal system may enter Jumbo Creek, which may be sensitive to nutrient inputs, more detailed information on hydrogeological/geotechnical studies will be required in the MSR process. Further information on assimilation capacity and cumulative effects will be required in the EIS.

With respect to NPS discharge, WLAP commented that the information is very general and dispersed in several locations and that the LWMP does not contain best management practices for controlling NPS during all phases of the Project (e.g., during construction), as required. Also, there is limited information provided within the EMP (e.g., there is question as to the effectiveness of aquatic vegetation and use of wetlands to mitigate NPS in alpine areas).

WLAP requested that, as a condition of EA certification, the Proponent provide site-specific detailed EMPs for NPS control (Stormwater Management Plan, Sediment and Erosion Control Plan, Spill Contingency Plan, etc.) completed to the satisfaction of the WLAP Regional Manager (Environmental Protection) during detailed design or after detailed design, but before construction, as appropriate. WLAP also requested a spill containment plan for wastewater from Glacier Dome Teahouse/Restaurant, and a spill contingency plan for the transportation corridor due to the proximity of the road to Jumbo Creek and crossings of Toby Creek.

WLAP also noted that other substances of concern (e.g., cleaning products, pharmaceuticals) are currently being investigated and that consideration of these substances, while not currently required in the EIS, may be required at a later stage.

DOI commented that they will not have their consulting engineers study the proposed waste management system, as they are assuming that the appropriate provincial authority is responsible for evaluating the project to ensure provincial standards will be met. DOI expressed the need to ensure that the waste management system be of the highest calibre and operate as intended to ensure that Jumbo Creek and other related waterways are not affected by the Project. In addition, DOI noted that appropriately trained and paid personnel must be in place to ensure that the system is monitored and performs to standards as engineered and that all stormwater issues during construction and on completion of the Project be contained on-site and not discharged into Toby Creek and/or any other water system. As DOI is a downstream community, any sediment and extra run-off will have an adverse effect on our surrounding environment including the Columbia Valley Wetlands.

The Canadian Columbia River Inter-Tribal Fisheries Commission (CCRIFC) commented that the handling of wastewater should require removal from site (e.g., trucking) as the only acceptable option. The LWMP states that liquid waste from the Glacier Dome Teahouse/Restaurant will be transported to the main resort area for treatment, but no details were provided on the disposal and storage of this wastewater. There is no indication of how waste will be handled to ensure spill containment. CCRIFC also commented that while tertiary and ultraviolet treatment of wastewater are effective at reducing impacts from bacteria and nutrient loading associated with sewage effluents, pharmaceuticals cannot be removed with standard treatment procedures. These impacts on groundwater need to be considered.

#### *Proponent response and commitments*

The Proponent confirmed that the option that has been selected for the Project is to immediately connect all development to the tertiary sewer treatment plant from the start and that in-ground dispersal of the near potable quality water is the final stage of treatment. Should sensitivity to phosphorus or other inputs in the ground dispersal stage be confirmed during the detailed investigations required under the MSR registration process, additional levels of wastewater treatment could be implemented, such as phosphorus removal. With respect to seepage, the Proponent responded that the EIS process under the MSR will begin with an assessment of the potential for seepage from the ground disposal system to enter Jumbo Creek. If this initial analysis shows a real potential for this to occur, additional studies could include a mecosm study and/or in situ algal assay.

With respect to the comments on NPS discharge, the Proponent responded that the several plans in the documentation are conceptual and reflect different aspects of the NPS waste control. More information will be provided in the detailed design stage prior to construction, as appropriate for each plan. The Proponent has committed to following best management practices with respect to liquid waste management. There is no proposal to use wetlands in alpine areas, and the selection of appropriate stormwater management options will be made (and the information provided) during detailed design.

The Proponent committed to developing and submitting a NPS waste discharge control plan with site-specific details for approval by WLAP. Implementation could occur before any aspect of construction begins.

The Proponent advised that EIS requirements will be discussed at the MSR pre-application meeting and will not necessarily be limited to:

- presence/absence of connection between Jumbo Creek and groundwater that would receive discharge;

- capacity of soil to remove nutrients, metals and other wastewater constituents before wastewater has traveled from point of discharge to creek, if connection exists;
- estimated quantity and quality of treated wastewater that ultimately could reach Jumbo Creek; and
- estimated concentrations in Jumbo Creek of nutrients, metals and other substances that ultimately might result from the discharge.

In response to DOI's concerns, the Proponent stated that the Provincial authorities will evaluate the Project to ensure that provincial standards are met. The Proponent expressed confidence that the engineering and maintenance expertise exists to provide a reliable state-of-the-art waste management system. The utility chosen to operate the waste management system will have the proper maintenance program in place and will be subject to public scrutiny. The Proponent agreed that "all stormwater issues during construction and on completion must be contained on-site and not be discharged into Toby Creek or any other water system."

In response to CCRIFC's comments, the Proponent stated that it will provide tertiary treatment for domestic wastewater from the project start, as described in the LWMP. A decision on whether to treat sewage on-site at Glacier Dome or to pipe waste from the teahouse/restaurant to the main treatment plant would be determined during the detailed design stage. Factors such as elevation and climate would be considered when making this final decision. Spill containment is addressed in the Spill Contingency Plan, presented in the EMP. Effluent quality, including pharmaceuticals, will be evaluated in detail during the EIS. The evaluation of pharmaceuticals will be based on the data available for this issue (see section 3.13.4).

The Proponent has committed:

- that site-specific detailed Environmental Management Plans (EMP) for Non-Point Source (NPS) control (Stormwater Management Plan, Sediment and Erosion Control Plan, Spill Contingency Plan, etc.) will be completed to the satisfaction of the Ministry of Water, Land and Air Protection Regional Manager (Environmental Protection) during detailed design, or after detailed design but before construction, as appropriate (51).
- that an Environmental Impact Study of the wastewater treatment system for the Project will be completed in compliance with the process under the *Municipal Sewage Regulation* (52).

#### *Conclusion*

It is the Proponent's responsibility to ensure the selected system is appropriate for site-specific conditions and has the capability to treat the effluent to ensure no significant impact to the receiving environment. The Proponent has committed to completing site-specific detailed EMPs for NPS waste control, prior to construction, and to conducting detailed EIS as part of the MSR registration process, as per WLAP's requests.

The EAO is satisfied that the Proponent has identified and assessed the potential impacts with respect to liquid waste treatment and disposal and that the Proponent can implement appropriate measures to avoid or address any potential significant adverse effects.

### **3.13.3 Special Wastes and Fuel Storage Sites (D.1C)**

#### *Background*

Safe storage, handling, and transportation of special wastes and fuels require adequate identification of collection, storage, treatment and disposal plans, and spill contingency plans.

The Specifications required that the Proponent provide to MELP (now WLAP), after EA certification and prior to site development, detailed identification of special wastes that may be generated, plans for collection, treatment and disposal, and spill contingency plans for any special wastes that are stored or transported.

The Project Report (Volume 3, Section D.1(C), pages D-32 to D-35) provides the response and the Proponent made the commitment to prepare the detailed information as requested (Appendix 3-C outlines an initial Spill Contingency Plan and the finalised plan will be prepared prior to site development and will follow the recommended BC Guidelines for Industry Emergency Response Plans). Spill prevention measures will be the primary mechanism for mitigating potential spills of special wastes being transported to and from the resort.

*Public review comments/Proponent Responses*

There was concern that the use of explosives for avalanche control would leave toxic residues in extremely sensitive areas.

The Proponent responded that the Project Report indicates that the Spill Contingency Plan will cover explosives used during construction and for avalanche control.

*Agency review comments*

WLAP commented that the commitments made under the entire Special Wastes and Fuel Storage section are acceptable.

CCRIFC, on behalf of KKTC, commented that a spill contingency plan for the transportation corridor is required based on the proximity of the road to Jumbo Creek and to the crossings of Toby Creek, as well as the potential fish-bearing sections within the Jumbo Creek watershed.

*Proponent response and commitments*

The Project Report addresses the possibility of spills by presenting a conceptual Spill Contingency Plan. Separate Spill Contingency Plans, which are specific to construction and various resort operations, will be developed during or after detailed design. Spills on the access road likely would be addressed by requiring transportation companies to carry spill clean-up materials and to provide spill contingency plans. The resort also might provide emergency response services for spills on the access road. As well, a Spill Contingency Plan will be developed to cover explosives used during construction and for avalanche control.

The Proponent has committed:

- to prepare and submit a detailed information listed in Final Project Report Specification D.1(C) to the Ministry of Water, Land and Air Protection Regional Manager (Environmental Protection) for approval prior to any site development/construction activity being undertaken (53).
- to prepare a Spill Prevention Plan for the construction phase and a general Spill Contingency Plan for approval by the Ministry of Water, Land and Air Protection Regional Manager (Environmental Protection) prior to the start of site development work (54).
- to equip maintenance facilities with conventional storage and handling equipment for used oils and lubricants which will be collected and managed by a recognized recycling facility (55).

- to arrange with specialized contractors for proper disposal of household hazardous wastes (56).

### *Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts with respect to special wastes and fuel storage sites and that the Proponent can implement appropriate measures (e.g., preparation of Spill Contingency Plans and a Spill Prevention Plan) to avoid or address any potential significant adverse effects.

### **3.13.4 Water Quality Issues (D.1D)**

#### *Background*

Issues related to water quality are similar to issues identified for liquid waste management and hydrology. In particular, issue areas include: management of runoff, erosion and sedimentation from disturbed areas; potential impacts of construction/operation – on and off site - on surface and groundwater; potability of water; and impacts on fish and fish habitat.

The Specifications required a summary of baseline water quality conditions and stream ecology, as well as a discussion of protection measures to avoid point and NPS contamination, at each stage of project development. A commitment to carry out additional water quality monitoring prior to site development, and submitting the results to WLAP, was also required.

Baseline water quality and stream ecology are summarized in Volume 3 of the Project Report (Section D.3(A) Fisheries Resources, with additional details in Appendix 3-G). Details of water quality protection measures are identified in Appendix 3-C EMP and 3-N Liquid Waste Management Plan, and protection of water quality is also outlined in the Master Plan Concept (Volume 5, Section 5.5.2.3).

The Project Report indicates that the Proponent will develop and implement plans to protect water quality, including an Erosion Control and Sedimentation Plan, Stormwater Management Plan, and Spill Contingency Plan including Spill Prevention and Response Plans. The Proponent is prepared to make the required commitment to conduct and submit to the appropriate ministry the required water sampling and reporting prior to any site development or construction. This commitment may be included in the MDA between the Proponent and the Province.

#### *Public review comments/Proponent responses*

Respondents expressed concern that the proposed development would contribute significant amounts of effluent to the aquatic ecosystem of Toby Creek, in particular. As well, it was noted that the runoff, erosion and sedimentation from disturbed surfaces could be of concern during construction and operations. The potential use of salt, oil and chemical components at the resort was raised a number of times with regard to its potential impact on local water sources. A recommendation was made to conduct a soil survey in order to enable complete impact identification of road placements on riparian areas.

The Proponent responded that water will not be contaminated as there will be a tertiary treatment sewer plant and appropriate drainage control. The Project Report indicates that the EMP contains an Erosion and Sediment Control Plan, and a Drainage Control/Stormwater Management Plan. As the Project is located in powder snow country, there will be no artificial snow and no significant amount of salt used for ski run operations. The Proponent has committed to detailed

engineering studies which will precede road upgrades and placements and will include geotechnical/soil considerations.

*Agency review comments*

WLAP commented that general plans for management of runoff, erosion, and sedimentation are provided in Environmental Management Plans (Appendix 3-C). As a condition of EA certification, the Proponent is to provide site-specific detailed EMPs for NPS control (Stormwater Management Plan, Sediment and Erosion Control Plan, Spill Contingency Plan, etc.) completed to the satisfaction of the WLAP Regional Manager (Environmental Protection) during detailed design or after detailed design, but before construction, as appropriate.

WLAP stated that more recent baseline water quality/quantity data was needed as previous samples were collected in 1992 - 1993. As confirmed in Principle #9 Appendix 3-G, further baseline monitoring for water quality and quantity (continuous monitoring) must be conducted to characterize baseline conditions. The baseline study does not contain information on algal communities and this information is needed to assess changes in productivity that may occur as a result of increased nutrients. Benthic invertebrate sampling is noted as an important component of the water quality monitoring program. However, data collected in September 1992 was not provided and not interpreted in results. The September data is more relevant to analyze background water quality conditions than May 1993 data as higher abundance and increased diversity of benthos is typically observed in high elevation streams in the fall.

Sedimentation of fish bearing streams due to seasonal and storm runoff from other ski resort operations in the region has been of concern to WLAP and the report includes a conceptual Erosion and Sediment Control Plan that if implemented, should address these concerns. While there is only limited baseline information that could be used to describe seasonal water quality background levels for comparative purposes, commitments to conduct this specific monitoring are present in the Project Report.

CCRIFC commented that water quality is not adequately protected by the measures described. Water quality is a priority for the KKTC and maintaining the relatively pristine conditions is perceived as unlikely with development of a 5,000 or more bed resort. Current wastewater treatment technology does not address components such as pharmaceuticals, which are known to cause impacts to aquatic organisms. As disposal to groundwater is identified as the preferred option, potential for long-term contamination from wastewater discharge exists. There is no plan for management of salts and sand used in road and parking lot maintenance and these chemicals and abrasives negatively affect fish and invertebrates when introduced into water bodies.

*Proponent response and commitments*

The Proponent has committed to the additional sampling required by the Specifications to be submitted prior to site development/construction. The need for further sampling will be determined as part of the EIS for the wastewater treatment plant. The monitoring will be coordinated with baseline monitoring to evaluate any post development stormwater impacts. Algal communities baseline information was not required by the Specifications. However, an in-situ algal assay may be undertaken as part of the EIS if analysis of the groundwater-stream water connection suggests that elevated nutrients could reach Jumbo Creek.

Benthic invertebrate sampling was conducted in September 1992, however the results were not available to the consultant preparing the Application and Project Report. September benthic

invertebrate sampling was not required by the Specifications. However, further baseline studies on benthic communities will be conducted as part of the EIS.

During the construction and post construction phases of the Project, the Proponent has committed to implementing the most applicable best management practices to control the quality of run-off water, including the Project's environmental analysis, as well as the Land Development Guidelines for Protection of Aquatic Habitat.

Effluent quality, including pharmaceuticals, will be evaluated in detail during the EIS. The evaluation of pharmaceuticals will be based on the data available, notwithstanding that a study funded by the U.S. Environmental Protection Agency (Fox et al. 2001) found that "percolation of secondary effluent through sediments is an effective barrier to transport of estrogens and estrogen mimics".

The Proponent noted that no management plan for road salt was presented in the Project Report because the below-zero climate in normal winter conditions will, at most times, allow the use of sand only to provide winter traction for travel safety. Furthermore, it is planned that the access road will remain a gravel road for a long period of time, and during this time salt will not be used. After the access road is paved, it still should be capable of being managed primarily with sand. Minimal amounts, if any, of salt may be used for parking lot maintenance. The Proponent also noted that:

- sand used in winter road maintenance is unlikely to be carried in runoff to Jumbo Creek, given sand is heavy and will settle out quickly;
- roadside swales will provide detention and infiltration of any fine particles that might be present in the sand;
- the Stormwater Management Plan (Project Report, Appendix 3C and Master Plan Concept, Volume 5) addresses sediment control for runoff from base roads and parking areas;
- any snow that may be cleared from base roads and parking lots will be stored in a way that will prevent direct entry of any accumulated sediment into Jumbo Creek;
- further sampling to assess wastewater treatment impacts and to provide a baseline for any post development monitoring requirement will be conducted in preparing the detailed EIS as part of the MSR registration process; and
- the NPS Waste Management Plan will include a road management plan for the base area that is consistent with the federal Code of Practice for the Environmental Management of Road Salt.

The Proponent has committed:

- that site-specific detailed Environmental Management Plans (EMP) for Non-Point Source (NPS) control (Stormwater Management Plan, Sediment and Erosion Control Plan, Spill Contingency Plan, etc.) will be completed to the satisfaction of the Ministry of Water, Land and Air Protection Regional Manager (Environmental Protection) during detailed design, or after detailed design but before construction, as appropriate (51).
- to conduct and submit to the Ministry of Water, Land and Air Protection Regional Manager (Environmental Protection) additional baseline analyses before any site development/construction activity/well drilling program is undertaken, including (57):
  - additional sampling in Jumbo Creek to characterize sediment production during spring freshet (April 1 to June 30);
  - additional sampling in Jumbo Creek to confirm the low level of mineralization in the basin, as suggested by the water chemistry data; and

- an ion analysis component to the baseline water quality monitoring for Jumbo and Toby Creeks.

### *Conclusion*

The EAO is satisfied that, for the purpose of the EA review, the Proponent has identified and assessed the potential impacts with respect to water quality and that the Proponent can implement appropriate measures (e.g., Stormwater Management Plan, Sediment Control Plan) to avoid or address any potential significant adverse effects. The Proponent has committed to completing site-specific detailed EMPs for NPS waste control, prior to construction, as per WLAP's request. A detailed environmental impact studies will be completed as part of the MSR registration process.

### **3.13.5 Air Quality Issues (D.1E)**

#### *Background*

As the Project is located in a steep valley, air pollutants from space heating, especially wood stoves or fireplaces, may accumulate under valley inversions.

The Specifications required the Proponent to assess air emission sources and demonstrate how local air quality would be protected.

The Project Report (Volume 3, Section D.1(E), pages D-46 to D-51) provides a response, and indicates that Appendix 3-C Environmental Management Plan includes a detailed Air Quality Management Plan. Mitigation of emissions is summarized for heavy construction vehicles and equipment, construction worker commuter trips, open burning, fugitive dust control, wood burning appliances, and vehicular traffic during operations. Assessment of potential impacts from these emission sources, is presented. The Proponent committed to construct energy efficient buildings at the resort and to preparing a Greenhouse Gas Action Plan. The Proponent has committed to install only wood burning devices that meet the specific emission testing and record keeping requirements of the *Solid Fuel Burning Domestic Appliance Regulation*.

#### *Public review comments/Proponent response*

A number of respondents raised concerns regarding the potential increase in air pollution as a result of the access road traffic.

The Proponent responded that a low speed and low traffic road upgrade is planned and is expected to generate minimal additional impacts.

#### *Agency review comments*

WLAP suggested more focused attention on airshed management planning including detailed dispersion modelling and development of an emissions inventory. WLAP noted that the increased activity at the resort, along with increased road sanding, will add to the local levels of fine particulate air pollution and strongly recommended that the Proponent undertake Airshed Management Planning, including hi-volume monitoring starting one year prior to development and carrying on throughout construction and resort operation. WLAP also requested that the Proponent provide 'worst case scenario' details for drought and rising average temperatures to address climate change issues.

With respect to the Fugitive Dust Control Plan, WLAP commented that the road traction material application should use well-accepted practices to reduce airborne contributions to PM10 levels. These practices include the selection of clean coarser pellet size and material recovery when conditions allow.

WLAP stated that the burning of land clearing debris would be addressed as part of regulatory requirements and recommended limiting wood burning appliances or fireplaces allowed at the resort to reduce any air quality impacts. WLAP agreed with the Proponent's statement that greenhouse gas emissions are not expected and stated that the Proponent should work with WLAP, local governments and stakeholders in the development of airshed management strategies and health-based air quality objectives.

#### *Proponent response and commitments*

The Proponent responded that based on the example of Panorama Mountain Resort, it remains unclear as to how the Project would generate sufficient emissions capable of impacting not only the resort but also Invermere. However, if detailed dispersion modelling is a requirement for this type of Project then the Proponent would engage a specialist consultant. The Proponent agreed that Airshed Management Planning would be part of the planning for the resort as required. The Proponent also agreed that worst case scenario details could be provided as the Project progresses, but details of what that worst case should be will need to be worked out once a consensus is reached with government staff regarding what that worst case would look like.

The Proponent noted its willingness to follow *Open Burn Smoke Control Regulations* and local government requirements developed prior to any land clearing and construction, and agreed with the objective of reducing air quality impacts (e.g., by limiting the construction and use (especially during periods of stagnant meteorological conditions) of fireplaces at the resort).

The Proponent stated that the recommended practices regarding fugitive dust control planning are noted for the future development implementation phase, and that the intent of the statement regarding greenhouse gas emissions was that they would not be significant due to the resort's use of electricity. Detailed plans for air quality management at construction and operation stages are presented in the Project Report and in the Air Quality Management Plan as part of the EMP. The Proponent has committed to install only wood burning devices that meet the specific emission, testing and record keeping requirements of the *Solid Fuel Burning Domestic Appliance Regulation*.

The Proponent has committed:

- to cooperate with the Ministry of Water, Land and Air Protection, local government, and other stakeholders should they develop airshed management planning strategies and health based air quality objectives (58).
- to prepare a Greenhouse Gas Action Plan for the resort, including minimizing the construction and use of fireplaces and guidelines for the construction of energy efficient buildings (59).
- to install only wood burning devices that meet the specific emission, testing and record keeping requirements of the *Solid Fuel Burning Domestic Appliance Regulation* (60).

#### *Conclusion*

The Proponent has adequately assessed the air pollution potential in the full build-out of the resort, including the potential emission sources. The EAO is satisfied that the Proponent has identified and assessed the potential impacts with respect to air quality and that the Proponent can

implement appropriate measures (e.g., Air Quality Management Plan) to avoid or address any potential significant adverse effects.

### **3.14. Water Management (D.2)**

#### **3.14.1 Water Supply (D.2A)**

##### *Background*

The projected water demand of the resort and adequacy and quality of proposed groundwater supply is a concern, as withdrawals of groundwater may impact the amount of water available in streams for fish and fish habitat.

The Specifications required<sup>3</sup>:

- an assessment of the potential impacts of groundwater withdrawals on streamflows and fish and fish habitat; the rate of extraction must be documented and explained;
- an accurate analysis of available groundwater to ensure a sustainable supply for all project phases;
- the relationship between groundwater and streamflows in Jumbo Creek must be described and quantified; and
- the impacts of withdrawals on this exchange assessed.

Should the assessment have indicated that there was not an adequate supply of groundwater, the Proponent was to investigate and report on alternative water supply options. The Proponent was also required to provide an overview of the elements of any drinking water treatment facilities.

The Project Report (Volume 3, Section D.2(A)) provides the Proponent's response. In addition, the Master Plan Concept (Volume 5, Section 5.3) explains the planned water supply engineering. Additional hydrology information is submitted in the Project Report (Appendices 3-I, Golder Associates Ltd. letter report and 3-N Liquid Waste Management Plan).

The Proponent reported that the rate of extraction at full build-out will be in the range of up to approximately 183,000 m<sup>3</sup> per year (two methods of calculating yearly water demand are described in the Master Plan Concept). Civil engineering studies indicate that the resort supply requirements can be met with a well water supply of 20 litres per second or less. Preliminary geotechnical and hydrogeological investigations by KPA Engineering, and a subsequent review by Golder Associates Ltd. of the availability of groundwater approximately one km upstream of the proposed resort base, have indicated that total groundwater flow from one or more wells at this location, on a continuous basis, would be in the range of 7.5 l/s to 22.5 l/s.

Appendix 3-I includes a letter report from Golder Associates Ltd. dated December 23, 2003, which analyses the relationship between surface and groundwater in the Jumbo Creek valley and concludes that localized groundwater drawdown and withdrawal at well installations will have nominal or no significant impact on surface water conditions which would remain 'perched' above the well extraction zone. Accordingly, there would be no significant detrimental impact on either groundwater or surface water resources.

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<sup>3</sup> The EAO clarified these requirements in the section 11 procedural order (Appendix B) to include only information that could be feasibly provided in the absence of a drilling exploration program for groundwater. Although the requirement for a detailed assessment involving drilling was excluded, information regarding water supply was still assessed as part of the EA review.

The main elements of the drinking water system are described as distribution, storage, isolated water supply facilities, and water treatment. New groundwater wells are anticipated to have a water quality that meets the Canadian Drinking Water Quality Guidelines. Depending on the storage system(s) used, the drinking water may need to be disinfected (e.g., chlorinated) to prevent adverse effects of storage.

*Public review comments/Proponent responses*

Concern was expressed regarding the proposed level of groundwater extraction and how that potentially could impede the flow levels in streams, especially during winter, used by species such as the Westslope Cutthroat trout and Bull trout. A few respondents were concerned about the resort's water usage and the potential impacts on future water supply. Another concern was raised about the absence of information in the report about the linkage between ground water extraction, water quality impacts due to waste water production, and fish production.

It was suggested that the Project Report should address water demand estimates and groundwater impacts during maximum visitor capacity, and it was recommended that mitigation measures identify where the Project will source additional groundwater extraction, or other water.

The Proponent responded that future soil investigations, monitoring and the drilling program will provide the appropriate information and that since the water supply appears to be adequate to meet the needs of the resort and mitigation measures are not required at this time. The Project Report Appendix 3-I Golder Associates Ltd. letter report provides a professional engineer's assessment and opinion that groundwater extraction will have nominal or no significant impact on surface water conditions. The Master Plan Concept (Volume 5, Section 5.3) provides the water demand and supply assessments (a maximum estimate of 183,000 m<sup>3</sup> per year) and indicates that there is a high likelihood of more than sufficient supply.

*Agency review comments*

The Interior Health Authority commented that the water supplier will need to provide technical documentation and proof of competency to provide potable water from source to tap as per the Drinking Water Protection legislation. The water supplier or agent will need to obtain two major approvals; a Permit to Construct, and a Permit to Operate (with terms and conditions) for the water system. Once in operation the water supplier must ensure water potability quality, and is responsible for remedial actions and any public notification if there is a potential risk to the water quality.

WLAP made several recommendations to ensure that the water supply at the resort is adequate, and stated that further investigative work is needed to fully determine if the proposed withdrawal rates are possible and/or sustainable. WLAP recommended that, prior to any construction taking place, the Proponent commit to developing and implementing an adequate groundwater investigation program that will include, but not be limited to, drilling and pump testing wells to determine sustainable groundwater extraction rates.

WLAP also recommended that the Proponent commit to the resort groundwater being provided through a Water Utility and that the guidance document Evaluating Long-Term Well Capacity for a Certificate of Public Convenience and Necessity be used in determining the long-term well capacities. WLAP recommended that a well protection plan be developed to safeguard the resort's water supply and water quality over the long-term.

WLAP recommended that, if the groundwater option does not prove to be feasible, the Proponent commit to conducting, prior to any resort construction taking place, appropriate investigative work to assess and determine the environmental impacts of the surface water option, as well as to propose mitigation measures to address identified impacts. Terms of reference for this work should be signed off by appropriate WLAP staff (Environmental Stewardship and Environmental Protection) prior to any work taking place.

WLAP also recommended that adequate monitoring be conducted to determine whether there are any adverse groundwater/surface water interactions resulting from the withdrawal of groundwater to supply the proposed resort. WLAP (Environmental Stewardship) should be consulted during the development of terms of reference for any monitoring program involving fish and fish habitat assessment. Details of this monitoring program are to be developed after a drilling and pump testing program has been completed.

CCRIFC commented that the impact of withdrawals on surface and groundwater flows needs to be modelled on a seasonal basis, considering fluctuations in resort usage and flows. The effects on overwintering fish habitat (e.g., through reduced pool depth or changes in groundwater inputs) resulting from water withdrawals requires assessment, especially in the low flow period in February. Groundwater residency times also need to be determined to assess impacts of withdrawals from wells and disposal of wastewater to groundwater.

CCRIFC also stated that the effectiveness of mitigation measures is impossible to assess given potential limitations of climate, elevation, proximity to glaciers, slopes, etc. at the site and lack of specific information (e.g., number and size of stormwater retention ponds). Lack of targets for best management practices contribute to the inability to assess how effective the typical practices described will be in the study area. Sediment yield estimates are made on a flatter, drier region and estimates based on similar situations (e.g., nearby ski resorts) are required. Water supply, wastewater disposal and spill containment plans need to be provided for possible additional day lodges, such as Glacier Dome and the Commander/Farnham drainage.

#### *Proponent response and commitments*

The Proponent has agreed to conduct hydrogeological studies post-certification to confirm the availability of groundwater and to determine the zone of influence of the proposed wells. This information will be used to determine:

- whether groundwater extraction would affect flows in Jumbo Creek;
- the extent of the effect, if any;
- impacts on fish habitat; and
- appropriate mitigation.

The Proponent agreed to include long term monitoring to determine whether there are any adverse groundwater/surface water interactions resulting from withdrawal of groundwater to supply the resort and to discuss details of the monitoring program with WLAP after the drilling and testing program has been completed.

In response to CCRIFC's comments, the Proponent stated their belief that sufficient groundwater can be extracted to supply the resort without affecting flows in Jumbo Creek. This belief is based on the preliminary hydrology assessment made by Golder Associates Ltd. which indicated that the hydrology of the Jumbo Creek drainage will remain substantially intact once the water is extracted for use by the resort and then infiltrated again into the ground after treatment. The Proponent agreed to undertake a drilling program, post-certification, to confirm the presence of

adequate groundwater and to determine whether groundwater withdrawal could affect stream flows.

In response to CCRIFC's comments regarding stormwater management, the Proponent stated that the Proponent base area is located at an elevation of 1,700 metres and the "predominantly bedrock setting" is located primarily in the alpine, while the base area is located in the valley bottom where there has been active sedimentation over thousands of years. The Project Report and Master Plan Concept present a conceptual stormwater management plan, which identify the types of best management practices that would be evaluated and selected during the detailed design stage. The ultimate design of stormwater facilities would be based on analysis of site characteristics and their effects on best management practices. Furthermore, facility sizing would be based on analysis of local runoff characteristics and the expected amount of impervious area in the resort base.

The sediment yield estimates referenced were presented to indicate a general comparison of sediment yields from various land uses. Although the discussion of sediment removal effectiveness was not specific to a geographic setting similar to the Project, it was based on a model of facility volume relative to runoff volume, which has general application.

See sections 3.13.2 and 3.13.3, respectively, for responses on water supply, wastewater disposal and spill containment plans for day lodges on Glacier Dome and Commander/Farnham drainage.

The Proponent has committed:

- that site-specific detailed Environmental Management Plans (EMP) for Non-Point Source (NPS) control (Stormwater Management Plan, Sediment and Erosion Control Plan, Spill Contingency Plan, etc.) will be completed to the satisfaction of the Ministry of Water, Land and Air Protection Regional Manager (Environmental Protection) during detailed design, or after detailed design but before construction, as appropriate (51).
- to develop and implement an adequate groundwater investigation program that will include, but not be limited to, drilling and pump testing wells to determine sustainable groundwater extraction rates. This investigation must take place prior to construction of each phase of development (including the drilling and developing groundwater wells that will be used to supply the resort) (61).
- that resort groundwater be provided through a Water Utility (62).
- that the guidance document Evaluating Long-Term Well Capacity for a Certificate of Public Convenience and Necessity be used in determining the long-term well capacities (63).
- to conduct adequate monitoring to determine whether there are any adverse groundwater/surface water interactions resulting from the withdrawal of groundwater to supply the proposed resort. The Ministry of Water, Land and Air Protection (Environmental Stewardship) should be consulted during the development of terms of reference for any monitoring program involving fish and fish habitat assessment. Details of this monitoring program are to be developed after a drilling and pump testing program has been completed (64).
- that, if the groundwater option does not prove to be feasible, the Proponent will, prior to any resort construction, conduct appropriate investigative work to assess and determine the environmental impacts of the surface water option, as well as to propose any needed mitigation measures to deal with identified impacts. Terms of reference for this work should be signed off by appropriate Ministry of Water, Land and Air Protection (Environmental Protection and Environmental Stewardship) staff prior to any work taking place (65).

- to provide the local Health Authority with technical documentation upon applying for required approvals (66).

### *Conclusion*

Based on the Proponent's commitments, requirements and proposed conditions of certification, the EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on water supply and can implement appropriate measures (e.g., to undertake a drilling program to confirm the presence of adequate groundwater and determine whether groundwater withdrawal could affect stream flows) to avoid or address any potential significant adverse effects.

### **3.14.2 Hydrology (D.2B)**

#### *Background*

Abnormally high run-off and peak flows may be exacerbated by runoff from the resort, for example from paved areas, roofs, roads, and ski runs. In order to avoid erosion, stream sedimentation, and impacts on fish and fish habitat, evidence was required to support the adequacy of the Proponent's plans for managing peak streamflow and runoff at the resort and along the access road.

The Specifications required mapping for stream channel stability and capacity, and that the Proponent address runoff control, including the identification of stormwater discharge points and downstream channel characteristics. In addition, if any stream channelisation, armouring or relocating of stream channels was necessary (in relation to the resort or access road upgrading or to withstand debris flows), conceptual plans were required.

Volume 3 of the Project Report (Section D.2(B), page D-65) describes the Proponent's response. The Proponent provided a Liquid Waste Management Plan in Appendix 3-N of the Project Report which includes mapping by McElhanney Consulting Services Ltd. of the preliminary conceptual storm drainage routing, stormwater discharge points, existing drainage system, and road drainage system. The EMP (Project Report Appendix 3-C, Section 6) outlines the Stormwater Management Plan, including processes and criteria to be used during the detailed design of the resort. Sections 2, 3, 6 and 7, of the EMP describe mitigation measures to avoid sedimentation and erosion and manage stormwater runoff and include the following mitigation measures likely to be incorporated in the final design:

- runoff and snowmelt interception ditches;
- strategic placement of water impoundment and storage areas;
- a system of storm sewers in the resort base area; and
- infiltration systems such as trench systems, sand filter manholes, porous pavement design and parking lot perimeter infiltration systems.

The Master Plan Concept provides 200-year floodplain mapping (Appendix 2-C ) and also describes runoff control measures (Volume 5, Sections 5.5, 5.5.1 and 5.5.2). The Proponent states that the resort site is not exposed to avalanches, debris flow or flooding based on geotechnical and hydrological studies and that channelising, armouring or relocating of stream channels would not be necessary as all riparian areas have been mapped and will maintain their integrity. The final choice of road alignments has eliminated any stream crossings and will maintain the present bridges initially and then follow a road alignment Route Study provided in the Master Plan Concept (Volume 5, Appendix 5-A).

*Public review comments/Proponent responses*

During the review of the Project Report, the practice of discharging effluent into the ground was questioned, and concerns were expressed about the volume of effluent exceeding the natural capacity of local soil conditions and local hydrology to accommodate the discharge.

It was recommended that the Proponent ensure that mitigation measures provide for settling ponds for stormwater runoff storage and treatment from a two-year storm event in light of soil and terrain conditions at the site.

The Proponent's EMP states that DFO and Provincial guidelines will provide the design criteria that will be followed for determining the size of stormwater storage and treatment ponds.

*Agency review comments*

WLAP commented that following detailed design there will be a requirement for permits, and that a Stormwater Management Plan is required for the Ski Area Master Plan.

*Proponent response and commitments*

The Proponent agreed with agencies that permits will be sought and that a Stormwater Management Plan is required in the Ski Area Master Plan.

The Proponent has committed:

- to complete a hydrological assessment as part of the drilling program (see 61) and the detailed geotechnical assessment (see 69) (67).
- that a Stormwater (and Snowmelt) Management Plan will be submitted with the detailed engineering design and will show that drainage areas will remain unchanged and overall runoff patterns will be maintained (68).

*Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential hydrological effects of the Project and can implement appropriate measures (e.g., Stormwater Management Plan) to avoid or address any potential significant adverse effects.

**3.14.3 Floodplain Development Control (D.2C)***Background*

The Specifications required identification and mapping of the once-in-200 year floodplain for all streams that could be affected by, or could affect, the Project. The Proponent's response is provided in Volume 3 of the Project Report (Section D.2(C), page D-68). The Proponent clarifies that the Project site was selected because it avoids areas of geotechnical hazards. The Master Plan Concept (Appendix 2-C) contains a map showing the once-in-200 year floodplain.

*Public review comments/Proponent responses*

No comments received.

*Agency review comments*

Based on their review of air photos, WLAP identified two possible debris flow fans may require

modification of development plans if high hazard areas are identified in the field. WLAP noted that Golder Associates Ltd. recommends detailed site investigations prior to finalisation of development plans and that some modifications of development plans, including mitigation designed and constructed to the appropriate standards, may be required if high hazard areas are identified. WLAP requested copies of the detailed geotechnical engineering reports for review.

*Proponent response and commitments*

The Proponent responded that detailed site investigations are planned and necessary prior to development. Golder Associates Ltd. confirmed their preliminary site investigations indicating that the resort location was not exposed to debris flow in any significant manner and that any debris flows/avalanches initiating in the upper reaches of the creek above the village site would likely be deposited in a hanging valley with gentler channel reaches. More detailed field assessments are required to confirm the assumptions and interpretations made, given the inherently limited accuracy of topographic maps, and to gather sufficient information for design of any mitigation works.

The Proponent agreed that detailed site investigations and reports from Golder Associates Ltd. would continue on all aspects of geotechnical engineering that may affect the Project and that design recommendations will flow from those reports.

The Proponent has committed:

- that detailed site investigations will continue on-site prior to finalization of the development plans, including detailed reports from Golder Associates Ltd. on all aspects of geotechnical engineering that may affect the project based on site conditions (69).
- that the design of the resort will comply with the Regional District of the East Kootenay's Floodplain Management Bylaw (70).

*Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential effects of the Project with respect to floodplain development control and can implement appropriate measures (e.g., detailed site investigations for all aspects of geotechnical engineering) to avoid or address any potential significant adverse effects.

### **3.15. Fish and Wildlife Resources (D.3)**

#### **3.15.1 Fisheries Resources (D.3A)**

*Background*

The Project construction and operations, including access road upgrading/use and liquid and solid waste management at the resort, have the potential to adversely affect fish and fish habitat on Toby and Jumbo Creeks. Biophysical studies conducted in 1979 and aquatic studies conducted in 1992 and 1993 may not have identified habitat for Bull trout or Westslope Cutthroat trout.

The Specifications required reporting that demonstrates that the objectives of previous reports in 1992 and 1993 were met and that information was more easily identified by stream reaches. The Proponent was required to identify and map critical and sensitive fish habitat features for all fish including Bull trout, including barriers to fish passage. If any habitat loss was identified as a result of the Project, measures to mitigate effects were to be reported, and if residual effects were expected, conceptual compensation plans were to be provided.

The Project Report (Volume 5, Part D – D.3(A), page D-75) identifies the objectives of the 1992 and 1993 reports and indicates that Appendix 3-G provides a full report on fisheries resources, including the required mapping. It also demonstrates that the study objectives were met. Fish reaches were identified in both a 1979 biophysical survey following DFO/Ministry of Environment standardized stream survey forms and in the 1992/93 studies. The Proponent describes five reaches and reviews the fish barriers identified and habitat conditions in the reaches. Three fish surveys indicate no fish on Jumbo Creek in Reach A where the resort is located and the upstream limit of Westslope Cutthroat trout was in the upper end of Reach B below the resort. Bull trout were not observed in the three surveys of Jumbo Creek, and while Bull trout are present at the confluence of Jumbo/Toby creek, they were not observed in any tributary stream of Toby Creek. The reasons for few fish found in Jumbo Creek are related to natural factors limiting suitable habitat, such as few pools, flashy flows of sediment-laden glacial meltwater and steep gradients.

The Proponent proposes to avoid or minimize potential impacts on fish habitat by adopting a 30 metre Streamside Protection and Enhancement Area as outlined in the *Fish Protection Act – Streamside Protection Regulations* (January 2001). As a result, the Proponent concludes that there are no direct instream or riparian fish habitat impacts associated with the resort base development, and thus, no further mitigation measures are proposed. Nonetheless, a number of guiding principles and best management practices will be used during final design, construction and operation of the resort development areas including location of ski runs and ski lifts.

#### *Public review comments/Proponent responses*

Public comments on the Project Report included concern about negative impacts of sewage and salt runoff into local Bull trout streams. In response, the Proponent indicated that there is not expected to be any significant impact due to sewage and salt run off. Ground dispersal is expected to be effective according to the planned design. The quality of the fish and water assessments was questioned by a number of respondents, including environmental organizations, who noted the need for a comprehensive monitoring study for mitigation purposes. It was felt that the Proponent had not adequately detailed measures to avoid, minimize or mitigate all potential effects on fish and fish habitat in accordance with DFO's "no net loss" policy.

#### *Agency review comments*

CEAA commented that the Project does not require a *CEA Act* review as the Project, as designed, does not trigger any Authorizations under the *Federal Fisheries Act* or the *Navigable Waters Protection Act*. However, federal authorities will require detailed fish population and or habitat assessments on a site-specific basis where habitat impacts would result from resort and infrastructure development.

WLAP commented that the Jumbo Creek drainage supports populations of both Westslope Cutthroat trout (a blue-listed species) and Bull trout at levels similar to comparable high elevation tributary systems in the Purcell range, but that habitat utilization throughout the system appears to be restricted by gradients, barriers and natural log jams. WLAP noted that more detail on the barriers is needed to determine if they are "complete or partial" barriers to fish. Unless the barrier is deemed to be permanent, or of a nature where access cannot be gained by fish to the upper reaches, the habitat in the upper reaches must be protected and managed as fish bearing habitat until questions regarding fish passage and habitat use have been conclusively addressed.

WLAP also commented that the potential impacts on fish habitat and populations due to possible impacts to water quantity (impact of ground well withdrawal) and or quality (surface runoff and or sewage treatment) do not appear to have been addressed and the Proponent was requested to commit to conducting adequate monitoring to determine whether there are any adverse groundwater/surface water interactions resulting from the withdrawal of groundwater to supply the proposed resort since problems related to the interaction of groundwater flows with fluvial environments supporting fish may also exist. WLAP (Environmental Stewardship) should be consulted during the development of terms of reference for any monitoring program involving fish and fish habitat assessment.

The Canadian Columbia River Inter-Tribal Fisheries Commission (CCRIFC) provided the following comments on behalf of the KKTC<sup>4</sup>:

- Bull trout and Westslope Cutthroat trout are blue-listed species; therefore, further assessments are required to identify critical habitat and measures to ensure the adequate protection of spawning and overwintering habitats for these species;
- stream crossing structures should be designed as fish-bearing for all streams with gradients up to 30%, unless sampling has determined the absence of fish;
- crossing structures should not be constructed based on the availability of materials, but rather, designed for fish and water passage;
- the riparian setbacks of 30 metres are less than *Forest Practices Code* requirements for sections of Jumbo Creek that are classified as S2 (which require 50 metre setbacks); the Proponent needs to specify whether the existing road alignment encroaches on the required setback, and if so, how this will be mitigated;
- the impact of withdrawals on surface and groundwater flows needs to be modelled, on a seasonal basis, in relation to overwintering fish habitat;
- there is no plan for the management of salts and sands used in road maintenance - these chemicals and abrasives negatively affect fish and invertebrates when introduced into water bodies; and
- the Resort Development Agreement should specify that only native plants will be permitted.

#### *Proponent response and commitments*

The Proponent responded to WLAP comments by clarifying that the waterfall barrier at the uppermost end of Reach B is a partial fish migration barrier. The mitigation presented in the Project Report (Appendix 3-G) assumes that all habitat in Jumbo Creek will be managed as fish habitat. The Proponent noted that to mitigate any impact by proposing 30 metre setbacks from the base area development that is consistent with the *Fish Protection Act – Streamside Protection Regulation* requirements.

The Proponent also noted that the Project Report (Appendix 3-G, Section 4.1) addresses potential impacts of surface water quality from stormwater runoff and wastewater discharge via groundwater. The potential for impacts from the rapid percolation of stormwater from treatment facilities seems remote since most contaminants in stormwater are associated with particulates, which would be removed by infiltration or detention. While there could be some residual nutrient loadings to Jumbo Creek as a result of stormwater discharge, given the small size of the base area, the effect is unlikely to be significant. Fish habitat characteristics are also described Appendix

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<sup>4</sup> DFO was provided and reviewed CCRIFC's comments and the Proponent's subsequent response and informed the EAO (June 14, 2004) that it did not anticipate requirements for a *Fisheries Act* Authorization. DFO also indicated that they would like to be kept informed of the EA review.

3-G (pages 13 and 17). See section 3.14.2 for the Proponent's commitments related to managing stormwater runoff.

The Proponent responded to CCRIFC comments by clarifying that the Artech (2002) study (cited by CCRIFC<sup>5</sup>) supports the information and conclusions presented in the Project Report (Appendix 3-G). Artech (2002) found Bull trout in Stark Creek, a tributary to Toby Creek near the Jumbo/Toby Creek confluence, but did not find Bull trout in Jumbo Creek or any of its tributaries despite extensive sampling. Artech (2002) also did not believe that Bull trout could access Reach 2 of Jumbo Creek and concluded that the lower stream (which extends 0.6 km upstream from the Jumbo/Toby Creek confluence) supports Westslope Cutthroat and Bull trout and that the potential distribution of Bull trout in Jumbo Creek is limited by a permanent impassable barrier.

Despite the absence of information showing that Bull trout use Jumbo Creek, potential Bull trout habitat features were mapped in the Project Report. This mapping (Appendix 3G, Figure 5 and Appendix 3A) shows potential spawning, rearing and overwintering habitat suitable for Bull trout. Those features are also suitable for Westslope Cutthroat trout. The classification of all fish-bearing reaches of Jumbo Creek as "critical habitat" does not change any of the mitigation design presented in the Project Report. The primary reason for identifying critical habitat features is to avoid in-stream impacts at these locations. Since there will be no new crossings of Jumbo Creek, there will be no in-stream impacts. Other mitigation measures have been developed on the assumption that all of Jumbo Creek is fish habitat (although the resort base is upstream of the upper fish barrier).

Artech (2002) reports the following regarding fish above 20% gradients in tributaries to Jumbo Creek: "No fish were captured or observed in reaches exceeding 20% in the project area. Most of the tributaries to the river rise steeply away from the valley floor and the number of accessible reaches falling into the 20-30% marginal habitat category are very few, with barriers or extreme gradient sections blocking the majority of them." Since Artech (2002) captured no fish in tributaries with gradients > than 20%, it appears that the mitigation presented in the Project Report – to provide fish passage for all crossings up to 20% gradient – is overly conservative. Provision of fish passage for streams with gradients up to 30% clearly is unwarranted.

In response to CCRIFC's comment on the construction of crossing structures, the Proponent stated that the phrase "availability of materials" was taken out of context and implies a statement and an intent that were not present in the Project Report. The relevant sentence from Appendix 3G is as follows: "The choice and design of fish stream crossing structures are determined by a number of factors including sensitivity of fish habitats, engineering requirements, cost and availability of materials, cost of inspection, maintenance and deactivation." The next sentence discusses types of crossing structures recommended under the *Forest Practices Code*. The discussion concludes: "All road crossings of Jumbo Creek tributaries with <20% gradient (assumed to be fish bearing) will be designed as open bottom structures." The intent of this discussion was to recommend crossing structures that provide fish passage where necessary. Regardless of the materials selected, it would be necessary for all structures to allow water to pass.

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<sup>5</sup> Artech Consulting Ltd. (2002). Reconnaissance (1:20,000) Fish and Fish Habitat Inventory of the Jumbo Creek Watershed. Prepared for Slocan Forest Products (January 2002). Available online: [srmwww.gov.bc.ca/appsdata/acat/html/deploy/acat\\_p\\_report\\_17.html](http://srmwww.gov.bc.ca/appsdata/acat/html/deploy/acat_p_report_17.html).

With respect to CCRIFC's comment on riparian setbacks, the Proponent responded that different types of riparian setbacks were proposed for the various Project components. The proposed 30 metre setback from Jumbo Creek refers to the base area, not the access road. It is based on the *Fish Protection Act - Streamside Protection Regulation*, which applies to land developments and, therefore, is applicable to the base area development. The Project Report did not propose a setback zone for the access road, as the road already exists. However, the access road will comply with the *Forest Practices Code – Riparian Management Area Guidebook*.

Responses to CCRIFC's comment on the impacts of groundwater and surface water in relation to fish habitat can be found in section 3.14.1, and responses regarding the lack of a plan for the management of salts and sands used in road maintenance can be found in section 3.13.4.

In response to CCRIFC's comment on the use of native vegetation at the resort, the Proponent responded that only native vegetation would be used for landscaping at the resort base.

The Proponent has committed:

- to conduct adequate monitoring to determine whether there are any adverse groundwater/surface water interactions resulting from the withdrawal of groundwater to supply the proposed resort. The Ministry of Water, Land and Air Protection (Environmental Stewardship) should be consulted during the development of terms of reference for any monitoring program involving fish and fish habitat assessment. Details of this monitoring program are to be developed after a drilling and pump testing program has been completed (64).
- that, if the groundwater option does not prove to be feasible, the Proponent will, prior to any resort construction, conduct appropriate investigative work to assess and determine the environmental impacts of the surface water option, as well as to propose any needed mitigation measures to deal with identified impacts. Terms of reference for this work should be signed off by appropriate Ministry of Water, Land and Air Protection (Environmental Protection and Environmental Stewardship) staff prior to any work taking place (65).
- to adopting a 30 metre Streamside Protection and Enhancement Area as outlined in the *Fish Protection Act – Streamside Protection Regulations* (71).
- to a biological, physical habitat and continuous water volume and quality sampling program to be implemented pre-and post-development (72).
- to minimize total impervious area as a result of the development (73).
- that only native vegetation will be used for landscaping in the resort base. No noxious weeds will be used and no non-native plants capable of becoming weeds will be permitted (74).
- design and locate ski runs and ski lifts to follow the Forest Practices Code (75).
- that, when required, widening of the access road will be done on the upslope side of the road (76).

### *Conclusion*

Based on the Proponent's commitments, requirements and proposed conditions of certification, the EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on fisheries resources and can implement appropriate measures (e.g., to undertake a drilling program to confirm the presence of adequate groundwater and determine whether groundwater withdrawal could affect stream flows) to avoid or address any potential significant adverse effects.

### 3.15.2 Wildlife Resources (D.3B)

#### *Background*

The general implications of project development for wildlife resources required further assessment, in particular, for impacts on habitats and populations, and use of Jumbo Pass as a migration corridor.

The Specifications required analysis of surveys and mapping provided previously by the Proponent, and additional biophysical habitat mapping and special habitat features mapping overlaid with the project components, in order to determine the extent of impacts on wildlife. The impacts were to be assessed based on direct and indirect, short and long term effects of the Project and were to include quantification of habitat losses, population impacts as a result of resort presence and activities, and detailed mitigation and monitoring plans.

The Project Report (Volume 3, Section D.3(B), pages D-94 to D-150) addresses the requirements. The Report provides an analysis of previous aerial and ground surveys for Mountain goat, Mule deer, White-tailed deer, moose, elk, black bears, Grizzly bears, large carnivores (e.g., cougars), furbearers, and small mammals. Biophysical habitat mapping, special habitat features mapping, and overlay of project components mapping was completed, at the scale required by the Specifications, in Appendix 3-B Wildlife Resources. The Master Plan Concept also provides the maps in Map Volume 8. The assessment of potential impacts and detailed mitigation for each wildlife species, including several categories of bird species, is summarized in the Project Report.

Mitigation plans involve restrictions during construction and operation including: timing of construction, maintenance and avalanche control activities; protocols for helicopter use; prohibition of all terrain vehicles and hunting; stormwater runoff management plans (to prevent riparian losses due to flood scouring); use of existing rights-of-way and maintenance of forest cover/woody debris, whenever feasible to avoid habitat impacts; garbage management and bear encounters education; and, monitoring plans. The extent of habitat losses are analysed and determined to not adversely affect the overall regional population of wildlife species with the planned mitigation in place. A number of commitments are made for mitigation and management for each category of wildlife species.

#### *Public review comments/Proponent responses*

The impact of the proposed development on local and regional wildlife garnered considerable input. Wildlife concerns included: the perception that the wildlife study area was insufficient; potential destruction of habitat leading to reduced populations and low genetic diversity; potential impact from an increase in human activity; perceived insufficient analysis on small mammals and birds; and, a perceived absence of new wildlife studies and acceptable habitat mitigation plans. It was requested that provincial authorities govern the direction of wildlife management and that the Proponent be required to properly document wildlife enhancement plans and provide a quantitative analysis of potential wildlife impacts.

The Proponent responded that the wildlife issue, including Grizzly bears, has been carefully studied and that wildlife will not be placed under extreme pressures. The potential loss of wildlife habitat will be mitigated. The design of the Project has been completed to avoid disrupting the wildlife corridor. Both threatened and non-threatened species have been carefully studied.

*Agency review comments*

WLAP commented that, as proposed, the Project seems to avoid areas of high value winter range for Mountain goats, however, if resort expansions were approved at a later date, they could potentially adversely affect this habitat. The currently proposed route for lift access to the ski training area (Farnham Glacier) may impact high value winter range habitats.

Although the Proponent has previously stated that helicopter based operations are not part of this proposal, except for emergency use and for construction, the Preliminary Conceptual Mountain Area Map submitted with the Project Report indicates a proposed new location for R.K. Heli-Ski Panorama Inc.'s (R.K. Heli-Ski) operations. This source of impact to wildlife has not been addressed. Guidelines for mitigating the impact of helicopters on goat populations should be considered.

WLAP also stated that with the exception of the possible impacts of the road access on moose, the mitigation measures proposed in the Project Report should address adverse impacts of the project on moose populations in the Jumbo area. The impacts on Mule and White-tailed deer are expected to be minimal. With the exception of the increased vehicular traffic into the Jumbo and upper Toby Creek drainages as a result of the Project development, WLAP accepts that impacts on elk are expected to be minimal. The mitigation measures proposed in the Project Report should address adverse impacts of vehicular traffic on elk populations in the Jumbo area.

Additional mitigation measures that may be considered would include working in cooperation with the local forest industry and government agencies to reclaim forest access trails and any redundant forest or resort access roads. Proposed mitigation measures for access roads and utility corridors should include designs to avoid riparian areas downstream of the resort. The Proponent was requested to work with MOT to undertake winter road maintenance measures to reduce the impacts to wildlife on the access road.

Proposed mitigation measures will serve to minimize the impact on furbearers. Proposed mitigation measures for access roads and utility corridors should include designs to avoid riparian areas downstream of the resort. The removal of parallel access routes and the reclamation of redundant access will further reduce the long-term impacts on furbearing species.

The Proponent indicates that high value winter range habitats will be avoided. However, WLAP commented that the Project Report does not clearly address the potential for impacts from the resort access road on high value valley bottom habitat.

WLAP commented that the commitment by the Proponent for continuing field surveys for the Least chipmunk, should the Project be approved, is commendable. WLAP requested that a comprehensive amphibian assessment be considered for all areas that would be physically altered or directly impacted by the Project, should the Project receive approval.

The Proponent suggests that guidelines will be employed to minimize impact on Jumbo Pass as a connectivity corridor. This mitigation will only be effective given assurances that future development will be confined to the proposed Project area.

*Proponent response and commitments*

The Proponent acknowledged that the ski training area access point could potentially impact one of the high value Mountain Goat winter range habitats and stated that the Proponent's environmental consultant would respond to this concern prior to construction.

The Proponent stated that helicopter use was expected to be limited only to emergency use and to winter operations by R.K. Heli-Ski. The resort would not encourage heli-hiking or provide a base for this activity. Due to the potential for disturbance from helicopter use, the Proponent has outlined helicopter operational guidelines to be enforced during the construction stage and during occasional helicopter flights into and out of the Jumbo drainage.

The Proponent clarified that an expansion of the Project into the Jumbo Pass area is not planned, expected, or even feasible in consideration of the history and of the approval processes that are taking place. The Project has been designed to minimize any interference with the Jumbo Pass corridor and this effort is expected to continue for the lifetime of the Project.

The Proponent agreed with the additional mitigation proposals suggested by WLAP for Mule and White-tailed deer, moose, elk, and furbearers, and committed to work with the forest industry and government agencies to reclaim redundant forest access roads and trails for productive wildlife forage. The Proponent also committed to encourage MOT to undertake road maintenance measures to reduce impacts to wildlife on the access road.

In response to WLAP's concern regarding the potential for significant impacts from the resort access road on high value valley bottom habitat, the Proponent stated that since the proposed access road would not deviate from the existing Forest Service Road, except for minor alignment changes, no additional valley bottom habitat would be affected.

The Proponent committed to undertaking continuing field surveys for Least chipmunk and agreed to discuss the terms of reference for a future comprehensive amphibian assessment for all areas that would be physically altered or directly impacted by the Project, should the Project receive approval.

The Proponent has committed:

- to reduce potential impacts on goats moving between winter and summer ranges by not conducting ski run and lift development activities in the areas of migrating goats in April, May or November (77).
- to conduct adequate monitoring surveys to identify goat winter habitat polygons and to determine whether the potential exists for disturbance to wintering goats in the area in proximity to the proposed Farnham Glacier summer chair lift alignment. Staff from Ministry of Water, Land and Air Protection (Environmental Stewardship) should be consulted during the development of terms of reference for any monitoring program involving goat habitat assessment (78).
- to consider, in consultation with Ministry of Water, Land and Air Protection (Environmental Stewardship) staff, relocating the proposed Farnham Glacier summer chair lift alignment to avoid goat winter habitat polygons. If an alternate suitable alignment cannot be identified, the Proponent will not operate the lift during the winter period specified by the Ministry of Water, Land and Air Protection Regional Manager (Environmental Stewardship) (79).
- to conduct wildlife monitoring (as per Environmental Management Plan section 13.2) and, as required, to install appropriate out-of-bounds signs and cliff barriers (80).
- to work in cooperation with the forest industry and government agencies to reclaim redundant forest or resort access roads and trails for productive forage (81).
- to, in the event that an agreement with the forest industry cannot be reached, fund the reclamation of redundant forest or resort access roads and trails for productive forage as

required by the Ministry of Water, Land and Air Protection Regional Manager (Environmental Stewardship) (82).

- to encourage the Ministry of Transportation to (83):
  - use non-forage species when re-vegetating exposed soils;
  - undertake winter road maintenance measures, such as pullouts and snow-free crossing points, to allow escape pathways for ungulates and reduce impacts to wildlife;
  - use road de-icing agents other than salt; and
  - employ signage and other measures to discourage wildlife viewing from the access road.
- to discuss with the Ministry of Water, Land and Air Protection Regional Manager (Environmental Stewardship) the terms of reference for a future comprehensive amphibian inventory and habitat and impact assessment (84).
- to follow established practices to avoid avalanche control activities in the vicinity of wintering goats (85).
- to locate all facilities along the corridor of the upgraded access road, as well as existing roads and trails with any deviations following the route that is least disruptive to the natural environment (86).
- to locate ski runs to ensure that riparian forest habitats are not disrupted, and to avoid entry into riparian areas during construction and protect riparian habitat during operation (87).
- to prohibit recreational use of all-terrain vehicles (88).
- to prohibit staff and residents from carrying firearms or hunting within the resort area (89).
- to minimize impacts of helicopter overflights on wildlife by following protocols outlined in the Project Report (90).
- to retain large areas of existing forest with minimal fragmentation of forest areas and maintain coarse woody debris between ski runs (91).
- to minimize disturbance of low growing herbs and shrubs that are not the target of maintenance (92).
- to planting unpalatable species of grasses on the resort to deter deer, if and where grass is planted (93).
- to actively participate in a program to increase staff and public's awareness and understanding of human-wildlife interactions and implement ways to avoid or minimize human-wildlife conflicts (94).
- to have Bear Aware programs which will be aggressive and mandatory (95).
- that clearing of habitats will not occur during the critical April 1 to July 31 breeding bird period for birds unless a nest survey is conducted and a management plan is developed by a qualified wildlife biologist (96).
- to retain riparian corridors within all residential and commercial development areas, and to protect these corridors, and other sensitive/unique songbird habitats, within the streamside buffers (97).
- to retain riparian habitats along creeks to ensure that important breeding and foraging habitat for many raptor species is maintained and that corridor-linkages are maintained between core forested areas (98).
- to halt all land development activities in the vicinity of any active raptor nests found within the construction area until a management plan is developed with the cooperation of regulatory agencies (99).
- to follow nest protection guidelines for Bald eagle consistent with the Ministry of Water, Land and Air Protection (2002) guidelines, including (100):
  - to prevent facility development within 150 metres of nest trees,
  - to minimize human activities within 150 metres of active nests between February and July,

- to maintain all existing habitat components within 150 metres of nest trees, and
- to train staff and provide information to guests on appropriate behaviour in the vicinity of raptors and their nesting habitat.

### *Conclusion*

Based on the information and commitments provided, the EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project with respect to wildlife resources and can implement appropriate measures to avoid or address any potential significant adverse effects.

### **3.15.3 Grizzly Bears (D.3C)**

#### *Background*

The potential impacts of the Project on Grizzly bears, a blue-listed species, was a key issue in the EA review process that came to symbolize land use concerns of many review participants.

The objective of the additional studies required by the Specifications was to ensure that a thorough understanding of the potential impacts of the proposed development on Grizzly bears was obtained, and that any viable options to prevent or mitigate any adverse effects were identified and analyzed.

The phases of study needed to complete the assessment of the impacts of the Project on Grizzly bears and Grizzly bear habitat were:

- a) identification of Grizzly bears and Grizzly bear habitats (presence, absence, limiting factors), both existing and potential;
- b) collection of hair samples from Grizzly bears for one season for purposes of genetic analysis;
- c) identification of probable impacts (direct, indirect and cumulative) of the Project on those resources; and
- d) identification of measures to prevent impacts and minimize those which cannot be prevented.

In addition, monitoring the impacts, their prevention and mitigation, with modification as necessary, if plans are not effective to achieve the expected results, would be required should the Project proceed.

The Project Report (Volume 3, Section D.3(C), pages D-150 to D-193) contains the additional information on Grizzly bear resources required to complete the EA review. The Proponent conducted several new studies to collect the additional information, including a Grizzly bear population survey (November 1999), a habitat suitability assessment (July 2002) and a cumulative effects assessment (CEA) (December 2003).

The key finding of the CEA was that, in the absence of any measures to mitigate impacts on Grizzly bears, the Project would increase the risk of Grizzly bear mortality by 2.6% to 3.8% and reduce habitat effectiveness by 1.7% to 3.1% within the 3,977 km<sup>2</sup> study area (89% of the Central Purcell GPBU).

On the basis of these and other studies and in response to concerns expressed during earlier phases of the EA review process, the Proponent made the following project design modifications, in part, to address potential impacts on Grizzly bears:

- 60% reduction in the size of the CRA; and

- the removal of project components on the west side of Jumbo Valley and in lower Jumbo Creek (an area identified as being more frequently visited by Grizzly bears).

In addition, the Proponent proposed a Grizzly Bear Management Plan (Project Report Appendix 3-D) to address onsite impacts, including strategies to prevent or minimize bear problems (e.g., garbage management, access road management, education) and to deal with problem bears. The Proponent also proposed a program of monitoring and adaptive management that includes continued hair sampling and DNA testing to assess changes in Grizzly bear numbers and distribution in response to project construction and operation, and to help manage the Central Purcell Grizzly Bear Population Unit (GBPU) with greater precision.

#### *Public review comments/Proponent responses*

Many review participants wanted to ensure protection of the Grizzly bear for future generations. Furthermore, many felt that the stability of the bear population was already in question due to existing logging and local development. The impact of the proposed avalanche management and future road traffic on denning bears were of concern. A number of respondents questioned the size of the Grizzly bear study area and felt that existing Proponent reports do not adequately address the overall status of the Grizzly bear habitat/population within the region and that the scientific study needs to be based on long-term collected data to be valid.

Of specific concern were the current state of the regional Grizzly bear population fragmentation and the potential impact of the Project on the north-south connectivity of Grizzly bears in the central Purcell Mountains. There were inquiries made as to what measures the government would put in place (e.g., monitoring programs in perpetuity) to ensure there is no net loss of Grizzly bears as a result of the proposed development. It was recommended that probable “net impacts” to a viable Grizzly bear population and undesirable impacts to present and future resource users be addressed. Many respondents noted that access restrictions as a result of action taken to mitigate Grizzly bear impacts would be unacceptable.

Generally, the Proponent responded that the public concerns were addressed by the additional information provided, including a comprehensive package of mitigation and monitoring. The Proponent clarified that the wholesale restriction of motorized access in adjacent drainages was not being pursued.

Detailed technical submissions were received from several regional and local Grizzly bear biologists who raised a variety of concerns regarding study methodology and conclusions. The Proponent prepared individual responses to each of these submissions, including clarification that the CEA results are scale dependent and that the appropriate application of the CEA analysis was over a regional ecosystem encompassing several watersheds (e.g., a GBPU) rather than on a drainage-specific basis. All submissions, and the Proponent’s responses, were provided to WLAP to consider in preparing their review comments.

#### *Agency review comments*

The lead review agency for this issue was WLAP. Additional review comments were received from the SRM, the Ministry of Energy and Mines (MEM), MOF, the RDCK, and the KKTC, particularly in relation to any potential access restrictions in adjacent drainages.

The proposed Project is located in the 4,619 km<sup>2</sup> Central Purcell GBPU, one of 49 GBPUs in the Province designated as ‘viable’ under the Grizzly Bear Conservation Strategy. This designation means that the population is stable and sufficiently productive to permit some hunting. The

current population estimate of the Central Purcell GBPU is 150 bears. WLAP estimates that this population is currently at 93% of habitat capability (163 bears) and that would have to decline by 41% (i.e., to less than 81 bears) to be designated as ‘threatened’.

WLAP currently classifies the risk of human-caused mortality in the Jumbo Creek valley as “moderate”. Although Jumbo Creek valley contains highly suitable Grizzly bear habitat, the effectiveness of this habitat is reduced somewhat by the existing level of human disturbance (existing access road, hiking trails, forestry activity and a backcountry hut).

WLAP determined that in the absence of any mitigation, the Project would result in significant impacts to Grizzly bears, both in terms of mortality risk and habitat effectiveness (including habitat fragmentation) within and outside Jumbo Valley. However, the risk of mortality and loss of habitat effectiveness within the CRA would be substantially reduced by application of measures described in the Proponent’s Grizzly Bear Management Plan. Within the CRA, areas opened for ski run development and for managing risk of wildfire will assist in offsetting the loss of habitat effectiveness, particularly when coupled with management of human activities to prevent disturbance of bears attempting to use these foraging areas. Implementation of the Proponent’s Outdoor Recreation Management Plan would further reduce mortality risk in, and immediately adjacent to, the CRA by managing human activities in a manner that will avoid human disturbance of, and contact with, bears.

WLAP suggested the Proponent pursue partnership arrangements with local forest tenure holders and government to improve habitat effectiveness within and adjacent to the CRA through incremental silviculture projects (thinning and spacing of young forest stands), deactivation of unnecessary (redundant) roads, and strategic harvest of merchantable timber. Reduction of the density of active roads in adjacent drainages by strategic deactivation (i.e., strategic actions to keep open only those roads that are needed for active resource extraction or to serve existing recreational tenures and existing levels of public use), in consultation with other tenure holders, will further reduce risk of mortality and loss of habitat effectiveness.

Based on the information available, including the CEA, WLAP has determined that there is a low risk that the Project would result in a reduction of the Grizzly bear population of such significance that the population in the Central Purcell GPBU would become threatened. This determination considers that:

- proposed mitigation for the area within and immediately adjacent to the CRA are fully applied; and
- the Proponent will maintain their proposed monitoring program, and will adjust their mitigation programs to the fullest extent possible if resort-related impacts to Grizzly bear populations or habitat use are evident.

WLAP confirmed that wholesale restriction of motorized access to drainages adjacent to the CRA is neither a desirable, nor required, approach to off-site mitigation of cumulative impacts on Grizzly bears. Access management of this type would represent extraordinary measures that are not necessary to adequately manage the GBPU. It would be difficult, expensive, and extremely controversial to implement such measures over the lifespan of the Project (i.e., indefinitely).

WLAP further identified concerns regarding potential impacts from increased future activities (above existing levels) in Jumbo Pass and adjacent areas over time, whether the Project proceeds or not. Increased recreational traffic may evolve from new trailheads and/or points outside of the CRA. WLAP identified the need for government to carefully manage the Jumbo Pass and Glacier Creek areas. For its part, the Proponent has committed to discourage employee and visitor use of

Jumbo Pass and to not enter into any agreements for recreational activities, with the exception of agreements with R.K. Heli-Ski and the existing guide/outfitter, without LWBC's approval. LWBC has committed to consult review agencies (including WLAP) on applications for commercial recreation tenures outside the CRA. Further, the Proponent committed to consult with the KKTC and the Shuswap Indian Band before entering into any agreements for recreational activities within the CRA. WLAP would be invited to participate on a Grizzly Bear Management Committee established to oversee implementation of the Proponent's Grizzly Bear Management Plan.

*Proponent response and commitments*

The Proponent reiterated for agencies that the proposed mitigation does not include wholesale restrictions to motorized access in adjacent drainages and that the mitigation proposed the Grizzly Bear Management Plan will be adequate to mitigate the impacts. In response to WLAP's request, the Proponent clarified that they do not intend to provide helicopter-based recreation activities. In addition, the Proponent clarified that the treed areas of Jumbo Creek and Farnham watersheds to be cleared for runs and/or lifts (and to offsetting the loss of habitat effectiveness) to be 287 ha and 134 ha, respectively.

With respect to the monitoring and adaptive management, the Proponent proposes that the implementation of the Bear Management Plan be overseen by a Grizzly Bear Management Committee with a reporting structure to be determined in consultation with WLAP. In response to WLAP's request for clarification, the Proponent expressed a willingness to discuss alternatives to partial funding by the resort management for a local Conservation Officer service. The Proponent is committed to monitoring to identify impacts and to responding to monitoring results to address any impacts detected.

The Proponent has committed:

- to achieve and maintain Bear Smart community status (101).
- to implement, at its own cost, all mitigation measures and provisions for preventing or minimizing bear problems within and immediately adjacent to the Controlled Recreation Area, as outlined in the Project Report (102).
- to implement, at its own cost, all measures and provisions for managing problem bears within and immediately adjacent to the Controlled Recreation Area, as outlined in the Project Report (103).
- to monitor the potential direct and indirect effects of the Project on the Central Purcell Mountains Grizzly bear population through genetic testing to predict, detect, and assess any change (if any) in Grizzly bear numbers and distribution. The monitoring program is to include field collection of hair samples from Grizzly bears within the area of direct and indirect impacts before construction, at the end of each phase of construction and at appropriate intervals in the following 10 years, or until such time as the Ministry of Water, Land and Air Protection determines that it is no longer required (104).
- to implement (in consultation with the Ministry of Water, Land and Air Protection and Land and Water BC Inc.), at its own cost, an adaptive management program, as outlined in the Project Report, to evaluate the success of measures for mitigating impacts to Grizzly bears. The adaptive management program will include the identification of performance measures and targets, a decision protocol for the adjustment of mitigation programs to the fullest extent possible when resort-related impacts to Grizzly bear populations or habitat use are evident, and a mechanism for resolving adaptive management disputes (105).
- to establish and participate in a Grizzly Bear Management Committee to oversee implementation of the Grizzly Bear Management Plan as proposed in the Project Report,

including a monitoring and adaptive management program and associated management practices (decision protocol, reporting, and a dispute resolution mechanism) (106).

- to pursue arrangements with local forest tenure holders and government to improve habitat effectiveness within and adjacent to the CRA through incremental silviculture projects (thinning and spacing of young forest stands), deactivation of unnecessary roads, and strategic harvest of merchantable timber (107).
- to make every effort to achieve the desired mitigation, in regards to Grizzly bear cumulative impacts, with strategies that will not alter the present access enjoyed by various special interests (108).
- to strive to achieve no net impact by implementing the Grizzly Bear Management Plan and by supporting or implementing additional measures identified and agreed to by Land and Water BC Inc. and the Ministry of Water, Land and Air Protection (109).

### *Conclusion*

Based on the information and commitments provided, the EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on Grizzly bears (both in terms of mortality risk and habitat effectiveness, including habitat fragmentation) within and outside Jumbo Valley and can implement appropriate measures (e.g., garbage management, outdoor recreation management, adaptive management) to avoid or address any potential significant adverse effects.

### **3.15.4 Birds (D.3D)**

#### *Background*

The Application included a list of bird species that are likely to be disturbed by construction and operation of the Project.

The Specifications required surveys of the project area to determine the use of the area by migratory and non-migratory birds with special emphasis on identification of nesting sites and feeding areas, and to propose mitigation.

The Project Report (Volume 3, Section D.3(D), page D-197 to D-200) reviews the field study results and provides additional impact mitigation information in Appendix 3-B Wildlife Resources.

The Report indicates that the potential impact on birds would be primarily limited to the approximately 104 ha of resort development. Wherever possible, important bird habitat will be avoided, or if not possible, efforts will be made by the project team to minimize or remediate the impact by creation of additional habitat in environmental reserves. The Proponent committed to additional field studies for migratory and non-migratory birds in early summer 2004, and submitted the Terms of Reference for the study in Appendix 3-U.

The bird surveys were conducted in June 2004 and the Project Report Supplement (Migratory and Non-migratory Birds) was submitted to the EAO on June 28, 2004 (See 2.5). The surveys were conducted to estimate migratory bird presence/absence, relative abundance and habitat use, as well as use of the area by non-migratory birds (with an emphasis on identification of nesting sites and feeding areas that could be physically disrupted or impacted by resort development and operation). The report identified the potential impacts of the Project on migratory birds and non-

migratory birds during the construction and operation of the resort and proposed mitigation measures.

The migratory bird survey results concluded that the resort as designed would not impact on critical habitat for bird species of conservation interest, or more common migratory birds observed in the study area, as these species are habitat generalists. Mitigation measures identified, specifically for Harlequin ducks, during the construction and operation phases would include: fencing the riparian protection and enhancement areas within the resort base and posting signs to restrict access; not offering water-based activities at the resort; training resort staff in the appropriate behaviour while in the vicinity of Harlequin ducks and their habitats; and providing literature on harlequin ducks to resort guests.

Since the resort base design and mountain plan have avoided impacts on critical non-migratory bird habitat, no additional mitigation measures for non-migratory birds beyond those presented in the Project Report are identified as a result of the surveys. Mitigation measures specifically for raptors, as stated in the Project Report, would include: the halting of all activity in the vicinity of active raptor nests discovered until management plans are developed with the cooperation of regulatory agencies; an attempt to retain all large old growth trees or other trees suitable for raptor nesting and perching.

The Proponent has made a number of commitments to mitigate potential impacts, including a program of monitoring and adaptive management.

#### *Public review comments/Proponent responses*

A few respondents were concerned that the bird studies were not complete and noted that they were not convinced of the estimated impact that the development would have on bird populations. As well, it was noted that it was unclear whether adequate or appropriate surveys were conducted to conclude the absence of several species such as the Swainson's hawk. A member of the public noted that there have been Peregrine falcon sightings in the Jumbo Valley as well as Northern goshawk. Specific interest was expressed in protecting Spotted owls and the female Harlequin ducks. Overall, there was interest in protecting the Columbia River Wetlands.

Concern was expressed about the late submission of the bird inventory work and felt that the public was being denied a reasonable window of time to review and comment on its findings.

Also of concern was Spruce grouse and Northern goshawk habitat modification or loss from deforestation. Some respondents felt that the Proponent's claim that no active nests would be disturbed by clearing was not valid as many bird nests are undetectable and occur at relatively high densities. It was requested that no clearing or construction take place during the breeding season (early May to early July) to ensure that nests remain undisturbed.

The potential increase in corvids (jays and crows) from the increasing human presence and disturbance in the area was of concern as these species are nest predators that could depress the nesting success of local breeding birds.

A comment on the Project Report Supplement on Migratory and Non-Migratory Birds questioned whether such a short sampling period conducted under adverse weather conditions could produce scientific results, especially since alpine areas were not included in the study area. It was stated that comprehensive studies that include areas such as the Purcell Wilderness Conservancy should be conducted over a three year period during all seasons. Further, the respondent stated that the

report's conclusion that the Project will have minimal impact on the avifauna while recommending further studies, was an inappropriate scientific conclusion. The respondent indicated that Harlequin ducks and Bull trout are identified as species of concern in the Specifications and that these species are both indicators of unspoiled and unsullied habitat which is fast becoming extinct in the southern interior of BC.

Concern was expressed that report conclusions on the impact of the resort on non-migratory species are of limited value as only the two raptor species that were detected during the recently-conducted survey were considered and others may be present. It was also stated that the increased road and helicopter traffic along with increased human use would likely disturb nesting and foraging raptors such as Northern goshawk, owls, and Golden eagle. Although direct loss of habitat would be limited, disturbance of their habitat would likely have a much larger impact.

The Proponent responded that the Project was designed to have no significant impacts on bird populations in the backcountry, given the limited size of the resort and its operations.

With respect to the comment which questions the conclusions reached by the Project Report Supplement on Migratory and Non-Migratory Birds, the Proponent responded that the report stated future bird nest surveys would be required, if the Proponent planned to clear vegetation during the nesting season, in order to identify and protect active nests. These surveys are not intended to gather additional information on the relative abundance or habitat use.

The Proponent agreed that although weather conditions were not ideal for a bird field survey, they were acceptable according to provincial protocols that define acceptable weather conditions for such surveys. Pre-development wildlife surveys are primarily intended to identify species that may be impacted by the development and to develop appropriate mitigation measures. The Proponent responded that three years of surveys are not necessary to achieve this.

With respect to impacts on avifauna, the report is mistakenly credited with the statement that there would be minimal impacts on the avifauna in the area. The report states that the overall impacts of the project activity on migratory bird species are considered to be of medium significance on a sub-regional scale, but of low significance following mitigation, while the overall impacts may be of medium significance for non-migratory raptors. For ground-nesting non-migratory birds, the off-trail use by hikers leading to habitat loss is expected to be of low significance for alpine areas.

With respect to the Harlequin duck and the Bull trout, the Proponent responded that the Project Report Supplement provides appropriate mitigation measures to protect the Harlequin duck, while the Project Report provides appropriate mitigation measures to protect all fish species in Jumbo Creek.

With respect to the study conclusions regarding raptors, the Proponent responded that although only two raptor species were observed (Golden eagle and merlin) during the June 2004 study, the report also lists other raptor species that have been observed during previous field work.

The Proponent confirmed that helicopter use is not a foreseeable activity associated with the proposed resort as heli-hiking and heli-skiing would not be offered by the resort. Road traffic along the access road would certainly increase as a result of the proposed resort, but raptors are not expected to nest in close proximity to the access road. If a treed buffer is maintained along the access road, lower elevation raptors should continue nesting at areas away from the access

road. If Northern goshawks were found nesting within the Jumbo valley, a greater nest buffer might be required.

*Agency review comments*

WLAP determined that the survey met the Specifications by use of recognised standard methods. The one-time survey period, and the weather conditions encountered during the survey period, may have limited the capability of the survey to fully account for representation of bird fauna in the CRA. However, the survey was sufficient to support consideration of the scope of impacts related to resort development, particularly if the Proponent continues to conduct bird surveys as part of their monitoring and adaptive management program.

WLAP concluded that the commitments made by the Proponent to address the identified impacts appear reasonable, and if applied, would appear capable of reducing disturbance, mortality risk and loss of habitat for migratory and non-migratory birds. It is clear that the application of these mitigation commitments is dependant on continued attention to the location of critical habitats for birds. For example, several of the commitments are related to knowing the locations of nests - commitments that can only be met if surveys are conducted to locate those nests.

The effectiveness of mitigation will only be realised if the Proponent continues to conduct bird surveys consistent with the monitoring and adaptive management program to be applied during development and maintenance of this resort complex.

Environment Canada (EC) advised that the Proponent is responsible for complying with all applicable environmental laws and regulations in conducting the proposed project, should it be approved. In general terms, federal statutes include the *Fisheries Act*, *Migratory Birds Convention Act*, *Canadian Environmental Protection Act*, and *Species at Risk Act* and any regulations pursuant to those statutes.

The KKTC's comments on the Project Report Supplement had been previously submitted as written public comments and responded to by the Proponent (see above).

*Proponent response and commitments*

The Proponent responded to WLAP by committing that an appropriate bird survey would be conducted prior to construction and that a monitoring and adaptive management program, appropriate with the type and size of the Project, would be implemented following the start of the development.

The Proponent has committed:

- that clearing of habitats will not occur during the critical April 1 to July 31 breeding bird period for birds unless a nest survey is conducted and a management plan is developed by a qualified wildlife biologist (96).
- to retain riparian corridors within all residential and commercial development areas, and to protect these corridors, and other sensitive/unique songbird habitats, within the streamside buffers (97).
- to retain riparian habitats along creeks to ensure that important breeding and foraging habitat for many raptor species is maintained and that corridor-linkages are maintained between core forested areas (98).
- to halt all land development activities in the vicinity of any active raptor nests found within the construction area until a management plan is developed with the cooperation of regulatory agencies (99).

- to follow nest protection guidelines for Bald eagle consistent with the Ministry of Water, Land and Air Protection (2002) guidelines, including (100):
  - to prevent facility development within 150 metres of nest trees,
  - to minimize human activities within 150 metres of active nests between February and July,
  - to maintain all existing habitat components within 150 metres of nest trees, and
  - to train staff and provide information to guests on appropriate behaviour in the vicinity of raptors and their nesting habitat.
- to prepare and comply with a Trail Management Plan to minimize off-trail use, which should prevent habitat loss from disturbance of alpine vegetation (110).
- to manage garbage to avoid its availability for scavengers (111).
- to retain large old growth trees or other trees that may be suitable for raptor nesting where old growth has been left (112).
- that resort base design will direct all activity away from the Jumbo Creek corridor, especially at specific Harlequin duck nesting sites. Proposed design features include fencing riparian protection and enhancement areas within the resort base and posting signs that state “Environmentally Sensitive Area – Entry Prohibited” (113).
- to not offer any water-based activities such as canoeing, kayaking or rafting, and to discourage such activities and prohibit visitors who bring canoes, kayaks or rafts from launching them anywhere within the Controlled Recreation Area (114).
- to train resort staff in appropriate behaviour in the vicinity of Harlequin ducks and their habitats (115).
- to convey information on protecting Harlequin ducks to resort guests (116).
- to identify, during maintenance activities, problem areas for raptor collisions with transmission lines and, if necessary, monitor the occurrences of raptor electrocutions and develop an adaptive management plan (117).
- to conduct additional bird surveys prior to construction and to implement a monitoring and adaptive management program for birds, appropriate with the type and size of the Project, during construction and operations (118).

### *Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project with respect to birds and that the Proponent can implement appropriate measures (including monitoring and adaptive management) to avoid or address any potential significant adverse effects.

### **3.15.5 Threatened or Endangered Wildlife (D.3E)**

#### *Background*

The impact of the Project on threatened and endangered wildlife required further assessment.

The Specifications required an assessment of the known, or likely, occurrence of threatened or endangered species in areas which will be directly impacted, and identify mitigation strategies to address impacts. A commitment was required to develop a plan for ongoing field inventory of the occurrence of threatened or endangered species during all phases of construction and operation, and include proposed plans for mitigation.

The Project Report (Volume 3, Section D.3(E), pages D-204 to D-208) provide an assessment of the potential for the study area to provide suitable habitat for red or blue listed species, based on

review of field studies and literature. Four blue listed species are known or possible in the Project area: wolverine and Grizzly bears are known; fisher and the Least chipmunk are possible. The study area was determined to not support a visible fisher population, and discussion with local trappers indicated that there are small numbers of wolverine in the upper areas of Jumbo valley above the resort. Grizzly bear management is addressed in section 3.15.3 of this report. The Proponent has committed to, after government approvals of the Project, conduct field surveys to monitor for presence of the Least chipmunk. A commitment has also been made for ongoing field inventory during the pre-construction/construction phase, of threatened or endangered species and proposed plans to mitigate any impacts on such species.

#### *Public review comments/Proponent Responses*

A number of respondents were interested in the identification of species at risk within the study area. There were questions regarding the thoroughness of the fieldwork that had been completed in the Project area to determine the presence or absence of species at risk. It was noted that the Proponent had failed to comment on the Western toad, and that surveys had not been completed for the Least chipmunk and the Red-tailed chipmunk. Some respondents felt that there were too many threatened species to consider future development. It was also mentioned that there was too much reliance on the B.C. Conservation Data Centre for listed species occurrence records to determine presence/absence and it was suggested that ground-level field surveys be undertaken.

The Proponent has responded that threatened and non-threatened species have been extensively studied to avoid any significant impacts.

Blue or red listed mammals and birds are addressed in the Project Report, including the Least chipmunk and Red-tailed chipmunk. The Specifications did not require review of amphibians in the area. There are no red-listed bird or mammal species in the Jumbo project area, and only four blue listed species are expected or known in the area out of 23 species listed for the Invermere Forest District. Existing field studies, maps and literature were reviewed.

The Proponent noted that there are no threatened or endangered species in the Project area: Westslope Cutthroat trout, Bull trout and Grizzly bears are blue listed by the Province (at risk but not threatened or endangered). Furthermore, there are no species requiring protection on Schedule 1 of the *Species at Risk Act* (SARA). Compliance with SARA will be required if species are subsequently added to Schedule 1.

#### *Agency review comments*

WLAP advised that given the difficulty in obtaining sufficient information on many rare and endangered species, field assessments should be continued for all species of concern.

CCRIFC, on behalf of KKTC, commented that Westslope Cutthroat trout which may be present in Jumbo Creek are a blue listed species; thus would require the protection of critical habitat (see section 3.15.1).

#### *Proponent response and commitments*

The Proponent agreed with WLAP's comments and has committed to monitoring for the presence of the Least chipmunk, after government approvals for the Project are obtained. The Proponent has also committed to ongoing threatened and endangered wildlife monitoring in the pre-construction/construction phase of the Project and has proposed mitigation measures for all small mammals, including measures that would benefit the Least chipmunk.

See section 3.15.1 for Proponent's response to CCRIFC's comments regarding Westslope Cutthroat trout.

The Proponent has committed:

- to strive to achieve no net impact by implementing the Grizzly Bear Management Plan and by supporting or implementing additional measures identified and agreed to by Land and Water BC Inc. and the Ministry of Water, Land and Air Protection (109).
- to implement and fund ongoing threatened and endangered wildlife monitoring, including the Least chipmunk, in the preconstruction/construction phase of the Project (119).

### *Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project with respect to threatened or endangered wildlife and that the Proponent can implement appropriate measures (e.g., field surveys and monitoring) to avoid or address any potential significant adverse effects.

## **3.15.6 Wildlife Impacts of Utility and Access Corridors (D.3F)**

### *Background*

Issues were raised concerning the wildlife implications of access road upgrading and use, and transmission line development. The Specifications required: mapping of access roads and transmission lines; an assessment of their impacts on habitat and populations; projected traffic volumes and proposed mitigation measures; and an assessment of the potential impacts on wildlife of helicopter use during construction with specific reference to Mountain goats.

The Project Report (Volume 3, Section D.3(F), pages D-215 to D-217) indicates that the Master Plan Concept and Route Study illustrate the mapping of all roads, and that the utility corridor is only an overhead power line along the access road. Access corridors are limited to the use of existing highways, forestry and mining roads. Cumulative effects are reported separately in Appendix 3-E.

The Project Report reviews experience at other mountain winter resorts, literature reviews, and analysis of traffic volumes at each stage of resort development, indicating a maximum of zero to four road kills per year at build-out. The following measures are proposed to prevent or mitigate impacts:

- road and utility corridors will follow existing rights-of-way, whenever feasible;
- minimize steep snow banks on road edges;
- snow berms created by snowplows will be broken at regular intervals to allow escape pathways;
- vehicle speeds will be enforced;
- roadsides will be hydroseeded with unpalatable herbaceous species;
- use of salt on roads will be avoided; and
- helicopter use will be limited to top lift station and lift tower installations and during operations for emergency and avalanche control requirements; possible mitigation measures for helicopter use and addressing mountain goats are outlined in Appendices 3-B and 3-C.

*Public review comments/Proponent Responses*

The increased use of the access road was of concern to many respondents from a wildlife perspective including a suggestion of night-time road closures. It was suggested that the existing wildlife connectivity corridors be maintained to restore Mountain caribou and other threatened species.

The Proponent responded that given the projected traffic volumes and vehicle speeds, as well as experiences on roads in national parks, the danger of collisions with wildlife would be insignificant. The area does not support Mountain caribou.

Wildlife connectivity is addressed in section 3.15.2.

*Agency review comments*

WLAP advised that, if the Project is approved, the proposed access road location should be assessed in more detail to ensure that detailed road design avoids, to the extent possible, valuable habitat features such as avalanche paths, winter range and riparian areas. The Proponent was requested to commit to undertaking winter road maintenance measures, such as pullouts and snow-free crossing points, to reduce impacts to wildlife on the access road.

*Proponent response and commitments*

The Proponent responded that the proposed access road follows the existing Forest Service Road and that road construction would avoid widening into riparian areas and would not impact valuable habitat features.

The Proponent has committed:

- to encourage the Ministry of Transportation to (83):
  - use non-forage species when re-vegetating exposed soils;
  - undertake winter road maintenance measures, such as pullouts and snow-free crossing points, to allow escape pathways for ungulates and reduce impacts to wildlife;
  - use road de-icing agents other than salt; and
  - employ signage and other measures to discourage wildlife viewing from the access road.
- to locate all facilities along the corridor of the upgraded access road, as well as existing roads and trails with any deviations following the route that is least disruptive to the natural environment (86).
- to identify, during maintenance activities, problem areas for raptor collisions with transmission lines and, if necessary, monitor the occurrences of raptor electrocutions and develop an adaptive management plan (117).
- that helicopter use will be limited to top lift station and lift tower installations and during operations for emergency and avalanche control requirements (120).

*Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential wildlife impacts of utility and access corridors and that the Proponent can implement appropriate measures (e.g., to encourage MOT to undertake winter road maintenance measures, such as pullouts and snow-free crossing points, to allow escape pathways for ungulates and reduce impacts to wildlife) to avoid or address any potential significant adverse effects.

### 3.15.7 Potential Human Conflicts with Wildlife (D.3G)

#### *Background*

The Project will bring increased human activity directly into contact with wildlife, particularly species that have a history of conflict with people, such as coyotes, bears, moose and cougars. The Specifications required that the issue of wildlife/human conflicts must be addressed, including the potential magnitude of the problem at all stages of development, including strategies to minimize the problem.

The issues are reported on in several sections of the Project Report (Volume 3, Section D.3(G), pages D-221 to D-224; Appendix 3-C EMP; Appendix 3-D Grizzly Bear Management Plan; Section D.3(F), and other sections describing helicopter management to avoid impacts on wildlife).

The resort size is small and the Master Plan Concept and Grizzly Bear Management Plan address issues such as garbage management. A detailed list of actions is provided in the Grizzly Bear Management Plan to avoid human interactions with bears. Only one summer trail will be used, which will go to the Glacier Dome which is less known for wildlife visitations.

#### *Public review comments/Proponent responses*

There were concerns about animal mortality caused by traffic and human conflicts. The need for an aggressive and mandatory bear awareness program was suggested in order to protect the bears.

The Proponent responded that wildlife mortality would be reduced by the size of the road and that, in proportion to traffic and speed and compared to the roads in the national parks, the danger of collisions with wildlife will be insignificant. The Project Report provides a detailed list of actions in the Grizzly Bear Management Plan to avoid human interactions with bears.

#### *Agency review comments*

See sections 3.15.2 (Wildlife Resources) and 3.15.3 (Grizzly Bears) for agency comments related to potential human conflicts on wildlife.

#### *Proponent response and commitments*

The Proponent has committed:

- to implement, at its own cost, all measures and provisions for managing problem bears within and immediately adjacent to the Controlled Recreation Area, as outlined in the Project Report (103).
- to enforce vehicle speed limits to avoid wildlife collisions (121).
- to implement, at its own cost, measures and provisions described in the Grizzly Bear Management Plan, which includes guidelines for minimizing bear-human conflicts (122).

#### *Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project with respect to potential human conflicts with wildlife and that the Proponent can implement appropriate measures (e.g., Grizzly Bear Management Plan) to avoid or address any potential significant adverse effects.

### **3.15.8 Impacts on Alpine Vegetation (D.3H)**

#### *Background*

The implications of ski runs and glacier management techniques on alpine vegetation required further assessment. The Specifications required that the impacts of ski run construction, operation and maintenance, and of increased backpacking and hiking on alpine vegetation and soils, be assessed and a commentary on potential impact mitigation measures be presented.

In the Project Report (Volume 3, Section D.3(H), pages D-227 to D-228) the Proponent indicated that there will be little additional clearing required and there is no plan to construct ski runs by recontouring or reshaping the slopes. As a result, there should be little or no impact on alpine vegetation from compaction or grooming. The Proponent committed to reseeding any bare soil presented and to complete a revegetation plan (Appendix 3-C). Impacts would be minimal since backpacking or hiking is expected to be limited (only one trail to the Glacier Dome) and backcountry use would be discouraged. Furthermore, trail construction guidelines have been provided and a Trail Management Plan has been prepared to avoid or mitigate impacts from the trail.

#### *Public review comments/Proponent responses*

Interest was expressed in obtaining additional information on the survey methodology used for identifying rare and endangered plant communities. Some respondents were concerned that the increased traffic from hiking and mountain biking by the clientele of the resort could result in further destruction of Monica Meadows.

The Proponent responded that access from the resort to areas outside the CRA would be very difficult and discouraged. The Project has been designed so that there will be no significant damage to the alpine environment.

#### *Agency review comments*

No comments received.

#### *Proponent response and commitments*

The Proponent has committed:

- to implement , at its own cost, measures and provisions described in a Trail Management Plan prepared to avoid or mitigate impacts from the trail and to minimize off-trail use (123).

#### *Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts on alpine vegetation and that the Proponent can implement appropriate measures (e.g., revegetation plan and Trail Management Plan) to avoid or address any potential significant adverse effects.

## **3.16. Forest Resources (D.4)**

### **3.16.1 Harvestable Timber Impacts (D.4A)**

#### *Background*

The review identified that there may be implications for harvestable timber volumes if the Project proceeds. However, the Specifications did not require any further reporting on this issue. MOF

considered that the specifications required under the Forest Land Reserve (section 3.16.2) are sufficient to address any economic impacts of project development on timber harvesting.

*Public review comments/Proponent responses*

It was noted that forestry has been ongoing in the Project area and in adjacent areas for many years. As such, it was questioned if the loss of revenue to the local economy has been determined - including the substitution of high income forest sector employment for low income tourist sector employment - if the forestry operations are curtailed.

The Project Report indicated that through contact with Slocan Forest Products (now Canfor) and MOF, it was determined that direct reductions in the forest land base will be approximately 100 ha, and that potential indirect reduction is negligible.

*Agency review comments*

MOF advised that the Proponent had provided an adequate assessment of impacts on harvestable timber as specified in the original information requirements. The proposed location of the resort base, at the upper end of a narrow valley, has been logged previously and the harvestable timber impact would be negligible to future industrial forestry operations. Glading for heli-ski runs has occurred in the vicinity in previous years and proposed resort runs that use either the existing gladed areas or require additional development through glading would not be a significant impact on the harvestable timber.

*Proponent response and commitments*

The Proponent agreed with MOF's comments.

The Proponent has committed:

- that there are no significant impacts on forestry local operations or the forest industry as a result of the Project (124).

*Conclusion*

Should the Project proceed, cutting approvals that may be required for Project development would address any further timber harvesting issues. The EAO is satisfied that the Proponent has identified and assessed the potential harvestable timber impacts and that those impacts will be negligible.

### **3.16.2 Forest Land Reserve (D.4B)**

*Background*

The potential effects of the removal of forest land from the Windermere Provincial Forest Land Reserve, and effects on existing forest companies and forest management, required clarification. The Specifications required documentation regarding forest land quality data (site indices, species composition forest capability; logging and replanting history; total forest land area affected by resort development and infrastructure areas; potential indirect reduction in harvestable timber volumes; and, how the adjacent forest lands are to be protected from fires started within the community, including an assessment on the potential effects to local, regional or other mills).

The Project Report (Volume 3, Section D.4(B), page D-231) describes the potential impact on the Forest Land Reserve as well as proposed measures for mitigating impacts and information on

timber values are provided in Appendix 3-H and land quality data and analysis is provided in Appendix 3-L.

Through contact with Slocan Forest Products (now Canfor) and the MOF, it was determined that direct reductions in the forest land base would be approximately 100 ha, potential indirect reduction is negligible and there would be no restrictions to forestry-related traffic using the resort access road. The only logging planned and carried out in upper Jumbo Creek in the past quarter century has been to cut ski runs and to do some glading for the heli-ski company. The ski runs would involve minimal cutting as most of the ski runs are in high alpine terrain and glaciers and the runs to the resort site have been mostly cut already by the heli-ski company. The impact on timber supply (Allowable Annual Cut) was deemed insignificant by MOF, and no restrictions on forestry related traffic using the resort access road are anticipated. Mill operations of Canfor are in the Columbia Valley. The Proponent reported that in the opinion of MOF and Canfor, there would not be any significant effect on local or regional mills or employment levels due to the Project.

*Public review comments/Proponent responses*

No comments received.

*Agency review comments*

MOF does not feel that the forest resource will be significantly impacted by the presence of the proposed resort site or runs. MOF also noted the need for a public education component to address visitor perceptions of harvesting activity and that, if the Proponent requests greater visual management, the impact could be significant in the Toby/Jumbo access corridor. Accordingly, MOF stated that, if the Project is approved, the Proponent must provide a clear indication, in writing, prior to the commencement of construction that this would not be pursued.

*Proponent response and commitments*

The Proponent agreed to provide a public education component to positively address visitor perceptions of harvesting activity and also agreed to provide, in writing prior to the commencement of construction, a clear indication that enhanced visual management along the access corridor would not be pursued by the resort in the future.

The Proponent has committed:

- to complete a Fire Protection Plan to Ministry of Forests' standards prior to commencing construction. The plan is to address, in detail, the design of the community and associated roads and emergency vehicular access, among other topics (40).
- to provide to the Ministry of Forests, prior to commencing construction, written confirmation that enhanced visual management along the access corridor will not be pursued (125).
- that there will be no restrictions to forestry-related traffic using the resort access road (126).

*Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project with respect to the Forest Land Reserve, and that the Proponent can implement appropriate measures (e.g., to written confirmation that enhanced visual management along the access corridor will not be pursued) to avoid or address any potential significant adverse effects.

### 3.17. Mineral Resources (D.5)

#### *Background*

Since 1991, there has been a no-staking reserve over the study area that precludes claims staking and there are no valid claims in the area. Some clarification of the impacts of the Project on potential mineral development in the area was required in the Specifications including: more detail on the existing no-staking reserve; current information on the mineral tenure status in the area; and whether any restrictions are envisaged for lands outside the current no-staking reserve area.

The Proponent reported (Appendix 3-T provides a map of the reserve and updates the mineral tenure information) that the size of the no-staking reserve may be reduced, while acknowledging, as required, that the Project, if approved, would entail a long term withdrawal of land from mineral exploration, with potential economic impacts. The Proponent states that they do not intend to adversely affect mining opportunities, and that it is possible for the Project and mining to co-exist.

#### *Public review comments/Proponent responses*

Concern was expressed with regard to the Project destroying access into an area where further mineral exploration could lead to many new mines and local employment opportunities.

The Proponent responded that there would be no impediment and no destruction of access for mining purposes except in the resort area.

#### *Agency review comments*

MEM indicated that it could not guarantee that views from within the Jumbo operations area would remain unaltered from exploration or mining-related activities and, with respect to the no-staking reserve placed over the proposed resort site, requested the Proponent commit to amending the existing no-staking reserve by limiting it to the resort area, and to seek a conditional tenure reserve over the rest of the CRA. MEM also indicated it would like to see the no staking reserve removed at the earliest possible date. The Proponent was requested to provide MEM, prior to commencing construction, written confirmation that enhanced visual management not be pursued from any location related to the resort.

#### *Proponent response and commitments*

The Proponent responded that mining restrictions are not requested except for the resort base area, and agreed to amend the existing no-staking reserve by limiting it to the resort area, and to seek a conditional tenure reserve over the rest of the CRA.

The Proponent has committed:

- to provide to the Ministry of Energy and Mines, prior to commencing construction, written confirmation that enhanced visual management not be pursued from any location related to the resort (127).
- to amend the existing no-staking reserve by limiting it to the resort area (128).
- to seek a conditional tenure reserve over the rest of the Controlled Recreation Area (129).
- that there would be no impediment and no destruction of access for mining purposes except in the resort area (130).
- to provide the minimum possible intrusion into mining territory and to leave open the options for future mining (131).

*Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project with respect to mineral resources and that the Proponent can implement appropriate measures (e.g., amending the existing no-staking reserve by limiting it to the resort area, and seeking a conditional tenure reserve over the rest of the CRA ) to avoid or address any potential significant adverse effects.

**3.18. Agricultural Resources (D.6)**

*Background*

Implications of the Project on agricultural resources required further reporting in the Specifications as follows: identification of any Crown land livestock grazing; identification of Agricultural Land Reserve lands or private agricultural lands in the vicinity of the Project and access roads; assessment of the impacts of the Project on these land uses; and, identification measures to mitigate the impacts.

The Proponent reported (Volume 3, Section D.6, page D-245) that the Project is not within the Crown Range Use areas for grazing, and there is no history of grazing along the access road.

*Public review comments/Proponent Responses*

There was a concern expressed that the Project would alter the historical use of the area by ranchers, as well as trappers and local recreational users. There was some concern that the proposed development would result in increased land prices region-wide which would affect the ranching communities' ability to lease or purchase land for expansion.

The Proponent responded that the design of the Project, with its reduced size and CRA, is intended not to change the historical use of the area and there has been no use by ranchers.

*Agency review comments*

MOF commented that agricultural resources per se are not considered a factor in the area.

*Proponent response and commitments*

No further response required.

*Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project with respect to agricultural resources and that the Proponent can avoid or address any potential significant adverse effects.

## **Part E          Socio-Economic and Community Issues**

### **3.19.          Socio-Economic Profile of Potentially Affected Communities and Region (E.1)**

#### *Background*

The socio-economic character of the local community and regional environment, and the First Nations community setting for project development required further assessment.

The Specifications required: a definition of the geographic area considered in assessing local and regional impacts; a demographic profile; identification of community characteristics which could be substantially changed by the Project or which may give insight on its resilience and capacity to accommodate stresses associated with the Project; an overview of the major sectors of the economy; and a profile of the local labour force and labour market conditions. A local and regional socio-economic profile of First Nations was also required.

The required information is contained in the Project Report (Volume 4, Section E.1, pages E-5 to E-6) and the Master Plan Concept (Volume 6). The study is primarily focused on the Regional District of the East Kootenay, and particularly on the Columbia Valley in Electoral Areas F and G.

The Proponent states that no substantial changes in the community characteristics discussed are expected based on the size, type and remote location of the Project. The extent of community resilience and capacity to accommodate stresses associated with the Project were derived from a comparison with the growth of Panorama Mountain Resort, which reported no significant community stress because of the resort. The Master Plan Concept also identifies cooperative activities with local First Nations, plans for First Nations employment and training, First Nations business opportunities, and the First Nations Interpretive Centre.

#### *Public review comments/Proponent responses*

No comments received.

#### *Agency review comments*

SBED commented that the definition of the area affected should be broadened to the eastern end of the Columbia Shuswap Regional District encompassing the Golden (Kicking Horse Mountain Resort) area. The Proponent was requested to review the demographic data to ensure it is reported accurately and is based on the most consistent information available. SBED agrees that it may be unreasonable to assume a major direct impact to community characteristics given the resort's size and remoteness. However, growth of backcountry recreation may be accelerated by the presence of the resort. The Proponent may wish to consider working with local social services to monitor and, if necessary, mitigate effects that may arise from young transient workers, although the resort's remoteness may limit this phenomenon. SBED noted that the Proponent's contention that the development of the resort would not add significantly to stresses on the community in terms of public services appears reasonable.

SBED was satisfied with the information provided in regard to an overview of the major sectors of the local and regional economy, and stated that from their perspective, there was no need to have the Proponent update the Project Report to incorporate new data. SBED were satisfied that the Proponent had provided the required profile of the local labour force and labour market

conditions but that the Proponent may wish to formalize an employment development strategy for local area residents, as well as consider a strategy to maximize contracting opportunities for the local/regional construction and building supply sectors.

SBED was also satisfied with the information provided by the Proponent regarding the local and regional socio-economic profile of First Nations communities, and stated that the Proponent has no obligations to undertake any further socio-economic assessment associated with this specification.

#### *Proponent response and commitments*

The Proponent agreed to provide additional information in the final Ski Area Master Plan along with figures from the RDEK Regional Profile, dated October 2003. The Proponent also agreed with the statements made by SBED in regards to community characteristics and the local/regional economy.

The Proponent indicated their intention to establish working relationships with social service agencies once the Project is approved. The Proponent also indicated that an ongoing environmental monitoring program would be initiated that would include a socio-economic monitoring component, providing an ongoing opportunity to liaise with local social services.

The Proponent also proposed an Employment Equity Plan to ensure the local population receives first priority for hiring. Meetings were held with local businesses in March and April 2004 to discuss potential opportunities.

The Proponent has committed:

- to conduct, at its own cost, annual monitoring and reporting (to Land and Water BC Inc.) of socio-economic impacts (132).
- to involve local governments in the development of the proposed monitoring plan for socio-economic benefits, and to provide them with annual reporting of results (133).
- to conduct cooperative activities with local First Nations, plans for First Nations employment and training, First Nations business opportunities, and the First Nations Interpretive Centre (134).

#### *Conclusion*

The requirements for the Proponent to identify and assess the socio-economic profile of potentially affected communities and to provide more accurate demographic population estimates (based on more recent data and information on the broader area likely to be affected by the Project) in the final Ski Area Master Plan, satisfies information requirements on the socio-economic profile of the affected communities and region.

Based on these permitting requirements and on information contained in the Project Report, the EAO is satisfied that the Proponent has identified and assessed the socio-economic profile of the potentially affected communities and region, and that the Proponent can implement appropriate measures to avoid or address any potential significant adverse effects.

### **3.20. Economic Dimensions of Project (E.2)**

#### **3.20.1 Project Capital and Operating Costs (E.2A)**

##### *Background*

The Specifications required additional reporting on the project cost estimates, including an overview or summary of revised costs, by phase, to assess the project's capital and operating costs.

The Proponent's revised project cost estimates, and redesigned Project are described in the Project Report (Volume 4, Section E.2(A), page E-8). Information on the Project's financial viability was provided to the EAO on a confidential basis. The Proponent reported that the first phase of development would have an initial capital investment of \$25 to \$40 million in equity investment, with a total investment of \$80 million. At build-out this total would be approximately \$450 million.

##### *Public review comment/Proponent responses*

No comments received.

##### *Agency review comments*

The Project Report conceptually demonstrates potential financial feasibility for the multi-phased project as presented. It assumes the base area development, infrastructure for the ski areas, demand, revenue and cost projections might be reasonable, subject to findings to the contrary. Although the financial details are not finalised, as indicated in the Project Report, it is anticipated that under the CASP review process the overall marketability, financial and technical feasibility of the Project would be assessed by an independent consultant.

##### *Proponent response and commitments*

The Proponent has committed:

- to providing the following additional information as part of the Ski Area Master Plan planning process: economic viability (break even analysis) projections with targets for warm and employee beds, comfortable carrying capacity, road costs, market absorption of land projections, net lift ticket value, and partial capital investment for utilities. In addition, the Proponent will supply information on detailed capital costs for different operating department equipment and snow removal operating costs, and illustrations of 'off years' with a higher revenue loss and operating savings, if required by Land and Water BC Inc. This information will be provided in confidence to Land and Water BC Inc. (32)

##### *Conclusion*

Based on:

- LWBC's commitment to require the Proponent to provide additional information on Project feasibility to its satisfaction as part of the Ski Area Master Plan planning process;
- the Proponent's commitment to provide additional information; and
- SBED advice that questions raised about the feasibility of the Project can be dealt with as part of the Ski Area Master Plan process with further information being provided to support the assumptions upon which the current conceptual feasibility is based.

The EAO is satisfied that most concerns related to the capital and operating costs have been addressed and that any outstanding concerns/questions can be addressed as part of the Ski Area Master Plan planning and approval process.

### **3.20.2 Employment and Income Creation (E.2B)**

#### *Background*

The potential implications of Project development for job creation and personal income generation required further reporting.

The Specifications required additional employment information (e.g., direct jobs, employment income, etc.) and information to address seasonal employment issues (i.e., the extent to which the Project could reduce the incidence of seasonal employment and in-migration of temporary workers).

The information reported on in the Project Report (Volume 4, Section E.2 (B), page E-13) states that the number of direct jobs estimated at build-out is 750 people and seasonal employment of between 50 and 100 people. Information on average weekly earnings was provided along with a commitment that specific job and wage details would be worked out of the operations management stage. The Proponent also proposes an educational/training support program for resort employees.

#### *Public review comments/Proponent responses*

No comments received.

#### *Agency review comments*

SBED confirmed that the Proponent had provided the required information but expressed concern that information on in-migration does not consider proximity to Calgary, that the projected level of seasonal employment is understated, and that a more comprehensive explanation regarding the seasonal employment percentage of total operations employment should be considered. SBED noted that documenting the assumptions used and providing a comparison with other industry operations would be of particular value for fully understanding this aspect of the proposed operation. As the level of seasonal employment proposed is potentially understated, SBED suggests that the Proponent consider the development of a mitigation strategy for seasonal employment issues, should there be a change in the circumstances upon which the employment estimates are based. In considering the seasonal employment issue during the permitting process, SBED would assist in developing the format for a mitigation strategy should such a strategy be deemed necessary.

#### *Proponent response and commitments*

The Proponent stated that a new format for presenting the construction and operations phase job information will be developed and will be more specific where possible and that seasonal employment will be confirmed and, if changed, will be reflected in other portions of the report in order to maintain consistency.

The Proponent has committed:

- to employment policies and programs with a focus on training and equity employment for locals and First Nations (135).

- to an education/training support program for all resort employees to cross-trade skills enhancement and assist with year-round employment opportunities (136).

### *Conclusion*

The permitting requirement to provide a more comprehensive explanation regarding the seasonal employment percentage of total operations employment will satisfy the requirements for the Proponent to provide employment information that will address seasonal employment issues.

Seasonal employment issues will also be addressed by the permitting requirement to provide a mitigation strategy for seasonal employment issues, should it be deemed necessary, during the finalisation of the Ski Area Master Plan.

Based on these permitting requirements, the EAO is satisfied that any remaining concerns with respect to employment and income creation can be addressed as part of the Ski Area Master Plan planning and approval process.

## **3.21. Enhancing Local Socio-Economic Benefits (E.3)**

### *Background*

The enhancement of the Project's local socio-economic benefits include: issues that cover opportunities for enhancement of local benefits; the need to address specific possibilities, such as local hiring and training; and opportunities to increase the benefits to affected First Nations communities.

The Specifications required additional information in order to assess the potential scope of local socio-economic benefits.

In the Project Report (Volume 4, Section E.3, pages E-17-18), the Proponent explained that preference will be given to local recruitment of employees, as is done at the Fairmont, Panorama Mountain Resort and Kicking Horse Mountain Resort and that there would likely be an even distribution of employees between the local, regional, and in-migration categories of the work force. It is also anticipated that a new resort would create more and better opportunities for the local work force. Training opportunities and skills upgrading programs for employees are under discussion.. Information on the proposed employment policies and programs are included (Section 6.3.3.7 of the Master Plan Concept) along with statistical and other data.

### *Public review comments/Proponent Responses*

A number of local residents commented on the social and economic benefits that could be derived from bringing a year-round resort to the area including the employment opportunities for the local residents and the increases in the tax base that would contribute to the overall local economy. The need for sustaining the local economy was also of interest to the Invermere business community.

Concerns were expressed over the perceived lack of benefits to the region and British Columbia along with fears about foreign investment. A concern was raised that Invermere would experience increased costs for infrastructure and road maintenance without the benefit of revenues from the Project. There was concern expressed that the jobs would be mainly minimum wage seasonal jobs and that students would not be able to take advantage of them.

The Proponent responded by stating that the Project could benefit the region and the Province, and that investment opportunities were open to all interested parties, not just foreign investors. The Project, and its utility company, would construct and pay for its own infrastructure. Invermere would not be required to provide any municipal or utility services, but would have the opportunity to provide a variety of services generating employment. The Proponent disagrees that most of the jobs resulting from the Project would be minimum wage. The Proponent further articulated that Panorama Mountain Resort has proven that businesses from other nearby resorts would not be lost.

*Agency review comments*

SBED commented that the Proponent has provided the required information for this specification.

*Proponent response and commitments*

The Proponent has committed:

- to develop an Employee Equity Program (Appendix 4E, Volume 4 of the Project Report) with a goal of 5% aboriginal employees at the resort (13).
- to develop an education/training support program in proportion with the size of each phase of the Project (14).
- to make bona fide efforts to develop a joint training program with the International Union of Operating Engineers in proportion with the size of each phase of the Project (15).
- to make reasonable efforts to use qualified First Nation subcontractors (16).
- to employ, as part of the assignment for the First Nations Interpretive Centre, a qualified aboriginal person in a key role. This individual will also monitor First Nation employment programs (18).
- to work with interested First Nations to develop a comprehensive Employment Development Program, which targets skill and job readiness training for youth, adults, and potential entrepreneurs/small business owners in the tourism sector, using the proposed resort, Panorama Mountain Resort and R.K. Heli-Ski Panorama Inc. as partners, to the extent that they are willing participants (19).
- to provide job training opportunities within the resort for all training programs in proportion with the size of each phase of the Project (20).
- that regional tourists will be given preference with a substantial discount on lift prices (137).
- to establish training opportunities that will have long term benefits and impacts (138).
- to develop an Employment Equity Program that provides assurances that all efforts possible will be made to ensure that First Nations and local residents are given priority of hiring at all levels (139).

*Conclusion*

Based on information and commitments provided, the EAO is satisfied that the Proponent has identified and assessed the potential local socio-economic benefits and that appropriate measures can be implemented to avoid or address any potential significant adverse effects.

### **3.22. Economic Development Impacts (E.4)**

*Background*

The Project's economic development impacts required further assessment. The Specifications required an assessment of the potential economic impacts of the Project, taking into consideration the following factors:

- the nature of the Project and the goods and services to be purchased for resort construction and operation;
- any information on bidding opportunities expected for local businesses arising from construction and operation;
- information and awareness of local suppliers and community economic development interests;
- information on business opportunities which might be available at the resort;
- the degree of support from businesses that may have noted development opportunities arising from the Project;
- examples of how other similar-sized resort developments have spurred development in local areas; and
- specific examples of how publicity over the Project has already generated initiatives in the area.

The Project Report (Volume 4, Section E.4, page E-21) indicates that the opportunities presented by the Project are outlined in the Master Plan Concept and that the types and volumes of goods and services to be purchased for resort construction and operation are the same as those for Panorama Mountain Resort and Kicking Horse Mountain Resort. Nearly all of the suppliers and contractors that would be needed for construction and operation are available in the Columbia Valley due to the existing activity in forestry, tourism and construction. The Proponent replied that information on bidding opportunities for local businesses and suppliers can only be provided after the Project is ready to start.

Commercial and retail space and types of opportunities are outlined in Volume 4 (Section 4.3.6) of the Master Plan Concept.

In addressing the Specification regarding the ability of the Project to spur interest in the Columbia Valley, the Proponent refers to the interest in economic activity generated by the Kicking Horse Mountain Resort in its surrounding area.

*Public review comments/Proponent responses*

A number of local residents expressed concern with the development of such a large resort that would not, in their opinion, generate significant local economic activity and/or benefit. There was concern that the proposed Project would lead to further development in the Jumbo area. There was some interest expressed in ensuring that the proposed resort utilised and purchased “Canadian” materials, equipment, supplies and goods for the construction and operational phases.

It was perceived that the current funding formula for regional district services is already inadequate to meet seasonal peak demand for services. It was further noted that this type of development demands a major investment in infrastructure and commitment to ongoing maintenance.

The Proponent responded that the Ski Area Master Plan and MDA would ensure that the area is not negatively impacted by real estate subdivisions and further expansion. These documents, together with other government laws and regulations, outline the types of further development that will or will not be permitted. The Proponent states that foreign interests would not compromise Canadian heritage, and the only restriction on use of the area is the required purchase of a lift ticket.. The Proponent responded that the Project is designed to generate economic benefits without significant environmental impacts.

*Agency review comments*

SBED agreed that it may be premature to require information on bidding opportunities for local businesses. Regarding information and awareness of local suppliers and community economic development interests, SBED said that information listing possible local suppliers would be useful and that this could be addressed as part of the finalisation of the Ski Area Master Plan. The Ski Area Master Plan should provide specific documentation by development phase of the types and volumes of goods and services to be purchased and a detailed listing of contracting and supplier opportunities with projected scheduling, as well as general terms and conditions for bidding on such opportunities.

*Proponent response and commitments*

The Proponent stated that community awareness of the Project has been well documented, as have meetings with local community economic development interests. Information on local suppliers is provided in the Master Plan Concept (Section 6.2) with reference to Panorama Mountain Resort's expansion activity. While a comprehensive list of possible contractors and suppliers are typically not assembled in the conceptual planning and approval stages, a list has been compiled and will be provided on request, and will be referenced in the final Ski Area Master Plan.

The Proponent has committed:

- to provide information on bidding opportunities expected for local businesses arising from the construction and operation of the project in the Ski Area Master Plan under the Commercial Alpine Ski Policy (140).
- to provide information on local suppliers and community economic development interests in the Ski Area Master Plan under the Commercial Alpine Ski Policy (141).

*Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on economic development impacts. The Proponent will provide specific information requirements (e.g., a detailed list of contracting and supplier opportunities) to SBED during the finalisation of the Ski Area Master Plan. Any unanswered questions can be addressed as part of the CASP process.

### **3.23. Recreation and Tourism Impacts (E.5)**

#### **3.23.1 On-site and Adjacent Outdoor Recreational Use (E.5A)**

*Background*

The implications of the Project for existing outdoor recreation opportunities, and the changes in outdoor recreation patterns from the Project required further assessment. Specifically, recreational information conforming to MOF standards, a description of established outdoor recreational use and patterns of use in the Project area, a map and description of new opportunities, and an assessment of the significance of displaced or altered activities were required. In addition, use and impacts of new hiking trails (accompanied by conceptual mapping) and new recreational uses (on wildlife, vegetation, and visual aesthetics) were required along with remedial strategies.

The information (Volume 4, Section E.5(A), pages E-30 - E-37, and Volume 2 of the Master Plan Concept) indicates that:

- the existing recreational use in the Project area is hiking in Jumbo Pass accessed from a logging road, primarily in summer, and helicopter skiing in winter;
- snowmobiling is not permitted in the area because it would interfere with heli-skiing;
- summer hiking in the Jumbo Pass area would continue unaffected by the Project;
- the level of current hiking activity in the area is very low;
- the area is also generally impassable for horseback riding or mountain biking due to the forestry debris;
- ski touring would conflict with existing heli-skiing;
- the Project has been designed to avoid any potential impacts on recreation in the Lake of the Hanging Glacier, Jumbo Pass, Monica Meadows, and the Purcell Wilderness Conservancy;
- the planned recreation for the area is skiing and sightseeing from the top terminals of the lifts;
- a single hiking trail is proposed;
- the EMP addresses construction of the trail to mitigate any impact; and
- the Project policy is to emphasize containment of visitors in the CRA to avoid safety issues with the rugged backcountry terrain.

*Public review comments/Proponent responses*

Considerable concern was expressed related to possible motorized access closures in adjacent drainages (e.g., Monica Meadows) to mitigate Grizzly bear impacts for the Project, especially, on other commercial and recreational users. Future access and encroachment on other adjacent recreational areas, such as Lake of the Hanging Glacier, Glacier Creek and Jumbo Pass were also of concern to many respondents from the West Kootenays. Many respondents voiced reservations regarding the loss and destruction of their wilderness experience and concerns that the size of the proposed development is not complementary to the area's existing natural strengths and character (i.e., its "greatest economic asset"). A belief was expressed that tourists, particularly Europeans, and local residents use this area as an alternative to commercial resort development and that a commercial resort would have a negative visual impact.

The Proponent responded that degradation would be prevented, and that road closures would not be utilised to restrict access.

*Agency review comments*

SRM requested that the Proponent prepare a socio-economic assessment of the impacts to timber, mining, trapping, guide-outfitting, commercial recreation and public recreation, if motorized closures are proposed to mitigate impacts to Grizzly bears.

MOF commented that adjacent drainages in the East and West Kootenays provide vehicular access to highly popular public hiking trails and trailheads. Accordingly, vehicular travel restrictions to mitigate Grizzly bears, especially in the Horsethief, Farnham, Toby and Glacier Creek drainages, would have severe negative impacts on public recreation opportunities at any time of the year.

The RDCK submitted a Board resolution that motorized access closures for mitigation of Grizzly bears is unacceptable.

### *Proponent response and commitments*

The Proponent reiterated that the proposed mitigation does not include restrictions to motorized access in adjacent drainages and that the mitigation proposed in the Grizzly Bear Management Plan would be adequate (see section 3.15.3).

The Proponent has committed that:

- that motorized closures will not be proposed by the Proponent (142).
- to establish only one hiking trail from the resort area (to Glacier Dome). Hiking outside the trail will be discouraged (143).
- to remove the Master Plan proposal to offer the use of Glacier Dome as a heli-hiking departure point (144).
- that the Project will not enter into any agreements for heli-hiking or heli-sightseeing, guided hiking, biking, or other motorized or non-motorized recreational activities, with the exception of agreements with R.K. Heli-Ski Panorama Inc. and the existing guide/outfitter, without Land and Water BC Inc.'s approval (145).
- to monitor, at its own cost, unsupervised public recreational use (including use by resort construction and operations employees, resort visitors and resort residents) and other use of roads which link to Highway #95 at Invermere. This monitoring will be undertaken before construction, during initial construction (i.e., prior to commercial scale resort operations), and during commercial-scale operations. Monitoring results will be reported to the Ministry of Water, Land and Air Protection Regional Manager (Environmental Stewardship) (146).

### *Conclusion*

The nature and extent of the on-site and adjacent outdoor recreational use, especially within the Jumbo Creek valley, may evolve and expand should the Project proceed. Based on the Proponent's commitments (e.g., not entering into agreements for recreational activities without Land and Water BC Inc.'s approval, consulting with the KKTC and the Shuswap Indian Band before entering into any agreements for recreational activities within the CRA, monitoring unsupervised public recreational use) and reasonable measures proposed to limit impacts to the area defined by the CRA and to reduce impacts to recreational uses of adjacent areas to the extent possible, along with the regulatory requirement of LWBC to manage (and consult on) future tenures, the EAO is satisfied that appropriate measures can be implemented to manage outdoor recreation uses in a manner consistent with the prevailing land use designation of the project area and to address any potential significant adverse effects.

### **3.23.2 Use of Purcell Wilderness Conservancy Provincial Park (E.5B)**

#### *Background*

The implications of the Project on existing use of the Purcell Wilderness Conservancy (PWC) required further assessment. Specifically, a characterisation of the type and number of clients the resort would attract, the associated demographics, as well as other types of proposed recreational activities was required.

The information provided (Volume 4, Section E.5(B), pages E-41 - E-42, and Volume 6 of the Master Plan Concept) indicates that the type of client is similar to those who would typically stay at the Chateau Lake Louise or the Post Hotel in Banff National Park and that the number of visitors at full build-out on a high season day is expected to be approximately 3,500 people, of which, 80% would be skiers. Sightseers would be urban tourists who would not likely venture outside the CRA.

*Public review comments/Proponent responses*

A number of respondents were concerned that this Project would adversely impact on the PWC as a protected area.

The Proponent responded that the PWC is not accessed from Jumbo Creek and would not be jeopardized.

*Agency review comments*

The EAO notes that the nearest boundary of the PWC is at least 10 km away from the proposed resort boundary.

*Proponent response and commitments*

The Proponent has committed to discourage hiking outside the Controlled Recreation Area, and in particular, hiking outside the hiking trail from the resort area to Glacier Dome (147).

*Conclusion*

Based on the fact that the nearest boundary of the PWC is at least 10 km away from the proposed resort boundary and that the PWC is not accessed from Jumbo Creek, the EAO is satisfied that the Proponent has identified and assessed the implications of the Project on the use of the PWC and that appropriate measures can be implemented to avoid or address any potential significant adverse effects.

**3.23.3 Visual Impacts of Development (E.5C)***Background*

The visual quality implications of the Project required further assessment. Specifically, information and an assessment on scenic values and visually sensitive areas were required.

The information provided (Volume 4, Section E.5(C), pages E-47 - E-49, and Appendix 4-A) indicated that road improvements would not have a significant effect on the viewscape since the access and transmission line route follows the existing road. The most sensitive area for scenic values and viewing opportunities are the Lake of the Hanging Glacier and Commander Glacier. Digital terrain modelling, conducted in accordance with MOF standards, indicates that no part of the resort can be seen from the drainage of the Lake of the Hanging Glacier.

Additional reasons for concluding that visual impacts would not be significant include:

- vegetation clearing and grading would be minimal (runs have previously been gladed);
- ski lifts on large mountain settings do not have a significant visual impact;
- no visual exposure from any part of the area outside of the CRA except limited exposure from the southern crest of the Leona Creek drainage (distance of more than five km) and the lower section of the Jumbo Pass trail.

*Public review comments/Proponent responses*

The potential viewing of a ski resort, including the gondolas, buildings, and parking lots in the pristine wilderness was of concern to a number of respondents.

The Proponent responded that the resort would have minimal visual exposure from any part of the area outside of the CRA, and nothing in the Jumbo Creek drainage can be seen from outside the drainage.

*Agency review comments*

SRM noted that the required information was provided and that there would be very limited impact to the visual resources of the area.

*Proponent response and commitments*

The Proponent has committed:

- to the visual mitigation and scenic enhancement measures identified in the Visual Impact Assessment (148).

*Conclusion*

Based on information and commitments provided, the EAO is satisfied that the Proponent has identified and assessed the potential visual quality implications of the Project and that appropriate measures (e.g., visual mitigation and scenic enhancement) can be implemented to avoid or address any potential significant adverse effects.

### **3.23.4 Noise Impacts of Development (E.5D)**

*Background*

Potential noise impacts of the Project on the wilderness experience of outdoor recreational users required further documentation. Specifically, information and an assessment about impacts from noise were required.

The information provided (Volume 4, Section E.5(D), page E-49) indicates that noise is limited to the drainage in which it is generated with the exception of limited helicopter noise. The Proponent stated that limiting vehicular traffic and the use of electric lifts are among the measures taken to minimize noise impacts in mountain resorts.

*Public review comments/Proponent responses*

Concerns were expressed that there would be significant noise and light impacts on the neighbouring backcountry areas with the development of a resort.

The Proponent stated that noise would be confined to vicinity of the resort and the drainage in which it is located.

*Agency review comments*

Applicable noise control requirements in relevant employment standards legislation should be sufficient to deal with employee exposure to noise, while, if the Project proceeds, RDEK would have the option to regulate community noise issues in the proposed resort area by means of a noise bylaw.

*Proponent response and commitments*

The Proponent has committed to limiting vehicular traffic and the use of electric lifts to minimize noise impacts (149).

### *Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential noise impacts of the Project and can implement appropriate measures (e.g., vehicular controls, electric lifts) to minimize any potential significant adverse effects.

### **3.23.5 Commercial Tourism – General Context (E.5E)**

#### *Background*

The size of the resort and its winter and summer products in relation to other nearby tourism facilities required further assessment. Specifically, information describing the size of the resort (total skiable area, lift capacity, visitor and resident accommodation) relative to other ski resorts in western Canada and summer tourist products was required. In addition, the implications of the project on other tourist products in Invermere, Radium and Fairmont areas required assessment.

The required information was provided in the Project Report (Volume 4, Section E.5(E), pages E-58 - E-79) and the Master Plan Concept (Volume 4). The Project Report concludes that the Project would have a beneficial effect on other tourist products in the region as there is an oversupply of winter accommodation and the Project would attract more people to the area in winter.

#### *Public review comments/Proponent responses*

A number of concerns were raised in public submissions, including:

- the size of the Project does not reflect or balance with the local values and interests;
- the Project would affect the viability of another ski development in the region;
- the government should focus more on the preservation of the wilderness areas and continue to promote eco-tourism as a revenue generator;
- environmental sustainability of the region should be a priority;
- the long-term provincial tourism strategy could potentially fail if not matched with a long-term province-wide wildlife management plan;
- the Project could seriously impact existing businesses in the region (e.g., R.K. Heli-Ski Panorama Inc.) and consequently damage the provincial business climate by impacting the stability of existing land tenures;
- the revenue generated from the Project would not be realised by the affected communities;
- a recreational cumulative effects assessment should be undertaken to determine the feasibility of this development; and
- other recreational areas may have to be closed to mitigate the impacts of the Project.

The Proponent responded that the size of the resort is relatively small (less than one-tenth of Whistler) and has been carefully designed to provide all necessary balances. The Project is also distinct from the lift access skiing at nearby resorts such as Panorama Mountain Resort who have confirmed their support for the Project. The Proponent also felt that the Project did not undermine the status of existing tenures, that unlimited expansion of eco-tourism may itself be unsustainable, and that the Project may contribute beneficially to increased use of the Cranbrook Airport and of the tourist facilities nearby.

### *Agency review comments*

MOF commented that guiding and outfitting currently occurs in the vicinity of the resort under an existing range tenure, and would be impacted by the resort by an undetermined level. MOF requested the Proponent commit to work with the existing guide/outfitter to minimize impacts and to explore opportunities to expand and enhance their business.

SBED stated that:

- the Proponent has provided the required information;
- the current experience in the region with other resorts indicates that such developments result in additional business opportunities for complimentary services in the hospitality/accommodation sector and for additional tourist product offerings;
- it agrees with Panorama Mountain Resort's comments that the Project would improve the performance/marketability of Panorama Mountain Resort and other ski resorts in the area;
- data for the Kootenay region show that skier visitation has grown from 625,732 skier-days in the 1993/1994 season to 996,345 skier-days in the 2001/2002 season;
- it is unrealistic to suggest that there is surplus capacity or that the proposed resort would have an adverse impact on filling that capacity (most major ski resorts require 20 to 30 years to achieve their target build-out capacity for bed units and skier-days and the majority of ski resorts in the East Kootenay are relatively new, having been converted from community ski hills in the past five years);
- while the potential for impacts on some backcountry tourism businesses and the reduction in revenue from independent travelers who focus on backcountry travel does exist, the impacts would be dependent upon how access management for addressing conservation values unfolds in the future and it is difficult to assess the net effects at this time; and
- the Proponent should work closely with the local tourism and recreation community in the development of a plan for ensuring that conservation values are maintained while minimizing potential impacts to other user groups of the area.

### *Proponent response and commitments*

The Proponent has committed:

- to work with the existing guide/outfitter to minimize impacts and to explore opportunities to expand and enhance their business (150).
- to work closely with the local tourism and recreation community in the development of a plan for ensuring that conservation values are maintained while minimizing potential impacts to other user groups of the area (151).
- continue to offer cooperation to Panorama Mountain Resort Ltd., the R.K. Heli-Ski Panorama Inc., and other tourism operators (152).

### *Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on commercial tourism in the area and can implement appropriate measures (e.g., work with the local tourism and recreation community and guide/outfitter) to avoid or address any potential significant adverse effects.

### 3.23.6 Commercial and Non-commercial Fish and Wildlife Recreation (E.5F)

#### *Background*

The impacts of the Project on guide outfitting, trapping, and non-commercial hunting and fishing required further documentation. Specifically, an assessment of the anticipated impacts of the Project and the need to impose firearms closures and other types of hunting restrictions was required.

The information provided (Volume 4, Section E.5(F), pages E-84 - E-87) indicates that hunting and discharge of firearms, and trapping, would be restricted within a half a kilometre of the base area. While the Proponent notes that the resort site is located around an old sawmill site and is not noted as a major hunting area, it has also noted difficulties of obtaining accurate information on hunting in the region (Appendix 4-H provides hunting data for Grizzly bears). The Proponent also indicates that there is no fishing in upper Jumbo Creek and histories of the Mineral King Mine site reported that the upper Jumbo Creek has low fishing and hunting values. In addition, the area has had a considerable amount of human intrusion (e.g., sawmill, mine, road, and trail).

Consultation with the licenced guide/outfitter indicated that 200 ha of the overall 10,000 ha guide/outfitter hunting territory would be restricted by the Project. The guide/outfitter reported that the Project could increase business in other areas such as sleigh rides and trail rides and the Proponent expects that the exposure to a larger clientele would offset any losses to the guide/outfitter due to the small area of closure. The licenced trapper in the area was also contacted. Trapping has never appeared to be active in the area of closure.

Since firearms closures would apply in the summer and fall seasons only to the area of the operating lifts in the upper portion of the glaciers, no significant effect is expected on productive hunting territory. Public use and enjoyment of wildlife will be enhanced in the Jumbo valley due to a safer road. The significant reduction in size of the proposed CRA has resulted in an area that was of greater interest for hunting being removed from the CRA.

#### *Public review comments/Proponent responses*

Concerns were expressed that measures to mitigate for Grizzly bears lost within the resort area would reduce hunting opportunities in adjacent drainages. Concern was also expressed for the existing low impact backcountry businesses that may be negatively impacted by this proposed development and that guide/outfitting and trapping tenures would be undermined.

The Project Report states that the opportunities for hunting Grizzly bears in the 200 ha resort area are limited, as it is an area of existing human intrusion from the sawmill, road and recreational use. The Proponent responded that there is no plan to undermine the stability of existing tenures and that the opportunity may exist for backcountry operations to expand their client base from resort clientele.

#### *Agency review comments*

WLAP commented that there appears to be a reasonable requirement for the Proponent to discuss accommodation with the trapper who might be affected by the Project. A trapper notification and compensation program has been in place since 1994 that provides for compensation to trappers for having to move traps, build trails and replace damaged equipment or fur. WLAP is currently completing a guidebook on conflicting tenures.

### *Proponent response and commitments*

The Proponent has committed:

- to limit skiing to the higher portions of the glaciers during the summer and fall hunting seasons (153).
- to allow most of the Jumbo Creek drainage to remain available for access and for hunting except for a permanent firearm closure requested for a half a kilometre around the resort base, a firearm closure in the Controlled Recreation Area in winter, and closures in the area of operating lifts (154).
- to future cooperation with local First Nations, the local rod and gun club, the guide/outfitter and other organizations and individuals who have an interest in hunting (155).
- to make reasonable efforts to consult with holders of existing trapline tenures within the Controlled Recreation Area, and to provide reasonable accommodation of trapping interests in accordance with provincial program objectives (156).

### *Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on guide outfitting, trapping and non-commercial hunting and fishing and can implement appropriate measures (e.g., to cooperate with organizations and individuals who have an interest in hunting and to make reasonable efforts to consult with holders of existing trapline tenures within the CRA) to avoid or address any potential significant adverse effects.

### **3.23.7 Implications for R.K. Heli-Ski Panorama Inc.'s Operations (E.5G)**

#### *Background*

If approved, the Project would occupy approximately 4% of the 144,000 ha of land currently used for heli-skiing by Radium Hot Springs Glacier Skiing Ltd. (trading name - R.K. Heli-Ski Panorama Inc.). R.K. Heli-Ski Panorama Inc.'s (R.K. Heli-Ski) base is located adjacent to Panorama Mountain Resort, approximately 18 kilometres from Invermere, along the same access corridor to the proposed resort site. R.K. Heli-Ski operates under a Licence of Occupation, renewed on December 2, 2001 for twenty years.

The issue of competing tenure interests arises because R.K. Heli-Ski has a Licence of Occupation which grants non-exclusive surface rights for heli-skiing purposes. Overlapping tenures are common on Crown lands throughout the Province as the government strives to achieve the highest and best use from a provincial resource. In such situations, the government seeks a reasonable agreement that would meet the needs of all parties on the use of lands and resources.

The issues under consideration are: the impact the proposed Project may have on R.K. Heli-Ski's operations (e.g., the loss of skiable terrain in R.K. Heli-Ski tenure) and its implications; and how the situation will be addressed).

In its Application, the Proponent (Application Vol. 2, page 176) maintained that resort development could have some beneficial effects on R.K. Heli-Ski's operations. However, in response to the Application, R.K. Heli-Ski identified the following concerns (September 15, 1995):

- loss of skiable terrain (especially the northern exposures of Commander and Farnham Glaciers);
- uncertainty about whether or not MOF will allow new runs to be cut to replace lost runs;

- uncertainty about whether or not MELP will accept the consequential additional habitat disturbance;
- the fact that all consideration of future planning is on hold while the Project is under review (e.g., a 55-room lodge at the base of Mount Bastille);
- loss of client wilderness experience;
- uncertainty about whether or not West Kootenay environmental interests will object to relocation of heli-ski activity to the Glacier Creek area; and
- uncertainty about whether or not heli-ski investigative permits for Glacier Creek and near Yahoo Creek will be reinstated.

During the EA review, the EAO commissioned an independent third-party assessment by Brent Harley and Associates. The Proponent was also invited to document its views on the potential impacts of its Project on R.K. Heli-Ski's operations in its Project Report.

On November 15, 1999, Brent Harley and Associates Inc. submitted a report entitled *Implications Assessment of the Proposed Jumbo Glacier Alpine Resort for R.K. Heli-Ski Panorama Inc.'s Operations*. Brent Harley and Associates Inc. concluded that: over the long term, economic heli-skiing operations would not be possible and at best, a fair weather heli-skiing operation might be able to co-exist with a lift-serviced ski resort; and, that there is no available replacement terrain of a similar size and nature to that which would be lost.

The Proponent questioned the facts, methodology and conclusions of the Brent Harley and Associates Inc. report (June 24, 1999) and indicated that there were incorrect operational assumptions made, that the usage of the Jumbo area was overstated and that the inability to access Glacier Creek during bad weather was debatable. In its Project Report (Volume 4, Section E5(G)) and Master Plan Concept (Volume 6, Section 6.3.7) submitted on December 30, 2003, the Proponent identified ways that R.K. Heli-Ski's concerns could be accommodated. These include: a proposed location for a new heli-ski operations and a lodge in Jumbo Creek (cost saving and on-site weather forecasting) and a willingness to cooperate with R.K. Heli-Ski to enhance its business. The Proponent also expressed the view that the expansion of R.K. Heli-Ski's tenure into Glacier Creek in 1996 was related to mitigating R.K. Heli-Ski for the potential loss of tenure to the Project.

#### *Public Comments*

The EAO received many comments on this issue that included the following concerns:

- displacement of an established business;
- effects on the economy of undermining the stability of existing tenures;
- R.K. Heli-Ski's business being less invasive and less limiting on other recreational activities;
- unfairness of revoking an existing tenure in the hope of gaining greater employment; and
- R.K. Heli-Ski be given adequate compensation for their losses.

R.K. Heli-Ski submitted an extensive response to the Project Report which raised, among other things, the following concerns, if the Project was approved:

- inability to operate and ultimately be put out of business;
- 60% of R.K. Heli-Ski's winter business is conducted in the Jumbo Valley and Farnham Glacier area for "flight/ski safety reasons, terrain and snow pack";
- R.K. Heli-Ski does not wish to relinquish its terrain; and
- R.K. Heli-Ski's plans to expand its business would not proceed.

The EAO also received correspondence from ski industry representatives and organizations. They expressed the importance of respecting existing tenures and dealing with them fairly. Accordingly, they recommended that the Proponent:

- be required to change the Project to come to compliment existing helicopter usage;
- post sufficient security to remove impacts if the Project fails; and
- come to an agreement with R.K. Heli-Ski on how they can mutually benefit and accommodate R.K. Heli-Ski for any residual infringements on its rights.

During the Project Report review period, the EAO and LWBC encouraged the Proponent and R.K. Heli-Ski to attempt to reach a mutually beneficial understanding. Those discussions were unsuccessful and resulted in the Proponent offering to purchase R.K. Heli-Ski if the Project were approved. R.K. Heli-Ski responded that the business was not for sale.

#### *Agency Comments*

LWBC is the lead government agency for this issue as they would be responsible for issuing a tenure for the Project. LWBC indicated their intention to deal with the impacts to R.K. Heli-Ski interests fairly. LWBC has stated that the Overlapping Tenure Policy applies only to new commercial recreation applications within existing commercial recreation tenured areas, is not retroactive and does not apply to applications for ski resorts (such as this Project), which fall under CASP (July 30, 2003 response to R.K. Heli-Ski). The Overlapping Tenure Policy for commercial recreation would not have applied to the Project in any case since the policy is not retroactive and this Project has been under review since 1991.

Overlapping tenures are common on Crown lands throughout the Province as the government strives to achieve the highest and best use. In this case:

- R.K. Heli-Ski's revenue to LWBC (based upon skier visits) is approximately \$10,000 - \$12,000/year and R.K. Heli-Ski employs approximately 75 people full or part time.
- the annual revenue from the Project from skier visits in Phase 1 (years 1-4) is estimated at an average \$139,000/year and at full build-out (year 20), approximately \$700,000/year. In addition, revenue to the Crown from land sales, assuming 50% sale of the 104 ha, is estimated to be \$1,500,000 for Phase 1. The Project's economic impacts also include an estimated capital investment of \$450M and 750 to 800 full-time jobs.
- ski resorts and heli-skiing operations are not necessarily mutually exclusive and may provide beneficial synergies for each other (e.g., Whistler and Kicking Horse Resorts are two examples where ski/heli-ski synergies appear to benefit both parties).

#### *Proponent response and commitments*

The Proponent noted that the Project would take only a small percentage of R.K. Heli-Ski's tenure and that there were several potential mitigation measures that could be taken to prevent or reduce potential adverse impacts on R.K. Heli-Ski, including:

- R.K. Heli-Ski establishing a base area in the Jumbo Creek drainage that would help with weather and safety concerns, provide an expanded clientele base and allow for shorter flights to some of the areas under its Licence;
- R.K. Heli-Ski's use of its runs in Leo and Leona Creek drainages for bad weather skiing;
- R.K. Heli-Ski's use of the Glacier Creek area, previously added to their tenure in 1996;
- the Proponent developing areas dedicated to bad weather heli-skiing in most of the upper Jumbo Creek; and
- the Proponent cooperating with any of R.K. Heli-Ski's expansion plans.

Following unsuccessful attempts to resolve the issue with R.K. Heli-Ski, the Proponent has committed:

- to allow R.K. Heli-Ski to operate inside the proposed Controlled Recreation Area subject to safe and reasonable management precautions; and
- to indemnify the Province in the event that a fair compensation package is required.

#### *Additional Assessment Considerations*

Given the disagreements over the impacts to R.K. Heli-Ski, the amount of skiable terrain potentially lost, and the need to provide advice to Ministers, the EAO engaged an independent consultant, Sierra Systems, to review and determine the significance of the potential impacts to R.K. Heli-Ski (i.e., lost heli-ski terrain and logistics of managing its operations) and the degree to which mitigation measures reduce or eliminate those potential impacts. Sierra Systems was also asked, in the event there might be residual impacts, to help the Province understand how those potential impacts might be quantified.

Sierra Systems looked at the pattern of R.K. Heli-Ski's terrain usage from 1986 to 2004 and reported that based on R.K. Heli-Ski's figures, the Jumbo Valley was used sporadically prior to 1990. In 1990/91, R.K. Heli-Ski's usage of Jumbo Valley shifted dramatically "from 2.4% of volume in 89/90 to 65% of volume in 93/94." Sierra concluded that "while the Brent Harley and Associates (BHA) study correctly signals that the majority of RK's recent operations occur in the Jumbo Creek area, it is clear that the BHA study neglects to identify or effectively analyze historic management plans, terrain usage documents and correspondence critical to assessing the impacts on RK's operations accurately."

Sierra Systems advised that:

- No material impact is expected to occur to R.K. Heli-Ski's operations because R.K. Heli-Ski has reasonable opportunities to mitigate impacts by making better use of other regions of its tenure, in particular Glacier Creek (the latter described by R.K. Heli-Ski, in its application to LWBC for additional tenure, as providing excellent snow conditions and bad weather wind accessibility); and
- While the Project may result in some disruption to R.K. Heli-Ski's operations, a compensable impact is unlikely to occur especially with Proponent commitments to mitigate the disruption to R.K. Heli-Ski's operations.

The Proponent and R.K. Heli-Ski have been given the opportunity to review the Sierra Systems report and to provide comments to the EAO by August 13, 2004. Any comments received from the Proponent or R.K. Heli-Ski will be included in the consideration of the Proponent's Application.

#### *Conclusion*

The issuance of a tenure to the Project by LWBC will create a competing tenure situation to enable the "highest and best use" of the proposed CRA.

In the event that the Project is approved, LWBC would proceed with the review and finalisation of the Ski Area Master Plan and MDA. At that point, if R.K. Heli-Ski claimed harm to its business, it could invoke an arbitration process under its Licence to determine the extent, if any, of harm to R.K. Heli-Ski's business and, the quantification of any "material effect" on the exercise of its rights under the Licence.

In this regard, the Proponent has committed:

- to offer R.K. Heli-Ski the ability to operate inside the proposed Controlled Recreation Area so that it will have no access restrictions, except for safety and reasonable management precautions (157).
- to cooperate with R.K. Heli-Ski in the development of an area safety management plan in detail and in a spirit of cooperation and good faith before start of operations (158).
- to offer a synergistic relationship to enhance R.K. Heli-Ski's operations (e.g., by establishing a base area in the Jumbo Creek drainage that would help with weather and safety concerns, provide an expanded clientele base and allow for shorter flights) (159).

Based on the information available, the EAO is satisfied that measures can be implemented (such as R.K. Heli-Ski making better use of other regions of its tenure and the Proponent allowing R.K. Heli-Ski access to the CRA and willingness to develop a synergistic relationship) to avoid or address any potential material effect on R.K. Heli-Ski.

Accordingly, consideration can be given to including, as conditions to any environmental assessment certificate that may be issued, both the accommodations offered by the Proponent, as well as an indemnification to the Province for any compensation it might have to pay to R.K. Heli-Ski under its Licence if any disposition to the Proponent results in any material effect that R.K. Heli-Ski cannot mitigate.

### **3.23.8 Existing Community Recreational Facilities (E.5H)**

#### *Background*

The implications of the Project for use of existing recreational facilities in the region required further assessment. Specifically, an assessment of the potential for any additional workers and visitors to the regions affecting the levels of use and supply of existing community recreation resources (including suggested mitigation measures and a report on discussions with local governments) was required.

The information provided (Volume 4, Section E.5(H), pages E-93 - E-94, and Volume 6 of the Master Plan Concept) indicates that, only those 50 to 100 employees not accommodated at the resort at full build-out (about 3% of the population of Invermere), may use local recreation facilities and this is not expected to be different than normal growth through other employment sources. Discussions with local governments indicated that the projected workforce or visitors would not negatively impact the levels of use and supply of existing local recreation resources in the Columbia Valley.

#### *Public review comments/Proponent responses*

No comments received.

#### *Agency review comments*

SBED commented that:

- the Project is one more amenity that would be added to the area;
- the area will likely continue to experience significant growth resulting from the recreational lifestyle;
- it is unlikely that a large number of year-round permanent residents would take up residence at the resort; and

- the Proponent's contention that the development of the resort would not add significantly to stresses on the community in terms of public services, etc. appears reasonable.

*Proponent response and commitments*

The Proponent agreed with SBED's comments.

*Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on existing community recreational facilities and that the Project would not add significantly to the stresses placed on the DOI's recreational services.

### **3.24. Road Access and Transmission Line Issues (E.6)**

#### **3.24.1 Jumbo Pass Highway Proposal (E.6A)**

*Background*

The Specifications did not require further reporting on the relevance of the Jumbo Pass highway proposal.

*Public review comments/Proponent responses*

There was considerable interest in ascertaining whether or not there would be a highway developed through Jumbo Pass.

The Proponent indicated that there are no plans to build a highway over Jumbo Pass and it has no relevance to the EA review of the Jumbo Glacier Resort Project.

*Agency review comments*

MOT commented that building a highway over Jumbo Pass Highway is not supported by MOT.

*Proponent response and commitments*

The Proponent agreed with MOT's comments.

*Conclusion*

The EAO is satisfied that the building of a highway over Jumbo Pass is not part of the Project and MOT has advised that there are no plans for such a highway proposal.

#### **3.24.2 General Public Use of the Access Road (E.6B)**

*Background*

The issue of whether the access road to the resort should be open to the public required further analysis. Specifically, a preliminary access plan and report on discussions held with relevant government agencies, First Nations and other interested parties was required.

The information provided (Volume 4, Section E.6(B), and Volume 2 of the Master Plan Concept) indicates that the access plan would be no different from other ski resorts in BC and that unrestricted vehicular access to the resort is assured. As a result of discussions with agencies, and

potentially affected parties, there is a strong desire to maintain the present access level for the identified interests. The proposed road improvements would facilitate user interests and the absence of fencing would prevent adverse impacts to wildlife.

*Public review comments/Proponent responses*

There was considerable interest expressed in ensuring that the existing forestry road access from Jumbo Pass to the Glacier Creek side remain intact.

The Project Report indicates that there are no plans to restrict existing forest access.

*Agency review comments*

MOT commented that aspects of the access management plan provide that the road to the proposed Resort would be a public road, accessible by anyone. Access to lands beyond the MOT right-of-way is the responsibility of other agencies.

*Proponent response and commitments*

The Proponent agreed with MOT's comments.

The Proponent has committed:

- to maintain the same ease of access to the Jumbo Pass Trail (160).
- to ensure unrestricted vehicular access to the resort, and in later stages a shuttle bus may operate as well (161).

*Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project with respect to the general public use of the access road and that appropriate measures can be implemented (e.g., Proponent and MOT agreement that the road to the proposed resort would be a public road accessible by anyone) to avoid or address any potential significant adverse effects.

### **3.24.3 Access Road Upgrading Requirements (E.6C)**

*Background*

The design standards for road upgrading required further reporting. Specifically, information on traffic volume, trip generation forecasts and a route study (MOT methodology and road design standards) was required. In addition, proposals for bridge improvements and all parking locations and capacity were to be identified.

The required information was provided in the Project Report (Volume 4, Section E.6(C), pages E-112 - E-113) and the Master Plan Concept (Volume 5, Appendix 5-A).

*Public review comments/Proponent responses*

The public raised several concerns:

- whether the public would be guaranteed free parking at the trailhead to Jumbo Pass;
- a 50 km/hour road speed was unrealistic and hard to enforce;
- the Project would result in a highway over Jumbo Pass;
- the potential for increased traffic congestion and accidents; and
- the need for mandatory fencing the road.

The Proponent responded that:

- the road will be a public road;
- there will be free public parking at the resort;
- MOT has stated that there are no plans for a highway proposal over Jumbo Pass;
- the access road speed limit will be agreed to with MOT; and
- no fencing is proposed after consultations with agencies and existing users of the road.

*Agency review comments*

MOT commented that:

- it is satisfied with the traffic forecasts and accepts the route study;
- road design proposals and costs including bridge and parking needs will be further reviewed when detailed engineering requirements have been defined, should the Project proceed;
- given terrain and roadway construction practicalities, a 60 km/h design speed is the target but the Ministry acknowledges that some sections can be constructed at 50 km/h;
- for economic reasons, MOT does not support attaining a target design speed standard at all costs on roadway projects and the road design standard to the resort should be compatible with the road standard to Panorama Mountain Resort for driver consistency;
- any additional costs associated with existing public roads will be reviewed, subject to further discussions with the Proponent should the Project proceed;
- detailed environmental impact and mitigation questions related to road improvements will be further reviewed during the design stage, should the Project proceed; and
- planning beyond the Ski Area Master Plan stage is required to determine the exact details of parking requirements.

The DOI commented that some type of long-term financial mechanism must be established by government, to allow the DOI to tax users accordingly to pay for the ongoing maintenance of roads and bridges used for accessing the Project.

MOT further commented that approximately three km of the roadway is under the responsibility of the DOI (transferred from MOT responsibility) and MOT would maintain the existing defined responsibilities, but recognizes that the traffic volumes and road user destinations would change sometime in the future, should the Project proceed. If significant changes are recognized, MOT would open further discussions with the DOI to define responsibilities for the sections of road from Highway 93/95 to the resort.

CCRIFC commented that bridge construction or upgrading requirements need to be determined.

*Proponent response and commitments*

The Proponent responded to MOT that a 50 km/h design speed for most of the road would be preferable both for environmental and economic reasons, but it is prepared to follow the recommendation of MOT and design for 60 km/h where feasible. The Proponent is responsible for the upgrade of the road from Panorama Mountain Resort to the sawmill site and is committed to refine the road design, in cooperation with MOT for both the environmental and engineering aspects, and agreed that further planning beyond the Ski Area Master Plan stage is required for parking design.

With respect to the DOI's comment, the Proponent stated they would agree to share costs fairly with all the other users, on the same basis.

With respect to CCRIFC's comment, the Proponent stated that no new crossings of Jumbo Creek would be required.

The Proponent has committed:

- that the road will be a public road with public free parking on a first come first serve basis (162).
- to refine the road design in cooperation with the Ministry of Transportation for both the environmental and engineering aspects (163).
- that further planning with the Ministry of Transportation beyond the Ski Area Master Plan stage is required for parking design (164).
- to follow the recommendation of the Ministry of Transportation for a 60 km per hour road design, where feasible (165).
- to share costs for the District of Invermere portion of the roadway/bridge upgrade fairly with all the other users, on the same basis (166).
- to pay their share of the costs for wear and tear on the bridges caused by industrial use of Toby Creek access and traffic to Panorama Mountain Resort and the Project, to the extent that there will be a fair determination of these impacts (167).
- that resort and road construction will proceed in a manner that will limit the potential doe invasion by noxious weeds. All disturbed areas will be re-seeded as quickly as possible using a certified weed-free grass (or grass-forb) mixture appropriate for the climate and altitude (168).

#### *Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on access road upgrading and can implement appropriate measures beyond the Ski Area Master Plan stage (e.g., further review of road design proposals and costs, and environmental impact and mitigation questions,) to avoid or address any potential significant adverse effects.

### **3.24.4 Avalanche Hazard along the Access Road (E.6D)**

#### *Background*

The implications of the avalanche hazard for the access road design and management required further reporting. Specifically, information integrating previous avalanche assessment reports into the Project Report and road route study, as well as an avalanche management program, were required.

The information provided (Volume 4, Section E.6(D), page E-119, and Volumes 2 and 5 of the Master Plan Concept) includes an avalanche management program and a commitment to submit a detailed management program prior to start of operations.

#### *Public review comments/Proponent responses*

Some respondents felt that winter access is high risk given the numerous avalanche chutes that exist on the road and that the cost of maintaining access would be high given the winter conditions. A number of respondents questioned the costs in the avalanche program outlined in the Proponent's studies.

The Proponent responded that, based on the consultants report, the road design avoids most of the frequent avalanche areas and that snow sheds would not be required. In addition, there would be an emergency plan to address all emergencies.

*Agency review comments*

MOT commented that the avalanche management program reporting requirements have been provided in the Project Report and Master Plan Concept to sufficient detail to satisfy them.

*Proponent response and commitments*

The Proponent has committed:

- to design the road to minimize exposure to avalanches and to facilitate the monitoring and an avalanche prevention program (169).
- to submit a detailed avalanche management program prior to start of operations in accordance with the Master Development Agreement (170).

*Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on avalanche hazard along the access road and can implement appropriate measures (e.g., prepare a detailed avalanche management program) to avoid or address any potential significant adverse effects.

### **3.24.5 Wildfire Considerations in Access Road Design (E.6E)**

*Background*

The Specifications did not require further reporting regarding the implications of wildfire hazard for road design and maintenance (Section 3.10 of this report addresses wildfire management at the resort).

*Public review comments/Proponent responses*

A number of individuals indicated that the Jumbo Valley has potential for rapid fire spread and the proposed development is limited to only one access road for moving people.

The Proponent responded that fire protection and the danger of wildfire will be studied in greater detail to ensure public safety.

*Agency review comments*

MOF commented that the Proponent has provided an adequate “overview and commentary” with regard to the design of the community, associated roads and emergency vehicular access at the resort, as specified in the original information requirements. The proposed resort is located at the upper end of a narrow valley, with singular access and no vehicular emergency/escape route available. There is potential for significant negative impacts to the resort in the event of wildfire (potential for rapid fire spread) and, as a result, there is risk to human life should such an event occur. The Proponent has committed to completing a Fire Protection Plan to MOF standards, if the Project is approved. The Plan will address in detail the “design of the community and associated roads and emergency vehicular access”, among other topics. The Proponent should be directed to complete a MOF-approved plan within one year of commencing construction, if the Project proceeds.

*Proponent response and commitments*

The Proponent has committed:

- to complete a Fire Protection Plan to Ministry of Forests' standards prior to commencing construction. The plan is to address, in detail, the design of the community and associated roads and emergency vehicular access, among other topics (40).
- that fire protection and the danger of wildfire will be studied in greater detail to ensure public safety (171).

*Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on wildfire considerations in access road design and can implement appropriate measures (e.g., Fire Protection Plan in consultation with MOF, complying with fire protection and suppression provisions of the BC Building Code) to avoid or address any potential significant adverse effects.

**3.24.6 Transmission Line (E.6F)***Background*

The location and impacts of the proposed transmission line required further reporting. Specifically, identification and discussion of the potential power sources, transmission line route options and the power distribution in the resort (including clarifications on standards, ownership, construction and long term maintenance) was required.

The information provided (Volume 4, Section E.6(F), pages E-125 - E-126) identifies: that the power source would be an extension of the powerline from the Panorama Mountain Resort (with emergency diesel or propane generators); the transmission line would follow existing and abandoned forestry roads; and the distribution system is electrical transmission lines (preferably underground). The Proponent intends to negotiate service and standards with either a private utility such as the Kinbasket Development Corporation or BC Hydro.

*Public review comments/Proponent responses*

Some respondents felt that the Project Report did not adequately address the power requirements of the proposed development and that a new transmission line would be required.

The Proponent noted that the Project Report described the power requirements to the satisfaction of agencies and that the power transmission is expected to be an extension of the BC Hydro powerline from Panorama Mountain Resort and that a major new transmission line is not planned.

*Agency review comments*

No comments received.

*Proponent response and commitments*

The Proponent has committed:

- that the transmission line will follow existing and abandoned forestry and mining roads (172).

### *Conclusion*

The EAO is satisfied that the Proponent has described the power requirements and reported on the location and potential impacts of the transmission line, to the satisfaction of agencies. The Proponent has identified and assessed the potential impacts of the Project on the transmission line and can implement appropriate measures to avoid or address any potential significant adverse effects.

## **3.25. Specific Infrastructure and Service Requirements (E.7)**

### **3.25.1 Health Services and First Aid Facilities (E.7A)**

#### *Background*

The health service and first aid requirements at the resort required further reporting. Specifically, information on the demands that the resort development would place on existing health services (i.e., demographic information, anticipated accidents, preliminary details on the types and scale of health facilities and services) was to be provided.

The information provided (Volume 4, Section E.7(A), pages E-132 to E-134) includes results from- the US National Ski Association 2000 study (2.63 injuries per 1000 skier visits) and a 1998 study for Whistler (1.4/1000 skier visit injury rate). These studies indicate a 50% reduction in injury rates since the 1970's and the projection that the Project's rates would be in the range of 2.0/1000 skier visits, going down to 1.8/1000 at full build-out or 55 injuries/month at build-out. Most injuries should be minor and would be treated at the resort's own medical clinic/first aid centre while major injury victims (5-6/month) would be transferred out. The Proponent will file a Mountain Safety Plan with LWBC during the Ski Area Master Plan process that includes details of the safety and medical program.

#### *Public review comments/Proponent responses*

Many respondents questioned the ability of local and regional governments to meet the infrastructure and service requirements of the Project and the associated impacts of the influx of people on:

- health services at Invermere Hospital
- education and schooling services in the area
- police services
- fire fighting services
- search and rescue services
- outdoor recreation services and management

The demands for the provision of emergency medical services in particular were expressed as a major concern. As well, the Proponent's proposal for offering a volunteer fire department at the resort was questioned from a reliability and training perspective. Questions were raised regarding how the necessary local services would be provided, while some respondents felt that the Project would provide a positive opportunity to explore shared community services within the region.

The Proponent responded that the Ski Area Master Plan will provide details on how emergency health care will be planned so that there is no loss to the Province. The Proponent is expecting to work with the local health region so that the required levels of services be continued or improved without additional cost to the local taxpayers.

*Agency review comments*

The Interior Health Authority commented that due to limited available information regarding the Project's medical capabilities, they would appreciate receiving information on the level of emergency care that would be provided at the resort, (e.g., medical clinic capacity, x-ray, etc), ramp-up projections, and what mode of transport would be provided from the site to a hospital and the site to an airport.

The BC Ambulance Service had several questions: how they would access the first aid station; provisions to accommodate possible use of helicopter medi-vacs; the need for a written agreement and communication strategy; and the level at which the first aid station would be equipped.

The DOI commented that funding for local hospital services appear to be tied to stable population figures of a community rather than the temporary population that is normally associated with resort communities. In this specific case, the catchment area would change from approximately 9,000 people to 13,000+ per day and the Project population will require emergency medical services. As a consequence:

- if additional emergency services in Invermere Hospital were not increased, the DOI would be subsidizing the Project through less service being made available to the community; and
- increased ambulance services will be required which will increase the time that ambulance attendants would be out on call and the citizens of Invermere would be subsidizing the proposed resort through reduced service to its citizens.

*Proponent response and commitments*

The Proponent has committed:

- to prepare an emergency health care plan in consultation with Interior Health representatives (173).
- that a proper contract for independent ambulance services will be in place and there is no expectation that the resort and its guests will undermine the service provided for District of Invermere residents (174).
- to provide a first aid centre at the resort (175).
- that a Mountain Safety Plan will be filed with Land and Water BC Inc. during the Commercial Alpine Ski Policy process. Details of the safety and medical program will be part of the Master Development Agreement (176).

*Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on health services and can implement appropriate measures (e.g., develop an emergency health care plan) to avoid or address any potential significant adverse effects.

**3.25.2 Solid Waste Disposal Costs (E.7B)***Background*

The implications of project development on regional solid waste disposal systems did not require further reporting (Section 3.13.1 of this report addresses this issue).

*Public review comments/Proponent responses*

A concern was raised that ancillary services (waste management, emergency health care, road building and maintenance) costs would have to be borne by the taxpayers.

The Proponent responded that no fiscal burden is anticipated as risk management and road building are directly paid by the Proponent and emergency health care would be planned so that there is no loss to the Province.

*Agency review comments*

The Project would truck its own garbage to the regional landfill and there should be no adverse effects on disposal costs. The Project would contribute to disposal costs through the normal tax system.

*Proponent response and commitments*

The Proponent has committed:

- to enter into agreement with the Regional District of East Kootenay on solid waste disposal prior to construction if required by both the Ministry of Water, Land and Air Protection and the Regional District (50).

*Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on solid waste disposal costs and can implement appropriate measures (e.g., truck and pay for garbage to the regional landfill) to avoid or address any potential significant adverse effects.

### **3.25.3 Education and Schooling Services (E.7C)**

*Background*

The implications of the Project for demand for schooling did not require further reporting.

*Public review comments/Proponent responses*

Comments were made with respect to the Project resulting in increased demands on the DOI (additional school capacity and associated capital costs).

The Proponent noted that the number of permanent residents at the resort is expected to be approximately 750 and the taxes paid by the resort to the province include any potential education costs. The Project Report and related documents describe the growth of the resort and the valley socio-economic context, and indicates that the Project will not impact on schools.

*Agency review comments*

Education-related impacts of the Project will be relatively modest and readily anticipated on a year-to-year basis. The Proponent is advised to maintain ongoing contact with the local School Board on schooling issues (including cost).

*Proponent response and commitments*

No further response required.

*Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on education and schooling services and can implement appropriate measures (e.g.,

ongoing contact with the local School Board) to avoid or address any potential significant adverse effects.

### **3.25.4 Social Services (Income Assistance) (E.7D)**

#### *Background*

The implications of the Project for Income Assistance did not require further reporting.

#### *Public review comments/Proponent responses*

No comments received.

#### *Agency review comments*

The Ministry of Human Resources (MHR) has not found resort communities to cause disproportionately high levels of demand for its services. MHR must respond to income assistance demands where and when they arise, and the Proponent is advised to maintain ongoing contact with the MHR district staff.

#### *Proponent response and commitments*

The Proponent has committed:

- to establish working relationships with social service agencies once the Project is approved (177).

#### *Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on social services (income assistance) and appropriate measures can be implemented (e.g., ongoing contact with Ministry of Human Resources) to avoid or address any potential significant adverse effects.

### **3.25.5 Child Care Services (E.7E)**

#### *Background*

The implications of Project development for child care needs did not require further reporting.

#### *Public review comments/Proponent responses*

No comments received.

#### *Agency review comments*

The Province does not require private developers to provide child care for employees, although many do voluntarily. The Ministry of Human Resources will provide child care financial assistance to resort workers on the same basis as other British Columbia residents, and the Proponent is advised to maintain ongoing contact with district staff.

#### *Proponent response and commitments*

No further response required.

### *Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on child care services and appropriate measures can be implemented (e.g., ongoing contact with Ministry of Human Resources) to avoid or address any potential significant adverse effects.

### **3.25.6 Police Services (E.7F)**

#### *Background*

The implications of project development on police services did not require further reporting.

#### *Public review comments/Proponent responses*

A comment was made that few drivers obey the speed limit on the road to Panorama Mountain Resort and that, enacting a speed limit of 50km/hr is meaningless unless the province provides the RCMP with additional resources for enforcement.. Without that guarantee the province should require a higher design requirement on the access road.

The Proponent must meet the road design requirements of MOT and the detailed resort design process will address police services in detail. The Proponent indicated that resorts do not normally create crime problems elsewhere.

#### *Agency review comments*

The DOI commented that the police detachment at present has 10 officers for all of the Upper Columbia Valley (1 officer per 1,000 permanent residents) and that the addition of 4,177 people into the area will require the addition of a minimum of four additional officers to maintain the existing level of policing in the Columbia Valley. If not increased, services to Invermere and the Columbia Valley would be reduced.

The RCMP will assess the potential impact on policing demands on an ongoing basis, and negotiate any incremental resource requirements with the Province, as and when the need arises. The Proponent is advised to maintain ongoing contact with the Ministry of Attorney General and the RCMP.

#### *Proponent response and commitments*

The Proponent has committed:

- to develop a plan with the assistance of police and provincial authorities. The Proponent will be responsible for arrangements with the Province regarding police service and adequate staffing (178).

### *Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on police services, and appropriate measures can be implemented (e.g., RCMP resource adjustments) to avoid or address any potential significant adverse effects.

### **3.25.7 Fire-fighting Services (E.7G)**

#### *Background*

The resort's fire-fighting needs and implications of project development for existing fire-fighting services did not require further reporting (more detailed planning can be incorporated into the permitting stage).

#### *Public review comments/Proponent responses*

A comment was made that taxpayers will bear the cost of fire interface planning, fighting and control.

The Proponent responded that the Project will have its own volunteer fire department. There will be no cost to taxpayers.

#### *Agency review comments*

The DOI commented that the Invermere Volunteer Fire Department currently responds to motor vehicle accidents within a radius of 60 km to 80 km outside of its jurisdiction and, since the increased traffic resulting from the Project will likely lead to an increase in call-outs, upgrading the initial response vehicles with appropriate rescue tools may be necessary.

#### *Proponent response and commitments*

The Proponent responded that the resort will develop its own firefighting capabilities at its own cost in accordance with provincial policies.

The Proponent has committed:

- to complete a Fire Protection Plan to Ministry of Forests' standards prior to commencing construction. The plan is to address, in detail, the design of the community and associated roads and emergency vehicular access, among other topics (40).
- that a fire protection service will be established in accordance with the provisions of provincial policies and established guidelines (42).
- to develop, train and equip, at its own cost, personnel for the volunteer fire department (179).

#### *Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on fire-fighting services and can implement appropriate measures (e.g., volunteer fire-fighting station, complying with the fire protection and suppression provisions of the BC Building Code) to avoid or address any potential significant adverse effects.

### **3.25.8 Search and Rescue Services (E.7H)**

#### *Background*

The Proponent's plans for on-mountain rescue operations did not require further reporting.

#### *Public review comments/Proponent responses*

No comments received.

*Agency review comments*

LWBC commented that the Proponent will be required to have an appropriate safety plan in place, as part of a Master Development Agreement (MDA) with the Province.

*Proponent response and commitments*

No further response required.

*Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on search and rescue services, and can implement appropriate measures (on-site mountain search and rescue plan) to avoid or address any potential significant adverse effects.

### **3.25.9 Emergency Preparedness (E.7I)**

*Background*

The emergency response needs and planning at the resort required further reporting. Specifically, a conceptual description of the types of measures that would be incorporated in the resort's emergency response plan was required.

The information provided (Volume 4, Section E.7(I), page E-158) indicates that emergency preparedness will be studied in detail with local emergency response teams and experts as part of the detailed planning of the resort, and that a conceptual response to two emergency scenarios is provided, (e.g., for disabling of the access road and wildfire engulfing the valley).

*Public review comments/Proponent responses*

A concern was expressed about what will happen when avalanches/weather closes the road and how people needing medical treatment will be able to receive it.

The Proponent responded that detailed emergency plans will be prepared and approved prior to the start of operations and that avalanche and weather closures are expected to be extremely rare as the proposed access route avoids the most frequent avalanche paths.

*Agency review comments*

The Interior Health Authority commented that Health Protection should be involved in an ongoing Emergency Preparedness Planning Process.

*Proponent response and commitments*

The Proponent has committed:

- to involve Interior Health (Health Protection) in the ongoing Emergency Preparedness Planning process (180).
- to prepare a safety and emergency plan prior to project start (181).
- that the resort shall be capable of being self-sufficient in emergency situations (182).
- to have on-site emergency facilities and clinic proportionate to its size and guest needs, and to arrange for its own ambulance capacity, whether by contract to third parties or directly (183).

### *Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on emergency preparedness and can implement appropriate measures (e.g., develop an Emergency Response Plan in consultation with Interior Health) to avoid or address any potential significant adverse effects.

### **3.25.10 Outdoor Recreation Resource Management (E.7J)**

#### *Background*

The implications of project development for management of outdoor recreation resources did not require further reporting.

#### *Public review comments/Proponent responses*

A concern was received regarding government cuts adversely affecting parks: the delivery of public education and tourist information, enforcement of regulations, safety patrols by park rangers, and planning and management.

The Proponent responded that the Project might be able to alleviate any problems with its education efforts and the provision of taxes.

#### *Agency review comments*

MOF commented that it does not support extending the current Project boundary to include the Ministry-operated backcountry hiking and skiing facility (Jumbo Cabin) located on Jumbo Pass. It also indicated that the current restriction of snowmobile access to the Jumbo Glacier under Section 58 of the *Forest and Range Practices Act* would be revisited to determine its relevance and status should the Project be approved. It is estimated that increased use of Crown land in the area may result in a 5% increase in expenditures for the MOF's local recreation program.

WLAP has noted that the Project could lead to increased recreational use of the Purcell Wilderness Conservancy and that the need for enhanced enforcement services resulting from increased public use of lands in the area will be addressed as part of their ongoing operations.

LWBC has noted that it consults with agencies, First Nations and the public on Commercial Recreation tenures outside the CRA.

#### *Proponent response and commitments*

The Proponent stated that there are no plans to extend the CRA and the resort in any way that would interfere with the Jumbo Pass corridor, and that the Project has been designed to maximize the distance from the corridor, minimize its visual impact, and allow current uses to remain unaltered. The Proponent agreed with MOF regarding a review of its policy on snowmobiling access.

The Proponent has committed:

- to monitor, at its own cost, unsupervised public recreational use (including use by resort construction and operations employees, resort visitors and resort residents) and other use of roads which link to Highway #95 at Invermere. This monitoring will be undertaken before construction, during initial construction (i.e., prior to commercial scale resort operations), and

during commercial-scale operations. Monitoring results will be reported to the Ministry of Water, Land and Air Protection Regional Manager (Environmental Stewardship) (146).

- that there are no plans to extend the Controlled Recreation Area and the resort areas in any way that would interfere with the Jumbo Pass corridor (184).

#### *Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on outdoor recreation management and can implement appropriate measures (e.g., consulting on recreation contracts) to avoid or address any potential significant adverse effects.

### **3.25.11 Fish and Wildlife Resource Management (E.7K)**

#### *Background*

The implications of project development for management of fish and wildlife resources did not require further reporting. Section 3.15 of this report addresses fish and wildlife issues.

#### *Public review comments/Proponent responses*

No comments received.

#### *Agency review comments*

No comments received.

#### *Proponent response and commitments*

No further response required.

#### *Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential impacts of the Project on fish and wildlife management and can implement appropriate measures to avoid or address any potential significant adverse effects. WLAP will address the need for increased enforcement services resulting from increased public use of lands in the area, as part of their ongoing operations.

### **3.25.12 Regional Transportation Infrastructure (E.7L)**

#### *Background*

The implications of the Project on regional transportation systems required further assessment. Specifically, to provide: transportation data, including daily trips for all resort functions for all transportation types and seasonal patterns of use; an assessment of the demand and incremental costs on local and regional infrastructure; and any congestion, noise and safety impacts.

The information provided (Volume 4, Section E.7(L), page E-165, and Master Plan Concept Appendix 4-B) indicates that the local and regional transportation system, including the Fairmont Hot Springs Resort airport, would not be significantly impacted and are capable of handling the traffic without change. While there would be no cost to other parties, local companies offering car rental and bus services would benefit.

*Public review comments/Proponent responses*

No comments received.

*Agency review comments*

MOT reported that it is satisfied with the information provided, with the understanding that capital cost of the access road should be borne by the developer. MOT commented that they will maintain the existing defined responsibilities, while recognizing that the traffic volumes and road user destinations will change in the future, should the Project go ahead. If significant changes are realized, the MOT will open further discussions with the DOI to define responsibilities for the sections of road from Highway 93/95 to the resort.

The DOI expressed concerns regarding the potential impacts of the past devolution of regional transportation infrastructure from MOT to local governments. The DOI stated that some type of long-term financial mechanism must be established by the government to allow the DOI to tax users for the maintenance of the roads and bridges used for accessing the resort.

*Proponent response and commitments*

No further response is required. The Proponent will fund the capital costs of the access road upgrade (see section 3.25.13).

The Proponent has committed:

- to share costs for the District of Invermere portion of the roadway/bridge upgrade fairly with all the other users, on the same basis (166).
- to pay their share of the costs for wear and tear on the bridges caused by industrial use of Toby Creek access and traffic to Panorama Mountain Resort and the Project, to the extent that there will be a fair determination of these impacts (167).

*Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential effects of the Project with respect to regional transportation infrastructure and can implement appropriate measures to avoid or address any potential significant adverse effects.

**3.25.13 Access Road Upgrading and Funding Responsibilities (E.7M)***Background*

The costs of funding of access road upgrading requirements required further reporting. Specifically, to provide cost estimates with respect to upgrading, operating and maintaining the access road between Panorama Mountain Resort. and the Project site.

The information including, cost estimates and preliminary phasing, was provided (Volume 4, Section E.7(M), pages E-169 - E-170, and Appendix 4-E).

*Public review comments/Proponent responses*

A number of respondents sought clarification on responsibility for funding road construction and maintenance including long-term maintenance of the two existing bridges (Columbia River and Toby Creek). There was some confusion evident in defining which aspects the Proponent would be responsible for and which areas would fall within the provincial government's mandate. As

well, a number of respondents asked for clarification on the road alignment. There were also concerns that: the upgrading costs would be higher than projected; the long term maintenance would be passed on to taxpayers; there would be a need for additional enforcement; and the use of salt for road safety or maintenance would adversely affect the creeks.

The Proponent responded that there would not be any cost to taxpayers for improvements to the access road and that MOT's road maintenance costs would be more than off-set by provincial revenues from the resort. The Proponent noted that road improvements will be designed and built according to the traffic projections of the Project prior to each phase going ahead, and will accommodate the appropriate speed limits.

#### *Agency review comments*

MOT commented that the access road design proposals presented are acceptable and that detailed design and cost estimates will be determined when further detailed engineering requirements are defined, should the Project be approved. MOT supports the principles and responses outlined with the clear understanding that future design considerations will be required should the Project be approved.

#### *Proponent response and commitments*

The Proponent agreed with the MOT's comments and made the following commitments:

- to design and pay for the road improvements in proportion with the Project phasing and in conformity with government policy (185).
- to detailed design in cooperation with the Ministry of Transportation to achieve mutually acceptable phased solutions based on the Route Study and the correspondence with the Ministry (186).

#### *Conclusion*

Based on MOT advice that future design considerations will be required, and that detailed design and cost estimates will be determined. The EAO is satisfied that the Proponent has identified and assessed the potential effects of the Project with respect to access road upgrading and funding responsibilities. The EAO is also satisfied that the Proponent can implement appropriate measures to avoid or address any potential adverse effects.

### **3.26. Infrastructure, Government Services and Revenue Impacts (E.8)**

#### *Background*

The implications of the Project for government revenues and infrastructure and service costs required further reporting. Specifically, an estimate of any significant increase in use and cost of local and regional infrastructure and services and the capability of existing infrastructure to accommodate the needs of the resort.

The information provided (Volume 4, Section E.8, pages E-174 to E-175) indicates that the Project is expected to be substantially self-sufficient and not have significant impacts on regional infrastructure. The Route Study (Master Plan Concept, Volume 5, Appendix 5-A) provides the costs of the road upgrading and indicates that the regional infrastructure is more than adequate for the resort. Furthermore, the taxes paid by the resort will expand the tax base and ability of local government to pay for its services. There will not be any additional infrastructure needs or costs to local taxpayers.

*Public review comments/Proponent responses*

Concerns were raised about the accountability of the Proponent and the Government to ensure that commitments are met, maintained and monitored and about the potential impacts on local and provincial taxpayers (e.g., for health care, road maintenance, water supply, sewage treatment and avalanche control). Many respondents noted that the Kootenays have recently experienced significant government cut-backs. Furthermore, some respondents requested that the Proponent provide accurate estimates of all infrastructure costs, as well as a binding commitment to financial arrangements and responsibilities. Concerns were also expressed that private residents at the resort may further impact on community services. Questions about commercial versus residential taxation on these residences were also raised along with concerns about the possibility of Proponent bankruptcy.

The Proponent responded that there are no infrastructure costs assigned to local taxpayers and that infrastructure, particularly road building, water supply and sewage treatment, would be at no cost to the taxpayers of British Columbia. The cost of the utilities would be absorbed by the resort and the infrastructure will be built in cooperation with a utility company. As for protection against economic failure, Master Development Agreements with LWBC include security and performance bonding provisions. Further, if a developer is in default or goes bankrupt, the government may take over the ski area.

*Agency review comments*

The Ministry of Community, Aboriginal and Womens' Services (CAWS) commented that local and regional government would not be impacted in a material way and that the development is considered to be self-sufficient.

SBED commented that from their perspective the Proponent has provided the information required and agrees with the Proponent's statement that "None of these services (utilities and infrastructure) are expected to be provided by the Regional District or nearby local governments, except when arranged by contract." SBED also stated that the resort will have and pay for a medical station and independent fire services at the resort (Table 1).

*Proponent response and commitments*

The Proponent has committed:

- that there will not be any additional infrastructure costs to local taxpayers (187).

*Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential effects of the Project with respect to infrastructure, government services and revenue impacts and can implement appropriate measures (e.g., providing or contracting for services) to avoid or address any potential significant adverse effects.

Table 1. Services and taxation.

<b>Service</b>	<b>Provider/Funding Source</b>	<b>Comments</b>
Municipal Road Maintenance	Local government from local levy	Non-residents do not pay
Provincial Road Maintenance	MOT from Provincial levy	

Table 1. con't

Service	Provider/Funding Source	Comments
Access Road Construction	Proponent	Financing by Province possible
Policing	RCMP from Provincial levy	Temporary resort residents not in funding formula 50% by local government in 2007 assessed against property
<u>Health</u> Medical	Interior Health, 100% of operations and 60% of capital by Province	Temporary resort residents not in funding formula. Out of Province users repay for services.
Emergency	Proponent	First aid and emergency treatment provided by the Proponent for early phase and small clinic in future
Ambulance	Proponent	Contract with ambulance providers
Air Medivacs	BCAS, client charge back	
Water, Sewer and Waste	Proponent	
Fire Protection	Proponent	Volunteer fire department and station
Solid Waste Landfill	RDEK from user fees	
Search and Rescue	Proponent on-site	
Housing	Proponent provides for 90% of employee housing	
Education & Social Services	Local from Provincial taxation	Few resort residents will use services

### 3.27. Accommodation Requirements (E.9)

#### *Background*

The provision and affordability of employee accommodation at the resort during construction and operation required further reporting. Specifically, clarification of where the initial staff complement would live, the types and cost of employee housing, and measures to create affordable housing.

The information provided (Volume 4, Section E.9, page E-178) indicates that employee housing (750 beds) would be provided on-site, as part of the employment contract, for about 90% of the employees, with a small minority commuting from other communities, and that temporary accommodation of construction workers in RV's may be required in the initial stage of development.

*Public review comments/Proponent responses*

A few respondents were concerned that there was no residential allowance on-site for either the construction or the operational phases of the proposed development. It was noted that the Proponent should allocate 15% of all development costs to be placed in an employee/affordable housing authority.

The Project Report indicates that housing is expected to be part of the employee's compensation package.

*Agency review comments*

CAWS commented that the Project Report lacked specifics on affordability (e.g., on-site employee housing, unit size, cost to employees) and the Proponent was requested to commit to clarifying how 90% of the workforce would be housed on-site during the Ski Area Master Plan development process.

*Proponent response and commitments*

The Proponent responded that the Project Report and Master Plan Concept provide only a conceptual level of detail and that in the initial phases staff would be housed in constructed townhouse and vacation units that would be converted later for sale. This temporary use model is expected to be followed in later stages.

The Proponent has committed:

- to provide information (i.e., clarify how the Proponent would house 90% of the workforce on-site) in the Ski Area Master Plan (188).
- to develop 750 beds of employee accommodation in accordance with the Ski Area Master Plan (189).
- that employee housing will be provided on site as part of the employment contract with the developer for about 90% of the employees with a small minority that may choose to commute from other communities (190).

*Conclusion*

Based on the Proponent's commitment to clarify how 90% of the workforce would be housed on-site during the Ski Area Master Plan process, the EAO is satisfied that the Proponent has identified and assessed the potential effects of the Project with respect to accommodation requirements and can implement appropriate measures to avoid or address any potential significant adverse effects.

### **3.28. Demographic and Social Effects (E.10)**

*Background*

The demographic and social implications of Project development required further reporting. Specifically, a qualitative discussion of demographic effects, community stability changes, First Nations social and economic implications, and mitigation strategies.

The information provided (Volume 4, Section E.10, pages E-184 to E-191 and Volume 6 of the Master Plan Concept) indicates that worker in-migration is expected to be minimal as a ready and experienced workforce is available in the region and that an Employment Equity Plan is proposed. The 250 to 300 migrant workers expected at full build-out is not expected to have

demographically adverse effects and, in addition, there are potential economic benefits for First Nations.

*Public review comments/Proponent responses*

Concerns were expressed about how the Project could be contained to its proposed footprint of only 600 to 700 permanent residents and how a resort with so few permanent residents could develop a sense of community.

*Agency review comments*

SBED commented that information provided adequately addressed the requirements and that, while the jobs to be filled locally (within the Kootenay region) and by in-migrating workers cannot easily be predicted, the 250 to 300 workers over twenty-five years (mostly single) would have minimal demographic impacts.

*Proponent response and commitments*

The Proponent has committed:

- to implement an Employment Equity Plan and employment policies and programs outlined in the Project Report (191).
- to continue to pursue agreements with local First Nations for provision of resort services (192).

*Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential effects of the Project with respect to demographic and social effects, and can implement appropriate measures to avoid or address any potential significant adverse effects.

### **3.29. Lifestyle Impacts (E.11)**

*Background*

The community-level lifestyle implications of the Project required further reporting. Specifically, a summary of predicted implications on lifestyle elements with and without the Project for residents living in and near Invermere, and the pace of change, was required. A number of categories were required for reporting (e.g., availability of emergency response services, levels of community traffic/noise/congestion).

The information provided (Volume 4, Section E.11, pages E-195 to E-205) includes a summary table and comments about the self-sufficiency of the resort, the low significance of impact on Invermere, and reiteration of a number of assessments conducted for other sections of the Project Report (e.g., water supply).

*Public review comments/Proponent responses*

Concern was expressed that the proposed development would negatively impact on the existing cultural and rural lifestyle values of the area, as well as on the existing peace and tranquility presently being experienced in the Purcell Mountains.

In response to concerns that the Project would negatively impact the cultural and rural lifestyle values and the existing peace in the Purcell Mountains, the Proponent indicated that the Project

would not impact the peaceful environment for hikers and campers as it is designed to be secluded and unobtrusive. The Project is designed to minimize impacts. Any impacts would be monitored at each phase of growth.

*Agency review comments*

SBED indicated that the information requirements were addressed, however, there is a potential for impacts to local residents depending on how access management for conservation values may evolve in the future. Given the current growth of backcountry recreation in the upper Columbia Valley, and the 20 to 25 year build-out period for the proposed resort, SBED advised that:

- it is unlikely the Project will add significantly to the growth of backcountry activity;
- it is not likely large enough on its own to have a significant direct impact on the demographics of the East Kootenay; and
- with increased visitor spending and supplier and construction requirements, the Project will only benefit the region.

*Proponent response and commitments*

No further response required.

*Conclusion*

The EAO is satisfied that the Proponent has identified and assessed the potential effects of the Project with respect to lifestyle impacts and can implement appropriate measures to avoid or address any potential significant adverse effects.

### **3.30. Monitoring Plan for Socio-economic Benefits (E.12)**

*Background*

The monitoring of actual social and economic effects of the Project required further reporting. Specifically that the Proponent make a commitment to systematic monitoring of socio-economic issues and provide a preliminary overview of the monitoring approach envisaged.

The information provided (Volume 4, Section E.12, page E-207) indicates plans to have an Interpretive Centre and Environmental Monitoring Station as part of the Project that will also create opportunities for socio-economic monitoring and reporting as well. Reporting activity is expected to cover the Ski Area Master Plan implementation issues with the entire project. The monitoring approach will consist of establishing measuring yardsticks based on the objectives in the Project Report and Master Plan Concept and annual reports, and that LWBC is expected to coordinate and review this activity. The Proponent committed to annual reports by a qualified consultant on the socio-economic and environmental issues.

*Public review comments/Proponent responses*

No public comments received.

*Agency review comments*

SBED commented that the Proponent provided the required information and that they will assist LWBC, who will coordinate this activity, review the socio-economic reports on an annual basis.

The RDEK requested to be involved in the development of the proposed monitoring plan, as well as to receive an annual report.

*Proponent response and commitments*

The Proponent stated that the costs and coordination of the socio-economic monitoring program will be confirmed with LWBC and committed to involve local governments in the development of the proposed monitoring plan for socio-economic benefits, and provide them with annual reporting of results.

The Proponent has committed:

- to conduct, at its own cost, annual monitoring and reporting (to Land and Water BC Inc.) of socio-economic impacts (132).
- to involve local governments in the development of the proposed monitoring plan for socio-economic benefits, and to provide them with annual reporting of results (133).
- to have an First Nations Interpretive Centre and Environmental Monitoring Station as part of the Project (193).

*Conclusion*

Based on the Proponent's commitments to monitor socio-economic issues annually, according to a plan developed in consultation with the RDEK, SBED and LWBC, and provide a report on the results to them, the EAO is satisfied that the Proponent has identified and assessed the potential effects of the Project with respect to a monitoring plan for socio-economic benefits. The EAO is also satisfied that the Proponent can implement appropriate measures to avoid or address any potential significant adverse effects.

## **Part F          Resort Administration Issues**

### **3.31.          Resort Ownership and Management (F.1)**

*Background*

The evolving ownership and management structure of the resort as it is developed has implications for the long-term continuity of agreements to fund and maintain project facilities, and to fund and/or deliver required services. It also has a significant bearing on the ongoing management of impacts for which measures are agreed to prior to project development.

The Specifications required the Proponent to provide how this continuity would be assured over time by indicating:

- how significant capital costs would be funded;
- the forms of legal agreements that would be used to allow the management responsibility to be diversified through transfer to different parties; and
- how transfer agreements would address impact management obligations.

The Proponent's response is contained in the Project Report (Volume 5). The Master Development Agreement between the Proponent and the Province defines the protection of the public regarding the type of future contracts, continuity of operations and transfer of ownership (which can only occur with the Province's approval).

*Public Review Comments /Proponent Responses*

No comments received.

*Agency Review Comments*

LWBC commented that the resort ownership and management structure provided by the Proponent is satisfactory to LWBC at this stage of the EA review.

*Proponent response and commitments*

No further response required.

*Conclusion*

The EAO is satisfied that the issue of resort ownership and management has been adequately assessed and that the Proponent can implement appropriate measures to avoid or address any potential significant adverse effects.

### **3.32. Local Governance Issues (F.2)**

*Background*

The Project is located in the Regional District of East Kootenay (RDEK), Electoral Area F. The area is currently zoned A-1 (Rural Resource Zone) and will require rezoning to allow for resort development. The Project will require local governance (planning, etc.) and services (sewer, water, fire, business promotion, etc.).

Mountain resort communities are unique developments often in unorganised rural areas or unserviced Crown Land with seasonal and weekly population fluctuations, high risk for initial owners, and the need for collective marketing. As such, they present unique challenges in the development approval process for determining the appropriate management/ accountability structure (governance) and the best means of providing services (public or private).

Decisions on the governance or service options are not required for the EA review. However, the Proponent was asked to provide its view about the status and administration of the proposed resort community (governance structure, management of the community pending some form of incorporation, and an assessment of the pros and cons of the various available governance options). In the Project Report (F. 2 and Master Plan Concept, Vol.7, 7.2) and subsequent correspondence with the RDEK (February 18 and 19, 2004) the Proponent proposed the following:

- initial regulatory control and standards provided through existing legislation and common law including a subdivision plan by the Approving Officer/MOT; servicing plan by the Province or RDEK; application of zoning principles through land use covenants under the *Land Titles Act*; and, compliance with the BC Building Code by use of covenants.
- in the short term, either,
  - a) creating a Mountain Resort Improvement District<sup>6</sup> (MRID) run by an appointed body and transferring zoning authority to it until such time as a Mountain Resort Municipality is created; the MRID would contract with utility and service providers, organize public

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<sup>6</sup> to provide services such as water supply and fire protection to the area in accordance with the *Mountain Resort Associations Act*, following the Minister of CAWS's designation of the JGR as a Mountain Resort Area (at request of RDEK) under that Act.

- services, and organize a volunteer fire department; the Proponent proposes to contract out planning and inspection for building to local government or establish a Certified Professional program to certify Building Code compliance; or,
- b) the RDEK could initiate the creation of an Official Community Plan and rezoning process and then provide services; currently RDEK provides Panorama Mountain Resort with Planning, Building Inspection, regional Solid Waste, and a fire protection area was recently established; sewer, water, etc. are provided by private entities.
  - a Mountain Resort Association<sup>7</sup> be formed to organize private business and promote business interests.
  - in the long term, creating a Mountain Resort Municipality (MRM)<sup>8</sup>.

#### *Public Review Comments*

One member of the public proposed an alternative governance model of establishing a Resort Municipality encompassing Edgewater, Radium, Wilmer, Invermere, Panorama Mountain Resort Ltd., Windermere, Fairmont Hot Springs Resort, the Project, and lands between. The Resort Municipality would be able to manage (planning and zoning) the growth in the larger area, have the financial tools to respond to needs for affordable housing and transportation, and provide for better economies of scale in service delivery.

#### *Agency review Comments*

The RDEK expressed concerns about the post-certification approval processes for rezoning and planning (work/capacity, costs/expense, land use conflicts, etc.) and identified some of the Proponent's suggestions that were not feasible (transferring zoning to a MRID, delegating planning and inspection services for Building Code). The RDEK identified two options to address its concerns: establish a Mountain Resort Municipality from the outset, or, establish a Mountain Resort Association (RDEK still responsible for land use and building inspection) with a Mountain Resort Improvement District to provide other services.

CAWS noted that the Project will require rezoning by the RDEK and, under the *Local Government Act*, only local government can undertake Official Community Plans, create zoning and regulate land use. It is not possible to create a Mountain Resort Municipality from the outset (without legislative change) because the *Local Government Act* requires a vote of residents (individuals not corporations). Since there would not be sufficient residents to elect a council and provide a tax base to support the governance structure<sup>9</sup>, it would be beneficial for the Proponent to work with the RDEK in their planning and development approval process. CAWS also noted the benefits associated with the RDEK dealing with the planning and development. Namely, adequate levels of services maintained, longer-term interests of property owners and businesses protected, and local government kept informed of plans for development. CAWS noted issues associated with the Proponent's proposal in that a zoning authority cannot be transferred to a MRID, and that establishing an appointed body could have cost implications for the Province.

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<sup>7</sup> an institutional structure created to promote the economic interests of a mountain resort with an elected board of directors and bylaws to levee fees from its members to support its activities.

<sup>8</sup> a means for providing local governance and services in situations where the development is large and well removed from existing municipalities, created under existing legislation but would first require agreement between the Minister CAWS and the RDEK as to the creation of a Mountain Resort Area.

<sup>9</sup> The rationale for this is that there must be a sufficient number of residents to determine the on-going governance structure, pay taxes to support a Mountain Resort Municipality and support the election of a municipal council.

### *Proponent response and commitments*

The Proponent response to the public and agency comments was as follows:

- The fact that there is not a voting resident population at the outset does not mean a Mountain Resort Municipality cannot be set up at the outset using a Board of Commissioners composed of representatives of LWBC, RDEK, First Nations, the developer and a representative of the public at large.
- While the idea of including Panorama Mountain Resort may have some merit, given similar interests, the idea of including the larger area is problematic due to possible conflicting interests and disproportionate voting representation. However, the governance model could evolve over time ‘according to the best possible consensus among the various interests’.
- The Proponent agrees with the RDEK’s outline of the options, namely administration with the assistance of the RDEK, either directly, or by contracting to RDEK planning controls and building permit services by a Mountain Resort Municipality structure.

The Proponent has committed:

- to involve Interior Health (Health Protection) in discussions pertaining to the governance of the development so that the necessary permitting system will be properly coordinated and administered (194).

### *Assessment Considerations*

As previously indicated, the purpose of including the governance issue in the EA review was to inform decision-makers about the issue and the various associated options.

### *Options*

- a) Governance Options - Resort governance options include the following:
- i. DOI by way of a boundary extension
  - ii. MRM once there is sufficient population
  - iii. MRID within RDEK Electoral Area F
  - iv. RDEK. The RDEK may pass bylaws for Official Community Plans (OCPs) and regulatory bylaws such as zoning bylaws, various types of land use permits and building permits.
    - Zoning – the zoning (rezoning) bylaw can be passed with or without an OCP being in effect for the area
    - Official Community Plans (OCP) - the adoption of an OCP would involve opportunities for public (public hearing) and provincial agency (comment) involvement and requires the approval of the Minister of Community, Aboriginal and Women’s Services.
- b) Service Options - Resort service options (RDEK under *Local Government Act* and if MRM created, would replace RDEK and/or MRID) are summarized in Table 2.

Table 2. Resort service options.

<b>Services</b>	<b>Local Government Based Options</b>	<b>Other Proponent Options</b>	<b>Comments</b>
Road maintenance (including snow removal)	<ul style="list-style-type: none"> <li>• Ministry of Transportation</li> </ul>	Strata corporation within Strata Plan	

Table 2. con't

<b>Services</b>	<b>Local Government Based Options</b>	<b>Other Proponent Options</b>	<b>Comments</b>
Sewer and Waste Treatment	<ul style="list-style-type: none"> <li>• RDEK</li> <li>• MRID</li> </ul>	Private sewer system	Treatment dealt with under <i>Waste Management Act</i> or <i>Health Act</i> depending on size. Local government systems provide greater assurance for long-term maintenance.
Fire Protection	<ul style="list-style-type: none"> <li>• RDEK</li> <li>• MRID</li> </ul>	Privately organized	Local government involvement may be required for insurance or Fire Commissioner regulation
Drainage	<ul style="list-style-type: none"> <li>• Ministry of Transportation (related to subdivision requirements)</li> </ul>		
Resort Promotion	<ul style="list-style-type: none"> <li>• Mountain Resort Business Improvement Area</li> <li>• Mountain Resort Association</li> </ul>	Privately organized	Processes in <i>Mountain Resort Associations Act</i> and <i>Local Government Act</i>
<b>Financing</b>			
Cost Recovery	A variety of means under the <i>Local Government Act</i>	Private arrangements such as lease fees, user fees	Enforcement of payment accommodated under local government model or for private contracted arrangements through the courts.
Borrowing	Access to Municipal Finance Authority (except for MRID)	Private, through financial institutions	
Accountability	Legislated through Community Charter, <i>Local Government Act</i>	Defined by contract between Resort and users	

### *Conclusion*

Since creating a Mountain Resort Municipality from the outset is not possible under existing legislation, the Project will have to go through RDEK rezoning and the RDEK will be responsible for the development approval process if rezoning is approved. Once the Project develops sufficient permanent resident population, a Mountain Resort Municipality could be created. As illustrated above, there are a variety of public and private service options available. As for the option of bringing the resort under the jurisdiction of the DOI, since they have not indicated a

desire to expand their boundary and they have indicated that they do not support the proposed Project, the merits of such an option have not been considered.

In recognition of the challenges the RDEK faces with development approval processes for the resort, government agencies noted that there may be ways to harmonize LWBC and RDEK processes such as the Ski Area Master Plan incorporating OCP elements in order to reduce the need for an OCP, or the possible integration of consultation requirements if the OCP process is established. Government agencies made the following commitments:

CAWS committed:

- to discuss ways they can assist the RDEK fill their capacity needs for the development approval process and to identify sources of assistance.

LWBC committed:

- to prepare a paper on, and discuss with the RDEK, opportunities for coordinating LWBC's Ski Area Master Plan development process with the RDEK's development approval process (i.e., technical and steering committees, use of LWBC's data base, access to additional proponent assessment work, public consultation).

## **Part G First Nations Issues**

### **3.33. First Nations Study Program (G.1)**

#### *Background*

The EAO plans and conducts environmental assessments to include meaningful participation by First Nations with asserted traditional territory in the area of a project. This effort begins at the pre-application stage and continues through to the referral of a project to Ministers. The *EA Act* requires that the assessment of the potential effects of a reviewable project take into account and reflect government policy. EAO consultations with First Nations are guided by the Provincial Policy for Consultation with First Nations (October 2002) and applicable case law requirements.

The Project falls within the asserted traditional territory of the KKTC. In addition, one of its member Bands, the Shuswap Indian Band (Kinbasket), also asserted traditional interests. In addition, a group called the Sinixt Nation expressed interests in the proposed Project.

During the Application Review (1995-1998), the KKTC, the Shuswap Indian Band and the Columbia Lake Indian Band accepted the EAO's invitation to participate on the Project Committee. The EAO provided financial assistance to the KKTC to participate. The three First Nation groups also provided comments on the Application and participated in the development of the Specifications. The KKTC and the Columbia Lake Indian Band indicated that they were opposed to the Project (i.e., inconsistent with values, deal with aboriginal rights before alienating crown land, environmental reasons) while the Shuswap Indian Band indicated that it was open to the Project through participation in economic growth, which should not be put on hold until a treaty was concluded. A Sinixt representative expressed concerns about potential impacts on Grizzly bears.

The Specifications required the Proponent to provide a summary of First Nation consultations and findings, and assess the potential impacts of the Project on contemporary and traditional uses and interests, as well as detail measures to prevent or mitigate any adverse effects on them. In attempting to fulfil these requirements and make its assessment, the Proponent:

- commissioned with the KKTC a Traditional Use and Archaeology Study<sup>10</sup> (the Proponent disputed the study outcomes because of concerns regarding the methodology used);
- was given the socio-economic assessment<sup>11</sup> (prepared for the EAO by a contractor recommended by the KKTC); and
- was provided with a Traditional Use Study and a Socio-economic Study prepared by the Shuswap Indian Band<sup>12</sup>.

### *Consultation*

In its Project Report (Section A.8 #3), the Proponent outlined the following consultation measures undertaken and their results:

- attempts to obtain support for the Project by discussing cooperative and joint venture opportunities: agreement-in-principle for economic benefits with the Shuswap Indian Band was reached but the KKTC was unwilling to discuss economic benefits at that time;
- attempts to conduct studies to complete an assessment resulted in an agreement with the KKTC to conduct a Traditional Use and Archaeology study; disagreements over the study methodology resulted in the Proponent not paying for the study, but subsequently proposing partial payment and ways of resolving the disagreement;
- providing information: the Application, Project Report including the supplementary information on migratory and non-migratory birds, and other technical information as requested; and
- face-to-face presentations were held with the Shuswap Indian Band leadership but offers to make stand alone presentations to KKTC and Columbia Lake Indian Band leadership were not accepted.

The EAO established the Proponent's consultation requirements by the procedural order issued pursuant to section 11 of the *EA Act*. In addition, the EAO communicated on a regular basis with all First Nations, and provided them with written updates on progress of the review process. The EAO ensured that key review documentation was sent to First Nations, and that they were kept fully informed at all stages of the EA review. All three First Nation groups were invited to sit on the technical advisory committee established for the review of the Project Report and provided with invitations, agendas and minutes. Both the KKTC (representing the Columbia Lake Indian Band as well as the whole Ktunaxa Nation) and the Shuswap Indian Band accepted the invitations to participate but only the Shuswap Indian Band participated on the technical advisory committee. The KKTC attempted to initiate discussion about the terms of participation well after the review process was established (section 11 procedural order) and underway.

On June 28, 2004, the KKTC requested the EAO to provide a time limit extension to allow for additional time to review and comment on the Project. The Executive Director noted in response to the KKTC's request:

- the EAO made extensive efforts to prevent this situation from arising by providing early notification;
- the KKTC chose not to participate in the technical advisory structure;
- the EAO has kept the KKTC informed of all meetings;
- the KKTC were provided with the information and the opportunity to comment on it;
- all other interested parties were required to meet, and met, the established timelines; and

<sup>10</sup> Area formerly used for fishing, hunting, gathering (e.g., stone, huckleberry, gooseberry); Jumbo Pass ancient travel route; Grizzly bears of 'scared significance'; archaeology sites (Jumbo Pass, Toby Creek).

<sup>11</sup> Impacts to tribal social cohesion, inequitable distribution of benefits.

<sup>12</sup> Area formerly used, ancient travel route, positive economic benefits.

- it was not until half way through the statutory comment period (March 9, 2004), that the KKTC finally engaged in discussions about participation.

In view of the above, the Executive Director was not prepared to deviate from statutory time limits. However, in order to ensure that the EAO fully met its legal obligations, the Executive Director offered the KKTC the opportunity to comment on the measures proposed to address the KKTC concerns and offered financial assistance to them to undertake the work. While the KKTC accepted this under protest, they submitted preliminary comments on July 9, 2004 and after discussion with the EAO, key review agencies and the Proponent, they submitted their final comments (see below).

Before concluding the EA review, the EAO and the Proponent, have undertaken the following further consultation activities to prevent or reduce potential effects on First Nation interests:

- provided the conclusions of the technical review on all issues to the First Nations to review;
- provided relevant portions of the Assessment Report with interested provincial government agencies, local governments and First Nations (the draft First Nation section) on the Technical Advisory Committee;
- provided an opportunity for the KKTC to review and comment on measures proposed to address their concerns;
- met with the KKTC to discuss the measures and their preliminary comments;
- considered the KKTC comments and included them in the Assessment Report;
- continued to ask the KKTC for the information on current uses, and,
- received a commitment from the Proponent to negotiate an impact management and benefit agreement.

#### *First Nation Comments*

The comment period established for Public comments ran for 60 days from February 13 to April 13, 2004, and the comment period for First Nations and the technical advisory committee ran for 77 days from February 6, 2004 to April 23, 2004. The Shuswap Indian Band, after considering their studies, the Project Report, and the Proponent's willingness to conclude an economic agreement for the provision of utility services to the proposed resort, indicated that they were satisfied that their concerns had been addressed and declared their support for the Project (April 10, 2004, May 23, 2004). The Sinixt group provided comments on the Project Report and expressed concerns about Grizzly bear, Westslope Cutthroat, Bull trout and the application of the *Species At Risk Act* (SARA) (April 8, 2004).

The Canadian Columbia River Inter-Tribal Fisheries Commission (CCRIFC) submitted technical comments (fisheries and aquatic resources, water quality and quantity, riparian habitat) on behalf of the KKTC on May 14, 2004. In addition, on July 20, 2004, the KKTC submitted their detailed comments on a document prepared by the EAO for their review entitled, *Measures Proposed to Address Issues Identified by the Ktunaxa Nation*. The KKTC's principle conclusions were:

- cultural interests – while elders have indicated the area is of cultural significance and there are sacred values associated with the area, this information has not been fully collected and documented in an appropriate format given the limited timeframe and resources;
- hunting – no effective measures have been proposed to address the impact increased traffic volumes will have on the ability of Ktunaxa members to hunt ungulates;
- Grizzly bears – the Project is likely to have a significant net negative impact on the central Purcell grizzly bear population (based upon difficulty mitigating fragmentation/connectivity

impacts, lack of development of successful monitoring methods, and uncertainty of the effectiveness of adaptive management);

- other wildlife (goats, wolverine, moose, birds, species at risk) – impacts are unlikely to be effectively mitigated (including goats and moose used for subsistence purposes); bird studies are inadequate; potential impacts on several species at risk are insufficiently considered;
- other impacts on Ktunaxa aboriginal rights and interests – could be effectively mitigated and managed if the KKTC and the Proponent concluded an impact management and benefits agreement; and
- cumulative impacts – concerns about the Project leading to further developments in the Jumbo Creek valley could possibly be mitigated by an agreement between the KKTC and LWBC on development limitation and management.

Based on these considerations, the KKTC concluded that, because the Project will have substantial impacts on KKTC aboriginal rights/title/interests, and the measures proposed do not fully address these impacts, the EAO recommend to Ministers that further assessment be done (grizzly bear mitigation program by an independent panel, outstanding wildlife issues by an independent panel, require the Proponent to attempt to negotiate an agreement with the KKTC, and the establishment of a tripartite committee (KKTC, BC, Proponent) to address impacts to KKTC's access to the area for traditional use purposes).

#### *Proponent response and commitments*

The Proponent concluded an Agreement-in-Principle for economic benefits and partnership with the Shuswap Indian Band. The Proponent's consultant (June 11, 2004), in response to the comments submitted by CCRIFC on behalf of the KKTC, identified measures and commitments proposed to address wildlife and water impacts including:

- locating the access road, set backs, elimination of bridges, open bottom culverts, tertiary waste treatment, Grizzly Bear Management Plan to prevent wildlife impacts;
- undertaking monitoring, Environmental Management Plan, a groundwater investigation program and participating in an adaptive management program;
- enhancing habitat by, among other things, de-commissioning and re-planting forestry roads; and
- containing recreational activities.

In response to the concerns expressed by the Sinixt, the Proponent indicated that Grizzly bear, Westslope Cutthroat and Bull trout are not threatened or endangered species and are not listed as such under Schedule 1 of the SARA. The measures and commitments proposed, including implementation of federal and provincial set back and stream crossing guidelines, will result in no impacts to fish or fish habitat. As for Grizzly bears, the Grizzly Bear Management Plan, and other measures and commitments proposed will mitigate mortality impacts and increase habitat effectiveness.

On July 26, 2004, the Proponent responded to the KKTC's July 20, 2004 submission. In its response, the Proponent noted:

- goats – potential impacts reduced by limited use of helicopters, design, access restrictions and monitoring;
- moose – mitigation measures can reduce vehicle impacts;
- wolverine – use of area already affected by existing road current and historic disturbance;
- species at risk – most species addressed by fieldwork and the need for further studies will be determined by activities that might generate impacts;

- Least chipmunk – further surveys planned and mitigation already proposed will maintain habitat;
- Western toad – impacts not expected but mitigation already proposed to protect fish and ducks will protect habitat for western toads;
- connectivity – project redesign and mitigation measures proposed to prevent or reduce impacts;
- caribou – caribou are not present in the resort area;
- birds – previously responded to;
- hiking trails – no plans or interest in hiking trails other than the one proposed
- helicopter operations – skiers will be less disruptive to goats than helicopters;
- Grizzly bears – the proposed adaptive management program will address potential impacts;
- noxious weeds – measures are proposed to limit the presence or spread of weeds;
- previous responses to CCRIFC - based on complimentary results of studies, no further bull trout studies are necessary; changing proposed access road mitigation measures that protect fish could have impacts on wildlife; willingness to exchange information; and
- the employment equity plan does not differentiate between any First Nation or Band.

Full responses can be found on the EAO's Project Information Centre. The KKTC's response to measures proposed by the Proponent and the EAO to address issues identified by the Ktunaxa Nation is included as Appendix E.

In addition to commitments made to address environmental concerns of First Nations, on June 2, 2004, the Proponent made twenty-five specific commitments to First Nations related to: developing and maintaining ongoing relationships (e.g., ongoing consultation); environmental mitigation (e.g., First Nations Interpretive Centre); cultural/traditional use and archaeology (e.g., hunting and gathering accommodations); and employment and economic development (e.g., 5% employment equity, training, land). These were subsequently expanded and clarified as follows:

- to continue to assist with consultation with First Nations to ensure that their interests are fully considered, together with an assessment of any potential infringement and requirements for accommodation (1).
- to negotiate with willing First Nations for the establishment of consultation protocols (2).
- to request an amendment to the EA certificate, if necessary, to include any subsequent agreements with First Nations (3).
- to cooperate with any ongoing marketing or community liaison committees (4).
- to report on achievements annually (5).
- to develop a First Nations Interpretive Centre and ongoing environmental monitoring station in cooperation with interested First Nations (6).
- to discourage employee and visitor use of Jumbo Pass (7).
- to work with interested First Nations and WLAP to determine where controlled seasonal hunting can be implemented (8).
- to work with interested First Nations to manage access for traditional gathering activities based on available information (9).
- to make bona fide efforts to maintain areas identified as having ethno biological significance (10).
- to hire an independent expert to monitor road construction for archaeological impacts in areas of moderate to high archaeological potential (11).
- to monitoring of land altering activities by a qualified archaeologist in areas of moderate to high archaeological potential prior to development taking place (195).

- to work with interested First Nations on selection and use of Aboriginal languages for Project names and signage (12).
- to develop an Employee Equity Program (Appendix 4E, Volume 4 of the Project Report) with a goal of 5% aboriginal employees at the resort (13).
- to develop an education/training support program in proportion with the size of each phase of the Project (14).
- to make bona fide efforts to develop a joint training program with the International Union of Operating Engineers in proportion with the size of each phase of the Project (15).
- to make reasonable efforts to use qualified First Nation subcontractors (16).
- to inform private sector investor/developer groups of First Nations employment strategies (17).
- to employ, as part of the assignment for the First Nations Interpretive Centre, a qualified aboriginal person in a key role. This individual will also monitor First Nation employment programs (18).
- to work with interested First Nations to develop a comprehensive Employment Development Program, which targets skill and job readiness training for youth, adults, and potential entrepreneurs/small business owners in the tourism sector, using the proposed resort, Panorama Mountain Resort and R.K. Heli-Ski Panorama Inc. as partners, to the extent that they are willing participants (19).
- to provide job training opportunities within the resort for all training programs in proportion with the size of each phase of the Project (20).
- to make bona fide efforts to reach a final agreement flowing from the agreement in principle with the Shuswap Indian Band on the provision of sewer and water portion of utilities (21).
- to make bona fide efforts to reach benefit agreements with the Ktunaxa/Kinbasket Tribal Council, the Shuswap Indian Band and the Columbia Lake Indian Band on the provision of other services described in the Master Plan Concept (section 6.3.10.3.2) (22).
- to make land available and assist First Nations to develop the Interpretive Centre described in the Master Plan Concept (section 6.3.10.3.3) (23).
- to make land available and assist First Nations to develop Condotel described in the Master Plan Concept (section 6.3.10.3.4) (24).
- to continue efforts to negotiate an economic benefits agreement, in proportion with the size of each phase of the Project, that could include (25):
  - provisions for construction and operating employment, student employment,
  - business opportunity notification,
  - equity partnerships and joint ventures,
  - direct purchase from First Nations and neighbouring communities and their businesses, and
  - assistance for strategic planning for non-project management activities.
- to inform third-party developers and investors in order that they clearly understand and cooperate in the economic and employment participation of First Nations people in the Project (26).
- to negotiate with willing First Nations for the establishment of consultation protocols, which will provide for ongoing consultation on the development, issues identified in the EA process, and the commitments made (27).
- to consult with the Ktunaxa/Kinbasket Tribal Council and the Shuswap Indian Band before entering into any agreements for recreational activities within the Controlled Recreation Area (28 - see also commitment 145).

- to negotiate with the Ktunaxa/Kinbasket Tribal Council and the Shuswap Indian Band and attempt to conclude an impact management and benefits agreement prior to submission of the final Ski Area Master Plan and Master Development Agreement (29).
- to provide completed Environmental Management Plans to the Ktunaxa/Kinbasket Tribal Council and the Shuswap Indian Band for review and comment at the same time as submitting draft Environment Management Plans to the respective provincial government agencies (30).

### *Conclusion*

The Specifications required the Proponent to provide a summary of First Nation consultations, including results, to assess the potential impacts of the Project on contemporary and traditional uses and interests, and to detail measures to prevent or mitigate any adverse effects. Based on the consultation activities undertaken by the Proponent and on the commitments made, the EAO is satisfied that the Proponent has sought to identify and assess the potential effects of the Project with respect to First Nations and that measures have been proposed to offset identified impacts on First Nations' interests.

#### 4. Conclusion

The Proponent's commitments to mitigate impacts of the Project are summarized in Appendix F.

Based on the information contained in the Application, relevant issues identified by the public, First Nations, local governments, and provincial government agencies and material provided by Proponent during the EA review, the EAO is satisfied that:

- the Project Report and Project Report Supplement, together with additional information subsequently provided, adequately identified and assessed the potential significant adverse environmental, economic, social, heritage, and health effects of the Project, including potential effects on First Nations' interests;
- measures relating to the distribution of information about the Project have been carried out by the Proponent and there has been adequate public consultation;
- issues identified by the public, and provincial agencies and local governments, where they were within the scope of the EA review, were adequately addressed by the Proponent during the review of the Application; and,
- there has been adequate consultation with the KKTC and the Shuswap Indian Band and measures have been proposed to offset identified impacts on First Nations' interests; and
- practical means have been identified to prevent or reduce to an acceptable level all potential significant adverse effects arising from the Project through the implementation of commitments and mitigation measures identified during the EA review and compliance with subsequent statutory permits, licences and approvals (Appendix G).

**Appendix A**  
**Project Reviewability**



Reference: 91001

File: 135-40/38TranPol

January 8, 2003

Oberto Oberti  
President  
Pheidias Project Management Corporation  
Suite 1660 – 1188 West Georgia Street  
Vancouver BC V6E 4A2

Dear Oberto Oberti:

On December 30, 2002, the *Environmental Assessment Act* S.B.C. 2002, c.43 (Act) was proclaimed and the *Environmental Assessment Act* R.S.B.C. 1996, c.119 (former Act) was repealed. Transition provisions in the Act require that the assessment of an application for a project approval certificate under the former Act be continued and disposed of as an application for an environmental assessment certificate.

The Act also allows the Executive Director to make an order specifying the step in the environmental assessment process under the Act to which a project will be transitioned and to vary the review process to the extent necessary to accommodate the review of the project under the Act. Accordingly, I have ordered the transition of the environmental assessment of the Jumbo Glacier Alpine Resort Project (Project) to the Act. A copy of the order is enclosed for your information. It ensures that the assessment of the Project can be completed expeditiously.

The new Act provides flexibility to custom-design review procedures for individual projects and procedural simplification, which should allow more focus on technical issues. The streamlined process should be more timely and reduce the overall duration of reviews. There is no longer a mandatory project committee system, although the Environmental Assessment Office may decide to work with smaller technical committees focused on specific issues.

If you have any questions about the transition order or the new Act, please contact Martyn Glassman, Project Assessment Director, to whom I have delegated authority for the completion of the environmental assessment of the Project.

Sincerely,

Dr. Sheila Wynn  
Deputy Minister  
Environmental Assessment Office

cc: Martyn Glassman, Project Assessment Director, Environmental Assessment Office

**IN THE MATTER OF THE ENVIRONMENTAL ASSESSMENT ACT (ACT)  
S.B.C. 2002, c.43**

and

**GLACIER RESORTS LTD. (PROPONENT)  
IN THE MATTER OF AN APPLICATION FOR THE  
JUMBO GLACIER ALPINE RESORT PROJECT (PROJECT)**

**TRANSITION ORDER # 02-09**

**WHEREAS:**

- A. In August, 1991 Phedias Project Management Corporation, on behalf of the Proponent, submitted a proposal to the Ministry of Environment, Lands and Parks, in response to a call for proposals issued by that Ministry under the Commercial Alpine Ski Policy (the "CASP");
- B. The proposal was to develop a ski resort on Crown land in Jumbo Creek valley in the Purcell Mountain Range west of Invermere, British Columbia;
- C. The Proponent was pursuing the proposal under the CASP, having responded successfully to the call for proposals;
- D. The Project was a reviewable project on June 30, 1995 when the *Environmental Assessment Act*, R.S.B.C. 1996, c.119 (former Act) was proclaimed;
- E. Pursuant to section 93(5) of the former Act, Transition Order M 364 required that the Project be accepted for review under section 8(1) of the former Act and proceed in a review from that step;
- F. In June 1995, under the former Act, the Proponent submitted a five-volume submission entitled *Jumbo Glacier Alpine Resort* in support of its application for a project approval certificate to develop the Project;
- G. The Project includes the design, construction and operation of the following on-site and off-site facilities:
  - ski runs, including circulation corridors; ski lift system; ski run maintenance facilities; rescue facilities; ski lodge; ski village; hotels, condominiums, townhouses, chalets, single family dwellings; road system; water supply systems for all on-site components; solid waste disposal systems for all on-site components, including on-site (and if necessary, off-site) disposal facilities and systems; liquid waste disposal systems for all on-site components, including on-site (and if necessary, off-site) disposal facilities and systems; and

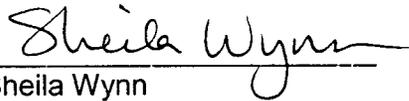
- an access road from Invermere to the proposed resort, with particular focus upvalley from the Panorama ski resort; bridges along the access road; related facilities such as gravel/borrow pits and maintenance yards (if any); proposed off-site parking facilities (e.g. near the Mineral King minesite); the proposed electric transmission line hook-up to the integrated grid; telephone communications; any other project components for which an off-site location is proposed; and relevant operational, environmental design and public safety considerations;
- H. The Project is a reviewable project under the former Act and an assessment of the Project under the former Act was in progress;
- I. Project report specifications issued under the former Act on May 20, 1998 describe additional information required to identify and assess the potential effects of the Project;
- J. The process for establishing a project committee under the former Act is repealed and a process for consulting with members of the former project committee and others will be specified whenever an order is issued under section 11 of the Act; and
- K. Section 51(3) of the Act requires that the assessment of the Project be continued and disposed of as an application for an environmental assessment certificate.

**NOW THEREFORE:**

Pursuant to sections 10(1)(c), 24(2) and 51(5) of the Act, the Executive Director orders that an environmental assessment certificate is required for the Project and the Proponent may not proceed with the Project without an assessment, subject to the following conditions:

1. The application and supporting information provided to date by the Proponent be accepted as an application under section 16 of the Act, subject to condition 3;
2. The time limit specified by the *Prescribed Time Limits Regulation* (B.C. Reg. 372/02) for the review of this application will commence from the date that the additional information described in the Project report specifications is accepted by the Executive Director for review, subject to condition 3; and
3. The additional information described in the Project report specifications must be provided to the Executive Director by December 31, 2003 or the current assessment of the Project is terminated and the Proponent may not proceed with the Project without a new assessment.

Pursuant to section 51(6) of the Act, the reason for this order is that the continuance of the assessment of the Project in accordance with this order will ensure a fair, orderly and timely review of the effects of the Project under Act.



Dr. Sheila Wynn  
Executive Director  
Environmental Assessment Office

Dated December 30, 2002 at Victoria, British Columbia.



File: 30250-20/Jumbo-10

Reference: 93472

January 27, 2003

Oberto Oberti  
President  
Pheidias Project Management Corporation  
1660 – 1188 West Georgia St  
Vancouver BC V6C 4A2

Dear Mr. Oberti:

I am writing to inform you that, pursuant to section 24(4) of the *Environmental Assessment Act* (the Act), I have issued a Time Limit Extension Order (enclosed). This Order will enable the Environmental Assessment Office to conduct a thorough and timely review of the additional information required to complete the environmental assessment (EA) of the Jumbo Glacier Resort Project as a basis for a decision by Ministers.

This timeline extension enables you to: address some minor deficiencies (e.g. mapping detail) in your Project Report prior to the start of the formal 180 day review period; and provide the results of bird field studies during that period.

In accordance with the Act, Ministers will be provided with a complete package of information and a thorough evaluation of the issues.

If you have any questions about the Time Limit Extension Order, please contact Martyn Glassman, Project Assessment Director, to whom I have delegated authority for the completion of the Project's EA.

Yours truly,

Joan Hesketh  
Deputy Minister

Enclosure

pc: Martyn Glassman

**IN THE MATTER OF THE ENVIRONMENTAL ASSESSMENT ACT  
S.B.C. 2002, C.43 (the "Act")**

**and**

**AN ENVIRONMENTAL ASSESSMENT OF THE  
JUMBO GLACIER ALPINE RESORT PROJECT (the "Project")**

**TIME LIMIT EXTENSION ORDER**

**WHEREAS:**

- A. On December 30, 2002, the Executive Director of the Environmental Assessment Office issued Transition Order #02-09 which set out the next steps for reviewing the Project;
- B. Project report specifications issued under the former *Environmental Assessment Act*, R.S.B.C. 1996, c. 119 in May 1998, describe additional information required from Glacier Resorts Ltd. to identify and assess the potential effects of the Project; and
- C. Condition 3 in Transition Order #02-09 required Glacier Resorts Ltd. to provide additional information described in the Project report specifications to the Executive Director by December 31, 2003.

**NOW THEREFORE:**

Pursuant to Section 24(4) of the Act, the undersigned hereby extends the time limit as specified in Condition 3 of Transition Order #02-09 for:

- a) information described in Project report specifications A.3 #1, A.7 #2-4, D.1(B) #8, D.2(A) #4, D.2(B) #1 and E.5(A) #1 to February 13, 2004; and
- b) information described in Project report specification D.3(D) to July 15, 2004.

  
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Joan Hesketh

Executive Director

Environmental Assessment Office

Dated this 27 day of January, 2004 at Victoria, British Columbia

## **Appendix B**

### **Scope, Procedures and Methods of the EA Review**

**IN THE MATTER OF THE ENVIRONMENTAL ASSESSMENT ACT S.B.C. 2002, c.43**

**AND**

**AN ENVIRONMENTAL ASSESSMENT OF THE  
JUMBO GLACIER RESORT PROJECT (the "PROJECT")**

**ORDER UNDER SECTION 11**

**WHEREAS:**

- A. In April 1991, Glacier Resorts Ltd. (the "Proponent"), submitted a formal expression of interest in developing the skiing potential of the upper Jumbo Creek valley to the Ministry of Environment, Lands and Parks (BC Lands Division) who, following an initial public and agency review, issued a call for proposals to undertake development in the area under the Commercial Alpine Ski Policy;
- B. In March 1993, the Proponent's proposal (February) to develop a ski resort in Jumbo Creek valley (55 km west of Invermere, British Columbia) was accepted and the Proponent was granted sole proponent status. However, consideration under the Commercial Alpine Ski Policy was deferred pending the completion of a Kootenay land-use plan by the Commission on Resources and the Environment;
- C. In October 1994, the Commission on Resources and the Environment recommended that the area of the proposed ski resort be subject to an environmental assessment;
- D. In March 1995, the East Kootenay Land Use Plan identified ski resort development as a potentially acceptable use of the upper Jumbo Creek valley area and included that area in the Jumbo-Upper Horsethief Special Resource Management Zone;
- E. In June 30, 1995 the *Environmental Assessment Act*, R.S.B.C. 1996, c.119 was proclaimed, and consideration of the Proposal under Commercial Alpine Ski Policy was put on hold pending completion of the environmental assessment (Transition Order M 364 required that the Project be accepted for review and proceed in a review from the step identified under section 8(1));
- F. In July 1995, the Proponent submitted an application for a project approval certificate and the Environmental Assessment Office (the "EAO") conducted a 75-day formal public comment period from July 15, 1995 to September 28, 1995 and hosted public meetings in Invermere, B.C. and Nelson, B.C. (September 14 and 20, 1995);
- G. On December 13, 1996, the EAO issued Draft Project Report Specifications (including issues identified by the public and the Jumbo Glacier Project Committee's responses to them) and a consultation adequacy assessment report, and conducted a 65-day public comment period on the Draft Project Report Specifications from December 18, 1996 to February 20, 1997;
- H. On May 20, 1998, the EAO issued Final Project Report Specifications ("Project Report Specifications");
- I. On September 4, 2003, Glacier Resorts Ltd. (the Proponent) informed the EAO that the name of the Project was changed to the Jumbo Glacier Resort Project;

- J. On December 30, 2002, the *Environmental Assessment Act*, S.B.C. 2002, c.43 (the "Act") was proclaimed, and Transition Order #02-09 issued by the Executive Director indicating that: the project have an environmental assessment certificate; the Proponent could not proceed without an assessment; and the previous review process would be replaced by one to be identified in an order to be issued under section 11 of the Act which would also specify the process for consulting with members of the former project committee and others;
- K. On December 30, 2002, the Executive Director of the EAO, in accordance with section 4 of the Act, delegated certain statutory and regulatory powers and duties to the undersigned Project Assessment Director (the "Director");
- L. On January 27, 2004, the Executive Director of the EAO issued a Time Limit Extension Order to enable the EAO to conduct a thorough and timely review of the additional information required to complete the environmental assessment of the Project as a basis for a decision by Ministers.

**NOW THEREFORE:**

I order that the name of the Project be changed to the Jumbo Glacier Resort Project (the Project) and that, pursuant to section 11 of the Act, the environmental assessment of the Project be conducted according to the scope, procedures and methods set out in Schedule A.



Martyn Glassman  
Project Assessment Director

Dated January 27, 2004 at Victoria, British Columbia

## SCHEDULE A

### SCOPE, PROCEDURES AND METHODS FOR THE ENVIRONMENTAL ASSESSMENT OF THE JUMBO GLACIER RESORT PROJECT

The proposal to construct and operate the Jumbo Glacier Resort Project is a reviewable project within the meaning of Part 9 of the *Reviewable Projects Regulation* (B.C. Reg. 370/2002) and therefore requires review under the *Environmental Assessment Act* (S.B.C. 2002, c. 43).

#### 1. DEFINITIONS FOR SCHEDULE A

<b>“Act”</b>	has the same meaning as in section J of this Order;
<b>“Additional Information”</b>	Means, in accordance with section 4.1.1(a) of this Order, the information described in the Project report specifications with the exception of information described in Project report specification D.2(A) #4 which, in the opinion of the Executive Director, cannot be feasibly provided by the Proponent in the absence of a drilling exploration program for groundwater;
<b>“Application”</b>	means the Proponent’s application for an environmental assessment certificate for the Project, made under section 16 of the Act, as described in section 2 of this Order;
<b>“Assessment Report”</b>	means the report referred to in section 5.3.1 of this Order;
<b>“Director”</b>	has the same meaning as in section K of this Order;
<b>“Environmental Assessment Office” or “EAO”</b>	means the office set up under section 2 of the Act;
<b>“Lead Agency”</b>	means the review participant identified as the lead agency for a given issue in the Project Report Specifications;
<b>“Local Government Response Documents”</b>	means the written responses to the Project referred to in section 5.2.15 of this Order;
<b>“Ministers”</b>	means the Minister of Sustainable Resource Management, the Minister of Water, Land and Air Protection, and the responsible minister;
<b>“Order”</b>	includes all pages of this Order, including this Schedule (Schedule A);
<b>“Project”</b>	means the proposed Jumbo Glacier Resort Project;
<b>“Project Information Centre”</b>	means the project information centre set up under section 25 of the Act;
<b>“Project Report”</b>	means the Proponent’s submission of Additional Information received by the EAO by December 31, 2003;
<b>“Project Report Specifications”</b>	means the Final Project Report Specifications referred to in section H of this Order;

<b>“Project Report Supplement”</b>	means the Proponent’s submission of a portion of the Additional Information referred to in section 5.1.3 of this Order. This is to include the Proponent’s response to information requirement D.3 (D);
<b>“Proponent”</b>	means Glacier Resorts Ltd.;
<b>“Proponent Responses”</b>	means the Proponent’s responses to written comments referred to in section 5.2.13 of this Order;
<b>“Public Comment Period”</b>	means the period for formal public comment referred to in section 6.3.4 of this Order;
<b>“Public Consultation Assessment”</b>	means the assessment of public consultation conducted in accordance with section 6.3.1 of this Order;
<b>“Report on Public Views and Interests”</b>	means the report referred to in section 6.3.9 of this Order;
<b>“review participants”</b>	means any or all of the parties to the assessment of the Project, including the public, First Nations, government agencies and/or the Proponent;
<b>“Technical Advisory Committee”</b>	means the committee referred to in section 5.2.1 of this Order; and
<b>“Technical Working Groups”</b>	means the working groups referred to in section 5.2.3 of this Order.

## 2. APPLICATION DOCUMENTATION

2.1. The Application for an environmental assessment certificate from Glacier Resorts Limited (Proponent) consists of the following documents:

- Jumbo Glacier Alpine Resort: a study in compliance with the Commercial Alpine Ski Policy and in compliance with the requirements for the Project Report according to the Environmental Assessment Act of British Columbia (Volumes 1 and 2): June 2, 1995. Prepared by Pheidias Project Management Corporation.
- Jumbo Glacier Alpine Resort, Volumes 3 (Appendices A – O): June 2, 1995. Prepared by Pheidias Project Management Corporation.
- Jumbo Glacier Alpine Resort, Volumes 4 (Appendix P): June 2, 1995. Prepared by Pheidias Project Management Corporation.
- Jumbo Glacier Alpine Resort, Volumes 5 (Appendix P con’t): June 2, 1995. Prepared by Pheidias Project Management Corporation.

and must be supplemented by the Proponent with Additional Information.

## 3. SCOPE OF THE PROJECT

3.1. The assessment of the Project will include the following on-site and off-site components and activities as described in the Project Report Specifications (Appendix A):

- 3.1.1 the construction and operation of all on-site and off-site facilities which are installed exclusively or primarily for the benefit of this project; and
- 3.1.2 associated activities related to (or attributable to) resort operations, including:
  - a) the use of physical infrastructure built in the Toby/Jumbo Creek drainages;

- b) use of, or impacts on, infrastructure and services provided in the surrounding region; and
- c) impacts on First Nations traditional use of the area in the vicinity of the project.

3.2. Specifically:

- 3.2.1 On-site Facilities - Definition of the project is deemed to include the design, construction and operation of the following at the resort site itself:
  - a) ski runs, including circulation corridors;
  - b) ski lift system;
  - c) ski run maintenance facilities;
  - d) rescue facilities;
  - e) ski lodge;
  - f) ski village;
  - g) hotels, condominiums, townhouses, chalets, single family dwellings;
  - h) on-site road system;
  - i) water supply systems for all on-site components;
  - j) solid waste disposal systems for all on-site components, including on-site (and if necessary, off-site) disposal facilities and systems;
  - k) liquid waste disposal systems for all on-site components, including on-site (and if necessary, off-site) disposal facilities and systems; and
  - l) relevant operational, environmental design and public safety considerations.
- 3.2.2 Off-site Physical Infrastructure in the Toby/Jumbo Creek Drainages - Definition of the Project is deemed to include the design, construction and operation of the following off-site physical infrastructure:
  - a) access road from Invermere to the proposed resort, with particular focus up valley from the Panorama ski resort;
  - b) bridges along the access road;
  - c) related facilities such as gravel/borrow pits and maintenance yards (if any);
  - d) proposed off-site parking facilities (e.g., near the Mineral King mine site);
  - e) the proposed electric transmission line hook-up to the integrated grid;
  - f) telephone communications;
  - g) any other project components for which an off-site location is proposed; and
  - h) relevant operational, environmental design and public safety considerations.
- 3.2.3 On-site Activities and Services and Off-site Activities - Definition of the project is deemed to include:
  - a) activities based at, or originating from, the resort at each season, including those, if any, which would extend off-site to surrounding areas (e.g., cross-country skiing, hiking, etc. - the proponent will be responsible for identifying any such activities); and
  - b) on-site services required to operate the resort community.

#### 4. SCOPE OF THE ASSESSMENT

- 4.1.1 The assessment of the Project will include consideration of those potential environmental, economic, social, heritage and health effects identified in the Project Report Specifications as being within the scope of the assessment, excluding:
  - (a) any information described in Project report specification D.2(A)4 which, in the opinion of the Executive Director, cannot be feasibly provided by the Proponent in the absence of a drilling exploration program for groundwater.

- 4.1.2 The assessment will take into account practical means to prevent or reduce to an acceptable level any potential significant adverse effects.

## 5. ASSESSMENT PROCEDURES

### 5.1. Accepting the Project Report for Review

- 5.1.1 The Proponent must supply an electronic version of the Project Report in an acceptable electronic format, and the number of hard copies indicated by the Director.
- 5.1.2 Within 30 days of receiving the Project Report, the Director will screen the Project Report to determine if it contains the Additional Information.
- 5.1.3 With the prior agreement of the Director, the Proponent may submit a portion of the Additional Information in a supplementary document (the "Project Report Supplement"), filed separately from, and after, the filing of the Project Report for screening.
- 5.1.4 The Director may establish any advisory mechanism determined necessary to assist with the screening of the Project Report (and Project Report Supplement).
- 5.1.5 Upon acceptance of the Project Report (or Project Report Supplement) for review, the Proponent must, if it has not already done so, submit to the Director an electronic version of the complete final form of the Project Report (or Project Report Supplement), in an acceptable electronic format, and hard copies (for use by the EAO) in the quantity indicated by the Director.
- 5.1.6 Pursuant to Transition Order #02-09, a review period of up to 180-days will begin upon receipt by the Director of those copies of the complete final form of the Project Report referred to in section 5.1.5 of this Order.

### 5.2. Reviewing the Project Report

#### Advising the Director on the Assessment

- 5.2.1 The Director will establish and chair a **Technical Advisory Committee** to advise the assessment.
- 5.2.2 The following agencies will be invited to participate on the Technical Advisory Committee:

#### Province of British Columbia

- a) Ministry of Sustainable Resource Management (SRM)
- b) Ministry of Water, Land and Air Protection (WLAP)
- c) Ministry of Small Business and Economic Development (SBED)
- d) Interior Health Authority (IHA)
- e) Land and Water British Columbia Inc. (LWBC)
- f) Ministry of Agriculture, Food and Fisheries (MAFF)
- g) Ministry of Attorney General – Treaty Negotiations Office (MAG-TNO)
- h) Ministry of Community, Aboriginal and Women's Services (CAWS)
- i) Ministry of Energy and Mines (MEM)
- j) Ministry of Forests (MOF)
- k) Ministry of Transportation (MOT)

#### Regional and Local Government

- l) Regional District of the East Kootenay (RDEK)
- m) Regional District of the Central Kootenay (RDCK)
- n) District of Invermere (DOI)
- o) Village of Radium (VOR)

First Nations

- p) Ktunaxa Kinbasket Tribal Council (KKTC)
- q) Columbia Lake Indian Band (CLIB)
- r) Shuswap Indian Band (SIB)

- 5.2.3 The Director may, as necessary, establish and chair **Technical Working Groups** to assist with the assessment of specific issues.
- 5.2.4 Technical Working Group membership will be determined by the Director.
- 5.2.5 The nature and extent of agency involvement in the assessment will be guided by the issue profiles (including Lead Agency) contained in the Final Project Report Specifications (Appendix A). The EAO will assume lead agency status for issues where the Project Report Specifications assign that role to the project committee.
- 5.2.6 Members of the Technical Advisory Committee and Technical Working Groups, when requested by the Director, will undertake the following specific tasks from the perspective of the interests and/or program responsibilities of the organizations which they represent:
  - a) review and comment on the Project Report (and Project Report Supplement);
  - b) review written comments on the Project Report (and Project Report Supplement);
  - c) review the Proponent's responses to written comments;
  - d) provide advice on issues raised during the course of the assessment; and
  - e) provide advice on the assessment findings to be reported to Ministers at the conclusion of the environmental assessment review.
- 5.2.7 The Director may add or remove agencies from the Technical Advisory Committee or Technical Working Groups.
- 5.2.8 The Director may consult government agencies which are not members of the Technical Advisory Committee or Technical Working Groups with respect to specific issues relevant to their mandates.

**Agency and First Nations Comments on the Project Report**

- 5.2.9 The Proponent must provide copies of the Project Report (and Project Report Supplement) to government agencies and First Nations for information and consultation purposes, as directed by the Director.
- 5.2.10 The Director will invite government agencies and First Nations, either through their participation in the work of the Technical Advisory Committee or Technical Working Groups or individually, to submit written comments on the Project Report (and Project Report Supplement) within a period determined by the Director.

**Public Comments on the Project Report**

- 5.2.11 As per section 6 of this Order.

**Proponent's Reporting of Issues and Responses to Comments**

- 5.2.12 Within 15 days of the close of the formal public comment period identified in section 6.3.4 of this Order, the Proponent must provide the Director a written report on the results of all public consultation activities held and attended in support of the Project Report, noting public interest (including attendance), views, issues and concerns raised with respect to the Project.

- 5.2.13 The Proponent must respond to issues that are identified in written comments by government agencies and First Nations received during the review of the Project Report (and Project Report Supplement), and to public written comments which are received during a formal public comment period that the Director considers to be within the scope of the assessment (the “**Proponent Responses**”).
- 5.2.14 Where requested by, and within any time limits set by, the Director, the Proponent must provide specified additional information in relation to, or to supplement, the information provided to address issues identified during the course of the review.

### **Local Government Response Document**

- 5.2.15 In addition to the opportunity to participate in the technical review of the Project Report as per section 6.3 of this Order, Regional and Local Government agencies identified in section 5.2.2 of this Order will be invited to prepare and submit to the Director official written responses to the Project (the “**Local Government Response Documents**”) upon consideration of information on the Project including, but not limited to:
- a) the Project Report;
  - b) Project Report review comments identified in section 5.2.11 of this Order;
  - c) the Proponent Responses identified in section 5.2.13 of this Order; and
  - d) the Report on Public Views and Interests identified in section 6.3.9 of this Order.
- 5.2.16 Local Government Response Documents are to be submitted within a period determined by the Director.
- 5.2.17 Upon receiving Local Government Response Documents, the Director will determine whether further responses to specific technical issues are required from the Proponent in order to prepare the Assessment Report identified in section 5.3.1 of this Order.
- 5.2.18 As required by the Director, the Proponent must respond to issues identified in Local Government Response Documents.
- 5.2.19 Local Government Response Documents, and associated Proponent responses, will be incorporated into the Assessment Report identified in section 5.3.1 of this Order to be provided to the Minister of Sustainable Resource Management, the Minister of Water, Land and Air Protection, and the responsible minister (the “Ministers”) for their consideration in making a decision on the Application.

### **5.3. Preparing the Assessment Report**

- 5.3.1 Pursuant to section 17(1) of the Act, the Director will prepare a report on the assessment of the Project (the “Assessment Report”) for submission to the Ministers for their consideration in making a decision on the Application under section 17(3) of the Act.
- 5.3.2 For the purposes of completing the Assessment Report, the Director will consult, as necessary, with the Technical Advisory Committee, the Proponent, and others as determined by the Director.

### **5.4. Referral to Ministers**

- 5.4.1 Pursuant to the Transition Order #02-09, the Director will refer the Application, the Assessment Report, and any recommendations (including reasons) to the Ministers for a decision within the time period identified in section 5.1.6 of this Order. Pursuant to section 17(3)(c) of the Act, the Ministers must, within the time

limit provided in section 4 of the *Prescribed Time Limits Regulation* (B.C. Reg. 372/2002):

- a) issue an environmental assessment certificate to the proponent, and attach any conditions to the certificate that the Ministers consider necessary;
- b) refuse to issue the certificate to the proponent; or
- c) order that further assessment be carried out, in accordance with the scope, procedures and methods specified by the Ministers.

## 6. CONSULTATION

### 6.1. Access to Information

- 6.1.1 The Director will make available to the public, through the Project Information Centre (available online through [www.eao.gov.bc.ca](http://www.eao.gov.bc.ca)), records generated for the purposes of the assessment in accordance with section 6 of the *Public Consultation Policy Regulation* (B.C. Reg. 373/02) and this Order.
- 6.1.2 The Director will also make available, through the Project Information Centre (available online through [www.eao.gov.bc.ca](http://www.eao.gov.bc.ca)), the following records:
  - a) Technical Advisory Committee and Technical Working Group meeting minutes;
  - b) EAO newsletters and other communication materials; and
  - c) The Report on Public Views and Interests referred to in section 6.3.9 of this Order.
- 6.1.3 The Director will make available to the public, through local information locations at the Invermere Public Library, the Cranbrook Public Library, the Nelson Public Library, the Argenta Community Library, the Silvertown Municipal Office and the Kaslo Government Agent's Office, the Project Report (and Project Report Supplement) and other project information as determined by the Director.

### 6.2. Notification

- 6.2.1 The Proponent must:
  - a) prior to the open houses identified in section 6.3.7 of this Order, provide a summary of the Project Report as inserts in the publications identified in section 6.2.1 c) of this Order;
  - b) advertise the date, time and location of any open houses whether organized by the EAO or the Proponent;
  - c) provide public notice of the availability of the Project Report for public review and comment, along with the time limits for the formal public comment period, in the Cranbrook Daily Townsman, the East Kootenay Weekly, the Kootenay Advertiser, the Invermere Valley Echo, the Nelson Daily News, the Express (Nelson), the Golden Star, and the Kaslo Pennywise. The content, format, and publication schedule must be approved by the Director.
- 6.2.2 First notices for public comment periods and open houses must appear:
  - a) in the case of a formal public comment period, at least 7 days prior to the date on which the formal public comment period commences, and
  - b) in the case of an open house, at least 7 days prior to the date on which an open house is scheduled.

### 6.3. Consultation Activities

#### Public Consultation Assessment

- 6.3.1 The Director will assess the adequacy of the Proponent's past and proposed public consultation activities and provide the results of that assessment (the

- “Public Consultation Assessment”) to the Proponent in writing within 30 days of receiving the Project Report for screening.
- 6.3.2 The Public Consultation Assessment may:
- a) specify further consultation activities that the Director considers necessary to ensure adequate public consultation,
  - b) set time limits for carrying out specific consultation activities, and
  - c) allocate responsibilities for carrying out specific consultation activities to the Proponent, the Environmental Assessment Office, or both.
- 6.3.3 The Proponent will be required to complete the public consultation program, including any additional measures for consultation specified by the Director, by the dates stipulated or agreed upon.

### **Public Comment Period**

- 6.3.4 The Director will hold a formal public comment period of 60 days, commencing 7 days after notice of the comment period is posted on the Project Information Centre, inviting the public to submit written comments on the Project Report.
- 6.3.5 Upon acceptance of a Project Report Supplement referred to in section 5.1.3 of this Order, the Director may establish any public consultation process determined necessary to solicit public review comments.

### **Public Involvement**

- 6.3.6 The Proponent must conduct the public consultation program proposed in its Project Report, subject to any modification of that program ordered by the Director under this Order.
- 6.3.7 The EAO will organize open houses in Invermere, B.C. and Nelson, B.C., respectively, during the formal public comment period identified in section 6.3.4 of this Order.
- 6.3.8 The open houses identified in section 6.3.7 of this Order will be designed to provide a forum for effective two-way communication that is interactive and leads to a mutual understanding of interests (*i.e.*, use of work stations to present information contained in the Project Report; consultants available to discuss and respond to specific issues within the scope of the assessment; government agencies available to provide any necessary government policy context).

### **Report on Public Views and Interests**

- 6.3.9 The Director will, following the formal public comment period identified in section 6.3.4 of this Order, prepare a report summarizing all public submissions received by the EAO during the review of the Application (the “**Report on Public Views and Interests**”), including:
- a) a summary of public submissions received during the formal public comment period identified in section 6.3.4 of this Order, including associated proponent responses; and
  - b) a summary of public submissions received during the comment period on the Application (July 15, 1995 to September 28, 1995)<sup>1</sup> and the Draft Project Report Specifications (December 18, 1996 to February 20, 1997)<sup>2</sup>.

<sup>1</sup> Jumbo Glacier Project Committee Responses to Views Expressed and Issues Identified by the Public with Respect to the Proposed Jumbo Glacier Alpine Resort Project.

<sup>2</sup> Project Committee/Review Agency Responses to Public comments on the Draft Specifications, as flagged in July 4, 1997 Chart: Tabulation of Public Comments received during Public Comment Period on Draft Project Report Specifications – December 18, 1996 to February 20, 1997.

- 6.3.10 The Report on Public Views and Interests will be incorporated into the Assessment Report to be provided to the Ministers as a complete and accurate reporting of public issues and concerns for their consideration in making a decision on the Application.

#### **6.4. First Nations Consultation**

- 6.4.1 The Proponent must make reasonable efforts to consult with First Nations listed in section 5.2.2 of this Order in accordance with the consultation program proposed in the Project Report, including discussions of:
- a) any aboriginal interests which may be potentially affected by the Project; and
  - b) measures to avoid, mitigate or, where appropriate, otherwise accommodate for those interests.
- 6.4.2 The Proponent must report to the Director the results of any consultations conducted with First Nations.
- 6.4.3 Based on the Proponent's reports referred to in section 6.4.2 of this Order, the Director may require the Proponent or the EAO to implement additional measures for First Nations consultation.
- 6.4.4 The Proponent, or the First Nations, may request the assistance of the EAO in these consultations.
- 6.4.5 The Proponent must advise the Director as early as practicable if circumstances arise which, in the Proponent's view, prevent the Proponent from completing First Nations consultation measures, in which case, the Director may require the Proponent to undertake alternative measures.
- 6.4.6 As required and by mutual agreement, the Director will arrange consultation meetings with the First Nations to discuss:
- c) any aboriginal interests which may be potentially affected by the Project; and
  - d) measures to avoid, mitigate or, where appropriate, otherwise accommodate for those interests.

## Technical Advisory Committee

The following agencies, local governments and First Nations were invited to participate on the Technical Advisory Committee (TAC) established to advise the EAO on the EA review:

### Province of British Columbia

- a) Ministry of Sustainable Resource Management (SRM)
- b) Ministry of Water, Land and Air Protection (WLAP)
- c) Ministry of Small Business and Economic Development (SBED)
- d) Interior Health Authority (IHA)
- e) Land and Water British Columbia Inc. (LWBC)
- f) Ministry of Agriculture, Food and Fisheries (MAFF)
- g) Ministry of Attorney General – Treaty Negotiations Office (MAG-TNO)
- h) Ministry of Community, Aboriginal and Women’s Services (CAWS)
- i) Ministry of Energy and Mines (MEM)
- j) Ministry of Forests (MOF)
- k) Ministry of Transportation (MOT)

### Regional and Local Government

- l) Regional District of East Kootenay (RDEK)
- m) Regional District of Central Kootenay (RDCK)
- n) District of Invermere (DOI)
- o) Village of Radium Hot Springs (VOR)

### First Nations

- p) Ktunaxa/Kinbasket Tribal Council (KKTC)
- q) Columbia Lake Indian Band (CLIB)
- r) Shuswap Indian Band (SIB)

The following representatives participated in one or more TAC meetings:

Martyn Glassman  
Project Assessment Director  
**Environmental Assessment Office**

Alan Calder  
Project Assessment Manager  
**Environmental Assessment Office**

Roger Tailleir  
Project Assessment Officer  
**Environmental Assessment Office**

Bill Irwin  
Director, All Seasons Resorts  
**Land and Water BC Inc.**

Psyche Brown  
Alpine Ski Manager,  
Land and Water Management Division  
**Land and Water BC Inc.**

Dannie Carsen  
Economist, Community Transition  
**Ministry of Community, Aboriginal and  
Women’s Services**

Kevin Weaver  
Regional Manager,  
Economic Development Division  
**Ministry of Small Business and Economic  
Development**

Greg Anderson  
RSM-Revitalization  
**Ministry of Forests**

Steve Flett  
District Planner  
**Ministry of Sustainable Resource  
Management**

Ken Gorsline  
Regional Planning Manager  
**Ministry of Sustainable Resource  
Management**

Rodger Stewart  
Manager, Environmental Assessment and  
Major Projects  
Environmental Stewardship Division  
**Ministry of Water, Land and Air Protection**

Kathy Eichenberger  
Regional Manager, Nelson  
Environmental Protection Division  
**Ministry of Water, Land and Air Protection**

Gary Lawrence  
Environmental Protection Officer  
**Ministry of Water, Land and Air Protection**

Ed Shaw  
Floodplain Technician  
**Ministry of Water, Land and Air Protection**

Doug Martin  
Senior Ecosystem Specialist  
**Ministry of Water, Land and Air Protection**

Matt Austin  
Species Specialist  
**Ministry of Water, Land and Air Protection**

Jolene Raggett  
Environmental Impact Assessment Biologist  
**Ministry of Water, Land and Air Protection**

Jack Bennetto  
District Manager, Transportation  
**Ministry of Transportation**

Carl Withler  
Resource Stewardship Agrologist  
**Ministry of Agriculture, Food and Fisheries**

Ron Popoff  
Senior Public Health Officer  
**Interior Health**

Dave Brooks  
Superintendent  
**BC Ambulance Services**

Dave Grieve  
Regional Geologist,  
Mining and Minerals Division  
**Ministry of Energy and Mines**

Brian McLaughlin  
Councillor  
**District of Invermere**

Larry Greenlaw  
Director  
**Regional District of Central Kootenay**

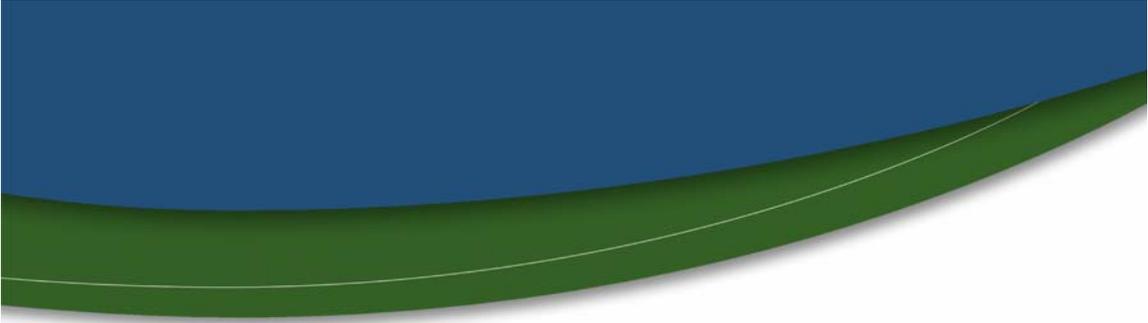
Bob Whetham  
Manager, Planning & Development Services  
**Regional District of East Kootenay**

Greg Deck  
Mayor  
**Village of Radium Hot Springs**

Mathew Nye  
Chief Financial Officer,  
Kinbasket Development Corporation  
**Shuswap Indian Band**

All members were not involved in every meeting. Proposed agendas were distributed in advance of the meetings to enable members to decide which meetings warranted their participation.

**Appendix C**  
**Report on Public Views and Interests**



**JUMBO GLACIER RESORT PROJECT  
REPORT ON PUBLIC VIEWS AND INTERESTS**

**Prepared by:  
Environmental Assessment Office**

**August 3, 2004**

## Preamble

This report has been prepared in accordance with section 6.3.9 of the procedural order issued under section 11 of the *Environmental Assessment Act* for the Jumbo Glacier Resort Project (the Project). The purpose of the Report on Public Views and Interests is to summarize and report on all written public comments received by the Environmental Assessment Office (EAO) during the environmental assessment (EA) review of the Project.

The Project is located in one of the few areas in the East Kootenay that provides easy motorized access to the Purcell Mountains. Jumbo Creek valley and adjacent areas are popular backcountry area for hunting and recreational use such as hiking and picnicking in the summer months. The area, and the Project, have been the subject of ongoing land use debate for over ten years, despite the Kootenay/Boundary Land Use Plan allowing resort development in the area. As a result, the context of the EA review is one in which there is local public, political and First Nations division on the Project.

EA in British Columbia is an issue-driven technical review process that leads to an informed political decision. The consideration of public comments is an important part of the EA review process. Specific issues raised in submissions are considered as part of the technical review which is documented in the Assessment Report.

A public comment period conducted as part of an EA review should not be treated or considered as a referendum on a project. Public participants are self-selected and trusted to provide information that is complete and accurate. Further, there is generally not a high level of quality control built into the process for submitting public comments.

The number of submissions that express support for or concerns regarding a given project should not be considered to represent polling or survey data. Such data has no statistical validity or measurable levels of confidence associated with the degree of project acceptability. At best, this type of information is only indicative of the general nature and extent of public views and interests. In order to make this information more useful, it has (for February 13 to April 13, 2004 formal public comment period only) been put in the context of the response rate of specific communities and regions (see 2.1.3.4, Figure 8 to Figure 11).

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## 1. Background

### 1.1. The Project

Glacier Resorts Ltd. (the Proponent) proposes a year round ski resort in Jumbo Creek valley, located in the Purcell Mountain Range approximately 55 km west of Invermere, British Columbia.

At full build-out, the proposed \$450 million the Project would include an estimated 104 hectare (ha) resort base area consisting of a hotel with approximately 6,250 bed units (which includes 750 bed units for staff accommodation), condominium vacation homes, and associated amenities for the resort community. The Controlled Recreation Area (CRA) which includes areas licensed for ski runs and connecting territory, would encompass approximately 5,925 ha and includes lift-serviced access to several nearby glaciers at an elevation of up to approximately 3,400 metres. The Project would provide approximately 3,750 person years of construction employment and create 750 to 800 permanent full-time jobs.

### 1.2. Environmental Assessment Review Process

Since the environmental assessment (EA) review of the Project began in 1995, the following list of activities have been undertaken:

<b>Date</b>	<b>Action</b>
June 1995	EA Application Filed by Glacier Resorts Ltd.
<b>July 15 to September 28, 1995</b>	<b>75-day Public Comment Period on Application</b>
December 1996	Draft Project Support Specifications prepared by the Jumbo Glacier Alpine Resort Project Committee
<b>December 13, 1996 to February 20, 1997</b>	<b>60-day Public Comment Period on the Draft Project Report Specifications</b>
May 1998	Final Project Report Specifications prepared by the Jumbo Glacier Alpine Resort Project Committee
May 1998 to December, 2003	Glacier Resorts Ltd. conducts studies and compiles information required in response to the Final Project Report Specifications
December 2002	Project transitioned for review under the new <i>Environmental Assessment Act</i> (2002)
December 30, 2003	Project Report completed by Glacier Resorts Ltd. and submitted to the EAO
January 27, 2004	EAO accepts the Project Report for review
February 5, 2004	EAO 180-day Review Period on the Project Report begins
<b>February 13 to April 13, 2004</b>	<b>60-day Public Comment Period on the Project Report</b>
June 28, 2004	EAO accepts the Project Report Supplement (Migratory and Non-migratory Birds) for review
<b>July 1 to 9, 2004</b>	<b>9-day Public Comment Period on the Project Report Supplement</b>
August 3, 2004	Assessment Report referred to Ministers.

### 1.3. Public Consultation

#### 1.3.1 EAO Activities

The main goals of public consultation in the EA process are:

- to ensure an open and accountable review process;
- to provide notification and information to the public at an early stage in the planning of proposed reviewable projects;
- to ensure that there is adequate public input into the identification and resolution of concerns and issues raised with respect to proposed projects and their potential effects; and,
- to ensure that local public and community-level information, knowledge and concerns contribute to both the project design process of the proponent and the decision making process of the government.

For the Jumbo Glacier Resort Project, the Environmental Assessment Office (EAO) has participated in the following forums for public review and input into the EA review process:

- public meetings (1995)
- the establishment and operation of a Public Advisory Committee (1996-1998)
- public open houses (2004)
- public review and comment periods on:
  1. the Project Application (1995)
  2. the Draft Project Report Specifications (1996/1997)
  3. the Project Report (2004)
  4. the Project Report Supplement (2004)
- access to project review information through the EAO's Project Information Centre online at [www.eao.gov.bc.ca](http://www.eao.gov.bc.ca).
- maintenance of local information outlets at libraries at Invermere, Cranbrook, Nelson, Argenta and Silverton, as well as at the government agent's office in Kaslo.

#### 1.3.2 Proponent Activities

The Proponent is responsible for presenting the features of a proposed development. During the EA review, they have designed and implemented a public consultation program that has included:

- holding public open houses and more structured public meetings in various communities;
- offering to hold on-on-one meetings with identified public interest groups which have a known interest in the project; and,
- accommodating requests from public interest groups and organizations which approach the proponent to discuss the project.

As well, the Proponent has opened a Project Information Centre in Invermere and established a website ([www.jumboglacierresort.com](http://www.jumboglacierresort.com)) as two additional measures to communicate with the public and to provide access to information.

#### 1.3.3 Adequacy of Consultation

The December 13, 1996 document titled *Assessment of the Adequacy of Measures Being Implemented for Public and First Nations Notification, Access to Information and Consultation*

reviewed the consultation activities to that point in the review and determined that they were satisfactory (Appendix A).

On January 28, 2004, pursuant to section 6.3.1 of the Procedural Order issued under section 11 of the *Environmental Assessment Act*, the EAO reviewed the Public Consultation Program described in the Project Report (Volume 1, Section A.8). The EAO concluded that the past and proposed public consultation activities were adequate for the purpose of reviewing the additional information required to complete the EA review and required the Proponent to conduct the proposed Public Consultation Program outlined in the Project Report, as well as satisfy some additional requirements (Appendix B).

A summary of the Proponent's consultation activities is provided in Appendix C.

## 2. Written Public Comments

This section of the report summarizes written public comments on key project documents produced during the EA review process. Since July 1995, public comments have been received both inside and outside the following formal public comment periods:

- Public Comment Period on the Project Application July 15 to September 28, 1995 (75 days)
- Public Comment Period on the Draft Project Report Specifications December 18, 1996 to February 20, 1997 (60 days)
- Public Comment Period on the Project Report February 13 to April 13, 2004 (60 days)
- Public Comment Period on the Project Report Supplement July 1 to 9, 2004 (9 days)

There has been considerable and sustained interest in the Project throughout the EA review process. The purpose of each formal comment period is to elicit feedback on specific information related to a particular phase of the EA review. The Project Report (2004) represents the most current design of the Project; written public comments received during the review of this document best represent the existing state of public views and interests. Reporting on public views and interests focuses on this period (February 13-April 13, 2004), the analysis of which is the most detailed and comprehensive. The analysis of earlier public comments is more general in nature and has been included to provide an indication of the sustained level of interest in the Project.

### 2.1. Formal Public Comment Periods

#### 2.1.1 Public Comments on the Application (July 15, 1995 to September 28, 1995)

##### 2.1.1.1 Background

The Project Application was submitted to the Environmental Assessment Office on June 30, 1995 by Glacier Resorts Ltd.

The EAO established a 75-day formal written public comment period to provide the public with an opportunity to review and comment on the Application and to ensure that all relevant issues relating to the project were identified and addressed as part of the EA review process.

The public was notified about the Application through announcements in community papers, and the report was available for review at satellite document repositories throughout the project study area. Written submissions were received by the EAO during the 75-day public comment period.

### 2.1.1.2 Number of Submissions

The EAO received 324 unique submissions from identifiable individuals (including 4 petitions, each counted as one submission (see 2.1.1.4 Petitions)). An analysis of the geographical distribution of comments received during this period (1995) was not conducted.

### 2.1.1.3 Public Views and Interests

The following presents an overview of key issues derived from written comments during the 75-day comment period on the Jumbo Glacier Resort Project Application. There has been no attempt to substantively revise or correct (where inaccurate) the manner in public issues have been represented. A detailed summary of public issues and Project Committee responses is attached as Appendix D.

## I General Issues

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### *Review Process*

### *Land Use Planning*

### *Sustainability*

In regard to the actual review process, there was concern expressed that the public has little or no influence on whether the project should continue. There was a strong perception that the public is alienated from the process through use of highly technical and somewhat misleading language.

The need for proper integration with community values and findings of local planning processes such as the East Kootenay CORE table was noted as essential. It was further emphasized that regional sustainability was a priority without compromising the area's economic or environmental future.

## II Specific Project Design Issues

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### *Resort Configuration*

### *Glacier Skiing*

### *Waste Management*

### *Site Access/Access Road*

### *Electricity Supply*

In terms of the proposed resort configuration, there was a preference for a reduced resort development to minimize the footprint on the environment.

A number of respondents were concerned with glacier ablation impacting the overall glacier ski potential. Specific concerns were raised regarding the use of explosives, bulldozing and the use of salt or fertilizers.

Concerns were expressed with regard to waste management particularly in an alpine/sub alpine environment. Specific concerns were raised in regard to the sewage treatment plant operations, Invermere's landfill site capacity, liquid and solid waste impacts on fisheries and surrounding watersheds.

Concerns were raised regarding site access and use of the access road from a maintenance and overall use perspective. Protection

of wildlife was viewed as a priority by a number of respondents. Forest fire risk and the potential for avalanches was a concern with regard to road access and public safety.

The visual, ecological and financial impact of transmission line routes to the proposed development were raised as concerns.

### III Environmental Management Issues

<p><i>Environmental Impact Studies</i>  – General  <i>Water Management</i>  <i>Air Quality</i>  <i>Fish and Wildlife Resources</i>  <i>Wilderness Character of Area</i>  <i>Grizzly bears</i></p>	<p>A few respondents noted that the Application does not adequately address the actual impact of the project on the environment including the areas beyond Jumbo Creek. Respondents noted the need for substantiated plans for mitigation of impacts and ongoing monitoring.</p> <p>Concerns were noted related to water quantity and quality impacts that may accompany the proposed development. Specific concerns were noted over potential reduced water flows and the acquisition of potable water. Concerns were also expressed related to accumulated air pollution in the valley as a result of further development and activity.</p> <p>Protection of the existing fish and wildlife resources was of considerable interest to many respondents. Maintaining the Columbia River wetlands was a priority along with protecting potentially threatened species and the existing wildlife corridors. Grizzly bear protection was of considerable interest.</p> <p>A priority was placed by many respondents on maintaining the wilderness character of the area. The need for monitored and controlled growth of the proposed development was emphasized along with protecting the area for the current recreational users (particularly those experiencing the Purcell Wilderness Conservancy).</p>
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### IV Economic Issues

<p><i>Project Feasibility/Clientele</i>  <i>Public Sector Costs</i>  <i>Effect on Local Economy and Business Opportunities</i></p>	<p>A number of respondents raised concerns related to the financial viability of the project and the need for performance guarantees. Some concern was expressed as to the Proponent's perceived limited experience in operating a ski resort. A number of respondents were concerned about the potential financial risks to the public sector with direct reference to avalanche control, search and rescue, access road maintenance and fire management.</p> <p>Many respondents were supportive of the project and could foresee economic and employment benefits of the development in the area particularly in the tourism sector.</p>
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### V. Social and Community Issues

<p><i>First Nations</i>  <i>Impacts on Columbia Valley Communities</i>  <i>Community Services</i>  <i>Employment</i>  <i>Community Character and</i></p>	<p>From a First Nations perspective, a few respondents were concerned about the potential impact the land claims negotiation and settlement process may have on the proposed development.</p> <p>The potential impact on the quality of life in the Columbia Valley communities was raised as a concern by a number of respondents. Specifically, respondents were concerned about road/air</p>
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<i>Direction</i>	transportation impacts, including noise and congestion.
<i>Displacement of Local Interests</i>	<p>The impacts of the proposed development on community services including emergency services, local health resources, educational facilities, and policing were of concern to a number of respondents.</p> <p>A number of respondents welcomed the anticipated year-round employment opportunities that could potentially accompany the resort development. However, there was some concern that the remuneration packages would be low.</p> <p>There was concern expressed that the Kootenay region will lose its reputation as a genuine wilderness destination and that its carefree lifestyle and character would diminish. A number of respondents were concerned with the potential for increase in local crime related activities with the attraction of a transient workforce.</p> <p>The potential displacement of local interests for ‘foreign’ interests was raised as a concern. However, a few respondents voiced interest in accommodating the proposed development in the valley in order to stimulate the current economic base.</p>

#### 2.1.1.4 Petitions

The content of each of the four petitions received was as follows. No effort was made to identify duplicate signatures. Signatories are self-selected and trusted to provide information that is complete and accurate.

*“We are a few neighbours on the West Arm of Kootenay Lake who oppose the introduction of a new ski area into the Kootenays. Development on the magnitude which has been proposed for the Jumbo Pass area would profoundly affect our lives. As we and our families have watched the steady march of development in the Kootenays for the past 100 years, we have come to realize that there comes a time when one does not wish Nelson, Balfour, Kaslo or Willow Point to go the way of Squamish or Whistler.”*

**11 signatures**

*“We, the undersigned, do not want the Provincial Government to grant a permit to Jumbo Glacier Alpine Resort or any other ski resort to use the Jumbo Pass area as a ski resort.”*

**733 signatures collected by the  
Jumbo Creek Conservation Society**

*“Under the auspices of this Association, I support the development proposal for Jumbo Glacier Alpine Resort.”*

**95 signatures collected by the  
Association for the Protection and Enjoyment of the Kootenays (APEK)**

*“...Most of us are in the 20-30 age range and are active participants in outdoor sports here in the Kootenay area. Almost all of us have grown up in the Kootenays and would like to see its beauty preserved for ourselves and for our young students. We have 6 concerns regarding the Jumbo Pass Ski Resort ... Please, if nothing else, place the decisions of the Jumbo Pass area in the hands of the community.”*

**12 signatures collected by  
Students in the East Kootenay Elementary Teacher Education Program**

## 2.1.2 Public Comments on the Draft Project Report Specifications (December 18, 1996 to February 20, 1997)

### 2.1.2.1 Background

The Draft Project Report Specifications was prepared by the Jumbo Glacier Alpine Resort Project Committee and issued by the EAO in December 1996. The material comprising the draft specifications was assembled from public feedback received on the Application during a public comment period that extended from July 10 to September 28, 1995, and also from Project Committee members and other government agencies. The document was made available to the public on December 19, 1996, and an official 60-day public comment period was issued from January 13, 1997 to February 12, 1997. Due to a large volume of submissions received the week following February 12, 1997, the public comment period was extended to February 20, 1997 to include these comments.

The purpose of the 60-day public comment period on the Draft Project Report Specifications was to seek public input on the material presented and to assist in determining the need for additional studies and information.

On July 15, 1997, the EAO issued a document entitled *Analysis of Public Submissions Received During Jumbo Glacier Draft Project Report Specifications Public Comment Period December 18, 1996 – February 20, 1997* (Appendix E).

### 2.1.2.2 Number of Submissions

The EAO received 350 unique submissions from identifiable individuals (including 5 petitions, each counted as one submission (see 2.1.2.5 Petitions)).

### 2.1.2.3 Geographical Distribution of Submissions

Based on the 346 submissions analyzed (petitions excluded), written submissions were received from the following identifiable locations<sup>1</sup> (Figure 1).

- 73 submissions (23%) from the East Kootenay; including 50 submissions from Invermere/Panorama/Windermere, 7 submissions from Cranbrook, 6 submissions from Fairmont Hot Springs, and 7 submissions from Radium Hot Springs/Edgewater;
- 190 submissions (60%) from the West Kootenay, including 80 submissions from Nelson, 40 submissions from Argenta/Kaslo, 12 submissions from Winlaw and 12 submissions from Creston;
- 21 (7%) from the rest of BC; and,
- 34 (10%) from the rest of Canada and the world.

Sixty-six submissions made explicit comments with respect to the Draft Project Report Specifications. Three-hundred and nine submissions expressed various degrees of opposition to the Project, while 8 submissions expressed support for the Project. Twenty-eight submissions did not specifically state support for, or opposition to, the Project (Figure 2).

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<sup>1</sup> The place of origin could not be determined for 27 submissions.

Figure 1. Geographical distribution of written public submissions (excluding petitions) received during formal public comment period (n=318) established for the review of the Draft Project Report Specifications (December 18, 1996 to February 20, 1997).

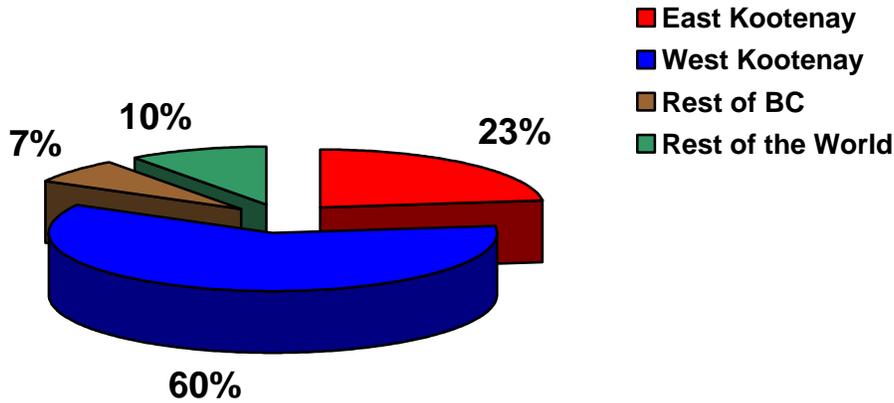
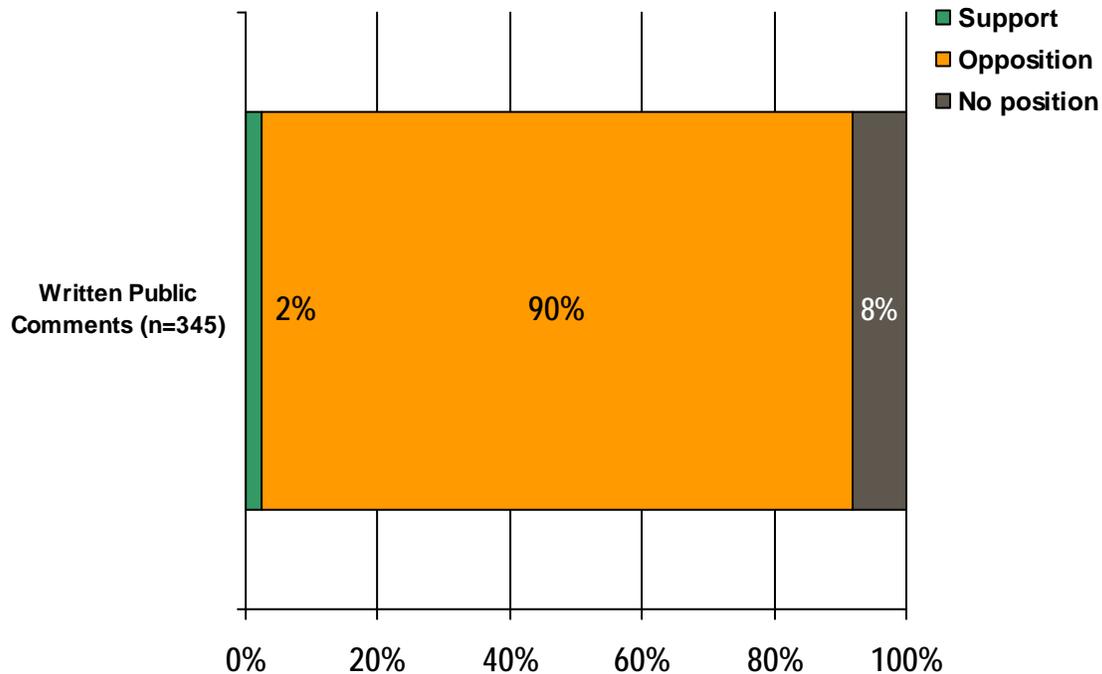


Figure 2. Summary of public views on the Project stated in written public submissions (n=345) received during formal public comment period established for the review of the Draft Project Report Specifications (December 18, 1996 to February 20, 1997). The number of submissions that expressed project support or opposition should not be considered to represent polling or survey data. Such data has no statistical validity or measurable levels of confidence associated with the degree of project acceptability.



#### 2.1.2.4 Public Views and Interests

An overview of key issues derived from written comments during the 60-day comment period on the Jumbo Glacier Resort Draft Project Report Specifications is presented below. There has been no attempt to substantively revise or correct (where inaccurate) the manner in which public issues have been represented. The issues are summarized in the following categories:

- I General Issues
- II Specific Project Design Issues
- III Environmental Management Issues
- IV Social and Economic Issues

A detailed summary of all issues and responses during this comment period is available in the document *Responses to Public Comments as Flagged in July 4, 1997 Chart: Tabulation of Public Comments Received during Public Comment Period on Draft Project Report Specifications – December 18, 1996 to February 20, 1997* in Appendix F.

#### I General Issues

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<b>Studies in general</b>	Respondents requested that consideration be given to European studies showing the environmental impact of similar projects. As well, it was noted that the Proponent adhere to strict guidelines regarding the collection and analysis of data for Project studies. Respondents expressed concern about the Proponent's definition of sustainable development and requested documentation of its green policy.
<b>Process</b>	It was requested that the Project Specifications include a summary of the application of the EA outlining the project committee rationale, relationship to the public advisory committee and the general public, and the government's policy regarding land stewardship. Respondents also requested disclosure of all documents. Some respondents were concerned about a perceived lack of federal/provincial review coordination. There was also concern regarding the composition of the PAC. First Nations concerns included the need to clarify the main goals of the First Nations and the lack of participation by the Sinixt (a group claiming to be descendants of the Arrow Lakes Indian Band).
<b>Project viability</b>	Respondents were concerned that the Phase 1 development would be too small to attract visitors. It was requested that concerns about the Project's viability be addressed by determining the present and future market for summer skiing, acquiring summer and winter snowfall data, compiling a complete report on costs to taxpayer, and exploring alternative resort locations. Respondents also expressed an interest in how the resort would be decommissioned if it failed.

#### II Specific Project Design Issues

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<b>Project Plan/Description</b>	There was a request for a detailed project plan description. As well, several respondents expressed concern that the project study area did not address areas of impact beyond the Resort Development, including: a wilderness corridor connecting the Purcell Wilderness Conservancy to the north; wildlife that range further than the proposed park boundaries, the area west of Jumbo Pass, the Glacier Creek, Tenise Creek and Horsethief Creek drainages, and the Lake of the Hanging Glacier.
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<b>Access/Utility Corridor</b>	It was perceived that the avalanche hazards along the access road and utilities transmission routes were understated. Also, respondents were interested in the extent to which the existing access and utilities corridors would be modified, and requested that the width be kept to a minimum.
<b>Specific Technical Resort Design</b>	Concern was noted for perceived ice loading, wind exposure, snow creep and avalanches on lift line towers. As well, respondents raised the potential requirement for special carriers for water, food, fuel and garbage.
<b>Water and Waste Management</b>	Respondents requested that the potential nutrient impact be assessed for the entire project, including equestrian activities and the golf course, in order to address concerns about the potential for nutrient runoff into local water supplies. Waste management concerns centred around the environmental impacts associated with the potential need for a larger landfill, and potential problems with bears attracted to the waste management site. It was requested that fuel storage sites be identified and that a spill contingency plan be developed. Respondents asked that consideration be given to sewer requirements for the entire project rather than Phase 1 alone. Also of concern was the Project requirement of sourcing 20l/s of water.

### III Environmental Management Issues

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<b>Air Quality/Climate Change</b>	Respondents noted their concern about the burning of fossil fuels associated with resort operation and road transportation. The potential for an increase in greenhouse gas emissions was also raised, as was the validity of ski resorts given global warming. Respondents requested that consideration be given to the potential production of PM <sub>10</sub> and banning the use of wood burning stoves and fireplaces.
<i>Cumulative effects</i>	There was a concern about the perceived absence of a cumulative effects assessment of the Project. Concern focused on the potential impacts to wildlife, plants and communities, as well as the Purcell Wilderness Conservancy.
<i>Grizzly bears</i>	Concern for Grizzly bears included the potential loss of habitat, reduced population, weakened genetic viability, restriction of movement, and conflicts with humans. It was requested that a minimum three-year Grizzly bear study be undertaken using a cumulative effects assessment. Included with this request was that the specifications for this study coincide with the priorities identified by the province's Grizzly bear strategy. Also of concern was the perceived unmonitored authority granted to the Proponent in determining the scope of studies and mitigation extent with regard to Grizzly bears.
<b>Fish and Wildlife Resources</b>	General concerns noted for both fish and wildlife included potential habitat modification from changes to the natural landscape and a concern for species sensitive to human disturbance. It was requested that baseline inventories be implemented, including field studies of federally and provincially listed species of concern. It was also requested that the Proponent document the experience of other resorts with regard to fish and

wildlife management.

Concerns specific to fish included the potential impact to blue-listed species habitat, particularly the Bull trout and Westslope Cutthroat trout populations in the Jumbo drainage, the potential impact on fish spawning in the Purcell Mountain creeks and the potential impact on winter habitat from water demands and snowmaking.

Wildlife concerns included: the perception that the wildlife study area was insufficient; potential destruction of habitat leading to reduced populations and low genetic diversity; potential impact from an increase in human activity; perceived insufficient analysis on small mammals and birds; and, a perceived absence of new wildlife studies and acceptable habitat mitigation plans. It was requested that provincial authorities govern the direction of wildlife management and that the Proponent be required to properly document wildlife enhancement plans and provide a quantitative analysis of potential wildlife impacts.

#### IV Social and Economic Issues

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*Socio Economic Impacts* Requests were made for an ecological-economic-social total cost assessment of the Project, including future developments and the potential cumulative impact with the Panorama expansion. Of particular concern was the perceived need to consider infrastructure costs. Employment issues of concern included the proportion of direct employment by local and regional people and the potential burden on the accommodation supply in the Columbia Valley. There was also a concern about the potential impact of the Project on backcountry wilderness associated businesses and the perceived impact on the integrity of the guiding territory in the Toby and Jumbo drainages. It was felt that consideration should be given to the strong mountaineering interest in the area such as the climbers who use the Farnham Creek headwaters. It was requested that potential noise impacts beyond the Project study area also be addressed.

#### **Other Related Issues**

There were a number of issues raised that do not reflect the scope of this comment period (i.e., review of the Draft Project Report Specifications) but are consistent with those raised and documented in the previous public comment period for the Application. These related issues fall under the following categories:

- decision-making context
- proponent-led studies
- land use plan management objectives
- intervener funding
- snow management on the glacier
- glacier impact
- wildlife (Grizzly bears, Mountain goats)
- legible communication materials
- market assessments
- wilderness character of the area
- costs to taxpayers
- impacts on Columbia Valley communities

- project viability
- expansion of study area
- air transport noise/volume
- safety
- emergency risk analyses (e.g. fire and ambulance services)
- waste management
- water quantity and quality
- impact on local economy and business opportunities
- project feasibility
- access road costs

### 2.1.2.5 Petitions

While the vast majority of submissions were letters, e-mails, etc. received from individuals or families, five of the submissions were petitions. Four of the petitions indicated opposition to the project, and contained 1,490 signatures. One report, signed by 78 students from Selkirk College (which, due to the numbers of signatures, is being reported as a petition), while taking no formal position on the project, was generally positive with respect to the prospects for development.

The content of each of the five petitions was as follows. No effort was made to identify duplicate signatures. Signatories are self-selected and trusted to provide information that is complete and accurate.

*“...We, the undersigned, do not want the provincial government to grant a permit to Jumbo Glacier Alpine Resort or any other ski resort to use the Jumbo Pass area as a ski resort...”*

**294 signatures**

*“...We, the undersigned, are completely opposed to the Jumbo Glacier Resort proposed for the sensitive alpine of the Purcell Mt. Range in southern interior BC, Canada. We will not use, or support in any way, the proposed mega city which will destroy the wild habitat - home to grizzlies, mountain goats, wolverines, woodland caribou, Golden Eagles, Peregrine Falcons, Bull Trout and the declining Harlequin Ducks to name just a few. The entire area is extensively used by low impact, non-intrusive recreationalists and we insist the government say NO to the proposed resort...”*

**484 signatures**

*“... We, the undersigned, do not want the Provincial Government to grant a permit to Jumbo Glacier Alpine Resort or any other ski resort to use the Jumbo Pass area as a ski resort. 2. We, the undersigned, are opposed to the Jumbo Glacier Alpine Resort Development...”*

**572 signatures**

*“...We, the undersigned, oppose resort building and heli recreation in the Jumbo Creek Valley and the entire Jumbo/Glacier area including...Monica Meadows, the Horseshoe Glacier, the McBeth Ice fields and the Tenise Creek drainage...”*

**140 signatures**

The report submitted by Selkirk College students focused on three main points - fair consideration, comprehensive analysis, and legitimate analysis of the project. The report noted that:

- the Project should be given fair, objective and careful consideration, and should be judged on the basis of its physical feasibility as a ski area and its financial feasibility;
- the developers should show what the Project will create, how it will create this, and how BC will be affected;
- the draft specifications are comprehensive, and will address this;
- there is concern that the specifications have the potential to go beyond reasonable limits;
- there is concern that tourism development will be discouraged if the EA process goes well beyond judging a project on its own internal merits;
- the approval process for a project should not be a forum to address environmental and philosophical concerns that occur across our society;
- some opponents may well oppose the project, no matter how strenuous are the reporting requirements, and no matter how beneficial the project might be; and
- the process should not serve a narrowly focused coalition of anti-development groups.

**78 signatures**

### **2.1.3 Public Comments on the Project Report (February 13, 2004 to April 13, 2004)**

#### **2.1.3.1 Background**

On January 27, 2004, the Environmental Assessment Office (EAO) accepted for review the Project Report that contained the additional information required to complete the assessment of potential environmental, economic, social, heritage and health effects of the Project, as outlined by the Final Project Report Specifications.

Upon receiving the Project Report on February 5, 2004, the EAO had up to 180 days to complete the review. Specific review activities included:

- the technical review of the Project Report by government agencies and First Nations, primarily through the operation of a Technical Advisory Committee to advise the assessment of potential effects;
- the operation of Technical Working Groups to assist with the assessment of specific issues;
- public notification and access to review material;
- a public involvement process including open houses and a 60-day period for public comment on the Project Report, and the preparation of a *Report on Public Views and Interests*;
- the preparation and submission of official responses to the Project by regional and local governments (the *Local Government Response Documents*); and
- the Proponent's responses to comments received, and to technical issues raised that fall within the scope of the assessment; and the preparation of an *Assessment Report* for Ministers.

A 60-day public review and comment period on the Project Report occurred between February 13 and April 13, 2004. The document was made accessible to the public through the EAO electronic Project Information Centre (*ePIC*) accessible through [www.eao.gov.bc.ca](http://www.eao.gov.bc.ca). The Project Report was also available at libraries in Invermere, Cranbrook, Nelson and Argenta, as well as at the Government Agent's Office in Kaslo and the municipal office in Silverton.

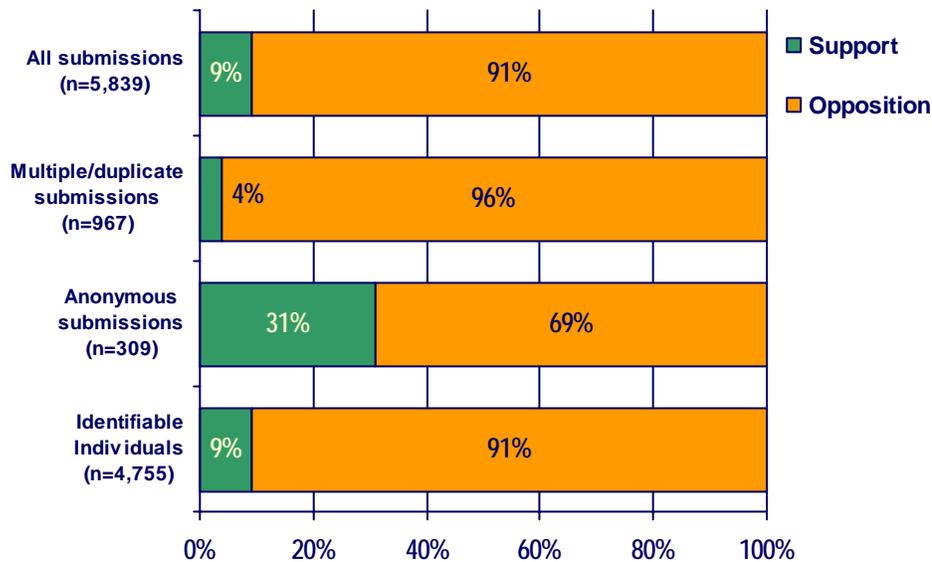
Public open houses were held in Invermere (March 10, 2004) and Nelson (March 11, 2004) in conjunction with the 60-day public comment period established for the Environmental Assessment Review. The purpose of the open houses was to effectively communicate the Project to the public so that they have a clear context within which to prepare comments.

### 2.1.3.2 Number of Submissions

The EAO received 5,839 submissions from 4,755 identifiable individuals (excluding petitions)<sup>2</sup> (Figure 3). Submissions included original letters, 11 different form letters, public open house comment forms, postcards, and 3 petitions (see 2.1.3.5 Petitions).

The EAO received 967 submissions that were duplicates or multiple submissions from the same identifiable individual. In addition, there were 309 anonymous submissions which were excluded from the analysis.

Figure 3. Overview of public views on the Project stated in written public submissions (excluding petitions) received during formal public comment period established for the review of the Project Report (February 13 to April 13, 2004). The number of submissions that expressed project support or opposition should not be considered to represent polling or survey data. Such data has no statistical validity or measurable levels of confidence associated with the degree of project acceptability.



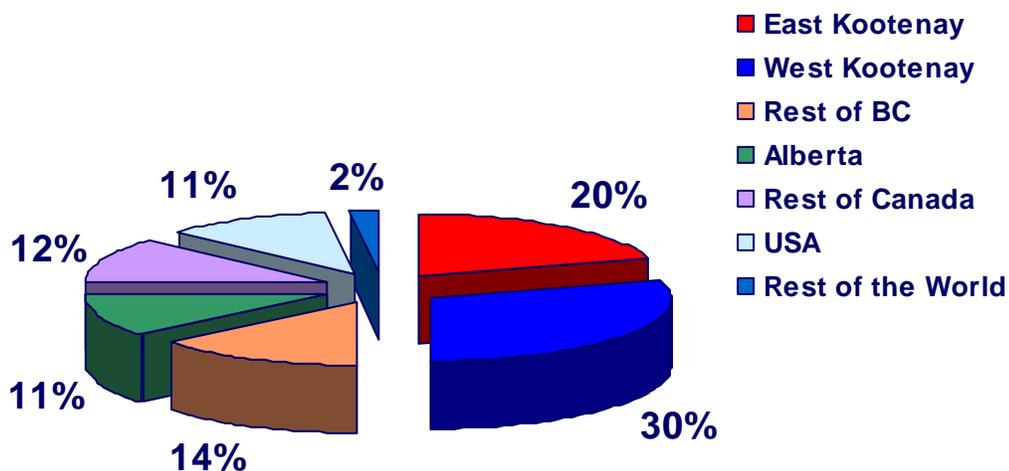
### 2.1.3.3 Geographical Distribution of Submissions

Written submissions were received from the following locations (Figure 4).

- 954 (20%) from the East Kootenay;
- 1,457 (30%) from the West Kootenay;
- 647 (14%) from the rest of BC; and,
- 1,737 (36%) from the rest of Canada and the world.

<sup>2</sup> For the purpose of this analysis, an identifiable individual is one for whom the first name (or initial), last name, and place of origin (city, country) is known.

Figure 4. Geographical distribution of identifiable individuals (n=4,755) who submitted written public submissions (excluding petitions) received during the formal public comment period established for the review of the Project Report (February 13 to April 13, 2004).



#### 2.1.3.4 Public Views and Interests

There was a high level of public interest in the Project during the review of the Project Report, as reflected by the attendance at public open houses in Invermere and Nelson (380 and 890, respectively) and by the number of written public comments received. While some submissions contained comments on material presented in the Project Report, many submissions were form letters and/or expressions of project support or opposition. Of the 4,755 identifiable individuals who responded to the invitation to comment on the Project Report, 414 (9%) expressed support for the Project while 4,339 (91%) expressed concerns or opposition (Figure 3). While this represents a relatively large number of submissions during an EA review process, it also represents a smaller percentage of opposition than is typically experienced (the EAO usually receives very few if any letters of support for projects under review).

Of those who expressed support for the Project, 39% were from the East Kootenay, 11% were from the West Kootenay, and 22% were from other parts of British Columbia (Figure 5). Of those who expressed opposition to the Project, 18% were from the East Kootenay, 33% were from the West Kootenay, and 13% were from other parts of British Columbia (Figure 6). The highest level of support for the Project was from the East Kootenay (17%), compared with 3% in the West Kootenay and 14% in other parts of British Columbia. This is likely due to the potential for local socio-economic benefits from the Project (Figure 7).

The preceding percentages of submissions expressing project support or opposition should not be treated or considered as a referendum or to represent polling or survey data. Such data has no statistical validity or measurable levels of confidence associated with the degree of project acceptability. At best, this type of information is only indicative of the general nature and extent of public views and interests of those who responded to the EAO's invitation to comment on the Project Report. In order to put this information in context, it has been analyzed in terms of the response rate of the East Kootenay (Figure 8), the West Kootenay (Figure 9), and the local communities of the District of Invermere (Figure 10) and the Village of Radium Hot Springs (Figure 11).

Figure 5. Geographical distribution of identifiable individuals who expressed support for the Project (n=414) in written public submissions (excluding petitions) received during the formal public comment period established for the review of the Project Report (February 13 to April 13, 2004).

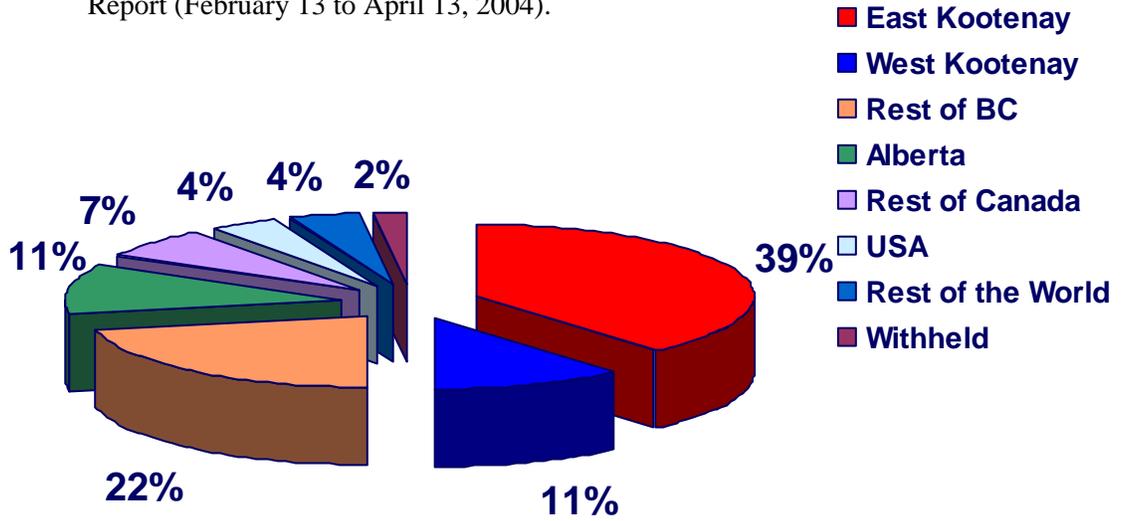


Figure 6. Geographical distribution of identifiable individuals who expressed opposition to the Project (n=4,339) in written public submissions (excluding petitions) received during the formal public comment period established for the review of the Project Report (February 13 to April 13, 2004).

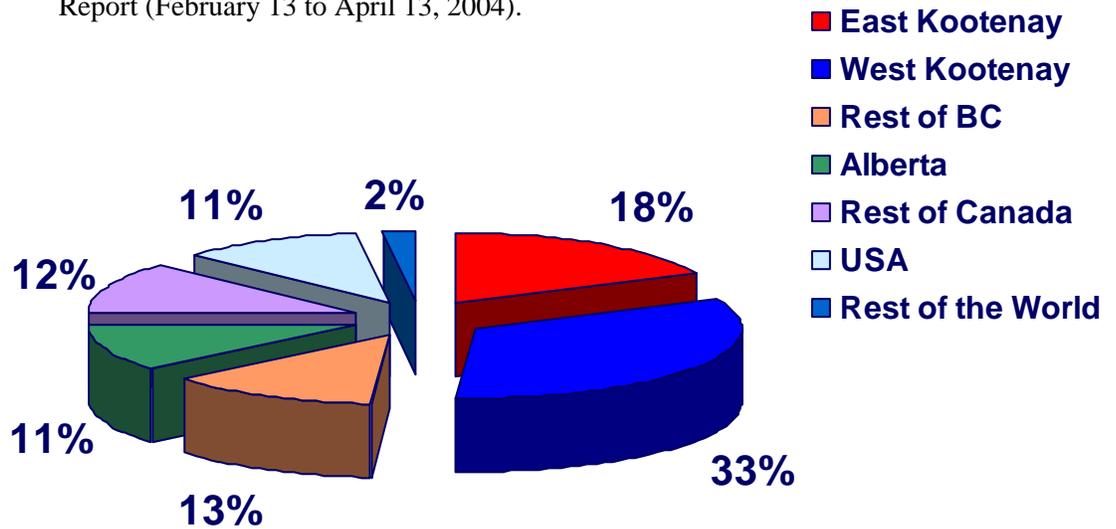


Figure 7. Regional summary of public views on the Project stated by identifiable individuals within British Columbia (n=3,100) in written public submissions (excluding petitions) received during formal public comment period established for the review of the Project Report (February 13 to April 13, 2004).

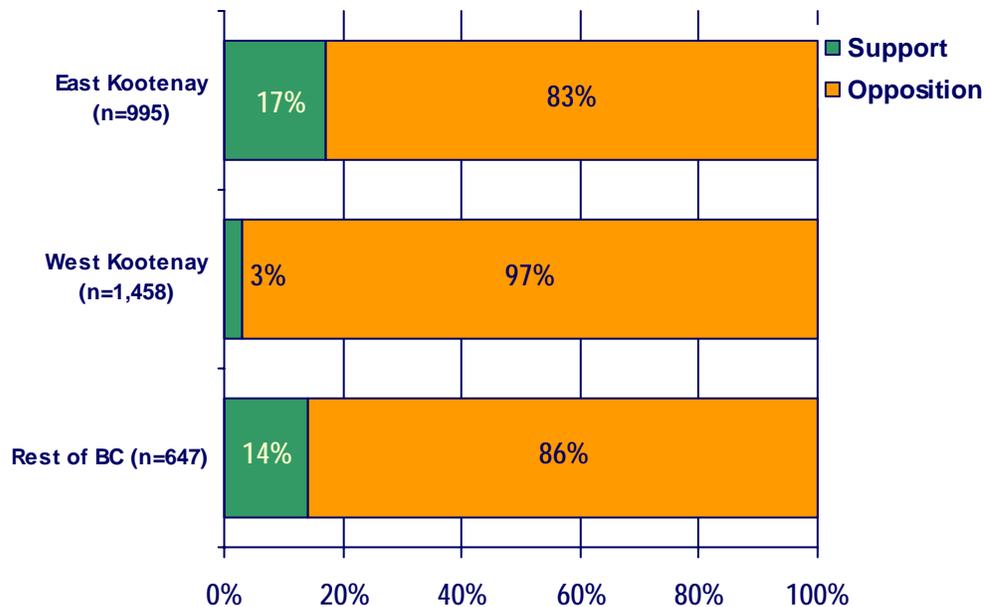
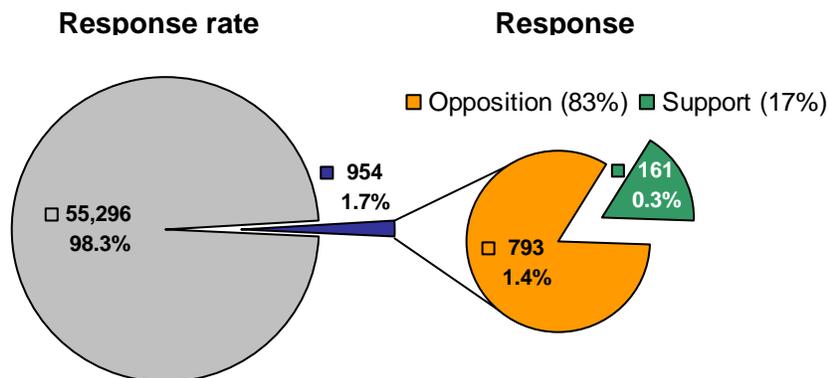


Figure 8. East Kootenay (population 56,291<sup>3</sup>) response rate (1.7%) and summary of public views on the Project stated by identifiable individuals (n=954) in written public submissions (excluding petitions) received during formal public comment period established for the review of the Project Report (February 13 to April 13, 2004).



<sup>3</sup> 2001 Census figures for the Regional District of East Kootenay.

Figure 9. West Kootenay (population 88,862<sup>4</sup>) response rate (1.6%) and summary of public views on the Project stated by identifiable individuals (n=1,457) in written public submissions (excluding petitions) received during formal public comment period established for the review of the Project Report (February 13 to April 13, 2004).

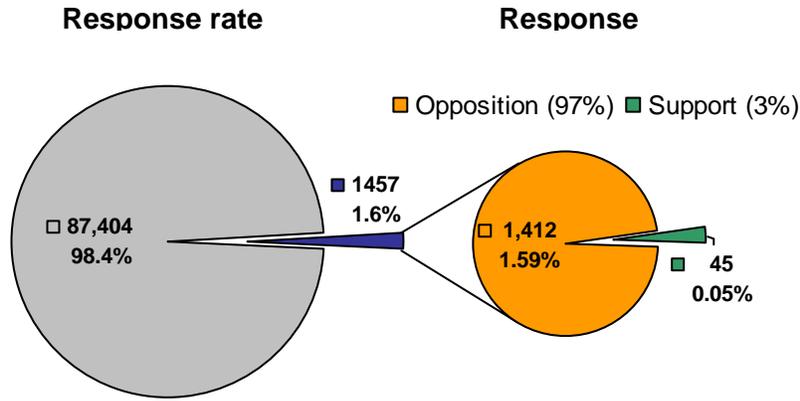
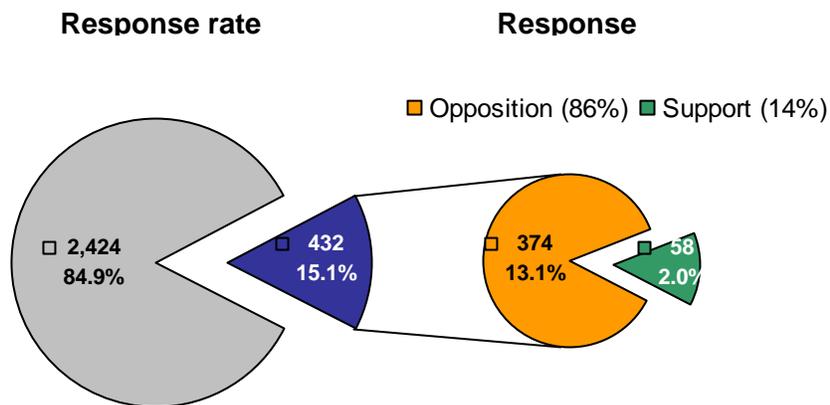


Figure 10. District of Invermere (population 2,858<sup>5</sup>) response rate (15%) and summary of public views on the Project stated by identifiable individuals (n=432) in written public submissions (excluding petitions) received during formal public comment period established for the review of the Project Report (February 13 to April 13, 2004).



<sup>4</sup> combined 2001 Census figures for the Regional District of Central Kootenay (57,019) and the Regional District of Kootenay Boundary (31,843).

<sup>5</sup> 2001 Census figures for the District of Invermere.



### Local Government Response Documents

Local governments were invited to participate on the Technical Advisory Committee establish to advise the EAO, as well as to submit an official response to the Project. The District of Invermere (DOI), the Regional District of East Kootenay (RDEK), and the Regional District of Central Kootenay (RDCK) submitted review comments that were considered as part of the technical review process. Local Government Response Documents were received from the DOI, the Village of Radium Hot Springs, the RDEK, the RDCK and are presented in Appendix D of the Assessment Report. The responses they provided reflect differing viewpoints:

- the DOI is opposed;
- the Village of Radium Hot Springs is in favour;
- the RDEK decided not to comment on the Project in order to avoid compromising its objectivity on future land use decisions; and
- the RDCK expressed concerns about the Project if motorized access restrictions in adjacent drainages were required to mitigate impacts on grizzly bears. No such restrictions are being pursued.

### Key Issues

A summary of public comments received on the Project Report is presented below. There has been no attempt to substantively revise or correct (where inaccurate) the manner in public issues have been represented. Specific issues raised in submissions were considered as part of the technical review process as documented in the Assessment Report.

### Part A. General Reporting Requirements

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#### *Scope of the Project and its Review A.1*

Several technical professionals commented on the data sources and research methodology comprising the scientific bases for the Project studies. Reference was made to the socio-economic (e.g. employment statistics), environmental and technical studies (e.g. avalanche control estimates) that were perceived to use insufficient data for the development of mitigation measures. There was a concern that the Report inadequately interpreted data and failed to include more current studies that are available with respect to the Project area and potentially affected adjacent areas. Also of concern was the use of minimal sampling and aggregate data which may have resulted in inaccurate ecological interpretation. A comprehensive re-examination of proposed mitigation options was recommended.

A number of respondents were concerned that the scope/size of this Project will grow beyond the projected bed capacity noted in the Project documentation. From the public's perspective, there will be a need for the provincial government to enforce ongoing compliance and extensive monitoring of the Project for the long term to ensure the Proponent adheres to its stated commitments.

#### *Complying with the Project Report Specifications A.6*

One respondent commented that the Proponent's strategy of mitigating the science (evidence) before it is applied to the assessment of impacts is clearly at odds with a scientifically sound, objective, and transparent public impact assessment process. Other respondents were concerned with perceived inadequacies in documentation associated with the Jumbo Project.

*Land Use and Land  
Use Planning A.7*

There was a strong desire expressed to have the Project planning linked with the Regional District of East Kootenay's planning processes, given the complexities of the Project and the private company interests. It was further noted that the Proponent and the Province should be addressing local community interests in order to best derive the regional economic benefits prior to Project approvals being sought.

Many respondents referenced the recommendations of the Kootenay Boundary Land Use Plan as well as the CORE Regional Land Use Plan and the need to adhere to such planning process findings. There was a request that a backcountry recreation land use plan be implemented before any tenures were issued. One individual raised the concern that the proposed development is incompatible with the spirit of this area's Special Management Zone designation that he believed precludes high intensity human development.

*Public and First  
Nations  
Consultations A.8*

***Public Consultations***

There were mixed reviews received on the format of the open house events. Some respondents liked the format and found the resource people to be very helpful and informative. Others would have preferred a public meeting with a presentation followed by a question-and-answer period. A few respondents were interested in knowing if the public input received during the comment period would be publicized.

There was some minor confusion at the events in terms of public understanding of the roles of the Proponent and the EAO. For future events, it was suggested that name tags be used to readily distinguish the Proponent from the government agencies present.

Some questioned the credibility of the process and felt that the outcome of this Project had already been determined. To address the issue of public approval many respondents suggested that a referendum be held at the local government level.

It was felt that the Proponent had not addressed its commitment to identifying and meeting with stakeholders in the West Kootenay area. Some respondents felt that their questions remained unanswered and expressed a desire to be kept informed on the progress and status of the process and findings. A few respondents inquired about applicable measures that they could take to stop the Project.

***First Nations Consultations***

A number of respondents questioned the extent of the consultation process involving the First Nations. It was perceived that the First Nations had not been consulted in a meaningful manner and that land claims – for which there was strong support – needed to be resolved prior to Project approval. There was also interest in knowing the

responses that had been received to date from the Shuswap Tribal Council as well as the Ktunaxa/Kinbasket Tribal Council. The public was interested in knowing the extent of ongoing dialogue that occurs with Ktunaxa First Nations and the Sinixt group. As well, it was requested that the traditional use study and the First Nations socio-economic study be made available for public review. A recommendation was made that an Elders Advisory Group be established as part of the First Nations consultation process.

## Part B. Commercial Alpine Ski Policy (CASP) Process

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<i>Formal Proposal Review Under CASP Process and its relationship to EA Process B.2</i>	The ownership of the land occupied by the proposed resort and ski areas, as well as the maintenance roads remains unclear to some respondents.
<i>Assessment of Project Feasibility B.4</i>	There was a perception that the socio-economic impacts were not adequately addressed in the Project Report. Many respondents expressed concerns regarding the economic sustainability and feasibility of such a large-scale development in the area, given their belief that there had been a decline in the use of the existing local ski hills. The feasibility of a proposed four season operation was questioned by a number of respondents given skiing for the majority is a winter sport only. It was their view that the region could not sustain another ski development without further negative impact to existing ski areas. A number of respondents questioned the economic viability of the Project with reference to the findings of the Sno. Engineering economic feasibility report.

## Part C. Specific Technical Resort Design and Management Issues

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<i>Glacier Ablation Public Safety Glacier Management</i>	A number of respondents expressed interests in glacier ablation, public safety related to crevasses as well as glacier management.
	Concerns were raised by a number of respondents regarding the potential impact of climate change (i.e. glacial melt) on the proposed Project's viability. A concern was raised regarding the cumulative impact on the environment from excessive use of the glacial ecosystem. A number of respondents felt that more extensive study of glacier ablation was warranted. A few respondents questioned the science behind the Climate Change Fact Sheet (EAO). (C.1 – Snow Wastage and Glacier Ablation)
	Many local respondents felt that Commander Glacier would be difficult and dangerous to manage for skiing. (C.1.1) It was further emphasized that avalanche control was essential and the funding allocated by the Project Proponent was inadequate to meet these needs.

The need for sound glacier management was frequently stated as a

requirement. (C.2 Glacier Management) Specifically, concerns were expressed regarding the proposed use of snow cats and blasting techniques. Maintaining the integrity of the glacier was a key concern. A few respondents raised concerns regarding the threat of avalanches at the resort location and the need for an avalanche control program. (C.3 – Avalanche Control at the Resort). As well, the need for safety measures to protect the resort community as well as the wildlife population from avalanches was raised. (C.3)

In addition to the above issues, a number of respondents were concerned about public safety in the event of a wildfire at the resort given there is only one access road (C.4 – Wildfire Control at the Resort) Furthermore, there was reference to BC’s 2003 fire experience as well as the predictions for climate changes including drier periods and intensive fire seasons. The need to identify the responsible body for protecting the resort from such fires was articulated.

*Ski Lift Location and Design C.5* An alternative to the proposed mountain plan was submitted to reduce impacts on the core operating requirements and costs.

#### Part D. Environmental Management, Resource Management and Technical Issues

<i>General Environmental Concerns D.0</i>	Concerns were expressed regarding the need for rigorous ongoing mitigation efforts on behalf of the Proponent to protect and restore this ecologically sensitive area.
<i>Solid Waste D.1 (A)</i>	Establishing appropriate parameters for solid waste disposal was identified by a few respondents. There was concern that the lifespan of the Columbia Valley landfill site would be significantly reduced with the proposed development in place. As well, there was some concern that non-recyclable waste would be transported to the existing landfill site. It was noted that every effort should be made by the Proponent to minimize waste, through reuse and recycling.
<i>Liquid Waste Treatment and Disposal D.1 (B)</i>	Respondents raised several issues with regard to wastewater management. A specific concern was the disposal of suspended solids from the sewage treatment plant that are presently being trucked away. Respondents expressed an interest in how the suspended solids were being removed and were concerned about potential health impacts due to the proximity of sewage disposal fields to water courses. Respondents questioned the procedures that have been used to address sewage management from the perspective of the government’s ability to enforce compliance for wastewater treatment, and whether alternatives for disposal had been explored. It was requested that the Project address the residence time of both supply aquifers and aquifers that will receive wastewater. A broader concern was raised regarding the Project’s downstream impacts on the valued Columbia Wetlands and the development of a Spill Contingency Plan was recommended.

<i>Special Wastes and Fuel Storage Sites</i> D.1 (C)	There was concern that the use of explosives for avalanche control would leave toxic residues in extremely sensitive areas.
<i>Water Quality Issues</i> D.1 (D)	A number of respondents raised water quality issues from an environmental management perspective. There was concern that the proposed development would contribute significant amounts of effluent to the aquatic ecosystem of Toby Creek, in particular. As well, it was noted that the runoff, erosion and sedimentation from disturbed surfaces could be of concern during construction and operations. The potential use of salt at the resort was raised a number of times with regard to its potential impact on local water sources. A recommendation was made to conduct a soil survey in order to enable complete impact identification of road placements on riparian areas.
<i>Air Quality Issues</i> D.1(E)	A number of respondents raised concerns regarding the potential increase in air pollution as a result of the access road traffic.
<i>Water Supply</i> D.2 (A)	<p>Concern was expressed regarding the proposed level of groundwater extraction and how that potentially could impede the flow levels in streams, especially during winter, used by species such as the Westslope Cutthroat trout and Bull trout. A few respondents were concerned about the resort's water usage and the potential impacts on future water supply. Another concern was raised about the absence of information in the report about the linkage between ground water extraction, water quality due to waste water production and fish production.</p> <p>It was suggested that the Project Report address water demand estimates and groundwater impacts during maximum visitor capacity. It was also recommended that mitigation measures identify where the Project will source additional groundwater extraction, or other water.</p>
<i>Hydrology</i> D.2 (B)	<p>Respondents questioned the practice of discharging effluent into the ground, and expressed concerns about the volume of effluent exceeding the natural capacity of local soil conditions and local hydrology to accommodate the discharge.</p> <p>It was recommended that the Proponent ensure that mitigation measures provide for settling ponds for storm water runoff storage and treatment from a two-year storm event in light of soil and terrain conditions at the site.</p>
<i>Fisheries Resources</i> D.3 (A)	The quality of the fish and water assessments was questioned by a number of respondents, including environmental organizations, who noted the need for a comprehensive monitoring study for mitigation purposes. It was felt that the Proponent had not adequately detailed measures to avoid, minimize or mitigate all potential effects on fish

and fish habitat in accordance with Fisheries and Oceans Canada's "no net loss" policy. For example, it was noted that sampling procedures are incomplete, there are inconsistencies in fish data and there has not been any Project-specific fisheries resource work completed. It was also noted that the fisheries resource data is outdated, rudimentary and there are perceived inconsistencies, inaccuracies and omissions in the reporting of the data. It was requested that the Proponent conduct a detailed and comprehensive assessment to provide accurate, up-to-date information on densities, population abundance and structure movement, and habitat quality, especially for blue-listed species such as Bull trout, Westslope Cutthroat trout and the Yellowstone Cutthroat trout.

Concern was also expressed for maintaining the natural environment for specific fish species, including the Westslope cutthroat trout and bull trout. A general concern was raised regarding the overall impact of resort development on the fisheries resources in the adjacent river systems.

*Wildlife Resources  
D.3 (B)*

The impact of the proposed development on local and regional wildlife garnered considerable input. Some respondents requested that further field inventory be undertaken to stricter standards in order to document species-specific abundance and seasonal habitat use, to arrive at reliable measures of protection. It was also requested that these studies, and proposed protection measures, be made available for public review. Furthermore, it was suggested that potential mitigation issues be further evaluated using a cumulative effects assessment, and that detailed adaptive management and monitoring issues be addressed.

A few respondents noted the need for an assessment of potential impacts on the wolverine and the Least chipmunk as well as the Townsend Long-eared bats. It was noted that the Project Report failed to account for the potential impacts on reptiles and amphibians.

A concern regarding Mountain goats was raised with regard to disturbance and winter usage being underestimated in the Project Report. Also of concern was the potential for a decrease in the moose population due to roadkill and displacement from preferred habitat.

The preservation of the environment for other wildlife species such as wolverines, lynx, Mule deer, elk and Mountain caribou was also of interest. One comment referred specifically to the measures that would be taken to preserve all wildlife movement corridors in the Jumbo Valley.

*Grizzly Bears D.3  
(C)*

Many respondents wanted to ensure protection of the Grizzly bear for future generations. Furthermore, many felt that the stability of the bear population was already in question due to existing logging and

local development. The impact of the proposed avalanche management and future road traffic on denning bears were of concern. A number of respondents questioned the size of the Grizzly bear study area and felt that existing Proponent reports did not adequately address the overall status of the Grizzly bear habitat/population within the region and that the scientific study needs to be based on long-term collected data to be valid. Of specific concern was the current state of the regional Grizzly bear population fragmentation and the potential impact of the Project on the north-south connectivity of Grizzly bears in the central Purcell Mountains. There were inquiries made as to what measures the government would put in place (e.g. monitoring programs in perpetuity) to ensure there is no net loss of Grizzlies as a result of the development. It was recommended that probable “net impacts” to a viable Grizzly bear population and undesirable impacts to present and future resource users be addressed. Many respondents noted that access restrictions as a result of action taken to mitigate Grizzly bear impacts are unacceptable, given that it is the development that is the source of negative impact.

*Birds D.3 (D)*

A few respondents were concerned that the bird studies were not complete and noted that they were not convinced of the estimated impact that the development would have on bird populations. As well, it was noted that it was unclear whether adequate or appropriate surveys were conducted to conclude the absence of several species such as the Swainson’s hawk. A member of the public noted that there have been Peregrine falcon sightings in the Jumbo Valley as well as Northern Goshawk. Specific interest was expressed in protecting Spotted owls and the female Harlequin ducks. Overall, there was interest in protecting the Columbia River wetlands.

Concern was expressed about the late submission of the bird inventory work and felt that the public was being denied a reasonable window of time to review and comment on its findings.

Also of concern was Spruce grouse and Northern Goshawk habitat modification or loss from deforestation. Some respondents felt that the Proponent’s claim that no active nests would be disturbed by clearing was not valid as many bird nests are undetectable and occur at relatively high densities. Therefore, it was requested that no clearing or construction take place during the breeding season (early May to early July) to ensure that nests remain undisturbed.

The potential increase in corvids (jays and crows) from the increasing human presence and disturbance in the area was of concern as these species are nest predators that could depress the nesting success of local breeding birds.

*Threatened or  
Endangered Wildlife*

A number of respondents were interested in the identification of species at risk within the study area. There were questions regarding

<i>D.3 (E)</i>	the thoroughness of the fieldwork that had been completed in the Project area to determine the presence or absence of species at risk. It was noted that the Proponent had failed to comment on the Western toad, and that surveys had not been completed for the Least chipmunk and the Red-tailed chipmunk. Some respondents felt that there were too many threatened species to consider future development. It was also mentioned that there was too much reliance on B.C. Conservation Data Centre for listed species occurrence records to determine presence/absence and it was suggested that ground-level field surveys be undertaken.
<i>Wildlife Impacts of Utility and Access Corridors D.3 (F)</i>	The increased use of the access road was of concern to many respondents from a wildlife perspective. It was suggested that the road be closed from 10:00 pm to 5:00 am to protect wildlife movement. It was suggested that the existing wildlife connectivity corridors be maintained to restore Mountain caribou and other threatened species.
<i>Potential Human Conflicts with Wildlife D.3 (G)</i>	There was some anticipation the there would be an increase in human conflicts with wildlife, particularly bears. The need for an aggressive and mandatory bear awareness program was suggested in order to protect the bears.
<i>Impacts on Alpine Vegetation D.3 (H)</i>	Interest was expressed in obtaining additional information on the survey methodology used for identifying rare and endangered plant communities. Some respondents were concerned that the increased traffic from hiking and mountain biking by the clientele of the resort could result in further destruction of Monica Meadows.
<i>Forest Resources D.4</i>	It was noted that the Project Report does not mention the Engelmann Spruce Sub-alpine Fir (ESSF) biogeoclimatic zone that is reported to occur in the Jumbo valley.
<i>Harvestable Timber Impacts D.4 (A)</i>	Some questioned the accuracy/credibility of the Slocan Forest Products' statement that the impact of the Project on available forest land would be minimal. It was noted that forestry has been ongoing in the Project area and in adjacent areas for many years. As such it was questioned if the loss of revenue to the local economy has been determined - including the substitution of high income forest sector employment for low income tourist sector employment - if the forestry operations are curtailed.
<i>Mineral Resources D.5</i>	Concern was expressed with regard to the Project destroying access into an area where further mineral exploration could lead to many new mines and local employment opportunities.
<i>Agricultural</i>	There was some concern expressed that the proposed Project would

*Resources D.6*

alter the historical use of the area by ranchers, as well as trappers and local recreationalists. There was some concern that the proposed development would result in increased land prices region-wide which would affect the ranching communities' ability to lease or purchase land for expansion.

## Part E. Socio-Economic and Community Issues

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There were mixed responses received as to whether the communities would or would not benefit economically from the proposed development.

*Enhancing Local  
Socio-Economic  
Benefits E.3*

A number of local residents noted the social and economic benefits of bringing a year-round resort to the area. The residents acknowledged the employment opportunities for the local residents and the increases in the tax base that would contribute to the overall local economy. The need for sustaining the local economy was of interest to the Invermere business community.

*Economic  
Development  
Impacts E.4*

A number of local residents expressed concern with the development of a 'mega' resort – as it is perceived – that would not result in significant local economic activity and/or benefit. There was concern that this proposed Project would lead to further future development in the Jumbo area either by the Proponent or another developer.

There was some interest expressed in ensuring that the proposed resort utilized and purchased "Canadian" materials, equipment, supplies and goods for the construction and operational phases.

It was perceived that the current funding formula for regional district services is already inadequate to meet seasonal peak demand for services. It was further noted that this type of development demands a major investment in infrastructure and commitment to ongoing maintenance.

*On-Site and  
Adjacent Outdoor  
Recreational Use  
E.5 (A)*

Considerable concern was expressed related to the proposed access closures to accommodate the development. There was a strong perception that the access closures would not be welcomed by the local communities as this area offers unique mountaineering opportunities. There is concern that access closures may not be realistic given the large number of other tenures (e.g. mining resources) and public uses in the subject area.

The possibility of restricting access to Monica Meadows to compensate for Grizzly bear habitat reduction at the resort was perceived as a significant loss for the West Kootenay. Future access and encroachment on other adjacent recreational areas, such as Lake of the Hanging Glacier, Glacier Creek and Jumbo Pass were also of

concern to many respondents from the West Kootenay.

Many respondents voiced reservations regarding the loss and destruction of their wilderness experience. It was commented that the central Purcells would be severely compromised if the Project is allowed to proceed. The concern is that the size of the proposed development is not complementary to the area's existing natural strengths and character, its "greatest economic asset". There is a strong belief that tourists, particularly Europeans, and local residents use this area as an alternative to commercial resort development. It was felt that a commercial resort would have a negative visual impact.

*Use of Purcell  
Wilderness  
Conservancy  
Provincial Park E.5  
(B)*

A number of respondents were concerned that this Project would adversely impact on the Purcell Wilderness Conservancy Provincial Park as a protected area.

*Visual Impacts of  
Development  
E.5 (C)*

The potential viewing of a ski resort, including the gondolas, buildings, and parking lots in the pristine wilderness was of concern to a number of respondents.

*Noise Impacts of  
Development  
E.5 (D)*

There was concern expressed that there would be significant noise and light impacts on the neighbouring backcountry areas with the development of a resort.

*Commercial  
Tourism E.5 (E)  
Size of the Project  
Implications for  
Other Tourism  
Businesses in the  
Region*

It is felt that the size of the Project does not reflect or balance with the local values and interests.

The question of the viability of another ski development in a region where there are already significant ski resorts (throughout the Purcell Mountains and Rocky Mountains) was raised on numerous occasions. It was further commented that many of the ski resorts are currently not operating at capacity. Suggestions were made that the government should focus more on the preservation of the wilderness areas and continue to promote eco-tourism as a revenue generator.

Environmental sustainability of the region was expressed as a priority by many respondents. It was noted that the long-term provincial tourism strategy could potentially fail if not matched with a long-term province-wide wildlife management plan.

There was a perception that this proposed development could seriously impact existing businesses in the region that rely on the pristine nature of the environment and consequently damage the provincial business climate by impacting the stability of existing land tenures (e.g., R.K. Heli-Ski).

In contrast, a number of respondents felt that the new development would have no impact on the nearby communities as it is too far away

and would be self-sustaining. It was perceived by some respondents that the proposed resort would generate revenue but the economic benefits would not be realized by the affected communities.

It was suggested that a recreational cumulative effects assessment be undertaken to determine the feasibility of this development. There was some concern expressed that other recreational areas may have to be closed to mitigate the impacts of the proposed development.

*Commercial and  
Non-Commercial  
Fish and Wildlife  
Recreation E.5 (F)*

There is concern that the proposed method for mitigation for Grizzly bears lost within the resort area will be to reduce hunting opportunities in adjacent drainages. Concern was also expressed for the existing low impact backcountry businesses that may be negatively impacted by this proposed development.

With regard to the guide/outfitting and trapping tenures, there was concern that this Project would undermine the stability of existing tenures.

*Implications for  
R.K. Heli-Ski  
Panorama Inc.'s  
Operations E.5  
(G)*

Given the conflicting tenure interests involving the Project and R.K. Heli-Ski Panorama Inc., the displacement of R.K. Heli-Ski's operations was a significant concern to respondents. It was strongly perceived that R.K. Heli-Ski would be put out of business by the Project's use of most of their tenured terrain. It was recommended that the Proponent, government and R.K. Heli-Ski work together to protect this ecological tourism business. A few respondents noted that adequate compensation should be provided to R.K. Heli-Ski and that an arbitrator may be of assistance in determining value. One respondent noted that if R.K. Heli-Ski is not accommodated then the value of each ski area and commercial recreation licensee in the province would be seriously compromised. It was felt that it was the Proponent's responsibility to resolve this issue prior to the issuance of any new permits by the government. Furthermore, two associations in the ski industry stated that they would not support the Jumbo application until there is a written agreement between Jumbo and R.K. Heli-Ski.

The Proponent's suggestion that R.K. Heli-Ski move their operations to Glacier Creek was not perceived as a viable alternative as the terrain is neither safe nor reliable.

Also of concern was the Proponent's use of outdated information to support the Project in *Section 6.3.7 Impact on R.K. Heli-Ski* of the Project Report.

*Jumbo Pass  
Highway Proposal  
E.6 (A)*

There was considerable interest in ascertaining whether or not there would be a highway developed through Jumbo Pass.

<i>General Public Use of the Access Road E.6 (B)</i>	There was considerable interest expressed in ensuring that the existing forestry road access from Jumbo Pass to Glacier Creek side remain intact.
<i>Access Road Upgrading Requirements E.6 (C)</i>	There was some interest in fencing being mandatory along the roadside funded by the Proponent. A few individuals were concerned that the resort development would result in increased traffic congestion and accidents as well as an overall reduction in privacy.
<i>Avalanche Hazard Along the Access Road E.6 (D)</i>	The avalanche hazard along the access road was a concern for a number of attendees. There was a perception that winter access to this area is high risk given the numerous avalanche chutes that exist on the road. The potentially high cost of maintaining access given the winter conditions, was pointed out. A number of respondents questioned the cost variance in the avalanche program outlined in the Proponent's studies.
<i>Wildlife Considerations in Access Road Design E.6 (E)</i>	A number of individuals, including the Ministry of Forests pointed out that the Jumbo Valley has potential for rapid fire spread and the proposed development is limited to only one access road for moving people.
<i>Transmission Line E.6 (F)</i>	It was noted that the Project Report did not adequately address the power requirements of the proposed development. Some respondents were concerned that a new transmission line would be required to meet the energy needs of the resort.
<i>Specific Infrastructure and Service Requirements E.7</i>	<p>The ability of the local and regional governments to meet the infrastructure and service requirements of the development of this Project was questioned by many respondents. The concern was the anticipated influx of people to this area and the associated impacts on:</p> <ul style="list-style-type: none"> <li>• health services at Invermere Hospital</li> <li>• education and schooling services in the area</li> <li>• police services</li> <li>• fire fighting services</li> <li>• search and rescue services</li> <li>• outdoor recreation services and management</li> </ul> <p>The resort demands for the provision of emergency medical services in particular was expressed as a major concern. As well, the Proponent's proposal for offering a volunteer fire department at the resort was questioned from a reliability and training perspective.</p> <p>Inquiries were made regarding how the necessary local services would be provided by the area. A few respondents felt that this Project would provide a positive opportunity to explore shared community services within the region, citing fire and ambulance services as examples.</p>

Specific to the resort, the need for appropriate medical facilities being on-site was considered a priority, given the possibility of road closures due to avalanches. E.7 (A)

*Access Road  
Upgrading and  
Funding  
Responsibilities  
E.7 (M)*

Considerable discussion took place related to the proposed access road upgrading. A number of respondents sought clarification on responsibility for funding road construction and maintenance including long-term maintenance of the two existing bridges (Columbia River and Toby Creek). There was some confusion evident in defining what aspects the Proponent would be responsible for and which areas would fall within the provincial government's mandate. As well, a number of respondents asked for clarification on the road alignment.

There was concern that the upgrading costs would be higher than predicted and that the financial burden for the long term maintenance would be passed on to the provincial taxpayer, not the Proponent. As well, a number of respondents felt that the road upgrade would result in the need for additional speed limit enforcement. The addition of bicycle lanes on the new alignment was suggested by a number of respondents.

With respect to maintenance costs, many respondents were concerned about the costs of clearing the road given that the area is subject to falling blocks of ice and snow as well as avalanches. The impacts of road upgrading and maintenance (e.g. use of salt) on the creeks in the area were raised as a concern by a number of respondents.

*Infrastructure,  
Government  
Services and  
Revenue Impacts  
E.8*

Many concerns were raised regarding the accountability of the Proponent and the Government to ensure Project commitments are met, maintained and monitored. The potential impacts on local and provincial taxpayers to sustain such a resort development in the region was raised by many. Areas of specific concern were: health care, road maintenance, water supply, sewage treatment and avalanche control. Many respondents noted that the Kootenays have recently experienced significant government cut-backs. Furthermore, some respondents requested that the Proponent should provide accurate estimates of all infrastructure costs, as well as a binding commitment to financial arrangements and responsibilities.

There was some concern expressed that the private residences at the development may stay in their homes on an extended basis and further impact on community services. The question of commercial versus residential taxation on these residences also was raised.

Some concern was expressed as to what happens if the Proponent experiences bankruptcy. It was suggested that a bond be posted by the Proponent in the eventuality of bankruptcy.

<i>Accommodation Requirements E.9</i>	A few respondents were concerned that there was no residential allowance on site for either the construction or the operational phases of the proposed development. It was noted that the Proponent should allocate 15% of all development costs to be placed in an employee/affordable housing authority.  It was suggested that private residential dwellings at the resort should be subject to sustainability measures such as water conservation and alternate energy requirements.
<i>Demographic and Social Effects E.10</i>	It was questioned as to how the Project can be contained to its proposed footprint of only 600 to 700 permanent residents. It was further questioned as to how a resort of only 600 to 700 permanent residents can develop a real sense of community.
<i>Lifestyle Impacts E.11</i>	Concern was expressed that this proposed development would negatively impact on the existing cultural and rural lifestyle values of the area as well as on the existing peace and tranquility presently being experienced in the Purcell Mountains.

#### Part F: Resort Administration Issues

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<i>Local Governance Issues F.2</i>	One respondent suggested that a more appropriate governance model to a Mountain Resort Association would be the establishment of a Resort Municipality that would contain the local Valley communities, e.g. Edgewater, Radium Hot Springs, Jumbo Glacier Resort, Windermere, Fairmont, as opposed to excluding them from a Mountain Resort Association.
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#### Part H: Canadian Environmental Assessment Act Issues

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<i>Cumulative Environmental Effects H.2</i>	There was concern that the individual impacts associated with the Project amount to a cumulative risk that is too great to justify, regardless of the purported economic benefits. Furthermore some respondents felt that any proposed mitigation measures would be unable to reasonably address the environmental impacts on species that require the maximum protection possible.
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#### **Project Support**

Although there was opposition expressed by many respondents, a level of community support for the Project exists, primarily due to the potential socio-economic benefits. To some, the Project is perceived as an economic driver which will strengthen the local economy.

In addition, a number of respondents expressed a willingness to support the Project providing the following conditions were met:

- ongoing government monitoring to ensure compliance through all phases of the Project;
- sustainable development, based on environmental and social values;
- provision of skiing incentives for local residents;
- opportunities for year round employment for local residents; and

- guaranteed restrictions on future development of the resort.

#### 2.1.3.5 Petitions

While the vast majority of submissions were letters, e-mails, etc. received from individuals or families, three of the submissions were petitions. One petition submitted during the comment period contained 219 signatures collected between May 4 and September 14, 2002. Since these signatures were collected before the start of the public comment period, the EAO is reporting these results in 2.2 Other Written Comments.

The content of the other 2 petitions was as follows. No effort was made to identify duplicate signatures. Signatories are self-selected and trusted to provide information that is complete and accurate.

*“We the undersigned express our continuing opposition to the proposed Jumbo Glacier Resort”*

**40 signatures collected by  
the West Kootenay Coalition for Jumbo Wild**

*“We, the undersigned, do not want the Provincial Government to grant a permit to Jumbo Glacier Alpine Resort or any other ski resort to use the Jumbo Pass area as a ski resort”*

**378 signatures collected by  
the West Kootenay Ecosociety**

### 2.1.4 Public Comments on the Project Report Supplement (July 1 to 9, 2004)

#### 2.1.4.1 Background

The Executive Director of the EAO ordered a time limit extension (until July 15, 2004) for the Proponent to provide the results of bird studies identified in information requirement D.3(D) of the Final Project Report Specifications.

The EAO accepted Project Report Supplement (Migratory and Non-migratory birds) for review on June 28, 2004. In anticipation of its submission, the EAO issued public notice of a formal period for public review and comment on the Project Report Supplement on June 22, 2004. The notice was distributed to a list of individuals who had previously expressed interest in reviewing the additional information (collected at public Open Houses in March 2004). In addition, the notice (and the Project Report Supplement) was posted on the EAO's electronic Project Information Centre (*ePIC*) and distributed to local information outlets at libraries in Invermere, Cranbrook, Nelson, Argenta and Silverton, as well as at the Government Agent's Office in Kaslo.

The 9-day public comment period began on July 1, 2004 and closed on July 9, 2004.

#### 2.1.4.2 Number of Submissions

In total, 2 submissions were received during the formal public comment period on the Project Report Supplement (Migratory and Non-Migratory Birds).

### 2.1.4.3 Geographical Distribution of Submissions

One submission was received from Windermere (East Kootenay) and one submission was received from Argenta (West Kootenay).

### 2.1.4.4 Public Views and Interests

Public comments received were focussed on the methods and conclusions of the bird studies conducted. Specific issues raised in submissions are considered as part of the technical review which is documented in the Assessment Report.

## 2.2. Other Written Comments

The EAO received 1,634 unique submissions from identifiable individuals (including 12 petitions) during periods outside formal public comment periods.

### Petitions

The content of each of the 12 petitions received was as follows. No effort was made to identify duplicate signatures. Signatories are self-selected and trusted to provide information that is complete and accurate.

*“We the undersigned are opposed to the Jumbo Glacier Alpine Resort Development.”*

**2,004 signatures collected by the  
Jumbo Creek Conservation Society between  
September 29, 1995 and March 10, 1996**

*“We, the undersigned, favour the existing Environmental Assessment (Review) Process guidelines for environmental assessment of proposed developments on Crown land which allow all the time that’s deemed needed and necessary to assess the impacts (potential) of each proposal. We are opposed to changing the process to include a fixed time line for the environmental assessment procedure.”*

**29 signatures collected by the  
West Kootenay Coalition for Jumbo Wild  
submitted May 6, 1996**

*“We, the undersigned, do not want the Provincial Government to grant a permit to Jumbo Glacier Alpine Resort or any other ski resort to use the Jumbo Pass area as a ski resort.”*

**959 signatures collected by the  
West Kootenay Coalition for Jumbo Wild  
during the summer of 1996**

*“We, the undersigned, oppose resort building and heli recreation in the Jumbo Creek Valley, and the entire Jumbo/Glacier area including (but not limited to) Monica Meadows, the Horsheshoe Glacier, the McBeth Icefields and the Tenise Creek drainage. We are in favour of habitat preservation and propose non-motorized recreation with visitor limitations.*

**140 signatures submitted on October 21, 1996**

*“We, the undersigned, do not want the Provincial Government to grant a permit to Jumbo Glacier Alpine Resort or any other ski resort to use the Jumbo Pass area as a ski resort.”*

**56 signatures collected by the  
West Kootenay Coalition for Jumbo Wild  
submitted February 6, 1997**

*“Our valley needs quality economic development that meets environmental guidelines. I support the land use decision that allows Jumbo Glacier Alpine Resort to proceed. Let Jumbo fly!”*

**115 signatures collected by  
Ian McKenzie (Panorama, BC)  
submitted May 1998**

*“We, the undersigned, are opposed to the Jumbo Glacier Alpine Resort development.”*

**163 signatures  
collected by the JCCS  
in May 1997**

*“We, the undersigned, are opposed to the Jumbo Glacier Alpine Resort development.”*

**77 signatures  
collected by the JCCS  
in December 1998**

*“We, the undersigned, are opposed to the Jumbo Glacier Alpine Resort development.”*

**329 signatures  
collected by the JCCS  
from April to September 1999**

*We, the undersigned, are opposed to the Jumbo Glacier Alpine Resort development.”*

**513 signatures  
collected by the JCCS  
from July 22, 2000 to September 12, 2001**

*“We the undersigned are opposed to the Jumbo Glacier Alpine Resort Development.”*

**219 signatures  
collected by the JCCS  
between May 4 and September 14, 2002**

*“We are writing to register our opposition to the Jumbo Glacier Resort proposal, and to urge you to reject it immediately. ...Like thousands of others who oppose the Jumbo Glacier Resort, we believe that the economic, social, and environmental costs of the project far outweigh the benefits. We are strongly urging you to reject the resort proposal for Jumbo immediately.”*

**23 signatures  
collected by the St. Saviour’s Anglican Church (Nelson, BC)  
submitted April 16, 2004**

### 3. Conclusion

The Project is located in one of the few areas in the East Kootenay that provides easy motorized access into the Purcell Mountains and is a popular backcountry area for hunting and recreational use such as hiking and picnicking in the summer months. The area, and the Project, have been the subject of ongoing land use debate for over ten years, despite the Kootenay/Boundary Land Use Plan allowing resort development in the area. As a result, the context of the EA review is one in which there is local public, political and First Nations division on the Project.

There has been a considerable and sustained level of interest in the Project since the EA review began in 1995. The best indicator of the nature and extent of public views on the Project is represented by the feedback received during the 60-day formal public comment period on the Project Report during which the EAO received 5,839 written submissions from 4,755 identifiable individuals (see 2.1.3). The EAO solicits public comments on the substance of project applications. In the case of this EA review, most of the comments received were not on the Project Report itself, but rather expressions of opposition to, or support for, the Project. The analysis of these submissions indicates that:

- 432 people (15.1 %) of the approximately 2,858 population of the District of Invermere, the area closest to the Project area, made written submissions (374 opposed and 58 in favour);
- 13.1% of the population of the District of Invermere submitted written comments expressing opposition to the Project;
- the number and percentage of submissions from the broader local region was small compared to the total population (West Kootenay: 1,457/88,862 or 1.6%; East Kootenay: 954/56,291 or 1.7%);
- 50% of submissions were from outside the Kootenays;
- the level of public interest was consistent with the 1995-1998 review period;
- 91% of submissions were expressions of opposition to the Project; and
- the organized campaign of opposition did not result in the same level of international interest as has been seen in other campaigns in British Columbia.

Besides basic land use opposition, key issues identified by the public include: project feasibility; effects on local heli-ski operator; effects on Grizzly bears (including the related issue of possible motorized access restrictions in adjacent drainages to mitigate Grizzly bear impacts); global warming and the integrity of the glaciers; water quality; adequacy of groundwater supply; waste management facilities; and costs to taxpayers.

## **Appendix A**

### **Assessment of the Adequacy of Measures Being Implemented for Public and First Nations Notification, Access to Information and Consultation (December 13, 1996).**

## REVIEW OF PROPOSED JUMBO GLACIER ALPINE RESORT PROJECT

### Assessment of the Adequacy of Measures Being Implemented for Public and First Nations Notification, Access to Information and Consultation

Prepared by the Environmental Assessment Office, in  
Consultation with the Jumbo Glacier Project  
Committee

#### PREAMBLE

In accordance with section 14(1)(a) of the *Environmental Assessment Act*, and as part of the EA review of the proposed Jumbo Glacier alpine resort project, the Environmental Assessment (EA) Office, in consultation with the Jumbo Glacier project committee, has prepared this assessment of the adequacy of the measures being employed for public and First Nations notification, access to information and consultation. The assessment covers the consultations being conducted during the first stage of the EA process (the application review stage). This stage comprises the review of the five-volume initial application submitted by the proponent, Pheidias Project Management Corporation, and the subsequent preparation of project report specifications, both in draft and final form.

Based on the review of the proponent's application, the Jumbo Glacier project committee has concluded that a project report will be required. At the same time that this assessment is being released, project report specifications are also being released in draft form for public review and comment.

This assessment describes the notification, access to information and consultation measures which have been implemented to date, assesses their effectiveness, and specifies further measures which are considered necessary to complete the application review stage. Some of these further measures may also prove suitable for the second stage of the EA process - the project report review stage. However, under section 14(1)(b) of the Act, a separate written assessment will be required once review of the proponent's project report is underway.

**Special note** - This assessment focuses on the **measures** being employed for notification, access to information and consultation. It does not evaluate the **content** of public and First Nations feedback. The substance of public and First Nations input is separately reported in the December 13, 1996 draft project report specifications.

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## **ORGANIZATION OF THIS ASSESSMENT**

The contents of this assessment are structured as follows:

### *A. Notification and Access to Information*

- A.1 Summary of Measures Employed to Date
- A.2 Assessment of Measures Employed to Date
- A.3 Future Requirements

### *B. Consultation with the Public*

- B.1 Summary of Measures Employed to Date
- B.2 Assessment of Measures Employed to Date
- B.3 Future Requirements

### *C. Consultation with First Nations*

- C.1 Summary of Measures Employed to Date
- C.2 Assessment of Measures Employed to Date
- C.3 Future Requirements

### *D. Review Timelines*

- D.1 Summary of Measures Employed to Date
- D.2 Assessment of Measures Employed to Date
- D.3 Future Requirements

### *E. Reporting and Analyzing Public Views and Issues*

- E.1 Summary of Measures Employed to Date
- E.2 Assessment of Measures Employed to Date
- E.3 Future Requirements

## **USE OF TERMS AND PHRASES**

In this assessment, the following terms and phrases are used for convenience:

- the Act
- the EA Office
- the EA process
- the project
- the project committee
- the proponent
- the PAC
- the TUIIA
- the KKTC
- the *Environmental Assessment Act*.
- the Environmental Assessment Office.
- the environmental assessment process.
- the Jumbo Glacier alpine resort project.
- the Jumbo Glacier project committee.
- Pheidias Project Management Corporation.
- the public advisory committee
- the Traditional Use Inventory and Impact Assessment
- the Ktunaxa/Kinbasket Tribal Council

## A. NOTIFICATION AND ACCESS TO INFORMATION

### A.1 SUMMARY OF MEASURES EMPLOYED TO DATE

#### ***Newspaper Advertising***

Both the proponent and the EA Office have employed newspaper advertising in order to announce key process events in the course of this review. Where the proponent has been responsible for advertising, the EA Office has identified for the proponent those newspapers within which advertisements are to be placed. These newspapers now include:

#### **General Newspapers:**

- the *Lake Windermere Valley Echo*
- the *Kaslo Pennywise*
- the *Cranbrook Daily Townsman*
- the *Kootenay Advertiser*
- the *Kimberley Daily Bulletin*
- the *Nelson Daily News*
- the *Kootenay Express*
- the *Golden Star*
- the *Golden News*

#### **First Nations Newspapers/Newsletters:**

- *Kahtou\**
- *Ktuqcqakyam\**

\* subject to availability of a suitable next publication date, since these publications are monthly.

To date, newspaper advertising has been used by both the proponent and the EA Office to announce the following:

- the availability of the application for public review and comment;
- the deadline for public comment on the application, and two timeline extensions;
- the locations of the satellite document repositories; and
- the locations and timing of open houses and public meetings.

#### ***Mailing List and Direct Mail-Outs***

The Project Registry of the EA Office maintains, and constantly updates, a public mailing list for this review, thus permitting direct circulation of EA-review-related information to parties who/which have declared an interest in the review of the project.

In developing the mailing list for this review, the starting point was a list provided to the EA Office by BC Lands in July 1995 (at the outset of the EA review of the project). Since that time, the names and addresses of organizations and members of the public have been added to the mailing list as and when the EA Office has received written representations on the project from them. As of December 1996, the mailing list consists of approximately 640 persons and organizations.

To date, the EA Office has used direct mail-outs to circulate:

- its August 1995 and December 1996 newsletters on the review;
- notices of two timeline extensions for the initial public comment period on the proponent's application;
- notices of the two public meetings hosted by the EA Office/project committee (held in Invermere and Nelson on September 14 and 20, 1995 respectively); and
- public notice (in early December 1996) of the impending release of the draft project report specifications.

### **Newsletters**

The EA Office issues newsletters on an *ad hoc* basis to provide a summary description of a proposed project which is subject to EA review, to explain relevant features of the EA process, and to indicate the status of the project under the EA process, and the next steps in the process.

In August 1995, the EA Office circulated a newsletter on the EA review of the project to all parties who were listed on the Project Registry's mailing list at that time. A second (December 1996) newsletter has just been circulated to all parties on the current mailing list.

### **Project Registry and Satellite Document Repositories**

The EA Office's Project Registry, located in Victoria, is the central document/records repository for the review of the project. It contains all of the records which, under section 62(2) of the Act, must be placed on it.

Satellite document repositories are currently operated in the following locations:

- Cranbrook Public Library
- Invermere Public Library
- Kaslo Government Agent's Office
- Nelson Public Library
- Vancouver Public Library

### ***EA Office Website***

During mid-1996, the EA Office's new website became functional. To date, it has provided on-line access to a summary description of the project, and an up-to-date report on the status of project review.

### ***Information Distribution by Proponent***

The proponent has held open houses in three communities (Invermere, Radium and Nelson), both on its own initiative and on the advice of the EA Office.

The proponent has relied on its five-volume application submission as its primary reference source for distributing information on the project (at open houses and elsewhere). It has also produced supplementary hand-outs and wall displays, as well as providing detailed responses to specific issues and concerns in numerous individual letters to members of the public and public interest groups.

### ***First Nations***

Three First Nations groups - the Columbia Lake Indian Band, the Shuswap Indian Band and the Ktunaxa/Kinbasket Tribal Council (KKTC) - are represented on the project committee. It should be noted that the KKTC participates on the project committee to represent the interests of other Ktunaxa Bands, and to provide technical support to Columbia Lake and Shuswap Indian Band representatives. By means of project committee membership, the leaders of these potentially affected First Nations groups have been notified directly, and on an ongoing basis, of the status of project review and of imminent review steps.

## **A.2 ASSESSMENT OF MEASURES EMPLOYED TO DATE**

### ***General Public***

There is considerable public awareness of the project review in local communities, and many members of the public and public interest groups have availed themselves of the opportunities presented to date to provide input to the process. Given that public input has been extensive, and has originated from throughout the Kootenay region, the EA Office and the project committee are satisfied that current public notification and access to information measures are proving effective in reaching target communities and groups. (Note - Target groups primarily comprise residents of interested and affected local communities in the Kootenay region, including interested stakeholder groups and organizations.)

More specifically, the EA Office and the project committee are satisfied:

- that the central Project Registry, the new EA Office website, and the system of satellite document repositories are providing adequate access to information on the project for Kootenay region residents.
- that the proponent's application presents information on the project in sufficient detail for the application review stage. (Note - The application contains a detailed project description and considerable relevant information on the project's potential effects. In many respects, the level of reporting goes well beyond the basic minimum requirements for an initial application. However, organization of this information could have been more logical and systematic.)
- that the proponent has complied with all of the newspaper advertising requirements of the EA Office in announcing the availability of its application submission and the scheduling of its open houses and public meetings. (Note - The formatting and content of the proponent's advertisements were reviewed in draft form by the EA Office before publication, and the proponent has provided copies of the advertisements which actually appeared in newspapers to the EA Office.)
- that adequate notice and lead time was provided by the proponent for its open houses, and that they were held in convenient central venues appropriate to the target audiences, and at convenient times (usually throughout the day on weekdays). (Note - attendance at the open houses has tended to be light to moderate.)
- that the proponent's open houses have presented information on the project and its potential effects in a clear and organized manner.

### ***First Nations***

It is not clear how effective the notification and access to information measures have been in informing members of the three First Nations groups on the project committee, other than their leaders and their project committee representatives, about either the EA process or the proposed project. It is not known if First Nations people make use of the satellite record repositories to obtain information, or if a significant number have chosen to provide written submissions to the EA Office on the project. It is not believed that many First Nations people are included in the EA Office mailing list to receive direct mail-outs.

## **A.3 FUTURE REQUIREMENTS**

The intent is that notification and access to information efforts will be maintained at current or enhanced levels for the remainder of the current stage of the EA process.

The project committee is satisfied that continued advertising of key process events in the listed newspapers/publications (see above, section A.1), coupled with the other notification measures listed below, will be adequate to ensure that residents of the Kootenay region who are interested in the review will continue to be aware of its status, and of upcoming opportunities to provide input.

In summary, the required notification and access to information measures for the remainder of the application review stage are as follows:

- *release of the draft project report specifications for public review and comment:*
  - \* for purposes of notification, the EA Office is advertising in all listed newspapers, has mailed out a notice of the review and a newsletter to all parties on its mailing list, and has placed a notice on the Project Registry and satellite repositories;
  - \* effective December 18, 1996, the draft specifications are available to view at the Registry, at the satellite repositories, and on-line in their entirety through the EA Office website; and
  - \* effective December 18, 1996, copies of the specifications are available on request from the Registry.
  
- *release of the finalized project report specifications:*
  - \* for purposes of notification, the EA Office will mail out a notice to all parties on its mailing list, and will place a notice on the Project Registry and satellite repositories;
  - \* the finalized specifications will be available to view at the Registry, at the satellite repositories, and on-line in their entirety through the EA Office website; and
  - \* copies of the finalized specifications will be available on request from the Registry.

For the convenience of the public, the Project Registry will also load a copy of the index of available documentation for this review on to the EA Office website as soon as this can be arranged.

The intended future general purpose notification and access to information provisions (including advertising in the two listed First Nations publications) will serve to some extent to inform members of First Nations communities about the forthcoming review steps to complete the first review stage. In addition, the EA Office and the project committee will be guided by ongoing advice from the First Nations representatives who sit on the project committee with respect to any other appropriate First Nations consultation requirements.

## **B. CONSULTATION WITH THE PUBLIC**

### **B.1 SUMMARY OF MEASURES EMPLOYED TO DATE**

#### ***Proponent Consultation***

The proponent's consultation program has included:

- holding public open houses and more structured public meetings in various communities;
- offering to hold one-on-one meetings with identified public interest groups which have a known interest in the project; and
- accommodating requests from public interest groups and organizations which approach the proponent to discuss the project.

#### ***Project Committee Consultation***

To date, EA Office and project committee sponsorship of consultations has consisted primarily of the public meetings hosted in Invermere and Nelson in September 1995, and discussions with various public interest groups with respect to the establishment of a public advisory committee (or PAC).

In response to public requests received during the summer of 1995, the EA Office organized two public meetings during the public comment period on the proponent's application. The purpose of the meetings was to provide the public with an opportunity to communicate its views directly to the project committee. Both meetings were hosted by representatives of the project committee, and were held in Invermere (on September 14, 1995) and Nelson (on September 20, 1995) respectively. Each meeting was attended by about 200 people.

The EA Office has been represented at all of the proponent's general public meetings, and also at its open houses. EA Office staff attended these sessions in order to monitor the consultations and to respond to questions about the EA process.

As an additional consultation measure, the project committee structures its meeting agendas so as to allow up to three hours at the beginning of its formal meetings to hear representations from other parties to the review (e.g. members of the public, public interest groups, affected stakeholders or the proponent).

#### ***Public Advisory Committee (PAC)***

During the summer of 1995, the EA Office received several requests from members of the public and public interest groups for the establishment of a PAC. Following discussions with the project committee, the EA Office

decided to proceed with the setting up of a PAC (under section 11 of the Act, the appointment of a PAC is the responsibility of the EA Office).

Given that the EA Office has received a large number of public representations on the project, expressing a broad range of views, the PAC membership has been structured so as to ensure that the views and issues raised more generally by the public are a significant focus of PAC attention. More specifically, the attempt has been made to strike a balance which will facilitate achievement of the following two goals:

- to foster a dialogue between public groups about issues raised in the course of the review of the project; and
- to function as a forum for considering issues raised by the broader public.

After consultations with the project committee and informal discussions with various public interest groups, the EA Office has appointed the following groups to sit on the PAC:

- Windermere Valley Ski Club - 1 seat
- David Thompson Secondary School (student representative) - 1 seat - *at this time, availability of student representatives is uncertain*
- Rocky Mountain Visitors Association of BC - 1 seat
- East Kootenay environmental interests - 2 seats
- Welcoming Employment with Sustainable Tourism - 1 seat
- Kootenay Country Tourist Association - 1 seat - *at this time, this organization's participation is in doubt*
- Columbia Valley Chamber of Commerce - 1 seat
- West Kootenay environmental interests - 2 seats
- Columbia Valley Hut Association - 1 seat

The PAC is to be convened for its first meeting in January 1997, now that the draft project report specifications are being released for public review and comment. The PAC's first major task will be to review the draft specifications, and to provide advice to the project committee on the specifications.

## **B.2 ASSESSMENT OF MEASURES EMPLOYED TO DATE**

### ***Proponent Consultation***

It should be noted that, under the EA process, it is deemed to be primarily the proponent's task (not that of government) to present the features of a proposed development to the public. The role of government is complementary - to explain the EA process and to outline relevant areas of public policy with respect to issues raised by the development.

The proponent has complied with all requirements of the EA Office to date with respect to public consultation on its project. The proponent has provided a summary of the substance of its consultations with the public and public interest groups in its two letters of September 29, 1995 to the EA Office. The letters, which were tabled with the project committee on October 18, 1995, outline the proponent's consultation efforts, identify public views noted at its meetings and open houses, and document both general expressions of overall support for, and opposition to, the project, and specific points of interest or concern. The range of views and issues reported by the proponent is generally consistent with that communicated directly to the EA Office and the project committee by the public, both in written submissions and at public meetings.

The EA Office and the project committee are satisfied that the public meetings which the proponent has held to date were set up in an appropriate manner. There was adequate notice and lead time for these meetings, and they were held in convenient central venues appropriate to the target audiences, and at convenient times (usually on weekday evenings). The meetings were generally well attended, and interaction was achieved through question and answer sessions, which typically followed an initial proponent presentation. Moreover, the proponent appears to have made all reasonable efforts to arrange separate one-on-one meetings with representatives of interested public groups and organizations to discuss the project.

While it is recognized that the proponent's public meetings have often served to catalyze disagreements over the validity and seriousness of specific concerns, the EA Office and the project committee consider that the meetings have been worthwhile, and have yielded useful feedback on issues of public interest and concern. Dissatisfaction with these sessions, expressed by some elements of the public, is deemed to reflect their high level of concern over the project, and their desire for the more prominent direct involvement of the project committee in the consultation process.

### ***Project Committee Consultation***

As noted above, the EA Office and the project committee responded to requests for government-sponsored public meetings by holding two meetings in September 1995. They were well attended, and provided an adequate forum for the public to express its views about the project.

The EA Office has been criticized for its handling of the Invermere public meeting, held on September 14, 1995. While many public concerns were registered, the format did not make provision for either project committee members or the proponent to have the opportunity to respond to criticisms or concerns. The meeting had been set up with the intent that project committee members, many of whom had never previously attended a public session on the project, would simply listen to public views for information purposes, thus allowing as many people as possible the opportunity to speak.

That format served its purpose on that occasion, but the EA Office and the project committee agree that future consultations will need to be iterative. More specifically, future public meetings sponsored by EA process representatives will be structured to incorporate a question and answer format, with responses to questions from, or points raised by, the public being offered by project committee members or the proponent, as appropriate.

It has been suggested that EA process representatives should be intervening more directly in some of the heated public exchanges between the proponent and project critics, and that this might help to set the record straight on some of the disputes over facts about the project. However, except in respect of public representations made directly to the EA Office or the project committee, neither the office nor the committee see it as their role to track, research and respond to publicly expressed views and assertions respecting projects which are under review. As noted in the "Special Note" to the *Preamble*, the project committee is making known its own positions on the public views expressed on the proponent's application in the draft specifications (see also section E., below).

#### ***Public Advisory Committee (PAC)***

Since the PAC has yet to meet, it is not yet possible to assess the contribution which it might make to the review of the project.

The establishment of a PAC, by fostering a more structured interaction between the public, the proponent and the project committee on the more prominent public issues, is one means of encouraging ongoing communication between representatives of these parties. Hopefully, to the extent that misconceptions about the project are contributing to public concern, as claimed by some, discussions between the three parties will help to focus debate on the project as actually proposed, and may also lead to a better understanding of areas of agreement and the basis of concern where disagreement exists.

### **B.3 FUTURE REQUIREMENTS**

#### ***Proponent Consultation***

The EA Office and the project committee will not require the proponent to set up any further open houses or public meetings on the project during the remainder of the initial stage of the EA process, although the proponent should feel free to engage in such further consultations as it deems appropriate prior to the filing of its project report.

The proponent should be prepared to accommodate invitations received from the PAC for discussions on project-related matters, and should also continue to meet with public interest groups and organizations which request meetings on the project, where possible.

In its project report, the proponent is required to include a summary of all public consultations conducted prior to submitting the project report, providing details of:

- the dates and locations of meetings and discussions (with numbers in attendance);
- the nature of the views expressed by the public and public interest groups; and
- the measures proposed by the proponent to address public concerns - either to reduce adverse effects of project development or to enhance associated project benefits.

### ***Project Committee Consultation***

For the remainder of the application review stage of the EA process, the EA Office and the project committee will focus their public consultation efforts on discussions with the PAC with respect to the contents of the draft project report specifications. No further general public meetings are planned for the application review stage.

### ***Public Advisory Committee (PAC)***

The PAC will be convened in January 1997 to begin developing advice and recommendations for the project committee with respect to the contents of the draft project report specifications and the preparation and release of finalized project report specifications.

Under section 11(3)(c) of the Act, the PAC may invite members of the project committee to attend and participate in its proceedings. Thus, in reviewing the draft project report specifications, it may opt to seek discussions on key issues with appropriate project committee members, and for example, may wish to adopt a workshop format. The proponent's participation in some PAC sessions may also be warranted.

## **C. CONSULTATION WITH FIRST NATIONS**

### **C.1 SUMMARY OF MEASURES EMPLOYED TO DATE**

The proponent has had several meetings with the Chiefs, Councilors and other leaders and/or their representatives from the three First Nations groups which are members of the project committee - the Columbia Lake Indian Band, the Shuswap Indian Band and the KKTC. It has discussed with them its proposed project and the further consultation measures

which may be needed, and has indicated a willingness to consult in any manner convenient to First Nations.

In correspondence, the proponent has listed its various meetings with First Nations, held for purposes of information exchange and consultations (see its letter of September 29, 1995), but has not documented the substance of those discussions in any detail (this was not explicitly requested by the EA Office).

To date, EA Office consultations with First Nations have consisted largely of discussions with the leaders of the First Nations members of the project committee. Through the project committee forum, these First Nations organizations have been key participants in the decisions of that committee on the general direction and scope of the review of the project, as well as focusing the committee's attention on issues of First Nations interest and concern.

In late 1995, First Nations identified the technical scope of the issues raised by the project which needed to be addressed from a First Nations perspective. Since the beginning of 1996, negotiations have been held between these First Nations, the proponent, the EA Office and selected project committee members with the intent of reaching a mutual agreement on the details of a joint approach to the examination of First Nations concerns, including potential impacts on the exercise of Aboriginal rights. While it is ultimately the responsibility of the proponent to conduct and report on such assessments, the EA Office and the project committee are strongly encouraging the proponent to work closely with First Nations in a joint arrangement which will ensure that the proponent and the review process will have access to reliable information on First Nations traditional use of the area in the vicinity of the project site.

To date, the negotiation process has entailed the following steps:

- a First Nations community organizer was hired in early 1996;
- preliminary interviews and discussions were held with elders;
- an initial meeting was held on February 28, 1996 between the First Nations and the proponent, to exchange information;
- KKTC staff began to develop draft terms of reference for studies of First Nations traditional and cultural use of the project area, in consultation with interested Band representatives;
- a second meeting, between First Nations, the EA Office and BC Lands was held on March 26, 1996 to exchange information; and
- a third meeting, between First Nations, the proponent and the EA Office, was held on May 2, 1996 to further define areas of agreement and issues which require further attention with respect to the terms of reference for studies of First Nations issues.

The First Nations representatives on the project committee have arranged these meetings, which have included members at large of First Nations

communities, as well as First Nations leaders. Based on these sessions, the scope and content of First Nations issues which need to be addressed have essentially been finalized in follow-up discussions between the EA Office, the proponent and the project committee's First Nations representatives. For details of the final form of the traditional use inventory and impact assessment (TUIIA) study program which is being recommended to investigate matters of interest and concern to First Nations, see section G.1 of the December 13, 1996 draft specifications.

## **C.2 ASSESSMENT OF MEASURES EMPLOYED TO DATE**

By holding various meetings with the Chiefs, Councilors and other leaders and representatives of the First Nations represented on the project committee, and by indicating a willingness to accommodate requests to consult further in any manner convenient to First Nations, the proponent has complied with all First Nations consultation requirements of the EA Office to date.

The EA Office and the project committee are satisfied that, if the proponent is able to negotiate a co-operative study agreement with First Nations for the undertaking of the proposed TUIIA (see above for details), this will generate the information necessary for a reliable assessment of the effects of project development on traditional uses and the exercise of Aboriginal rights in the vicinity of the project site.

## **C.3 FUTURE REQUIREMENTS**

For the review of the Jumbo Glacier project, the EA Office and the project committee, in determining appropriate measures for achieving adequate First Nations consultation, will continue to rely primarily on the advice of the committee's three First Nations members.

In its project report, the proponent is required to include a summary of all First Nations consultations conducted prior to submitting the project report, providing details of:

- the dates and locations of meetings and discussions (with numbers in attendance);
- the nature of the views expressed by First Nations representatives and members of Aboriginal communities; and
- measures proposed by the proponent to address First Nations concerns - either to reduce adverse effects of project development or to enhance associated project benefits.

It should be noted that, to the extent that the project may have impacts to the west of the main watershed divide in the Purcell Mountains, it may affect areas which were traditionally used by other First Nations people.

Primarily within the context of the wildlife study program, the proponent should meet with representatives of the Shuswap Nation Tribal Council and the Sinixt people to discuss their interests and concerns with respect to such impacts. Sinixt representatives have indicated that the white grizzly bear is sacred to them. Other issues, given west-side impact potential, would include impacts on animal movements and on flora used for food and medicines.

The EA Office has received a written request from a group which claims to represent the Sinixt/Arrow Lakes Nation, requesting participation in the review of the project. The EA Office has responded in writing, agreeing that this group will be consulted about the content of studies which will have to be performed at the next stage of review with respect to the cultural and historic resources and traditional use of the project area by First Nations. Consultations with this group have yet to get underway.

## **D. REVIEW TIMELINES**

### **D.1 SUMMARY OF MEASURES EMPLOYED TO DATE**

The high level of public interest in the review of the project became apparent to the EA Office and the project committee during the public comment period on the proponent's initial application documentation. The initial view had been that approximately 50 days should suffice for that review step, given the extensive previous review history of the project. This period proved to be inadequate, however, and was extended twice, to a total of 75 days (eventually running from July 15 until September 28, 1995), in response to expressions of public concern about the need for more time to review the application.

After considering public representations, the EA Office concluded that the timeline extensions were warranted in view of:

- the substantial volume of documentation in the proponent's application;
- the scheduling of the public comment period at the height of the summer;
- the unexpectedly high level of public interest in the project review;
- the need to implement additional measures to better incorporate the West Kootenay region into the public notification/consultation programming; and
- the EA Office decision to hold public meetings in Invermere and Nelson, hosted by project committee representatives.

## **D.2 ASSESSMENT OF MEASURES EMPLOYED TO DATE**

The *Time Limits Regulation*, enacted under the Act, provides some flexibility in setting timelines. Based on experience with the first public comment period, the EA Office and the project committee now agree that, for this review, the selection of public consultation and comment timelines which are closer to the maximum allowable (rather than the minimum allowable) is an appropriate measure which takes due account of the demonstrated high level of public interest in this review, and the range and complexity of the issues being considered.

## **D.3 FUTURE REQUIREMENTS**

Specifically with respect to the review of the draft project report specifications, the maximum allowable timeline for public review and comment - 30 days, as set out in the *Time Limits Regulation* - is the period which has been selected for that review step. Moreover, a significant period is being provided in advance of formal commencement of the public comment period on January 13, 1997, to permit time for adequate public notification, and for the public to obtain access to the draft specifications.

## **E. REPORTING AND ANALYZING PUBLIC VIEWS AND ISSUES**

### **E.1 SUMMARY OF MEASURES EMPLOYED TO DATE**

Under the EA process, project committees are expected to evaluate public feedback on projects which are under review. For this review, the project committee is currently examining public input as part of the process of developing draft project report specifications.

In October of 1995, following the conclusion of that public comment period, the EA Office hired consultant James Rutter to review the public submissions which had been received by the EA Office by that time, and to produce an itemized listing of the views expressed by the public on the project, both in written submissions and at public meetings. The consultant was asked to document general expressions of support or opposition, and specific points of interest and concern. His listing of issues, dated October 17, 1995, was tabled with the project committee at its October 18, 1995 meeting, and currently forms the primary basis for the project committee's analysis of public input.

The project committee responds to public views and issues in Appendix A to the December 13, 1996 draft project report specifications. Responses indicate whether or not the committee agrees that stated concerns are relevant to the EA review of the project, and also to what extent it

considers further assessment of relevant issues at the project report review stage to be necessary.

In evaluating issues and preparing responses, project committee members are taking into account prevailing public policy expectations for each issue, and where necessary, they are referencing the relevant government policy context. The appendix is the primary means by which the project committee intends to respond to public views and concerns expressed to date on the project.

## **E.2 ASSESSMENT OF MEASURES EMPLOYED TO DATE**

The EA Office and the project committee continue to be satisfied that their decision to identify and respond to public issues in one document (Appendix A of the draft specifications), is the most efficient and effective means of demonstrating that due consideration has been given to public input in developing the draft specifications.

The EA Office and the project committee are satisfied that the EA Office's contractor undertook the itemizing of public views and issues in a fair, objective and impartial fashion, and that the overall balance of the resulting document, with most of the itemized issues reporting some degree of concern with respect to the project, was a reasonable reflection of the balance of the public submissions.

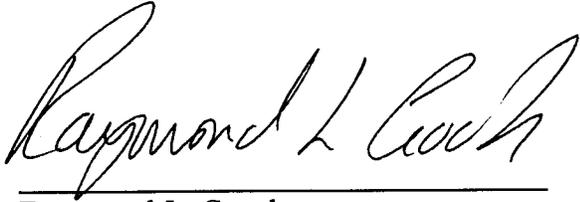
Having said that, the proponent has identified certain public views which it considers to have been overlooked. In a memo which was faxed to the EA Office on January 31, 1996, the proponent lists these points for consideration by the project committee. The project committee has incorporated (and responds to) these additional items in Appendix A of the December 13, 1996 draft specifications.

## **E.3 FUTURE REQUIREMENTS**

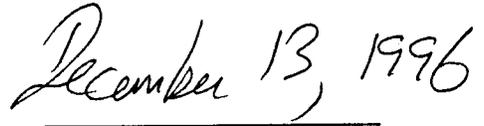
As part of the forthcoming review of the draft specifications, the EA process will provide a formal opportunity for all parties to identify views and issues which the project committee may have neglected to address in the document. The public, the proponent and government will all be able to scrutinize the list of issues in Appendix A to that document, checking for completeness.

The public feedback which will be received by the EA Office and the project committee on the draft project report specifications may raise further issues to which the project committee will wish to respond. If so, it will do so by updating Appendix A, and re-releasing it in updated form with the finalized specifications.

Signed on behalf of the Environmental Assessment Office and the Jumbo Glacier project committee by:



Raymond L. Crook  
Project Committee Chair  
Jumbo Glacier Project Committee



Date

## **Appendix B**

### **Jumbo Glacier Resort Project: Consultation Assessment (January 28, 2004).**



Telephone: 250-387-2206  
Facsimile: 250-387-2208

File: 30250-20/Jumbo-05-06

Reference: 93495

January 28, 2008

Oberto Oberti  
President  
Pheidias Project Management Corporation  
1660 – 1188 West Georgia St  
Vancouver BC V6C 4A2

Dear Oberto Oberti:

Pursuant to section 6.3.1 of the Procedural Order issued under section 11 of the *Environmental Assessment Act* for the Jumbo Glacier Resort Project, I am writing to convey the attached assessment of the adequacy of the past and proposed public consultation activities and to specify any further consultation activities necessary to ensure adequate consultation.

Please continue to keep the Environmental Assessment Office informed of your progress in implementing the proposed Public Consultation Program, including the further required activities identified.

Please contact either myself at (250) 387-2206 or Alan Calder, Project Assessment Manager, at (250) 952-6507 if you have any questions.

Sincerely,

Martyn Glassman  
Project Assessment Director

Attachment

cc: Alan Calder, Project Assessment Manager

**Environmental Assessment Office  
Jumbo Glacier Resort Project**

**Consultation Assessment**

In accordance with section 6.3.1 of the Procedural Order (the Order) issued under section 11 of the *Environmental Assessment Act* for the Jumbo Glacier Resort Project (the Project), the Environmental Assessment Office (EAO) has reviewed the Public Consultation Program described in the Project Report (Volume 1, Section A.8) and prepared the following assessment of the adequacy of the Proponent's past and proposed public consultation activities. This assessment has been prepared with reference to the requirements of the Order as well to future consultation requirements identified in the EAO's December 13, 1996 *Assessment of the Adequacy of Measures Being Implemented for Public and First Nations Notification, Access to Information and Consultation*.

**Notification and Access to Information**

The EAO is generally satisfied that measures taken to notify the public and to provide access to information have been adequate to ensure that those interested in the environmental assessment (EA) review have been made aware of its status and of upcoming opportunities to provide input. The EAO has taken a lead in this regard in maintaining the Project Registry and satellite repositories and, more recently, through the EAO's Project Information Centre online at [www.eao.gov.bc.ca](http://www.eao.gov.bc.ca). Information made available to the public since the Final Project Report Specifications were issued in May 1998 include several *EA Review Update* newsletters (May 1998, July 2000, October 2001, and December 2003), as well as study reports and other review documentation.

While the Proponent is encouraged to make information available through their own project webpage ([www.jumboglacierresort.com](http://www.jumboglacierresort.com)), the EAO is responsible for providing electronic access to project review information during the EA review process. To help provide electronic access to project information, the Proponent is requested to follow the EAO's formatting guidelines for electronic documentation, especially with respect to the 5 MB file limit, which is the maximum accessible size for many members of the public.

The EAO has also made arrangements to make the Project Report available through local information locations at:

- the Invermere Public Library,
- the Cranbrook Public Library,
- the Nelson Public Library,
- the Argenta Community Library,
- the Silvertown Municipal Office, and
- the Government Agent's Office in Kaslo.

**Further requirements:**

Pursuant to section 6.2. of the Order, the Proponent must:

- a) prepare a summary of the Project Report to be included as an insert in each of the following publications prior to public open houses scheduled in Invermere and Nelson on March 10 and 11, 2004 respectively:
  - the Cranbrook Daily Townsman,
  - the East Kootenay Weekly,

- the Kootenay Advertiser,
  - the Invermere Valley Echo,
  - the Nelson Daily News,
  - the Express (Nelson),
  - the Golden Star, and
  - the Kaslo Pennywise
- b) advertise (in the publications listed above) notice of Public Open Houses; and
- c) advertise (in the publications listed above) the availability of the Project Report for public review and comment.

Public notice must appear:

- a) at least 7-days prior to the date on which the formal public comment period commences; and
- b) at least 7-days prior to the date on which an open house is scheduled.

### **Public Consultation Activities**

The EAO is generally satisfied with the Proponent's summary of public consultations conducted prior to submitting the Project Report. The Proponent has continued to meet and correspond with interest groups, organizations, and local governments. In addition, they have taken appropriate steps to disseminate project information that it feels accurately reflects the proposed Project, including measures proposed to address public concerns.

The EAO is also generally satisfied with the concept of the proposed four-stage Public Consultation Program. The establishment of a local Project Office, as well as the proposed community and local government liaison activities – in conjunction with EAO-hosted Public Open Houses – are appropriate forums for involving a broad variety of community representatives and interests. The Proponent is advised to ensure that adequate resources are dedicated to the consultation process and that forums are well staffed by project and technical staff and consultants. The roles, responsibilities, and authority of all participants should be clearly defined and effectively communicated.

### **Further requirements:**

#### *Stage 1 Program design and notification*

- See **Notification and Access to Information** requirements identified above.
- The Proponent is requested to advise the EAO of the location and hours of operation of the local Project Office once these are determined.

#### *Stage 2 Key Stakeholder Group Liason*

- With respect to the placement of advertisements in regional newspapers, the Proponent is required to use the publications identified in section 6.2.1 of the Order and to provide at least 7-days advanced notice of meetings planned in support of the Project.
- The Proponent should include the Regional District of the Central Kootenay (RDCK) among the local governments approached for consultation. Contact the EAO for the name of the RDCK contact with respect to the Project.

#### *Stage 3 Community Dialogue*

- The Proponent is advised to provide prospective participants with as much advanced notice of the proposed Community Dialogue Meeting as possible.

#### *Stage 4 Public Open Houses*

- The Proponent must ensure that Public Open Houses are well resourced, both in terms of information materials and staff and consultants. The EAO will work with the Proponent in planning Public Open House logistics.

#### *General Reporting Requirement*

- Pursuant to section 5.2.12 of the Order, the Proponent must, within 15 days of the close of the formal public comment period (*i.e.*, by May 28, 2004) provide the EAO with a written report on the results of all public consultation activities held in support of the Project Report. This reporting is to include the level of public interest (*i.e.*, attendance), views, issues, and concerns raised with respect to the Project.

#### **Conclusion**

Overall, the EAO has determined that the past and proposed public consultation activities are considered adequate for the purpose of reviewing the additional information required to complete the EA review. Pursuant to section 6.3.6 of the Order, the Proponent must conduct the proposed Public Consultation Program outlined in the Project Report, as well as satisfy the above further requirements.

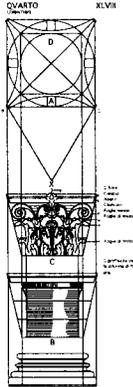


Martyn Glassman  
Project Assessment Director

Dated January 28, 2004 at Victoria, British Columbia

## **Appendix C**

### **Proponent's Summary of Public Consultation Activities conducted by the Proponent during the EA review of the Project Report.**



April 28, 2004

**Mr. Martyn Glassman**  
Project Assessment Director  
Environmental Assessment Office  
P.O. Box 9426  
STN. PROV. GOVT.  
Victoria, BC V8W 9V1

**Re: Jumbo Glacier Resort Public Consultation Activities**

Dear Mr. Glassman:

In accordance with section 5.1.12 of the Procedural Order we are enclosing our report on the results of public consultation activities held and attended in support of the Project Report.

The purpose and the program of the presentations and meetings generated by the proponent's consultants are explained in the Project Report, Volume 1, section A.8. The proponent's consultants have followed the requirements outlined in the attachment to the letter dated January 28, 2004, from the Project Assessment Director, clarifying the further requirements for the Public and First Nations Notification, Access to Information and Consultation.

As proposed in the Project Report, the proponent opened a site office in Invermere with a public display of project information. Information material for public distribution was prepared and a web site was created in order to complement the physical display and printed material, and to facilitate the distribution of information from the Project Report. The web site was regularly maintained and included a "bulletin board" to announce and advertise events such as the public open houses.

Meetings with individuals and groups were held informally at the site office and in other locations in Invermere, as well as in Golden, Cranbrook and Nelson. These meetings included a variety of people, ranging from occasional encounters with local individuals and business operators to the Mayors of Cranbrook and of Fernie. Meetings were offered to opponent groups, but the only group that had declared opposition and arranged for a meeting was the Kootenay Mountaineering Club. The Jumbo Creek Conservation Society and R.K. Heli-Ski refused to give the proponents' representatives an opportunity to present the project but came to the Open Houses to present their case against the project to the public. They set up their own presentation area and displays, sometimes prominently occupying the entry to the Open House with their supporters. It was felt that their presence was at times aggressive and intimidating to uncommitted visitors. Their presence was very noticeable and may have partially frustrated the opportunity to present project information.

Various attempts were made to arrange special presentations for First Nations, also through the EAO, but there was no positive response except from the Sinixt First Nation and the Kinbasket Shuswap First Nation.

Meetings were held as planned with the representatives of the three local governments in the proximity of the project in the East Kootenay. The Central Kootenay Regional District refused an offer to meet on the grounds that it did not want to become involved and that the project was not in its jurisdiction (this was not surprising to the proponents' consultants following the CORE Table decision to separate East and West Kootenay interests and land use planning).

The proponent advertised the Open Houses as required by the EAO in the media of the East and West Kootenay, and participated in the Open Houses in both the East and West Kootenays as required, despite the fact that at CORE it was clearly identified that the project is entirely contained in the East Kootenay drainages, that there is no east-west road through Jumbo Pass, and that the CORE Table chose to divide itself into the East and West Kootenay tables in order to achieve an agreed separation of interests.

A six-page brochure outlining the salient facts of the project was distributed through the local media in both the East and West Kootenay prior to the Open Houses.

Chronologically the meetings started with a February 11, 2004 presentation to the Invermere Chamber of Commerce and continued as follows:

February 11, 2004	Columbia Valley Chamber of Commerce	Invermere
February 13, 2004	Panorama/Intrawest	Vancouver
February 17, 2004	Radium Rotary Club	Radium
February 24, 2004	District of Invermere Council	Invermere
February 25, 2004	Village of Radium Council	Radium
February 26, 2004	Invermere Rotary Club	Invermere
February 26, 2004	Kinbasket Shuswap First Nation Council	Invermere
March 5, 2004	RDEK representatives	Cranbrook
March 10, 2004	Open House	Invermere
March 11, 2004	KKTC representatives	Cranbrook
March 11, 2004	Sinixt representatives	Nelson
March 11, 2004	Open House	Nelson
March 29, 2004	Focus Group	Invermere
April 1, 2004	Selkirk College presentation	Nelson
April 7, 2004	Focus Group	Invermere
April 13, 2004	Kootenay Mountaineering Club	Nelson
April 21, 2004	Cranbrook Chamber of Commerce	Cranbrook

Because of the lack of an earlier opportune time, a meeting and presentation with the Cranbrook Chamber of Commerce was held on April 21, 2004, and the proponent's consultants have made themselves available for additional meetings that may continue to be arranged to maintain an open communication process.

The Open House on March 11 in Nelson was disrupted by a demonstration that for a period of time rendered communication impossible, and that was the high and visible point of a campaign of intimidation. Despite the intimidation campaign even at that meeting in Nelson on March 11 a retired local doctor braved the situation to speak to Global TV about the value of the project to B.C.

The public input period generated six important statements of support from:

- Kinbasket Shuswap First Nation
- TASK (Tourism Action Society of the Kootenays)
- International Union of Operating Engineers
- Italian Chamber of Commerce
- Intrawest
- Invermere business community: Focus Group minutes

The public input period gave an abundant set of responses that surpassed the original expectations and the goals of the consultation program set out in the Project Report. A report of each meeting is attached.

The views, issues and concerns raised with respect to the project have been outlined in the meeting reports as well as in the written submissions that have been received by the EAO as part of the public process. The written submissions will receive detailed responses, which are being prepared and will be ready for the time set by the Director in the Procedural Order. There have not been substantially new issues and concerns that have not been addressed in the Project Report and related documents, but there has been a need to publicize and simplify the responses as well as a need to clarify some misunderstandings. Perhaps the most important misunderstanding generated during the public process was caused by a headline in the Nelson daily paper preceding the March 11 Open House, which suggested that the project would close the backcountry to the general public. This suggestion was made on the basis of a quotation with inaccurate statements. This issue will be clarified in the responses that are being prepared, and the proponent is confident that the mitigation measures that will be put in place pursuant to the environmental monitoring program that will be part of the project will not require a change to the current motorized access made available by the forestry roads in upper Glacier Creek and Horsethief Creek drainages, as feared by some.

The public process has generated an ample discussion of the project and related issues, which is an indicator of a successful process. As was the case in the past, it became apparent once more that many of those who do not wish to see the project go ahead did not have much interest in reviewing new information and were not well disposed to allowing other people to gain this information. Nevertheless, project information was widely distributed and contained the necessary information and responses to satisfy all of the concerns that had been expressed over the earlier years as well as in the latest public process. A number of people who took the time to read through the material and learn about the project were impressed with the work done by the proponents' consultants, and expressed that in writing as well as in words.

With kind regards,

**Pheidias Project Management Corporation**

Per: Oberto Oberti, MAIBC  
President

c.c.: Alan Calder

Enclosure

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**Meeting with Columbia Valley Chamber of Commerce  
Wednesday, February 11, 2004**

Location: Invermere Inn, Invermere  
Present: about 35 people

A presentation by the proponent's representatives to the Columbia Valley Chamber of Commerce was preceded by a presentation by Rod Gibbons on behalf of RK Heli-Ski:

Mr. Gibbons presented the history of his company, its presence in the community, the significance of the employment contribution of some 60 jobs with average pay above the industry standards, and the intent of the company to make plans to reach a new level. All this would come to an end with the Jumbo Glacier Resort project. Mr. Gibbons explained that the company could not survive if the project goes ahead. Mr. Gibbons noted that up to 80% of their skier visits occur in the area requested to become lift serviced Controlled Recreation Area and that bad weather skiing conditions, safety, slope analysis and cost would not permit to modify the pattern of terrain use.

The Chamber members asked Mr. Gibbons a number of questions:

- Question on size of territory: answer – 150 square kilometers, or 150,000 hectares.
- Question on size of proposed intrusion into tenure: answer – approximately 5,900 hectares; additional answer – only 9 % of territory skiable because of slopes, snow stability etc, ready to show satellite photography based slope analysis and statistical data.
- Question on the contribution to the Province by the heli-ski company: answer – \$5 dollar per skier.

Grant Costello then delivered a PowerPoint presentation and discussion to the Chamber members. An outline of the presentation is as follows:

1. The ski resort policy of Government is a good policy designed to generate economic engines in the interior.
2. The model started with Whistler, now a success story, but initially a sick development in the wrong climate. The model may not be perfect, but it generated a policy that may produce the ideal mountain resort.
3. The ski resort policy is a policy for the common good designed to benefit everybody, not just some special interests. It has been developed by thirty years of different governments. It is fundamentally non-partisan. This Government wants to use it more successfully: if they succeed this is good for everybody.

4. Problems of ski resorts are: 1) elevation too low = rain; 2) lack of snow = dependence on costly snowmaking and icy runs; 3) uncertain seasons = short seasons; 4) single season lifts = closing lifts for the summer; 5) location chosen because there was something there = site is not best choice for skiing; 6) excessive closeness to city = dependency on weekend traffic makes the resort too empty during the week.
5. We are working on the ideal mountain resort because of access, location, climate, elevation, scenery and glaciers, making the season year round for the lifts.
6. Why another ski resort? Aren't there enough of them? No, there aren't enough ski resorts in B.C. for several reasons: B.C. has about half the skier visits of Colorado, yet its interior is as accessible and it has better mountains, elevations and climate. None of the existing resorts can guarantee the season or to be rain free at Christmas, and none of the existing resorts was designed as a true year round ski destination, with an unsurpassable reputation for snow quality and scenery. B.C. needs new quality destinations, and Jumbo is the only proposed project that fulfils all the requirements.
7. Some controversial issues:
  - Wildlife corridors and Grizzly Bears: we have revised the Master Plan in order not to interfere and minimize impacts.
  - Access road: we have optimized the use of existing road alignments, phased the cost of the improvements and minimized it. Design speed will be mostly 50km/hour, with some sections at 60km/hr in the Toby Creek drainage.
  - Jumbo Pass: there will be no intrusion and no change.
  - Heli-ski company: before the project goes ahead there will be a mutually beneficial business solution. We believe that this is inevitable and that the Government and legal requirements will ensure that there will be fair play.
  - Employment: the project will be a major employment generator, with an estimated 800 full time jobs on completion, and we believe it will ensure the continuity of employment of the heli-ski employees as well, regardless of the type of final business deal.
8. The project will become an important economic engine for the region, providing an expansion for Panorama and creating a dream vision for the tourists of the entire continent, making affordable a visit to the glaciers for superior skiing and sightseeing, even for the physically disabled. Areas of opportunity include:
  - Construction
  - Ski area operations
  - Ski school, rentals etc.

- Utilities (water, sewer, etc.)
- Real estate, reservations and time-share
- Research and interpretive activities
- Food and beverage operations
- Retail operations
- Service activities
- Hotel and B&B accommodation
- Meetings and small conventions
- Mountain photography schooling and special movies

The PowerPoint presentation on the above noted points was complemented by comments by Oberto Oberti who highlighted five items in particular:

- The vision leading to the project.
- The changes from the 1995 preliminary Master Plan.
- The fundamental aspects of the road access improvements and design.
- The main points of the Grizzly Bear studies and reports.
- The RK Heliski issue and the avenues for resolution.

Grant Costello and Oberto Oberti responded to many questions explaining:

1. Colorado's skier numbers and geography give reason to be optimistic about the B.C. ski industry's potential. Latitude, elevation, mountain type, climate and access favour the development of new resorts in the interior of B.C. relative to the Colorado example.
2. There has been a bipartisan policy for over a quarter century encouraging the development of ski resorts. New resorts are needed where the snow is.
3. New resorts are economic engines proven by the policies created on the basis of the Whistler model (the CASP policy and the Mountain Resort Associations Act).
4. Projects do not need to be the size of Whistler to benefit from the resort development policies. The proposed project is much smaller than Whistler.
5. The difference between the SAOT and CCC and real numbers of day visitors was explained. Rough order of magnitude numbers were given from memory. Whistler estimated having a CCC of over 50,000, but may achieve a maximum of 26,000 skiers in a day and normally would have 8,000 to 15,000 skiers in a day. Jumbo Glacier Resort is designed to have a CCC in the range of 9,000 and is expected to generate 2,000 to 3,000 skiers in a day.
6. The physical size of Whistler and Jumbo Glacier Resort was discussed. The Whistler base area has a boundary of approximately 31,000 acres, while the Jumbo Glacier Resort base area has a boundary of approximately 250 acres.

7. What is important, to understand the difference, is that JGR has an abundance of natural snow, a bigger vertical drop than Whistler, and a skiable terrain that is almost as big as Whistler's, but accessed with fewer lifts.
8. Questions on the road allowed clarifying the figures on road maintenance – the existing costs of maintenance of the road to Panorama and of the road from Panorama to the Mineral King Mine. Avalanche monitoring costs estimated by Peter Schaerer were also explained.
9. There were questions on the costs and maintenance of the road to Kicking Horse Mountain Resort. It was explained that Kicking Horse Mountain Resort did not get government contributions to the cost of the road, but received a loan that will be repaid in approximately fifteen years.

Grant Costello recorded a question by Oberto Oberti to Bob Campsall:

*Question: Bob, you have said in the past that if you couldn't stop this project as originally planned that you hoped you could improve on it by getting the proponent to reduce the impacts. Do you feel that has been accomplished?*

*Answer: Yes, I feel our contribution has been to reduce the size and impact of the development compared to the initial proposal and if the project receives approval I will not continue to be a critic.*

**Meeting with Panorama/Intrawest  
Friday, February 13, 2004**

Location: Vancouver

Present: David Brownlie, Gord Ahrens, Grant Costello and Oberto Oberti

Meetings with R.K. Heli-ski and with Panorama were especially requested. R.K. Heli-ski refused to meet, but Panorama accepted to meet and to review the project. A meeting with David Brownlie, Gord Ahrens, Grant Costello and Oberto Oberti was held in Vancouver on February 13, 2004.

The main points of the project and of its feasibility were reviewed. It was agreed that collaboration with Panorama would be possible and desirable by both parties. It was decided to work to explore areas of cooperation and the Panorama representatives offered to write a letter of support, to introduce the new manager of Panorama to the proponent's representatives and to continue discussions to further areas of common interest. Oberto Oberti confirmed that the proponent would welcome any form of collaboration with Intrawest, which is the recognized industry leader.

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**Meeting with Radium Rotary Club  
Tuesday, February 17, 2004**

Location: Prestige Inn, Radium

Present: Approx. 16 Rotarians plus Greg Deck, Mayor of Radium and Chairman of RDEK and George Deck, former RDEK Director; Grant Costello represented the proponent.

Grant Costello delivered a PowerPoint presentation and discussion. An outline of the presentation is as follows:

1. The ski resort policy of Government is a good policy designed to generate economic engines in the interior.
2. The model started with Whistler, now a success story, but initially a sick development in the wrong climate. The model may not be perfect, but it generated a policy that may produce the ideal mountain resort.
3. The ski resort policy is a policy for the common good designed to benefit everybody, not just some special interests. It has been developed by thirty years of different governments. It is fundamentally non-partisan. This Government wants to use it more successfully: if they succeed this is good for everybody.
4. Problems of ski resorts are: 1) elevation too low = rain; 2) lack of snow = dependence on costly snowmaking and icy runs; 3) uncertain seasons = short seasons; 4) one season lifts = closing lifts for the summer; 5) location chosen because there was something there = site is not first choice for one reason or another; 6) excessive closeness to city = dependency on week end traffic makes the resort too empty during the week.
5. We are working on the ideal mountain resort because of access, location, climate, elevation, scenery and glaciers, making the season year round for the lifts.
6. Why another ski resort? Aren't there enough of them? No, there aren't enough ski resorts in B.C. for several reasons: B.C. has about half the skier visits of Colorado, yet its interior is as accessible and it has better mountains, elevations and climate. None of the existing resorts can guarantee the season or to be rain free at Christmas, and none of the existing resorts was designed as a true year round ski destination, with an unsurpassable reputation for snow quality and scenery. B.C. needs new quality destinations, and Jumbo is the only proposed project that fulfils all the requirements.

7. Some controversial issues:

- Wildlife corridors and Grizzly Bears: we have revised the Master Plan in order not to interfere and minimize impacts.
- Access road: we have optimized the use of existing road alignments, phased the cost of the improvements and minimized it. Design speed will be mostly 50km/hour, with some sections at 60km/hr in the Toby Creek drainage.
- Jumbo Pass: there will be no intrusion and no change.
- Heli-ski company: before the project goes ahead there will be a mutually beneficial business solution. We believe that this is inevitable and that the Government and legal requirements will ensure that there will be fair play.
- Employment: the project will be a major employment generator, with an estimated 800 full time jobs on completion, and we believe it will ensure the continuity of employment of the heli-ski employees as well, regardless of the type of final business deal.

8. The project will become an important economic engine for the region, providing an expansion for Panorama and creating a dream vision for the tourists of the entire continent, making affordable a visit to the glaciers for superior skiing and sightseeing, even for the physically disabled. Areas of opportunity include:

- Construction
- Ski area operations
- Ski school, rentals etc.
- Utilities (water, sewer, etc.)
- Real estate, reservations and time-share
- Research and interpretive activities
- Food and beverage operations
- Retail operations
- Service activities
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The room was very supportive of concept and potential business spin-offs for community. Questions were primarily regarding misinformation reported by project opponents in an earlier presentation. The meeting generated a letter from Mr. Pacey (see below), which outlined that the presentation was effective in countering the earlier disinformation campaign by special interest groups.

Mr Pacey's letter:

*Good Afternoon*

*I have just attended a Rotary meeting here in Radium Hot Springs where Grant Costello presented the "pro " side of the discussion regarding Jumbo Glacier Resort. Two weeks ago, Bob Campsall presented the " no " side of the discussion to the same Rotary group.*

*To put it into a very few words, I have to state a few things: there has to be two different resorts being discussed here. The meeting today (" pro ") was well presented and very lucid and informative. Facts were presented and questions answered extremely professionally. Unfortunately, the " no " side seemed to be primarily fear mongering about what might happen when, if, or should the sky fall.*

*I have to be very clear to you at this time, this project has so many positives going for the community and population as a whole, that the minor impact on the environment is miniscular at best. I have to state my wholehearted support for this project and hope that in some way, I will be able to be a part in the process and the success.*

*David Pacey  
Radium Springs B & B  
TimberStone Property Services Ltd.*

**Presentation to District of Invermere Council  
Tuesday, February 24, 2004**

Location: Invermere District Council Chamber

Present: Councillors Jerry Taft, Brian McLaughlin, Jo-Anne Willox, Bob Campsall and Mayor Mark Shmigelski in attendance. As well, Robert Earle, the current administrator and Patrick Robbins, his replacement, were present.

The proponent, represented by consultants Oberto Oberti and Grant Costello, delivered a PowerPoint presentation highlighting the economic benefits of the project and the changes since the 1995 Master Plan. An outline of the presentation is as follows:

1. The ski resort policy of Government is a good policy designed to generate economic engines in the interior.
2. The model started with Whistler, now a success story, but initially a sick development in the wrong climate. The model may not be perfect, but it generated a policy that may produce the ideal mountain resort.
3. The ski resort policy is a policy for the common good designed to benefit everybody, not just some special interests. It has been developed by thirty years of different governments. It is fundamentally non-partisan. This Government wants to use it more successfully: if they succeed this is good for everybody.
4. Problems of ski resorts are: 1) elevation too low = rain; 2) lack of snow = dependence on costly snowmaking and icy runs; 3) uncertain seasons = short seasons; 4) one season lifts = closing lifts for the summer; 5) location chosen because there was something there = site is not first choice for one reason or another; 6) excessive closeness to city = dependency on week end traffic makes the resort too empty during the week.
5. We are working on the ideal mountain resort because of access, location, climate, elevation, scenery and glaciers, making the season year round for the lifts.
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- Employment: the project will be a major employment generator, with an estimated 800 full time jobs on completion, and we believe it will ensure the continuity of employment of the heli-ski employees as well, regardless of the type of final business deal.

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- Retail operations
- Service activities
- Hotel and B&B accommodation
- Meetings and small conventions
- Mountain photography schooling and special movies

The Mayor stated that there would be no questions following the presentation. However, Bob Campsall asked for some quick clarifications.

Later on in the meeting, Robert Earle, the District Administrator, outlined the District's plan in dealing with the review of the JGR Project report. Earle stated that there was a large portion of the Project Report and Master Plan that staff was qualified to review and comment on but that there were significant sections

that staff had no expertise in and the DOI would require the assistance of outside consultants or expertise provided by the EAO or government agencies. There was discussion (Taft, McLaughlin) around the possible cost to the District and it was clear that there was no desire on their part to incur any costs on behalf of their constituents for a project so far out of their jurisdiction. Earle added that the District planned to host an open house to listen to the views of the Invermere residents on the project.

**Presentation to Village of Radium Council  
Wednesday, February 25, 2004**

Location: Radium Village Council Chamber

Present: The Mayor and Council, Rob Gibbons, Oberto Oberti and Grant Costello

The presentation was preceded by a presentation by Rod Gibbons on behalf of RK Heli-Ski. Mr. Gibbons presented the history of his company, its the presence in the community, the significance of the employment contribution of some 60 jobs with average pay above the industry standards, and the intent of the company to make plans to reach a new level. All this would come to an end with the Jumbo Glacier Resort project. Mr. Gibbons explained that the company could not survive if the project goes ahead. Mr. Gibbons noted that up to 80% of their skier visits occur in the area requested to become lift serviced Controlled Recreation Area and that bad weather skiing conditions, safety, slope analysis and cost would not permit to modify the pattern of terrain use. Mr. Gibbons noted that only about 9% of their territory is skiable.

Council members asked several questions regarding actual use of the terrain in bad weather, use of Jumbo Creek (39%) and other possible model of terrain use and alternative areas in the heli-ski tenure. There were also questions regarding possible cooperation with the resort. Mr. Gibbons explained that no avenues are available to mitigate the impact, other than relocating the resort.

Grant Costello presented the project proposal with a PowerPoint presentation. Oberto Oberti assisted in the presentation explaining the uniqueness of the glacier skiing opportunity in North America, the promise of the tourist resort industry as an economic engine and the validity of the proposal. He explained that the proponent believes that cooperation is possible with the heli-ski company and that instead of putting the heli-ski company out of business the project could make it more successful. He explained that the proponent is prepared to provide a financial solution to the impasse and that no jobs would be lost but many more created.

The Mayor commented that there seemed to be some good will that could lead to a good spirit of cooperation between the proponent's representative and the heli-ski company representative.

An outline of the PowerPoint presentation delivered by Grant Costello is as follows:

1. The ski resort policy of Government is a good policy designed to generate economic engines in the interior.

2. The model started with Whistler, now a success story, but initially a sick development in the wrong climate. The model may not be perfect, but it generated a policy that may produce the ideal mountain resort.
3. The ski resort policy is a policy for the common good designed to benefit everybody, not just some special interests. It has been developed by thirty years of different governments. It is fundamentally non-partisan. This Government wants to use it more successfully: if they succeed this is good for everybody.
4. Problems of ski resorts are: 1) elevation too low = rain; 2) lack of snow = dependence on costly snowmaking and icy runs; 3) uncertain seasons = short seasons; 4) one season lifts = closing lifts for the summer; 5) location chosen because there was something there = site is not first choice for one reason or another; 6) excessive closeness to city = dependency on week end traffic makes the resort too empty during the week.
5. We are working on the ideal mountain resort because of access, location, climate, elevation, scenery and glaciers, making the season year round for the lifts.
6. Why another ski resort? Aren't there enough of them? No, there aren't enough ski resorts in B.C. for several reasons: B.C. has about half the skier visits of Colorado, yet its interior is as accessible and it has better mountains, elevations and climate. None of the existing resorts can guarantee the season or to be rain free at Christmas, and none of the existing resorts was designed as a true year round ski destination, with an unsurpassable reputation for snow quality and scenery. B.C. needs new quality destinations, and Jumbo is the only proposed project that fulfils all the requirements.
7. Some controversial issues:
  - Wildlife corridors and Grizzly Bears: we have revised the Master Plan in order not to interfere and minimize impacts.
  - Access road: we have optimized the use of existing road alignments, phased the cost of the improvements and minimized it. Design speed will be mostly 50km/hour, with some sections at 60km/hr in the Toby Creek drainage.
  - Jumbo Pass: there will be no intrusion and no change.
  - Heli-ski company: before the project goes ahead there will be a mutually beneficial business solution. We believe that this is inevitable and that the Government and legal requirements will ensure that there will be fair play.

- Employment: the project will be a major employment generator, with an estimated 800 full time jobs on completion, and we believe it will ensure the continuity of employment of the heli-ski employees as well, regardless of the type of final business deal.
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- Construction
  - Ski area operations
  - Ski school, rentals etc.
  - Utilities (water, sewer, etc.)
  - Real estate, reservations and time-share
  - Research and interpretive activities
  - Food and beverage operations
  - Retail operations
  - Service activities
  - Hotel and B&B accommodation
  - Meetings and small conventions
  - Mountain photography schooling and special movies

**Presentation to Invermere Rotary Club  
Thursday, February 26, 2004**

Location: Invermere Ice Arena

Number of people present: Approximately 50 attended. Mr. Campsall and Ms. Hampstead also attended the meeting as guests of Mike Bradford, President of the Rod and Gun Club.

Oberto Oberti and Grant Costello represented the proponent. A PowerPoint presentation was made which was followed by a discussion of the project. An outline of the PowerPoint presentation delivered by Grant Costello is as follows:

1. The ski resort policy of Government is a good policy designed to generate economic engines in the interior.
2. The model started with Whistler, now a success story, but initially a sick development in the wrong climate. The model may not be perfect, but it generated a policy that may produce the ideal mountain resort.
3. The ski resort policy is a policy for the common good designed to benefit everybody, not just some special interests. It has been developed by thirty years of different governments. It is fundamentally non-partisan. This Government wants to use it more successfully: if they succeed this is good for everybody.
4. Problems of ski resorts are: 1) elevation too low = rain; 2) lack of snow = dependence on costly snowmaking and icy runs; 3) uncertain seasons = short seasons; 4) one season lifts = closing lifts for the summer; 5) location chosen because there was something there = site is not first choice for one reason or another; 6) excessive closeness to city = dependency on week end traffic makes the resort too empty during the week.
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- Meetings and small conventions
- Mountain photography schooling and special movies

The initial questions were to clarify some of the differences between statements made by the proponent's representatives and those made by the JCCS at their presentation that took place a week earlier. Several questions were on the road design and cost, and who would pay for the road. It was explained that the road planned was not a high traffic and high speed design road. The proponent's target is a 50 km/hr road similar to the Kicking Horse road. There is no offer by the Province to have the road paid for but a loan

similar to that offered to Kicking Horse would not be refused. After the meeting adjourned a handful of Rotarians remained asking questions and expressing their dismay that they had been misled by the JCCS at the previous meeting and over the years. They felt that the project should be approved and that a lot of the opposition support was based on intentional distortion of the facts.

**Meeting with Kinbasket Shuswap First Nation Council  
Thursday, February 26, 2004**

Location: Kinbasket Shuswap Office, Invermere

Number of people present: Marge Eugene, Clarissa Stevens, Paul Sam for the Council. Marc Thomas joined the meeting for a period of time. Grant Costello and Oberto Oberti represented the proponent.

The new Council was introduced with former Chief Paul Sam being the new Council member. Grant Costello and Oberto Oberti congratulated the Council and gave an update on the public consultation process for the project. There was a verbal report on the progress of the Traditional Use study and Paul Sam and Marc Thomas outlined the most recent information. It was explained that the Kinbasket Shuswap have been the traditional users of the land and that they have the greatest amount of information on it.

Marc Thomas was planning a trip to review the information that may be available in the archives in Ottawa. The interest and cooperation of the First Nation for the project were confirmed and it was requested and agreed upon that there would be a formal participation of the First Nation at the Open House in Invermere.

Oberto Oberti confirmed the appreciation of the proponent for the Kinbasket Shuswap's continued development of cooperation and the desire to make tangible progress with the development of the project in the same spirit of cooperation. It was stated that there is still hope that this spirit of cooperation may be expanded to other First Nations and that the door remains open. Oberto Oberti offered to do a special open house for the First Nation but the Council indicated that the meeting of November 15, 2003 had been very well attended and that another presentation was not necessary.

The Kinbasket Shuswap First Nation acted on the decision of this meeting by having Dean Martin attend the Open House in Invermere on March 10, 2004, and a press release was presented to the media indicating the support of the First Nation for the project. The press release outlined areas of cooperation that have been agreed upon with the proponent and additional prospects for cooperation that are envisioned for the future.

**Meeting with the Regional District of the East Kootenay  
Friday, March 5, 2004**

Location: Cranbrook

Present: RDEK Director of Planning, Directors and Chairman of the Board; Oberto Oberti and Grant Costello represented the proponent.

A group of RDEK Directors including the Area Directors closest to the project site, the Chairman of the Board and the Director of Planning met in advance of the Board meeting to discuss the Director of Planning's letter to the proponent and the governance options. It was determined that the Director of Planning would wait until the Province's decision on the Environmental Certificate and then address the issue based on the last correspondence with the Province.

Grant Costello and Oberto Oberti gave a PowerPoint presentation outlining the main points and issues of the project and then answered questions. The questions allowed to emphasize the difference between the project and the other resorts in B.C., most of which are not assured of snow without snowmaking, and run risks such as rain at Christmas. The future of skiing in B.C. was discussed and Oberto Oberti pointed out that there is potential for the Province to become equal to or surpass Colorado in terms of the skier visits because of B.C.'s potential to offer skiing in better climates, at better elevations, and in areas that have better access. Oberto Oberti noted that other industry experts, such as Al Raine, support his view. The Mayor of Fernie asked several questions on the ski market; these continued in private with the Mayors of Fernie and of Radium after the meeting and it appeared that Oberto Oberti was able to satisfy both Mayors that the project could increase the number of skiers in the region without detracting from current resorts. Oberto Oberti noted that it appears that Panorama shares this view.

**Invermere and Nelson Public Open Houses  
Wednesday, March 10 and Thursday, March 11 2004**

Report by IRIS Environmental Systems Inc. (see following pages).



consulting • management • training • GIS

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April 12, 2004

**Mr. Martyn Glassman**  
**Environmental Assessment Office**  
**PO Box 9426 V8W 9V1**  
**Station Provincial Government**  
**2<sup>nd</sup> Floor 836 Yates Street V8W 1L8**  
**Victoria, British Columbia**

Dear Mr. Glassman:

**RE: Jumbo Glacier Resort Open Houses**

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It was a pleasure to meet you at the Jumbo Glacier Resort open houses in Invermere and Nelson this past month.

It was noticeable that you and your team did a very good job in keeping the procedures well balanced. During my discussions with the public, whether they were for or against, the people were open and interested in the facts that were being brought forward. We must always respect what we hear and learn from their input and the overall experience.

I felt that it would be important to summarize what was heard from the public and bring the information forward to the Environmental Assessment Office. In view of this, attached is IRIS Environmental Systems summary of the public proceedings. This summary is based on the information that IRIS received from the public and IRIS hopes that you find this constructive for the overall process.

If you have any questions and would like to discuss this further, please contact me at your convenience.

Respectfully yours,  
**IRIS Environmental Systems Inc.**

Brian A. Smythe  
Principal

c.c. Mr. Oberto Oberti Pheidias Project Management Corporation  
Mr. Alan Calder Government of British Columbia, Environmental Assessment Office

**Jumbo Glacier Resorts Development Plan**  
**IRIS Environmental Systems Inc.**

**Jumbo Glacier Resorts Limited**  
**Summary of Public Consultation Process**  
**Invermere and Nelson, British Columbia**  
**March 10 and 11, 2004**

The open houses for Jumbo Glacier Resorts Ltd. (JGR), the Proponent, were held in Invermere, BC on March 10<sup>th</sup>, 2004 and Nelson, BC on March 11<sup>th</sup>, 2004. The Government of BC (BCG) held these open houses for the following purposes:

1. To allow the Proponent to present a summary of the proposal to the public and answer questions and/or concerns that are brought forward;
2. To allow the public to review and bring forward constructive comments to the Provincial Government of BC and the Proponent, Jumbo Glacier Resorts Ltd.;
3. The Government will allow the Proponent to respond to the Publics comments when the public input is summarized by the government;
4. The public will receive a summary of the comments from the open houses.

In order to ensure that the public understands and respects “what we heard” from the open houses, the Proponent feels that it is imperative to provide a summary of the comments/discussions that were brought forward to them during this important phase of the consultation process. JGR respects and understands that the Public Consultation process is an integral part of the development process and respects the constructive comments that the public have brought forward. In view of this a summary of the public input has been analyzed and has been sorted into the key categories from the setup of the open houses.

This has been completed in order for JGR to show leadership during the approval process and to ensure that they are able to come forward with facts that will assist the public in understanding the whole development. This will be crucial to the overall process as it became obvious at the open houses that the public were given information through media, public postings and from non-profit organizations that was incorrect. It must be understood that it is not only the public individuals and/or groups that have the right to a fair and open process it is also the Proponent, Jumbo Glacier Resorts that is entitled to a fair and equitable process, as well.

The following information, which may be illustrated in more than one category or in one term, was the input that the JGR Team received from the public. JGR has also come forward with the points/facts that will assist the government with the Public Consultation Process and most importantly the public in understanding the overall strengths of this proposal.

## **Public Consultation Information and Input:**

### **Attendance:**

Invermere Attendance	≈ 375 people	≈15% of population with a base of ≈2,500
Nelson Attendance	≈895 people	≈10.5% of population with a base of ≈8,500

- **Environmental Issues:**

- Major concerns were brought forward from the public as there was an understanding that the public will be losing access to the backcountry within the following regions:
  - the east side of the mountain range, except for the JGR access road, loss of vehicle and hiking access;
  - the west side, Glacier Creek area, no vehicle access to the backcountry roads;
  - there was an understanding that all of the access from the east side, including Jumbo Glacier hut, would be closed to the general public for recreational use;
  - Public understood that the land within the concession tenure area, which would include access from the west side as well, would be closed to the public and controlled by JGR; i.e. Public would not be permitted to travel, by vehicle or hiking/skiing through the tenure area;
  - Logging roads would be closed for public use;
- A large amount of the public did not understand that the tenure area was decreased by 60% from the 1995 plan; only 40% of the original size was in the 2003 proposal;
- Impression that the Glacier Creek area backcountry roads were going to be closed for recreation use and hunting;

- General understanding and major concern that the public would be losing access to the high country areas;
  - Public was not aware that in 1993 RK Heli-Ski received an expansion of their tenure area from the BC Government in consideration of the Jumbo Glacier Resort development tenure area being approved and an annual revenue for the sales of timber within the region;
  - Public was not aware that there was logging within the JGR proposal area on an annual basis;
  - A large majority of the public had received media information indicating that the JGR area was pristine, had never been disturbed; they were not aware that the proposed base areas development was located within an ecoregion that began to be disturbed over 70-years ago and continues to be today.
- **Mitigation Issues:**
    - Wildlife; overall there were comments that the development should not be approved in order to protect the entire wildlife area. Some areas of discussion were:
      - Fencing – it was explained to the public that fencing of the area within the resorts base area would improve wildlife connectivity by protecting them from human use within the region;
      - Education/Interpretive facility – majority of the public were not aware that the Proponent's proposal did include an interpretive centre within the base area and that this would be a key component for the education of the public to improve their awareness of this pristine region;
      - Monitoring wildlife movement – public were not aware that the master plan included wildlife monitoring within the interpretive centre program;
      - Public was not aware that in consideration of key wildlife movement periods in the spring/summer/fall that the Proponent would do major construction during the winter periods where possible in order to minimize wildlife disturbance;
      - There would be marketing done to encourage traffic between 10 and 6pm for protection of wildlife movement
      - Were not aware that wildlife movement periods were assessed and are part of the reports

- JGR would consider voluntary closures of areas during key periods for wildlife movement
  - Bear proof containers for wildlife protection are part of the EMS programs
  - Were not aware that ski run development creates “avalanche slopes” to supply better habitat for grizzly bears. This was created in the National Parks Canada
  - Official EMS: JGR Grizzly Bear Management Plan will be submitted with the Master Plan.
- **Gizzly Bears:**
    - Public understood that the Jumbo Creek valley was a crucial part of the habitat and movement areas for all of the grizzly bears within the whole region;
    - Public was not aware that JGR area was a small portion of the entire grizzly bear area within the Purcell wildlife region, in particular grizzly bear habitat.
    - Public questioned the grizzly bear data that was collected for the studies area.
- **Hunting:**
    - public were not aware that grizzly bear hunting permits were issued within the JGR and Glacier Creek regions;
    - public were not aware that other wildlife hunting was permitted within the Jumbo Valley region;
    - Hunting Permits – some public were concerned that the development would severely minimize key areas available for hunting in this region; they were unaware that the hunting would be restricted only within the proposed site;
    - Public agreed that hunting tags for grizzly bears within JGR region should be restricted if not removed from this area;

○ **Road closures:**

- The public understood that JGR proposal was responsible for and had the authority for the closure of the backcountry roads, not the BC Government.
- The public did not know that the closure of the roads was part of a recommendation to the BC Government in the proposal and the government would take this into consideration;
- There was public that applauded the development, however there were concerns that in the future the backcountry roads from the west side would be closed;
- Public is concerned that over time a road from the west side, Nelson area, would be constructed to allow direct access to the resort and the public wants to insure that this never occurs. The Public were not aware that a roadway was not part of this proposal and when and if approved this will not be within the CORE guidelines for the development.

○ **Water and Wastewater:**

- Public was concerned that in view of the perceived poor record of waste water management from within the JGR and Toby Creek areas there would be critical impacts to the creeks;
- Public would like to receive more information on the wastewater treatment plant and a better understanding how the effluent would be controlled to protect the environments;
- Potable water; would like more information on the effects of the retraction of water from the creeks and/or aquifers.
- Require more information for the EMS program that will be implemented for water use conservation with construction techniques and operational guidelines;
- Public demanded that the government take on more responsibility for water and wastewater issues to ensure that the proponent meets the guidelines at all times.

- **Economic Issues**

- Job creation; would like a better understanding of the seasonal versus full-time employment;
- The resort development is a “false” economic benefit to the community as the resort would only be for seasonal employment, not full-time year round;
- Define what the marketing areas will be as the project progresses;
- Concerns about the BC government approach for 4 new resorts in the province over the next few years as ski areas are not doing well at this time, how will they be economically viable and will they not effect the existing operators;
- Road work; it was understood that the government was paying for the road work, not JGR;
- Taxpayers have no problem with the project, however they feel that the project must be paid for (100%) by the Proponent, not the government and taxpayers;
- Short-Term vs Long-Term – public are unaware of economic benefits and the planning guidelines for the project. They feel that the project will be completed in 3 to 5 years, they do not understand that it will take 20-years to complete the whole project and this will have long-term full-time employment;
- Recommendations to implement a more detailed approach to explain the availability of all levels of employment over the long-term.

- **Community Issues**

- Impression that Glacier Creek area/roads would be closed to the residents of Nelson area;
- Economically the JGR project would be good for the short-term and would not provide long-term employment for people within the community;
- Understanding that in the future from the west side, Glacier Creek area will have an access road constructed, the public do not want this to occur;
- Confusion to who was holding the open houses, the Public thought that JGR was holding the “event” not the BC Government
- Public were extremely upset as they understood that the BC Government was funding the whole project, they were not aware that JGR, the Proponent, was funding the whole project;
- No tax payers money should be used for the project;
- Public were not aware that RK Heliskiing:

- Was a member of CWSAA and thus why are they against this;
  - Had their lease area increased in 1993 to compensate for the JGR development;
  - Some confusion on why RK was against the project;
  - Economically, public input that JGR would compliment RK Heli-skiing and build their clientele and increase revenue and profit;
  - JGR marketing would greatly benefit the short and long-term financial viability and “free” marketing of RK Heli-skiing on the “skirts” of JGR;
- Public were not aware that the project would take 20-years to complete and would thus give long-term employment opportunity (Senior Management; middle management; journeymen; food & beverage, line staff);
  - Concerns that the logging roads would be closed for recreational use and hunting;
  - Public Impression Glacier Creek area roads were going to be closed and not available for recreational use;
  - Public does not want to lose access to the high country; and
  - Public understood that the JGR lease area would be closed to the public and the public wanted to emphasize that it must stay open for recreational use (east and west side).

**Government Issues:**

- Public was not aware that the BC Government would take the following measures into consideration during the process:
  - assess all of the mitigative measures to protect the wildlife, in particular the grizzly bear habitat;
  - Closure of some or all upper backcountry road ways on the east side;
  - Closure of some or all upper backcountry road ways on the west side;
  - Hunting Permits, limiting or canceling hunting permits within the JGR region for the protection of grizzly bears;
  - Prescribed Burns – initiating prescribed burns in key locations to improve the wildlife habitat, in particular grizzly bear habitat;

- JCR would assist the government with the annual monitoring of the wildlife movement to provide no-net-negative impacts;
- BC Government was funding the project, not JGR, Proponent
- RK Heli-skiing has the right to maintain their lease area as per their lease agreement;
- Closure of logging roads for recreational and hunting use;
- Impression Glacier Creek area roads were going to be closed not only to hunters but for recreation as well. Public understood that this area was included within the JGR proposal and that JGR would close the area to the public;
- Loss of access to high country;
- Confusion to who was holding the open house, were not aware that the government was holding the open house;
- Grizzly Bear hunting licenses would be removed;
- Recreational use would be removed from the original proposed area;
- Understanding from media:
  - that the government decision had already been made and the project is approved;
  - that the original 1995 proposed tenure area was still planned;
  - that the Jumbo Glacier area for the development was pristine and the government had not previously permitted logging, hunting and mining within the region;
  - That the government was allowing a roadway to be built from the west side to the resort at a cost to the government/taxpayers.

In assessing the procedures leading up to the open house and then the information that came forward from the public in Invermere and Nelson, BC, it is apparent that there has been confusion, and to some extent manipulation and exploitation of the overall process. On a continual basis it became evident the information that the public received through media, mail, non-profit organizations and/or from the public was invalid and led the public to believe that the 2003 JGR plan was the same as the 1995 plan and/or were given information on environmental issues that was misconstrued and has led to some lack of support for the development. Some of the public were led to believe that the Open Houses were being held

by the Proponent, JGR, not the BC Government. It could be seen that when the public understood that the government was formally holding the open houses, they were much more relaxed and open to discuss the project in much greater detail and listen to the facts.

It was clear that the BC Government controlled the general public that came directly to the open houses, in a fair and equitable manner. However, a non-profit organization and a ski industry operator came forward in a way that was seen as unprofessional in the view of some of the public. Overall, the public was approachable and continually respectful of Jumbo Glacier Resorts proposal, even if they were not in support of the project. It became apparent that the public were welcome to hear the facts for the development plan as it was evident that data that was publicly handed out in the past was not correct. A large portion of the public did not know that the Proponent and the Consultants that they hired had completed extensive research and reports for the project site. The Public were not aware of the project specifications and that JGR had completed: Draft of the Master Concept Plan 2003; Project Report 2003; environmental assessment 2003 the grizzly bear study 1999-2001; other wildlife studies, including ones to be completed in 2004; environmental management system policies and procedures; Best Management Practices; water and wastewater research and development plans; and the no-net-negative environmental mitigation recommendations to the BC Government. A large portion of the Public were unaware of the BC Governments: *GUIDELINES TO ALPINE SKI AREA DEVELOPMENT IN BRITISH COLUMBIA; 1996*, and that Jumbo Glacier Resorts were following these guidelines under the authority of the government. Jumbo Glacier Resorts has not been directing and creating the policies and procedures for this development.

As the Project Team has discussed it is obvious that as the project proceeds through the remainder of the government process, the Public must receive information that is accurate and relevant to the project area, which includes the facts from the open house in response to the public's input. The project should not be compromised by the areas that the government controls and reviews annually within the whole region of the East Kootenays/Purcells as it is not within the JGR development areas. It is obvious that JGR respects the public's views, however the public must also respect that this proposal is not compromising the principles and guidelines of the process as these are the ethical standards and philosophy of the BC Government and the people of this Province. JGR's has the right to continue to proceed under these guidelines as other individuals and companies do within the province.

**Meeting with Ktunaxa Kinbaset Tribal Council Representatives  
Thursday, March 11, 2004**

Location: KKTC office, Cranbrook

Present: Troy Sebastian, Mike Keefer, Martyn Glassman and Oberto Oberti.

The meeting focused on the question of the Traditional Use and Archeological Study that the proponent has found too biased to be accepted and used as part of the submissions to the EA Office in response to the Project Specifications.

Mike Keefer offered to provide a reduced report removing the most controversial sections that are not part of a Traditional Use & Archaeological Study.

Oberto Oberti expressed the on-going concerns related with poor communications and the frustration on the proponent side due to the fact that there has never been an opportunity for a full presentation of the project to the Tribal Council and most of the First Nations it represents. However, Troy Sebastian confirmed that there is no interest in the Tribal Council and the First Nations it represents for a presentation of the project.

The meeting was concluded with the understanding that Oberto Oberti would provide a written response after consultations with his clients.

**Meeting with Marylin James of Sinixt First Nation  
Thursday, March 11, 2004**

Location: Nelson Prestige Inn, Nelson

Present: Ms. James and two other representatives of the Sinixt Nation, Martyn Glassman, Glenn Stewart, Oberto Oberti

Oberto Oberti thanked Ms. James for attending the meeting and asked if Ms. James had received the project outline sent in November 2003. Ms. James indicated that she had not received correspondence prior to the request to meet.

Oberto Oberti then offered a printed copy of the outline and a digital copy of the Project Report and Master Plan on a CD-ROM.

There was a discussion of conceptual project matters with those present and Ms. James indicated that she would review the Project Report and noted that she would have her lawyer draft the response and that the proponent should not be surprised by this.

It was a constructive meeting that was followed by a letter from Ms. James' lawyer, which was responded to by Glenn Stewart and Oberto Oberti on April 23, 2004.

**Invermere Business Leaders Focus Group  
Monday, March 29, 2004**

Location: Portabella Restaurant, Invermere

Present: About twenty prominent business people participated and were divided in three tables and three groups, plus Oberto Oberti – Pheidias Project Management, Allan Calder – EAO, Grant Costello – Glacier Resorts Ltd. and Dave Milne – Milne Consulting – Facilitator.

Questions were placed to each group.

**Question 1**

**The proponent wants to ensure local participation in construction, operations and spin-offs [direct, indirect, induced]. How can this be accomplished?**

Group 1

- *Local firms have equal opportunity to bid*
  - *Building materials*
  - *Trades*
  - *General Labour*
- *Housing of Labour*
  - *Hotel/Lodging*
- *Retail Lease Holdings*
- *Small business opportunities*
- *Inclusion of Columbia Valley in marketing programs*
  - *Provincial*
  - *Corporate*
  - *Fairmont to Radium*

Group 2

- *Local liaison representatives available [on staff] during construction and operations*
- *Data base of local contractors and business so we don't get left out [similar to what Ministry of Forest does]*

Group 3

- *Ensure communication of relevant opportunities*
- *Employment – hire local first*
- *Focus on local communication – dedicated resources*

**Question 2**

**How can this project create a "better valley" in 10 – 20 years? [Future Visioning]**

Group 1

- *Job Creation*

- *Year round employment*
- *Increase traffic through area*
- *International exposure*
- *Provincial marketing programs*
- *Inclusion in marketing programs*

Group 2

- *Offer business a longer "busy" season*
- *Create more employment year round for future generations*
- *Tax base*

Group 3

- *Spin off benefits – even if 2 in 10 people stop*
- *Employment*
- *More money to infrastructure via taxation*
- *Increase population will increase taxation*
- *Population drives development*
- *Creates opportunities for youth and adults*
- *Real "local" benefits*
- *Can be better environmentally*
  - *Clean up*
  - *Reclamation*
- *Project could be a leader in 'Green' initiatives*
  - *Good PR*
- *Project get involved with and improve local cultural opportunities*
- *Culturally will be a better place to live*
  - *Improve some of what we already have*
  - *Library*
  - *Choral, etc.*

**Question 3**

**What steps need to be taken to ensure the successful realization of #1 & #2?**

Group 1

- *Media campaign to support project*
- *Create awareness of size of project comparative to vastness of backcountry*
- *Everyone is Welcome! Program*
  - *Skiers*
  - *Hikers*
  - *Conversationalists*
  - *Hunters*
  - *Etc.*
  - *Local ski pass – 40%*

### Group 2

- *Put it in writing*
- *Follow through with Master Plan*

### Group 3

- *Two way communication*
- *Create a forum for input*
  - *Focus groups*
  - *Steering committee*
  - *Inclusive [business, culture, environment]*
- *Locals can diffuse misinformation if they know the facts*
- *Permanent and positive presence in the community to provide information and receive input*
- *Make clear commitments to mitigate impacts*

Following the Focus Groups the room was opened up to questions and discussion. Two important messages came from this discussion:

1. Carol Seable stated that originally she was against the project but once Grant Costello sat with her one-on-one and she got the facts versus the misinformation she was getting, she immediately changed her position to be in favour of the project.
2. Based on ideas presented by the one group people were very in favour of establishing a local advisory committee to provide input to the proponents on local matters. Most of those present volunteered.

The meeting was very valuable not only for the future support promised but for an evaluation of the issues raised in a variety of ways during the process.

## **Selkirk College Presentation Thursday, April 1, 2004**

Location: Selkirk College Tenth Street Campus, Nelson

Present: about 40 students and 4 faculty members; proponent represented by Tommaso Oberti

A presentation at Selkirk College's School of Hospitality and Tourism in Nelson was delivered on the request of Selkirk College faculty on April 01, 2004. About 40 students and 4 faculty members attended the presentation.

Tommaso Oberti of Pheidias Project Management delivered a half hour PowerPoint presentation describing the Jumbo Glacier Resort (JGR) project's vision and origins, the history of the review process, major differences between the 1995 and 2003 Master Plan Concepts, the project's key components, size and location. The presentation was followed by an hour-long question and answer period.

Initial questions were on the project's size, particularly in comparison with other resorts and towns. Mr. Oberti outlined the number of bed units and hectares covered by the resort and compared it with other existing and proposed ski resorts in B.C. A couple of students noted that they could not understand why people were comparing the resort to a "town the size of Nelson". Specific questions on the resort's components followed, including questions on the mix between condominiums, chalets and hotels, whether or not the resort would be a "private" resort, how the construction phasing is envisioned, the governance of the resort, the sewer treatment system at the resort, the number of ski lifts, and the type of ski lifts that the resort would offer.

Many of the students did not seem to have a clear understanding of where the resort will be located, and Mr. Oberti clarified that the resort will not be on Jumbo Pass and that the resort has nothing to do with the Jumbo Pass Highway proposal. Additional concerns were raised about visual or physical intrusions on the Horsethief Creek drainage, the Lake of the Hanging Glacier, Monica Meadows, Glacier Creek and Jumbo Pass. Mr. Oberti explained that the resort has been designed to ensure that there will be no visual or physical intrusions on the above locations and he outlined the changes that had been made to the Master Plan Concept since the 1995 submission. He also noted that recent media and opponent's remarks suggesting that the Glacier Creek drainage would be closed to public access were inaccurate. These responses seemed to alleviate any concerns.

A faculty member and a student raised the issue of market dilution. Mr. Oberti responded by noting that most of the existing resorts are regional destinations depending heavily on regional weekend traffic in

order to generate skier visits. Many of these resorts are crowded on the weekends and almost vacant during the week. He explained that JGR is designed to be a true destination resort, targeting visitors who would stay for a number of days at a time and would help open the region to extra-regional skiers. He noted that JGR would offer the highest vertical, the largest glaciers and the best microclimate for skiing in North America and that the resort would be the only “true” year round glacier skiing destination on the continent and is therefore expected to act as a magnet to the region. He also noted that it is common for vacationers who visit for more than just a couple of days to sample the other resorts in the region. He noted that, for example, it is common for an extra-regional visitor to the Banff Springs Resort to sample Norquay, Sunshine Village, Lake Louise and increasingly, Kicking Horse Mountain Resort during their stay. Finally, he noted that Panorama, the closest existing resort to the project, and the one that would potentially be most affected by any market dilution, was in support of JGR.

A student wondered if the resort, at 50 kms from Invermere, was too distant. Mr. Oberti responded by saying that a 50 km distance from the nearest town is quite typical of destination resorts; he noted that Lake Louise, Sun Peaks and Big White are all about 50 kms from their nearest towns.

Another student questioned the resort’s impact on R.K. Heliski and wondered if the resort might set a bad precedent by requiring the removal of an existing tenure. Mr. Oberti responded that no existing tenure would need to be revoked, and that there is plenty of precedence throughout the province for overlapping tenures. In fact, this is already the case in the Jumbo Valley. He noted that it is the proponent’s opinion that R.K. would benefit from an increased clientele and that the proponent was confident enough in R.K.’s potential that it would consider buying R.K. and continuing its operations if an agreement with the current owners could not be reached. Another student asked if R.K. had development plans of their own for the Jumbo Valley. Mr. Oberti responded that it was his understanding that R.K. proposed to build a heli-ski lodge in the Jumbo Valley if the JGR proposal fell through.

Interest was shown in the resort location’s climate. Questions related to amount of snowfall, snow quality and average temperatures were asked by both students and faculty. Mr. Oberti described the area’s microclimate and abundant snowfall and some of the students and one of the faculty members expressed enthusiasm for the quality and amount of snow in the area. Mr. Oberti also discussed global warming, its potential impact on the resort, and on existing resorts in B.C.

A student wondered if there was any potential for violent or disruptive reactions from some of the more extreme opponents if the project is approved. Mr. Oberti responded that in his opinion this would be very unlikely, as there is little precedence in B.C. for that kind of action (he noted that he was aware of only

one isolated incident at Apex that occurred a number of years ago). He also noted that the project had maintained a storefront in Invermere for a number of months without incident.

A faculty member questioned the impact of snowcats and snowmobiles on the glaciers. Mr. Oberti responded by noting that he was unaware of any glacier that has been negatively impacted by a snowcat or snowmobile. He also noted that one could compare the relative impact of a skier on a glacier to that of a swimmer on a large lake, or ocean.

Another student was concerned about the potential for increased avalanches at higher elevations. Mr. Oberti responded by noting that elevation is not necessarily related to avalanche occurrence -- that avalanches occur as frequently, if not more frequently at lower elevations. Mr. Oberti also noted that Peter Schaerer, one of Canada's foremost experts in avalanche control, and an Order of Canada recipient for his work in avalanche control, had studied the avalanche dangers at the resort.

The presentation was well received and the room seemed generally supportive of the project. A number of students spoke out saying that they were "all for it [JGR]". Some students in the Ski Resort Operations and Management program noted that they looked forward to applying for jobs at Jumbo Glacier Resort.

## **Invermere Business Women Focus Group Wednesday, April 7, 2004**

Location: Portabella Restaurant, Invermere

Present: About twenty business women participated and were divided in three tables and three groups, plus Oberto Oberti – Pheidias Project Management, Allan Calder – EAO, Grant Costello – Glacier Resorts Ltd. and Dave Milne – Milne Consulting – Facilitator.

### **Question 1**

**The proponent wants to ensure local participation in construction, operations and spin-offs [direct, indirect, induced]. How can this be accomplished?**

#### Group 1

- Local job fairs
- Office that registers services and opportunities
- Requests for tender posted locally [Valley Echo]
- Partner with College of the Rockies for training and job placement
- Encourage or guarantee more apprenticeship programs within the project
- Provide opportunities for entrepreneurship [independent business]
- Venue for "valley" to market itself at JGR and with JGR
- Understand small business – pay on time and be fair

#### Group 2

- Local open houses with information regarding needs of proponent
- All bid tenders presented to local service providers – advertised in local paper, etc. or posted in central location [e.g.: Career Seekers, Job Fairs]
- Partnering with local education programs – Apprenticing – Keep our children in the Valley
- "Welcome Wagon" package for staff/families coming into the valley as a result of the project [spin off]
- Local Chambers present to proponent package of valley services/businesses available. Package to include promotional material from local service providers
- Establish transportation service between valley and JGR
- Proponent provide discounts, incentives to local population

### **Question 2**

**How can this project create a "better valley" in 10 – 20 years? [Future Visioning]**

#### Group 1

- Jobs for young people [our kids can stay here]
- Vibrant downtown shopping core
- More restaurants from added population base
- International exposure and access [works both ways]
- Infrastructure would improve – better tax base for better roads and services [hospital, etc.]
- Better cooperation between resorts and amenities for multi event/experience visits – a four season area!
- Improvements in lake quality – it will be a focal point. Bring more awareness of wetlands
- More "Professional" opportunities

- More demand for Arts & Culture
- Better seniors' facilities – we will be there!
- Better extra curricular activities for children
- Convention destination
- Sport school and training facility and events

#### Group 2

- Economic growth – more local businesses, more jobs, more stable year round employment
- Year round destination – revive winter months
- Increased international market – Jumbo will attract and international clientele the valley does not currently draw
- Cultural and Arts programs will expand as a result of expanded market profile
- Increase shopping opportunities, dining opportunities, entertainment opportunities [movies, etc.]
- Local artisans will have opportunity to become internationally known
- Affordable housing – natural result
- Larger hospital – expanded public services

#### **Question 3**

**What steps need to be taken to ensure the successful realization of #1 & #2?**

#### Group 1

- Get the go ahead
- Continued positive information and liaison with the valley businesses and residents
- Continued accountability and monitoring of problems and concerns as they arise – Good communication with community
- Independent stakeholders committee to monitor progress [see previous point]
- Foundation or endowment fund to promote apprenticeship and education
- Make information about the opportunities available for youth

#### Group 2

- Supporters need to speak up
- Agree with everything from Group 1

Following the Focus Groups the room was opened up to questions and discussion for a short period. The main point discussed was the intimidation there is to keep quiet if you are in favour of the project.

Almost all of those present volunteered to become part of the Advisory group.

The meeting was very valuable not only for the future support promised but for an evaluation of the issues raised in a variety of ways during the process.

## **Meeting with Kootenay Mountaineering Club Tuesday, April 13, 2004**

Location: Prestige Inn, Nelson, BC

Present: John Beerbower and Kim Kratky represented the KMC; Grant Costello and Peter Wood represented the proponent.

The meeting got underway with a series of questions from John and Kim to Grant Costello:

- In the event of a Certificate being granted to the project, what binds the proponent to any assurances made in the Project Report and Master Plan?
- What will the impact be on other ski resorts in the East and West Kootenay?
- Why does the proponent disagree with consultants like Sno Engineering and others who claim there is no market for this type of resort?
- How does the proponent justify the building of a resort in an existing tenure (RK) which will negatively impact jobs and business?
- How do you justify road closures in the West Kootenay to mitigate impacts from the resort in Jumbo Creek?
- Questions on Grizzly habitat, road costs-who pays?, Fisheries and water issues, and most of the JCCS issue list.
- Is heli-hiking a part of our plan?

Question from Peter Wood: Road closures would help the grizzly population, right? Right. How can you object to helping the Grizzlies? Grant Costello asked for clarification of trail access from Monica Meadows to Glacier Dome. Kim Kratky described a scree slope in the upper meadows which leads to a small pass accessing the glacier leading to the Glacier Dome. It is used by some hikers to get a view of Lake of the Hanging Glacier.

Some discussion took place around most of the issues. Grant Costello stated that the KMC's questions would be responded to in detail once John Beerbower entered his letter and questions into the public record at the EAO.

Although diverse views were discussed it was agreed that it was a good session which stimulated thought and that discussions should carry on past the deadline as all positive input was appreciated.

**Meeting with Cranbrook Chamber of Commerce  
Wednesday, April 21, 2004**

Location: Cranbrook

Present: approximately 50 members plus the Mayor of Cranbrook and two Councillors; Oberto Oberti and Grant Costello represented the proponent

Grant Costello gave a PowerPoint presentation of the project. Oberto Oberti concluded with a summary presentation of the project vision and responded to questions. There was a question on the danger of avalanches to the resort guests and skiers. Oberto Oberti explained that the avalanche danger is for people who venture outside the controlled recreation area and the ski runs that are prepared and controlled by the ski patrol. Proper planning and monitoring have ensured that in B.C., no-one has been hit by an avalanche on an open ski run or in a resort area. A student, who was part of a group that had performed a show for the Chamber audience, asked whether the project had something to do with a Jumbo Pass road connecting the East and West Kootenay. Oberto Oberti confirmed that since the CORE process in the early nineties, every B.C. Government has confirmed that the highway project has been completely abandoned. The highway is not related to this ski resort proposal.

Questions continued after the formal meeting and some people remained and offered business cards to become involved in a group of supporters and advisors. Interviews were given to the Cranbrook daily paper and to the local CBC reporter.

**Jumbo Glacier Resort Public Consultation Activities Table**

Response A.8 of the Jumbo Glacier Resort Project Report proposed a working program for public consultation (pages A-55 to A-56). The program was outlined as a 4-stage process and included multiple methods and avenues of communication with the public. In general, the program included physical and electronic display of project information, meetings with individuals and groups, meetings with local government representatives and public open houses. The Environmental Assessment Office (EAO) reviewed and confirmed the public consultation program indicated above and prepared a Consultation Assessment (January 28, 2004) which included some additional requirements.

The following table summarizes the results of the public consultation program as outlined in Response A.8 of the Project Report and includes the additional requirements indicated by the January 28, 2004 Consultation Assessment:

<b>Working Program</b>	<b>Activities</b>	<b>Comments</b>
<b>Stage 1:</b> The Proponent will:		
<ul style="list-style-type: none"> <li>Establish a public consultation plan and review and receive approval with the Government;</li> </ul>	<ul style="list-style-type: none"> <li>Reviewed with the EAO; the January 28, 2004 Consultation Assessment issued by the EAO stated, "...the EAO has determined that the past and proposed public consultation activities are considered adequate," and outlined some additional requirements to the proposed public consultation plan included in the Project Report.</li> </ul>	
<ul style="list-style-type: none"> <li>Complete an executive summary of the 2003 Master Plan Concept and the Project Report;</li> </ul>	<ul style="list-style-type: none"> <li>6 page summary entitled "Project Report Update" completed and distributed as a newspaper insert throughout the East and West Kootenay and made available at all public meetings and open houses attended by proponent. Also available at project site office.</li> </ul>	
<ul style="list-style-type: none"> <li>Place the updated Master Plan Concept, the Project Report and their Appendices and executive summaries on the BC Government and Jumbo Glacier Resort project websites.</li> </ul>	<ul style="list-style-type: none"> <li>Executive summaries, Master Plan Concept, Project Report and all Appendices available for public download from <a href="http://www.jumboglacierresort.com">www.jumboglacierresort.com</a> since February 4, 2004.</li> </ul>	

<b>January 28, 2004 Consultation Assessment further requirements: Stage 1 Program Design and Notification</b>		
<ul style="list-style-type: none"> <li>• <i>“While the Proponent is encouraged to make information available through their own project webpage (<a href="http://www.jumboglacierresort.com">www.jumboglacierresort.com</a>), the EAO is responsible for providing electronic access to project review information during the EA review process. To help provide electronic access to project information, the Proponent is requested to follow the EAO’s formatting guidelines for electronic documentation, especially with respect to the 5 MB file limit...”</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Master Plan Concept, Project Report and all Appendices were made available for public download at <a href="http://www.jumboglacierresort.com">www.jumboglacierresort.com</a>; a single index page design was chosen in order to visually represent the entire body of information in an easy-to-access manner.</li> <li>• Contact/support e-mail address was clearly listed on download page; where members of the public indicated that they had difficulties downloading/accessing project information, CD-ROMs were readily made available.</li> <li>• Executive Summaries, responses to project opponents, and public notices were also available for download.</li> <li>• The proponent provided the EAO with electronic files of all project documents, and provided broken down versions of the documents to the EAO that conformed to the 5 MB file limit constraints.</li> </ul>	
<ul style="list-style-type: none"> <li>• <i>“The EAO has also made arrangements to make the Project Report available through local information locations at:  - the Invermere Public Library,  - the Cranbrook Public Library,  - the Nelson Public Library,  - the Argenta Community Library,  - the Silvertown Municipal Office, and  - the Government Agent’s Office in Kaslo.”</i></li> </ul>	<ul style="list-style-type: none"> <li>• The proponent provided printed and electronic copies to the noted locations. On request, additional electronic copies (CD-ROMs) were provided to the Nelson Public Library, Selkirk College and the University of Northern British Columbia.</li> </ul>	
<ul style="list-style-type: none"> <li>• <i>The Proponent is requested to advise the EAO of the location and hours of operation of the local Project Office once these are determined.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Location and hours of the operation of the Project Office in Invermere were communicated to the EAO and posted on the project web site. Contact information for scheduling appointments was posted on the project web site and at the Project Office.</li> </ul>	

<b>Stage 2: Key Stakeholder Groups, the proponent will:</b>		
<ul style="list-style-type: none"> <li>Establish a contact list for each of the stakeholder groups in the region;</li> </ul>	<ul style="list-style-type: none"> <li>Completed and maintained by Grant Costello</li> </ul>	
<ul style="list-style-type: none"> <li>Place ads in regional newspapers to allow other public/groups to come forward at the Open House and to be part of process;</li> </ul>	<ul style="list-style-type: none"> <li>Ads were placed in the <i>Cranbrook Daily Townsman</i>, <i>East Kootenay Weekly</i>, <i>Kootenay Advertiser</i>, <i>Invermere Valley Echo</i>, <i>Nelson Daily News</i>, <i>Nelson Express</i>, <i>Golden Star</i> and <i>Kaslo Pennywise</i> between February 4 and February 10, 2004. Ads were republished in the above publications between March 1 and March 3, 2004.</li> </ul>	
<ul style="list-style-type: none"> <li>Arrange Key Stakeholder Meetings by contacting key stakeholders and arrange “one-on-one” meetings over the public process period; this could be with individuals; board of directors; monthly group meetings, etc.;</li> </ul>	<ul style="list-style-type: none"> <li>Key Stakeholders were identified and contacted via telephone, e-mail and the Open House meetings; Grant Costello and Oberto Oberti arranged group and individual meetings.</li> </ul>	<p><i>Please see Public Consultations Activities Report (April 28, 2004)</i></p>
<ul style="list-style-type: none"> <li>Meet with Key Stakeholders – introduce the stakeholder to the 2003 reports and record the feed back received from them; mail summaries of meetings to the stakeholders;</li> </ul>	<ul style="list-style-type: none"> <li>Key Stakeholders were met at the Open Houses and on other occasions. Meetings were arranged with the Kinbasket Shuswap Council and with representatives of the Sinixt First Nation. A meeting with a representative of the Ktunaxa Kinbasket Tribal Council was arranged through the EAO. Other First Nations did not respond to requests for meetings. Meetings were also held with local governments, Chambers of Commerce, Rotary Clubs, and interested individuals and stakeholders. Focus group meetings with key local stakeholders were held on March 29, 2004 and April 7, 2004. A summary report of the focus group meetings was prepared by David Milne and sent to the participants.</li> </ul>	<p><i>Please see Public Consultations Activities Report (April 28, 2004); summary reports of the Open Houses and key meetings will be sent electronically to key stakeholders.</i></p>

<ul style="list-style-type: none"> <li>Summarize all of the information received from all stakeholders and mail summaries to stakeholders; it should be noted that if stakeholder(s) refuse to meet to review the project that this will be recorded.</li> </ul>	<ul style="list-style-type: none"> <li>Information received from stakeholders summarized in the <i>Public Consultations Activities Report (April 28, 2004)</i>.</li> </ul>	<p><i>Summary reports of the Open Houses and key meetings will be sent electronically to key stakeholders.</i></p>
<p><b>January 28, 2004 Consultation Assessment further requirements: Stage 2 Key Stakeholder Group Liaison</b></p>		
<ul style="list-style-type: none"> <li><i>With respect to the placement of advertisements in regional newspapers, the Proponent is required to use the publications identified in section 6.2.1 of the Order and to provide at least 7-days advanced notice of meetings planned in support of the Project.</i></li> </ul>	<ul style="list-style-type: none"> <li>Ads were placed in the <i>Cranbrook Daily Townsman, East Kootenay Weekly, Kootenay Advertiser, Invermere Valley Echo, Nelson Daily News, Nelson Express, Golden Star</i> and <i>Kaslo Pennywise</i> between February 4 and February 10, 2004. Ads were republished in the above publications between March 1 and March 3, 2004.</li> </ul>	
<ul style="list-style-type: none"> <li><i>The Proponent should include the Regional District of the Central Kootenay (RDCK) among the local governments approached for consultation. Contact the EAO for the name of the RDCK contact with respect to the Project.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Regional District of the Central Kootenay (RDCK) was contacted and approached for consultation. The RDCK noted that JGR is outside of their jurisdiction and declined involvement in the project.</li> </ul>	
<p><b>Stage 3: Community Dialogue Meeting; the Proponent will:</b></p>		
<ul style="list-style-type: none"> <li>Invite roughly 10 to 12 individuals who represent a mix of the community stakeholder groups to a 1/2 day “round table” meeting;</li> </ul>	<ul style="list-style-type: none"> <li>Two focus group meetings involving 20 individual stakeholders were arranged and held on March 29, 2004 and April 7, 2004. Meetings are summarized in the <i>Public Consultations Activities Report (April 28, 2004)</i>.</li> </ul>	
<ul style="list-style-type: none"> <li>The meeting will be a formal structure with a facilitator. Government and Proponent will have a seat at the table. Meeting will be recorded and summarized;</li> </ul>	<ul style="list-style-type: none"> <li>Focus group meetings had a formal structure with David Milne as a facilitator. Focus group meetings are summarized in <i>Public Consultations Activities Report (April 28, 2004)</i>.</li> </ul>	
<ul style="list-style-type: none"> <li>Summary of Community Dialogue meeting will be sent to all attendees; stakeholders and will an appendix in the Master Plan.</li> </ul>	<ul style="list-style-type: none"> <li>Summary prepared and sent by David Milne; will be attached as an appendix to the Master Plan.</li> </ul>	

<b>January 28, 2004 Consultation Assessment further requirements: Stage 3 Community Dialogue</b>		
<ul style="list-style-type: none"> <li><i>The Proponent is advised to provide prospective participants with as much advanced notice of the proposed Community Dialogue Meeting as possible.</i></li> </ul>	<ul style="list-style-type: none"> <li>Prospective participants notified and personally invited by Grant Costello and David Milne.</li> </ul>	
<b>Stage 4: Formal Open House; the Proponent will:</b>		
<ul style="list-style-type: none"> <li>Hold an open house;</li> </ul>	<ul style="list-style-type: none"> <li>Open Houses held in Invermere on March 10, 2004 and Nelson on March 11, 2004</li> </ul>	<i>Note: event hosted by EA Office</i>
<ul style="list-style-type: none"> <li>Advertise and send letters to all of the stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>Ads were placed in the <i>Cranbrook Daily Townsman, East Kootenay Weekly, Kootenay Advertiser, Invermere Valley Echo, Nelson Daily News, Nelson Express, Golden Star</i> and <i>Kaslo Pennywise</i> between February 4 and February 10, 2004. Ads were republished in the above publications between March 1 and March 3, 2004. Stakeholders were notified through electronic (Internet, radio, television) and print (newspapers) media.</li> </ul>	
<ul style="list-style-type: none"> <li>Public feedback from the open house will be summarized, sent to stakeholders and placed in appendix of the Master Plan.</li> </ul>	<ul style="list-style-type: none"> <li>Public feedback from the open house is summarized in the <i>Public Consultations Activities Report (April 28, 2004)</i> and will be placed as an appendix to the Master Plan.</li> </ul>	
<b>January 28, 2004 Consultation Assessment further requirements: Stage 4 Public Open Houses</b>		
<ul style="list-style-type: none"> <li><i>The Proponent must ensure that Public Open Houses are well resourced, both in terms of information materials and staff and consultants. The EAO will work with the Proponent in planning Public Open House logistics.</i></li> </ul>	<ul style="list-style-type: none"> <li>Public Open Houses were well resourced. Information material included display boards, a multimedia presentation, handout project summaries, handout responses to project opponents, and 2 physical sets of the Project Report and Master Plan Concept. Key consultants attended, including senior representatives of Glacier Resorts Ltd., Pheidias Project Management, ENKON Environmental, Lynnpeaks Consulting, David Milne Consulting, McElhanney Engineering, and IRIS Environmental.</li> </ul>	

**January 28, 2004 Consultation Assessment further requirements: General Reporting Requirement**

<ul style="list-style-type: none"><li><i>Pursuant to section 5.2.12 of the Order, the Proponent must, within 15 days of the close of the formal public comment period (i.e., by May 28, 2004) provide the EAO with a written report on the results of all public consultation activities held in support of the Project Report. This reporting is to include the level of public interest (i.e., attendance), views, issues, and concerns raised with respect to the Project.</i></li></ul>	<ul style="list-style-type: none"><li>Written report on the results of public consultation activities submitted on April 28, 2004.</li></ul>	
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## **Appendix D**

### **Jumbo Glacier Project Committee Responses to Views Expressed and Issues Identified by the Public with Respect to the Proposed Jumbo Glacier Alpine Resort Project (December 13, 1996).**

## **APPENDIX A**

### **JUMBO GLACIER PROJECT COMMITTEE RESPONSES**

**TO**

**VIEWS EXPRESSED AND ISSUES  
IDENTIFIED BY THE PUBLIC**

**WITH RESPECT TO**

**THE PROPOSED JUMBO GLACIER  
ALPINE RESORT PROJECT**

**Jumbo Glacier Project Committee  
December 13, 1996**

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## **PREAMBLE**

Early in its review of the Jumbo Glacier alpine resort project, the Jumbo Glacier project committee committed that, as part of its consideration of public input, it would respond in writing to issues of interest and concern raised by the public. Appendix A to the draft project report specifications itemizes public views and presents the project committee's responses. In its responses to individual issues, the committee indicates whether or not it considers the issues to be relevant to the assessment of the effects of the project, and whether, and to what extent, it intends to pursue them during the project report review stage of the environmental assessment (EA) process.

In principle, there are four possible project committee responses to the views expressed and the issues raised by the public:

- the project committee agrees that an issue is relevant to the EA review of the project, and that further reporting on the topic is necessary, and for this reason, has incorporated the substance of the issue in the project report specifications;
- the project committee agrees that an issue is relevant to the EA review of the project, but believes that the issue has already been adequately addressed in the application documentation filed by Pheidias Project Management Corporation (Pheidias), the proponent;
- in the project committee's view, while an issue may or may not be legitimate, it is beyond the scope or jurisdiction of the EA process, and the project committee does not intend to pursue it - for some issues, a more appropriate forum for consideration of the issue is suggested; or
- the project committee does not consider the issue to be valid or significant as it relates to the EA review of the Jumbo Glacier project.

To assist the project committee to itemize and categorize the various issues and views expressed by the public, the EA Office hired consultant James Rutter to examine the public submissions received during the period of public review and comment on the proponent's application documentation. This initial public comment period officially terminated on September 28, 1995, although late submissions, received early in October of 1995, have also been analyzed. The original categorization of issues by James Rutter has been revised and restructured by the project committee, and a few additional items have been added to his original list of public views and concerns.

***Jumbo Glacier Alpine Resort project review  
Draft project report specifications  
Appendix A  
December 13, 1996***

There has been no attempt to substantively revise or reword or correct (where inaccurate) the manner in which these issues have been represented in public submissions, other than where rewording was considered helpful in clarifying the points which the writer wanted to make.

In developing its responses, the project committee has relied heavily on the expertise of its members and other government agency participants in the review of the Jumbo Glacier project, and where warranted, has presented its responses with reference to current public policy expectations, since these form the basic evaluation framework for the review of the project.

Many of the public views and comments represent specific contentions about potential positive or negative effects of the project, or alternatively, they raise specific questions about these effects. At this time, the project committee does not have all of the information necessary to respond authoritatively to most of these assertions and questions on specific aspects of the project's likely effects, pending the assembly and review of the necessary impact assessments and related impact mitigation proposals at the next (project report) stage of review.

## I. GENERAL ISSUES

### 1. REVIEW PROCESS ISSUES

- 1a) The public meetings have shown strong opposition to this development. Does public opinion count anymore?

*Under the EA process, the project committee and the Environmental Assessment Office are expected to ensure that adequate opportunities are provided to the public to express its views on projects which are under review, and that due consideration is given to the public's views as the review progresses. The weight being placed on public input in the review of the Jumbo Glacier project is evident in the broad range of issues which are identified in the draft project report specifications, and in this Appendix, which presents the project committee's responses to each issue raised, and each view expressed, whether for or against the project.*

*However, the EA process is not a referendum process, and the project committee does not make its recommendations to Ministers solely on the basis of public opinion. Much of the work of the project committee is devoted to the policy and technical analysis of issues which are raised, and the project committee will not be ready to submit its report and recommendations to Ministers until it is satisfied that the issues raised by the project have been adequately assessed, and that reliable conclusions can be drawn about whether or not they can be resolved. The project committee is required to take this approach by law - see the response to item 1i), below for further details.*

*Once issues have been adequately assessed, the project committee will provide its recommendations to Ministers on the basis of its findings, which will contain three elements:*

- a technical evaluation of the issues raised, the public policy environment for addressing those issues, and the project committee's opinions in respect of whether or not they are manageable;*
- a summary of public opinion on the project, and on specific issues raised in relation to the review of the project; and*

- *some sort of analysis of the pros and cons (or benefits and costs) of project development.*

*With this information, Ministers should then be in a position to make an informed decision on whether the project should be approved, or rejected, or subject to further review by an independent panel - the Environmental Assessment Board - pursuant to section 30 of the Environmental Assessment Act.*

- 1b) Do not waste more time and money on further studies at taxpayers' expense when it is obvious that the majority of people are strongly opposed to this scheme to enrich people other than the residents of the East Kootenays.

*The intent of the EA process is that the project committee, in referring an application to Ministers for a decision, should provide a comprehensive report on the issues raised by a project, the extent to which they are resolvable, and the overall pros and cons (or benefits and costs) of the project. The need to complete comprehensive assessments prior to a certification by Ministers is a feature of the EA process which was built into the Environmental Assessment Act in response to concerns expressed by the public and key stakeholders that decisions might be made on projects on the basis of incomplete information. The EA legislation was the subject of public and stakeholder consultations between 1992 and 1995.*

*In the view of the project committee, a comprehensive assessment of the Jumbo Glacier project cannot be completed solely on the basis of the information available in the proponent's initial application. It is necessary to undertake the second stage of the EA process (the project report review stage) in order to complete a comprehensive assessment of the project.*

- 1c) At the public meeting arranged by the project committee in Invermere on September 14, 1995, there was no opportunity for the proponent to clarify and deal with the exaggerated claims of the opponents.

*This meeting was set up by the Environmental Assessment Office and the project committee in response to public requests for an opportunity to be heard. Project committee members attended the session simply to listen (for information purposes), since many of them had not had the opportunity to attend earlier*

***public sessions on the project. It was not intended that this meeting be an iterative session.***

- 1d) At the September 20, 1995 public meeting in Nelson, the proponent stated that, should public opinion not be favorable, he was still planning to proceed with the project because it had the backing of government.

This development was apparently approved ahead of time, with hearings being held only after the [former] BC Premier announced this project in Europe as a sure-to-be-accepted proposal.

***The project committee has no knowledge of any government decision on this project, either for or against approval.***

***In any event, the proponent's application will not be referred to Ministers for a decision until a full review has been completed. The EA Office and the project committee are committed to ensuring that the EA review of the project will be conducted in a credible, open and accountable manner, and in accordance with the spirit and intent of the Environmental Assessment Act. The full substance of the project committee's eventual report and recommendations to Ministers will be publicly available. Under section 30 of the Act, the Minister of Environment, Lands and Parks and the Responsible Minister (in this case, the Minister of Employment and Investment), after considering the proponent's application and the project committee's recommendations, must choose one of three legislated decision options:***

- ***to certify the project, with conditions;***
- ***to refuse to issue a project approval certificate; or***
- ***to refer the application to the Environmental Assessment Board for a public hearing.***

- 1e) The current format for presenting to the public the technical information about the project is severely flawed. Presenting a five-volume, 1,000-page set of environmental impact research as an "objective" assessment of the project alienates the general public from the process. What is needed is a 10-to-35-page summary, written concisely and produced by the Environmental Assessment Office or other government agencies.

***The project committee agrees that the proponent's application could have been better organized and integrated, and that it***

*was difficult to locate key information on some topics of interest. It also agrees that a convenient summary would be helpful. As a result, the project committee, in the draft project report specifications, has indicated (see section A.6) that the proponent's project report must be logically organized and integrated, and prefaced by a convenient stand-alone summary.*

*As regards the suggestion that the EA Office should draft a project summary and impact assessment, it is the Environmental Assessment Act which allocates the respective responsibilities and accountabilities for preparing, submitting, circulating and reviewing information on the project. Given the provisions in that statute, the EA Office, in administering the process, considers it to be the proponent's responsibility to present the details of its own project, whether orally (at meetings) or in written documentation, while the project committee and the EA Office are responsible for explaining the EA process and the public policy environment and expectations with respect to specific issues which arise during the course of a review.*

*At the same time, the project committee also recognizes that arm's length reporting on some issues would be helpful in evaluating certain issues, and has provided for this in the draft specifications (see, for example, sections B.4 and E.5(G) of the draft specifications).*

- 1f) At this time, the public at large does not have an organized body to represent its concerns. The project committee, representing the various regional and provincial government agencies, cannot speak directly for the citizens of the Kootenays. Intervenor funding is required now, so that the public can obtain independent expert evaluation of the impacts.

*The EA Office, after consulting the project committee, has decided to set up a public advisory committee to function as an organized forum for public input into the EA review of this project. The member public interest groups have already been appointed, and the new committee's first task will be to review these draft specifications and to provide advice and recommendations on them to the project committee.*

*With respect to funding of the public to conduct independent technical reviews, the EA Office has advised the project*

*committee that, under the EA process, participant assistance, when provided, is made available in accordance with cross-government policy. Currently, government policy is as outlined in the June 1993 Interim Participant Assistance Policy, which is summarized in Appendices II and III of the Guide to the British Columbia Environmental Assessment Process.*

*To date, for this review, participant assistance has been made available to First Nations to facilitate the development of the First Nations study program, which forms a part of the project report specifications - see section G.1 of the draft specifications. The EA Office has also made a commitment to provide participant assistance to eligible members of the newly-created public advisory committee (PAC) to facilitate their attendance and participation at PAC meetings. With respect to the funding of technical experts, no participant assistance has been dispensed to the public to date for this review, and indeed, none has been requested for a specific purpose, although a few general inquiries on the availability of monies for this purpose have been received by the EA Office.*

*With respect to the issue of independent expert evaluation of impacts, the project committee has already concluded that, for certain issues, it will commission its own independent third-party reviews, rather than requesting that the proponent provide an assessment in its project report - see for example, sections B.4 and E.5(G) of the draft specifications.*

*The EA Office would consult the project committee about any specific external request for funding to hire independent technical expertise. Assuming that the EA Office and the project committee agreed that an independent informed opinion was warranted on a particular issue, the project committee might well opt to commission the independent review itself, rather than funding another party to do so.*

- 1g) Inconsistencies in the proponent's proposals demonstrate the need for a public advisory committee whose members will represent both the East and West Kootenays and whose terms of reference will allow for a full assessment of the downside of this proposal. Other areas of concern that must be dealt with by this committee would be the credibility of assessments and claims made by the proponent.

*A public advisory committee has recently been set up with representation from both the East and West Kootenays, and its first task will be to review the draft project report specifications - see also the response to item 1f), above.*

- 1h) Environmental research should have been done by an independent group with no ax to grind.

*The Environmental Assessment Act stipulates (in section 24(b)(i) of the Act) that it is the responsibility of the proponent to conduct and submit the assessments and other information required for evaluation at the project report review stage. Thus, for all types of projects in all parts of British Columbia, the proponent is normally primarily responsible for the assessments upon which project certification decisions are made under the EA process. This is also the approach used in the EA procedures of other Canadian jurisdictions, and in many other jurisdictions.*

*Having said that, as noted in response to item 1f), above, the project committee does have some discretion to commission its own independent assessments, where it considers this to be necessary, and is doing so for certain specific issues.*

- 1i) It is hard to understanding why it was announced, while Stage 1 was just getting underway, that the EA review would be going to Stage 2. If Stage 2 was a given, that should have been stated either before the first stage was underway or after Stage 1 was complete. This timing reinforced a feeling that the public does not have any influence over whether or not the project should go ahead.

*As noted in response to item 1a), the public is playing a very prominent role in the review of the project.*

*With respect to the specific issue being raised here, the project committee, at its first (August 2, 1995) meeting, noted that a second review stage would likely be needed because it was apparent that the proponent's five-volume application for a project approval certificate would not be found to have addressed all of the issues raised by the project in a complete manner. For example, it transpired at that meeting that very little work had been undertaken by the proponent to address First Nations concerns or to identify possible infringements of aboriginal rights, should the project proceed. The conclusion*

*that a second stage of review would be needed was announced in the August 1995 newsletter on the EA review of the project, and was reaffirmed at the project committee's second (October 18, 1995) meeting.*

*As correctly pointed out by members of the public, under the Environmental Assessment Act, the project committee would not normally be in a position to reach a conclusion about whether or not a second stage of review was required until the public, First Nations and the project committee had first had an opportunity to review the proponent's application. However, in this case, the project committee had been alerted to a public perception that the provincial government had already decided to approve the project, and that the EA review of the project was redundant. In announcing its conclusion that a second review stage would be necessary, the project committee had hoped to remove public uncertainty about the possibility of a pre-emptive referral to Ministers for a certification decision at the end of the application review stage, based on an incomplete assessment.*

*As the sense of this public comment indicates, members of the public and public interest groups which oppose the project instead countered that a referral to Ministers at the end of the first review stage was indeed warranted, in keeping with their desire for an early project rejection decision. However, there is no provision in the Environmental Assessment Act to refer an application to Ministers at the end of the application review stage in a situation where the technical evaluation is incomplete. Section 19(2)(b) and (c) of the Act are explicitly intended to ensure that project committees will not refer applications to Ministers unless all significant issues have been identified, and the project committee is satisfied that there has been sufficient evaluation of the issues to determine whether or not they can be managed to reduce them to acceptable levels.*

*By way of background, these legislated provisions were inserted into the legislation as a result of public and stakeholder consultations on a draft bill (Bill 32) between the fall of 1993 and the spring of 1994. Environmental groups had expressed concern about the notion of inserting a Ministerial decision option into the legislation at the end of the first review stage. They indicated to government that they would have felt more comfortable with the complete elimination of that decision option, since its removal would have meant an automatic*

*minimum of two stages of review, and a greater likelihood that reviews would be technically complete.*

*The government, bearing in mind the desire to allow the staging of reviews to be tailored to project circumstances, did not wish to eliminate the option of a one-stage review, anticipating the possibility that some applications may well be relatively problem-free, and that any issues could be addressed in the first review stage. However, acknowledging the legitimacy of the concerns of environmental groups, for example, the government did insert a test in section 19 of the Act to restrict project committees to making referrals to Ministers for certification decisions at the end of the first review stage only on the basis of complete evaluations.*

- 1j) The credibility of the EA project review process depends on timely regulatory review. The ground rules for fair consideration of developments in mountain areas must be established.

*While review timeliness is an important indicator of the effectiveness of the EA process, it is not the sole consideration. In the project committee's view, the credibility of the EA process depends ultimately on achieving an effective balance between various potentially competing goals. The parties to an EA review variously contend that reviews: (1) need to be technically sound and complete; (2) need to provide for the effective and meaningful involvement of the all of the parties to the review, including the public, First Nations and the proponent, as well as government agencies; and (3) at the same time, need be conducted in a timely and efficient manner. Different parties to the review place a different level of priority on different objectives.*

*To the extent possible, the project committee is committed to meeting the legislated timelines for the EA process, consistent with meeting other review goals.*

## **2. LAND USE PLANNING ISSUES**

- 2a) The challenge of the future is to "integrate", to the greatest possible degree, all values within a particular landscape. This may mean mine development beneath a ski hill where wildlife values are protected and recreationists can enjoy a day in the hills.

*The EA process is not designed to perform the functions of land use planning processes, which are expected to establish the framework for integrating the maintenance and use of ALL of the values within a landscape, based on planned priorities set for each defined land unit in the plan. However, one of the tasks of a project committee is to consider the project which it is evaluating within the context of the surrounding landscape setting, taking account of surrounding environmental and other resource values, and any planning objectives for them. Through feedback provided to (and discussions with) the proponent, the intent is to promote more sustainable use of the landscape by fostering changes in project location and design details which will promote a more harmonious and beneficial co-existence of the project with surrounding values.*

*The project committee is well aware of the importance of focusing on the project setting in conducting the EA review of the Jumbo Glacier project, and many of the reporting requirements identified by the project committee reflect this focus - see for example, sections D and E.5 of the draft specifications.*

- 2b) This project would be a test case on whether the alpine/sub-alpine zone is permanently reserved for the exclusive use of elite environmental interests, or is available for broader public use.

A negative attitude toward development has manifested itself in different ways. One way is for an elite and vocal minority of people in the name of environment to oppose any development.

*The project committee does not agree with the implication in the comment made here that the accessibility of the project area to broader public use hinges on whether or not the Jumbo Glacier project is approved. The EA process is not a land use planning process, and is reviewing the project on its merits, and within the context of the prevailing land use planning regime (which, in this case, is the March 1995 East Kootenay Land-Use Plan). In other words, a decision to accept or reject the project will not change the land use designation. Even if the project is rejected, other proposals will continue to be eligible for consideration, unless the land use designation is amended in the future.*

- 2c) Our collective vision for the backcountry of the East Kootenay region (as expressed through two years of deliberation in the CORE process) is one of retaining the maximum of biodiversity and connectivity for wildlife populations by allowing the minimum of alienation and facility development in the backcountry. The Jumbo Glacier project is inconsistent with that vision.

*The issues raised here need to be considered in light of the latest land use plans for the area, since the land use designations for the various resource management zones (RMZs) which were established as a result of the 1993-1995 CORE planning process form the basic framework within which wildlife resources will be managed in the Kootenay region in the future. The role of the EA process in respect of the new plan is to assess the extent to which the resort project is compatible with that plan's zone designations and any associated management objectives (both for wildlife and other values).*

*For the Jumbo-Upper Horsethief Special Resource Management Zone (SRMZ), within which the resort project is proposed, the CORE report of October 1994 did identify key wildlife values, including biodiversity and wide-ranging carnivores, although it did not deal with the issue of acceptable land uses. At the time of release of the final form of the plan in March of 1995, the government chose not to set any special management guidelines for the various zones designated under the plan, but instead announced that further RMZ-level planning would be necessary to establish appropriate management objectives for wildlife and other sensitive natural and cultural values found in each RMZ. A more detailed account of the project committee's understanding of the recent CORE land use planning process for the Kootenay Region is included in the Preface to the draft specifications (see section 6.3 - Planning Context for Project Review).*

*Working within the context of the new land use planning framework for the Kootenay region, and as part of the process of identifying management objectives for individual RMZs, MELP (BC Environment) is now developing strategic regional directions (or plans) for the key wildlife resources under its jurisdiction through regional mapping and the development of workable management strategies (e.g. to supplement those already developed under the Forest Practices Code). These plans reflect variations in the significance of wildlife resources across the*

*region, and are being developed for biodiversity and connectivity, and also for certain other regionally significant values (e.g. for caribou, grizzly bears, ungulate winter range, alpine management, access and bull trout).*

*Thus, wildlife management regimes for each RMZ are guided by the regional priority allocated to local wildlife values found in each RMZ, and are expected to be as compatible as possible with the land use designation for each RMZ, and the other values in the RMZ, bearing in mind that it may be difficult to reconcile some of the high priority values in some RMZs (e.g. wildlife and coal resources), and that complete compatibility could be difficult to achieve.*

*Any management objectives which are established for each RMZ during the yet-to-be-concluded final phase of the Kootenay region planning initiative will provide further guidance and context for management regimes. A government technical team has been creating a draft set of management objectives for each RMZ, working with MELP (BC Environment) and other key agencies in an attempt to develop of set of compatible and deliverable strategies for all values in each RMZ. MELP's strategic regional plans are important inputs to this process.*

*At the time of release of these draft specifications, drafts of both regional-level and RMZ-level objectives/strategies have been completed by the government technical team as part of what is now termed the Kootenay-Boundary Land Use Plan Implementation Strategy, and, following the issuance of a news release on October 21, 1996, this draft information is now being circulated to facilitate review and discussion with key stakeholders and interested members of the public. The current hope is that, following receipt and consideration of public comment, the Implementation Strategy will be finalized and, by the end of March of 1997, forwarded to government for a final decision.*

*In the meantime, the project committee has noted the wildlife values which are identified in the CORE report for the Jumbo-Upper Horsethief SRMZ, and is taking steps to ensure that the assessments required under the EA process include consideration of the impacts of the project on the cited values, taking account of MELP's regional and local wildlife management objectives. More specifically, the project committee*

*agrees that potential impacts of project development on environmental and resource values such as biodiversity and connectivity for wildlife populations are relevant to the EA review of the project, and need to be addressed in more detail in the proponent's project report - see, for example, sections D.3(B) and (C) of the draft specifications.*

- 2d) It is clear that the Jumbo Glacier Alpine Resort cannot meet the criteria for a Special Resource Management Zone that is intended to provide enhanced levels of management for wide-ranging carnivores (grizzly and black bears), provide connectivity and migratory routes for wildlife, and provide a buffer for the Purcell Wilderness Conservancy Provincial Park.

*At this stage of the EA process, the project's potential impacts on the values noted here have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.*

*It is possible that additional guidelines for the management of these values will be forthcoming as a result of the current management-objectives-setting exercise. In any event, irrespective of progress with that exercise, the project committee agrees that the potential impacts of project development on wide-ranging carnivores, on wildlife connectivity and migration routes, and on the Conservancy, are relevant to the EA review of the project, and need to be addressed in more detail in the proponent's project report - see, for example, sections D.3(B) and (C) and E.5(B) of the draft specifications.*

- 2e) The commitment to establishing "protected areas" - in the form of parks or wilderness areas, for example - is called into question when an operation which may threaten the values being protected is permitted on the protected area's border. It appears that the proponent, and those in government who are pushing backcountry development initiatives, have little regard for the intent of these protected areas, and some consistency in land use management is needed.

*As noted in the Preface to the draft specifications (see section 6.3 - Planning Context for Project Review - CORE Report), the project committee is aware that the October 1994 CORE report identified one of the Jumbo-Upper Horsethief SRMZ's "resource emphasis values" as "protected area support zone". However,*

*the CORE report did not clarify the operational intent of this notion, and the final form of the East Kootenay Land-Use Plan, as released by government in March of 1995, left it to the subsequent management-objectives-setting exercise, which is now underway, to confirm the SRMZ's sensitive natural and cultural values and their management regimes. Thus, it may be that relevant land management guidelines will be developed as part of the current management-objectives-setting exercise. In the meantime, the project committee understands that compatible resource use is to be permitted adjacent to protected areas.*

*At the same time, with respect to this issue, MELP (BC Parks and BC Environment) has advised the project committee that it's participation in resource initiatives adjacent to parks is now geared in part to promoting a cooperative cross-boundary perspective towards the development of management regimes (e.g. as they relate to planning for access, fire fighting, biodiversity conservation, etc.), the intent being to facilitate the preservation of conservation values within parks. See also the response to item 14p), below.*

*The project committee appreciates the proximity of the project to Purcell Wilderness Conservancy Provincial Park, which is the closest protected area, and agrees that potential impacts on the Conservancy are relevant to the EA review of the project, and need to be addressed in the proponent's project report - see section E.5(B) of the draft specifications.*

- 2f) The government said Special Management Areas outside parks would provide buffer zones to protect wildlife

*The March 1995 East Kootenay Land-Use Plan states that "...Special Resource Management Zone[s] include areas where a full range of resource uses will proceed, but in a way that respects sensitive natural and cultural values, such as fish and wildlife habitats, conservation values, community watersheds and sensitive recreation sites..." One of the priorities of the EA review of this project is to determine the project's impacts on such natural and cultural values.*

*The project committee is aware that CORE, based on the work of the CORE Table, identified the SRMZ's potential as a "protected area support zone" as one of its "resource emphasis values".*

*However, the CORE report does not clarify the operational intent of this notion, nor is the concept confirmed in any government policy or decision. It may be that relevant land management guidelines will be confirmed at the conclusion of the current management-objectives-setting exercise.*

*In the meantime, the project committee recognizes the importance of focusing on the potential impacts of the project on existing protected areas, and has outlined a range of relevant reporting requirements with respect to potential impacts on the nearest protected area, the Purcell Wilderness Conservancy Provincial Park - see section E.5(B) of the draft specifications. See also the response to item 2e), above.*

- 2g) The East Kootenay CORE Table specifically excluded rural and urban settlement from this polygon.

*The East Kootenay CORE Table, in its July 1994 submission to CORE, identified two land use options for the Jumbo-Upper Horsethief SRMZ - either an "integrated" or "special management" designation. For neither option do the Table's polygon charts define either urban settlement or rural settlement (use categories #15 and #16) as "acceptable". There is disagreement, however, about whether or not, for either option, the intent was to exclude ski resort development from the polygon. Some participants in the planning process consider the determination that urban/rural settlement is inappropriate in the unit to apply to the Jumbo Glacier resort project also, while others argue that the project was considered to fall into use category #5 (commercial tourism), which is listed as an acceptable use under both the integrated and special management land use options. The polygon charts for both options mention the ski resort proposal, but neither chart clarifies within which use category it is considered to fall. The project committee is not aware that any consensus position of the Table for or against future consideration of the project was communicated to CORE.*

*Having said that, the East Kootenay CORE Table is known to have discussed the general issue of the acceptability of new settlement away from the region's areas of traditional settlement. The project committee understands that some sectors did favor placing a prohibition on new settlement away from traditional centers, but that, at the conclusion of its*

*discussion, the Table opted to recognize the need to accommodate housing and/or settlement needs in some "special purpose" situations. The minutes of the Table's meeting of March 28/29, 1994 record a Table consensus that "...In areas where traditional settlement is not permitted, special purpose development will be considered subject to management guidelines and land designation, in support of scientific research, commercial tourism, recreation, and resource extraction activities..." See also the response to item 211), below.*

*In any event, the subsequent October 1994 CORE report did not explicitly recommend prohibition of rural and urban settlement in this unit. That report did not address the possible prohibition of any use in SRMZs, and indeed, did not deal with the issue of acceptable uses. Based on both CORE's report and subsequent consultations with representative stakeholders during the winter of 1994/95, the government's March 1995 East Kootenay Land-Use Plan designated the unit to be a SRMZ, within which a range of types of development may be possible, providing that they are compatible with identified values.*

*As stated in the Preface to the draft specifications (see section 6.3 - Planning Context for Project Review - CORE Report), the CORE report also noted that the land use planning process was not a suitable forum for making decisions on specific land use allocation and project development decisions, and explicitly recommended that the Jumbo Glacier resort project be subject to the EA process, which is designed to be a project-specific review mechanism.*

- 2h) Following the East Kootenay CORE table, this area was to be recognized as a Special Management Area with no urban development. The CORE process was long and arduous, was participated in by a great number of East Kootenay residents, and their efforts should not have been for naught.

*With respect to the impact of the CORE planning process, the outcome of that planning effort has not been inconsequential. While zone-by-zone management objectives have still to be finalized, the planning process has led to significant changes in the status and management regimes for land and resources in many parts of the Kootenay region. The process was an exercise*

*in balancing various interests, and it is inevitable that people will not agree with every land designation which has resulted.*

*With respect to the issue of the acceptability of urban development in the Jumbo-Upper Horsethief SRMZ, see the response to item 2g), above.*

- 2i) Previous public participation processes in the West Kootenay region have generated consensus around the strategy of pursuing low-impact, small-scale, locally-owned tourism developments in the region.

*The planning and policy framework for land use in the Kootenay region is currently set at the provincial level by an extensive array of statutes, regulations and policies, and, at the regional level, primarily by the East Kootenay and West Kootenay-Boundary Land-Use Plans, both released in March of 1995. See the response to item 2c), above, and also the Preface to the draft specifications (see section 6.3 - Planning Context for Project Review) for discussion of the implications of this land use planning framework for the review of the Jumbo Glacier project.*

*In the meantime, the project committee agrees that the issue of potential impacts of project development on other types of tourism activity and opportunities in the vicinity of the project, including small-scale, low-impact eco-tourism, are relevant to the EA review of the project, and need to be addressed in more detail in the proponent's project report - see section E.5 of the draft specifications.*

- 2j) It is very important to the legitimacy of the land use process, and its outcome, that no decisions be made on the project until management guidelines for this area, arising from CORE's work, are in place. This includes a general definition of activities which are acceptable in "special management" areas, as well as the intent of the Table 2 management guidelines in managing for general biodiversity and wide-ranging carnivores. The sub-regional groups responsible for developing these management objectives have not yet met.

*The EA process reviews projects within the context of the prevailing land use regime. The EA process is subject to legislated timelines, and while these may be extended with cause, the process does not normally await the outcome of*

*incomplete planning processes, which, while underway, may be advancing at their own pace, and with unpredictable and potentially lengthy timetables. This policy is applied to EA reviews of all types of projects in all parts of British Columbia.*

*With specific reference to the EA review of the Jumbo Glacier resort project, the project committee has been advised by the Land Use Coordination Office (LUCO) that there are reasonable prospects for the completion of the current management-objectives-setting exercise before the project committee's review of the proponent's project report is finalized. The proponent's project report will take a significant amount of time to prepare, submit and evaluate before Ministers are in a position to make a decision on the project. Should Cabinet approve management objectives for the Jumbo-Upper Horsethief SRMZ prior to the completion of that review, the project committee will then be in a position to take these objectives into account in developing its report and recommendations for Ministers. More specifically, the project committee will be expected to evaluate the extent to which the achievability of these objectives could be affected if the project proceeds.*

*The project committee, anticipating this prospect, has inserted conditional provisions into the draft specifications, stipulating that the proponent is required to evaluate the implications of project development for the achievement of any management objectives formally established for resource values in the Jumbo-Upper Horsethief SRMZ - see section A.8 of the draft specifications. See also sections D.3(B) and (C), which address issues with respect to biodiversity and wide-ranging carnivores.*

*In the meantime, at the time of release of these draft specifications, drafts of both regional-level and RMZ-level objectives/strategies have been completed by a government technical team as part of what is now termed the Kootenay-Boundary Land Use Plan Implementation Strategy. Following the issuance of a news release on October 21, 1996, this draft information is now being circulated to facilitate review and discussion with key stakeholders and interested members of the public. The current hope is that, following receipt and consideration of public comment, the Implementation Strategy will be finalized and, by the end of March of 1997, forwarded to government for a final decision.*

### **3. SUSTAINABILITY ISSUES**

- 3a) The people of the East Kootenays want truly sustainable development that does not compromise our children's economic or environmental future.

***Achieving sustainability requires that government make balanced decisions which are economically, socially and environmentally sustainable, in that they:***

- ***are compatible with the need to maintain the integrity of the natural environment, including fish and wildlife populations and habitats (biodiversity), the quality of soil, water and air, and special natural features (through management regimes designed to achieve protection and conservation, as well as through preservation); and***
- ***foster social well-being and a prosperous and diverse economy of a type which does not compromise the ability of the land to replenish renewable resources.***

***Consistent with public policy expectations, information requirements outlined in the draft project report specifications are intended to ensure that numerous aspects of the environmental, social and economic sustainability of the proposed development are examined for their overall acceptability, including, for example:***

- ***the environmental implications of proposed waste disposal systems - see sections D.1;***
- ***implications of the development for local and regional air quality - see sections D.1(F) and (G);***
- ***long-term reliability of the quality and supply of water for the proposed resort community - see sections D.1(F) and D.2;***
- ***long-term outlook for the sustainability and biodiversity of affected ecosystems, flora, fauna (fisheries and wildlife resources) - see section D.3;***
- ***compatibility of the proposed resort community with its surrounding wilderness setting (aesthetics, wildlife values, tranquillity, etc.) - see sections E.5(A) through (D), and (F);***
- ***implications of the project for achievement of long-term land use planning objectives for the area - see section A.8;***

- *long-term regional socio-economic impacts (both benefits and costs) - see, for example, sections E.1 through E.5, and E.9 through E.12;*
- *prospects for a stable workforce (e.g. permanent vs. seasonal employment, affordability of housing for workers, etc.) - see, for example, sections E.2 and E.9;*
- *availability, delivery and funding of a wide range of community services (such as police, justice, social, educational, recreational and emergency management services), both to resort residents and visitors - see sections E.7 and E.8;*
- *the capacity and suitability of the access road to accommodate projected traffic levels - see section E.6(C);*
- *public safety issues associated with various aspects of resort access, design and operations - see, for example, sections C.3, C.4, E.6(D) and (E), and E.7(A), (F), (G) and (H);*
- *preservation of preferred lifestyles in existing local communities - see section E.11; and*
- *sustainability of First Nations cultures and traditional uses in the vicinity of the project - see section G.1.*

3b) This project represents a balance between good opportunities for ourselves and our children. This project, if completed according to stringent environmental regulations, will bring us both pleasure and jobs.

*Many of the public representations received on this project by the project committee have focused on the issue of balance between potential economic and employment benefits and potential environmental costs, particularly over the longer term. Public views differ on whether or not a good balance can be achieved for this project.*

*As noted in response to item 17b), below, as part of the EA review of the project, the project committee is considering its potential benefits, as well as its potential adverse effects. One of the project committee's goals in assembling the draft specifications has been to ensure that it will be possible to develop an in-depth understanding of the project's benefits at the project report review stage.*

3c) Invermere is not a depressed area, and jobs at any cost are not a desirable option. The full potential of well-planned sustainable

resource extraction in concert with recreational and eco-tourism activities has yet to be achieved.

*See responses to items 3a) and 3b), above*

## II. SPECIFIC PROJECT DESIGN ISSUES

### 4. RESORT CONFIGURATION

- 4a) There should be three smaller villages rather than one larger village.

*From an impact management standpoint, the project committee places a high priority on containment of the proposed resort development as a principle means of minimizing spillover effects onto surrounding wilderness values. It is to be expected that such impact containment would be more readily achieved with a single (albeit larger) village, than with three separate (albeit smaller) villages. For example, concentrating the resort development on the smallest necessary land base through proper planning should result in the least disruption of natural systems, the least fragmentation of wildlife habitats, and the least visual impact.*

- 4b) The current proposal calls for too large a development but that a smaller project could perhaps be an international model of environmentally responsible recreation and tourism

*There may be some validity to this assertion, although many of the impact concerns raised during the EA review of the project reflect the presence of any resort, regardless of its size.*

### 5. GLACIER SKIING

- 5a) The proponent claims impressive ski run elevations which are measured from the maximum height of the glacier to the end of the ski-out. The skiable terrain is actually far more limited. Will there be an independent review of this issue?

*The project committee is generally satisfied with the level of information provided in the application with respect to skiable terrain, which it considers sufficient for the purposes of the*

*resort plan assessment which will be undertaken at the project report review stage. Additional reporting is required with respect to possible changes in the areal extent of skiable terrain over time - see section C.1 of the draft specifications.*

*The project committee notes that, under the provincial Commercial Alpine Ski Policy (CASP) review process, it is normal practice for the proposed ski area master plan to be reviewed by a recognized arm's length consultant, commissioned by MELP and MEI. The proponent's resort plan, as presented in the application and the project report (including details of skiable terrain) will be subject to an independent evaluation, commissioned as part of the EA review of this project - see section B.4 of the draft specifications. This independent evaluation could conceivably lead to requests for additional information on the extent of skiable terrain for purposes of clarification.*

- 5b) The glaciers will require extensive manipulation to enable year-round ski-ability.

*The proponent's application indicates that manipulation of glaciers will be limited to lift installation, snow-cat compaction, and possible crevasse bridging at critical locations (using logs or wooden rafts), flagging and gating (see section 2.1.6 in Volume 1 of the proponent's application). Experience in Europe suggests that management of glacier skiing sites can be achieved largely by means of conventional ski slope grooming techniques, complemented by routine on-site ski area management and regular ski area patrolling to identify problem locations. The project committee understands that the local heli-ski operator has been able to offer glacier skiing for more than 10 years without significant glacier manipulation.*

*In its project report, the proponent will be expected to provide a glacier skiing management plan which identifies the types of glacier modification deemed necessary to make possible the four-season use of glaciers for both skiing and sightseeing. Strategies will be required for management of any impacts associated with any glacier modification. Reporting requirements are outlined in section C.2 of the draft specifications.*

- 5c) It is obvious, even to the inexperienced individual, that explosives and bulldozing will be required.

***The project committee is not aware of any use of dynamite or other explosives by BC ski operators to manipulate ski terrain (either glaciers or glacier crevasses). In this case, the proponent is not proposing to manipulate glaciers by means of explosives use or bulldozing (see response to item 5b), above), and it is unlikely that the use of explosives and bulldozing to re-shape or alter the configurations of glaciers would be permitted as an acceptable component of the glacier skiing management plan.***

***It should be noted that use of explosives is permitted for avalanche control for public safety purposes at many ski resorts, and in many other situations also (e.g. to minimize avalanche risk to traffic along public highways and resource roads).***

- 5d) In order to maintain ski runs on a beautifully rugged glacier like Commander Glacier, snow-cats will constantly have to push snow and ice into crevasses to create bridges. If the snow-cats cannot do the job, the ice will have to be moved into place with explosives. This is a very common weekly (and sometimes daily) practice on glaciers in Europe. Besides the severe modification of the glacier surface, these grooming efforts further accelerate glacial ablation.

***See responses to items 5b) and 5c), above, and 5f), below.***

- 5e) The predominately south-facing aspect of the proposed Jumbo ski runs must be questioned for a ski development of this magnitude, since the susceptibility of the snow to sun and heat is obvious.

***At this stage of the EA review of this project, the implications of solar aspect on the quality of ski runs have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.***

***On the basis of the proponent's application, while south-facing slopes are a significant proportion of the total, other aspects are also well represented - see, for example, the proponent's solar aspect digital terrain model map, located in its application (Figure 1.3.3.4(g) of Volume 1 of the application).***

*Having said that, the project committee agrees with the need for the proponent to provide information in its project report on the degree to which any of the aspects is susceptible to significant wastage due to solar or wind exposure. Experience at other resorts should be documented as part of the analysis, and compared to conditions encountered at the Jumbo Glacier project site (e.g. comparative elevations, etc.). An independent analysis of this information will be required as part of the overall third-party evaluation of project logistics and feasibility which the project committee will be commissioning at a later point in the EA review of the project - see section B.4 of the draft specifications.*

- 5f) Glacier ablation is occurring at an alarming rate. In Austria, ski runs which were once used for July and August racing camps have for years been unskiable or inaccessible due to rock exposure or crevasses. This rapid ablation is not confined to the Alps. Glacier National Park in Montana, only a few hundred kilometers from the Purcells, is reporting a decline from 48 glaciers in 1960 to 20 in 1995.

The glaciers are receding at a rate that will, over the next 20 years, severely impact overall glacier ski potential.

*At this stage of the EA review of this project, the implications of glacier ablation for the areal extent of ski runs over time have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about these specific assertions at this time.*

*Some discussion of the climatic stability of the project area was presented in the proponent's application (see Volume 2, section 4.2.1), although the topic of glacier ablation was not specifically addressed.*

*The project committee agrees with the need for the proponent to provide further information in its project report on the degree to which glacier ablation from whatever cause (either of climatic origin or due to use for skiing) could be a factor affecting the extent of skiable terrain over the next few decades. Experience at other resorts and in other climatic regions should be documented as part of the analysis, and compared to conditions encountered at the Jumbo Glacier project site. An independent analysis of this information will be required as part of the overall third-party evaluation of project logistics and feasibility*

***which the project committee will be commissioning at a later point in the EA review of the project - see section B.4 of the draft specifications.***

- 5g) If they don't use salt, how will they be able to call themselves a four-season ski resort?

Because of local climatic conditions, summer skiing will only be possible with the use of 5 to 10 tons of salt per day, contrary to the proponent's claims. Temperatures in this area are characteristically warm during spring, summer and fall.

***Application of salt or fertilizer to harden the snow surface is common practice for major ski events or races, and sometimes also to preserve glacier runs in summer periods. Whether or not this is necessary (and in what quantity) at a particular ski resort depends on factors such as elevation and the overall size of the ski runs.***

***In the case of the Jumbo Glacier project, the project committee has no reason to suppose that salt would be used in anything like the quantities suggested here, since this is not required at other ski resorts in British Columbia, and the proponent has not proposed significant use of these items in its application. Indeed, it is unlikely that use of salt or fertilizer in the quantities cited would be either economic or environmentally acceptable, except possibly on days when major international race events are being held.***

***The project committee agrees that the condition of the snow on the proposed ski runs during summer, and the extent to which the proponent intends to use salt (or fertilizer) as part of ski run maintenance, are issues which need to be clarified as part of the EA review of the project - see sections C.2 and D.1(F) of the draft specifications. The proponent's analysis needs to include a comparison of conditions at the Jumbo Glacier project site with those at other resorts, using examples where salt and/or fertilizer both are and are not in use.***

- 5h) In North America, summer skiing is only made possible through the use of salt or chemicals to enhance the freezing of the snow. On the Horstman Glacier at Blackcomb, on Mount Hood and Mount Bachelor in Oregon, and on Mammoth Mountain in California, ski teams spread a minimum of 5 tons of salt every day, and sometimes double that.

*See response to item 5g), above.*

- 5i) If salt is to be used on the glaciers at a rate of 5 to 10 tonnes per day, how will this affect water quality?

*At this stage of the EA review of this project, the potential use of salt, if any, to groom ski runs, and any consequential impacts on water quality, have yet to be adequately investigated and reported.*

*The proponent has advised the project committee that little (if any) salt will be used for the purpose of grooming ski runs. As noted in response to item 5g), above, the proponent, as part of its description of the methods proposed for ski slope grooming, is expected to document any proposed use of salt (and also fertilizer) in its project report, confirming that limited use of these materials is intended - see sections C.2 and D.1(F) of the draft specifications.*

*MoH has raised with the project committee a possible human health concern with respect to downstream water users and license holders if excessive salt is used. However, the project committee has also been advised that, in the view of MELP (BC Environment), moderate use of salt would not be expected to affect downstream water quality, although there may be potential for some impact on soils and plant communities located immediately beside and beneath glaciers.*

*In cases where salt use is intended during skiing operations, MELP (BC Environment), will require advance notice of the salting sites and the salt quantities to be used, and the proponent will require specific prior approval from MELP (BC Environment). Operational monitoring of effects will also be necessary where salt is used.*

## **6. WASTE MANAGEMENT**

- 6a) It will be difficult to successfully operate a sewage treatment plant in a winter environment.

*At this stage of the EA review of this project, operations-related issues associated with the project's sewage treatment systems*

*have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.*

*MELP (BC Environment) has advised the project committee that cold weather sewage treatment technology is available, and is currently in use in many places in North America. For example, on-site sewage treatment and effluent disposal systems currently operate at the Panorama Ski Resort and the Fernie Snow Valley Ski Resort. Effluent from the Panorama plant is discharged to ground via a sub-surface tile field. MELP (BC Environment) anticipates that a similar ground disposal system may prove to be acceptable for the Jumbo Glacier project, subject to careful scrutiny of the design parameters. If the project proceeds, effluents from sewage facilities would be monitored and immediate corrective measures would be required, should detrimental impacts on water quality or fish be detected.*

*Sewage disposal issues are relevant to the EA review of the project, and detailed reporting is expected at the project report review stage - see section D.1(B) of the draft specifications. Before project certification could be considered, the project committee will require that sewage treatment facilities associated with the project (e.g. any proposed ground disposal systems) be designed and engineered to operate efficiently, safely and without detrimental impact to the surrounding environment at all times, even under the extreme winter conditions expected in the Jumbo Creek valley. The project committee is relying primarily on the advice of MELP (BC Environment) in evaluating the proposed sewage disposal system.*

- 6b) Concern is often expressed over the sensitivity of alpine and sub-alpine environments, yet sewerage and other protection technologies are available to minimize this risk.

*The adequacy of the proposed sewage disposal system is an issue which is relevant to the EA review of the project - see section D.1(B) of the draft specifications. See also response to item 6a), above.*

- 6c) The amount of sewage which will be produced cannot be dealt with in a high-altitude valley.

*See response to item 6a), above.*

- 6d) Technologies exist to satisfy any environmental standard needed to protect land and water from the effects of waste disposal systems.

*See responses to items 6a) and 6b), above.*

- 6e) In the preliminary studies, the developers are proposing to build massive tile fields to purify vast amounts of human waste. Specific sites for these fields have yet to be identified, not to mention their effectiveness in such a harsh environment.

*At this stage of the EA review of this project, the design of the project's sewage treatment systems, and associated operations-related issues, have yet to be adequately investigated and reported. The design and potential impacts of the various components of the project's sewage disposal system, including the possible utilization of tile fields, are relevant to this review - see also the response to item 6a), above.*

*With specific reference to single family residences, the proponent, in its project report, will be expected to indicate the intended means of sewage disposal: either through individual fields or a community system. Individual disposal fields of less than 5,000 imperial gallons per day require licensing by MoH. Those in excess of 5000 imperial gallons per day require permitting by MELP. That ministry has expressed a preference for a system based on collection of effluent from individual premises for treatment at a central community facility and disposal in a central disposal field - see section D.1(B) of the draft specifications. Reporting on this issue will be one element in completing the overall site liquid waste management plan.*

- 6f) The KPA Engineering assessment of November 1993 (Appendix O, Volume 3 of the proponent's application) shows that no sites other than Site 3 appeared suitable for ground disposal. KPA indicated that Site 3 might be able to handle Phase 1 of the development, but that even this is uncertain. Site 3 appears to be located on a fan deposit at the base of an avalanche path.

*As indicated in response to item 6a), above, where ground disposal is intended, adequate and proven ground disposal fields will be a requirement before approval can be considered*

*for sewage treatment facilities. The project committee is relying on MELP (BC Environment) to review evaluations undertaken by the proponent's consultants with respect to sewage effluent fields.*

- 6g) The proposal makes no mention of any recycling initiatives, but assumes that all garbage will be compacted. Invermere's landfill site capacity is already strained.

*Solid waste disposal issues, including garbage compaction and recycling proposals, are relevant to the EA review of the project, and detailed reporting is expected at the project report review stage - see section D.1(A) of the draft specifications. The project committee is relying primarily on the advice of MELP (BC Environment) in evaluating the proposed solid waste disposal system.*

*The project committee will require the proponent to develop policies for reducing, reusing or recycling solid wastes, and also for minimizing disposal to any landfill site. Arrangements for landfill disposal would have to be made in consultation with RDEK. The proposed Solid Waste Management Plan of the RDEK states that a new sub-regional landfill will be developed in the Columbia Valley Subregion. MELP (BC Environment) and RDEK, through the solid waste management planning process, will become involved in the siting and development of the facility, and will consider all environmental, social and economic issues relevant to this process. MoH recommends that careful thought be given to the temporary on-site storage of solid waste in order to reduce the risk of mechanical or biological transmission of pathogens from compactors to food services.*

- 6h) Both the liquid waste (anticipated to amount to 1.2 million liters/day) and solid waste would have a serious impact on local fish populations.

*At this stage of the EA review of this project, the potential impacts of waste disposal at the resort on fishery resources have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.*

*Both solid and liquid waste disposal issues, and any possible on-site or downstream fisheries-related concerns, are relevant to*

*the EA review of the project, and further reporting is expected at the project report review stage - see sections D.1(A) and (B) and D.3(A) of the draft specifications.*

- 6i) What effects would waste and sewage disposal have on the surrounding watersheds?

*It is not clear that any impacts from waste (including sewage) disposal would be anticipated in surrounding watersheds. Any off-site impacts, if they occurred, would be expected to be experienced downstream in the same watershed as the disposal sites themselves (i.e. downstream of upper Jumbo Creek).*

*As noted in response to item 6h), above, an examination of the effects of wastes of all types on downstream water quality and fisheries is relevant to the EA review of the project, and detailed reporting is expected at the project report review stage - see the various component subsections of section D.1(A), (B), (E) and (F) of the draft specifications.*

## **7. SITE ACCESS ISSUES AND THE ACCESS ROAD**

- 7a) This resort proposal, if accepted, could be just the beginning of a series of development proposals for the area. Once the road is in place, there is no guarantee that it will not ever be extended through the Jumbo Pass to the West Kootenays.

*While road upgrading would be required in both the Toby and Jumbo Creek valleys to serve a ski resort, road access already exists through both valleys all the way to the upper reaches of Jumbo Creek. The proponent is proposing to upgrade access which already exists, not to create new access into a presently inaccessible area.*

*The project committee is aware that the CORE planning process examined the concept of road access through the Jumbo Pass, and that, in its October 1994 report to government, CORE recommended that "...If this development proposal [the ski resort] is approved, it should include a condition that no road access linking the East and West Kootenays through the Jumbo Pass will be permitted..." In this regard, the project committee notes that development of road access through the Jumbo Pass is not a component of the project, as proposed, and, therefore, is*

*beyond the scope of the EA review of the project (as are the transportation planning and environmental impact issues associated with this idea).*

*Should some version of the Jumbo Pass highway project be given serious consideration by either government or the private sector at some point in the future, the proposal would be subject to the project review procedures prevailing at that time. In the meantime, MoTH has advised the project committee that, in 1994, it conducted an internal preliminary investigation of the feasibility of developing a public highway through the Jumbo pass. The resultant report, which has been placed on the project registry, concluded that the order-of-magnitude costs of such a project would exceed \$200 million. Furthermore, MoTH has advised the project committee that there is no provision for continuing work on that project within MoTH's current 10-year plan. MoTH acknowledges that its 10-year plans are subject to revision from time to time, and that future priorities could change.*

*For further details, see Appendix B to these draft specifications, which consists of MoTH's summary of its 1994 draft report on the Jumbo Pass highway proposal.*

- 7b) If the proponent is given control of the road upvalley from the Mineral King mine, it would essentially be a private road and the developer could control access. The result would be a severe restriction of general public use and enjoyment of this area.

Once a private road is constructed from the Mineral King minesite to the resort, there will no longer be unrestricted access to the area, and anyone entering the area will be required to board one of the developer's shuttle buses. This is not making the wilderness accessible, but instead, effectively excludes all but the paying customer from an area which was once everyone's accessible backcountry.

*At this stage of the EA review of the project, issues associated with the management of public access to the area circumscribed by the resort development have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.*

*MoTH has advised the project committee that, once private lot development begins to occur at the resort, the access road, by law, will have to become a part of the public highway system, operated and managed by MoTH. However, this is only one of several issues associated with public access in the vicinity of the project site. The project committee agrees that the issues of road status and management of road use, and their implications for public access to the upper Jumbo Creek valley, are relevant to the EA review of the project, and need to be addressed in more detail in the proponent's project report - see section E.6(B) of the draft specifications.*

*The project committee is aware that the proponent's views on access management in the Jumbo Creek valley are evolving, in part in response to public feedback of the type noted here. The project committee will expect the project report to provide an up-to-date statement of the proponent's proposals for access management, including discussion of the issue of general public access unrelated to use of resort facilities.*

- 7c) *The increased use of the Toby Creek road and other components of the regional infrastructure will only mean that they are made more useful. Presently, the cost of maintaining them is spread over a small tax base and few users.*

*At this stage of the EA review of the project, the fiscal implications of the incremental use made of the local and regional infrastructure have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.*

*The potential economic and fiscal effects of the project, including those associated with increased use of infrastructure and resources, are cited by both project supporters and critics alike as key considerations in the EA review of the project, and the EA process is considering both the potential beneficial and adverse effects of the project.*

*For the project committee, the issue raised here is one of weighing pros and cons - of weighing the benefits of increased use and improved financial viability of infrastructure against the potential adverse effects of increased human activity in a sensitive wilderness setting. Many of the reporting requirements outlined in the draft project report specifications are intended*

*to promote an improved understanding of the benefits and costs associated with increased access and use of the area and its infrastructure.*

- 7d) The highway to the proposed resort will follow Toby Creek, severely detracting from a rafting business on Toby creek, and destroying the natural history tours conducted in the Toby Creek drainage.

*At this stage of the EA review of the project, the impacts of road access to the resort on outdoor recreation activities in the Toby Creek drainage have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.*

*MoTH has advised the project committee that, based on projected traffic levels, the existing resource road in Toby Creek will need to be upgraded to ensure safe, efficient public road access to the resort, and that this could possibly entail significant relocation of the existing resource road alignment in places. Thus, in the draft project report specifications, the project committee has outlined its expectations for road access studies focused on locating and designing a technically acceptable routing for the access road - see sections E.6(C), (D) and (E) of the draft specifications.*

*As part of road access studies, the proponent will be expected to compare the environmental and resource impacts of the various road location and design options under consideration. These studies will have to include an assessment of impacts on the aesthetics and tourism activities and opportunities in the Toby Creek valley - see, for example, sections E.5(C), (E) and (F) of the draft specifications. Also required will be an assessment of the potential impacts on water quality and fisheries which may result from construction associated with improvements and/or realignment of the main access road and any spur roads - see sections D.1(F) and D.3(A) of the draft specifications.*

- 7e) The road infrastructure and the traffic occasioned by the resort will greatly increase the chances of bears being shot by hunters and poachers.

*At this stage of the EA process, the project's potential impacts on bear populations and habitats, including the implications of improved road access for hunting and poaching, have yet to be*

*adequately investigated and reported. Thus, the project committee not reached any definite conclusions about this specific assertion at this time.*

*The project committee recognizes that a higher-standard road in the Jumbo Creek valley, built to serve the proposed Glacier Dome lodge, would improve access to higher quality bear habitat. On the other hand, given increased human presence in the valley (both visitors and residents), it is possible that 'self-policing' may tend to offset the potential for both legal and illegal shooting of bears - see section E.7(K) of the draft specifications. In any event, hunting restrictions would be imposed within the controlled recreation area (CRA) set up for the resort (see response to item 16d), below, for further details on the CRA). As noted in response to item 13n), below, an assessment of this problem and proposed measures for managing bears to avoid conflict will be required from the proponent in its project report - see section D.3(G) of the draft specifications.*

- 7f) The road up the Toby Creek and Jumbo Creek valleys was very heavily traveled in the 1960s, when the mine was open and extensive logging was taking place, but there was a healthy population of grizzly, moose, elk and deer, despite the traffic. Why would traffic have any greater impacts now?

*At this stage of the EA review of this project, the potential impacts of improved access and increased traffic on wildlife populations and habitats along the road corridor have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.*

*In the meantime, MELP (BC Environment) has advised the project committee that factual information on traffic levels and wildlife populations in the 1960s is not available for analysis.*

*In any event, it is not clear that comparing circumstances which prevailed during the 1960s with those which are relevant to the review of the proposed Jumbo Glacier development in the 1990s would be meaningful. There is now a greater awareness of the potential impacts of improved road access and associated traffic on wildlife populations. It is also worthwhile to note that, in a more general sense, pressures on natural areas have increased during the last 30 years, associated with population*

*growth, and that this has led to significant changes in both public expectations and the policy and regulatory environment for access to, and use of, natural areas.*

*The EA review of this project will include an assessment of the impact of resort-related traffic on today's wildlife habitats and populations - see, for example, section D.3(F) of the draft specifications.*

## **8. PUBLIC SAFETY ISSUES**

- 8a) Has disaster planning been taken into consideration?

*At this stage of the EA review of the project, emergency and disaster planning needs for the project have yet to be adequately investigated and reported.*

*The project committee agrees that emergency planning is relevant to the EA review of the project, and needs to be addressed in more detail in the proponent's project report - see section E.7(I) of the draft specifications. The proponent is responsible for the health and safety of those who visit its resort facilities, and will have to locate and design project components and develop emergency avoidance and response programs in a manner which will adequately address a range of potential emergency situations.*

*See also the responses to items 8b) and 22b), below.*

- 8b) What will happen if there is a forest fire in the valley en route to the resort?

*At this stage of the EA review of the project, forest fire risk and associated wildfire management issues have yet to be adequately investigated and reported. Thus, the project committee cannot provide a complete answer to this question at this time.*

*The project committee agrees that the risk of wildfire to residents of, and visitors to, the ski resort is an issue which is relevant to the EA review of the project, and needs to be addressed in detail in the proponent's project report - see*

*sections C.4, E.6(C) and (E), and E.7(G) and (H) of the draft specifications.*

*Components of any strategy to address wildfire concerns will have to include risk-sensitive design of the resort community and its road access, capable of accommodating the resort's emergency response requirements. These are issues of detail which must be addressed in part through discussions between the proponent, local police authorities and emergency planning authorities such as the Provincial Emergency Program and the RDEK.*

- 8c) The road from the Panorama ski resort to the proposed village will pass through 33 avalanche paths. How will avalanche danger be managed?

The access road to the Jumbo Glacier resort will be treacherous and dangerous, and will probably be closed for a good portion of the winter, due to avalanche hazard. To route tourists, who will be in a hurry to get to their weekend cabin or the ski hill, along such a road is to invite safety problems.

*At this stage of the EA review of the project, avalanche hazard and the associated risk management issues have yet to be adequately investigated and reported. Thus, the project committee cannot provide a complete answer to this question at this time.*

*The project committee agrees that issues associated with avalanche hazard along the access road - including the risk to road users, and also the plans and measures proposed to mitigate that risk - are relevant to the EA review of the project, and need to be addressed in more detail in the proponent's project report - see section E.6(D) of the draft specifications.*

## **9. ELECTRICITY SUPPLY**

- 9a) The costs of electricity supply and telephone service to the project could be prohibitive.

*At this stage of the EA review of this project, service costs (including electricity and telephone service costs) have yet to be adequately investigated and reported. Thus, the project*

*committee has not reached any definite conclusions about this specific assertion at this time.*

*The costs of services are relevant to the EA review of this project to the extent that costs might affect the financial feasibility of the project (see section B.4 of the draft specifications), or if they represent net costs to government (see section E.8 of the draft specifications).*

- 9b) If the location of the electricity transmission corridor has yet to be defined, the environmental impact study should be expanded to all surrounding drainages.

*The proponent has informed the project committee that the intended routing of the transmission line will largely follow the access road. Additional information is required from the proponent with respect to source(s) of power, transmission line routing options, the power distribution system within the development area, and the potential impacts of the proposed power supply system - see, for example, sections A.7, D.3(F), E.5(C) and E.6(F) of the draft specifications. An options analysis will be required for all transmission line routing alternatives considered by the proponent, with a rationale for the proponent's choice of preferred option.*

- 9c) A reference was made in the proponent's application to an initial 25-kV transmission line to deliver electricity, to be upgraded to a 69-kV line as the development expands. It is highly doubtful that the visual impact of electrical lines of this size would be acceptable in the Jumbo Creek drainage itself. This means that electrical lines would have to be routed up an adjacent drainage, significantly affecting the ecology and wilderness character of the chosen drainage.

*At this stage of the EA review of this project, the potential visual impacts of transmission line routing options have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.*

*As noted in response to item 9b), above, the proponent's stated intent is largely to follow the access road in routing the transmission line. Given that the resort's access road would be located in the Toby-Jumbo system, it would be of questionable impact management benefit for the transmission line to follow a*

*different linear corridor, particularly if that corridor is not otherwise disturbed, as could well be the case here.*

*Additional information is required from the proponent with respect to source(s) of power, transmission line routing options (including the rationale for the proponent's choice of preferred routing option), the power distribution system within the development area, and the potential impacts of the proposed power supply system (e.g. the visual and environmental impacts) - see, for example, sections D.3(F), E.5(C) and E.6(F) of the draft specs.*

### **III. ENVIRONMENTAL MANAGEMENT ISSUES**

#### **10. ENVIRONMENTAL IMPACT STUDIES - GENERAL**

- 10a) Although five volumes of application documentation look impressive at first glance, little attention has been given to the actual impact of the resort on the environment.

*The proponent's application presents information on the project in sufficient detail for the application review stage and, in many respects, the level of reporting goes well beyond the basic minimum requirements for an initial application. The application describes the project in detail, and contains in-depth information on many aspects of the project's potential effects. The document could have been better organized, since some effort may be required to locate pertinent information on certain topics.*

*Substantial additional project impact assessment work remains to be completed for this project, and this will have to be reported in a project report, submitted for review at the second stage of the EA process (the project report review stage). This situation is consistent with the normal staging of information requirements under the EA process, with the focus on issue identification at the application review stage, and on impact assessment at the project report review stage. Environmental impacts are among the effects for which further reporting is required - see, for example, the reporting requirements outlined with respect to various issues in section D of the draft specifications.*

- 10b) The wild backcountry is all interconnected. The proposal extends beyond the Jumbo Creek valley into Farnham and Horsethief Creeks, and grizzly range extends far beyond that. There is a need for an environmental impact study which encompasses the entire surrounding area, not just Jumbo Creek.

***The physical extent of the project, as proposed, is entirely contained within the upper Jumbo Creek valley, except for the ski runs on the northern side of the glaciers at the head of the valley.***

***However, the project committee agrees that impact assessments will have to be conducted in surrounding areas in order to investigate the possibility of spillover effects of certain types into surrounding drainages. Examples of issues for which off-site study is required include movement patterns of wildlife (grizzly bears, moose, etc.) - see section D.3(B) and (C) of the draft specifications - and the potential for increased use of the Purcell Wilderness Conservancy Provincial Park - see section E.5(B) of the draft specifications. The proponent is also required to assess the project's potential visual and noise impacts in surrounding areas - see sections E.5(C) and (D) of the draft specifications. Strategies to mitigate displaced commercial ventures (such as the existing local heli-ski operation) may also be warranted - see sections E.5(E), (F) and (G) of the draft specifications. Finally, the project committee notes that the potential cumulative effects of the Jumbo Glacier project, in combination with those of other activities in the area, will also have to be addressed as part of the cumulative effects assessments required under sections D.3(B) and (C) of the specifications, and potentially also under section H.2 (if CEAA review is triggered for this project).***

- 10c) All of the appropriate groundwork and environmental impact work seems to be in place for the project.

***The project committee recognizes that the proponent has undertaken a substantial amount of groundwork towards a thorough examination of this project, but has concluded that further work is needed for a complete assessment. The purpose of the draft project report specifications is to itemize the***

***outstanding data collection and impact assessments which are required to complete the EA review of this project.***

- 10d) The proponent has failed to identify possible environmental impacts in anything more than a cursory fashion, and there is no substantiated plan for mitigation of impacts or ongoing monitoring.

***Given the staging of reporting requirements in the EA process, it is not expected of proponents that issues must be fully addressed at the initial application review stage of the EA process - see response to item 10a), above. In its project report, the proponent will need to present completed impact assessments, and to propose practical and cost-effective impact management measures which are capable of mitigating a wide range of potential impacts - see section A.7 of the draft specifications.***

***Should the project be granted a project approval certificate at the conclusion of the EA review, mitigation and monitoring requirements would be stipulated, where appropriate, as conditions of the various specific statutory approvals which the proponent would then have to obtain in order to construct and operate the project. If, even with mitigation measures in place, the project were to entail residual unmitigatable impacts on some resource values, compensation measures may have to be considered to supplement mitigation measures.***

## **11. WATER QUANTITY AND QUALITY**

- 11a) During the summer, the resort will consume the entire yearly water supply of this area. What will be the resort's winter water source?

***At this stage of the EA process, the project's water supply needs have yet to be adequately investigated and reported.***

***The basis for this particular contention is unknown to the project committee. However, the project committee notes that water supply sources and projected water volume requirements for all aspects of the proposed development are issues for which further information is required from the proponent in its project report - see section D.2(A) of the draft specifications.***

- 11b) There has been a gradual and drastic reduction in water flows in Dutch, Toby and Forster Creeks since early this century.

***The project committee has been advised by MELP (BC Environment) that, although Water Survey of Canada flow records for Dutch Creek and Forster Creek are too limited to show trends, records for Toby Creek are excellent, extending from 1912 to 1984. They do not indicate any reduction in flows in Toby Creek. In fact, for the period from 1980 to 1984, the total annual discharges and mean annual discharges are some of the highest on record. Thus, MELP finds no concrete support for this concern, although it is aware of public perceptions that lake and stream levels in the Columbia/Windermere area are lower than historically.***

- 11c) The proponent's application suggests both melting snow and truck transportation of water from Invermere as two possible sources of potable water. Both seem highly impractical and illogical.

***At this stage of the EA process, the project's water supply needs and sources of supply have yet to be adequately investigated and reported.***

***The proponent is proposing to obtain water primarily from groundwater sources, and possibly also from surface stream flows. The project committee is not aware that melted snow and/or trucked water have been suggested as possible water sources for any aspect of the proposed development's total water needs. Neither option is mentioned in the proponent's application. MoH has advised the project committee that variable quality may be a drawback to use of melting snow as a water source.***

***Water must be obtained from licensed sources, and proposed sources would be considered only where water removal would not adversely affect water supplies to existing downstream water license holders. For this project, further details of water requirements (for potable use, etc.), practical sources of water supply and an evaluation of the potential impacts of water removal from whatever sources are proposed will need to be reported in the proponent's project report - see section D.2(A) of the draft specifications.***

## **12. AIR QUALITY**

- 12a) Air pollution associated with the project would become intolerable. During winter temperature inversions, smoke which originates from diesel rail engines and the burning of wood wastes at sawmills already collects in the valley. The narrow Jumbo and Toby Creek valleys will funnel polluted air from the resort, combine it with the diesel fumes emanating from the Panorama ski resort, and add to the air quality problem in this part of the Columbia valley.

*At this stage of the EA process, the project's implications for on-site and off-site air quality have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.*

*At present, MELP is not especially concerned that the ski village would contribute significantly to deteriorating air quality in the Columbia valley. MELP operates a PM<sub>10</sub> monitor in Invermere, which has been recording the lowest levels of particulates found in any of the communities monitored in the East Kootenay region, although levels are elevated over rural sites. Most of the smoke detected in Invermere originates in the community itself. Generally, rural air quality throughout the Rocky Mountain Trench is excellent, with the occasional bad episode, either localized due to open burning, or valley-wide, due to huge sources like forest fires.*

*Thus, in the view of MELP (BC Environment), the primary air quality focus of attention with respect to this project should be the immediate environs of the resort and its residents. The project is located in a steep valley, and air pollutants will accumulate during temperature inversion conditions in the valley.*

*The project committee requires the proponent to demonstrate in an air quality assessment that local air quality will be protected. The proponent has been advised to commence PM<sub>10</sub> monitoring as soon as possible, in order to gather background data for this assessment. In addition to background monitoring, the proponent will be expected to inventory all potential sources of air emissions, using emission factors available in the literature, and to develop the project with air quality stewardship as one of the guiding design principles. Air*

*emissions sources associated with this proposal, and the potential for these emissions (in combination with air emissions from other nearby sources) to lead to air quality conditions which are out of compliance with ambient air quality objectives set by MELP, are matters which will have to be addressed by the proponent in its project report - see section D.1(G) of the draft specifications.*

### **13. FISH AND WILDLIFE RESOURCES**

- 13a) A 1993 Ministry of Environment, Lands and Parks assessment of the Toby Creek drainage fisheries revealed the presence of significant mountain whitefish and kokanee in lower Toby Creek, and bull trout throughout Toby Creek. Cutthroat trout are found in the lower reaches of Jumbo Creek, and that creek is at the upper silt tolerance level for cutthroat. What impact would access road and/or resort development have on these fish populations?

*The project committee agrees that certain fisheries impact concerns associated with both the resort and its access road remain outstanding. Additional fish inventory and impact assessment studies are being required for the project report - see section D.3(A) of the draft specifications. The project committee will not be in a position to draw conclusions on the likely success of measures intended to avoid, manage or compensate for these impacts until it has reviewed of the proponent's project report.*

- 13b) Jumbo and Toby Creeks flow directly into the headwaters of the Columbia River. The Columbia River wetlands have been nominated as a World Heritage Site for wetlands and are an extremely important migratory flyway for many species of birds.

*The strategy of the project committee will be to protect and preserve the water quality of Jumbo Creek, adjacent creeks which may be potentially affected by the development and all downstream areas. The quality of all water (including waste water) discharging into the Jumbo Creek drainage from the various components of the project will have to meet stringent standards - this is the only basis upon which the project committee would consider recommending approval of the project.*

*If the project were to be approved, water quality monitoring would be required in Jumbo Creek, and to a lesser extent, in Horsethief Creek, during both the construction and operational phases of the project. Assuming that strict water quality standards are met, the project committee has no reason to believe that the receiving waters of the Columbia River and associated wetlands will suffer adverse impacts. Additional water quality reporting requirements are outlined in section D.1(F) of the draft specifications.*

- 13c) With careful planning, as is outlined in the proponent's application, changes to wildlife populations can be enhanced through habitat improvement, in conjunction with an ongoing population survey.

*The potential to implement habitat enhancement programs as a form of compensation for wildlife impacts is relevant to the EA review of the project. While there may be some limited potential for enhancing wildlife habitats within the Jumbo Creek valley itself, both on-site and off-site, at least a portion of any required wildlife habitat enhancement may have to be implemented outside the Jumbo Creek valley in order to achieve meaningful results. Conceivably, such enhancement activity may be required for the life of the project.*

*The ability to address this issue will be a prominent consideration in the project committee's eventual recommendation for or against project approval at the conclusion of the EA review, and would be an important area for detailed negotiation between the proponent and government, should the project be granted a project approval certificate and proceed to the final design stage. The issue is noted in section D.3(B) of the draft specifications.*

- 13d) Wildlife populations can in fact be enhanced through habitat improvement.

*MELP has advised the project committee that this assertion is only true for selected species. Deer, black bear, Clark's Nutcrackers, ravens and crows, for example, appear to increase in numbers in the vicinity of human development (although whether or not the increase represents a real increase in numbers, or is the result of concentration, is a matter for debate). In any case, other species may not be enhanced by resort development and other types of human activity, and some*

*species are likely to suffer. Grizzly bears, mountain goats and cougars, for example, may be adversely affected.*

*The issue of habitat enhancement is complex, and will require attention in situations where the impact assessments conducted for this project indicate a likelihood of significant wildlife impacts - see section D.3(B) of the draft specifications.*

- 13e) This project can only have a negative effect on this area's wildlife and fish. Caribou, mountain sheep, mountain goats and other animals using Jumbo Pass need protection.

*At this stage of the EA process, the project's potential impacts on the area's fish and wildlife populations and habitats have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.*

*The project committee considers protection of viable fish and wildlife populations and their habitats to be a key priority in the review of this project. The assessment requirements outlined in sections D.3(A) through (E), (G) and (H) of the draft specifications are intended to address this issue, and to ensure that project approval is considered only if there is confidence that fish and wildlife impacts can be either entirely avoided or mitigated to reduce them to an acceptable and manageable level. An assessment focused on the wildlife use of Jumbo Pass is specifically required - see section D.3(B) of the draft specifications. See also responses to various other items in this section (e.g. items 13c), above, and 13g), 13h) and 13k), below).*

*The project committee notes that there is no clear evidence that either mountain caribou or mountain sheep occur either specifically within the Jumbo Creek valley, or more generally within the area of influence of the project.*

- 13f) The snow compacted by thousands of skiers will impact the food sources of wildlife.

*The project committee has been advised by MELP that it is unaware of any research findings which provide evidence that compaction of snow on glaciers by skiers would adversely affect alpine plant communities to any significant degree.*

*The grooming of ski runs which are located off glaciers may entail the removal of protruding vegetation, and no doubt compaction may affect vegetation to some extent. However, the project committee is more concerned with the potential impact of resort development on vegetation associated with a significant increase in summer foot traffic. Assessment of this issue is required in the proponent's project report - see section D.3(H) of the draft specifications.*

- 13g) The development will impact mountain goat kidding locations. Consultants note that goats are particularly susceptible to stress from humans and helicopter activity, something which would be impossible to avoid in the construction and operation of the resort.

*At this stage of the EA process, the project's potential impacts on mountain goat populations and habitats have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time. The project committee agrees that further reporting on the potential for impacts on mountain goats (and other wildlife species) is required in the proponent's project report.*

*The proponent has committed to complete the impact assessment phase of studies which were defined in terms-of-reference established and jointly agreed to by the proponent and MELP (BC Environment) in 1993, and to document the findings of this assessment in the project report - see section D.3(B) of the draft specifications. Based on this assessment, the potential for impact avoidance through strategies such as the imposition of access restrictions during the kidding period will be evaluated. Access restrictions to mountain goat wintering habitat will also be considered, especially since during winter, this species functions on an extremely low energy budget.*

- 13h) No studies appear to have been done on potentially threatened species such as wolverine and marten.

*The proponent provided extensive reporting on its studies of existing wildlife resources in the vicinity of the project development area in its June 1995 application (see Volumes 4 and 5 of that document). The application notes that the wildlife habitat mapping which was produced on the basis of these studies will facilitate impact assessment, but that such*

*assessments have yet to be undertaken. As noted in response to item 10a), above, under the EA process, detailed impact assessments are normally expected from the proponent at the second review stage (not in the initial application).*

*The project committee agrees that the potential impacts of the project on wildlife resources in general are relevant to the EA review of the project, and need to be addressed in the project report - see various components of section D.3 of the draft specifications.*

*The project committee also notes that one of the species mentioned here - wolverine - is classified by MELP as a "blue-listed" species, which means that it is considered to be vulnerable or sensitive to disturbance (MELP also recognizes "red-listed" species, which are considered to be candidates for legal designation as "threatened" or "endangered"). The project committee has identified the need for the proponent to focus specifically on potentially threatened and/or endangered species in its project report - see section D.3(E) of the draft specifications.*

- 13i) *Jumbo and Stockdale passes are two of the few passes used by wildlife to move across the Purcell divide. No other passes occur to the north until the Spillimacheen drainage. The Jumbo Glacier resort development will cut off this critical wildlife corridor.*

*At this stage of the EA process, the project's potential impacts on wildlife movements across the Purcell divide have yet to be adequately investigated and reported. Thus, the project committee has not reach any definite conclusions about this specific assertion at this time.*

*The value of Jumbo Pass to migrating animals was recognized during the CORE process, and influenced the CORE recommendation that no road should be built through the pass. Given that the proponent is not considering such a road, the project committee is satisfied that further consideration of highway development issues in the pass is not required.*

*Nonetheless, with respect to all wildlife species using Jumbo Pass, the project committee agrees that an assessment of potential impacts of increased hiking activity associated with the project is required - see section D.3(B) of the draft*

***specifications. In its project report, the proponent will also be expected to propose strategies for avoiding or managing such impacts, and for ensuring that wildlife is not deterred from using, and moving through, the pass.***

- 13j) The proponent's environmental impact study states that "...ungulate movements from Glacier Creek through the Jumbo Pass and into the Jumbo-Toby valleys may be an important aspect that needs further study..." Will there be a wildlife inventory of the Glacier Creek and Hamill Creek drainages?

***The project committee is not seeking a detailed inventory of wildlife in the Glacier Creek and Hamill Creek drainages. However, as noted in response to item 13i), an assessment of the potential impacts on wildlife using Jumbo Pass will be required - see section D.3(B) of the draft specifications. In addition, under section D.3(C) of the draft specifications, which addresses grizzly bear issues, assessment of the indirect effects of project development on species which make use of the Jumbo, Toby, Horsethief, Glacier, Hamill, Carney and Dutch Creek drainages will provide some additional insight into the potential impacts of resort development on these drainages.***

- 13k) Wildlife studies conducted for the proponent indicated a minimum of five to seven grizzlies in the Jumbo valley. Although it was unable to spend the time to achieve a full, accurate count, this is a very high density for an area of less than 200 square kilometers. This confirms that the Jumbo Creek valley provides exceptional habitat for grizzlies, and seasonally attracts bears whose home ranges cover a much larger adjacent area. Whatever affects grizzlies in the Jumbo valley will have serious effects on bears throughout the entire Purcell ecosystem.

***At this stage of the EA process, the project's potential impacts on grizzly bear populations and habitats have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about these specific assertions at this time.***

***The number of grizzly bears which actually use the Jumbo Creek valley throughout the average year may never be determined with complete accuracy. For this reason, the project committee accepts the advice of MELP that an assessment of the direct and indirect effects of the project on grizzly bears and their habitat, and of the cumulative effects of this and other developments on***

*the presence of the species in the area, is needed to provide the government with key information with which to evaluate the project.*

*The assessment and reporting requirements with respect to grizzly bear impacts have been developed by an independent consultant who has reviewed the background documents for this project review, as well as current literature on impact assessment methodologies for grizzly bears. The consultant has also conferred with involved government agencies and the proponent. The reporting requirements with respect to impacts on grizzly bears are outlined in section D.3(C) of the draft specifications.*

- 13l) Even if grizzlies are forced out of the valley, more habitat for wildlife would be created, since there would be less pressure from logging and mining companies on other adjacent areas.

*The trade-offs suggested here are difficult to weigh, and views vary on the validity of this assertion. Moreover, the grizzly bear is a "blue-listed" species (i.e. vulnerable) - see response to item 13h), above, for explanation of this term - and wildlife species which are rated as "vulnerable" or "threatened" need to be given special consideration.*

*More or less temporary resource activities such as logging (and in many cases, mining also), while reducing the usefulness of habitats for some wildlife species (often on a temporary basis only), may have the effect of enhancing conditions for other species. However, the construction of more or less permanent facilities for housing and infrastructure typically eliminates the usefulness of those areas for larger species of wildlife and/or sets up human/wildlife conflicts which lead to displacement of animals from the area around the facilities. Some species may be forced onto neighboring habitats which are less productive, or which are already occupied by competing animals. Thus, wildlife impacts associated with permanent facilities tend to be significant and long-term in nature.*

*The project committee considers the potential for wildlife impacts to be a key issue for the EA review of the project, and has identified various reporting requirements which focus on potential wildlife impacts, and the capacity to mitigate them -*

*see, for example, sections D.3(B) through (G) of the draft specifications.*

- 13m) The Jumbo Creek valley is the main breeding ground for grizzly bears in a large portion of Management Area 4-26, and as such, it is of regional significance to the grizzly. If the resort development goes ahead, the present habitat effectiveness of this area, to both grizzly and black bears, will be lost.

*See responses to items 13k), above, and 13o), below.*

- 13n) The proposal is located just outside the Purcell Wilderness Conservancy and is also close to the White Grizzly Wilderness, two areas which have dense grizzly populations. Neither park is large enough to be a self-contained habitat for large, wide-ranging wild animals. The resort development (with large numbers of people, garbage etc.) will produce major bear/human conflicts, resulting in injuries to humans and high grizzly mortality levels.

*At this stage of the EA process, the project's potential impacts on grizzly bear populations and habitats, including problems with bear/human interactions, have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.*

*The project committee recognizes the potential for bear/human conflicts to be a key concern with respect to the Jumbo Glacier project, and is seeking a high level of assurance that loss of bears and injury to humans can be kept to an absolute minimum. Under section D.3(G) of the draft specifications, the proponent is required to analyze the indirect effects of the project, including the possible attraction of grizzly bears as a result of the methods selected for disposing of garbage at the resort. The proponent is expected to propose measures which will be effective in preventing or mitigating bear/human conflicts, and in avoiding situations which may result in either injuries to humans or increased bear mortalities.*

- 13o) How can the government on the one hand produce the *British Columbia Grizzly Bear Conservation Strategy* (which excludes development of human habitation), and on the other hand allow a resort that will destroy prime grizzly habitat?

*At this stage of the EA process, the project's potential impacts on grizzly bear populations and habitats have yet to be adequately investigated and reported.*

*The project committee has been advised by MELP that, in itself, the 1995 British Columbia Grizzly Bear Conservation Strategy does not prohibit development of human habitation everywhere that grizzly bears occur, nor is it a suitable tool for reaching land use or project approval decisions, such as those associated with the proposed Jumbo Glacier ski resort. The intent of the strategy is to set out programs designed to reverse losses of grizzly bears, and to ensure that the species survives in British Columbia. Such programs include the establishment of grizzly bear management areas and expanded programming for research, scientific advice, public education and enforcement.*

*Nonetheless, as noted in response to item 13k), above, the proponent is required to complete a detailed assessment of the potential impacts of the project on grizzly bears - see section D.3(C) of the draft specifications. Any MELP recommendations or positions with respect to the implications of the project for grizzly bears will be made with full consideration of any relevant provisions or findings of the conservation strategy (such as those pertaining to inventory and research, changes in hunting regulations, increased enforcement and the prevention and avoidance of "problem" bear situations).*

## **14. WILDERNESS CHARACTER OF AREA**

14a) Whatever happened to "Super, Natural British Columbia"?

*"Super, Natural British Columbia" is an advertising slogan which has been used to promote both downhill skiing and wilderness tourism. In recent years, there have been many examples of use of the slogan in conjunction with the advertising of ski resorts elsewhere in British Columbia.*

14b) The proposed development could be undertaken in a manner which will enhance rather than destroy wilderness character.

*The project committee has received various comments of a similar nature. The sense in which such comments are usually intended is that the proposed resort will provide a staging point*

*for a more publicly accessible wilderness experience which will be designed aesthetically, so as to blend harmoniously with the surrounding area, without impairing its wilderness values.*

*From a strictly literal standpoint, however, wilderness values cannot be "enhanced" by development or other human activity since, by most formal definitions, wilderness areas are large, natural, unroaded, usually untouched areas.*

*In this case, the wilderness values of the project site and surrounding areas continue to be evident, despite the obvious imprint of human activities (e.g. logging and road access in the upper Jumbo Creek valley). The project committee is considering the potential effects of the project on various aspects of surrounding wilderness values - see, for example, sections D.3 and E.5 of the draft specifications.*

- 14c) The proposal is a "quality development" which should prevent "further erosion" of wilderness values.

The quiet majority of the area support the Jumbo Creek development, placing a priority on monitored and controlled growth.

*The project committee has received various comments of a similar nature. The sense in which such comments are usually intended is that the proposed resort will be a carefully monitored and regulated development, and that it will offer a high quality product which will act as a "magnate" for those seeking a wilderness experience in the region, leading to some sort of slow-down in the demand for human use of adjacent valleys (i.e. arresting, or even reducing, public use pressures in surrounding wilderness areas).*

*Whether this would be the case, in fact, would be largely beyond the control of the project's management, and would depend much more on future land management strategies and resource allocations in the area. In other words, the implementation of this resort has no direct bearing on whether or not there will be other future human incursions into surrounding backcountry areas.*

*In any case, placing a ski resort development in this location, while offering increased opportunities for the public to enjoy a very high quality wilderness environment, has the potential*

*itself to adversely affect surrounding wilderness values and uses. Various reporting requirements in the draft specifications are intended to focus on both sides of this question - the project's potential to enhance wilderness use opportunities, as well as its potential for adverse effects - see, for example, sections D.3 and E.5.*

- 14d) This project would mean that "many more people will get to enjoy nature's beauty and will be confined to a specific area, leaving many more thousands of acres available for the solitary hikers.

*See response to item 14c), above.*

- 14e) In the project proposal outline, the proponent states that its resort design would encourage ecotourism. Does the proponent really know and understand the essence of ecotourism? With a design capacity of 10,000 people per day, the definition of mass tourism would be more appropriate.

*The term "eco-tourism" is somewhat elusive, but the project committee understands that it is seldom applied to ski area development. The project committee does not consider the label applied to the project be a material factor in the assessment of its impacts.*

- 14f) It is only common sense to locate projects of this nature in areas where encroachment already exists.

*The project committee recognizes that there has been resource activity in the Jumbo Creek valley in the past, and that the site of the proposed resort and immediate vicinity continue to support a variety of uses and activities. However, it is also true, as noted in response to item 13l), above, that the impact implications of more or less temporary resource activities such as logging (and, in many cases, mining also), which have historically been present in the valley, may differ significantly from those associated with the construction of more or less permanent facilities for housing and infrastructure.*

*The project raises two basic issues for the project committee: (1) the scale and scope of potential impacts associated with relatively permanent development, as compared to the more transitory effects of past and current temporary resource extraction and outdoor recreational activities (e.g. heli-skiing,*

*snowmobiling and hiking); and (2) the extent to which the project's potential effects could spill over into adjacent drainages, which are currently in a less disturbed condition. Moreover, the project committee notes that it is one of the purposes of the EA process, regardless of the current condition of the project site, to assess the project's effects on land and resources, and on the current uses and users of the area.*

- 14g) Jumbo valley is an area that has already been extensively logged, and has experienced lots of human activity such as hunting, hiking, snowmobiling and skiing. It is no longer pristine and an architecturally aesthetic resort will enhance the valley..

*See response to item 14f), above.*

- 14h) The proposed development in the Jumbo Creek valley will not spread into an overdeveloped mega-resort, as some are predicting. Heli-ski operations in the Bugaboos remain small and contained, yet attract world-wide visitors to an internationally distinct setting.

*This comment alludes to the capacity for containment of both resort development and heli-ski activity.*

*With respect to the Jumbo Glacier project, the project committee agrees that containment of both the physical development and any associated adverse effects should be an important objective of project planning, and many of the reporting requirements outlined in the draft specifications are focused on evaluating the extent to which this goal can be attained. The committee also notes that, should the project be permitted to proceed, it would become subject to a detailed and specific regulatory management regime. The intent would be to ensure adherence to approved plans, and there would not be unrestricted latitude for unpredictable change and growth of the development.*

*That is not to say that, as the development is implemented in the future, the proponent would never be permitted to vary the development plans from those approved in the project approval certificate. However, any subsequent proposals to modify or expand the development would require government approval, which would be considered in light of government policies and regulatory requirements prevailing at that time. See also the response to item 15l), below.*

*As regards the comment on heli-skiing, a general-purpose evaluation of the impacts of heli-ski operations in the region is beyond the scope of the EA review of this project. In any case, it is not clear that meaningful conclusions can be drawn about the impacts of permanent resort development on the basis of experience with shifting and seasonal heli-ski activity.*

- 14i) What there is not “lots of” is accessible wilderness, like Jumbo Creek. Allow this development and you change the entire character of the area.

*At this stage of the EA process, the project’s potential implications for the wilderness character of surrounding areas have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.*

*In the broadest sense, the supply of “accessible wilderness” to Canadians and British Columbians is an issue which is beyond the scope of the EA review of the project. However, as noted elsewhere (see, for example, the responses to items 14f), above, and 14m), 14n) and 14o), below), the project committee agrees with the need to assess the potential for impacts on the character of surrounding areas within the Purcell Mountains (including their wilderness values) - see the reporting requirements outlined in section E.5 of the draft specifications.*

- 14j) Ski resort facilities of this type already exist in Europe. What makes Canada unique is the existence of extensive wilderness areas without such commercial developments. This, rather than the Jumbo Glacier resort type of development, is what attracts tourists from Europe.

*The project committee agrees that the potential for project impacts on surrounding wilderness values and uses (including the more extensive types of wilderness use) fall within the scope of the EA process, as noted in response to other items (see, for example, the responses to items 14f), above, and 14m), 14n) and 14o), below).*

*However, the project committee considers both the existence of ski resorts of this type on other continents and the overall “supply” of wilderness in Canada to be beyond the scope of the EA review of this project. With respect to the means of assuring a “supply” of wilderness, the project committee is cognizant of*

*the fact that views vary on the best way to manage and use wilderness areas and preserve wilderness values - see response to item 14o), below.*

- 14k) Mount Assiniboine Park has many visitors from England, Australia, Austria, Germany and Japan. These countries had places like this once, but developed them and they lost their naturalness. This should not be allowed to happen here.

*The project committee agrees that the impact of the project on natural areas within both the "footprint" and the zone of influence of the project is a key consideration for the EA review of the project, as noted in response to item 14l), below.*

*However, the more general question of setting aside and preserving parklands or other forms of protected areas is beyond the scope of the EA process, and is more properly addressed in the context of land use planning processes such as the recently-concluded CORE planning processes for the Kootenay region, which led to the release of the East Kootenay and West Kootenay-Boundary Land-Use Plans in March of 1995. Those planning processes gave considerable attention to the matter, and as a result, significant new lands have been added to the protected area land base. These same processes led to designation of the Jumbo Creek valley as a Special Resource Management Zone within which a ski resort may be acceptable, but recommended that the project be subject to detailed consideration under the EA process.*

- 14l) If this area has an obligation to the international community, it is to retain the naturally functioning ecosystems that have already been lost in so much of the world. This is what makes the area unique.

*As noted in response to item 2c), above, and item 14o), below, decisions about which areas (and ecosystems) should be afforded complete protection are derived from land use planning processes such as the CORE process, which has now reached the management-objectives-setting stage in the Kootenay region. The project area is located within a Special Resource Management Zone, within which any activity may be permissible if compatible with sensitive natural and cultural values.*

***The project committee agrees that an examination of the impacts of resort development on the continued health of naturally functioning ecosystems in the vicinity of the project must form a necessary element of the EA review of the project. Relevant reporting requirements with respect to the project's potential impacts on the surrounding environment are outlined throughout section D of the draft specifications.***

- 14m) The unique, guided mountain experiences offered in the area would be significantly and negatively impacted by the development of the Jumbo basin. Participants seek the solitude of unspoiled mountain areas, and from the high peaks of the Purcell Range, they are able to scan great distances, and to reflect on the precious lack of human intrusion. There are very few places left where one can find this, away from heli-hiking in the summer and heli-skiing in the winter, yet the demand for such experiences has been increasing.

***At this stage of the EA process, the project's potential impacts on surrounding wilderness values have yet to be adequately investigated and reported.***

***The project committee agrees that the potential impact of the proposed resort development on the capacity of people to experience and enjoy the surrounding area's wilderness values is one of the key considerations for the EA review of this project. The committee is weighing this concern against the views of project supporters who contend that the project is one possible means by which to increase the accessibility of mountain-top experiences to the public, and that the effects of the project may be more concentrated and more contained than those of heli-hiking.***

***A range of reporting requirements, intended to address various aspects of the project's wilderness impact potential, are outlined in the draft specifications - see, for example, sections D.3 and E.5. The implications of the resort (both positive and negative) for other existing and potential tourism and recreation uses (e.g. commercial backcountry recreation operations) within the area specifically need to be examined - see, for example, sections E.5(A) through (G) of the draft specifications.***

- 14n) The meadows and forests of the Jumbo Pass area are a great attraction for botanists and wildlife viewers.

*Based on the proponent's application, it is the project committee's understanding that there will be no direct physical development disturbance in the immediate vicinity of the Jumbo Pass, since no project components are to be located there. Nonetheless, the project committee agrees that the potential indirect (or spillover) effects of the proposed resort development on the wilderness values of the surrounding area, and on the other existing and potential tourism and recreation uses of the area, is one of the key considerations for the EA review of this project.*

*With specific reference to the point raised here, the project committee recognizes that there may be some potential for indirect impacts on Jumbo Pass, induced by the increased human presence associated with the resort. Concern has been expressed that operation of ski lifts to support summer skiing, sightseeing and hiking activity could result in an increase over current levels in backcountry recreational activity and other human activity in alpine areas adjacent to (as well as within) the proposed resort. The potential increase in activity, the anticipated effects of this activity on alpine areas, and on the other existing and potential tourism and recreation uses of such areas, and any proposals for mitigating adverse effects (e.g. by managing and limiting foot access to the surrounding area from the resort) need to be addressed in the project report - see, for example, sections E.5(A) and (B) of the draft specifications.*

*See also the response to item 13i), above.*

- 14o) The mountains have spiritual value. A fisher does not go outdoors simply to catch fish nor the hunter only to bag big game. The hiker is not out there merely to record kilometers traveled nor the mountaineer to check the altitude of the summit climbed. They all go to the "wild places" to soothe their souls. The Jumbo Glacier project would intrude on such a "wild place".

*In considering this point, the project committee recognizes that much of the project development site is surrounded by relatively undisturbed wilderness areas, although the Jumbo Creek drainage itself has witnessed significant resource use activity in the past, and its wilderness values have already been affected as a result. At this stage of the EA process, the project's potential implications, both positive and negative, for enjoyment of wilderness values within and beyond the Jumbo*

*Creek drainage have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.*

*The project committee notes that recognition of the importance of wilderness areas - for their spiritual and other values - is a growing priority for government, and is now exerting a key influence on land and resource allocation policies and practices in BC. However, public views vary on how best to manage wilderness values, and more specifically, on how to evaluate the trade-off between full protection vs. management regimes which foster varying degrees of public access to, and enjoyment of, wilderness areas.*

*Government has responded to the situation by adopting a mix of approaches. Granting protected area status is one prominent wilderness protection tool. Its use is evident in the province's efforts, through land use planning processes and other means, to increase the protected area land base in BC to 12%. In the Kootenay region, about 13.6% of the land base has been set aside by the East and West Kootenay land use plans (the figure is closer to 16.5%, when the East Kootenay region is considered by itself).*

*At the same time, outside protected areas, the land base may accommodate a potentially broad range of activities. Government has stressed that ground-level access to all areas outside protected areas is permissible for resource use purposes. Thus, management of such areas in a "roadless" state exclusively to protect wilderness values will not normally be possible. However, even in these areas, land and resource management regimes are increasingly making provision for resource use activities to be sensitive to significant wilderness values, where they occur. Indeed, such activities may often depend on the maintenance of those values. For example, outside protected areas, government programming is attempting to foster sensitively designed backcountry recreation initiatives at all scales which market wilderness experiences, including everything from one-person guiding operations to full-scale resort developments. This is considered one viable strategy for diversifying what has historically been BC's predominantly resource extraction economy.*

*The project committee, in conducting the EA review of the Jumbo Glacier project, is placing a significant focus on assessing the*

*potential for adverse effects on surrounding wilderness values in the Purcell Mountains, and on evaluating the pros and cons of improved public access to wilderness experiences vs. any consequential degradation of wilderness values - see, for example, the reporting requirements outlined in sections D.3, E.5 and E.6(B) of the draft specifications.*

- 14p) How will the Purcell Wilderness Conservancy Provincial Park be affected? This development would undoubtedly result in increased use of the Conservancy. Opening the area to so many humans would impact the Conservancy and its intent.

*At this stage of the EA process, the project's potential impacts on the Conservancy have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time. MELP (BC Parks) has advised the project committee that it places a high priority on maintaining the uniqueness and wilderness values of the Conservancy. The project committee is addressing the issue raised here in its review of the project.*

*The project committee notes that it is not clear how accessible the Conservancy will be to hikers from the project site, since there is no obvious ground-level access which would not entail a long hike over rugged terrain. In any event, as noted in item 3d), above, in areas around the project site where there will be no direct development disturbance, such as within the Conservancy, the project committee's focus of interest will be placed on the potential for indirect impacts, induced by the increased human presence associated with the resort. The proponent will be expected to evaluate the potential for resort clientele to travel to the Conservancy, and will be required to develop practical strategies for limiting the amount of foot access beyond the confines of the proposed development - see, for example, sections E.5(A) and (B) of the draft specifications.*

- 14q) Why is the Jumbo Creek area not left as a buffer for the Purcell Wilderness Conservancy Provincial Park?

*See response to item 14p), above, with respect to required assessments of the potential impacts of the project on the Conservancy.*

*The project committee is aware that the October 1994 CORE Report listed "protected area support zone" as one of the resource emphasis values identified in the Jumbo-Upper Horsethief Special Resource Management Zone (SRMZ). However, the East Kootenay Land-Use Plan, announced by the government in March of 1995, did not designate this SRMZ to be either a protected area itself, or a buffer zone for the Conservancy. In SRMZs, a full range of resource activities are permitted, subject to careful management of important sensitive values. Although the March 1995 plan did not stipulate the special values for which this SRMZ is to be managed, a program to define management objectives for this and other SRMZs in the Kootenay region is now underway, and may clarify this issue.*

*See also the responses to items 2c), 2e) and 2g), above.*

- 14r) Man-made structures will be visible from most peaks within a radius of 20 kilometers, and this will undermine the wilderness character of nearly 126,000 hectares of the highest Purcells, including the northern portion of the Purcell Wilderness Conservancy Provincial Park.

*At this stage of the EA process, the project's potential visual impacts on surrounding wilderness values have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.*

*The project committee agrees that the potential for visual impact on wilderness activities in surrounding areas is relevant to the EA review of the project - see section E.5(C) of the draft specifications.*

- 14s) The headwaters of Glacier Creek have become an important area for West Kootenay non-motorized backcountry users. The proposed ski resort would be visible from the Jumbo-Glacier Creek height of land, and would have a negative effect on the semi-wilderness status of this area.

*At this stage of the EA process, the project's visual impacts and other implications for backcountry recreational use of the surrounding area have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.*

*The project committee agrees that the potential impacts of the project (including visual impacts) on surrounding wilderness use by backcountry recreationists are relevant to the EA review of the project, and need to be addressed in the proponent's project report - see, for example, sections E.5(A) through (D) of the draft specifications.*

*See also responses to items 14m), 14o) and 14r), above, and 23a), below.*

#### **IV. ECONOMIC ISSUES**

##### **15. PROJECT FEASIBILITY AND CLIENTELE**

- 15a) To date in western Canada there has not been an opportunity for year-round skiing and village accommodation comparable to Swiss resorts.

A year-round resort (similar to Swiss resorts) would provide immense economic benefits.

*The project committee considers the comparative features of the project and those of Swiss resorts to be generally beyond the scope of the EA process. Nonetheless, the project committee notes its understanding that this type of skiing experience is not available elsewhere in western Canada. The latter point is a factor which would be expected to influence the anticipated market for the Jumbo Glacier resort. This potential market is one aspect of project feasibility which will be subject to independent assessment during the course of the EA review of the project - see section B.4 of the draft specifications.*

- 15b) There is a need for year-round skiing and village accommodation and the need for at least one resort of this type in the province (no similar resort now exists).

There is a need in BC for high alpine skiing facilities, accessible by lifts rather than by helicopter.

*See the response to item 15a), above.*

***The project committee recognizes the current lack of summer skiing opportunities and training facilities in BC. Some of the study requirements noted in the draft specifications, including the independent assessment of project feasibility - see section B.4 of the draft specifications - are intended to determine whether or not catering to such needs will generate an adequate market or assure the economic feasibility of the project.***

- 15c) This project will assist in the training of athletes (ski racers), especially in the summer and fall months, when skiing is only possible through expensive travel.

***This project's usage by ski racers will be addressed as part of the market analysis which is required for the EA review of this project - see responses to item 15e), below. The project committee has been made aware of correspondence from the Canadian Alpine Ski Team which expresses support for the opportunity to access year-round ski facilities (for example, in a letter of July 19, 1996 to the proponent).***

- 15d) BC has inadequate summer training facilities (necessitating out-of-province travel, and even out-of-country travel). This project would allow Canadians and British Columbians to train at home rather than seek expensive facilities elsewhere.

***See the response to item 15a), above.***

- 15e) In Europe there is a steady downward trend in the popularity of summer skiing, and it only appeals to a very small sector of the population. Has there been any independent review of this?

Worldwide, there is a lack of public interest in summer skiing, and there are few recreational skiers using glaciers because of the limited terrain and the difficult, slushy snow conditions. Glacier skiing is mainly utilized for ski team training. At Mount Hood, one ski lane is reserved for the public, while 15 to 25 lanes are allocated to the various race teams.

***The project committee considers the status of the summer skiing market in Europe to be beyond the scope of the EA review of this project. However, this project's summer skiing conditions and the marketing of the resort, and specifically the summer skiing market, are relevant to this review. The proponent is expected to incorporate a detailed resort plan, which will include a***

*market analysis, in its project report - see sections A.2, A.3 and B.4 of the draft specifications. See also the response to item 5g), above.*

*For the purposes of the EA process, the proponent is not required to provide the level of detail which would be necessary for a decision on a ski resort master plan approval. The final details of the proponent's master plan would only be submitted for Land Act approval (to MELP [BC Environment and Lands]) if the project is granted a project approval certificate at the conclusion of the EA review. Thus, in this case, while some additional marketing information is required, much of the market analysis which is considered necessary for EA review purposes has already been provided in the proponent's application (see Volume 2, chapter 6).*

*The project committee also notes that, under the provincial Commercial Alpine Ski Policy (CASP) review process, it is normal practice for the proposed ski area master plan, including a detailed market analysis, to be reviewed by a recognized arm's length consultant, commissioned by MELP and MEI. The detailed resort plan which is referred to above, including details of the market analysis, will be subject to an independent evaluation, commissioned as part of the EA review of the project.*

- 15f) Every year, the Whitewater ski facility, and also the Red Mountain resort at Rossland, Snow Valley at Fernie and the Kimberley ski area, close operations after the Easter holidays, due to a reduced number of skier visits, even though there is still plenty of snow. Is there really a year-round market?

*With respect to the overall question of the market for this resort, see the responses to items 15i) and 15k), below.*

*MEI has advised the project committee that BC's ski areas continue to report a year-to-year aggregate total increase in skier visits, including increased summer and off-season use of established resort facilities. However, even where snow is still present, skiers will be discouraged where the condition of the snow is deteriorating, and this would be a factor in the market for summer or other off-season skiing at some sites. The proponent's application indicates that it is proposing to offer a*

*different product, which would be better compared with the continued growth of summer skiing at Blackcomb.*

- 15g) The phased-in development, and the fact that the entire project will not be owned and operated by one developer, eliminate the risk of project bankruptcy and the subsequent need for public money.

*At this stage of the EA process, the project's economic and financial viability have yet to be fully investigated and reported, and, while multiple ownership may reduce overall financial risk associated with the project, more information is needed to evaluate that. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.*

*As noted in the response to item 15h), below, financial and market information filed by the proponent is to be subject to expert review by an independent consultant commissioned by the project committee - see section B.4 of the draft specifications.*

- 15h) How do we know that the entire project will be economically viable? The proposal fails to demonstrate this. Full disclosure of investors, financial arrangements and performance guarantees must be included in the terms of reference.

At a time when downhill resort costs are escalating, competition is increasing and subscribers are falling, the success of this proposal is, at best, suspect, particularly given its location in a remote, semi-wilderness valley.

*Under the Commercial Alpine Ski Policy (CASP), ski resort proponents are required to provide financial and marketing plans with their application documentation. The information (which covers such items as project capital costs, proposed financing, operating revenues and costs, proposed market share and other details) is needed to evaluate the overall economic viability of the proposal in comparison with other western Canadian ski resorts.*

*Under CASP, this information is subject to expert third-party analysis to obtain an independent view of overall of project logistics, feasibility and marketability. As in any business venture, such third-party evaluations cannot foresee every eventuality, but they should provide advice in which the parties*

*to the review can have a reasonable level of confidence, providing that care is taken with the selection of appropriate independent expertise. This provision of CASP is being incorporated into the EA process. During the course of the EA review of the project, the project committee will commission an independent evaluation of project feasibility - see section B.4 of the draft specifications.*

*Given that beforehand market evaluations may reveal financial risk if the project proceeds, the project committee also notes that MELP (BC Environment and Lands) has the capacity to require the posting of performance bonds as a condition of the issuance of Land Act tenures such as leases or licenses. Performance bonds are intended to guard against unanticipated project shutdowns (e.g. associated with financial problems). Such bonds may be applied to the costs incurred either to complete the construction of facilities, or to remove facilities and rehabilitate the disturbed land.*

- 15i) It is highly unlikely that the business plan upon which this project is based will be achieved. In the case of the Panorama ski resort, for example, its owners' original business plan projected a demand for 11,000 beds. Currently, there are actually approximately 1,500 beds, and the revised projections estimate that demand now justifies growth to only 3,000 beds.

*With respect to the assessment of project viability which is required as part of the EA review of this project, see the response to item 15h), above.*

*The project committee notes that it is the provincial CASP policy which requires a proponent to submit a plan for the full development potential of the proposed site for a ski resort. It is true that ski resorts do not always develop in the manner indicated in initial plans (e.g. implementation may prove to be a more protracted process than initially estimated). Thus, once a ski resort project is underway, changes in the initially-approved development plans may be permitted as the project progresses, where this is necessary to respond to changes in market demand, technology, etc.*

*If the project is certified at the conclusion of the EA process, the proponent will then need to negotiate a Master Development Agreement and Ski Area Master Plan with MELP (BC Environment*

*and Lands), which will detail the expected project phasing and performance-related conditions, including the necessary actions and procedures to be followed in the event that there are changes or amendments to the plan over time.*

- 15j) The proponent's projections call for gross revenues of \$2.75 million per year in each of the first three years of operation, which they expect to jump to \$12.5 million per year in years 8 and 9. These sales projections do not appear to have any basis in reality.

*With respect to the assessment of project viability and markets which is required as part of the EA review of this project, see the responses to items 15h), above, and 15k), below.*

- 15k) Has the project committee arranged an independent review of current tourism trends in the U.S.A. and Europe?

*The project committee agrees that the tourism market for the resort is relevant to the EA review of the project, although, at this stage of the EA process, this market has yet to be adequately investigated and reported. Having said that, the project committee considers wide-ranging market research on tourism trends in the U.S.A. and Europe to fall outside the scope of the EA review of the project, beyond referring to these trends in verifying, to some reasonable degree, the marketing plan provided by the proponent in its project report.*

*Under the Commercial Alpine Ski policy (CASP), ski resort proponents are required to provide a marketing plan which clearly defines the tourism products to be offered, and the anticipated markets for these products. Under CASP, project design, the market plan and other financial information are then subject to expert third-party analysis to obtain an independent view of overall project logistics, feasibility and marketability, and this approach is being adopted for the EA process. During the course of the EA review of the project, the project committee will commission an independent evaluation of project feasibility - see section B.4 of the draft specifications.*

- 15l) Is there a contingency plan if the development proceeds, but not as planned?

*It is often the case, particularly where projects have lengthy (i.e. multi-year) development timetables, that as project*

*implementation proceeds, a proponent will want to make adjustments to some aspect of the project proposal as originally approved, perhaps in response to unanticipated site conditions or changing markets or technologies.*

*Thus, once an approved development is underway, its proponent is permitted to apply to amend the details of its project as originally certified under the Environmental Assessment Act. The means by which this may be done lawfully are summarized in the Preface to the draft specifications (see section 8.6 - Post-certification Phase - Review of Future Proposals to Modify a Certified Project). That section of the Preface indicates that the review mechanism used to evaluate such applications will vary, depending on the nature of the modification or expansion for which approval is sought. In principle, four situations could arise:*

- Where the modification is itself automatically reviewable under section 3 of the Act, the EA process will apply.*
- Where the modification is not automatically reviewable under section 3 of the Act, it may be reviewable under the Act nonetheless, if provision has been made, in the conditions of the project approval certificate, for EA review of that particular type of modification. This could occur where adherence to a particular feature of a project plan or approved management measure is considered critical to the public acceptability of the project.*
- Where the modification is not automatically reviewable under section 3 of the Act, the Minister of Environment, Lands and Parks may elect to use his/her discretion under section 4 of the Act to designate the project modification to be reviewable, providing that the modification has not been substantially started.*
- Where none of the above circumstances apply, the modification would normally be reviewable under the routine regulatory approval processes of relevant provincial, federal and/or local government agencies.*

*Except where applications to amend existing project approvals are lawfully approved, the expectation is that the project must be developed in the manner approved at the outset. Enforcement issues related to ensuring that a project proceeds in accordance with the approved plans will be a key focus of the project committee's evaluation of the project at the project*

*report review stage. The regulatory framework for project development, if the project is approved, will include, in addition to the project approval certificate, a Master Development Agreement and Ski Area Master Plan approved under the Land Act. Both documents would typically provide recourses in the event of non-performance, project delays or business interruption.*

- 15m) Is Pheidias Project Management Corporation a reputable developer? What is the track record of the developer? How many developments has it implemented, and where?

*Information on the proponent which has been made available to the project committee thus far is to be found in the proponent's application documentation - see sections 1.1 (Volume 1) and 7 (Volume 2) of the application.*

*MEI has advised the project committee that some company directors and investors are established Canadian business people who operate similar or related business ventures. As part of the independent evaluation of project feasibility, which is referred to in response to item 15h), above, the past performance of the development partners in managing similar projects will be considered - see section B.4 of the draft specifications.*

- 15n) There is serious doubt that this resort would be properly managed, since the proponent's Board of Directors and Officers have no experience in operating a ski resort.

*See the response to item 15m), above. Some (at least) of the Directors of the proponent company (Pheidias) are directly involved in ski resort management.*

*BC Environment and Lands has advised the project committee that, while government is expected to monitor and inspect ski operations for compliance with approvals, the government does not either oversee or approve the appointment of ski resort managers - this is the function of the private sector, and as such, is beyond the scope of the EA process, although broader questions relating to the proponent's experience and management approach will be addressed at the project report stage - see sections B4 and F.1 of the draft specifications.*

- 15o) Little or no consideration seems to have been given to the running of the resort, reflecting the proponent's "development only" role.

*The EA review of this project is expected to address operations at the resort, as well as its design and construction. Some of the issues for which additional reporting is required from the proponent relate to the management of resort operations.*

*With respect to the ownership of the resort, see also the response to item 15m), above.*

- 15p) Though we hear the term "four-season ski resort", this is actually a real estate development which will start off with 172 residential lots in addition to the main village. This is a land grab, and the land is being provided free of charge.

*The policy with respect to the provision of Crown land for ski resort development purposes, including the sale of land for single family lots, and the pricing of that land, are outlined in response to item 16d), above.*

*Under CASP, the sale of land for private lot development is phased in accordance with scheduling established in the resort's Master Development Agreement and Ski Area Master Plan, which would have to be finalized between MELP (BC Environment and Lands) and the proponent if the project is approved at the conclusion of the EA review. Thus, the private lots which are planned will not be created in a single step at the outset of project development. Rather, land will be released for this purpose on a progressive basis, over time, tied to the resort owner's investment in publicly-available recreation facilities. The proponent's application material indicates that no private single family lot development is contemplated until the third and final phase of the project.*

## **16. PUBLIC SECTOR COSTS**

- 16a) Do government financial planners have a grasp of how much this project will drain from regional revenues, or how much it will add to public debt?

*At this stage of the EA review of this project, the respective public and private sector responsibilities for meeting the*

**project's various funding needs, and the net financial implications of the project for the public sector, have yet to be adequately investigated and reported.**

**The project committee agrees that impacts of project development on government costs and revenues are relevant to the EA review of this project, and that further analysis is required at the project report review stage - see sections E.7 and E.8 of the draft specifications.**

- 16b) The area has incredible wilderness, social, economic and tourism values, and maintaining the status quo will not cost the taxpayer anything.

**The implication of this statement is that the project will not enhance, or will negatively affect, these values. In preparing its report and recommendations for Ministers following review of the proponent's project report, the project committee will develop some form of summary of the project's implications (i.e. pros and cons, or benefits and costs) for the communities, environment and economy of the local region. All of the reporting requirements outlined in the draft specifications, including both those for which the proponent is responsible and those for which the project committee intends to solicit independent consulting advice, will contribute to this evaluation.**

**Specifically with respect to costs which may be incurred by taxpayers (i.e. public sector costs), the respective public and private sector funding responsibilities for various components of the project are considered relevant to the EA review of the project, and further analysis will be required in the proponent's project report - see, for example, sections E.7 and E.8 of the draft specifications. See also the response to item 16i), below.**

- 16c) Will taxpayers end up subsidizing the resort, and who will pay in the event of financial failure?

**At this stage of the EA review of this project, the respective public and private sector responsibilities for meeting the project's various funding needs have yet to be fully clarified.**

**The proponent's stated intent is that the project will be a privately funded development, and that the financial risk will**

*rest with the project proponent. If the project is certified at the conclusion of the EA review, a Master Development Agreement will then have to be concluded between the proponent and the province which, in part, is intended to secure the province's position and reduce its risk in the event of financial failure.*

*As part of the assessment of financial risk, the proponent will be required to submit further information on its projected market for review during the project report review stage - see section B.4 of the draft specifications. Moreover, the project committee also notes that, under the provincial Commercial Alpine Ski Policy (CASP) review process, it is normal practice for the proposed ski area master plan to be reviewed by a recognized arm's length consultant, commissioned by MELP and MEI. Financial feasibility of the project, including the cost implications of key facilities and services, will be incorporated into this independent evaluation, which will be commissioned during the course of the EA review of this project - again, see section B.4 of the draft specifications.*

*With respect to the relative public sector and private sector financial responsibilities, see also response to item 16b), above.*

- 16d) The application does not contain any information on the land grants or start-up costs for land acquisition. What are the land tenuring arrangements to be? Does the proponent expect the government to give fee simple title, or a long-term lease, to a tract of land at little or no cost? To provide under-priced land, which will eventually become subdivided real estate for condos and cottages, is to provide the proponent with a huge public subsidy.

*Under the provincial Commercial Alpine Ski Policy (or CASP), the land tenuring requirements for ski resort development are established in the Master Development Agreement and Ski Area Master Plan which are authorized under the Land Act prior to any resort development. In this case, the Master Development Agreement and Master Plan will not be finalized and approved unless the project is first granted a project approval certificate at the conclusion of the EA process.*

*With respect to the status of lands at a ski resort, under CASP, MELP (BC Environment and Lands) designates as a "Controlled Recreation Area" (or CRA) those Crown recreation lands over which it will have administrative and regulatory responsibility*

*during resort operations. Within a CRA, rights to occupy and use land may be allocated under the terms of a mix of three types of Crown land tenures, each of which would normally be issued for a 50-year term, corresponding to the term of the finalized Master Development Agreement. Licenses of occupation are issued for ski runs and trails. A Crown land lease is issued for the base area development. Statutory rights-of-way are issued for the lift lines. Within a CRA, the owner of the ski area manages Crown lands in accordance with the Master Development Agreement and Master Plan, and controls access and egress by the general public.*

*Under CASP, fee simple lands may be created at a ski resort, as is proposed in this case, through direct sales of Crown land for both commercial and residential purposes. Typically, lands used for purposes other than ski terrain, the main lodge and the ski run maintenance facilities would have fee simple status. The land base for ski terrain, the main lodge and ski run maintenance facilities typically retain their Crown land status, since this simplifies any necessary government response to management-related or financial problems at the resort.*

*Fee simple status could be accorded to lands which are to be used for single family residential purposes, shops, hotels and other recreational facilities. Fee simple lands are not part of the CRA, and are subject instead to any Official Community Plan and zoning bylaws enacted by local government (in this case, by RDEK). MELP (BC Environment and Lands) makes base lands available for direct sale in a phased manner, as noted below, with sales effected by subdividing land in accordance with Land Title Act requirements, and in compliance with both MoTH standards for subdivision in unincorporated areas, and any relevant provisions of local government Official Community Plans and zoning bylaws.*

*Costs to acquire rights to use Crown land are established for ski resorts under the CASP process. The CASP pricing policy for direct sale of Crown lands to private parties at ski resort lands was recently revised (on February 23, 1996). This is the pricing policy which is presently applicable in the case of the Jumbo Glacier project. This latest pricing policy establishes that the sale price for fee simple lands at ski resorts in the Interior of the province in the first 10 years of the Master Development Agreement is the greater of \$2,500 per acre or the appraised value of the land (appraised as raw, unzoned, unserviced, land).*

*From years 11 to 15, the sale price is the greater of \$5,000 per acre or 5% of the appraised value of the land (appraised on the basis of intended use). From years 16 to 20, the sale price is the greater of \$5,000 per acre or 10% of the appraised value of the land (appraised on the basis of intended use). It should be noted that the CASP pricing policy to purchase Crown land is subject to change, and in any given year of a ski resort's development, the price charged will be determined by the pricing policy in effect at that time.*

*The Master Development Agreement and Ski Area Master Plan establish a staging for the sale of Crown land for commercial and residential purposes, so that Crown land is released progressively over time, tied to the phasing of the overall resort. In other words, the private lots are not all created at the outset of the resort development. For example, in a typical situation, no land would be sold for commercial or residential purposes until the first-phase recreational facilities have been substantially installed.*

*With respect to leased Crown land at a ski resort, the rental rates have been set for some time. Under the CASP policy, a single annual fee is charged to occupy Crown land within the CRA, no matter what the extent and mix of tenure types. The fee is currently set at 2% of gross lift revenue per year, with a minimum of \$500.00 per year (the latter figure would apply where gross lift revenues do not exceed \$25,000 per year).*

- 16e) There must be no grants, no give-aways and no front-end costs to be borne by the public purse in return for the promise of future tax dollars. The risk must be born 100% by the proponent.

*At this stage of the EA review of this project, the respective public and private sector responsibilities for meeting the project's various funding needs, and the net financial implications of the project for the public sector, have yet to be adequately investigated and reported.*

*The project committee is not aware of any requests by the proponent for direct government financial assistance. With respect to the broader issue of costs incurred by taxpayers (i.e. public sector costs), see the project committee's responses to various items in this section (e.g. items 16c) and 16d), above, and 16f) and 16i), below).*

- 16f) Who will pay for the massive construction of the road to the proposed resort? Will the Ministry of Transportation and Highways become obligated to maintain road access once the Jumbo Creek road has been upgraded, and will the taxpayer bear the burden for keeping it open?

***At this stage of the EA review of this project, the respective public and private sector responsibilities for funding the project's access road upgrading and ongoing maintenance requirements have yet to be fully clarified.***

***Given the intent of the proponent to seek private land status for some project components, including residential components, it will be necessary for the access road to have "public" status at some point in the phasing of resort development. Relative responsibilities for access road construction, operation and maintenance are considered relevant to the EA review of the project, and further analysis of costs and respective public sector and private sector funding responsibilities is required at the project report review stage - see, for example, sections E.6(B) and E.7(M) of the draft specifications. A cost-sharing arrangement similar to those concluded between the province and other ski resort owners in British Columbia (e.g. at the Mount Washington ski resort on Vancouver Island) is one possibility.***

***See also response to item 16i), above.***

- 16g) If the proponent's estimates are accurate, at least \$14 million of the investment for the service corridor and the last leg of the access road must be made before the proponent can build the first hotel. Will the initial tenure fees cover this cost, or will public funding be expected?

***At this stage of the EA review of this project, the amount of funding needed for, and the respective public and private sector responsibilities for funding of, the project's road access and service corridor requirements have yet to be fully clarified. The project committee is not aware of any current request by the proponent for government funding assistance for development of either the service corridor or the last leg of the access road.***

***In response to the final question here, MELP has advised the project committee that tenure fees which are imposed under the***

**CASP pricing policy are not intended to cover road costs. With respect to land acquisition costs, see the response to item 16d), above. With respect to the relative responsibilities of the public and private sectors for funding access road development, see the responses to items 16c) and 16f), above, and 16i), below.**

- 16h) Avalanche control, which the proponent has identified as an important need, has not been costed. The baseline costs of maintaining a crew and equipment have not been estimated in the application package.

**At this stage of the EA review of this project, the costs of avalanche control have yet to be fully clarified.**

**Responsibilities for avalanche control and associated costs are relevant to the EA review of this project, and will have to be estimated by the proponent in its project report - see section E.6(D) of the draft specifications. With respect to the assignment of funding responsibilities for avalanche control along the access road, see response to item 16i), above. On-site avalanche control at the resort is the responsibility of the proponent, and further information on how this is to be achieved is required in the project report - see section C.3 of the draft specifications.**

- 16i) Who will pay for managing avalanche hazard?

**The project committee is not aware of any current request by the proponent for government funding assistance for avalanche control purposes.**

**At this stage of the EA review of this project, the respective public and private sector responsibilities for funding avalanche control and other access road maintenance costs have yet to be fully clarified. The issue is relevant to the EA review of the project, and further analysis of costs and funding responsibilities will be required in the proponent's project report - see sections E.6(D) and E.7(M) of the draft specifications.**

**The project committee's approach to costing and cost allocation issues of this type is as outlined in section A.5 of the draft specifications. In its project report, the proponent is invited to document its own views on the appropriate allocation of respective responsibilities between itself and other parties for**

**the planning, construction, operation and maintenance of project-related facilities (e.g. the access road), the delivery of specific services (e.g. avalanche control) and any related liabilities. Where not intending to be responsible for particular facility construction and management or service delivery requirements of the resort, the proponent, in its project report, will also be expected to demonstrate that it has obtained the agreement in principle of any other parties (government or otherwise) to accept responsibilities of this type.**

- 16j) Opening access to these glaciers will lead to the need to accomplish technically very challenging mountain rescues, and will necessitate specialized staffing and training. Can the taxpayers meet this need?

**At this stage of the EA review of this project, the costs of, and respective public and private sector responsibilities for the funding of, mountain rescue services and operations have yet to be fully clarified.**

**Responsibilities for mountain rescue and associated costs are relevant to the EA review of this project. On-site mountain rescue is considered to be the responsibility of the proponent, and further information on how this is to be achieved is required in the project report - see section E.7(H) of the draft specifications.**

**The project committee's overall approach to costing and cost allocation issues of this type is as outlined in section A.5 of the draft specifications - see also the response to item 16i), above.**

- 16k) The proposed village site includes a fire station with basic equipment, and a reservoir and fire hydrant system, but nowhere is there an estimate of cost or who will pay for it?

**At this stage of the EA review of this project, the costs of, and respective public and private sector responsibilities for the funding of, fire fighting services at the resort have yet to be fully clarified.**

**Fire fighting services at the resort are relevant to the EA review of this project, and are considered to be the responsibility of the proponent. Additional reporting is required in the proponent's project report - see section E.7(G) of the draft specifications.**

*The project committee's overall approach to costing and cost allocation issues of this type is as outlined in section A.5 of the draft specifications - see also the response to item 16i), above.*

## **17. EFFECT ON LOCAL ECONOMY AND BUSINESS OPPORTUNITIES**

- 17a) The general public is limited to expensive helicopter packages in order to experience this type of high alpine skiing, and the option would be welcome.

*The project committee recognizes that lift access from a resort base would create the capacity for larger numbers of skiers to utilize high alpine areas at lower cost. The intent of the project committee is to establish the extent to which this can be achieved without undue adverse effects on surrounding wilderness values. Various reporting requirements which are noted in the draft specifications are relevant to this issue - see, for example, sections E.5(A), (B) and (E).*

- 17b) A 365-day ski season, combined with the existing 200-day golf season, bodes very well for the future of this area.

The project will provide a long-term increase in economic and social values.

*Many of the expressions of public support for the project received by the project committee have been based on its potential to create new tourism opportunities in the local region. In conducting the EA review of the project, it is appropriate to examine potential benefits (as well as the scope for potential adverse effects) of the project. Indeed, one of the government's intentions in enacting the Environmental Assessment Act was to provide for a balanced perspective in conducting reviews under the EA process, giving consideration to both the benefits and costs of projects.*

*Many of the reporting requirements incorporated into the draft specifications are intended to identify the potential benefits which could be realized locally, regionally and provincially (e.g. in the tourism sector) if the project proceeds - see for example, sections E.2, E.3, E.4, E.5(E) and E.11 of the draft specifications.*

- 17c) The Fairmont Resort Properties is jointly owned by more than 9,000 individual interests, representing 35,000 people who like to ski, golf and enjoy the outdoors. They would benefit from more facilities and more recreational opportunities in the Columbia valley.

***At this stage of the EA process, the project's potential implications, both positive and negative, for other local tourist accommodation and facilities have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.***

***Many of the items noted elsewhere in section 17 address related issues, both from a positive and negative standpoint - see, for example, the responses to items 17b), above, and 17e), 17f) and 17k), below.***

- 17d) The Rocky Mountain Visitors Association of British Columbia represents 145 tourism-related businesses in the East Kootenay region. It recognizes the importance of continued growth and development of the tourism infrastructure of the BC Rocky Mountains Region.

The project would add to the infrastructure of the Columbia valley.

***See the responses to items 17b), above, and 17g), below.***

- 17e) This project will be an economic asset to the Columbia valley, through increased exposure to international (as well as national) markets, resulting in increased tourism opportunities for everyone.

The project would provide needed international exposure for the valley.

***See the response to item 17b), above.***

***In determining net tourism effects, the project committee is taking account of the project's impacts, both positive and negative, on other local tourism values (e.g. environmental and wilderness values), and also on local tourism businesses (e.g. other local ski facilities) - see, for example, sections B.4 and E.5 of the draft specifications.***

- 17f) If this area is set aside as “accessible wilderness” for future ecotourism development, tourists will stay in the Columbia valley, using its motels, hotels, restaurants and other facilities. Invermere and the valley will reap the benefit.

***At this stage of the EA process, the project’s potential implications, both positive and negative, for existing local tourist accommodation and facilities have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.***

***It is beyond the scope of the EA process to undertake a wide-ranging assessment of the possible regional economic ramifications of potential future ecotourism activities in the area. However, the project committee agrees that the potential impacts of the project on surrounding wilderness values and current wilderness recreation uses, and on levels of use of other local tourist accommodation and facilities, are relevant to the EA review of the project, and it has identified various pertinent reporting requirements - see section E.5 of the draft specifications. See also the response to item 17p), below.***

- 17g) Many of the tourists who visit this area are here to enjoy its wilderness values. These tourists do not sleep, shop and eat 75 km west of Invermere. They stay in Invermere, and spend their tourist dollars here.

It is unlikely that there will be any losses for existing tourism-related businesses. In fact, there will probably be an increase in demand for existing services.

***Many of the points made in response to item 17b), above, are applicable to this item also. The project committee recognizes the importance of evaluating the regional economic development impacts of the project, examining benefits as well as costs. Thus, the draft specifications include assessment requirements with respect to the impacts of the project on the region’s economy and employment, as well as its implications for existing tourism businesses and recreation opportunities - see, for example, sections E.1 through E.4, E.5(A), (E), (F) and (G), and E.11 of the draft specifications.***

- 17h) If economic diversification and tourism are so important to the future economic well-being of BC, why are we selling out our last remnants of untouched wilderness to foreign interests. A development plan born of local interest may be more appealing.

***The proponent is itself a Canadian-controlled company, although much of its financing is being arranged from non-Canadian sources. The investment policy environment in British Columbia incorporates a strong emphasis on attracting foreign investment capital to the province. Proposed development ventures in the province are evaluated on their merits, irrespective of whether or not they are funded by domestic or foreign capital. Thus, while the project committee is examining the project's impacts on the local region's communities, economy and environment, foreign investment issues are beyond the scope of the EA process.***

- 17i) The companies which currently offer heli-skiing in this area would be adversely affected by this development in two ways: (1) a prime skiing site would be removed from the land base for their operations; and (2) in the future, some current customers may choose to stay at the four-season resort, which is not locally owned.

***With respect to issue (1), at this stage of the EA process, the project's potential impacts on local heli-ski operations have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.***

***The project committee recognizes the potential for the project to affect the current heli-ski operations of R.K. Heli-Ski Panorama Inc. That company has raised its concerns with the project committee, which is dealing directly with R.K on this matter. At the project report review stage, the project committee plans to commission an independent evaluation of the potential impacts of the project on R.K.'s operations - see section E.5(G) of the draft specifications. The proponent is also known to have its own views on the implications of its project for local heli-ski operations, and is invited to document those views in the project report.***

***Issue (2) is actually a combination of two issues - the potential for the Jumbo Glacier project to compete with other local ski operations, and the issue of non-local ownership.***

*With respect to the market for the proposed resort, and more particularly, the degree to which the resort would attract skiers who currently visit other local ski businesses, the project committee agrees that the issue is relevant to the EA review of the project. Market issues such as the resort's impact on competing ski hills will be included in an independent assessment of project feasibility, which the project committee intends to commission later in the course of the EA review of the project - see section B.4 of the draft specifications. The proponent will be required to provide further information in its project report on the anticipated origins of the project's clientele - again see section B.4, and also section E.5(E), of the draft specifications.*

*With respect to ownership, the project committee is not yet clear on the intended long-term ownership of the resort, and is seeking more information in the project report on such issues as the degree of consolidation of ownership and operations management - see section F.1 of the draft specifications. It is understood that the proponent does not envisage a single owner, but rather, a ski village similar to others in BC, with potentially many individual owners. How many of these owners will be locally based is not known at this time. In any event, the base of operations of the owners of the resort (e.g. foreign vs. domestic, local vs. non-local) is beyond the scope of the EA process - see also the response to item 17h), above.*

- 17j) If the profits go to foreigners, the clients are foreigners, and even the employees are foreigners and out-of-province residents, what benefits will local communities realize?

*At this stage of the EA process, the project's potential implications, both positive and negative, for local communities have yet to be adequately investigated and reported.*

*The project committee agrees that the potential benefits of project development to local communities (for example, in terms of employment, income and business opportunities, as well as impacts on the quality of life of the communities and on recreation opportunities) need to be examined, and this is provided for at various points in the draft specifications - see, for example, sections E.2, E.3, E.4, E.5(E) and E.11.*

*As noted in response to item 17i), above, the project committee also agrees that, in some respects, ownership of the resort is an issue for which further clarification is needed, although, for the reasons mentioned in response to item 17h), above, foreign investment issues are beyond the scope of the EA process.*

*In a similar vein, significant government tourism programming effort is devoted to attracting out-of-country tourists to BC. Thus, tourist development projects which target a significant (although not necessarily a dominantly) non-Canadian market are compatible with provincial policy for BC's tourism sector. Having said that, the client mix anticipated for this project - the balance between BC visitors, visitors from other provinces and visitors from abroad - has yet to be estimated with confidence. Market issues such as the origin of the customers who will use the resort will be included in an independent assessment of project feasibility, which the project committee intends to commission later in the course of the EA review of the project - see section B.4 of the draft specifications.*

- 17k) The project will not benefit the Windermere valley. The Panorama ski resort and R.K. Heli-Ski Panorama Inc. already provide recreation and jobs for local and non-local people. The proposed resort will not complement either of these two enterprises.

*At this stage of the EA process, the project's potential implications, both positive and negative, for existing local communities and business ventures have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.*

*The project committee agrees that whether or not the predicted benefits will be realized if the project proceeds is relevant to the EA review of the project. The draft specifications outline reporting requirements with respect to the potential economic impacts of the development on the local area, including the implications of the project for both the local heli-ski operator and the Panorama ski development - see, for example, sections B.4, E.2, E.3, E.4, E.5(E), (F) and (G), and H.2 of the draft specifications. In addition, market issues such as the resort's impact on competing ski hills will be included in an independent assessment of project feasibility, which the project*

*committee intends to commission later in the course of the EA review of the project - see section B.4 of the draft specifications.*

*See also the responses to items 17b) and 17i), above.*

- 17l) Local alpine ski hills will probably experience increasing problems with economic survival, due to the decline in this type of tourism, plus competition from the Jumbo resort. If alpine skiing is to receive additional investment, expansion should occur where development has already taken place.

Ski resorts in the area draw their customers from a more-or-less fixed population. Visits to the new Jumbo resort will only take away customers from nearby small ski resorts.

*At this stage of the EA process, the project's potential implications, both positive and negative, for levels of use at other local ski resorts have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about these specific assertions at this time.*

*An in-depth examination of the overall economic health of BC's ski sector in general, and of local ski resorts in particular, is beyond the scope of the EA review of the project. However, the project committee agrees that the potential economic impacts of the project on other ski facilities in the area is relevant to the EA review of this project, and has identified various pertinent reporting requirements - see sections B.4 and E.5(E) of the draft specifications.*

*The issues of customer origin and competition with existing ski hills are also to be addressed in the independent assessment of project feasibility, which the project committee intends to commission later in the course of the EA review of the project - see section B.4 of the draft specifications.*

*See also the responses to items 15k), 17i), and 17k), above.*

- 17m) This development would negatively affect those existing tourism opportunities which the backcountry character of the region offers to both commercial and non-commercial users. Present users, including many local residents, will be displaced and replaced by the new Jumbo resort's clientele, who can pay for services.

***At this stage of the EA process, the project's potential implications for other local backcountry tourist opportunities and existing operations have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.***

***The project committee agrees that potential impacts of the project on existing local tourism operations and clientele, and on outdoor recreation activities and users in the surrounding area, are relevant to the EA review of the project. Further reporting is required from the proponent on the implications of its project for both commercial and non-commercial recreational and tourist use of the area in its project report - see sections E.5(A) through (G) of the draft specifications.***

- 17n) The rejection of resort development of this sort will not guarantee the preservation of Jumbo Creek. It will only put pressure back onto the logging and mining companies to create jobs.

***Broader issues with respect to potential land use activities in the Jumbo Creek valley are beyond the scope of the EA process, and are more properly addressed through processes which are suitable for land use planning. The government, through the Kootenay regional land use planning process, is currently attempting to define management objectives for the Jumbo Creek valley and elsewhere in the Kootenay region. For more background, see the Preface to the draft specifications (specifically, section 6.3 - Planning Context for Project Review - Setting Resource Management Objectives).***

- 17o) The valley is not pristine, but the trees will go grow back where they have been logged. In the meantime, other cut-blocks are being laid-out in the Jumbo Creek area. The area will continue to be harvested until the initially cut trees have grown back, and then they will be cut again, unless, by that time, a different economy has been created that is not so dependent on logging.

Continued growth in the tourism sector is of critical importance in the face of the decline in the resource extraction sector.

***An in-depth evaluation of broader sectoral shifts in economic development and employment opportunities are beyond the scope of the EA process. Similarly, whether or not logging is an appropriate use of the Jumbo Creek valley is more properly***

*addressed within processes which are suitable for land use planning. However, the project committee agrees that the contribution of the project to future local economic development is an important consideration in the EA review of the project.*

*The proponent has already provided some information on the role of tourism in a transition economy in its application (see Volume 2, page 177), and further reporting is required from the proponent in its project report - see sections E.2, E.3, E.4 and E.5(E) of the draft specifications.*

- 17p) Will there be a long-term economic and social comparison of the choice between developing a destination ski resort vs. reserving the area for resource-sharing wilderness recreation uses?

*In the draft project report specifications, the project committee has outlined various reporting requirements which are intended to examine the implications of the project, if it proceeds, for surrounding wilderness values and other types of wilderness recreation potential - see, for example, sections D.3(B) and (C) and E.5(A) through (G) of the draft specifications. Thus, for example, the proponent's project report will be expected to incorporate an assessment of the project's impacts on current uses of surrounding wilderness areas.*

*The project committee notes that it considers a broader analysis, entailing a comparison of the relative merits of the resort vs. an extensive array of alternative wilderness recreation scenarios, including purely hypothetical possibilities, to be beyond the scope of the EA process.*

## **V. SOCIAL AND COMMUNITY ISSUES**

### **18. FIRST NATIONS ISSUES**

- 18a) It is expedient for the government to reject this proposal now rather than have to pay restitution to the developer (at great expense to BC taxpayers), should the Ktunaxa Nation appropriate these lands in a Land Claims settlement.

*The project committee has been advised that the treaty process makes provision for a First Nation treaty settlement to entail third party compensation in respect of the transfer to First*

*Nations of rights to land and resources. To date, the provincial government has been disinclined to consider or agree to the "expropriation" of third party rights, particularly where this may entail private property, held in fee simple.*

*Although the payment of compensation to third parties is contemplated in the Canada-BC cost-sharing agreement on treaty negotiations, the province, for reasons of certainty and fiscal responsibility, will strive to minimize settlement provisions which entail such compensation, and to respect the terms of all legal interests in private land, and also in Crown land and resources, including leases and licenses. Disruption to existing interests, including interests held by individuals, corporations or local governments, will be avoided wherever possible.*

*Since it may take several years to bring to a conclusion the many treaty negotiations which are currently underway or planned within BC, the province has not been prepared to put on hold all land use and resource development decisions pending substantial progress with formal treaty negotiations. Thus, it is understood that any restrictions on the allocation of land and resources (e.g. through interim measures agreements) are more likely to be put in place when negotiations have moved beyond the signing of agreements-in-principle.*

*Having said that, one key function of the EA process is to evaluate the extent of potential impacts on the exercise of aboriginal rights, should the development proceed. To assist in conducting this assessment at the second stage of the EA process (the project report review stage), First Nations have developed terms of reference for relevant traditional use studies - see section G.1 of the draft specifications. First Nations are currently engaged in discussions with the Environmental Assessment Office and the proponent to determine the best approach for carrying out this study program.*

18b)

~~17a)~~

How can the proponent acquire rights to land which is the subject of land claims negotiations, and at a pace which is much quicker than that at which land claims are being addressed?

*Issues connected with the negotiation and settlement of aboriginal land claims are addressed in processes especially set*

*up to address treaty negotiations, and are beyond the scope of the EA process. Under the EA process, the proponent is expected to consult with First Nations, and to conduct the traditional site use studies necessary to determine whether or not development of the project would lead to adverse effects on the exercise of aboriginal rights in the project area. Should potential adverse effects be identified, the proponent will then be expected to identify any measures available to prevent, mitigate or compensate for adverse effects. The First Nations which are potentially affected by the review of the project are coordinating the development of a study program to address their concerns, and the basic reporting requirements are outlined in section G.1 of the draft specifications.*

*In the meantime, the contention that lands have already been granted to the proponent for development purposes is not accurate. An Interim Agreement between the proponent and the province, concluded in July of 1995 under the Commercial Alpine Ski Policy, recognizes the proponent as the sole proponent for ski development purposes on those lands in the upper Jumbo Creek valley within which ski resort development is proposed. The project committee understands that the proponent will retain "sole proponent" status for as long as it takes to reach a final decision on the acceptability of its proposed resort development. That agreement also authorizes the proponent to enter on to these lands to perform the studies necessary for its application under the EA process. However, that agreement in no way constitutes the granting of resort development rights, nor does it in any way fetter or prejudice the freedom of Ministers to make a decision under the Environmental Assessment Act to either approve or reject the project application.*

## **19. IMPACTS ON COLUMBIA VALLEY COMMUNITIES**

- 19a) The quality of life will be negatively affected by additional traffic, noise and congestion resulting from a significantly increased density of people in the region.

*At this stage of the EA process, the project's potential impacts on the quality of life in local communities (e.g. levels of traffic, noise and congestion) have yet to be adequately investigated and*

***reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.***

***The project committee agrees that quality of life issues such as those associated with additional traffic, noise and congestion are relevant to the EA review of the project, and need to be addressed in more detail in the proponent's project report - see, for example, sections E.7(L), E.8 and E.11 of the draft specifications.***

- 19b) There would be a significant impact on the Invermere region associated with a major increase in the amount of traffic, including:
- cars and buses for transportation of staff, construction workers and guests;
  - trucks for construction, maintenance, delivering supplies and removal of waste; and
  - helicopters and aircraft for the transportation of guests.

***At this stage of the EA process, the project's potential implications for local and regional vehicular and air traffic volumes have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.***

***The project committee agrees that a broad range of transportation issues associated with the project, including the project's implications for traffic levels, are relevant to the EA review of the project, and need to be addressed in more detail in the proponent's project report - see, for example, sections E.7(L), E.8 and E.11 of the draft specifications. See also the responses to items 19a), above, and 19e), below.***

- 19c) The Fairmont airport will likely see increased usage over time. However, noise problems can be minimized by limiting flights to certain times and using quieter aircraft where possible.

***At this stage of the EA process, the project's potential impacts on the air traffic volumes and noise levels at Fairmont Airport have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.***

***If the proponent's initial projections of air traffic increases are realized - see response to item 19d), below - it may be that***

*incremental noise problems associated with increased air traffic at the Fairmont Airport will be, at most, modest, particularly if managed in the manner suggested here.*

*In any event, the project committee has concluded that the issue is relevant to the EA review of the project, and that the proponent should address airport noise in its project report - see section E.7(L) of the draft specifications.*

- 19d) The developer intends to fly his customers into Fairmont airport and then bus them to the Jumbo resort. This means that Invermere and the Columbia valley will turn into a glide path for the 737s which will be transporting these customers.

*At this stage of the EA process, the project's potential implications for local and regional transportation systems and services have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.*

*The committee notes that the proponent's application contained some analysis of this concern (see Volume 1, page 59), which did not support the expectation of a dramatic increase in the commercial passenger air traffic at the Fairmont airport. In the project committee's view, this preliminary response to the issue by the proponent appears to be more realistic.*

*The project committee agrees that issues associated with the transportation system envisaged to bring tourists to the ski resort, including potential impacts on the level of use of the Fairmont airport facility, and related noise concerns, are relevant to the EA review of the project, and is seeking some additional information in the proponent's project report - see section E.7(L) of the draft specifications.*

- 19e) The project proposes accommodation for 25% of the 2,000 staff. This will put an untenable burden on accommodation in the Columbia valley, and will require a bus service with almost 40 daily round trips, or up to 700 private vehicle trips per day.

*At this stage of the EA process, the project's potential implications for the availability of accommodation locally, and also for employee transportation requirements, have yet to be adequately investigated and reported. Thus, the project*

*committee has not reached any definite conclusions about this specific assertion at this time.*

*The project committee agrees that the employee housing and commuter transportation issues raised here are relevant to the EA review of the project, and need to be addressed in more detail in the proponent's project report - see, for example, sections E.7(L) and E.9 of the draft specifications.*

*The project committee notes that the figure which forms the basis for this comment (i.e. an operations workforce of 2,000 people) is not cited in the workforce estimates provided in the proponent's application (see Volume 2, section 5.2.2), although it may be based on an approximation of the workforce at full build-out, using the proponent's maximum estimate of the ratio of one worker per three guests. Additional information on the size of the operating workforce, including the workforce needed for later stages of the development, will be required in the project report - see section E.2 of the draft specifications.*

## **20. EMPLOYMENT**

- 20a) At this resort, both well-paying and low-paying jobs will be created, as is the case with most businesses. There will be opportunities for spin-off businesses at the resort and around the region. Winter is the slow season in this region, and with current businesses becoming more profitable, there will be more opportunities for year-round employment.

The project will provide many opportunities for spin-off businesses started by local interests.

Since the village site will be owned by multiple owners rather than one company, there will be many opportunities for local interest to participate.

There will be both well-paying and low-paying jobs.

*At this stage of the EA review of the project, the employment breakdown envisaged for the project, and its implications for the local and regional economy, have yet to be adequately investigated and reported. Thus, the project committee has not*

*reached any definite conclusions about these specific assertions at this time.*

*With respect to employment created by the project, and related effects, see the response to item 20b), below. The project committee also agrees that other effects of the project on the local and regional economy, both beneficial and adverse, should be assessed in the project report - see, for example, sections E.3, E.4 and E.5(E) of the draft specifications.*

*With respect to multiple ownership of the resort, see also the response to item 17i), above.*

- 20b) Ski resorts offer mostly menial jobs, pay poor wages (usually higher than minimum wage, but just barely), do not provide health, dental or other benefits, except to those few who are in management, do not provide childcare services or adopt employment equity principles, do not provide adequate housing, provide no job security whatsoever to the average seasonal worker, and generally take advantage of workers who want to be at a ski resort. Exceptions to this general comment are the unionized hotel chains.

In the ski industry, management and skilled jobs are scarce.

*The potential economic and employment effects of the project are cited by both project supporters and critics alike as key considerations in the EA review of the project. While, at this stage of the EA process, the employment-related issues raised here have not been fully investigated and reported, and their significance determined, the project committee agrees that various aspects of the potential employment opportunities created by the project are in need of further analysis and reporting at the project report review stage - see for example, sections E.2, E.7(D) and (E), E.9 and E.10 of the draft specifications.*

*With respect to seasonal employment issues, the draft project report specifications require the proponent to document the types of employment and wage levels envisaged for the resort's workforce, and to provide a breakdown of the seasonal, full-time and part-time jobs, any skill upgrading opportunities, and estimates of local hiring, workforce housing requirements and impacts on housing supply. The project committee notes that, while an assessment of the aggregate employment effects of the*

*project on the community are of interest in the EA process, there is no particular public policy expectation that prospective employers should be striving to provide jobs of any particular skill type or wage level. In principle, the province encourages all forms of employment creation which comply with basic employment standards.*

*In terms of aggregate employment effects, many of the factors cited in this comment could have an impact on the delivery of health, education and social (e.g. Income Assistance) services locally, and the project committee will be interested in any programs which the proponent proposes which will help to mitigate any adverse effects of seasonal employment. With respect to such effects, MHR has noted, for example, that it is a normal expectation at other, more seasonal, ski resorts that ski hill employees must be available on-site for the start of the ski season. If adequate snow cover is late in arriving, workers tend to wait locally for the season to start, while on UI or income assistance. In the Invermere area, the local unemployment rate is low in the summer, while in winter, there is a local pool of unemployed tourism workers on UI or income assistance. Other local ski resorts have tended to hire out-of-area workers. MHR accommodates any seasonal client-driven demand on an as-needed basis. Issues such as these are relevant to the EA review of the project - see section E.2, E.3, E.4 and E.7(D) of the draft specifications.*

*A more significant problem for MHR is the inability of minimum-wage resort employees to find affordable housing. Increasingly, there may be financial hardship for new workers entering the province, and MHR cannot provide assistance to mitigate such problems under current legislation. Local rents are typically extremely high, and in-migrant workers cannot afford them at just-above-minimum pay scales. MHR typically cannot assist those with high shelter costs whose income is above income assistance rates (at least \$500.00 per month for a single employable person). Housing issues need to be addressed in the project report - see section E.9 of the draft specifications.*

*With respect to similar issues, see also the response to item 21k, below.*

*With respect to other aspects of the terms of employment, although the government incorporates in its own employment practices various provisions for employee benefits and the*

*application of employment equity principles in hiring (e.g. pursuant to the BC Public Service Act and the Build BC Act, which applies to BC 21 projects), there are currently no public policy expectations of private sector developers in any sector of the British Columbia economy with respect to either the provision of health, dental or other employment benefits, local hiring or the adoption of employment equity principles in the hiring and maintaining of a workforce.*

*Beyond the basic legislated framework for employing workers in BC (e.g. the Canadian Charter of Rights and Freedoms, the provincial Human Rights Act and the Employment Standards Act, which collectively ensure minimum employment standards, set minimum wage levels, and outlaw hiring discrimination and workplace harassment), development of policies and practices with respect to such issues continues to be the responsibility of individual private companies.*

*However, the proponent is requested to provide estimates of the projected gender breakdown of its workforce, as part of its demographic analysis for the project - see section E.2 of the draft specifications. The project committee will also be interested in any programs which the proponent proposes in these areas, and the project report specifications have so indicated.*

- 20c) The Panorama ski resort has been compelled to seek workers in the Prairie provinces, due to the lack of available local labor. The proponent of the Jumbo Glacier project could have difficulty finding local workers.

*While, in its application, the proponent has recognized that some non-local labour will likely be needed for the project, at this stage of the EA process, the project's labor sources have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.*

*The project committee agrees that sources of labour for the project are relevant to the EA review of the project - see section E.2 of the draft specifications.*

- 20d) There is not a large pool of local labor standing idle, waiting for jobs at this project.

***The proponent has provided some information on this issue in Volume 2, section 5.3 of its application. See also the response to item 20c), above.***

- 20e) Limited local employment for youth of post-secondary-school age is leading to migration away from the area for that age group. There is little in the way of continuing and permanent employment opportunities upon which young residents can build a future. A project such as the Jumbo Glacier resort proposal would help to mitigate the current "feast or famine" economic cycle.

Our children need jobs in the future so they can remain in the valley.

***At this stage of the EA process, the project's labor sources, youth employment opportunities and the degree of seasonality of the available jobs, have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.***

***The project committee agrees that sources of labor for the project, including the potential for local hire, and also the seasonality of the project's employment requirements, are relevant to the EA review of the project. The proponent has already provided some analysis of these issues (in section 5.2, Volume 2 of its application), and additional reporting requirements are outlined in sections E.2 and E.3 of the draft specifications.***

## **21. COMMUNITY CHARACTER AND DIRECTION**

- 21a) For the next 25 years, the economy in the Columbia valley will be tourism-dependent.

***In the broadest sense, the issue of future economic development trends in the Columbia valley extends well beyond the scope of the EA process. However, the project committee has identified the need to consider the place of the project in the local region's overall tourism development context, including an analysis of both the tourism opportunities which it would create and its potential impacts, both positive and negative, on other tourism activities and opportunities in the region - see sections B.4 and E.5(E), (F) and (G) of the draft specifications.***

- 21b) If this project means creating a climate where employment and recreational opportunities for young people are encouraged, great! Or creating an atmosphere where people from all walks of life, and with different lifestyle preferences, can share in the inherent wealth of the region, sustainably, great!

***Many of the public representations received on this project by the project committee, both in support or expressing concern or opposition, have focused on its capability to provide the economic, recreational and employment benefits which are projected by the proponent, particularly over the longer term. The project committee agrees that achieving a reliable assessment of the project's likely benefits is relevant to the EA review of the project.***

***Reporting requirements are outlined in the draft project report specifications which focus on the capacity of the project to generate economic, recreational and employment benefits for various elements of local communities, including youth - see, for example, sections E.2, E.3, E.4, E.5(E) and E.10 of the draft specifications.***

- 21c) Tourists identify the Kootenay region with a genuine wilderness experience. They stress that the lack of large developments and the relaxed nature of the small town atmosphere is what is so attractive.

***The basic attributes which account for the overall tourist appeal of the Kootenay region are beyond the scope of the EA review of the project. However, the project committee agrees that the potential effects of the project on wilderness values and other types of tourism activities around the project development site are relevant to the EA review of the project, and need to be addressed in more detail in the proponent's project report - see, for example, sections E.5(A) through (G) of the draft specifications.***

- 21d) With the development of this resort, and the influx of tourists (if they are anything like those attracted to the Whistler and Banff area), the Columbia valley will shift from being relatively "laid back" to something more like a city (i.e. nothing like the place as it is at present).

***At this stage of the EA process, the project's potential implications for the future atmosphere of local communities have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.***

***The project committee agrees that a range of demographic and quality of life issues, such as those associated with an incremental influx of tourists, are relevant to the EA review of the project, and need to be addressed in more detail in the proponent's project report - see section E.10 and E.11 of the draft specifications. See also responses to items 19a) and 21c), above.***

- 21e) Having watched the steady march of development in the Kootenays, there is a concern that communities such as Nelson, Balfour, Kaslo or Willow Point could go the way of Whistler or Squamish.

***It is beyond the scope of the EA process to assess the future social and economic development prospects of the cited communities. However, the project committee agrees that impacts of the project on local communities, primarily those in the Invermere area, are relevant to the EA review of the project, and need to be addressed in more detail in the proponent's project report - see various reporting requirements in section E of the draft specifications.***

- 21f) This proposal, together with the new development in Athalmer, will so alter the area's population that many will find the quality of life here diminished.

Why is it that developers have so much control over the lives of others? Many choose to live here because of the unspoiled environment and the sense of values held by residents hereabouts.

***At this stage of the EA process, the project's potential demographic implications for local communities, and also the associated impacts on the quality of life locally, have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about these specific assertions at this time.***

***As noted in response to item 21d), above, the project committee agrees that a range of quality of life issues, including those***

*stemming from population immigration associated with new employment opportunities, are relevant to the EA review of the project, and need to be addressed in more detail in the proponent's project report - see, for example, various subsections of section E of the draft specifications, including sections E.1, E.2, E.10 and E.11.*

*See also response to item 19a), above.*

- 21g) RCMP sources indicate that petty crime is "...much, much higher than average..." in Whistler.

Banff has a rate of criminal code violation rate which is two and a half times the national average.

*The Ministry of Attorney General (MAG) has advised the project committee that both the Whistler and Banff resorts have reported crime rates which appear higher than the national average. However, MAG notes that this statistic reflects the basis used for Canadian community crime rate calculations, which is misleading for this type of community.*

*For Canadian communities, the crime rate is calculated as the ratio of the number of reported crimes to the size of the resident population. Resident population statistics exclude part-time residents, such as tourists, cottage and chalet owners, and seasonal workers, who usually have a permanent residence elsewhere. Since Whistler is a resort community for which a significant proportion of its population on any given day consists of visitors and seasonal workers, its apparent crime rate is predictably higher than that for other communities. Thus, the crime rate alone is not a reliable indicator of the relative safety of one location over another.*

*MAG also notes that local law enforcement authorities consider Whistler to be a very safe community compared to urban areas or other communities of comparative size. It is not a centre which is noted for any unusual crime-related problems.*

*See also response to item 21h), below.*

- 21h) We want to raise our children in an area virtually free of many of the criminal elements that plague other parts of the country.

*If the project is approved and, once underway, crime-related problems associated with the resort do arise in the local community, it may well be difficult to distinguish those problems from problems which are attributable to other causes. Moreover, experience suggests that it is beyond the capacity of most employers, by themselves, to address and resolve problems of this type.*

*Nevertheless, MAG has advised the project committee that it wishes to work with the proponent to ensure that a sufficient community design focus is placed on protection of the personal safety of area residents and visitors, in keeping with MAG's goal of promoting and preserving the safety of all places in BC where people live, work or visit. The MAG does not issue specific standard criteria which proponents are expected to meet in respect of crime prevention issues raised by new development. In this case, as in others, MAG is encouraging the proponent to be proactive and responsible in ensuring that the ski resort is planned and operated in such a manner that prevention of, and responsiveness to, threats to public safety are closely coordinated with the local authorities responsible for the provision of policing and emergency management services.*

*The project committee is recommending that the proponent discuss policing and crime prevention issues with the appropriate police authorities and document the advice provided by these parties in its project report - see sections E.7(F) and E.10 of the draft specifications.*

- 21i) At the Whistler resort, estimates place the number of substance abusers in the 60-to-70-percentile range. This does not reflect a significant criminal element - these are simply local folk with no criminal records: electricians, construction workers, lift operators and snow groomers.

*MHR has advised the project committee that all resort communities share an awareness of the potential for drug and alcohol problems. How well they cope with these problems depends on their degree of commitment to coordinated community-level efforts to address them. More specifically, some ski resorts, including Whistler, have identified drug and alcohol issues as a community concern.*

***If the project is approved and, once underway, problems associated with abuse of drugs and alcohol do arise in the local community, it may well be difficult to distinguish those problems from problems which are attributable to other causes. Moreover, experience suggests that it is beyond the capacity of most employers, by themselves, to address and resolve problems of this type. Other than by providing education and counseling services on a voluntary basis, it is usually considered inappropriate for an employer to intervene in the private lives of employees.***

***If the Jumbo Glacier project proceeds, MHR will be encouraging the proponent to maintain an ongoing consultative relationship with key elements of the local community, including its own workers, the Medical Health Officer and local government. The intent would be to better anticipate and address any ongoing problems which may be associated with substance misuse or other negative social effects of the project as they emerge.***

***The project committee is inviting the proponent to document any views which it may have with respect to this issue - see section E.10 of the draft specifications - but there are no formal reporting requirements.***

- 21j) Recently, the media have published reports which claim that sexually transmitted diseases have a higher incidence per capita in the resort communities of Whistler and Banff than anywhere else in Canada.

***MoH has advised the project committee that provincial statistics on sexually transmitted diseases (STDs) are not collected in a manner which permits the convenient linkage of the incidence of STDs to specific communities, so that there is no direct evidence to support or refute the claim made here. Any available data are organized by Local Health Area, rather than by community.***

***MoH also notes that the issue is beyond the capacity of any one party (whether government or a private developer) to address and resolve through unilateral action. Society rejects any control or prevention strategy which intrudes too obviously into the personal lives of individuals.***

***If the project is approved and a problem emerges once development is underway, a joint community approach, pursued***

***on an ongoing basis with the proponent's participation, is the recommended approach. Low-key on-site awareness measures such as those which are adopted at other resorts could be considered by the proponent (such as display of posters and installation of condom machines in appropriate locations, and perhaps also employee counseling services). The proponent is advised to contact the MoH's Sexually Transmitted Diseases Control Branch in Vancouver for further advice on community awareness programming - see section E.10 of the draft specifications.***

- 21k) *The Community Health Profile of the Invermere/Columbia Valley Area states that "...tourism...employs many transient young people at low wages with no roots in the community..." This transient population has a negative impact on local youth, who are attracted to the lifestyle of the transients. This problem already exists, and the Jumbo Creek proposal will amplify it.*

***At this stage of the EA review of this project, whether or not there will be an unusual incidence of problems associated with transient workers at the resort has yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.***

***However, the project committee notes that, given the intent of the proponent to develop a year-round resort, there may be some potential for the project to contribute to a more stable workforce situation by favoring year-round jobs over more seasonal employment, where possible. This is an option which is not as available in the more seasonal forms of tourism activity. The proponent also has the option to encourage local people to seek employment, although, like any other employer, the proponent will be constrained by regulations governing fair hiring practices from actively discriminating against non-local workers.***

***In its project report, the proponent is expected to provide estimates of seasonal and year-round employment at the resort, and also estimates of the numbers of local vs. non-local employees - see section E.2 of the draft specifications. Having said that, it should be noted that, while an assessment of the aggregate employment effects of the project on the community are of interest in the EA process, there is no particular public***

*policy expectation that prospective employers should be striving to provide jobs of any particular skill type or wage level. In principle, the province encourages all forms of employment creation which comply with basic employment standards, whether seasonal or permanent.*

*If the project is approved and, once underway, problems associated with transient workers at the resort do arise in the local community, it may well be difficult to distinguish those problems from problems which are attributable to other causes. Moreover, experience suggests that it is beyond the capacity of most employers, by themselves, to address and resolve problems of this type (e.g. drug and alcohol problems - see also response to item 21i), above). Other than by providing education and counseling services on a voluntary basis, it is usually considered inappropriate for an employer to intervene in the private lives of employees.*

*In such circumstances, a joint community-based approach, entailing the participation of the proponent, local community interests and social service delivery agencies is more likely to yield results. Indeed, MHR has identified similar concerns to those raised here, and has informed the project committee that, if the project is approved, it will be encouraging the proponent to develop an ongoing working relationship with the local MHR District Office in Invermere, examining problems and potential mitigation options in a cooperative manner as they arise.*

*Despite the obvious difficulties inherent in attempting to predict the incidence of lifestyle problems of this type, the project committee agrees that issues such as those associated with transient workers (including youth-related concerns) are relevant to the EA review of the project, and should be the subject of further reporting in the proponent's project report - see sections E.2 and E.10 of the draft specifications.*

- 21i) Regional policy emphasizes a clustering of residential and commercial developments rather than allowing development to spread to less developed areas which retain other significant values.

*The RDEK advises the project committee that only for the Elk valley has it developed a policy for new town development. However, it has generally supported the principle of directing human settlement towards existing nodes of development. The*

*option of considering "special purpose development", including commercial tourism, in areas where traditional settlement would not be allowed, was discussed by RDEK during the CORE process, and was endorsed by a consensus of the East Kootenay CORE Table (March 1994) - see also response to item 19e), below.*

*The RDEK notes that the distinction between "special purpose development" and "traditional settlement" was not clearly articulated by the East Kootenay CORE Table, but that, in the RDEK's view, the intent was to distinguish between: (1) accommodation which is ancillary to, or forming an integral part of, a tourist facility or resource extraction use, and (2) development intended to provide primarily for the needs of a permanent residential population.*

*Reflecting the RDEK's own human settlement preferences, as noted in the first paragraph of this response, the RDEK also notes that, while single family lot development at the resort site has been the subject of discussion between the proponent and the RDEK, the issue remains unresolved, and the acceptability of such lots to the RDEK has not been determined.*

## **22. COMMUNITY SERVICES**

- 22a) The local Child and Youth Committee is aware that community resources for mental health, counseling, medical health, policing and social services, for example, are already overutilized. Invermere's resources will be further stressed if the development goes ahead.

*The project committee has consulted the Ministry of Attorney General (MAG), the Ministry of Health (MoH), and also the former MSS, which was eliminated on September 23, 1996, and its functions reallocated to the newly-created Ministry of Human Resources (MHR) and Ministry for Children and Families (MCF), about the concerns raised in this item. MAG and MoH are involved in the delivery of the services which are mentioned here, as was MSS, prior to September 1996.*

*With respect to health services, the project committee, on the advice of MoH, is seeking further information from the proponent on the potential effects on health service provision associated with project development - see section E.7(A) of the draft specifications. MoH notes that health service supply is*

*mandatory and client-driven throughout BC. Local health services are expected to cater to actual demand in accordance with provincial criteria, and each Health Region is funded through a formula which takes into account both the size of its own population and the services which it renders to patients from other Health Regions.*

*Similarly, MSS (now MHR/MCF) has advised the project committee that many of the services which it delivers, specifically child protection, services to youth, family services and income assistance, are mandatory, and are therefore client-driven. Thus, the province allocates resources to such services in response to actual demand. However, MSS (now MHR/MCF) also funds community-based counseling services, but on a discretionary basis, as and when funding permits. The ability to respond to any increased demand for this type of service is therefore a budgeting issue, and service delivery is more sensitive to incremental local demand.*

*Some degree of impact on MSS (now MHR/MCF) service provision may be expected, if only because of the additional travel time entailed in handling any caseload at the resort. At the same time, MSS (now MHR/MCF) has advised the project committee that it does not associate resort communities with any particular or unusual level of concern with respect to its programming responsibilities. It recommends, as the primary strategy for addressing any incremental demand for its services created by the project, that the proponent develop a close working association with MSS (now MHR/MCF) district staff. This should help alert MSS (now MHR/MCF) to any circumstances which may affect its ability to deliver services, and specifically any additional demand for its services. Through such a liaison, problem-solving approaches, which could also involve other elements of the community, may be jointly developed. See also section E.7(D) of the draft specifications.*

*MAG has also advised the project committee that, in its view, the incremental demands for policing and emergency management services should be handled through close liaison between the proponent and the appropriate policing and emergency management authorities to ensure that adequate resources are available to the resort, without sacrificing protection services to nearby communities. Relevant issues are noted in sections E.7(F) and (I) of the draft specifications.*

*With respect to demand for police services, see also the response to item 22e), below.*

- 22b) The proponent will rely on resources from the surrounding communities for emergency infrastructure elements including search and rescue, ambulance, hospital and police services. Is this realistic?

If an on-site ambulance station is required by the Ministry of Health, will the station have to be paid for by the municipality, and will the ambulance services be able to absorb the (operational) costs?

*At this stage of the EA review of this project, the respective public and private sector roles and funding responsibilities for the provision of emergency services, and the potential impacts of the project on levels of use of such services in local communities, have yet to be adequately investigated and reported. Thus, the project committee is not in a position to provide definite responses to these specific questions at this time.*

*The project committee addresses the issue of how search and rescue, ambulance, hospital and police services will be made available to the proposed resort community for emergency management purposes, and the impact of the project's demand for such services on existing service availability, in sections E.7(A), (F), (H) and (I) of the draft specifications.*

*With respect to on-site safety issues, in its project report, the proponent will be expected to provide estimates of the total anticipated number of accidents involving injuries, and of those requiring emergency evacuation and/or requiring hospital visits. Statistics and experience from comparable ski facilities should form an adequate basis for these estimates.*

*The proponent will be responsible for making adequate arrangements to assure the safety of its clientele and other members of the public who visit the resort development. For example, such arrangements might include development and funding of a well-trained and competent ski patrol organization. Where appropriate, the proponent should negotiate contractual or mutual aid agreements with the administrators of those community support services which may be required from time to time. This will help eliminate confusion as to who provides services and who pays for them. Where such negotiated*

***contracts and mutual aid agreements are intended by the proponent to form part of the planned response to emergency situations, the proponent is being requested to hold discussions with the appropriate service providers, and to demonstrate, where possible, that these entities are agreeable in principle to such arrangements - see section A.5 of the draft specifications.***

***MoH has advised the project committee that there is no current government policy which requires the proponent to provide first aid facilities. Nevertheless, MoH strongly recommends that the proponent provide a reasonably equipped first aid station at the resort, and staff it with personnel who hold valid first aid certificates. The facility should be functional (and qualified staff available) at all times. The proponent would be expected to fund the on-site first aid station and its trained staff.***

***Regular ambulance service to the resort for use by the resort's visitors is a provincially funded service. The proponent may chose to base an industrial ambulance at the site at its own cost for its own employees (e.g. through an arrangement with the Workers Compensation Board [WCB]). The proponent is being requested to consult with WCB about the possible need for an industrial ambulance, and with the BC Ambulance Service about suitable ambulance arrangements for visitors.***

***With respect to demand for police services, see the response to item 22e), below.***

- 22c) Invermere and District Hospital has experienced recent bed and staff reductions. What are the implications of this project for the already inadequate local funding base for this service? Will a medical station have to be built at the new village site, and if so, who will be paying for it?

***See responses to items 22a) and 22b), above.***

- 22d) There are no day-care or school facilities in the site plan. How will these services be provided to children born to people living at the Jumbo resort? Will the local school district be expected to bus these children to Invermere? Is it fair to expect children to ride 55 kilometers on a winding mountain road to go to school each day?

**Project Committee's Note - With respect to the provision of day-care services, the following response is based on feedback**

provided to the project committee by the Ministry of Women's Equality (MWE), prior to September 23, 1996, the date on which the creation of the new Ministry for Children and Families was announced, the latter acquiring numerous child-related and family programming responsibilities from various provincial ministries. Prior to that date, MWE had had the primary responsibility for childcare in BC (including day-care). At the time of release of the draft specifications, the project committee is seeking clarification of the new allocation of responsibilities among ministries, but believes that, other than in respect of the changes in ministry responsibilities for day-care-related programming, the comments outlined below correctly summarize the status of day-care provision in BC.

*The MWE had advised the project committee that delivery of day-care services in BC is largely a private sector responsibility. Thus, the supply of day-care facilities is market-driven. There are no standing public policy expectations with respect to the provision of day-care facilities by private developers, although many private employers incorporate child care settings into their operations on a voluntary basis, in response to needs expressed by their staff or clients. Grants may be provided (now through MCF) to assist private operators with the inclusion of group child care centers at the resort.*

*The project committee is not aware of any plans of the proponent for day-care services. A more detailed review of the issue of day-care is presented in section E.7(E) of the draft specifications.*

*With respect to schooling of resident children of school age, the project committee has consulted with the Ministry of Education, Skills and Training (MEST). Further information on schooling issues is also included in section E.7(C) of the draft specifications.*

*In summary, MEST notes that, in this province, new schools are built only once the actual demand exists, and not in advance, on the basis of projections. Thus, as a new population built up at the resort, it would be monitored, and interim arrangements would be made for the schooling of children until there was a sufficient school-age population base to justify construction of new school facilities. Normally, MEST would not consider funding new school construction until the demand had actually*

*materialized at the resort. This approach is intended to minimize the risk entailed in investing scarce capital investment funding on unnecessary educational space.*

*Pending school facility construction at the resort, options for handling the incremental demand created by school-age children who live at the resort would include bussing to the nearest schools, leasing school space in the resort, taking regional correspondence, doing home schooling, or boarding in another school district. If new schools are needed, phased construction is also possible, once new sites have been acquired, with portable classrooms used for initial operations.*

*For a resort development of this type, it is quite possible that there would be, at most, a slow build-up of the resident population of school-age children at the resort during the initial phases of the development. If projections are correct, and the on-site workforce were to consist mostly of young, single people, new on-site school development would be unlikely, although portable classroom arrangements might be considered. Bussing to schools in Invermere appears to be the most likely option for the early years of the resort, to meet short-term needs. Daily school commutes of 50 to 60 kilometers each way are fairly common in northern rural areas of BC. For better or worse, this reflects the lifestyle choices of some parents.*

*In MEST's view, it should be possible to anticipate, and to adequately respond to, the education-related impacts of the project on a year-to-year basis. The proponent is advised to consult the local school board on any schooling-related issues raised by the project as it is planned, and to ensure that the Board is notified of projected student enrollments.*

- 22e) Due to its crime statistics, Banff requires a ratio of full-time police officers to population which is more than double that of Invermere/Radium. Increased staffing, or even a new police detachment, may be needed. In the proponent's application reports, there are no cost estimates for this service.

*At this time, it has not been established that the Jumbo Glacier resort and Banff would be comparable in terms of crime levels and policing requirements, or that increased staffing, or indeed, a new Royal Canadian Mounted Police (RCMP) detachment, would be required.*

*MAG has advised the project committee that any estimates of policing needs for the Jumbo Glacier project which were to be based on per capita crime statistics and policing levels reported for other resorts would be of little value in planning police requirements for this resort (for the reasons cited in response to item 12b), above). Moreover, while there are general guidelines, the actual ratio of police to population fluctuates considerably around BC for many reasons, not all of which are attributable to crime rates. In determining the need for policing services, the most likely scenario is that the RCMP will adapt to the new resort's demands gradually over time, taking account also of other local factors which are affecting the demand for its services.*

*Typically, in a situation such as this, the local detachment of the RCMP will make an assessment of the potential impact of the planned development on policing demands, and would then negotiate any incremental resource requirements through its policing agreements with the province. Police resource planning is not an "exact science", and judgement will be needed, taking account of available resources and competing demands.*

*MAG also notes that police services for unincorporated settlements of less than 5,000 people are funded by the province under contract with the RCMP. In the case of ski developments, the operators contribute only indirectly, through the regular taxation system, and not through any more direct cost-sharing arrangements.*

*The proponent is being requested to engage in discussions between the proponent, the MAG's Police Services Division and the RCMP - see section E.7(F) of the draft specifications.*

## **23. DISPLACEMENT OF LOCAL INTERESTS**

- 23a) Why should local residents and low-impact tourists, who currently benefit from local wilderness opportunities, be ignored in favor of a foreign-owned company with a mega-project which will create pollution, deface the natural landscape, not support the local economy in a meaningful way, and export its profits to off-shore shareholders?

***This comment raises a diverse range of issues. At this stage of the EA review of this project, such issues have yet to be fully investigated and reported, and their significance ascertained. The project committee agrees that further reporting is required from the proponent on most of these issues (other than the issue of foreign ownership, which is deemed to be beyond the scope of the EA process - see response to item 17h), above).***

***In its project report, the proponent will be expected to provide information on the impacts of project development on other types of tourism potential in the region, on environmental and visual values, and on the local and regional economy - see various sections of the draft specifications.***

- 23b) Traditional land uses in the area, such as hunting, trapping and the gathering of herbs and berries, are incompatible with a project of such grandeur.

***At this stage of the EA process, the project's implications for traditional First Nations and non-aboriginal use of the project site and surrounding area have yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific assertion at this time.***

***The project committee agrees that impacts on traditional activities in the area, whether conducted by First Nations or by non-aboriginal people, are relevant to the EA review of the project, and need to be addressed in more detail in the proponent's project report - see, for example, section E.5(F) of the draft specifications with respect to general hunting and trapping activities in the area, and section G.1, with specific reference to First Nations interests.***

***See also the response to item 18b), above.***

- 23c) As more and more commercial operations apply for tenure, snowmobile access to public land is compromised time and time again. The proposal area is heavily used by snowmobiles, and the economic benefits of this growing sport, in an area like Invermere, must be fully considered.

***At this stage of the EA process, the project's implications for snowmobile use of the project site and surrounding area have***

***yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific issue at this time.***

***MELP and MSBTC have advised the project committee that existing snowmobile use of the area is increasing, and that conflicts between snowmobilers and other interests are already the subject of discussions between MELP (BC Environment and Lands), MoF, MSBTC and representatives of the BC Snowmobile Federation, heli-ski operators, hut operators and backcountry skiers. The parties are attempting to develop strategies and agreements to reduce conflict in backcountry areas, and to develop new opportunities for these activities. At present restrictions on snowmobile use are in effect near the project site, and one possible outcome of discussions is that efforts may be made to restrict snowmobile use to designated areas and trails. Access by snowmobiles and other all-terrain vehicles will continue to be prohibited in the Purcell Wilderness Conservancy Provincial Park.***

***The project committee agrees that the implications of project development for snowmobile use of the area is relevant to the EA review of the project, although the more general question of snowmobiling activity in the region is beyond the scope of the EA process. In the project report, the proponent will be expected to document current snowmobile use of the immediate project area, and any snowmobiling issues associated with the prospect of resort development - see section E.5(A) of the draft specifications.***

- 23d) There is already a great deal of unwelcome helicopter activity in our backcountry. Hikers have already "lost" the Bugaboo and Shangri-la areas, due to the large amount of heli-hiking activity. The Jumbo Glacier project will add to the problem.

***The implication of the comment is that wilderness degradation problems can already be attributed to heli-hiking activity, and that the project represents a further negative imposition on the wilderness values of the region.***

***While the more general topic of the implications of heli-hiking activity for non-motorized backcountry hiking in the region is beyond the scope of the EA process, the project committee agrees that the potential impacts of the project on wilderness values***

*and backcountry recreation activities are relevant to the EA review of the project, and need to be addressed in the project report - see sections E.5(A) through (G) of the draft specifications.*

*See also the responses to items 14n), 14r) and 14s), above.*

- 23e) There are so many scenic areas available in the Kootenay region, that no group will be deprived if this area is developed.

*The more general topic of the opportunities available in the Kootenay region to enjoy scenic areas is beyond the scope of the EA process.*

*The project committee is focusing its attention on the potential impacts of project development on surrounding wilderness values and opportunities in the vicinity of the project. Reporting is being requested from the proponent with respect to various relevant issues - see, for example, sections E.5(A) through (G) of the draft specifications.*

- 23f) The project will be accessible to all.

*At this stage of the EA process, the extent to which the resort's facilities will be affordable and accessible to potential customers of all types, including local residents, has yet to be adequately investigated and reported. Thus, the project committee has not reached any definite conclusions about this specific issue at this time.*

*The project committee agrees that the potential market for the project, including issues such as the accessibility and affordability of the resort for a wide range of potential clients, is of relevance to the EA review of the project, and has set out various relevant reporting requirements for the proponent - see section B.4 of the draft specifications. The independent assessment of project feasibility which the project committee intends to commission will also examine likely client profiles - again see section B.4 of the draft specifications.*

## **Appendix E**

**Analysis of Public Submissions Received During Jumbo Glacier Draft  
Project Report Specifications Public Comment Period: December 18, 1996  
to February 20, 1997.**

**FINAL REPORT**

**ANALYSIS OF PUBLIC SUBMISSIONS RECEIVED  
DURING JUMBO GLACIER DRAFT PROJECT REPORT  
SPECIFICATIONS PUBLIC COMMENT PERIOD  
DECEMBER 18, 1996 - FEBRUARY 20, 1997**

**July 15, 1997**

## **Methodology**

This document presents an analysis of written public submissions received by the EA Office during the public comment period on the Jumbo Glacier Project draft project report specifications, and was compiled by staff at the EA Office. The public review period commenced officially on January 13, 1997 and concluded officially on February 12, 1997. However, the draft specifications were made available to the public from December 18, 1996 onwards, and submissions were accepted up until 10:00 am on February 20, 1997.

The analysis was conducted in three stages, and entailed the construction of a detailed chart (see the July 4, 1997 chart, circulated to the Project Committee under cover of the EA Office's July 7, 1997 memo). The first stage involved labeling each submission by type (i.e. e-mail, form letter, individual letter, petition), name of writer, place of origin, date written or received, those indicating support for, or opposition to, the project, and whether or not a concern regarding the EA process and/or the draft project report specifications had been noted. Each submission was counted in the total received, with each petition documented as a separate submission. The second stage of the analysis involved a more thorough review of each submission to determine its main points, and these are summarized in the July 4, 1997 chart. The third and last portion of the analysis involved the determination, in cases where a concern has been noted, of whether or not that concern was recognized and considered in any degree in the draft project report specifications, and, if not, which Project Committee member or other review agency would be the appropriate lead reviewer to address the concern. Where submissions specifically allude to the content of the draft specifications, these too are referred to the lead reviewer.

## **Total Number of Submissions**

As noted above, the deadline for public comment on the draft project report specifications was originally set as February 12, 1997. However, a heavy volume of submissions continued to be received at the EA Office during the following week, and it was decided that these late submissions would be included in the analysis. Submissions received after 10:00 am on Thursday, February 20, 1997 were not included in the analysis. All submissions, however, were forwarded to the Project Registry, the satellite repositories and the proponent.

Almost 400 submissions were received and recorded in the Project Registry. Some people wrote more than once. Their letters are counted as separate submissions in cases where they are differently worded, but not in cases where the identical submission is sent to more than one government official or politician. The Project Registry noted about 30 submissions which were replicates of submissions sent by the same person to other parties. Less than 20 people forwarded more than one separately worded submission, one of whom wrote three times. Approximately 15 submissions were illegible. A number of the submissions represented form letters, and are counted separately when forwarded from different individuals. In total, exactly 350 submissions were deemed to be legible and not to be duplicates of other correspondence sent by the same person.

## **Petitions**

While the vast majority of submissions were letters, e-mails, etc. received from individuals or families, five of the submissions were petitions. Four of the petitions indicated opposition to the project, and contained 1,490 signatures. One report, signed by 78 students from Selkirk College (which, due to the numbers of signatures, is being reported as a petition), while taking no formal position in favor of the project, was generally positive with respect to the prospects for development.

The content of each of the five petitions was as follows:

- *"...We, the undersigned, do not want the provincial government to grant a permit to Jumbo Glacier Alpine Resort or any other ski resort to use the Jumbo Pass area as a ski resort..."*  
**Signed by 294 people**
- *"...We, the undersigned, are completely opposed to the Jumbo Glacier Resort proposed for the sensitive alpine of the Purcell Mt. Range in southern interior BC, Canada. We will not use, or support in any way, the proposed mega city which will destroy the wild habitat - home to grizzlies, mountain goats, wolverines, woodland caribou, Golden Eagles, Peregrine Falcons, Bull Trout and the declining Harlequin Ducks to name just a few. The entire area is extensively used by low impact, non-intrusive recreationalists and we insist the government say NO to the proposed resort..."*  
**Signed by 484 people**
- *"... We, the undersigned, do not want the Provincial Government to grant a permit to Jumbo Glacier Alpine Resort or any other ski resort to use the Jumbo Pass area as a ski resort. 2. We, the undersigned, are opposed to the Jumbo Glacier Alpine Resort Development..."*  
**Signed by 572 people**
- *"...We, the undersigned, oppose resort building and heli recreation in the Jumbo Creek Valley and the entire Jumbo/Glacier area including...Monica Meadows, the Horseshoe Glacier, the McBeth Ice fields and the Tenise Creek drainage..."*  
**Signed by 140 people**
- The report submitted by Selkirk College students focused on three main points - fair consideration, comprehensive analysis, and legitimate analysis of the project. The report noted that:
  - ⇒ the project should be given fair, objective and careful consideration, and should be judged on the basis of its physical feasibility as a ski area and its financial feasibility;
  - ⇒ the developers should show what the project will create, how it will create this, and how BC will be affected;
  - ⇒ the draft specifications are comprehensive, and will address this;
  - ⇒ there is concern that the specifications have the potential to go beyond reasonable limits;

- ⇒ there is concern that tourism development will be discouraged if the EA process goes well beyond judging a project on its own internal merits;
- ⇒ the approval process for a project should not be a forum to address environmental and philosophical concerns that occur across our society;
- ⇒ some opponents may well oppose the project, no matter how strenuous are the reporting requirements, and no matter how beneficial the project might be; and
- ⇒ the process should not serve a narrowly focused coalition of anti-development groups.

**Signed by 78 people**

**Place of Origin of Submissions**

Based on the 350 submissions which were analyzed, the following is a listing of the places of origin and the number of individual submissions received from each place of origin (excluding the places of origin of each signature on petitions). The total count for individual letters is 345. These latter submissions were received from the following locations:

<b><u>Place of Origin</u></b>	<b><u>No. of Submissions</u></b>
<u>East Kootenay Area</u>	
• Invermere/Panorama/Windermere	50
• Cranbrook	7
• Fairmont Hot Springs	6
• Radium Hot Springs/ Edgewater	7
• <u>Other<sup>1</sup></u>	<u>3</u>
<b>TOTAL</b>	<b>73</b>

<sup>1</sup> East Kootenay communities from which less than four submissions were received include: Golden and Marysville.

<u>West Kootenay Area</u>	
• Nelson	80
• Argenta/Kaslo	40
• Winlaw	12
• Creston	12
• Crescent Valley	7
• Rossland	6
• Slocan	6
• Trail	4
• <u>Other<sup>2</sup></u>	<u>23</u>
<b>TOTAL</b>	<b>190</b>

<sup>2</sup> West Kootenay communities from which less than four submissions were received include: Burton, Castlegar, Cooper Creek, Crawford Bay, Mirror Lake, New Denver, Procter, Revelstoke, Harrogate, Johnson's Landing, Meadow Creek, Salmo and Silverton.

***Analysis of Public Submissions - Jumbo Glacier Project  
Final Report - July 15, 1997***

Other

• Vancouver/Lower Mainland	4
• Victoria area	7
• Other BC <sup>3</sup>	10
• Ontario/Alberta/Yukon, with majority from Alberta	20
• United States	14
• Unknown place of origin (e-mails, no return address, letter illegible)	27
<b>TOTAL</b>	<b>82</b>

- <sup>3</sup> Other BC communities from which less than four submissions were received include: Kelowna, Prince George, Mayne Island and Haines Junction.

**Concern Expressed - No Position on Project**

Of the 350 submissions analyzed to date, 28 submissions, while indicating views on, or concerns with respect to, either the project or the draft specifications or the EA process, did not specifically state support of, or opposition to, the project. These submissions are categorized as position “not stated” in the July 4, 1997 chart.

**Support for Project - Main Points**

Of the 350 submissions analyzed to date, 9 expressed support for the project (one petition was received which is considered positive towards the prospects for project development - from Selkirk College).

Key points include (not in any order):

1. area is not pristine, as many people believe;
2. area has great potential as a ski area;
3. ski resort is preferable to mining, forestry or other forms of resource extraction;
4. would diminish the threat of bear hunting and poaching;
5. is a legitimate economic development, creating jobs; and
6. BC investment potential would be diminished if resort not approved.

**Opposed to Project - Main Issues**

Of the 350 submissions analyzed, 313 expressed different degrees of opposition to the project (including four of the five petitions, with each petition counted as one submission); and

Key issues include (not in any order):

1. detrimental effects on the southern Purcell Mountains and degradation of the Purcell Wilderness Conservancy, the Bugaboos, Monica Meadows and/or Lake of the Hanging Glaciers;

2. wildlife displacement and/or loss of/fragmentation of habitat for grizzly bear, moose, elk, and black bear;
3. increased human/bear conflicts;
4. disruption of migratory routes of wildlife, causing inability to replenish gene pool;
5. degradation and increased ablation of glaciers from summer ski activities;
6. cost to taxpayer of road construction, maintenance and avalanche control ;
7. competes with already struggling ski hills such as Panorama;
8. financial gain of foreign investors to the detriment of local residents;
9. change of Kootenay lifestyle;
10. increased sewage and waste disposal problems; and
11. decreased availability of wilderness areas for future generations.

### **Concerns Regarding EA Process**

Of the 350 submissions analyzed, 42 expressed concerns with respect to the EA process.

Key issues include (not in any order):

1. some Public Advisory Committee members are in conflict of interest;
2. too many West Kootenay representatives on the Public Advisory Committee;
3. too much representation from special interest groups;
4. process is adversarial and not conducive to productive dialogue;
5. invites radical views;
6. time period for public comment too short (2 submissions stated this concern);
7. process is inefficient, too long and costly;
8. process is flawed if it cannot be summarily terminated when a project is unacceptable;
9. process definition does not refer to a fair and unbiased adjudication of impacts, costs and benefits;
10. process should not abbreviate reporting of public comments;
11. assessments should not be proponent-controlled; and
12. there should be a formal public hearing.

### **Specific Comments on Draft Project Report Specifications**

Of the 350 submissions analyzed, 66 made explicit observations with respect to the draft project report specifications.

The concerns regarding the specifications are very specific, and need to be addressed individually. Generally, however, concerns regarding the specifications included (in no particular order):

1. no reference to total resource planning;
2. alternative locations for resort not explored;
3. statements about decision to accept project for consideration under CASP in *Preface* of draft specs were not substantiated by background documentation;
4. no mention of possible impacts on Glacier Creek Valley;
5. provincial sustainability goals not clearly articulated;

6. no mention of the function of public letters in the process;
7. no discussion of responsible stewardship of land and resources;
8. should document impacts on wilderness businesses;
9. study area should be enlarged - is too restrictive, given resort's impact potential;
10. cumulative effects of salt, fertilizers, glacial ablation and waste management should be discussed;
11. costs to taxpayer for road construction, maintenance and avalanche control not addressed;
12. impact on the Panorama ski resort not addressed
13. potential impacts on wildlife habitat for many species, such as black bear, wolverine, mountain sheep and caribou, need to be addressed;
14. the grizzly bear study requirements are inadequate (e.g. there should be a three-year field study);
15. more detailed habitat suitability or capability studies are required;
16. the socio-economic assessment framework for the EA review is inadequate; and
17. socio-economic studies should be based on full cost accounting methods and/or should adopt an approach based on ecological economics.

<b>Opposed to Project</b>	<b>Support for Project</b>	<b>Position not Stated</b>	<b>Concern(s) Regarding EA Process</b>	<b>Comment(s) Regarding Specifications</b>
313	9	28	42	66

## **Appendix F**

**Project Committee/Review Agency Responses to Public comments on the Draft Specifications, as flagged in July 4, 1997 Chart: Tabulation of Public Comments received during Public Comment Period on Draft Project Report Specifications – December 18, 1996 to February 20, 1997.**

**Jumbo Glacier Alpine Resort Project - Project Committee/Review Agency Responses to Comments Received on the December 13, 1996 Draft Project Report Specifications**

Submission # From Chart	Issue(s) for Follow-up (per July 4, 1997 Chart)	Project Committee/Review Agency Response(s)
#21	<i>Public advisory committee (PAC) concerns</i> - (1) number of seats given to West Kootenay reps; (2) PAC make-up.	Three seats out of 11 were assigned to West Kootenay interests. Two seats represented environmental interests, the third represented the tourism program at Selkirk College. West Kootenay representation is not unreasonable, given the high level of interest of West Kootenay residents. This is demonstrated by the volume of public comments received from that area during the EA review of the project. (EAO)
#24	<i>West Kootenay involvement</i> - West Kootenays were not a part of East Kootenay CORE process. Why involved in project review?	Based on public submissions received, the implications of potential resort development for the future of the backcountry recreation experience in areas surrounding the project site are of interest to both East and West Kootenay residents who currently use the area. Moreover, while CORE divided the planning tables into the East and West Kootenays, this was not intended to arbitrarily separate those issues which are common to both regions along the boundary between them, or to be implied to have done so. The CORE documents identified issues which traverse this boundary, such as the public concern about the proposition of an access road through Jumbo Pass to connect the East and West Kootenay regions. Government's 1995 East and West Kootenay Land Use Plans maintained, at least nominally, a division between the two regions, in order to respond individually to the two CORE reports, and to the two land use planning tables. However, the details of government's approved policies for the area are found within the <i>Kootenay/Boundary Land Use Plan Implementation Strategy (KBLUP-IS)</i> , a document which is 'seamless' with regard to the treatment of issues in the East and West Kootenay regions. The general management directions and guidelines in the <i>KBLUP-IS</i> are applicable in both areas. (LUCO/EAO)
#40	<i>Time for review</i> - Inadequate time for public to review draft specifications.	The <i>Time Limits Regulation</i> , enacted under the <i>Environmental Assessment (EA) Act</i> , provides for from 15 to 30 days for public review of draft specifications, plus a period of not less than 7 days prior to the commencement of the comment period, to allow time for advanced public notification and distribution of copies. In this case, given the size of the document and the intervention of the Christmas season, EAO allowed 3 weeks from the date of release of the specifications (December 18, 1996) until formal commencement of public review (January 13, 1997). In addition, since a heavy volume of public comments on the draft specifications continued to be received in the week following the comment deadline (February 12, 1997), comments were accepted for consideration for another 8 days (until 10:00 a.m. on February 20, 1997). Arrangements for public comment on the draft specifications are deemed to have been adequate, given the time of year and size of the document. Few of the large number of written submissions received during the comment period expressed the view that the comment period was too short. (EAO)
#43	<i>Total resource planning (TRP)</i> - Why is MoF TRP approach not being used to review project?	In MoF's Invermere Forest District, TRPs are used for timber harvesting proposals only. The EA process sponsors a considerably more detailed, comprehensive review. (MoF)
#46	<i>Decision making context</i> - EA process presupposes approval of project.	Incorrect. The EA process is expected to conduct an assessment of the effects of a project so that the project committee can provide ministers with the information necessary for an informed decision on whether or not the project should proceed. The process is not predicated on any presupposition that a project will be certified at the conclusion of the EA review. This particular comment was made in reaction to the wording of one sentence in the draft specifications (the 3 <sup>rd</sup> sentence on page xix of the <i>Preface</i> ). This wording was also identified as a source of concern to some members of the PAC during its meetings. EAO agrees that the

**Jumbo Glacier Alpine Resort Project - Project Committee/Review Agency Responses to Comments Received on the December 13, 1996 Draft Project Report Specifications**

Submission # From Chart	Issue(s) for Follow-up (per July 4, 1997 Chart)	Project Committee/Review Agency Response(s)
<i>(Cont'd from previous page)</i>		wording, taken out of context, and read in isolation of the rest of the <i>Preface</i> , could be misleading, and the sentence has been clarified for the finalised specifications. (EAO)
#46	<i>Treatment of public submissions</i> - Concerns raised in public submissions are abbreviated/consolidated, and dismissed or confused. EAO omits issues for which public has expressed interest/concern.	Disagree. In <i>Appendix A</i> to the draft specifications, project committee members and other government review staff went to significant lengths to identify, catalogue, group and respond to the large volume of views and issues raised in public submissions on the proponent's application. It is reasonable that they should be grouped and consolidated in order to make the large volume of feedback intelligible for purposes of analysis. Moreover, the project committee has only opted not to pursue concerns in situations where either the issue is beyond the jurisdiction of the EA process or there is no public policy basis for pursuing the issue. (EAO)
#46	<i>Proponent-led studies</i> - Assessment should not depend on proponent-funded studies.	Under the <i>EA Act</i> , proponents are primarily responsible for carrying out the assessments necessary to satisfy the reporting requirements of the EA process. This approach is employed in every jurisdiction in Canada, and in most jurisdictions in the USA and elsewhere in the world. The role of government is to ensure that appropriate technical expertise is brought to bear on the review of a proponent's project proposals. Government needs to provide adequate direction to each proponent on required studies and assessments, and the proponent's information should receive meaningful and competent review by professionally neutral and objective technical experts. Usually the latter are employed by government agencies, although arm's length consultants may also be used to advise government on specific issues. (EAO)
#46	<i>Alternative resort locations</i> - are not explored in the draft specifications.	Since the proponent only has a development option in the upper Jumbo Creek valley, it would not be meaningful to examine other sites, and indeed, this would go beyond the jurisdiction of the <i>EA Act</i> . The Act sets up a project-specific review mechanism to judge a specific development proposal on its merits. The <i>EA Act</i> requires that a proponent make an application, and the proponent can only apply for development approvals at sites for which it has the right to make such applications. Thus, while there may or may not be better sites for a particular type of development, the proponent can only make application where it has obtained the right to do so. Pheidias has concluded an 'Interim Agreement' with the province under the CASP process, and that agreement authorises it to seek approval for a ski resort development in the upper Jumbo Creek valley. It currently has no authority to seek such approval elsewhere. (EAO)
#46	<i>Land use plan management objectives</i> - Government has not finalised management guidelines for SRMZ.	This comment was true when written, but is no longer correct. The province released finalised planning guidelines – the <i>Kootenay/Boundary Land Use Plan - Implementation Strategy</i> – in June 1997. (EAO)
#46	<i>Economic assessments</i> - How will a fair, unbiased economic assessment of real costs and benefits be achieved?	The finalised specifications reflect an impact assessment approach to project review, which is normal under the EA process. In assembling the specifications, the project committee has tried to identify for assessment all significant costs and benefits in the broader sense, including both monetary and non-monetary factors which are within the scope of the EA process. Many of these factors were identified by the public (rather than by government agencies) during the review of both the proponent's application and the project committee's draft specifications. During the course of preparing advice and recommendations for ministers, the project committee will evaluate and summarise the project's costs and benefits, following review of the proponent's project report. The project committee may commission an expert consultant to assist with the development of its analysis of positive and negative effects. (MEI)

**Jumbo Glacier Alpine Resort Project - Project Committee/Review Agency Responses to Comments Received on the December 13, 1996 Draft Project Report Specifications**

Submission # From Chart	Issue(s) for Follow-up (per July 4, 1997 Chart)	Project Committee/Review Agency Response(s)
#46	<i>Intervenor funding</i> – should be granted to citizens, so that they can present views, commission technical expertise to critique project.	This issue, and the policy environment for the provision of participant assistance to the public during the course of this review, is addressed in item 1f) of <i>Appendix A</i> in the December 13, 1996 draft specifications (see pages A-6 to A-7). (EAO)
#53	<i>Draft Specs, Preface - Section 3</i> – no reference in <i>Preface</i> to specific body of EA to be used, no rationale for using a project committee, and no explanation of the relationship of the project committee to the public advisory committee (PAC) and the general public.	The comment on “...the specific body of Environmental Assessment or other process to be used...” is not clear in its intent. However, the policy context within which effects are assessed under the EA process is summarised in section 8.2 of the <i>Preface</i> to the draft specifications. The <i>EA Act</i> requires that a project committee be set up to steer each review, and its general role and purpose are explained in section 5.1 of that <i>Preface</i> . Some information on the role of the PAC is contained in section 7.5 of the draft specifications, and this discussion is expanded upon in section 5.5 of <i>Appendix B</i> to the finalised specifications. In the finalised specifications, <i>Appendix B</i> in <i>Volume 2</i> replaces the <i>Preface</i> to the draft specifications for the purposes of explaining the background to the various issues being raised in submission #53. (EAO)
#53	<i>Draft Specs, Preface - Section 4</i> - crucial stages in the initiation of a ski proposal are outlined without complete disclosure of all documents, omission of the government's policy respecting stewardship of the land, no mention of the Glacier Creek valley which may be impacted.	It is not clear which documents are being referred to in this comment. Prior to review under the <i>EA Act</i> , the initial stages of review of the project were managed under BC's Commercial Alpine Ski Policy (CASP). Requests to access specific CASP-related documents should be referred to MELP's Cranbrook office (BC Environment and Lands). With respect to the policy context for examining specific issues raised by the project, including land stewardship issues, where considered necessary for purposes of clarification, this policy context is addressed on an issue-by-issue basis in <i>Appendix A</i> to the finalised specifications. The project committee has considered the Glacier Creek valley in its assessment of wildlife issues and, based on MELP's advice, has incorporated upper Glacier Creek and upper Horsethief Creek, above its confluence with Farnham Creek, in an expanded wildlife study area. (MELP/EAO)
#53	<i>Draft Specs, Preface - Section 5.1</i> - provincial sustainability goals are omitted, there is no description of the nature and extent of minimisation of the full range of effects which are subject to the process, and no attempt to provide environmental enhancement alongside the benefits - poor wording of this whole key statement.  <i>Page xxi</i> - lack of clarity as to what the aboriginal people see as their main goals, and lack of participation by the Sinixt people.  <i>Pages xxii and xxiii</i> - no mention of the function of letters from the public in the EA process, no accounting by the EAO as to the number, scope and viewpoint of the letters, no mention of the EAO's dealing with the	The project committee's view of sustainability issues was documented in its response to item 3a) in <i>Appendix A</i> to the draft specifications (see pages A-20 to A-22). Re. the comments on minimisation of effects and environmental enhancement, under the EA process, it is the proponent's role to respond to the issues identified in the finalised specifications, documenting to what extent it can avoid or mitigate adverse effects or enhance project benefits, and not the project committee's role to prejudge these issues in the specifications. Section 5.1 of the <i>Preface</i> to the draft specifications (section 3.1 of <i>Appendix A</i> to the finalised specifications) is intended simply to present a very brief overview of the EA process. The goals of First Nations which are participating in the EA process for this project are documented in section G.1 of the specifications, which also mentions the interest of the Sinixt people in the review. While section 5.1 of the <i>Preface</i> to the draft specifications did not make mention of the process by which the project committee has evaluated public submissions on the proponent's application, section 7.4 did so. In addition, <i>Appendix A</i> of the draft specifications represented the project committee's formal record of its review and analysis of public submissions on the application prior to preparing the draft specifications. Section 5.4 of <i>Appendix B</i> to the finalised specifications provides an up-to-date summary of the approach to processing public submissions received on the draft specifications. Last year, EAO also produced a summary charting of the submissions received (dated July 4, 1997), plus a brief summary report on those submissions (dated July 15, 1997). (EAO)

**Jumbo Glacier Alpine Resort Project - Project Committee/Review Agency Responses to Comments Received on the December 13, 1996 Draft Project Report Specifications**

Submission # From Chart	Issue(s) for Follow-up (per July 4, 1997 Chart)	Project Committee/Review Agency Response(s)
<i>(Cont'd from previous page)</i>	letters to the project committee and the public advisory committee (PAC).	
#53	<i>Draft Specs, Preface – Section 5.3</i> – Lack of federal/provincial review co-ordination, lack of attention to triggers other than <i>Fisheries Act</i> triggers, ignoring cumulative effects assessment.	Section 5.3 of the <i>Preface</i> to the draft specifications (now section 3.3 of <i>Appendix B</i> to the finalised specifications) has been updated to reflect conclusion of a formal federal/provincial EA co-operation agreement in April of 1997. This agreement will only have effect in the present review if <i>CEAA</i> is legally triggered. If <i>CEAA</i> is triggered, the co-operation agreement provides for close federal/provincial co-operation in conducting the EA review of the project. Focusing on a <i>Fisheries Act</i> trigger reflects the reality that the potential for the project to need an authorisation under the <i>Fisheries Act</i> is the only known potential <i>CEAA</i> trigger. Without a <i>CEAA</i> trigger, the federal government has no legal authority to require a cumulative effects assessment. The jurisdictional context for federal consideration of the project under <i>CEAA</i> is discussed further in <i>Appendix A</i> , section H of the finalised specifications. (DFO)
#53	<i>Draft Specs, Preface - page xxvii, Section 5.4</i> - disputes assumptions that decisions need to be made in the absence of land use plans being in place, that available information is sufficient in quality and quantity to make tenable decisions, and that there exists an effective and responsible stewardship; disputes the omission of any mention of the parties responsible for this stewardship, the assumption that the land use regime being exercised is adequate, and lack of external controls and evaluation of decisions, information and stewardship.	The land use plan for the Kootenay region has now been finalised – see the <i>Kootenay/Boundary Land Use Plan Implementation Strategy (KBLUP-IS)</i> of June 1997 – which now functions as the regional planning context for the review of the project. The project committee has not assumed that available information is sufficient in either quantity or quality to make reliable decisions, which is why the committee requires the proponent to submit a project report with additional information. Issues of resource data, stewardship and decision making are ultimately the responsibility of the individual line agencies with legislated and/or policy-based management responsibility for each resource. EA reviews are conducted within the context of the prevailing policy environment, including current resource management regimes. If there are concerns about their adequacy, such concerns should be pursued directly with the relevant line agencies. (EAO/LUCO)
#53	<i>Time for review</i> - Complicated draft specifications need careful examination by public; more time needed.	See response to similar issue under submission #40 ( <i>Time for review</i> ), above. (EAO)
#59	<i>Public submissions</i> - Do public letters of concern count?	See response to submission #53 comments on section 5.1 of the <i>Preface</i> to the draft specifications. (EAO)
#63	<i>Use of salt</i> – salt issue is a red herring.	Proponent has stated that no salt will be applied to ski runs for general public use, although it may be used on a few race days each year if the race organisers consider it necessary. Thus, the project committee has removed all reference to assessment of salt impacts from the specifications. (MELP)
#63	<i>West Kootenay representation</i> – not appropriate for public advisory committee (PAC), focus should be needs of Columbia valley.	Representation on the PAC is weighted towards East Kootenay interests (with 8 seats, versus 3 seats for West Kootenay interests). Having no West Kootenay representation would not be appropriate, given that many public submissions on the project have come from that area. One issue frequently raised in public comments concerns the implications of potential resort development for the future of backcountry recreation in areas surrounding the project site. This issue is of interest to the East and West Kootenay residents who currently use the area. (EAO)
#63	<i>Use of experts</i> – public interest groups should not be allowed to call their own experts.	Disagree. This is assumed to be a reference to the regular practice of the PAC in requesting EAO to arrange for it to discuss specific issues with identified experts in those issues (both from within and outside government). The requests were not deemed unreasonable, and helped to inform the PAC's deliberations on

**Jumbo Glacier Alpine Resort Project - Project Committee/Review Agency Responses to Comments Received on the December 13, 1996 Draft Project Report Specifications**

Submission # From Chart	Issue(s) for Follow-up (per July 4, 1997 Chart)	Project Committee/Review Agency Response(s)
<i>(Cont'd from previous page)</i>		specific issues. The requests were accommodated by EAO without causing delay in the PAC's review of the draft specifications. (EAO)
#64	<i>Grizzly bears</i> - Serious concerns re. survival of grizzly bears. Impact zone of project is not restricted to one side of Purcells, but includes area west of the Jumbo Pass. Feels that a 2-to-3-year grizzly bear study is warranted.	The project committee notes that concern regarding over-reliance on habitat capability as a means of determining the potential effect of the project on grizzly bears was raised by many reviewers. MELP has recommended changes to the draft specifications with respect to grizzly bear studies, after retaining the services of Ben van Drimmelen to review the various comments received on the draft grizzly bear specifications. The consultant's report and recommendations were reviewed with other members of the project committee who have an interest in grizzly bear issues. Their input resulted in several revisions to the draft specifications. These changes were forwarded to the project committee as part of MELP's overall submission on the draft specifications in November 1997. The finalised specifications incorporate a requirement for one season of fieldwork (June-July), collecting hair samples from grizzly bears for genetic testing purposes, prior to an EA certification decision, plus several follow-up seasons of similar data collection <i>if</i> the project is approved under the <i>EA Act</i> – see <i>Volume 1</i> and <i>Appendix A</i> , section D.3(C) for details. Grizzly bear hair sampling is intended to provide information on bear numbers and distribution, and to monitor how these may change as a result of the project. Specification D.3(C)#6 also requires that the proponent make use of research literature review results and the existing 1:20,000-scale habitat capability information to undertake a detailed analysis of the indirect off-site effects of the project within the watersheds of Jumbo, Toby, Horsethief, Glacier, Hamill, Carney, Howser and Dutch Creeks. (MELP)
#64	<i>Fish</i> – Cold streams are spawning grounds for Bull trout, an endangered species and traditional food. Federal review of fishery issues is needed, also independent inventory of Bull trout.	MELP and DFO are considering these issues jointly, per various federal/provincial agreements on shared fish management. Explanation of the jurisdictional context is presented in the background to this issue – see section H.1 of <i>Appendix A</i> to the finalised specifications. The primary need with respect to fisheries is to evaluate the project's potential impacts on Cutthroat trout and Bull trout. Bull trout are blue-listed, and are a species of special management concern for the region. Tributary streams are crucial for the maintenance of stream ecosystems and fish populations. Bull trout have not been observed in Jumbo Creek to date. However, Bull trout have been documented in Toby Creek and several of its tributaries. There does not appear to be an obstruction to fish passage between Jumbo Creek and Toby Creek. Based on other Bull trout populations in the Kootenay region, portions of Jumbo Creek may be utilised by Bull trout during some stage of their life cycle. MELP feels that the specifications adequately provide for these issues to be considered (see section D.3(A) of <i>Volume 1</i> and <i>Appendix A</i> to the finalised specifications). With respect to independent fish inventories, the <i>EA Act</i> stipulates that it is the responsibility of the project proponent to conduct and submit the assessments and other information required under the Act. It is the project committee's task to determine the validity and accuracy of the studies and analysis presented in the assessment. Using this information, as well as information gathered from other sources, the project committee will ultimately have to make recommendations to ministers on whether or not to certify the project, as proposed. (MELP/DFO)

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Submission # From Chart	Issue(s) for Follow-up (per July 4, 1997 Chart)	Project Committee/Review Agency Response(s)
#65	<i>Market analysis</i> - Should look at long-term impacts of the project on backcountry wilderness-associated businesses such as hunting, biking, and hiking.	Existing and known proposed backcountry businesses are being considered under various sections of the finalised specifications. It is not within the scope of this review for the proponent to speculate on hypothetical future backcountry wilderness recreational use. (MELP)
#65	<i>R.K. Heli-Ski</i> - R.K.'s application for use of other Crown land suggests that R.K. believes that the Jumbo resort will be approved, and is investing in the Tenise and Glacier Creek areas in anticipation of proceeds from the proponent's acquisition of existing heli-ski terrain.	The implications of the project for the operations of R.K. Heli-Ski Panorama Inc. (R.K.) are unknown at this time. Many aspects of the proposed project may impact R.K.'s heli-ski operations, including the loss of skiable terrain. As part of the process of addressing R.K.'s concerns, the project committee has decided to commission an independent third-party assessment of this matter during the project report review stage (see <i>Appendix A</i> , section E.5(G) of the finalised specifications). However, this independent assessment will not proceed if there is a prior resolution of this issue between the parties. In the meantime, according to past tenure applications, R.K. has determined that further skiable terrain should be investigated to respond to expanding demands being placed on its business. That R.K. has recently acquired the right to use Crown land in the Glacier and Tenise Creek drainages for heli-skiing purposes is part of the company's business plans, which are outside the scope of this review. The writer should refer the inquiry directly to R.K. (MELP)
#66	<i>Wildlife</i> - No grizzly bear population study is proposed for entire Purcell Mountain ecosystem. Other wildlife species whose habitat will be threatened include black bear, wolverine, marten, mountain sheep, and caribou. All wildlife need to be studied.	With respect to grizzly bears, it is recommended that the specifications be amended to require that the study area be expanded to include Howser Creek for indirect off-site impacts, and Howser and Stockdale Creeks for cumulative effects. Further expansion of the study area is not deemed appropriate, since it is not clear that increasing the study area would improve the results, and may in fact make it more difficult to isolate the changes which may result from the project. With respect to gathering further information on grizzly bear use, specification D.3(C)#12 now requires that hair samples from grizzly bears be collected to provide information on grizzly bear habitat use and grizzly bear numbers, and to make it possible to assess how these may change as a result of the project. Section D.3 of the finalised specifications also addresses many other wildlife impact issues which are deemed relevant to the EA review of the project. (MELP)
#66	<i>Wildlife study zone</i> - Zone of influence should include entire Purcell Wilderness Conservancy, west side of Jumbo Pass, Glacier and Tenise Creek drainages.	Initial terms of reference for wildlife studies were negotiated between the proponent and MELP (BC Environment) during 1993. They included field surveys and habitat mapping in an agreed-to study area, which was confined to the Jumbo Creek valley. However, having received considerable public comment on this issue, MELP agrees that an expansion of the study area into some adjacent drainages is necessary for an adequate assessment of direct and indirect impacts on ungulate populations. In the finalised specifications, the wildlife study area has been enlarged to include upper Glacier Creek and upper Horsethief Creek, above its confluence with Farnham Creek. (MELP)
#73	<i>Draft Specs, Appendix A - #1a</i> - not to present the ministers with a detailed description of the opinions of the public and an in-depth understanding of public issues is to give public opinion less significance than the technical evaluation. The project committee needs to describe the form which their recommendations will take, and the weighting to be given to each of the three	The project committee will not decide on the final structure of its recommendations to ministers until it has reviewed the proponent's project report and received feedback on it from the public. This comment, as written, prejudices decisions which the project committee has yet to make about how it will report its assessment of public views on issues raised during the course of the review. Certainly, it has expressed no intent or made any decision to give less weight to public feedback. Thus, it is not clear on what basis the comment is made. (EAO/project committee)

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<i>(Cont'd from previous page)</i>	elements in its recommendations, as well as the weighting of the recommendations themselves.	
#73	<i>Draft Specs, Appendix A – #1e)</i> – Requiring that the proponent's report be organised, integrated and summarised is not the same thing as a concise 10-to-35-page government summary.	Agreed, but the project committee, in what is now section A.5 of the specifications, has clearly indicated that it expects a stand-alone executive summary of the project report. (EAO)
#73	<i>Draft Specs, Appendix A – #1f)</i> - EAO and the project committee are wrong to equate interest groups with the opinions of Kootenay citizens. The PAC would be more representative if it reflected the age, race, education, and socio-economic status of the Kootenay population. Nothing in this response shows that the decision-making power in the review process lies with Kootenay citizens.	Under the <i>EA Act</i> , the final decision on whether or not the project should proceed rests with the Minister of Environment, Lands and Parks and the Minister of Employment and Investment. In making their decision, they will take into account the views of the public, the recommendations of both the project committee and the PAC, and the overall pros and cons of development. There are many conflicting views about an appropriate membership for the PAC. However, as currently structured, it reflects a broad range of interests and perspectives on the project and the issues which it raises, and any restructuring of its membership would still have to achieve a similar balance. (EAO)
#73	<i>Draft Specs, Appendix A – #1h)</i> – Answer doesn't describe the independence, expectations, consistency and thoroughness of the project committee's evaluation of the proponent's assessments.	Agreed, because the original public comment did not raise these issues. Under the EA process, the main burden of technical review of the proponent's various submissions falls on government technical staff. They are expected to conduct their reviews with proper professional detachment and objectivity, based on their agencies' respective mandates, goals, programs and policies. In the absence of appropriate government expertise, independent experts may be hired to advise the project committee. (EAO)
#73	<i>Draft Specs, Appendix A – #2c)</i> – Does not respond to the concepts in the question.	The response to item 2c) in <i>Appendix A</i> was provided in an attempt to explain the manner in which government is pursuing the issues of retaining maximum biodiversity and connectivity for wildlife populations in the backcountry. There is no simple answer to this question, since the issues must be considered in light of the latest land use decisions for the area, as well as in the context of the EA process. The response itself is dated, in that it was prepared before the <i>KBLUP-IS</i> was released in final approved form in June of 1997. The <i>KBLUP-IS</i> provides direct guidance on general resource management direction across the region, plus management guidelines for specific resources (including general biodiversity, connectivity, grizzly bears, ungulates and mountain caribou) which are applicable in specific areas. In addition, <i>Appendix 5</i> of the <i>KBLUP-IS</i> establishes objectives and strategies for a variety of resource values in the Jumbo-Upper Horesethief SRMZ (including commercial tourism values (which the Jumbo Glacier project seeks to make use of), access, recreation, biodiversity and ungulates). (LUCO/MELP)
#73	<i>Draft Specs, Appendix A – #15e)</i> – The answer does not describe what the proponent's application actually says about the market for summer skiing, both today and in the future.	In the project committee's view, the proponent has provided adequate comment on the main tourism products to be offered at the proposed resort. The market for this product, and the viability of the proposed resort, will be the subject of an independent market investigation (see section B.4 of the finalised specifications). (MSBTC/MEI)

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#73	<i>Draft Specs, Appendix A – #15f) – The different product being proposed is left vague and disconnected. A full comparison of this resort’s impacts to Blackcomb is omitted.</i>	The project committee recognises that the proposed resort differs from the Whistler/Blackcomb resort in terms of the products being offered in several important respects. Thus, placing emphasis on comparing the Jumbo Glacier project with experience with skiing on the Horstman Glacier at the Blackcomb resort may well not be of any particular advantage in providing insights. The market and feasibility of the project will be the subject of an independent assessment, which will consider resort experience elsewhere (see section B.4 of the finalised specifications). (MSBTC/MEI)
#73	<i>Draft Specs, Appendix A – #15k) - Instead of demanding further valid information on feasibility and markets, and accepting or rejecting the proponent's study on the basis of the project committee's assessment, it permits the whole review process to continue further into CASP and third-party analysis.</i>	This statement implies that the feasibility and market assessment of this project is being deferred by the project committee to the post-EA CASP process, which is incorrect. Section B.4 of the finalised specifications outlines the intent of the project committee to commission an independent assessment of the project’s marketability and overall financial feasibility. The proponent has already provided extensive information on these aspects of the resort proposal, and provision is made in section B.4 for the proponent to supplement that information, if necessary for the independent assessment to be completed. Terms of reference for the independent assessment have been developed by MELP and MEI (see <i>Appendix A</i> , section B.4 for details). (MELP)
#73	<i>Draft Specs, Appendix A – Analysis of public submissions – In Appendix A, only 47% of public concerns were answered. Wants all incomplete responses completed, all submissions from the public to be collated, responded to and published, and membership on the PAC to be expanded to include Kootenay citizens with an objective outlook.</i>	To expect complete responses to all questions mid-way through the first stage of the review process is not realistic. The project committee will not be in a position to respond to many of the public’s comments on the application until it has had the opportunity to review the proponent’s project report, and the comments received on it. To the extent that it was possible at the time of release of the draft specifications, all public comments on the proponent’s application have been responded to. Within the bounds of a reasonably-sized group, the PAC has a broad enough representation for the purposes of the EA process. (EAO)
#73	<i>Draft Specs, Section D.3(B) – Spec #10 - Why is the proponent not required to document the experience of other ski resorts in completing the required wildlife assessments?</i>	The project committee encourages the proponent to conduct its wildlife assessments with reference to relevant experience at other ski resorts and in other development situations – see for example, specifications D.3(C)#2 and D.3(F)# 3. (MELP)
#73	<i>Draft Specs, Sections E.3 and E.11 - do not address concerns regarding the proportion of direct employment by local and regional people.</i>	This issue is addressed in specification E.3#1, first bullet. (MEI)
#73	<i>Draft Specs, Section E.5(E) - Why is proponent not required to assess successes and trends of US, European and other markets for summer use.</i>	The independent feasibility assessment of the proposed resort (provided for in section B.4 of the finalised specifications) is expected to characterise the ski market and to assess the role of the proposed resort in that market. (MELP/MEI/MSBTC)
#73	<i>Draft Specs, Sections D.3, E.5, E.6(B) – Do not address either spiritual values or intrusion of project into wild places, as expressed in items #14j) and #14o) of Appendix A.</i>	The project committee recognises that many people associate spiritual values with wilderness settings. However, given the difficulty inherent in evaluating project impacts on people’s highly variable spiritual values, the committee has focused assessment requirements on the underlying backcountry values which contribute to the spiritual experience. These values are more readily amenable to systematic evaluation (e.g. impacts on aesthetics, on wildlife and recreational settings, and ambient noise levels). (MSBTC/EAO).

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#86	<i>Panorama resort</i> – Given the proposed upgrading of the Panorama resort, the proponent should consider the developmental history of the area, environmental and socio-economic issues raised by that project, and any public funding requirements. The Panorama resort has not been profitable as a ski area. The Jumbo Glacier project would only be profitable as a real estate venture. In section E.8, the project committee makes such a study a voluntary request. Panorama’s management may have concerns about providing such information to a competitor, but assessment is essential.	The project committee favours the voluntary approach indicated in the draft specifications. The proponent may choose to draw from experience at Panorama and other resorts if it deems that this is the best way to assess issues (e.g. as indicated in section E.8 of the finalised specifications). It is also recognised that the history of the Panorama resort and its commercial performance may not be fully relevant to the Jumbo Glacier project (e.g. different economic circumstances at the time of development, different target markets, different project facilities and skiing opportunities, etc.). As to the issue of concerns over the commercial success of Panorama and possible parallels for this project, the performance of other ski operations will form part of the independent feasibility assessment which the project committee is commissioning (see section B.4 of the finalised specifications). MEI points out that recent new investment by long-time ski area operators and knowledgeable and experienced Canadian and international investors, being made at Panorama, Fernie, Sun Peaks, Big White and Mount Washington resorts, among others, indicates confidence that these projects represent a reasonable risk in terms of return on investment. This is similarly reflected in current active investor interest in resort development opportunities at Kimberley, Golden, Lillooet, Squamish and Revelstoke. (MEI/MELP)
#86	<i>Other studies</i> - the project committee should examine the work of the East and West Slopes Grizzly Bear Projects and the Bow Valley Study. Should also look at the Alberta Natural Resources Conservation Board hearings on the Three Sisters resort proposal.	The draft specifications in section D.3(C) have been amended to require the proponent carry out a review of existing literature from BC and adjacent jurisdictions, including the northwestern USA, to identify, describe and assess the effectiveness of mitigative strategies and techniques applicable to land use impacts on grizzly bears – see specification D.3(C)#11. (MELP)
#86	<i>Glacier skiing resorts in Europe</i> - the project committee should examine environmental, socio-economic and the broad spectrum of cumulative effects of existing glacial resort developments in Europe.	It is beyond the scope of the EA process to undertake a broad systematic assessment of the impacts of glacial skiing resorts in Europe. For the purposes of environmental assessment, while comparisons might be interesting, they cannot be used conclusively. The environmental setting for each ski resort is unique. (MELP)
#88	<i>Grizzly bears</i> – The project committee does not seem to require research of local activities, movements and habitat use of bears through the use of radio collars or global positioning systems collars, nor to do repeat population sampling to indicate the turnover in the individual bears which use the Jumbo valley. The importance of taking these approaches is that habitat suitability or capability may provide a very incomplete picture of the value of the area to bears. Will not indicate key denning or mating sites, or whether Jumbo is a bottleneck through which bear movement is funnelled, or where bear activity is actually concentrated. Need to address potential effect on genetic viability of several wildlife populations in the	Concern regarding a perceived over-reliance on habitat capability assessments as a means of determining the potential effect of the project on grizzly bears was raised by many reviewers. In response, the specifications have been amended to require that hair samples of grizzly bears be collected to provide information on grizzly bear habitat use and grizzly bear numbers, and to form a baseline for monitoring how these may change as a result of the project – see specification D.3(C)#12. It should be noted that MELP considers radio-collaring to be too intrusive as a grizzly bear monitoring method. (MELP)

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#88	<i>Solid waste</i> - Even with good waste management practices, bears will be attracted to the odour of garbage, barbecues and restaurants. Would be appropriate for proponent to identify other mountain resort communities which have successfully prevented bears from being attracted. Within the waste management section of the specifications, need to discuss the impacts on the Columbia valley of the increasing amount of Crown land needed for a larger landfill than would otherwise be required. Need to assess increased risks, smell, wildlife problems, and blowing garbage from a larger landfill.	In section D.1(A) of the specifications, MELP has requested that the proponent provide an acceptable solid waste management plan for the Jumbo Glacier project. This plan should meet MELP and RDEK goals to reduce, re-use and recycle solid wastes. Confirmation is required on how the proponent will deal with residual wastes, that is, whether the RDEK landfills will be used, or whether a landfill/incinerator will be part of the project. The development of a wildlife-proof residual waste management system is an essential part of this waste management plan. RDEK notes that any decision to proceed or not proceed with the project will not materially affect programs set out under its Regional Solid Waste Management Plan. Neither of the two main issues - landfill space/capacity and operational considerations (smell, wildlife conflicts, etc.) - are considered limiting by RDEK, which must select a new landfill site for the upper Columbia valley, regardless of the decision on the project. To meet long-term needs, the largest site practicable will be preferred. Operational standards are subject to provincial regulation. (MELP/RDEK)
#88	<i>Equestrian facilities</i> - Should require proponent to take account of developments that are not in the current plan, but which are expected to be developed in the future, such as the equestrian facility.	The proponent has categorically withdrawn its original proposal for equestrian facilities as part of the overall resort project. Thus, this facility is no longer subject to assessment. This approach is being adopted by the project committee for any feature of the original project proposal which has now been withdrawn. If the proposal is revived at a later time, following project start-up, it will be subject to the review regime in effect at that time (see <i>Appendix B</i> , section 6.8 of the specifications). (MELP)
#92	<i>Wildlife</i> - Disputes logic of asking proponent to document wildlife enhancement plans to deal with wildlife impacts which should not be permitted. Concerned that the specifications refer to the proponent negotiating with MELP on wildlife issues, when MELP, with its expertise, should simply direct the proponent on what is required. What happened to the MELP Wildlife Branch proposal for 2-year grizzly bear study?	Given the long-term nature of the Jumbo Glacier project, habitat enhancement will not likely be acceptable as compensation for unmitigatable impacts on wildlife resources. MELP would not support enhancement of adjacent wildlife habitats as mitigation or compensation for project impacts on wildlife. Wildlife enhancement generally refers to forest or vegetation manipulation to improve forage/cover habitat values. These are appropriate techniques to offset relatively short-term impacts of projects such as mines, until a permanent solution can be provided through site reclamation. Reclamation is not an option in a project of this size and longevity. See above, response to submission #64 ( <i>Grizzly bears</i> ), with respect to grizzly bear assessments. (MELP)
#92	<i>Costs to taxpayers</i> - How much will project cost the taxpayer?	The issue of costs to government is covered in the specifications - see sections E.7 and E.8. Note that the focus of the reporting requirements is on larger incremental impacts, not on minor or inconsequential cost items. In some cases (such as noted for schools and social services), the demands for government services are not expected to increase provincially as a result of the project, and the associated funding issue is considered to be more of an issue of re-distribution of expenditures within the province. (MEI)
#92	<i>Cumulative effects</i> - draft specifications omitted cumulative effects on flora and fauna, and on community.	If CEAA is triggered, evaluation of cumulative environmental effects is required by law (see <i>Appendix A</i> , section H.2). In any case, assessment of cumulative effects on grizzly bears is highlighted in section D.3(C) of the finalised specifications, and is required irrespective of whether or not CEAA is triggered - see both <i>Volume 1</i> and <i>Appendix A</i> . The project committee notes that, under CEAA, there is no federal jurisdiction to evaluate issues which do not stem from environmental effects, such as many of the project's potential social and

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#92	<i>Use of salt</i> – Need to address concerns re. use of salt.	See above, response to submission #63 ( <i>Use of salt</i> ) on this issue. (MELP)
#92	<i>Project viability</i> – what are impacts on existing low-impact tourism businesses? Need to evaluate levels of use of present ski resorts in BC, and land speculation.	The purpose of this environmental assessment is to determine the impacts of the proposed resort on the surrounding area, including the possible impacts on lower-impact tourism such as heli-skiing. Section B(4) of the specifications provides for the proponent's market analysis to be subject to an independent assessment, which will consider the proponent's projections of the impact of project development on visitor levels at other ski resorts in the region, notably the Panorama ski resort. This will include an assessment of the projected visitor profile for the project (which is expected to differ from that at other resorts in BC), and the demand and capacity for comparable skiing in BC, and in other relevant competing areas. (MELP)
#94	<i>Definition of study area</i> – Should include the Purcell Wilderness Conservancy (PWC) in study area.	There was considerable comment received from the public and the PAC with respect to the boundaries of the study area, particularly for wildlife assessments. There was particular concern that the study area did not take into account potential impacts of the proposal on wide-ranging wildlife populations in adjacent drainages. MELP has considered the comments received, and agrees that expansion of the study area into some adjacent drainages (upper Glacier Creek and upper Horsethief Creek, above its confluence with Farnham Creek) is warranted for an adequate assessment of direct and indirect impacts on ungulate populations. With respect to the PWC, section E.5(B) of the specifications addresses the potential for increased backcountry use of the area. MELP believes that the Jumbo Glacier project will result in some hikers going into the PWC for day and overnight trips. Thus, specification E.5(B)#1 requests the proponent to develop a resort client profile which characterises client numbers and demographics, as well as the type of recreational activities (and projected use levels) which resort clients will be interested in pursuing, in addition to skiing. MELP will use this information to evaluate for itself the likelihood of increased visitors to the PWC. (MELP)
#94	<i>Full cost accounting</i> - There should be full cost accounting of project impacts.	See above response to submission #46 ( <i>Economic assessments</i> ) on the issue of assessing costs and benefits. (MEI)
#100	<i>Wildlife</i> - GIS mapping by an impartial firm should be required. Would suspect pro-project bias in habitat and impact maps produced by proponent. Wording in draft specifications D.3(C) #4 and #5 and D.3(F) #2, D.2(A) #1 and D.3(B) #10 are imprecise and leave room for biased assessment. Surprised by the absence of any specifications for new wildlife studies, with proponent expected to rely on existing work.	The proponent's biophysical habitat baseline mapping is comprehensive in nature, and will provide useful baseline habitat information necessary for the evaluation of the project's potential impacts on wildlife habitats and populations. Baseline mapping is the first step for the proponent in its overall task of reviewing maps and collected data, and preparing an impact assessment and analysis for review by the project committee. MELP reviewed the fisheries and wildlife resource specifications which are identified in submission #100, and asked its independent grizzly bear expert, Ben van Drimmelen, to review those noted here from section D.3(C) - <i>Grizzly Bears</i> . Where it was felt that specifications were imprecise, or that there was room for a specification to be misinterpreted, wording changes have been made. The wildlife impact assessment work has still to be completed by the proponent. Once complete, the proponent and MELP will be able to determine if there are any special wildlife habitat features identified which may require further study. At this time, only habitat capability mapping has been completed. Assessment of collected information has still to be completed, and the study area for ungulate evaluation has now been expanded. (MELP)

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#109	<i>Noise</i> - Section E.5(D) makes no mention of noise impacts beyond the immediate area to be developed.	Based on concerns expressed by the public, the proponent is being asked to address the extent to which noise could extend to any significant distance beyond the boundaries of the proposed resort. The project committee is focusing on the implications (if any) of on-site noise for surrounding backcountry use. (EAO/project committee)
#109	<i>Air transport noise/volume</i> – Section E.7(L) of the draft specifications provides no means for determining what level of noise is significant. On what basis does the project committee agree (per page 200) with proponent's conclusion that there would not be any dramatic increase in air traffic at Fairmont. Even if true, increased helicopter use will significantly raise noise levels.	In the draft specifications (page 200, section E.7(L)), the project committee did indicate that the proponent's estimates of low project-related air traffic at Fairmont Airport seem realistic, based on the scenarios documented by the proponent in its application. However, other possible combinations of number of flights and plane sizes are possible. In the draft specifications, the committee went on to comment that some supporting analysis is needed. The feasibility of service by large jets to and from Fairmont Airport would be a function of the price and demand for the service. Factors which would affect price include airport capability, airport costs, regulatory safety approvals, environmental approvals, reliability factors (e.g. weather-related), routings and types of aircraft in use. The finalised specifications reiterate the original reporting requirements, which were intended to clarify both air traffic volumes at Fairmont (see specification E.7(L)#3) and frequency of helicopter use at the resort (see specification D.3(F)#4). Noise at Fairmont Airport from aircraft use is not expected to change significantly from present levels, if the frequency of use projected by the proponent is confirmed by analysis. (MEI/MELP)
#109	<i>Wildlife</i> - Concerned about the project committee's dismissive attitude toward threatened and endangered species. Views any mitigation plan (pages 105 and 110 of the draft specs) with scepticism. How can impacts be avoided when displacement of wildlife and loss of habitat are inevitable? At what point do these losses become acceptable? Has there been a mitigation plan related to a development of this nature which has proven successful? On page 105, the project committee suggests that loss of endangered and threatened species is acceptable, providing that the proponent monitors the loss. Why are these studies time-limited? Monitoring is not an acceptable solution.	The comment reflects a misunderstanding of the draft specifications. Disagree that the project committee has dismissed this issue, or that the draft specifications imply that losses are acceptable if monitored. Acceptability of adverse impacts is a matter for ministers to decide, based on their ultimate view of the overall benefits and costs of the project. The role of the project committee is to provide the ministers with its assessment of what those benefits and costs (e.g. to wildlife) will be. Having said that, MELP has revised and clarified section D.3(E) of the draft specifications – <i>Threatened or Endangered Wildlife</i> . In addition to the possible occurrence list requested in the original terms of reference for this project, work is required to identify habitat features for threatened or endangered species which are present in areas to be directly impacted by the construction and operation of the resort facility. Proposals for mitigation plans are also required for MELP review. Attention needs to be focused on the village site, resort buildings, tower locations and any ski runs located off the glaciers. (MELP)
#110	<i>Air traffic</i> - Main concern centres on transportation to/from resort. Proponent seems uncertain how much air traffic will be required to service the resort. Jet flights from Fairmont would increase. The sound of helicopters and jet planes will escalate over time, creating an intolerable situation. An undetermined number of flights into Fairmont, Cranbrook and Calgary	Regional transportation issues of the type mentioned here have been identified by the project committee as requiring further clarification – see section E.7(L) of the specifications. Regarding heli-hiking, the project proposal in the proponent's application does not include any helicopter-supported recreation activities, such as heli-hiking, although third-party operators may opt to be based at the resort, if they can obtain government approvals to operate. See also response to submission #109 ( <i>Air transport noise/volume</i> ). (MEI)

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#121	<i>Review timeframe</i> – Project of this scope needs a longer time for the public to respond.	See response to submission #40 ( <i>Time for review</i> ), above. (EAO input)
#121	<i>Draft Specs – Section C.2</i> - Proponent should be more specific in addressing safety issues re. crevasses, ice falls and out-of-bounds skiing. <i>Spec #3</i> - what does 'limited' mean? Define/quantify. <i>Spec #4</i> - need detailed analysis of snow conditions, including amounts, type of surface and how each will be managed. <i>Spec #5</i> - Impacts on Lake of the Hanging Glacier and Horsethief Creek drainage must be addressed, as impacts from glacier modification would be greatest here. <i>Specs #6 and #7</i> - should address what will be used to modify glacier's surface, why it must be done, how much reshaping will be required, what the visual impacts will be, and what impact this will have on glacier hydrology. Specific thought should be given to addressing the impact of dynamite on glacier movement.	With respect to safety matters, the proponent has indicated that no glacier modification of any sort is required, and especially of the type with respect to which the public has expressed concern. In particular, there will be no use of explosives, bulldozing or significant salt or fertiliser application. Glacier management will entail primarily installation of surface lifts, conventional ski area grooming practices, temporary lift, run and natural hazard markers, and the installation of log rafts to bridge selected crevasse areas on the glacier surface, where necessary for access purposes. The surface of the glacier will be maintained in order to keep it safe and usable for skiers. In addition, ski patrols will be on duty in order to ensure the enjoyment and safety of the public. Specification C.2#1 requires the proponent to reaffirm that its intent is to manage glacier skiing sites largely by means of conventional ski slope grooming techniques, complemented by routine on-site ski area management and regular ski area patrolling to identify problem locations. The project committee has reviewed the issue of glacier use in light of the proponent's assurances that glacier modification is not intended, and has concluded that there remain no strategic issues with respect to glacier grooming which require attention during the EA review of the project. Thus draft specifications C.2#2 to #7 have been deleted from the finalised specifications. If the project is approved under the <i>EA Act</i> , the remaining glacier grooming issues, which are routine, will be addressed in the course of developing the CASP ski area master plan. (MELP/MEI)
#121	<i>Draft Specs – Section C.4</i> - Should address various types of building materials/construction which could be used to minimise impact and loss in case of wildfire. Proponent should apply risk analysis to determine the type of fire-fighting capabilities required.	This is an issue for detailed planning. Conceptual/strategic wildfire risk and management issues need to be assessed under section C.4 of the specifications. If the project is approved at the conclusion of the EA process, details of building design and construction materials, and also fire-fighting capability, would be addressed during the development of the CASP ski area master plan and the regional district (RDEK) OCP. (MoF)
#121	<i>Draft Specs – Section C.5</i> - Should consider: ice loading and exposure to wind from the west; exposure of the top return station terminal; special carriers which may be required for items such as water, food, fuel and garbage; effect of snow creep on towers; and avalanche risks affecting towers along the lift line from the east side. Uneven ice movement may create problems for tower structures. Should document successes or failures of glacier skiing at other resorts.	All of these issues are addressed as part of the regulatory permitting process for proposed ski lift locations. None are viewed as raising concerns which call into question project acceptability, and which are therefore in need of attention during the EA process. See section C.5 of <i>Appendix A</i> to the finalised specifications for further details. (MMA)

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#121	<i>Draft Specs – Section C.6</i> - Proponent should document its 'green' policy.	Proponents are expected to develop projects in compliance with the laws, regulations and government policies in effect when development is undertaken, including those which pertain to environmental management and protection. Where issues of environmental acceptability have been raised in this review, they are addressed in other sections of the specifications, and the project committee, on reflection, sees no value in insisting that the reporting required elsewhere be re-packaged to address the resort's 'greenness'. Thus, the project committee has deleted draft specification C.6#1. (MELP)
#121	<i>Draft Specs – Section D.1(A) – Spec #3</i> - Should provide detail of bear-proofing. <i>Spec #5</i> - Concerned that proponent may change position on elimination of equestrian facilities. What guidelines are in place to prevent this? Should address MELP's concerns about the release of nutrients contained in runoff into local water supplies.	Section D.1(A) of the specifications requires the proponent to address bear-proofing issues in general terms in its waste management plan. If the project is granted approval, specific detailed bear-proofing measures will have to be mutually agreed upon between the proponent, RDEK and MELP at the pre-construction stage, and will have to incorporate state-of-the-art technology which is available at that time. The proponent has stated conclusively that equestrian facilities have been withdrawn from the project - see above, response to submission #88 ( <i>Equestrian facilities</i> ). With respect to nutrient runoff, specification D.1(B)#6 addresses the need to examine nutrient runoff issues, in the event that the proponent opts for discharge of treated wastewater to Jumbo Creek. (MELP)
#121	<i>Draft Specs – Section D.1(B) – Spec #1</i> - Must address collection, treatment and disposal of domestic effluent, and stormwater/ snowmelt runoff from all components.	Agreed and provided for in specification D.1(B) #1, which states that, in the project report, the proponent must "...include a plan for liquid waste disposal which is similar to a Liquid Waste Management Plan, and which considers all aspects of liquid waste treatment and disposal..." (MELP)
#121	<i>Draft Specs – Section D.1(D) – Spec #1</i> - Identify location and exposure of fuel storage sites. Present conceptual plans for the storage of all fuels, including control structures to contain spills, and mitigation plans.	Section D.1(D) has now been combined with section D.1(C), which originally only addressed special wastes. MELP wishes to ensure safe storage, handling and transportation of special wastes and fuels, and minimisation of the risk of releasing special wastes and fuels into the environment. The project committee feels that this can be accomplished by seeking a commitment in the project report to provide information on fuel storage sites prior to project development activity. The decision to opt for a commitment, rather than firm details, in the project report is based on two factors: (1) siting of such caches should raise no strategic issues, given the existence of widespread proven practice; but at the same time (2) there is no formal permitting process for these facilities, hence the need for a binding commitment. (MELP)
#121	<i>Draft Specs – Section D.1(F) – Spec #3</i> - How much salt will be used, how will it be spread, and how will impacts be mitigated? <i>Spec #4</i> - add to this any impact on associated drainages, especially Lake of the Hanging Glacier and Horsethief Creek. <i>Specs #12, #13 and #14</i> - Nutrient impact should be assessed for full project, including equestrian activities and golf course. How does removal of certain components of the project or lack of details on how something will be achieved affect the viability of the project?	The proponent has stated that salt will not be used to groom ski runs at the Jumbo Glacier resort for regular operations, although it is possible that, on some of the few days when ski races are held, race organisers may feel that salt application is warranted to improve skiing conditions. The proponent has withdrawn equestrian activities and the golf course from the project proposal. Thus, these facilities are no longer subject to assessment. This approach is being adopted by the project committee for any feature of the original project proposal which has now been withdrawn. With respect to nutrient runoff, specification D.1(B)#6 addresses the need to examine nutrient runoff issues, in the event that the proponent opts for discharge of treated wastewater to Jumbo Creek. It is conceivable that the removal of certain components of the project could affect its viability. The project committee is commissioning an independent feasibility assessment of the project – see section B.4 of the specifications – and this assessment will focus on the final form of the project proposal for EA decision making purposes. Thus, it will be based on excluding the withdrawn facilities. The level of detail

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#121	<i>Draft Specs – Section D.1(G) – Spec #1 - add PM<sub>10</sub> of Level A as recommended by MELP for the benefit and longevity of the resort. Consideration should be given to a total ban on use of wood-burning stoves/fireplaces.</i>	MELP has advised the project committee that it does not anticipate significant off-site transport of air pollutants from the project site if the resort proceeds – see section D.1(E) of the finalised specifications, <i>Volume 1</i> and <i>Appendix A</i> . Those emissions which might be expected to affect PM <sub>10</sub> levels in the vicinity of a ski resort normally originate from wood burning (heating, clean-up fires), internal combustion engine exhaust and natural gas combustion (heating), and do not require permits under the <i>Waste Management Act</i> . Since MELP has no regulatory authority with respect to air quality, once a project is approved or when a resort is built, air quality is an issue which is being given consideration during the EA process. For its part, the proponent has advised MELP that it does not plan to install wood-burning fireplaces or wood-burning stoves in every residential unit. Some fireplaces may be installed in the common areas of the hotel, and in a number of residential units, but it expects the number of fireplaces to be limited by the terms of its ski area master plan. (MELP)
#121	<i>Draft Specs – Section D.2(A) – Spec #4 – Should identify water sources for the entire project and their seasonally adjusted rates. Spec #8 - Snowmaking should be moved out of conditional category, and into area that must be addressed.</i>	With respect to water supply, MELP requires a water supply plan for the resort in the project report. The plan must take into account adequacy and long-term reliability of proposed water sources, based on hydrological analysis and well-founded estimates of demand for the fully developed resort. It must also include an overview of the main components of a water treatment and storage system. The proponent has indicated that the resort will rely entirely on groundwater supply. Thus, potential impacts of groundwater withdrawals on streamflows and on fish, fish habitat and downstream water users must be assessed. MELP is seeking assurance that the proponent will have sufficient water to meet demand at the resort at full build-out, without fish habitat losses or significant impacts on fish populations or downstream waters users. With respect to snowmaking, the proponent's proposal does not include this activity. The project is at such a high elevation that snowmaking will not be necessary. (MELP)
#121	<i>Draft Specs – Section D.3(A) – Spec #1 - Add Horsethief drainage and the need for evaluation of all fish species.</i>	MELP has recommended to the project committee that the specifications in section D.3(A) not incorporate this proposed addition, since there is no basis to suppose that the project could lead to direct impacts on fishery values in the Horsethief drainage. (MELP)
#121	<i>Draft Specs – Section D.3(C) – Specs #1 to #12 - All assumptions used in the US Forest Service Grizzly Bear Cumulative Effects Model should be included in project report. Grizzly bear study in Jumbo Creek valley and adjacent surrounding drainages should include habitat, food sources, bear movement, denning sites, conflicting habitat usage, impact of habitat loss, mortality and</i>	The specifications have been amended to make it clear that the assumptions required to apply the cumulative effects assessment model must be reviewed by a panel of grizzly bear experts – see specification D.3(C)#10. This will ensure the effective application of the model, whether the assessment is conducted by the proponent or by MELP. (MELP)

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#121	<i>Draft Specs – Section D.3(E)</i> – Should be required to establish a baseline from field studies of endangered or threatened species prior to project approval.	See above, response to submission #109 ( <i>wildlife</i> ). (MELP)
#121	<i>Draft Specs – Section D.3(F)</i> - Provide details of the extent to which the existing access corridor will have to be modified. Should minimise the width of the utility/access corridor.	Section E.6(C) of the specifications requires that the proponent provide further information in the project report on the extent to which the existing access corridor will be modified and upgraded. The project committee will not be in a position to respond further to the question raised here until the proponent submits this design information in the project report. (MELP)
#121	<i>Project plan</i> - Need a detailed project plan/description in the project report.	The requirement for a detailed project description is stipulated in section A.2 of the finalised specifications document. (EAO)
#121	<i>Data collection</i> - Should stipulate that all data must be properly and completely collected and analysed.	The finalised project report specifications stipulate the data collection requirements which must be complied with in preparing the project report. As a check, the <i>EA Act</i> provides for an initial screening of a project report by the project committee, when first submitted, to ensure that it generally meets the intent of the specifications. If not, the report will be returned to the proponent for upgrading, prior to being accepted for formal detailed review. (EAO)
#121	<i>Conservancy</i> - Specifications do not address fully the need for this project, or how the development of this project in a buffer zone will impact the Purcell Wilderness Conservancy (PWC). Does not address how increased numbers and greater backcountry penetration will impact the adjoining PWC.	The PWC is one of the few parks in British Columbia classified as a 'Wilderness Conservancy Park', and the park master plan refers to 'minimal development', 'minimum use', 'rustic', etc. MELP recognises that there could be spin-off activities associated with the Jumbo Glacier resort, since access to the area will be improved, and that this could lead to increased visits to the PWC. The proponent has stressed that it expects most of its clientele to be unlikely to leave the confines of the resort. Moreover, it has pointed out that the PWC is not contiguous to the resort, and, at its closest, is 7 km away, across rugged terrain. MELP is seeking additional reporting on the profile of the resort's clientele, and any spin-off activities which could encourage resort visitors to enter the PWC (and their expectations, if they do so). MELP will itself assess the resort's client profile information and its implications for use of the PWC– see section E.5(B) of the finalised specifications document. (MELP)
#121	<i>Wildlife</i> - assessment of importance of Jumbo Pass as a wildlife migration corridor is needed. Need to address how establishment of permanent residences in a main east/west wildlife corridor will impact wildlife movement and how it will be mitigated. Potential impacts of project development on wildlife populations in the drainage due to loss of habitat, harassment and displacement of wildlife, and direct human/recreation conflicts, need to be addressed. Proponent should	None of the facilities proposed for this resort are located in the Jumbo Pass itself; thus they will not physically block wildlife movements in the pass. There is expected to be some upgrading of the existing Jumbo Creek road below the pass, but other than that, the nearest new facilities (ski terrain facilities such as lifts and runs) would be located more than 2 km away to the north. Having said that, reporting requirements incorporated into sections D3(B) and (C) of the specifications are designed to examine the extent to which Jumbo Pass is currently used as a wildlife corridor, and to assess indirect effects on wildlife (habitat disturbance, harassment and displacement of wildlife) as a result of increased human presence, etc. Various subsections of section D.3 address a range of wildlife issues in addition to the Jumbo Pass issue. Other sections of the specifications also address the other issues mentioned, including avalanche issues (sections C.3 and E.6(D)), and deforestation,

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#122	<i>Purcell Wilderness Conservancy</i> - Future of tourism in BC depends on wilderness wildlife and small business, and resort would detract from them, and seriously degrade the quality of the PWC.	Tourism issues, including impacts on existing small backcountry businesses, are addressed in sections E.5(A), (E), (F) and (G) of the specifications. See above, response to submission #121 with respect to PWC issues ( <i>Conservancy</i> ). (MELP)
#122	<i>Wildlife</i> – Project site is east/west migration route. Project would put too much pressure on wildlife, and cause displacement/death of animals. Area functions as sanctuary for species that live there.	See above, response to submission #121 respecting <i>Wildlife</i> . (MELP)
#122	<i>Socio-economic</i> - Specifications were weak in recognising all socio-economic impacts. Small business would lose. People visit Canada because of the mystery, not the access.	The project committee is satisfied that the scope of the socio-economic assessment requirements in section E of the finalised specifications is broad enough to address the issues raised by this comment. (MSBTC/MEI)
#122	<i>Public advisory committee (PAC)</i> - PAC membership is too narrow. No one represents West Kootenay mountaineering community.	Given the range of interests involved in this review, it is not possible to provide a separate seat for everyone of them on the PAC. The PAC already consists of 11 members, 3 of them from the West Kootenay. A variety of backcountry use interests are represented. (EAO)
#124	<i>Responsibilities for studies</i> - Funding for investigations and report-writing should come from the proponent, but government should be closely involved in the selection of people contracted to do the work, in management of the contract, and in interpretation of the results.	As in all other jurisdictions in Canada, and in many other jurisdictions in the world, British Columbia's EA process assigns to proponents the responsibilities to commission, fund and manage most of the studies required for EA reviews. In exceptional circumstances, the project committee may commission independent expertise – see for example sections B.4 and E.5(G) of the finalised specifications. The role of government normally lies in reviewing the proponent's assessments, when submitted, including its study methodologies and results interpretation. Where not satisfied, government agencies may request that the proponent rework some aspect of its assessment, or, less commonly, may opt to do so itself. (EAO)
#124	<i>Wildlife issues</i> - Wildlife studies should include investigation of both regional and local wildlife impacts. Proponent should produce, for key species, an analysis of effects on travel and dispersal, and on long-term gene flow and population dynamics. Should be done in	The many wildlife issues which have been raised by this comment are addressed throughout section D.3 of the specifications document. Impacts on the PWC are addressed in section E.5(B). Alternatives for ski resort development at the site would have been considered during the first stage of the CASP process, which led to selection of this particular development concept for further more detailed review by interested parties. Respecting this issue, see also the response to submission #46 ( <i>Alternative resort locations</i> ), above. (MELP)

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#124	<i>Project revenues</i> - Should produce an account showing where the income from this development will accrue.	The project committee agrees that this is an issue in terms of impacts of the project on the local community and region. The issue is addressed in specifications which require assessments of employment and income effects (E.2) and spin-off impacts (E.4). (MEI)
#125	<i>Sewage</i> - Specifications require an analysis of sewer requirements for the entire project rather than phase 1 alone. Inability to dispose of sewage will pre-empt the project.	MELP requires the information indicated in section D.1(B) of these specifications to assess whether or not the proponent's proposed liquid waste treatment facilities for the resort are adequate, given the site constraints in the valley and the phased construction of the project. Key issues include the provision of adequate ground disposal systems for secondary-treated or tertiary-treated wastewater, and the preparation of a liquid waste management plan for the project. Chemistry and physical capability of the soil to handle wastewater are critical. The objective is to avoid impacts on water quality and fisheries. More detailed information will also be required at the permitting stage, if the project is certified under the EA process. (MELP)
#125	<i>Water supply</i> - Sourcing 20 l/s of water is unresolvable problem.	See above, response to submission #121, <i>Draft Specs - section D.2(A) - Spec #4</i> . (MELP)
#125	<i>Access road</i> - Problems with avalanche hazard along the access road are grossly understated.	Comment does not fairly reflect the proponent's work to date. Avalanche assessments performed for proponent by P. Schaefer (of Stetham and Associates, dated November 30, 1995 and May 18, 1997) fairly and completely assess the hazard along the highway corridor. His assessment is consistent with other BC highway corridor assessments, and the hazard is typical of a mountain highway in BC. The consultant, who is Canada's foremost expert in this field, makes recommendations for alignment changes which will further reduce the risk, and also proposes methods to mitigate and manage the hazard. (MoTH)

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#125	<i>Wildlife impacts</i> - Mitigation of wildlife habitat impacts is not reasonable or even plausible.	The project committee is not yet in a position to draw firm conclusions on this issue. Specifications in section D.3 are designed to investigate this matter. (MELP)
#125	<i>Wildlife study area</i> – Should be much larger.	See above, responses to submissions #66 ( <i>Wildlife study zone</i> ) and #94 ( <i>Definition of study area</i> ). (MELP)
#126	<i>Grizzly bears</i> - MELP considers the Jumbo Creek drainage to be important for grizzly bears, as noted in its Regional Biodiversity Strategy. Disagrees that it is difficult to apply objectives in MELP's <i>Grizzly Bear Conservation Strategy</i> on a site-specific basis to projects like Jumbo.	The direct, indirect and cumulative impact assessments required in section D.3(C) of the specifications, supplemented by the proposed addition of genetic analysis of hair samples to provide information on grizzly bear habitat use and numbers, and to monitor how these may change as a result of the project, will provide sufficient information to be able to determine the potential effects of the project on grizzly bears, and whether or not opportunities to prevent or mitigate any adverse effects exist. (MELP)
#127	<i>Definition of study area</i> - History has shown that this scale of development is incompatible with grizzly bears. Can't just rely on our parks to provide critical habitat needed for bears. These animals range much further than park boundaries.	The specifications have been amended to require that the grizzly bear study area be expanded to include Howser Creek for indirect off-site impacts, and Howser and Stockdale Creeks for cumulative effects. Further expansion of the study area is not recommended since it is not clear that increasing the study area would improve the results, and may in fact make it more difficult to isolate the changes which may result from the project. (MELP)
#127	<i>Impacts on Conservancy</i> - Need to recognise impacts on neighbouring ecosystems, specifically the PWC. Project will compromise intent of PWC.	See above, response to submission #121 ( <i>Conservancy</i> ). (MELP)
#127	<i>Wildlife studies</i> - Long-term studies are needed to ensure that environmental impacts from development do not destroy the long-term populations of all species within the project area. Specifications do not mention goats, and deal insufficiently with small mammals and birds.	MELP has re-examined draft specification D.3(B)#1 and the aerial and ground wildlife survey information contained in <i>Volume 5</i> of the application. MELP is now satisfied that the proponent has met the wildlife field survey requirements identified in the terms of reference developed with the proponent in 1993. That includes mountain goat field survey information. Several letters from the public referred to a lack of information on goats in the area. However, MELP does not feel that there is a need for additional surveys of goats. The initial survey results are consistent with what MELP biologists would expect for goats in the area. Follow-up goat mapping and assessment work continue to be required in section D.3(B). (MELP)
#131	<i>Wildlife studies</i> – Understood there would 2-3-year grizzly bear study to determine population densities, but this is omitted from draft specifications. From work on caribou and wolverine projects, is aware of impact of human developments on these animals.	See above, response to submission #64 ( <i>Grizzly bears</i> ). (MELP)
#131	<i>Definition of study area</i> – Data are needed for a larger area than the Jumbo-Upper Horsethief Special Resource Management Zone (SRMZ). Project will cut off a wilderness corridor connecting the PWC with the northern protected areas. Cutting off the south will further isolate and fragment wide-ranging animals (e.g. caribou, grizzly bear and wolverine).	The project committee agrees that the land use planning assessment requirements outlined in what is now section A.7 of the specifications should extend to the Upper Glacier Creek SRMZ also. With regard to the wildlife study area, also see above, responses to submissions #66 ( <i>Wildlife study zone</i> ) and #94 ( <i>Definition of study area</i> ). (MELP)

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#131	<i>Access road costs</i> – Concerned about cost to taxpayer incurred in connection with building and maintaining an access road, and avalanche control along the road.	Road upgrading and maintenance requirements (including avalanche control) are being addressed through the EA process (see sections E.6(C) and (D) of both <i>Volume 1</i> and <i>Appendix A</i> of the specifications). Estimating costs for road upgrading and maintenance are included in the reporting requirements, although the respective funding responsibilities of the proponent and the province may not be fully clarified through the EA process – see discussion in <i>Appendix A</i> , section E.7(M). (MoTH)
#133	<i>Grizzly bear studies</i> - Specifications on grizzly bear studies and other wildlife species need to be much more comprehensive. Quality wildlife research demands several years of work. Specifications must coincide with the priorities identified by the province's grizzly bear strategy. Believe that adverse effects on many wildlife species cannot be mitigated. The provincial grizzly bear strategy states that "...recreational development located in prime bear habitats cannot be designed to have no or minimal impacts..."	See above, response to submission #126 ( <i>Grizzly bears</i> ). (MELP)
#133	<i>Other wildlife studies</i> - Need to study movement and distribution of wildlife populations.	Section D.3(B) of the specifications requires that, in its project report, the proponent provide information which will complete the baseline inventory, in order to assess potential impacts of the project on wildlife populations and habitats, both during construction and for the life of the project. (MELP)
#133	<i>Lifestyle impacts</i> – Most people who oppose the project are opposing a lifestyle change that is inevitable with the construction of a substantial project. It is of little value to ask proponent to itemise any changes to lifestyle, given proponent's frame of reference.	Reporting on the individual elements of lifestyle effects will allow the project committee to draw its own conclusions on their significance, both individually and collectively. The experience of the Invermere area with respect to the development of the Panorama ski resort in the last 20 years may provide a useful datum against which to evaluate many of the listed lifestyle elements, especially given that, in terms of bed units, the Jumbo Glacier resort, at full build-out, would be of comparable size, while the Panorama resort is much closer to Invermere. (EAO)
#133	<i>Definition of study area</i> – project committee needs to consider a much larger geographical area in studying environmental impacts of resort, covering entire greater Purcell ecosystem.	See above, responses to submissions #66 ( <i>Wildlife study zone</i> ) and #94 ( <i>Definition of study area</i> ). (MELP)
#133	<i>Impacts on Conservancy</i> - PWC will be impacted.	See above, response to submission #121 ( <i>Conservancy</i> ). (MELP)
#135	<i>Various wildlife issues</i> - Project contravenes Rio '92 Conference declarations, and is ill-advised and ill-conceived. When wildlife habitat is destroyed, wildlife does not relocate, numbers decline. This proposal cuts the heart out of a huge area. How many bears would be affected? Grizzlies and people are not compatible. The corridor connecting the north and south Purcells is vital.	See responses to grizzly bear issue ( <i>Grizzly bears</i> ) under submission #64, and to study area issue ( <i>Wildlife study zone</i> ) under submission #66, above. The project committee agrees that the issue of wildlife migration needs further consideration, and this is provided for in section D.3(B) of the specifications. (MELP)

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<i>(Cont'd from previous page)</i>	The many mountain goats in the area will be affected. Area is dangerous for inexperienced people.	
#136	<i>Studies performed by proponents</i> - Given scale of project and potential for environmental degradation, it should not be proponent who undertakes necessary environmental studies. Impartial, capable, knowledgeable persons with no financial connection with the proposed project should undertake such studies. All studies should be conducted prior to approval.	See response to this issue ( <i>Responsibilities for studies</i> ) under submission #124, above. (EAO)
#136	<i>European examples</i> – Cites studies from the Swiss Forest Service, Bavarian Minister for Development and Environment, Swiss Documentation Centre for Wildlife Research, Ministry of Forests, hunting inspectors, wildlife biologists, game wardens, etc. Such studies document negative impacts on wildlife from use of helicopters, motorised vehicles, and presence of skiers, damage to fragile alpine vegetation, increased burden of food demand, damage to soils from compaction, increased hazards of avalanches, difficulties involved in controlling problems once they are identified, dangers to skiers, noise impacts, questionable economic benefits. Cites examples from the International Commission for the Protection of the Alps in 1987.	See above, response to submission #86 ( <i>Glacier skiing resorts in Europe</i> ). (MELP)
#137	<i>Fossil fuels</i> - Concerns regarding the burning of fossil fuel for jets, running the resort operation and related road transportation.	A few public submissions raised concerns regarding the burning of fossil fuels (greenhouse gas emissions), and the potential effects of global warming on glaciers. However, assessment of the impact of long-term climate change is an area of much uncertainty. It is not clear how the information would be evaluated, or that the project would create any incremental contribution to greenhouse gases, since its customers would likely travel to other resorts if this one is not developed. While MELP requires proponents of projects that could contribute significant volumes of greenhouse gases to the atmosphere to propose strategies to mitigate greenhouse gas emissions, MELP has not been requiring project proponents to predict the impact of climate change on their own projects, because of the level of uncertainty involved. (MELP)
#137	<i>Wildlife</i> - The fragile high-mountain ecology will be disrupted and degraded. Need a complete ecological assessment, including detailed baseline inventories. Is a known bear breeding ground and migration route. Project would degrade habitat for significant numbers of	These issues are addressed extensively in the project report specifications – see sections D.3(B), (D), (E) and (H). See also response to submission #64 ( <i>Grizzly bears</i> ), above. (MELP)

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<i>(Cont'd from previous page)</i>	grizzly bears and black bears. Bears would die either from starvation or from disputes with humans or bears from other territories. Goats have not been adequately assessed. Impacts on birdlife deserve careful consideration. Must also consider impacts on 'micro' fauna.	
#138	<i>Contingency plans for mishaps</i> – Proponent should prepare written contingency plans in case of spillage.	If <i>CEAA</i> is triggered, evaluation of the environmental effects of accidents and malfunctions is required under that Act as part of the EA process (see section H.3 in both <i>Volume 1</i> and <i>Appendix A</i> of the specifications). MELP has raised similar issues in the specifications for special wastes and fuel storage – see section D.1(C) in <i>Volume 1</i> and <i>Appendix A</i> . (DFO/MELP)
#140	<i>Study area</i> – Should expand study area to include greater Purcell ecosystem, including the Glacier and Tenise Creek drainages	See above, responses to submissions #66 ( <i>Wildlife study zone</i> ) and #94 ( <i>Definition of study area</i> ). (MELP)
#140	<i>Fish and wildlife</i> - Should study impact on fish spawning in Purcell Mountain creeks, and reference Banff National Park history and current concern about development.	Section D.3(A) of the specifications addresses fish-related issues. Various specifications require research on experience elsewhere as part of the proponent's analysis of impact concerns – for example, with respect to wildlife, grizzly bears and outdoor recreational activity. (MELP)
#140	<i>Backcountry tourism</i> - Should assess decline in existing and future projects for lower-impact backcountry eco-tourism in both the Jumbo/Earl Grey Passes and PWC.	The project report specifications address the effects of the project on existing and currently proposed recreational activities, and on the resources which support those activities. Speculation on hypothetical future recreational activities and trends is beyond the scope of this assessment. (MSBTC)
#140	<i>Employee training</i> - Asked that there be requests for additional tourism/recreation post-secondary training programs to equip the resort with the necessary skilled employees for its operations.	Under current government policy, there is no expectation that a proponent must sponsor training programs, when it proceeds with a development. Various training programs have been developed in the hospitality and tourism sector by a variety of interests, and some of these are mentioned in the background to section E.3 of the specifications (see <i>Appendix A</i> ). The proponent may wish to take advantage of some of these training plans, rather than developing new programs. In section E.3, the proponent is invited to indicate whether or not, at this point in project planning, it has any plans to sponsor or implement any such programs. (MEI/MAETT)
#140	<i>Scope of review</i> - Does not understand the limitations on the scope of the review.	The general principles governing the process of establishing the scope of the review are summarised in section 6.2 of <i>Appendix B</i> to the finalised specifications. In addition, in <i>Appendix A</i> of the December 13, 1996 draft specifications, the project committee clarified its position on the scope of the EA review in respect of many individual issues. <i>Appendix A</i> to the finalised specifications provides further explanation on with respect to a range of issues. (EAO)
#141	<i>Definition of study area</i> - Is concerned about potential cumulative negative effects on wildlife over a wide geographic area. Given wide-ranging species, need to expand study area. Project's close proximity to the PWC, and the potential effects on downstream surface	See above, responses to submissions #66 ( <i>Wildlife study zone</i> ) and #94 ( <i>Definition of study area</i> ). Cumulative effects on grizzly bears are a specific focus of section D.3(C) of the specifications. In addition, if <i>CEAA</i> is triggered for this project, the federal government will expect cumulative effects assessments for potentially affected fish and wildlife values. (MELP/DFO)

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<i>(Cont'd from previous page)</i>	water quality makes it essential to expand the 'zone of impact' study area to include the entire greater Purcell ecosystem.	
#144	<i>Scoping of assessment</i> - Concerned that the specifications have the potential to go beyond reasonable limits, and that tourism development will be discouraged if process goes well beyond judging a project on its merits. The approval of a project is not a forum to address environmental and philosophical concerns that occur across our society. Suspect that some opponents will oppose the project no matter how strenuous the report requirements are, and no matter how beneficial the project might be. Hope that the EA process does not serve a narrowly focused coalition of anti-development groups.	The project committee has focused considerable attention on the scope of the issues under review since releasing, and receiving comments on, the December 13, 1996 draft specifications. It has also provided the proponent with adequate opportunities to pursue its concerns that some draft specifications reflect either a lack of awareness of, or inadequate weight being given to, data already filed in earlier proponent submissions. After weighing all of the representations received on the draft specifications, the project committee has produced a summary rating of the identified issues. This rating system clarifies which issues require further review under the EA process, and which issues can be deferred to the post-certification stage. These ratings are being published as part of a package of documentation (which also includes this response chart) prepared by the project committee to accompany the release of the finalised specifications. (EAO)
#145	<i>Overview issues</i> - Feels that specification requirements for environmental assessments are neither comprehensive nor specific enough, and are unlikely to identify all of the impacts. Proponent must eliminate, not merely minimise, environmental impacts. Specifications must be far more specific in defining such things as levels of acceptable impacts. Must have accurate, thorough and completely unbiased data about such matters as fish and wildlife populations, plant communities, and impacts on water and other resources. Proponent must be required to initiate new research based on credible data. Studies could take years to generate reliable data. Must not allow any aspects of the project to proceed until all studies have been completed to an acceptable level. Project must be forced to strive for an absolute minimum of environmental impact, regardless of the cost to the developers.	The project committee has spent much time in refining and clarifying the specifications since receiving comments on the December 13, 1996 draft. The finalised specifications are now deemed by the project committee and the lead agency(ies) for each issue to be specific enough to ensure that an adequate level of assessment will be conducted. The specifications stipulate where new data collection is required, and where assessments can rely in existing information. Respecting the standards to be attained in managing impacts, under government laws and policies, these are relatively well articulated for some issues (e.g. sewage disposal or water supply), less so for others (e.g. wildlife impacts, for which each individual situation must be evaluated on the facts of the situation). Respecting impact management, the proponent is expected to explain what measures are available to mitigate potential negative impacts, and, where possible, to minimise them or avoid them entirely. However, it may well be that certain types of impact cannot be completely eliminated if the project proceeds. The purpose of the project report is to establish the extent to which identified adverse effects can be managed. Once that has been established, the project committee will provide recommendations to ministers, documenting the status of the identified issues, and noting any effects which cannot be acceptably minimised or otherwise managed in the view of the project committee. It will be the task of the ministers to decide whether or not the project should proceed, taking into account its positive and negative effects – see also section 6.6 of <i>Appendix B</i> to the finalised specifications. All of the assessments deemed necessary by the project committee must be completed before the committee will refer the project to ministers for a certification decision. At the same time, no part of the project can commence construction until the EA review is completed and unless ministers have decided to approve the project. (EAO)

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#150	<i>Definition of study area</i> - Project would threaten Conservancy. Should include PWC in surrounding area where impacts could be felt.	See above, responses to submissions #66 ( <i>Wildlife study zone</i> ) and #94 ( <i>Definition of study area</i> ). (MELP)
#150	<i>Grizzly bear studies</i> - Specifications do not indicate that a complete long-term grizzly bear study has to be done.	See above, response to submission #64 ( <i>Grizzly bears</i> ). (MELP)
#155	<i>Public hearings</i> – urges full public hearings.	It will be a decision of for ministers to make at the end of the project report review stage whether or not a public hearing within the meaning of the <i>EA Act</i> is held on this project – see section 6.5 of <i>Appendix B</i> to the finalised specifications for more details. (EAO)
#155	<i>Federal EA</i> – requests federal review of cumulative effects on wildlife such as grizzly bears and Bull trout.	Will occur if <i>CEAA</i> is triggered - see also response to submission #92 ( <i>Cumulative effects</i> ), above. (DFO)
#160	<i>Referendum</i> – referendum is needed to ensure voice of local people is heard.	The EA process is not a referendum process, but an issue-driven policy and technical evaluation of a project. The public is afforded various opportunities to comment on project proposals under the <i>EA Act</i> , and to identify issues which should be the subject of examination. The project committee must weigh the merits of the concerns being raised, deciding which issues require further assessment through the EA process. In doing this, it may conclude that some issues are known to be manageable without further assessment, or are beyond the scope of the EA process. The committee’s prime task is to evaluate the issues identified during the course of the review, and to advise ministers of the extent to which the committee considers them resolvable. The committee will also report on public opinion with respect to the project in general, and specific issues in particular, and it is possible that public views may vary significantly from the purely technical assessment of those issues by the committee. It will be up to ministers to weigh any such discrepancies. (EAO)
#160	<i>Conflict of interest</i> - Many stand to gain financially from this project, and would be in conflict of interest if involved in actual decision making.	The certification decision for the project will be made jointly by the Minister of Environment, Lands and Parks and the Minister of Employment and Investment, who are constrained by government conflict of interest rules from gaining financially from the project. (EAO)
#162	<i>Impact of public opinion</i> – Many concerns were expressed in the initial round of public meetings in September 1995 (e.g. project will have a negative effect on wildlife and fish; need for more information about the proponent; and cost to taxpayers). Is concerned that EAO’s public input process is flawed, since strong opposition to the project has been documented and wonders if public opinion counts for anything.	The project committee has already responded to this point – see item 1a) in <i>Appendix A</i> to the draft specifications. The amount of focus placed by the project committee on evaluating public comments on the project clearly demonstrates the commitment with which it is considering public input. (EAO)
#162	<i>Process delays</i> - Before any further action is taken on application, wants to know context for rumours that the EA process has been delayed because of threats of lawsuits.	The process has not been delayed by threats of lawsuits from any quarter. Review progress has taken longer than provided for in the <i>Time Limits Regulation</i> for four reasons: 1. The review is unusual in the volume of public submissions received on the project, which is greater than for other projects currently subject to the EA process. It has been necessary to evaluate and respond to the numerous comments, and this has been a significant task, although not, in itself, a primary source of delay.

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<i>(Cont'd from previous page)</i>		<ol style="list-style-type: none"> <li>2. It has been necessary to clarify public policy expectations with respect to both grizzly bear impact assessments and, to a lesser extent, ski resort public highway access requirements. This task consumed most of 1996, and represents the most significant individual source of review delay to date.</li> <li>3. There was an approximately 4-month delay in finalizing the PAC's report to the project committee on the draft specifications, due to an unforeseeable technical failure of the audio equipment used to record the proceedings of its final sessions.</li> <li>4. The proponent requested additional time to review both the draft specifications and the public and PAC comments on those specifications. (EAO)</li> </ol>
#163	<i>Grizzly bear studies</i> - Notion in specifications regarding prevention and mitigation of adverse effects contradicts the provincial grizzly bear strategy.	See above, response to submission #145 ( <i>Overview issues</i> ), which indicates that the project committee is seeking to establish the extent of potential impacts, both positive and negative, if the project proceeds, assuming that impact management measures are in effect. The project committee is aware that the provincial grizzly strategy is pessimistic about the ultimate success of measures to manage impacts on grizzly bears. The project committee has made no assumption that grizzly bear impacts can be eliminated. The specifications inquire about the proponent's impact mitigation options, and their potential for success. (MELP)
#168	<i>Mountaineering</i> - Alpine Club of Canada has had strong involvement in the area for 25 years. Mountaineering interest in the area is strong. Should poll the club. Can presently ski in area and this has less impact upon wildlife.	The project committee believes that the specifications adequately address this issue by requiring the proponent to evaluate existing recreation and tourism activity in the area (see section E.5). The Alpine Club of Canada (ACC) and other interested recreational groups can facilitate this work by documenting historic use of the area. The ACC has written to the EAO, offering to provide information on the history of mountaineering in the area, and is understood to be proceeding with this. In the meantime, MoF crudely estimates that the area may currently support between 100 and 200 mountaineer user days per year. (MSBTC/MoF/EAO)
#170	<i>Special Management Zones and grizzly bears (UNBC paper)</i> – Submission was a paper entitled: <i>Defining special management zones in land use policy: Implications for the future of sensitive resources in BC with special reference to the Grizzly Bear.</i>	The paper addresses the treatment of grizzly bear issues in land use planning. While of interest, it should be recognised that a regional land use planning process has now been completed in the area. Objectives for the management of grizzly bears in the Kootenay Region are set out in the <i>KBLUP-IS</i> (June 1997) – see section 3.4 – <i>Grizzly Bear Management Guidelines</i> . Specific objectives for the Jumbo-Upper Horsethief SRMZ are included in <i>Appendix 5</i> (see RMZ I-SO7), and for the Upper Glacier Creek SRMZ, in <i>Appendix 6</i> (see RMZ K-S09). (MELP)
#186	<i>Fisheries</i> – Drainage has Westslope Cutthroat trout population and habitat for Bull trout, which is blue-listed. Both support recreation. Project will cause fishery losses.	The intent of the specifications is to ascertain the potential for fishery losses (see <i>Volume 1</i> and <i>Appendix A</i> , sections D.3(A) and H.1). The project committee will reach conclusions on any potential fisheries losses, following review of the proponent's project report. (MELP/DFO)
#202	<i>Grizzly bears</i> - Will a comprehensive and independent grizzly bear study be completed before decision is made?	See above, responses to submissions #64 ( <i>Grizzly bears</i> ) and #80 ( <i>Grizzly bears</i> ). (MELP)
#202	<i>Taxpayer costs</i> - Will there be a complete and unbiased report on costs to taxpayer?	See response to submission #92 ( <i>Costs to taxpayers</i> ), above. The accuracy or reasonableness of the assessments provided in the project report will be reviewed and assessed by the project committee. (MEI)

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#202	<i>Bond</i> - Will the developer be required to post a financial bond to guarantee that costs will not be passed on to taxpayers?	Given that beforehand market evaluations may or may not reveal financial risk if the project proceeds, the project committee also notes that MELP (BC Environment and Lands) has the capacity to require the posting of performance bonds as a condition of the issuance of <i>Land Act</i> tenures such as leases or licenses. Performance bonds are intended to guard against unanticipated project shutdowns (e.g. associated with financial problems). Such bonds may be applied to the costs incurred either to complete the construction of facilities, or to remove facilities and rehabilitate the disturbed land. (MELP)
#204	<i>Full cost accounting</i> – Need full cost accounting approach to evaluation.	See response to submission #46 ( <i>Economic assessments</i> ), above. (MEI)
#205	<i>Review deadline</i> - Requests that deadline for public comment period be extended to mid-March.	See response to submission #40 ( <i>Time for review</i> ), above. (EAO)
#205	<i>Continuing review</i> - Has a number of detailed concerns, including continued review of this project despite public opposition.	The <i>EA Act</i> requires the review of a project to continue until the assessments are completed. In this case, the project committee has decided that a second stage of review is necessary to put the committee in a position to advise ministers with confidence on all aspects of the project. (EAO)
#205	<i>Wildlife</i> – Concerns include lack of three-year grizzly bear study, specifications which focus on mitigation, minimising, restoration and contingency plans, which are all devices intended to legitimise destructiveness of this project, impacts on wildlife corridor, impacts on grizzly bears.	See above, responses to submissions #64 ( <i>Grizzly bears</i> ) and #145 ( <i>Overview issues</i> ). (MELP/EAO)
#211	<i>Limits on impacts</i> - No definition in specifications of level of acceptable environmental impact (e.g. by citing standards such as: if habitat of more than 25 grizzly bears is impacted, project cannot go forward).	Under government laws and policies, expectations to be met by developers are relatively well articulated for some issues (e.g. sewage disposal or water supply, for which many expectations are set by regulation), but less so for others (e.g. wildlife impacts). To the extent that such objectives exist, they will form the context for the review of the project by the lead agency(ies) for each issue. For wildlife impacts, impact management goals, whether quantitatively or qualitatively defined, tend to be developed by government's wildlife specialists on a case-by-case basis, using their professional judgement to evaluate projects in the context of the specific characteristics of the potentially affected environment. In any event, working level staff do not normally determine that a certain level of impact is or is not acceptable, unless it violates a legal enactment. Rather, their role is to establish the extent of impact and the degree to which that level of impact is consistent with government legal and policy expectations. Having received the project committee's analysis of impact issues raised by the project, and its recommendations, ministers will decide, taking into account the positive and negative effects of the project, whether or not the project should be certified under the <i>EA Act</i> . (EAO)
#211	<i>Conservancy</i> - Environmental impact of resort on Jumbo Creek drainage will be catastrophic, and on the PWC and the Glacier Creek drainage, major. Concerned about responses on pp. A-14 to A-18 of the draft specifications, concerning land use. Wants	The <i>KBLUP-IS</i> (June 1997) indicates that ski resort development is a potentially acceptable use in the Jumbo-Upper Horsethief SRMZ, providing that a resort can be developed in a manner which is compatible with the newly-established planning objectives in and around the area, including those for sensitive values identified in the area. This would include management objectives for the PWC. (MELP)

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<i>(Cont'd from previous page)</i>	definition of what would be a compatible use near the PWC.	
#211	<i>Climbing interests</i> - Cannot find where, in the draft specifications, the concerns of climbers who use Farnham Creek headwaters are addressed, nor where the protests of hikers, climbers and family campers have been answered.	Many comments have been received on this project from climbers, hikers and campers. The project committee is satisfied that these concerns are being adequately investigated through the reporting requirements set in section E.5 of the project report specifications, notably in sections E.5(A) – <i>On-site and Adjacent Outdoor Recreational Use</i> – and E.5(C) – <i>Visual Impacts of Development</i> . (MSBTC/MoF)
#212	<i>Performance bond</i> – Should have to be posted by proponent.	See above, response to submission #202 ( <i>Bond</i> ). (MELP)
#212	<i>Decommissioning</i> – Specifications should require decommissioning plans for the resort.	A resort is not like a mine, which has a finite life. Once the mineral resource is extracted, the mine must be decommissioned. A resort, if developed, is expected to be in place on a long-term basis. A full decommissioning plan is therefore not considered a necessary part of the initial design of such a proposal. Having said that, a significant focus is being placed on project feasibility, in order to ensure, before the project is constructed, that it can be demonstrated to be viable in both the short term and the long term. For further discussion, see the explanation under the heading <i>A Note on Permanent Project Closure and Decommissioning</i> in <i>Appendix A</i> , section A.1 of the finalised specifications. It should be noted that performance bonding is required under the CASP process for each development stage to secure against public liability. The CASP master development agreement also defines provisions for ongoing operation of ski areas in the event of financial failure. (MELP)
#228	<i>Full cost accounting</i> – Advocates full cost accounting of such expenses as search and rescue, ambulance, road maintenance, avalanche control, landfill facilities, fire service.	See response to submission #46 ( <i>Economic assessments</i> ), above. (MEI)
#228	<i>Grizzly bear studies</i> – advocates 3-year study of grizzly bears.	See above, response to submission #64 ( <i>Grizzly bears</i> ). (MELP)
#231	<i>Policy context</i> - Does the project promote justice? Will the project promote or restore reciprocity? Does the project confer divisible or indivisible benefits? Does the project favour people over machines? Does the planning strategy maximise gain or minimise disaster? Does the project favour conservation or waste? Does the project favour the reversible over the irreversible?	The project committee is couching its questions about the project in terms of existing government policies and expectations for such development. While some of the questions posed here may be reflected, to a more or less implicit or explicit extent, in the existing frame of reference for the evaluation, the responsible government agencies also incorporate a wide range of other factors in establishing their expectations. If the writer believes that these questions should explicitly form a basic frame of reference within which other review questions are posed, then the writer should consider pursuing this point of view directly with relevant government ministries involved in project reviews of this type. (EAO)
#232	<i>Ecological economic costing</i> – no mention of this approach to project evaluation in specifications.	See response to submission #46 ( <i>Economic assessments</i> ), above. (MEI)

**Jumbo Glacier Alpine Resort Project - Project Committee/Review Agency Responses to Comments Received on the December 13, 1996 Draft Project Report Specifications**

Submission # From Chart	Issue(s) for Follow-up (per July 4, 1997 Chart)	Project Committee/Review Agency Response(s)
#234	<i>Automobile emissions</i> - Draft specifications should address cumulative long-term impact of automobile emissions.	See above, response to submission #137 ( <i>Fossil fuels</i> ). (MELP)
#237	<i>Federal EA review jurisdiction</i> - Federal assessment should be done on impact on Purcell Mountain ecosystems.	The federal EA process ( <i>CEAA</i> ) is applicable to a proposed development if a federal authority (e.g. DFO, DOE or Parks Canada) undertakes any one of four specific 'actions', commonly referred to as 'triggers'. <i>CEAA</i> applies if a federal authority: (1) proposes or initiates a project; (2) provides funding; (3) provides federal land; or (4) issues a permit, licence, authorisation or other approval to allow the project to proceed, and the approval is included in the <i>Law List Regulation</i> . An exception would occur if the development in question either was not a 'project' within the meaning of <i>CEAA</i> or was listed in the <i>Exclusion List Regulation</i> – neither condition applies in this case. The conditions under which the federal EA process may apply were clearly described in the draft specifications, and are again described in the finalised specifications – see <i>Volume 2 (Appendix A, section H, and Appendix B, sections 3.2 and 4.2)</i> . The applicability of <i>CEAA</i> is automatic if any of the triggers exist, and does not depend on an invitation from the province. Based on the information provided by the proponent to date, DFO has not been able to ascertain if a <i>CEAA</i> trigger exists for the Jumbo Glacier project. Should <i>CEAA</i> be triggered, the geographic scope of the assessments within the Purcell Mountains would then have to be determined. The direct effects would be addressed through studies of the project site itself, but indirect and cumulative environmental effects must also be considered. The <i>CEAA</i> legislation requires that "...any cumulative environmental effects likely to result from the project in combination with existing or planned projects or activities..." must be examined. The geographic range of the cumulative effects analyses would vary from species to species, since the range of potentially affected populations may be quite different (e.g. downstream fisheries vs. migratory birds). (DFO)
#241	<i>Grizzly bear studies</i> – Why was grizzly bear study cancelled?	See above, response to submission #64 ( <i>Grizzly bears</i> ). (MELP)
#242	<i>Public awareness of review</i> - Is concerned that the project and review process has been so poorly advertised because many have not heard of it. Locals deserve to hear more about this project, since they will be the most affected.	Disagree. The large volume of public submissions received on the project is testimony to the widespread awareness of the project review among local residents. For further details on the provision made for public notification, access to information and consultation in the review process to date, see sections 5.4 and 5.5 of <i>Appendix B</i> to the finalised specifications. (EAO)
#242	<i>Decommissioning</i> - How would resort be decommissioned if it fails?	See above, responses to submissions #202 ( <i>Bond</i> ) and #212 ( <i>Decommissioning</i> ). (MELP)
#243	<i>Greenhouse gasses</i> - Concerned about increased greenhouse gas emissions.	See above, response to submission #137 ( <i>Fossil fuels</i> ). (MELP)
#247	<i>Public hearing</i> – Public hearing is required on this project.	See above, response to submission #155 ( <i>Public hearings</i> ). (EAO)

**Jumbo Glacier Alpine Resort Project - Project Committee/Review Agency Responses to Comments Received on the December 13, 1996 Draft Project Report Specifications**

Submission # From Chart	Issue(s) for Follow-up (per July 4, 1997 Chart)	Project Committee/Review Agency Response(s)
#248	<i>Grizzly bears</i> - Grizzly bears are on decline. Jumbo Creek is 6 <sup>th</sup> on 'Prioritised Hot Spots List' for bear populations in trouble in BC. Project committee proposes no wildlife studies. A 2-to-3-year grizzly study, addressing grizzly bear populations for entire Purcell Mountain ecosystem, was omitted as a specification. For province to be viewed as a leader in grizzly bear conservation in North America, this project should not be approved. Grizzly bears in Kootenay Region are listed as vulnerable (at risk). Jumbo Creek valley provides excellent habitat, and is major travel corridor for bears between PWC and White Grizzly Wilderness. The project would eliminate large portion of existing bear habitat and reduce grizzly populations.	It is not clear which 'hot spots list' for grizzly bears is being referred to. The 1995 BC <i>Grizzly Bear Conservation Strategy</i> does not itemise specific areas of concern for grizzlies in BC in this manner. Grizzly bears are a blue-listed species throughout the province. The Kootenay region is an inherently productive area for grizzly bears. The Purcell Mountains support a 'peninsular' population of grizzly bears in that there are linkage problems (fracture) across Highways #95/Columbia River, Highway #1, Kootenay Lake, and to a lesser degree, Highway #13. Within the Purcells, there are relatively few roads fragmenting the region, and relatively few human/bear conflicts. The Rocky Mountain Grizzly Bear Planning Committee, which includes members from BC, Alberta, Montana, and the US Fish and Wildlife Service, are focused on linkage issues and genetic diversity in area populations. See also above, response to submission #64 ( <i>Grizzly bears</i> ). (MELP)
#259	<i>Housing</i> – Concerned that resort staff will place burden on accommodation supply in Columbia valley.	The project committee agrees that this issue needs further attention – see section E.9 of the finalised specifications for more information. (MMA)
#259	<i>Sewage</i> – Concerned about how sewage will be disposed of.	See above, response to submission #125 ( <i>Sewage</i> ). (MELP)
#268	<i>Water/waste</i> – Concerns re. waste collection and disposal, sewage treatment, groundwater and surface water quality in Jumbo Creek.	Regarding solid waste issues, see above, response to submission #88 ( <i>Solid waste</i> ), and also section D.1(A) of the specifications. Regarding sewage disposal, see above, response to submission #125 ( <i>Sewage</i> ), and also section D.1(B) of the specifications. Regarding water sources and water quality issues, see sections D.1(D) and D.2(A) of the specifications. (MELP/RDEK)
#268	<i>Access road</i> - Concerns re. road access and avalanche hazard.	Project committee agrees that, while some issues have been addressed to the project committee's satisfaction, others require further attention - see sections C.3 and E.6(C) and (D) of <i>Volume 1</i> and <i>Appendix A</i> . (MoTH)
#268	<i>Wildlife</i> – Concerns for wildlife impacts.	The potential wildlife impacts of this project are addressed extensively in section D.3 of the specifications. (MELP)
#268	<i>Socio-economic</i> – Concerns for impacts on local economy.	The project committee is satisfied that the information already provided by the proponent, plus additional reporting on economic impacts required in various subsections of section E of the specifications, will ensure an adequate understanding of the impacts of the project on the local economy. (MEI/MSBTC)
#269	<i>Guide/outfitter</i> - If project proceeds, the integrity of the guiding territory in the Toby and Jumbo drainages will be severely impacted. Specifications indicate that the proponent must deal with Mr. Barsby, who requests third-party intervention. Outfitting is his full time occupation. He would suffer loss of his grazing rights, and the project would drive away summer/fall business.	The project committee recognises the concern stated here. Specifications D.3(B)#9 and D.3(C)#3 require the proponent to consult with long-time users of the Jumbo Creek valley and adjoining valleys, so that assessments of wildlife populations, habitats, etc. benefit from the local knowledge of those familiar with the area. It should also be noted that specification E.5(F)#11 has been amended. The proponent is still expected to try to conduct discussions with the guide/outfitter and traplines holders, but, if this is not possible, the proponent is expected to produce an assessment which uses available information. The specification also reserves for the project committee the option to commission an independent assessment of issues, if required. (MELP)

**Jumbo Glacier Alpine Resort Project - Project Committee/Review Agency Responses to Comments Received on the December 13, 1996 Draft Project Report Specifications**

Submission # From Chart	Issue(s) for Follow-up (per July 4, 1997 Chart)	Project Committee/Review Agency Response(s)
<i>(Cont'd from previous page)</i>	He has a license to build a cabin and corral in Jumbo and Leo Creeks, but the proposal has put project on hold. Suggests government ask some local old-timers about the valleys. Valley has great habitat for white-tailed and mule deer, elk, moose, goats, and grizzly and black bear.	
#274	<i>Sustainable development</i> – Questions definition of sustainable development in specifications.	The project committee's view of sustainability issues was documented in its response to item 3a) in <i>Appendix A</i> to the draft specifications (see pages A-20 to A-22). (MELP)
#274	<i>Wildlife (various)</i> - Raises questions regarding applicability of cumulative effects model, mortality sub-model, and further study of disturbance- and mortality-related effects of dispersed human activities on grizzlies, as well as definition of acceptable levels of risk and grizzly bear population thresholds. Proponent should study effects on all federally- and provincially-listed species of concern.	The project committee has decided not to change its earlier decision to require application of the cumulative effects model in assessing grizzly bear impacts, but has modified the draft specifications to provide for the design and application of the cumulative effects assessment model to be reviewed by a panel of grizzly bear experts (specification D.3(C)#10). See also response to submission #64 ( <i>Grizzly bears</i> ), above. Assessments of 'listed' species other than grizzly bears are addressed in sections D.3(D) and (E) of the specifications. (MELP)
#274	<i>Glacier impacts</i> – Should assess physical, chemical and hydrological modifications of glacier surface, and establish baseline data for Lake of the Hanging Glacier and Horsethief Creek.	Conventional glacier grooming techniques are proposed, rather than more significant glacier modification. The significance of this issue is addressed in section C.2 of the specifications, while the quality of local water bodies is addressed in sections D.1(B) and (D). (MELP)
#274	<i>Socio-economic</i> – Need more consideration of proposed Panorama expansion - cumulative pollution effects, impact on market demand, and cumulative demand for labour between two resorts.	With respect to the impact on labour, the reporting requirements in sections E.2 and E.3 of the specifications require the proponent to estimate the proportion and types of direct employment expected to be filled by local and regional residents. Based on this assessment and the profile of the current local labour force (which is required under section E.1), the project committee will be able to identify whether cumulative labour supply impacts could pose a problem. The impacts of the Jumbo Glacier development on other ski resorts in the region (including the Panorama resort) will be addressed in an independent feasibility assessment of the project which is to be commissioned by the project committee – see section B.4 of the specifications. The cumulative environmental effects of the Jumbo Glacier resort are being addressed on a selective basis, where there is perceived to be a need (e.g. with respect to grizzly bear impacts – see section D.3(C) of the specifications). A broader assessment of cumulative environmental effects will also be required if CEAA review is triggered for this project – see section H.2 of the specifications. (MEI/MELP)
#274	<i>Time for review</i> - Concerns re: time allotted for public review of specifications.	See response to submission #40 ( <i>Time for review</i> ). (EAO)

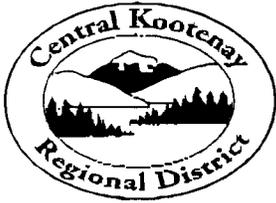
**Jumbo Glacier Alpine Resort Project - Project Committee/Review Agency Responses to Comments Received on the December 13, 1996 Draft Project Report Specifications**

Submission # From Chart	Issue(s) for Follow-up (per July 4, 1997 Chart)	Project Committee/Review Agency Response(s)
#278	<i>EAO staffing</i> – How many EAO staff are working on the project review?	In order for EAO to administer the review of any project, six EAO staff will normally devote a certain percentage of their time to the review. Most EAO staff are involved in several project reviews simultaneously. Assigned EAO staff include the project committee chair, a project assessment co-ordinator, a First Nations relations coordinator, an administrative support person, and EAO's Project Registrar and her assistant. (EAO)
#278	<i>Further consultation</i> – Ministers should attend public meetings.	This suggestion should be addressed directly to the ministers in question. (EAO)
#278	<i>Tendering process</i> – what was tendering process for resort?	For brief explanation, see <i>Volume 2</i> of the finalised specifications, <i>Appendix B</i> , section 2. (MELP)
#278	<i>Project viability</i> - How will a development as small as Phase 1 attract visitors from Japan and Europe? What are the consequences (e.g. costs to taxpayers) of failure after completion of Phase 1 and need to decommission?	Project feasibility and market demand are to be the subject of an independent assessment commissioned by the project committee – see section B.4 of the specifications. Feasibility assessments will continue at a more detailed level if the project is approved at the conclusion of the EA process, and proceeds into the ski area master planning stage under the CASP process. At that stage, the province and the proponent would conclude a master development agreement, which would stipulate the proponent's obligatory scheduling requirements for resort development. At that time, MELP can impose performance bonding under the <i>Land Act</i> to secure the province against any risk of financial failure, should the resort encounter financial difficulties once operations are underway. (MEI/MELP)
#278	<i>Snowfall</i> - Need firm data on snowfall and winter and summer weather to determine viability.	Information on snowfall, snow conditions, aspect, etc., was provided in the proponent's application, and will be considered as part of the independent feasibility analysis which is to be commissioned by the project committee – see section B.4 of the finalised specifications. (MELP)
#278	<i>Avalanche threat to utilities</i> - The effects of avalanches on electrical/telephone transmission have not been considered.	The transmission systems for the resort will follow the road access corridor, with respect to which extensive attention has been given to avalanche hazard – see section E.6(D) of the specifications. (project committee).
#281	<i>Cumulative effects</i> – federal EA should be conducted to obtain regional overview, also cumulative effects study to address use of fertiliser and salt, glacier ablation, and downstream water quality.	The specifications provide for further assessments of impacts on downstream water quality – see sections D.1(B), D.1(D), D.2(A) and D.3(A). The proponent has provided assurances that neither salt nor fertiliser will be used for ski run maintenance during normal resort operations, so the project committee has deleted any reporting requirements with respect to their use. The project committee has concluded that there is no special concern with respect to glacier ablation over any meaningful timeframe, given the high elevation of the proposed glacier ski terrain. Thus, any specifications with respect to that issue have been deleted. If CEAA is triggered, federal requirements will include a cumulative effects assessment – see section H.2 of the specifications. (DFO/MELP)
#281	<i>Ecological/economic costs</i> - An ecological/economic total cost assessment needs to be prepared.	See response to submission #46 ( <i>Economic assessments</i> ), above. (MEI)
#281	<i>User survey</i> - Should conduct a public survey of those who use the PWC, Jumbo Pass and Lake of the Hanging Glacier areas.	Members of the public who use this area have already expressed their concerns over the project's potential impacts on recreational settings adjacent to the project site. The project committee is satisfied that the specifications address these issues adequately (see section E.5), and does not believe that a user survey would add materially to its grasp of these concerns. (MSBTC/MoF)

**Jumbo Glacier Alpine Resort Project - Project Committee/Review Agency Responses to Comments Received on the December 13, 1996 Draft Project Report Specifications**

Submission # From Chart	Issue(s) for Follow-up (per July 4, 1997 Chart)	Project Committee/Review Agency Response(s)
#284	<i>Tourism studies</i> - Economic development is more beneficially achieved through smaller-scale, locally owned/operated tourist facilities. The writer cited studies conducted in 1992-1994 and 1995 (Kootenay Lake CoDesign Process and Tourism Action Society) which, in the writer's view, proved that there is a large demand for small-scale, 4-season, low-impact, locally-owned tourism. Project does not accommodate growing desire for eco-tourism, and instead discourages it.	The project committee recognises that land allocated to ski resort development would not accommodate certain other forms of eco-tourism, and the specifications require an assessment of the impacts of the project on such activities in and around the project site (see section E.5). However, it is not clear what role the proposed resort would play as a base for other eco-tourism products. The proponent's project report, and the independent feasibility assessment provided for in section B.4 of the specifications, should help to clarify this issue. However, the project committee does not consider it either realistic or warranted for the proponent to attempt to predict the broad future directions of the eco-tourism sector, which is considered beyond the scope of this review. MEI points out that international tourism travel to BC is growing, and activities such those which would be offered at the proposed resort are a key component of this increasing travel demand. Small-scale commercial backcountry activities are appropriate and compatible activities in and around resorts, as well as proceeding on a stand-alone basis, as is demonstrated elsewhere in the Kootenay region. Growth of such activities attests to this. It is appreciated that the Jumbo Glacier resort project is a larger-scale project. The economic benefits of construction and larger volumes of visitor expenditures offered by this proposal are not associated with smaller projects. (MEI/MSBTC)
#285	<i>Full cost accounting</i> - As a taxpayer, is not willing to support expenses incurred by project. Wants to see full cost accounting.	See responses to submissions #46 ( <i>Economic assessments</i> ) and #92 ( <i>Costs to taxpayers</i> ), above. (MEI)
#294	<i>Global warming</i> - Discusses findings of the UK's Natural Environment Research Council on global warming and the effects of decreasing boreal forests and peat bogs. The validity of ski resorts is questionable, given the concern over global warming.	See above, response to submission #137 ( <i>Fossil fuels</i> ). (MELP)
#295	<i>Public advisory committee</i> - PAC members should sign affidavit that they will not receive any compensation from the proponent.	All PAC members signed an affidavit in January 1997, indicating that they had not received, and were not receiving, any such compensation from the proponent. (EAO)
#308	<i>Response to public's issues</i> – concerned about effective involvement of the public, and lack of response to public letters since October 1995.	<i>Appendix A</i> to the draft specifications represented a very in-depth response to the wide range of views and issues expressed by the public during the review of the proponent's application. The present chart represents a further significant effort to respond to public concerns. See also sections 5.4 and 5.5 of <i>Appendix B</i> to the finalised specifications. (EAO)
#317	<i>Fisheries</i> – Jumbo drainage supports Westslope Cutthroat trout, which is in decline, also blue-listed Bull trout. Water demands and snowmaking will have severe effects on winter fish habitat.	Snowmaking is not required at the proposed resort, so will not be a factor in water availability for fisheries. The intent of the specifications is to ascertain the potential for water demands to impact over-wintering habitat for fish (see <i>Volume 1</i> and <i>Appendix A</i> , sections D.3(A)). Project committee will draw conclusions following review of proponent's project report. (MELP/DFO)

**Appendix D**  
**Local Government Response Documents**



# Regional District of Central Kootenay

Box 590, 202 Lakeside Drive  
Nelson, BC V1L 5R4  
web: [www.rdck.bc.ca](http://www.rdck.bc.ca)

Telephone (250) 352-6665 Fax (250) 352-9300  
BC Toll Free 1-800-268-7325  
email: [rdck@rdck.bc.ca](mailto:rdck@rdck.bc.ca)

May 5, 2004

Mr. Roger D. Tailleir  
Environmental Assessment  
P.O. Box 9426 Stn Prov Govt  
Victoria, BC V8W 9V1

**BYFAX: 250-387-6448**

Dear Mr. Tailleir:

Please be advised that the following resolution was adopted by the Board at the meeting of April 24, 2004:

566/04

The memorandum dated April 20, 2004 from Director Greenlaw regarding the Jumbo Glacier Resort Project and requesting the Board convey to the Environmental Assessment Office the following points of concern / impact to the RDCK:

- The North Kootenay Lake Area is engulfed in parks and wilderness areas. As a consequence, we have suffered severe economic hardships in the forest sector and lost opportunities in the mining, commercial, recreation and tourism industries.
- Further degradation of our resource areas in Glacier Creek and Howser drainages for mitigation of grizzly habitat for the Jumbo Glacier Resort project is unacceptable.
- The North Kootenay Lake Area is depressed with limited employment. We must protect our remaining resource areas to maximize all possible economic opportunities.

be received and the foregoing be communicated to the Environmental Assessment Office for inclusion in the Public Submission Process.

Yours truly,

Carol McGowan  
Deputy Chief Administrative Officer

CM:mem

Document2



Village of

# RADIUM HOT SPRINGS

British Columbia, Canada

Box 340  
Radium Hot Springs, B.C.  
Canada V0A 1M0

Telephone (250) 347-6455  
Facsimile (250) 347-9068

May 17, 2004

Martyn Glassman, Project Assessment Director  
PO Box 9426 Stn Prov Govt  
Victoria, B.C.  
V8W 9V1

Also via fax to 250-387-2200 (2 pages)

Dear Mr. Glassman,

The Village of Radium Hot Springs appreciates the opportunity to comment on the application to the Province for the development of a ski resort in the upper Jumbo Valley. We have considered the question carefully over many years, and we continue to return to two main issues of public policy.

We believe that the first priority is to gauge the carrying capacity of the public land in question under the various existing and proposed uses. We are concerned with the protection of the natural assets of our region, out of respect for their intrinsic wild value, and in recognition of the economic value they represent as the foundation of our tourism industry. We recognize that any public use is likely to have some impact, but we also believe that some impacts are much more feasible to manage than others.

Once the type and scale of acceptable commercial use has been set within reasonable limits, we believe that the next priority should be to gauge which acceptable commercial uses of the public land return the highest value to the province, in exchange for the "load" that the back country is being asked to carry. We acknowledge that this may favour some commercial uses which compete with existing patterns of public recreation, but we also believe that, as responsible members of the public, we have to expect to make some tradeoffs in return for the demands we place on government for services. We acknowledge that this may also lead to a review of some existing commercial uses to see whether they continue to provide the greatest return to the public when compared to new options that weren't considered when the original tenures were granted.

Martyn Glasman / May 17, 2004

We are very pleased at the way in which the extensive review of the Jumbo Glacier Resort (JGR) project has addressed the question of carrying capacity. Current users have had many opportunities to provide information on the existing load on the land, and much professional expertise has been marshaled to try to quantify the effects of existing use and potential new use of the land on the natural environment. Our understanding of the conclusions of the technical review is that there is general agreement that most effects on the natural environment can be managed within reasonable limits. The exception is a disagreement on the impact to grizzly bears in the central Purcell region: that disagreement having to do fundamentally with which methods of mitigation are acceptable. (There does seem to be agreement that certain measures would be effective from a biological perspective, but that they would not be preferred by members of the public who would lose some access to areas or hunting quotas that they currently enjoy.)

That competition between human users leads us to the role of the JGR in discussions around highest return to the public from commercial tenures on crown land. Local governments in the region have expressed concern repeatedly over the scope and number of tenures being granted under the province's Back Country Commercial Tenure program. These tenures are being granted in the absence of any serious investigation of carrying capacity and for remarkably small payment to the public for the use of crown land (\$1 to \$4 per customer day.)

An existing large commercial operator contends that the intrusion of the JGR project into his tenure would fatally damage his business and that there is no opportunity for cooperation between the two operations — this commercial user pays approximately \$12,000 in annual user fees to the province for a tenure encompassing approximately 145,000 hectares. When we contrast this to JGR, whose operation on 104 hectares of developed land (within a ski area boundary of 5,900 hectares) is expected to pay \$3,200,000 in annual local and provincial government property taxes at build-out, we are puzzled why this striking difference doesn't form a larger part of the discussion around this project.

Everything doesn't come down to money, but money is what our government uses to pay such people as nurses, teachers and conservation officers. Until we in the public choose to forego many of the services we now expect from government, we need to expect our governments to look for the most responsible ways to provide those services. The very careful allotment of our ever more precious wild land, in order to

Martyn Glassman / May 17, 2004

receive the highest return to the public for the least amount of public land, strikes us as an appropriate course to follow.

For this reason, in the context of overall public policy, the Village of Radium Hot Springs supports the JGR proposal in the reduced scale of its most recent design. We do so with the firm expectation that the province will meet its critical responsibility to ensure that the technical solutions, outlined in the EA review for development in the back-country, are built into the project and operated properly for the life of the project.

As a community with an economy that is dependent in large measure on tourism, we also support the project for the boost that it will give the international profile of tourism in this region and the province as a whole. We believe that a mature tourism industry, cognizant of the need to protect the natural resources on which it depends, is a good partner for a vigilant government in ensuring the health of our environment.

Yours truly,

The Council of the Village of Radium Hot Springs



Mark Read, CAO

# District of Invermere

"ON THE LAKE"

File: 6.6.8.3

Fax: 250 342-2208

Environmental Assessment Office  
PO Box 9426  
STN PROV GOVMT  
Victoria, BC  
V8W 9V1

Attention: **Martyn Glassman, Project Assessment Manager**

Dear Sir;

Re: **Proposed Jumbo Glacier Resort**

At the May 11<sup>th</sup>, 2004 Council Meeting Resolution #04/147 was passed and then ratified at the May 25<sup>th</sup>, 2004 Council Meeting.

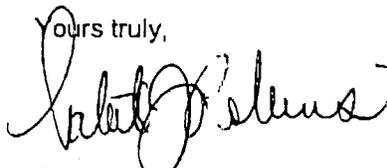
Resolution #04/147:

*"WHEREAS the District of Invermere has been requested by the Provincial Government to provide comment on the Jumbo Glacier Resort proposal, and further to our submission of April 27, 2004 to the Technical Advisory Committee, the District of Invermere has actively sought input from the citizens of Invermere and has received overwhelming and widespread opposition to the proposal, based largely on negative environmental, economic and social concerns.*

*NOW THEREFORE BE IT RESOLVED THAT the District of Invermere opposes the Jumbo Glacier Resort proposal currently under review by the Environmental Assessment and the Provincial Government."*

I have also included, for your information, Council's April 27<sup>th</sup>, 2004 submission to the Technical Advisory Committee.

Yours truly,



Patrick Robins  
Chief Administrative Officer

PR/ccg

Encl. DOI Submission to TAC (April 2004)

Technical Advisory Committee,  
Environmental Assessment Office  
Public Input, Jumbo Glacier Resort  
April 27, 2004

Dear Mr. Glassman,

As you are aware, the District of Invermere has until May 26<sup>th</sup> to complete its response to the Environmental Assessment process concerning Jumbo Glacier Resort. This time frame conflicts significantly with the request for the Technical Advisory Committee response of April 23, 2004. In an effort to assist members of the Technical Advisory Committee, the Council, in its regularly scheduled meeting held on April 27, 2004 approved the following.

The following is a highlight of many of the areas that may be contained in the District's final submission to the Environmental Assessment Office. These issues should not be construed as either support or opposition to the project, but rather as needed changes to existing services in Invermere to meet the needs of the Jumbo Glacier Resort if the Province approves the project.

Issues 1    Waste Management System: The District of Invermere will not have our Consulting Engineers study the proposed Waste Management System. We are assuming that the appropriate provincial authority is responsible for evaluating the project to ensure provincial standards will be met. However, our concerns are really in the application and maintenance of the Waste Management System once approved in principle. Discussions with colleagues in Fernie, Golden (Kicking Horse), and our own observations (Panorama) indicate that even new systems do not necessarily operate as intended. If the project is approved, then, the engineering of the waste management systems used at Jumbo Glacier must be of a highest caliber to ensure that the Jumbo creek and other related waterways are not affected by the project. In addition, appropriately trained and paid personnel have to be in place to ensure that the system is monitored and is performing to the standards as engineered.

Issues 2    Storm Drainage: The District of Invermere will not have our Consulting Engineers study the proposed Storm Sewer System. We are assuming that the appropriate provincial authority is responsible for evaluating the project to ensure provincial standards will be met. Again, as we are a downstream community, any sediment and extra run-off will have an adverse effect our surrounding environment – the Columbia Valley Wetlands. The wetlands is a world class environmental wonder, and because of that, significant economic spin-offs have been generated in Invermere – eco-tourism, Wings over the Rockies, second home owners, timeshare participants and the like. Therefore all storm water issues during construction and on completion of the project must be contained on site and not be discharged into the Toby Creek and or any other water system.

- Issue 3 Bridges. To access the Panorama/Jumbo Road, visitors must enter into Invermere from highway 93/95. In doing so, they will cross the Athelmer Bridge that spans the Columbia River at the eastern end of The District of Invermere, then they must cross the Toby Creek Bridge in the north west end of The District of Invermere. Both of these bridges are under the maintenance responsibility of the District of Invermere. The additional traffic volumes will require more regular maintenance as well as a shortening of the predicted life span of these bridges. As the proposed Jumbo Glacier Resort is outside of the municipality, the District of Invermere does not have the financial instruments under the Community Charter. Therefore, some type of long term financial mechanism must be established by government, to allow the District of Invermere to tax users accordingly (share of property tax, share of gas tax, share of property sales tax etc.) or some other type of compensation plan will be required. Otherwise it will be the residents of Invermere who will be subsidizing the Resort.
- Issue 4 Roads: To access the Panorama/Jumbo road, day skiers and visitors to Jumbo must drive through a portion of Invermere. The added traffic will require changes to the existing roadway to ensure safety and proper traffic flow. Two areas of specific concern will be the intersection at the top of the railway bridge and panorama road, where a turn right lane and a set of lights may be required. The other major concern is an ‘S’ curve in the Panorama road as it approaches Invermere’s Industrial area. The added traffic may require that the road be straightened out, as it may no longer meet the standards required for the volume of traffic predicted. Finally, the roadbed itself may be required to be upgraded, as it may not be up to the standard required for the predicted volume of traffic. Given that the roadway in question used to be part of the MoT road maintenance system, the Ministry should have the background information and expertise to calculate the costs of these changes, as well as the ability to fix the ‘S’ curve as the straightening of the road would go through the provincial road maintenance yard. Again, some type of long-term financial mechanism must be established by government, to allow the District of Invermere to tax users accordingly to pay for the up keep of the road.
- Issue 5 Hospitals: Funding for Hospital services appear to be tied to stable population figures of a community rather than the temporary population that is normally associated with resort communities. In this specific case, the catchment area would change from approximately 9,000 people to 13,000+ per day (700 Jumbo employees plus an average of 3,477 visitors a day at the resort). This “shadow” population will need emergency medical services as they are here for recreation and thus may be more accident prone than during normal day-to-day activity. As a consequence, additional emergency services in Invermere Hospital should be increased to cover these 4,177 more people. Otherwise the District of Invermere would be subsidizing the Resort through less service being made available to the community.

- Issue 6     Ambulance: Given the experience with Panorama Resort, it is a certainty that increased ambulance services will be required for the Jumbo Glacier Resort. The road distances will increase the time that ambulance attendants will be out on call. Again, staffing levels will have to be increased to meet the needs of 4,177 more people a day who will be engaging in higher risk recreation activities. Otherwise it will be the citizens of Invermere that will be subsidizing the proposed resort through reduced service to its citizens.
- Issue 7     Jaws of Life: The Invermere Volunteer Fire Department currently responds to motor vehicle accidents within a radius of 60 to 80 kms outside of our jurisdiction. Given the added volume of traffic that will be required to meet the daily objectives of Jumbo Glacier Resort, the probability of more call outs in the area is inevitable. To effectively meet these increased needs, it may be necessary to upgrade the initial response vehicles such that the appropriate rescue tools are available to meet the increased demand.
- Issue 8     Policing: The police detachment at present has 10 officers for all of the Upper Columbia Valley. This translates into approximately 1 officer per 1,000 permanent residents. The addition of 4,177 people into the area will require the addition of a minimum of 4 more officers just to simply maintain the existing level of policing in the valley. Otherwise it will be the citizens of Invermere and the Columbia Valley that will be subsidizing the proposed resort through reduced service to its citizens.

In addition to the above, the final submission may deal with other issues that Council feels relevant to the project, such as public sentiment, possible governance issues and the like.

If you have any questions or concerns on any of the above, please contact me, or Patrick Robins, CAO for the District of Invermere.

Yours truly,

Brian Mc Laughlin  
Brian Mc Laughlin  
Councillor for the District of Invermere

Mark, Robert, Joanne, Gerry, and Patrick Robins.

Attached is a draft letter to the Technical Advisory Committee for the Jumbo EAO project.

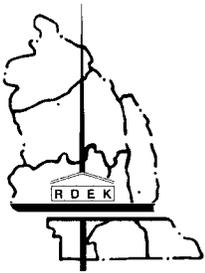
The TAC members were to provide their comments by Friday april 23, 2004. My initial understanding from the committee was that our role was not really a technical one like the other members, and so we would not really be having a response o make as a member of the technical committee.

However, I was asked by the manager of the project if we could put something in so that the committee and the proponent would have a heads up to our final submission due the 25<sup>th</sup> of May.

The following is from a brief discussion that I had with Brian N. and initial comments that I had made to the EAO.

Please read and see if you feel comfortable with this response if we decide to submit one to the technical committee.

Brian



# REGIONAL DISTRICT OF EAST KOOTENAY

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File: P 800 503

May 11, 2004

Martyn Glassman  
Project Assessment Director  
Environmental Assessment Office  
2<sup>nd</sup> Floor 836 Yates Street  
PO Box 9426 Stn Prov Govt  
Victoria, BC V8W 9V1

Dear Mr. Glassman:

**Re: Jumbo Glacier Resort Project**

At its regular meeting on May 7<sup>th</sup>, the RDEK Board discussed the Jumbo Glacier Resort Project and its response to the invitation to provide comments prior to May 25, 2004.

After consideration, the Board adopted the following resolution:

*"That the Environmental Assessment Office be advised the RDEK is unable to comment on the Jumbo Glacier Resort project."*

The decision was made after a discussion of the requirements for a public hearing should a project certificate be issued and an application be made to amend the Upper Columbia Valley Zoning Bylaw.

If you have further questions, please contact me at 250 489-0312.

Sincerely,

R.D. Whetham, Manager  
Planning & Development Services

RDW/bjm

#### MUNICIPALITIES

CITIES: Cranbrook, Fernie, Kimberley; DISTRICTS: Elkford, Invermere, Sparwood; VILLAGE: Radium Hot Springs

#### ELECTORAL AREAS

"A" Elkford Rural, Elk Valley, Fernie Rural, Flathead, Hosmer, Sparwood Rural, West Fernie; "B" Baynes Lake, Elko, Galloway, Grasmere, Jaifray, Newgate, Rosen Lake, Tie Lake; "C" Bull River, Cranbrook Rural, Fort Steele, Mayook, Monroe Lake, Moyie, Wardner, Wycliffe; "E" Kimberley Rural, Meadowbrook, St. Mary's Lake, Sheep Creek, Skookumchuck, Ta Ta Creek, Wasa; "F" Canal Flats, Columere Park, Fairmont Hot Springs, Invermere Rural, Panorama, Windermere; "G" Brisco, Edgewater, Radium Rural, Spillimacheen, Wilmer

## **Appendix E**

### **Measures Proposed to Address First Nations' Asserted Interests**

**FIRST NATION ASSERTED  
INTEREST/COMMENTS**  
(source, see endnote)

**MEASURES/RESPONSES  
BY PROPONENT AND/OR EAO**  
(Proponent commitment # - see Appendix F  
Compendium of Proponent Commitments)

**Asserted Aboriginal Title (1, 2, 3, 5, 7, 10)**

- Right of first refusal if Crown land removed (1).
- Land placed aside under Interim Measures Agreement (1).
- Treaty and rights should be dealt with first (1, 2).
- Project inconsistent with KKTC sacred/cultural values (1, 8) & location (Katmuq) is considered unacceptable because potential impacts on subsistence activities [hunting (moose in particular), berry-picking (black huckleberry in particular), trapping and plant gathering] (10).
- Aboriginal Title held collectively by the Ktunaxa Nation (4).
- No agreement with Proponent to use KKTC TUS information and not paid for TUS (10).
- KKTC not adequately resourced to prepare and provide comprehensive comments during the prescribed period.
- On-going consultation can be negotiated as part of an impact management and benefits agreement including:
  - monitoring & mitigation;
  - use of Aboriginal languages for names/signage;
  - effectiveness of benefit arrangements;
  - archaeology work;
  - economic and employment & training commitments;
  - Interpretive Centre;
  - on-going marketing or community liaison committees;
  - restrictions on non-Ktunaxa activities within the CRA);
  - EIS;
  - EMPs;
  - terms of reference for the additional baseline studies;
  - environmental monitoring program (10).
- KKTC may be interested in negotiating an agreement with LWBC for effective participation in the Master Development planning process (10).

**EAO, Proponent and On-going Consultation**

- Information Sharing: the Application, draft Project Report Specifications, Final Project Report Specifications, section 11 procedural order, Project Report, Project Report Supplement, Technical Advisory Committee Minutes, Proponent responses, and measures proposed to address concerns.
- Notices of, opportunity to comment on, the Application, draft Project Report Specifications, Project Report, Project Report Supplement.
- Invitations to participate in the EA review advisory committees.
- Information Gathering: Proponent Application and Project Report; KKTC TUS/Archaeology, Socio-economic Assessment; comments received.
- Requirements for, and Proponent attempts to, consult with First Nations.
- EAO consultations and discussions.
- Proponent proposal to resolve TUS dispute.
- Proponent commitment to continue to assist with consultation with First Nations to ensure that their interests are fully considered, together with an assessment of any potential infringement and requirements for accommodation (1)
- Proponent commitment to negotiate with willing First Nations for the establishment of consultation protocols (2).
- Proponent commitment to request an amendment to the EA certificate, if necessary, to include any subsequent agreements with First Nations (3).
- Proponent Commitment to continue efforts to negotiate an economic benefits agreement, in proportion with the size of each phase of the Project, that could include (25):
  - provisions for construction and operating employment, student employment,
  - business opportunity notification,
  - equity partnerships and joint ventures,
  - direct purchase from First Nations and neighbouring communities and their businesses, and
  - assistance for strategic planning for non-project management activities.
- Proponent commitment to negotiate with willing First Nations for the

<b>FIRST NATION ASSERTED INTEREST/COMMENTS</b> (source, see endnote)	<b>MEASURES/RESPONSES BY PROPONENT AND/OR EAO</b> (Proponent commitment # - see Appendix F Compendium of Proponent Commitments)
	<p>establishment of consultation protocols, which will provide for ongoing consultation on the development, issues identified in the EA process, and the commitments made (27).</p> <ul style="list-style-type: none"> <li>● Proponent commitment to consult with the Ktunaxa/Kinbasket Tribal Council and the Shuswap Indian Band before entering into any agreements for recreational activities within the Controlled Recreation Area (see also commitment) (28).</li> <li>● Proponent commitment to negotiate with the Ktunaxa/Kinbasket Tribal Council and the Shuswap Indian Band and attempt to conclude an impact management and benefits agreement prior to submission of the final Ski Area Master Plan and Master Development Agreement (29).</li> <li>● LWBC commitment to invite First Nations to participate Master Development planning process.</li> <li>● LWBC commitment to consult on commercial recreation tenure applications outside the CRA.</li> <li>● Proponent commitment to work with interested First Nations on selection and use of Aboriginal languages for Project names and signage (12).</li> <li>● Proponent commitment to report on achievements annually (5).</li> <li>● Proponent Project design change to reduce the CRA to 5,900 ha (KKTC's asserted traditional territory is 70,000 km<sup>2</sup>).</li> </ul>
<p><b>Jumbo Pass &amp; Archaeology</b></p> <ul style="list-style-type: none"> <li>● Jumbo Pass (Katmuq) is ancient travel route &amp; hunting area (6, 10).</li> <li>● Archaeological finds (quartzite quarry - Jumbo Pass &amp; campsite -Toby Creek) indicate high archaeological potential within the project area (6, 10).</li> <li>● First section of the access road beyond the Jumbo-Toby confluence will not be on the existing Forest Service Road (10).</li> <li>● Polygons with moderate or high potential (and the new road section) must have an AIA prior to construction and monitoring during construction done by an archaeologist</li> </ul>	<ul style="list-style-type: none"> <li>● Proponent commitment to discourage employee and visitor use of Jumbo Pass (7)</li> <li>● Proponent commitment to the visual mitigation and scenic enhancement measures identified in the Visual Impact Assessment - Project redesigned to avoid visual impact on Jumbo Pass users (148).</li> <li>● Proponent commitment to discourage hiking outside the Controlled Recreation Area, and in particular, hiking outside the hiking trail from the resort area to Glacier Dome (147).</li> <li>● Project designed so access road is on a previously disturbed pre-existing forestry and mining road.</li> </ul>

<b>FIRST NATION ASSERTED INTEREST/COMMENTS</b> (source, see endnote)	<b>MEASURES/RESPONSES BY PROPONENT AND/OR EAO</b> (Proponent commitment # - see Appendix F Compendium of Proponent Commitments)
<p>approved by the KKTC with a direct reporting relationship to the KKTC &amp; have the authority to suspend construction activities (10).</p> <ul style="list-style-type: none"> <li>• No legal means for preventing employees or clients from hiking to Jumbo Pass (10).</li> <li>• Project will be visible from locations in Jumbo Pass (10).</li> </ul>	<ul style="list-style-type: none"> <li>• Proponent must comply with provisions of Heritage Conservation Act to deal with archaeology artefacts found during construction (TUS finds are outside Project area).</li> <li>• Proponent commitment to monitoring of land altering activities by a qualified archaeologist in areas of moderate to high archaeological potential prior to development taking place (195).</li> <li>• Proponent commitment that there are no plans to extend the Controlled Recreation Area and the resort areas in any way that would interfere with the Jumbo Pass corridor (184).</li> <li>• to hire an independent expert to monitor road construction for archaeological impacts in areas of moderate to high archaeological potential (11).</li> <li>• Proponent commitment to monitor, at its own cost, unsupervised public recreational use (including use by resort construction and operations employees, resort visitors and resort residents) and other use of roads which link to Highway #95 at Invermere (146).</li> <li>• Proponent commitment to maintain the same ease of access to the Jumbo Pass Trail (160).</li> </ul>
<p><b>Accommodation</b></p> <ul style="list-style-type: none"> <li>• KKTC concerned about low paying and seasonal resort jobs vs. the cost of maintaining employment (10).</li> <li>• Proponent's expects training resources to be provided by the First Nations themselves or by government (10).</li> <li>• Lack of information on: the length of the commitment in regards to 5% First Nations equity hire or how that will be accomplished and maintained; retention strategies; involvement and plans with other unions (10).</li> <li>• The Proponent's agreement to request an amendment to a EA certificate to mandate the impact management and benefit agreement is important (10).</li> </ul>	<ul style="list-style-type: none"> <li>• Proponent commitment to develop an Employee Equity Program (Appendix 4E, Volume 4 of the Project Report) with a goal of 5% aboriginal employees at the resort (13).</li> <li>• Proponent commitment to develop an education/training support program in proportion to the size for each phase of the Project (14).</li> <li>• Proponent commitment to make bona fide efforts to develop a joint training program with the International Union of Operating Engineers proportion to the size for each phase of the Project (15).</li> <li>• Proponent commitment to make reasonable efforts to use qualified First Nation subcontractors (16).</li> <li>• Proponent commitment to inform private sector investor/developer groups of First Nations employment strategies (17).</li> </ul>

<b>FIRST NATION ASSERTED INTEREST/COMMENTS</b> (source, see endnote)	<b>MEASURES/RESPONSES BY PROPONENT AND/OR EAO</b> (Proponent commitment # - see Appendix F Compendium of Proponent Commitments)
	<ul style="list-style-type: none"> <li>• Proponent commitment to employ, as part of the assignment for the Interpretive Centre, a qualified aboriginal person in a key role (will also monitor First Nation employment programs (18).</li> <li>• Proponent commitment to work with interested First Nations to develop a comprehensive Employment Development Program which targets skill and job readiness training for youth, adults, and potential entrepreneurs/small business owners in the tourism sector, using the proposed resort, Panorama Mountain Resort and R.K. Heli-Ski Panorama Inc. as partners, to the extent that they are willing participants (19).</li> <li>• Proponent commitment to provide job training opportunities within the resort for all training programs in proportion with the size of each phase of the Project (20).</li> <li>• Proponent commitment to make bona fide efforts to reach a final agreement with the Shuswap Indian Band on the provision of sewer and water portion of utilities (21).</li> <li>• Proponent commitment to make bona fide efforts to reach benefit agreements with the KKTC, the Shuswap Indian Band and the Columbia Lake Indian Band on the provision of other services described in the Master Plan Concept (22)</li> <li>• Proponent commitment to have an First Nations Interpretive Centre and Environmental Monitoring Station as part of the Project (193).</li> <li>• Proponent commitment to make land available and assist First Nations to develop the Interpretive Centre (23).</li> <li>• Proponent commitment to make land available and assist First Nations to develop the Condotel (24).</li> <li>• Proponent commitment to inform third-party developers and investors in order that they clearly understand and cooperate in the economic and employment participation of First Nations people in the Project (26).</li> <li>• Proponent willingness to explore, as an alternative, providing bus transportation for employees not housed at the resort.</li> <li>• Proponent Commitment to continue efforts to negotiate an economic benefits agreement, in proportion with the size of each phase of the Project, that could include (25):</li> </ul>

<b>FIRST NATION ASSERTED INTEREST/COMMENTS</b> (source, see endnote)	<b>MEASURES/RESPONSES BY PROPONENT AND/OR EAO</b> (Proponent commitment # - see Appendix F Compendium of Proponent Commitments)
	<ul style="list-style-type: none"> <li>• provisions for construction and operating employment, student employment,</li> <li>• business opportunity notification,</li> <li>• equity partnerships and joint ventures,</li> <li>• direct purchase from First Nations and neighbouring communities and their businesses, and</li> <li>• assistance for strategic planning for non-project management activities.</li> </ul> <ul style="list-style-type: none"> <li>• Proponent commitment to conduct cooperative activities with local First Nations, plans for First Nations employment and training, First Nations business opportunities, and the First Nations Interpretive Centre (134).</li> <li>• Proponent commitment to employment policies and programs with a focus on training and equity employment for locals and First Nations (135).</li> <li>• Proponent commitment to an education/training support program for all resort employees to cross-trade skills enhancement and assist with year-round employment opportunities (136).</li> <li>• Proponent commitment to develop an Employment Equity Program that provides assurances that all efforts possible will be made to ensure that First Nations and local residents are given priority of hiring at all levels (139).</li> <li>• Proponent commitment to continue to pursue agreements with local First Nations for provision of resort services (192).</li> </ul>
<b>Impacts to Asserted Aboriginal Rights</b> <ul style="list-style-type: none"> <li>• Formerly used for fishing, hunting, gathering (stone, huckleberry, gooseberry) (6, 8).</li> <li>• Grizzly bear of sacred significance (6).</li> <li>• Access road a barrier to use (6)</li> <li>• Attempt to control hunting seasons and/or access considered as a direct infringement on Ktunaxa rights (10).</li> <li>• Whole valley is of ethnobiological significance - commitment requires clarification (i.e., maintain in a naturally functioning condition?) (10).</li> <li>• Hunting within the Jumbo valley, even outside of the CRA,</li> </ul>	<ul style="list-style-type: none"> <li>• Proponent commitment to work with interested First Nations and WLAP to determine where controlled seasonal hunting can be implemented (8).</li> <li>• Proponent commitment to work with interested First Nations to manage access for traditional gathering activities based on available information (9).</li> <li>• Proponent commitment to make bona fide efforts to maintain areas identified as having ethno-biological significance (10).</li> <li>• MOT does not restrict access on public highways.</li> <li>• Proponent commitment to allow most of the Jumbo Creek drainage to remain available for access and for hunting except for a permanent firearm closure requested for a half a kilometre around the resort base, a firearm</li> </ul>

<b>FIRST NATION ASSERTED INTEREST/COMMENTS</b> (source, see endnote)	<b>MEASURES/RESPONSES BY PROPONENT AND/OR EAO</b> (Proponent commitment # - see Appendix F Compendium of Proponent Commitments)
<p>will be substantially impaired by traffic on the resort access road and increased hunting restrictions (to the extent that restrictions are required for public safety, this would be addressed in the Master Development Agreement following consultation between LWBC and the KKTC) (10).</p>	<p>closure in the Controlled Recreation Area in winter, and closures in the area of operating lifts (154).</p> <ul style="list-style-type: none"> <li>• Proponent commitment to future cooperation with local First Nations, the local rod and gun club, the guide/outfitter and other organizations and individuals who have an interest in hunting (155).</li> </ul>
<p><b>Environmental Effects: wildlife (8, 10)</b></p> <ul style="list-style-type: none"> <li>• Winter road maintenance is the responsibility of MOT not the Proponent (10).</li> <li>• Mitigation measures designed to prevent road mortality of moose and other ungulates (ploughed snow-free crossing areas) have merit, but cannot be expected to be 100% effective (10).</li> <li>• Fencing the resort may reduce deer/moose habitat by excluding a significant valley bottom forage area from ungulate use (10).</li> <li>• Increased use of the Jumbo Pass trail will have consequences for wildlife and the Proponent would not have the jurisdiction to do restrict use (10).</li> <li>• The demand for summer recreation beyond the skiing and the trail to Glacier Dome, would likely force the resort to install further trails to meet this demand. A commitment to only have a trail to Glacier Dome would address concerns about future expansion of the trail network (10).</li> <li>• There is no indication of whether and how speed limits and traffic calming efforts will be monitored and enforced (10).</li> <li>• Roads salt will attract salt lickers, if NaCl is used, resulting in increased risk of vehicle - animal collisions (10).</li> <li>• Discouraging people from stopping to view wildlife is of doubtful value (10).</li> <li>• No information is provided on which species are expected to benefit from proposed habitat conversions (10).</li> </ul>	<ul style="list-style-type: none"> <li>• Project design changed to reduce wildlife and grizzly impacts (e.g., elimination of parking lot, reduced size)</li> <li>• Goats:             <ul style="list-style-type: none"> <li>- The Proponent has committed to reduce potential impacts on goats moving between winter and summer ranges by not conducting ski run and lift development activities in the areas of migrating goats in April, May or November (77).</li> <li>- The Proponent has committed to conduct adequate monitoring surveys to identify goat winter habitat polygons and to determine whether the potential exists for disturbance to wintering goats in the area in proximity to the proposed Farnham Glacier summer chair lift alignment (78).</li> <li>- The Proponent has committed to consider, in consultation with WLAP staff, relocating the proposed Farnham Glacier summer chair lift alignment to avoid goat winter habitat polygons. If an alternate suitable alignment cannot be identified, the Proponent will not operate the lift during the winter period specified by the WLAP (79)</li> <li>- The Proponent has committed to follow established practices to avoid avalanche control activities in the vicinity of wintering goats (85).</li> </ul> </li> <li>• The Proponent has committed to conduct wildlife monitoring (as per Environmental Management Plan section 13.2) and, as required, to install appropriate out-of-bounds signs and cliff barriers (80).</li> <li>• The Proponent has committed to work in cooperation with the forest industry and government agencies to reclaim redundant forest or resort access roads and trails for productive forage (81).</li> <li>• The Proponent has committed to, in the event that an agreement with the forest industry cannot be reached, fund the reclamation of redundant forest</li> </ul>

<p align="center"><b>FIRST NATION ASSERTED INTEREST/COMMENTS</b> (source, see endnote)</p>	<p align="center"><b>MEASURES/RESPONSES BY PROPONENT AND/OR EAO</b> (Proponent commitment # - see Appendix F Compendium of Proponent Commitments)</p>
<ul style="list-style-type: none"> <li>• Measures implemented to reduce wildlife mortality on roads may reduce, but not eliminate wildlife mortality from collisions (10).</li> <li>• The risks to Mountain Goats from this proposal are significant (humans entering their habitat and from helicopter usage) (10).</li> <li>• Measures to mitigate the impacts on wolverine are not sufficient mitigation (10).</li> <li>• Cannot determine whether proposed measures can mitigate the impacts on the Least Chipmunk (10).</li> <li>• The Western Toad is present in the valley and may be impacted by the resort (10).</li> <li>• Further isolation of Caribou could have negative consequences which cannot be mitigated (10).</li> <li>• Birds - the study did not follow provincial survey guidelines and more information needs to be collected (10).</li> <li>• Specialist Birds - the survey was not intensive enough to identify specialist species or determine whether sensitive species are present and further surveys are required (10).</li> <li>• Cavity nesting birds - there is no evidence that the proposed mitigation for impacts will be effective because they will not increase or maintain the availability of trees suitable for cavity nesting (10).</li> <li>• Raptors - surveys should be conducted on Swainson’s Hawk and Peregrine Falcon that may be possible in the area and the proposed mitigation measures of 150 m buffers around identified nests would not be effective (10).</li> <li>• White-ailed Ptarmigan have been overlooked (10).</li> </ul>	<p>or resort access roads and trails for productive forage as required by the WLAP (82).</p> <ul style="list-style-type: none"> <li>• The Proponent has committed to encourage MOT to:               <ul style="list-style-type: none"> <li>• use non-forage species when re-vegetating exposed soils;</li> <li>• undertake winter road maintenance measures, such as pullouts and snow-free crossing points, to allow escape pathways for ungulates and reduce impacts to wildlife;</li> <li>• use road de-icing agents other than salt; and</li> <li>• employ signage and other measures to discourage wildlife viewing from the access road (83).</li> </ul> </li> <li>• The Project design has only one hiking trail (to Glacier Dome).</li> <li>• The Proponent has committed to develop a First Nations Interpretive Centre and ongoing environmental monitoring station in cooperation with interested First Nations (6).</li> <li>• The Proponent has suggested fencing the resort area at build out, or even earlier, if monitoring program suggested it.</li> <li>• The Proponent intends to expanding cuts of avalanche areas and connecting them at the bottom to create large fire barriers while enhancing bear habitat and notes that hHigh value feeding habitat by cutting of runs and lift lines, which represents 4.9% of the Farnham Creek drainage and 3.5% of the Jumbo Creek drainage.</li> <li>• The Proponent has committed that helicopter use will be limited to top lift station and lift tower installations and during operations for emergency and avalanche control requirements (120).</li> <li>• The Proponent has committed to discuss with the Ministry of Water, Land and Air Protection Regional Manager (Environmental Stewardship) the terms of reference for a future comprehensive amphibian inventory and habitat and impact assessment (84).</li> <li>• The Proponent has committed to locate all facilities along the corridor of the upgraded access road, as well as existing roads and trails with any deviations following the route that is least disruptive to the natural environment (86).</li> <li>• The Proponent has committed to locate ski runs to ensure that riparian forest</li> </ul>

<b>FIRST NATION ASSERTED INTEREST/COMMENTS</b> (source, see endnote)	<b>MEASURES/RESPONSES BY PROPONENT AND/OR EAO</b> (Proponent commitment # - see Appendix F Compendium of Proponent Commitments)
	<p>habitats are not disrupted, and to avoid entry into riparian areas during construction and protect riparian habitat during operation (87)</p> <ul style="list-style-type: none"> <li>• The Proponent has committed to prohibit recreational use of all-terrain vehicles (88).</li> <li>• The Proponent has committed to prohibit staff and residents from carrying firearms or hunting within the resort area (89)</li> <li>• The Proponent has committed to minimize impacts of helicopter overflights on wildlife by following protocols outlined in the Project Report (90).</li> <li>• The Proponent has committed to retain large areas of existing forest with minimal fragmentation of forest areas and maintain coarse woody debris between ski runs (91).</li> <li>• The Proponent has committed to minimize disturbance of low growing herbs and shrubs that are not the target of maintenance (92).</li> <li>• The Proponent has committed to planting unpalatable species of grasses on the resort to deter deer, if and where grass is planted (93).</li> <li>• The Proponent has committed to actively participate in a program to increase staff and public's awareness and understanding of human-wildlife interactions and implement ways to avoid or minimize human-wildlife conflicts (94).</li> <li>• Birds:             <ul style="list-style-type: none"> <li>- The Proponent has committed that clearing of habitats will not occur during the critical April 1 to July 31 breeding bird period for birds unless a nest survey is conducted and a management plan is developed by a qualified wildlife biologist (96).</li> <li>- The Proponent has committed to retain riparian corridors within all residential and commercial development areas, and to protect these corridors, and other sensitive/unique songbird habitats, within the streamside buffers (97).</li> <li>- The Proponent has committed to retain riparian habitats along creeks to ensure that important breeding and foraging habitat for many raptor species is maintained and that corridor-linkages are maintained between core forested areas (98).</li> <li>- The Proponent has committed to halt all land development activities in the</li> </ul> </li> </ul>

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vicinity of any active raptor nests found within the construction area until a management plan is developed with the cooperation of regulatory agencies (99).

- to prepare and comply with a Trail Management Plan to minimize off-trail use, which should prevent habitat loss from disturbance of alpine vegetation (110).
- to manage garbage to avoid its availability for scavengers (111).
- to retain large old growth trees or other trees that may be suitable for raptor nesting where old growth has been left (112).
- that resort base design will direct all activity away from the Jumbo Creek corridor, especially at specific Harlequin duck nesting sites. Proposed design features include fencing riparian protection and enhancement areas within the resort base and posting signs that state “Environmentally Sensitive Area – Entry Prohibited” (113)..
- to not offer any water-based activities such as canoeing, kayaking or rafting, and to discourage such activities and prohibit visitors who bring canoes, kayaks or rafts from launching them anywhere within the Controlled Recreation Area (114).
- to train resort staff in appropriate behaviour in the vicinity of Harlequin ducks and their habitats (115).
- to convey information on protecting Harlequin ducks to resort guests (116).
- to identify, during maintenance activities, problem areas for raptor collisions with transmission lines and, if necessary, monitor the occurrences of raptor electrocutions and develop an adaptive management plan (117).
- to conduct additional bird surveys prior to construction and to implement a monitoring and adaptive management program for birds, appropriate with the type and size of the Project, during construction and operations (118).
- The Proponent has committed to follow nest protection guidelines for Bald eagle consistent with the Ministry of Water, Land and Air Protection (2002) guidelines, including (100):
  - to prevent facility development within 150 metres of nest trees,
  - to minimize human activities within 150 metres of active nests between February and July,

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	<ul style="list-style-type: none"> <li>• to maintain all existing habitat components within 150 metres of nest trees, and to train staff and provide information to guests on appropriate behaviour in the vicinity of raptors and their nesting habitat.</li> <li>• The Proponent has committed to implement and fund ongoing threatened and endangered wildlife monitoring, including the Least chipmunk, in the preconstruction/construction phase of the Project (119)</li> <li>• The Proponent has committed that helicopter use will be limited to top lift station and lift tower installations and during operations for emergency and avalanche control requirements (120).</li> <li>• The Proponent has committed to enforce vehicle speed limits to avoid wildlife collisions (121).</li> </ul>
<p><b>Grizzly Bears:</b></p> <ul style="list-style-type: none"> <li>• Design changes are likely to be beneficial for grizzly bears; however, they will not result in 'no net impact' to the central Purcell grizzly bear population (10).</li> <li>• the Project poses a long-term risk to the north-south connectivity (10).</li> <li>• Concerns regarding the effectiveness of mitigation measures (10).</li> <li>• Plans to minimize bear attraction and human - bear interactions will not eliminate habitat or mortality (10).</li> <li>• There is no clear evidence that the ability to mitigate and adaptively manage fragmentation will succeed (10).</li> <li>• There are currently no proven successful means of monitoring grizzly bear populations that can be relied upon to implement Adaptive Management (10).</li> <li>• Monitoring is a complex undertaking - we should probably not accept impacts on the premise that we can monitor the effects accurately (10).</li> <li>• More information on reclaiming forestry roads is required - how much area of redundant forest or resort access roads</li> </ul>	<ul style="list-style-type: none"> <li>• The Proponent has committed:               <ul style="list-style-type: none"> <li>- to achieve and maintain Bear Smart community status (101)</li> <li>- to implement, at its own cost, all mitigation measures and provisions for preventing or minimizing bear problems within and immediately adjacent to the Controlled Recreation Area, as outlined in the Project Report (102)</li> <li>- to implement, at its own cost, all measures and provisions for managing problem bears within and immediately adjacent to the Controlled Recreation Area, as outlined in the Project Report (103)</li> <li>- to monitor the potential direct and indirect effects of the Project on the Central Purcell Mountains Grizzly bear population through genetic testing to predict, detect, and assess any change (if any) in Grizzly bear numbers and distribution. The monitoring program is to include field collection of hair samples from Grizzly bears within the area of direct and indirect impacts before construction, at the end of each phase of construction and at appropriate intervals in the following 10 years, or until such time as the WLAP determines that it is no longer required (104)</li> <li>- to implement (in consultation with the WLAP and LWBC), at its own cost, an adaptive management program, as outlined in the Project Report, to evaluate the success of measures for mitigating impacts to Grizzly bears. The adaptive management program will include the identification of</li> </ul> </li> </ul>

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<p>and trails is available? (10).</p> <ul style="list-style-type: none"> <li>Reclaiming forestry roads is a positive commitment but of limited value because the proponent is relying on the forest industry to take the lead on and pay for proposed reclamation work (10).</li> </ul>	<p>performance measures and targets, a decision protocol for the adjustment of mitigation programs to the fullest extent possible when resort-related impacts to Grizzly bear populations or habitat use are evident, and a mechanism for resolving adaptive management disputes (105)</p> <ul style="list-style-type: none"> <li>- to establish and participate in a Grizzly Bear Management Committee to oversee implementation of the Grizzly Bear Management Plan as proposed in the Project Report, including a monitoring and adaptive management program and associated management practices (decision protocol, reporting, and a dispute resolution mechanism) (106)</li> <li>- to pursue arrangements with local forest tenure holders and government to improve habitat effectiveness within and adjacent to the CRA through incremental silviculture projects (thinning and spacing of young forest stands), deactivation of unnecessary roads, and strategic harvest of merchantable timber (107)</li> <li>- to make every effort to achieve the desired mitigation, in regards to Grizzly bear cumulative impacts, with strategies that will not alter the present access enjoyed by various special interests (108)</li> <li>- to strive to achieve no net impact by implementing the Grizzly Bear Management Plan and by supporting or implementing additional measures identified and agreed to by LWBC and WLAP (109).</li> <li>• The Proponent has committed to have Bear Aware programs which will be aggressive and mandatory (95).</li> <li>• The Proponent has committed to implement, at its own cost, measures and provisions described in the Grizzly Bear Management Plan, which includes guidelines for minimizing bear-human conflicts. (122).</li> </ul>
<p><b>Environmental Effects: Water Quality, Fish and Aquatics</b></p> <ul style="list-style-type: none"> <li>Outstanding concerns could be addressed by a legally-binding proponent commitment (to the satisfaction of the KKTC) to design and implement additional biophysical and baseline studies relating to bull trout and westslope cutthroat trout distribution and habitat use prior to final design and any project construction activities (field verification of fish</li> </ul>	<ul style="list-style-type: none"> <li>• The Proponent proposes to prevent impacts by the following measures:             <ul style="list-style-type: none"> <li>- set backs from Jumbo Creek;</li> <li>- elimination of bridges;</li> <li>- monitoring and Environmental Management Plan (incl. Stormwater Management, NPS Waste Discharge Control and Spill Contingency Plans);</li> </ul> </li> </ul>

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presence of streams with gradients between 20 and 30%.) (10).

- Outstanding concern could be addressed by a legally binding proponent commitment (to the satisfaction of the KKTC) to relocate the road as necessary based on information obtained from the biophysical and baseline studies about critical habitats for westslope cutthroat trout and bull trout. In some cases, this may require relocation beyond the RMA requirements for S2 streams (10).
- The EIS should be reviewed and approved by the KKTC within the Impact Management process to be specified within a negotiated IMBA (10).
- The detailed EMPs should be reviewed and approved by the KKTC within the Impact Management process to be specified within a negotiated IMBA (10).

- open bottom culverts;
- further hydrological studies prior to construction; and,
- tertiary waste treatment from the start of the Project.
- The Proponent has committed to adopting a 30 metre Streamside Protection and Enhancement Area as outlined in the *Fish Protection Act – Streamside Protection Regulations* (71).
- The Proponent has committed that, when required, widening of the access road will be done on the upslope side of the road (76).
- The Proponent has committed to completing site-specific detailed Environmental Management Plans (EMP) for Non-Point Source (NPS) control (Stormwater Management Plan, Sediment and Erosion Control Plan, Spill Contingency Plan, etc.) will be completed to the satisfaction of the Ministry of Water, Land and Air Protection Regional Manager (Environmental Protection) during detailed design, or after detailed design but before construction, as appropriate (51).
- The Proponent has committed that an Environmental Impact Study of the wastewater treatment system for the Project will be completed in compliance with the process under the *Municipal Sewage Regulation* (52).
- The Proponent has committed to complete Environmental Management Plan(s) (EMP) to the reasonable satisfaction of the appropriate provincial government agency prior to construction start-up to include, as relevant, an (45):
  - Erosion and Sediment Control Plan;
  - Water Management Plan;
  - Solid Waste Management Plan;
  - Liquid Waste Management Plan;
  - Stormwater Management Plan;
  - Non-point Source Waste Discharge Control Plan;
  - Vegetation Management Plan;

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<ul style="list-style-type: none"> <li>• The commitment re. salt is satisfactory, subject to KKTC approval of the EIS (10).</li>   <li>• This is a satisfactory commitment <i>provided that</i> individual developers and property owners within the resort can be legally bound to it (10).</li>   <li>• The terms of reference for the additional baseline studies should be reviewed and approved by the KKTC within the IMBA (10).</li> </ul>	<ul style="list-style-type: none"> <li>• Trail Management Plan;</li> <li>• Grizzly Bear Management Plan;</li> <li>• Outdoor Recreation Management Plan;</li> <li>• Air Quality Protection Plan;</li> <li>• Spill Contingency Plan;</li> <li>• Environmental Monitoring; and</li> <li>• Additional Monitoring Plans</li>   <li>• The Proponent has committed to implement, at its own cost, all mitigation measures and provisions of the related Environmental Management Plan components (e.g., Liquid Waste Management Plan, Solid Waste Management Plan, Grizzly Bear Management Plan, etc.) as proposed in the Project Report (46).</li>   <li>• The Proponent has committed to provide completed EMPs to the KKKTC and the Shuswap Indian Band for review and comment at the same time as submitting draft EMPs to the respective provincial government agencies (30).</li>   <li>• The Proponent has committed that salt will not be used to maintain runs for general public use (33)</li> <li>• The Proponent has committed not to use salt or icing compounds except for the occasional ski race or summer race training by agreement with race organizers (34)</li>   <li>• The Proponent has committed to not using pesticides (including herbicides) on ski slopes or in the base area</li>   <li>• The Proponent has committed to conduct and submit to the Ministry of Water, Land and Air Protection Regional Manager (Environmental Protection) additional baseline analyses before any site development/construction activity/well drilling program is undertaken, including:           <ul style="list-style-type: none"> <li>• additional sampling in Jumbo Creek to characterize sediment production</li> </ul> </li> </ul>

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<ul style="list-style-type: none"> <li>• Concerns regarding impacts to Toby and Jumbo Creek from groundwater extraction could be addressed by legally binding proponent commitments to design and implement the groundwater (or alternately surface water) investigation program to the satisfaction of the KKTC (10).</li>   <li>• Concerns regarding impacts to Toby and Jumbo Creek from groundwater extraction could be addressed by legally-binding proponent commitments to limit short- and long-term resort water use to the sustainable aquifer (or surface water) yield as determined by an independent consultant acceptable to the proponent and the KKTC (10).</li> </ul>	<p>during spring freshet (April 1 to June 30);</p> <ul style="list-style-type: none"> <li>• additional sampling in Jumbo Creek to confirm the low level of mineralization in the basin, as suggested by the water chemistry data; and</li> <li>• an ion analysis component to the baseline water quality monitoring for Jumbo and Toby Creeks (57).</li> </ul> <ul style="list-style-type: none"> <li>• The Proponent has committed to develop and implement an adequate groundwater investigation program that will include, but not be limited to, drilling and pump testing wells to determine sustainable groundwater extraction rates. This investigation must take place prior to construction of each phase of development (including the drilling and developing groundwater wells that will be used to supply the resort) (61).</li> <li>• The Proponent has committed to complete a hydrological assessment as part of the drilling program (see ) and the detailed geotechnical assessment (67).</li> <li>• The Proponent committed to conduct adequate monitoring to determine whether there are any adverse groundwater/surface water interactions resulting from the withdrawal of groundwater to supply the proposed resort. The Ministry of Water, Land and Air Protection (Environmental Stewardship) should be consulted during the development of terms of reference for any monitoring program involving fish and fish habitat assessment. Details of this monitoring program are to be developed after a drilling and pump testing program has been completed (64).</li> <li>• The Proponent committed that, if the groundwater option does not prove to be feasible, the Proponent will, prior to any resort construction, conduct appropriate investigative work to assess and determine the environmental impacts of the surface water option, as well as to propose any needed mitigation measures to deal with identified impacts. Terms of reference for this work should be signed off by appropriate Ministry of Water, Land and Air Protection (Environmental Protection and Environmental Stewardship) staff prior to any work taking place (65).</li> </ul>

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<p>Cumulative impacts (6)</p> <ul style="list-style-type: none"> <li>The KKTC seeks to negotiate a Jumbo Valley cumulative impacts management agreement with LWBC (how LWBC would consult with the KKTC on new applications for land and water tenures) in accordance with the Ktunaxa Nation Accommodation and Consultation Policy Framework (10).</li> </ul>	<ul style="list-style-type: none"> <li>LWBC has committed to consult on commercial recreation tenure applications outside the CRA.</li> <li>The Proponent has committed to consult with First Nations on commercial recreation agreements within the CRA (28).</li> <li>The Proponent has committed that employee housing will be provided on site as part of the employment contract with the developer for about 90% of the employees with a small minority that may choose to commute from other communities (190).</li> <li>The Proponent has committed to dispose of the non-recyclable refuse at the Regional District of East Kootenay landfill (48).</li> <li>The Proponent has committed to enter into agreement with the Regional District of East Kootenay on solid waste disposal prior to construction if required by both the Ministry of Water, Land and Air Protection and the Regional District 50).</li> <li>The Proponent has committed to discourage employee and visitor use of Jumbo Pass (7).</li> </ul>
<ul style="list-style-type: none"> <li>Glacier ablation (6)</li> </ul>	<ul style="list-style-type: none"> <li>Given its elevation (1,700 to 3,419 metres), the Project is at less risk from the potential effects of climate change than most other ski resorts. It is unlikely that skiing activity will significantly impact on the glacier's extent.</li> </ul>
<ul style="list-style-type: none"> <li>Greenhouse gas contribution(6) – Proponent's commitment seems unlikely to be achieved in the long term as there will be cost pressures to use propane and/or LNG (10).</li> </ul>	<ul style="list-style-type: none"> <li>The Proponent proposes to have minimal emissions as it is powered by electricity and emissions from automobiles are subject to same regulation as rest of Province and Canada.</li> </ul>
<ul style="list-style-type: none"> <li>Wildfire (6)</li> </ul>	<ul style="list-style-type: none"> <li>Proponent has committed to complete a Fire Protection Plan to Ministry of Forests' standards prior to commencing construction. The plan is to address, in detail, the design of the community and associated roads and emergency vehicular access, among other topics (40).</li> </ul>

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	<ul style="list-style-type: none"> <li>• Proponent has committed that buildings will be sprinklered to meet National Fire Protection Association requirements (41).</li> <li>• Proponent has committed that a fire protection service will be established in accordance with the provisions of provincial policies and established guidelines (42).</li> <li>• Proponent has committed that all building will be sprinklered until a volunteer fire department is fully established and will provide the level of service expected under the B.C. Building Code (43).</li> <li>• Proponent has committed to develop guidelines for resort design and the use of materials to reduce and control the threat of fire (44).</li> <li>• Proponent has committed that fire protection and the danger of wildfire will be studied in greater detail to ensure public safety (171).</li> <li>• Proponent intends to expand cuts of avalanche areas and connecting them at the bottom to create large fire barriers while enhancing bear habitat.</li> </ul>
<ul style="list-style-type: none"> <li>• Access Road Geological Stability (6) – Proponent’s measure does not address the KKTC concern about the geological stability of the access road.</li> </ul>	<ul style="list-style-type: none"> <li>• The Proponent has proposed an Erosion and Sediment Control Plan based on an adaptive methodology to be employed in developing detailed design and construction techniques that achieve stream protection during construction.</li> <li>• The road design must meet MOT’s access road design standards.</li> </ul>
<ul style="list-style-type: none"> <li>• The Vegetation Management Plan must be developed to the satisfaction of the KKTC and address the following issues:               <ul style="list-style-type: none"> <li>- Leafy spurge infestation must be dealt with before additional disturbance</li> <li>- Machinery to must be pressure washed prior to being used;</li> <li>- The code for landscaping must address the use of non-native species;</li> <li>- Topsoil must not be imported from outside the project area;</li> <li>- Only non-persistent agronomic species and native species should be used during construction.</li> <li>- Freshly disturbed soils must be seeded with appropriate</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• The Proponent's Vegetation Management Plan describes guiding principles, proposed mitigation measures and best practices to reduce potential impacts to vegetation impacts [e.g., use of seed mixtures that will not increase the frequency or distribution of any weed species or introduction of non-native species; cast soils off to the (upslope) side rather than transport soils; monitor the revegetation success and address any noxious/undesirable weed invasion]. The Plan recommends that revegetation occur as soon as possible following the end of construction in order to limit the area of exposed soil.</li> </ul>

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<p>native and non-persistent agronomic species (Aqam Nursery, owned and operated by the St. Mary Indian Band specializes in native plant species propagation and should be consulted on the choice of native species and contracted to supply seeds and other stock) (10).</p>	
<ul style="list-style-type: none"> <li>• Noxious weeds (6) - Noxious weed control strategies must be developed and implemented to the satisfaction of the KKTC (10).</li> </ul>	<ul style="list-style-type: none"> <li>• Proponent has committed that only native vegetation will be used for landscaping in the resort base. No noxious weeds will be used and no non-native plants capable of becoming weeds will be permitted (Noxious weed control strategies must be included in all development plans, for approval by MOF) (74).</li> <li>• Proponent has committed that resort and road construction will proceed in a manner that will limit the potential doe invasion by noxious weeds. All disturbed areas will be re-seeded as quickly as possible using a certified weed-free grass (or grass-forb) mixture appropriate for the climate and altitude (168).</li> </ul>
<ul style="list-style-type: none"> <li>• Land Use (6) - The KKTC was not a party to the Kootenay Land Use Plan (and it may not be consistent with the Nation's vision for how their territory should be used) and is developing a comprehensive Land Use Plan (LUP) for its Traditional Territory including the area of the proposed JGR which will be completed in March 2005 and government and third party entities are expected to respect and integrate the LUP into their operations (10).</li> </ul>	<ul style="list-style-type: none"> <li>• The Project is an acceptable use under the Kootenay/Boundary Land Use Plan subject to completing an environmental assessment.</li> </ul>
<ul style="list-style-type: none"> <li>• Avalanches (6)</li> </ul>	<ul style="list-style-type: none"> <li>• The Proponent has committed that the proposed residential and commercial structures will be located completely outside the avalanche hazard area (36)</li> <li>• The Proponent has committed that every attempt will be made to locate the ski run departure and arrival stations outside the mapped and potential avalanche runs as shown in the Master Plan layout (37)</li> </ul>

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	<ul style="list-style-type: none"> <li>• The Proponent has committed that a Ski Area Safety Plan will be filed prior to the start of operations which will provide details of areas of exposure and safety programs that will be established to avoid exposure to avalanche hazards (38)</li> <li>• The Proponent has committed that avalanche control on ski runs will be accomplished by: using the skills of an avalanche hazard forecaster; using trained and certified ski patrol personnel; and appropriate methods including avalanche runs, explosives control, and trail closures (39).</li> <li>• to design the road to minimize exposure to avalanches and to facilitate the monitoring and an avalanche prevention program (169).</li> <li>• to submit a detailed avalanche management program prior to start of operations in accordance with the Master Development Agreement. (170).</li> <li>• MOT is satisfied that: the technical assessment on avalanche hazards is sufficient; the avalanche management and conceptual operations plan is sufficient (further implementation details would occur prior to construction); and the conceptual operations plan in the vicinity of any residential and/or commercial structure meets their requirements (detailed analysis would be required prior to facility installation and/or construction of residential and commercial structures).</li> </ul>
<b>Socio-economic Effects (2)</b> <ul style="list-style-type: none"> <li>• Limited economic benefits (8)</li> <li>• Inequitable distribution of benefits (8)</li> <li>• The increased cost of living due to the increased tourist activity (10).</li> </ul>	<ul style="list-style-type: none"> <li>• Proponent commitments (see above) to provide economic opportunities including employment equity with 5% target, business joint ventures associated with Interpretive Centre, Hotel and utility services, training, etc.</li> </ul>

Information Sources:

1. KKTC Resolution, September 20, 1995.
2. KKTC Comments on Project Application.
3. KKTC Resolution, January 2003.
4. Interview (M. Anielski), September 22, 2003.
5. CLIB Resolution, October 8, 2003.
6. Ktunaxa Aboriginal Interest: TUS and Archaeological Overview, Fall 2003.
7. Interview with Chief S. Pierre (M. Anielski), December 12, 2003.
8. K. Teneese letter, May 18, 2004.
9. CCRIFC Comments, May 14, 2004.
10. KKTC Response to measures proposed, July 20, 2004



**Appendix G**  
**Permits, Licences and Approvals**

The following list of relevant provincial and federal statutes is not comprehensive and is provided for information only. Permits, licences and approvals, including appropriate zoning and other necessary local government approvals would be required, should the Project proceed.

**Provincial**

*Environmental Management Act*

*Fish Protection Act*

*Forest Act*

*Forest and Range Practices Act*

*Forest Land Reserve Act*

*Forest Practices Code of BC Act*

*Health Act*

*Heritage Conservation Act*

*Highway Act*

*Land Act*

*Local Government Act*

*Mountain Resort Associations Act*

*Strata Property Act*

*Waste Management Act*

*Water Act*

*Water Protection Act*

*Water Utility Act*

*Wildlife Act*

**Federal**

*Canadian Environmental Protection Act*

*Fisheries Act*

*Migratory Birds Convention Act*

*Navigable Waters Protection Act*

*Species at Risk Act*

*Transportation of Dangerous Goods Act*