

# Executive Summary of the Quality of Life Assessment of the Proposed Jumbo Glacier Resort Project

Quality of Life Assessment Document Completed by



the Foundation for Democratic Advancement  
(October, 2009)

The Foundation for Democratic Advancement is a non-partisan advocate for the public in issues of democracy and elections. (www.democracychange.com)

**Purpose of the Quality of Life Assessment:** To determine a non-partisan, objective assessment of the quality of life impact of the Jumbo Glacier Resort Project on relevant population groups.

This determination is an independent perspective to give the residents of the East Kootenays and relevant organizations and individuals an informed, non-partisan, objective perspective.

The views in this non-partisan Quality of Life Assessment are the views of the FDA and the experts and relevant persons involved in the Assessment. Also, the Determination is an example of using quality of life assessments to assist in making development decisions. Presently, the BC government's development process does not include formalized quality of life assessments.

Also, the FDA and its members are in no way affiliated with any individuals or organizations affiliated, associated, or connected to the Jumbo Glacier Resort Project.

The Evaluation represents an assessment of the Jumbo Glacier Resort Project based on objectivity, transparency, and non-partisanship.

### **Key Definitions:**

#### **Jumbo Glacier Resort Project:**

Resort site in Jumbo Creek Valley is 20 km (12.5 miles) away from Panorama and 38 km (24 miles) away from Invermere.

The Resort site is on 104 hectares.

a year-round facility focusing on sightseeing from the top of glaciers and a different kind of skiing in the mountains. "The proposed land use will add skiing in designated locations, tennis and a highly compact resort

base, which will comprise hotels, ancillary commercial facilities, vacation apartments, townhouses, and single family chalets.”  
A resort of 5,502 tourist beds plus 750 staff beds is planned for the ultimate expansion, which will include a network of some twenty lifts. (Total 6,252 bed units) (Source: Master Plan)

The resort on completion will consist of 143 single-family chalets, 240 townhouse units, 974 condo/hotel units, and 369 hotel rooms.

An ultimate capacity of approximately 6,250 beds, including 750 beds for staff accommodation. Bed unit occupancy is anticipated to be in accordance with industry standards, in the 30 to 50 percent range for bed units and in the 50 to 60 percent range for dwelling units. For occupancy considerations it is important to realize the difference between dwelling units (rooms, suites, etc.) and bed units (pillows).

Total tourist bed base is designed for 5,500 beds at build out. At 40% occupancy this would translate into 2,200 overnight guests, which is a reasonable winter target. This is a target design in a similar range to the projected size of [Panorama](#) and [Silver Star](#). Average number of skiers at build out is anticipated to be in the 2,000/ 3,000 persons/ day range in high season.

The Resort will offer lift-serviced access to Jumbo, Farnham and Commander Glaciers as well as Glacier Dome

Study on Grizzly Bear populations in the Central Purcells, commissioned jointly with the Environmental Assessment Office, confirms the Proponents' findings through the previous years of environmental studies. Of the 33 individual Grizzlies identified from hair samples collected in the 1998 "Grizzly Bear Population Survey in the Central Purcell Mountains", covering an area of 4,000 square kilometers, **only 2 Grizzly Bear hair samples were collected in the Jumbo Valley, versus 31 in the other drainages.** Grizzly Bears were not found within 1 kilometer of main valley bottom roads, even though

26% of the capture sites were located near these roads. The proposed resort is at the end of the existing road.

Note the Jumbo Glacier Resort Project is premised on claimed sustainability, and yet quality of life surpasses sustainability---a project can be sustainable while at the same time harmful to quality of life.  
(Source: FDA)

### **Jumbo Creek Valley:**

**The Valley is not pristine.** It has had substantial human activity including logging, mining, exploration, skiing, snowmobiling, hiking and hunting for over five decades. The resort is proposed for the site that was previously utilized for a sawmill.

Sure the Jumbo Creek Valley is not pristine... but at the same time it is not devastated. (Source: FDA)

### **Methodology**

Fundamental evaluation questions for the Jumbo Glacier Resort Project:

1. What are the impacts of the Jumbo Resort at build-out on quality of life of the relevant population groups?

Viz., Does the Jumbo Resort at build-out add or detract from the overall quality of life, and to what degree?

Are there any relevant population groups that are severely impacted?

### **Sections for Evaluation:**

Pre-Resort Recreationalists:

A. Protection of Environment, including impact on wildlife (quality of wilderness experience of the Jumbo Creek Valley and surrounding drainages)

B. Access to Outdoors Recreation

C. Visual Impact of Resort

D. Overall Impact (Noise, Crime, Congestion, and Pollution)

E. Economic Impact

Invermere and Surrounding Areas:

F. Air quality

G. Water quality

H. Economic Impact

I. Overall Impact from (Noise, Crime, Congestion, Pollution)

**Population groups to be assessed:**

1. Pre-Resort Tourists and Recreationalists for the entire Jumbo Creek Valley and surrounding drainages: applies to Sections A, B, D, and E. The re-resort tourists and recreationalists are made up of hunters, trappers, wildlife watchers/enthusiasts, hikers, climbers, backcountry skiers, outdoors enthusiasts, ATV users and so on. The total annual population of pre-resort tourists and recreationalists is estimated at 4,756. Note the figure was attained from review of occupancy at the Jumbo Pass Cabin, consultation with the Columbian Valley Chamber of Commerce (Visitor Center), and various groups which frequent the Jumbo Creek Valley including skiers and tourists from Panorama and local and Albertan ATV users at Farnham Creek. There are no statistics on the actual number of people who access Jumbo Creek Valley and surrounding drainages.

Statistics on public access of the Jumbo Pass Cabin and Jumbo Pass area:

1994	227	user days - from sign in records - *includes day use
1995	389	" "
1996	320	" "
1997	469	" "
1998	794	" "
1999	193	" "
2000	349	" "
2001	462	" "
2002	430	" "
2003	~missing data~	
2004	703	" "
2005	399	paid & reserved user nights **DOES NOT include day use
2006	736	" "
2007	822	" "
2008	730	" "

### Russ Hendry – CVHut Society

(These numbers do not include day hikers, climbers, mountaineers, fisherman, sightseers, and any of these groups and others who access the other nearby drainages and passes like the Lake of the Hanging Glacier. Also, the numbers from 1994 to 2004 do not include people who didn't sign in when entering the Jumbo Pass)

#### Calculation:

Summer months: June to September (122 days) estimated at 35 persons per day which equates to 4,270 people annually.

Winter months: October to May (243 days) estimated at 2 persons per day which equates to 486 annually.

Total annual population of pre-resort tourists and recreationalists who access Jumbo Creek Valley and/or surrounding drainages: 4,756.

2. Invermere and surrounding areas: The estimated population of Invermere is approximately 3,300 (City of Invermere) with another 542

from Toby Benches, Panorama, and Rushmere. (2006 Canadian Census). Total population of Invermere and surrounding areas: 3, 842

3. Local First Nations: The local first nation is the Shuswap Lake Band. According the 2006 Census, the Band has a total population of 169. Note, the local First Nations have not been included in this Survey because they have failed to respond to Survey questions.

4. Resort at build-out (after 20 years): The Developer's estimated Resort Population is 560,873. (Total number of visitors in one year including winter and summer.) Note, the Resort population in this Survey has been reduced by 70% to account for overestimation by the Developer, which is typical of Development estimates. The modified Resort Population is 168,262.

#### Delphi Technique:

Individuals and groups from the population groups will be surveyed on the relevant sections for evaluation.

A feedback process will be implemented to allow the surveyed to review the responses of all other participants, and then have opportunity to reassess their initial survey response.

There will be three rounds of feedback. The purpose of the feedback process is not to reach consensus, but to ensure participants make the most informed response while maintaining their individuality.

The survey responses will be kept anonymous amongst the participants, in order to reduce noise between participants.

Because the Resort population will be given 80% for quality of life, on the presumption that the quality of life experience of the Resort recreationalists will be high but not perfect. (For a more detailed explanation, please see Modifications to the Survey Result due to further quality of life impacts section.)

Weighting:

The nine sections for evaluation will be weighted equally, 0 to 10. Moreover, all participants will be given equal weight.

**Information sources:** Jumbo Glacier Resort Master Plan, Invermere Chamber of Commerce, Visual Impact Assessment on the Glacier Resort, Wildsight, numerous reports and assessments on the impacts of the Jumbo Glacier resort, and various individuals and groups which use the Jumbo Valley Creek.

**Participating Organizations and Individuals:**

Alpine Club of Canada  
School of Skiing and Snowboarding (Panorama, BC)  
Findlay Creek Outfitters  
Toby Creek Adventures  
Jumbo Wild Conservation Society (Bob Campsall—also Councilor for City of Invermere)  
Nolan Radd (Jumbo Valley hunter and trapper)  
West Kootenay EcoSociety  
Wildsight—Cranbrook/Kimberley Branch  
Norm MacDonald, MLA Columbian River-Revelstoke  
Spring Hawes, Councilor for the City of Invermere, BC  
Kootenay Mountaineering Club  
West Kootenay Naturalists  
UBC Varsity Outdoors Club  
Alberta Whitewater Association  
Ben Singleton-Polster, UBC Varsity Outdoors Club  
Eva Boehringer, Member of the Climbers' Access Society of BC

Note, Mr. Gerry Taft, the current Mayor of Invermere and Chief Paul Sam of the Shuswap Indian Band were invited to participate in this



survey, but failed to respond to the survey questions despite several reminders.

Moreover, the BC Liberal government through the Ministry of Tourism, declined to support or participate in this survey.

**Chief Administrator:**

Mr. Stephen Garvey, BA, MA, Chief Director of the FDA,

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## Overall Score for the Nine Sections of Quality of Life

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## A. Pre-Resort Recreationalists:

A. Protection of Environment including wildlife (quality of wilderness experience of the Jumbo Creek Valley and surrounding drainages)

Survey Results:

1. What is the overall environmental impact of the Jumbo Glacier Resort at build-out on Pre-Resort Tourists and Recreationalists in terms of quality of wilderness experience?

Scores:

0/10, 9/10, 0/10, 2/10, 5/10, 0/10, 1/10, 0/10, 0/10, 0/10, 1/10, 1/10, 0/10, 1/10

Total: 20/140 14.3% 1.4/10 (Scores less than 5 have a negative quality of life impact; the lower the score, the more negative the quality of life impact)

Main Rational for Score:

The Jumbo Resort will have irreversible, negative impact on the natural environment and wilderness experience.

The inaccurate wildlife assessments by the developer weaken the developer's credibility.

There will be a spillover of negative impacts on the surrounding drainages.

There is a threat of secondary commercial development of the Jumbo Resort, which will worsen impacts.

Grizzly and black bear cannot co-exist with people; mountain goat will move out of area.

Wildlife and resorts don't mix.

Huge impact in a valley somewhat compromised already. (Additional 555,000 visits a year.)

Wilderness experience will cease in the Jumbo Creek Valley.  
The Jumbo Resort is environmentally sound with minimal impact.

## B. Access to Outdoors Recreation

### Survey Results:

2. What is the overall impact of the Jumbo Glacier Resort at build-out on Pre-Resort Tourists and Recreationalists' access to outdoors recreation?

### Scores:

8/10, 0/10, 0/10, 9/10, 0/10, 3/10, 2/10, 0/10, 2/10, 2/10, 0/10, 5/10,  
3/10, 5/10

Total: 39/140 27.9% 2.8/10

### Main Rational for Score:

The Jumbo Resort will have access restrictions through the development process and inevitable conflict between backcountry recreationalists and commercial interests.

There is a threat of secondary commercial development of the Jumbo Resort, which will worsen impacts.

The Jumbo Resort will eliminate hunting, trapping, and wildlife watchers. Hikers, climbers, back country skiers etc., will face severe diminishment of wildlife experience.

Access to Jumbo Creek Valley will be restricted from backcountry recreationalists not wanting to access the area anymore.

There is a possibility the developer will try to restrict access.

The Jumbo Master Plan entails limits on access, with the possible closure of nearby drainages.

Resort bureaucracy will limit access for people trying to cross the resort.

The Resort will improve access to the area, and increase overall experience of the Valley.

The Resort may improve winter access to the valley.

## C. Visual Impact of the Jumbo Glacier Resort

### Survey Results:

3. What is the overall visual impact of the Jumbo Glacier Resort at build-out on Pre-Resort Tourists and Recreationalists' view of the Jumbo Creek Valley and surrounding drainages?

### Scores:

2/10, 0/10, 0/10, 8/10, 0/10, 1/10, 0/10, 0/10, 2/10, 0/10, 2/10, 1/10, 4/10, 0/10

Total: 20/140 14.3% 1.4/10

### Main Rational for Score:

The Jumbo Resort will fundamentally alter the visual landscape.

Development is incompatible with wilderness values.

There is a threat of secondary commercial development of the Jumbo Resort, which will worsen impacts.

Beauty destroyed; resort an eyesore.

No beauty in lumber, asphalt and concrete.

Visual impact, which is negative, will extend to the surrounding drainages and areas—Earl Grey trail, Horsethief Creek, Bugaboos etc.

Vast increase in the number of people will severely diminish the visual impact of area.

Development will ruin the natural environment leaving scars.

The Resort will have marginal impact, by blending into the area.

## D. Overall Impact on Jumbo Creek Valley (Noise, Congestion, Pollution)

### Survey Results:

4. What is the overall impact of the Jumbo Glacier Resort at build-out on Pre-Resort Tourists and Recreationalists from noise, congestion, and pollution stemming from the Jumbo Resort?

3/10, 0/10, 0/10, 9/10, 0/10, 0/10, 1/10, 0/10, 1/10, 0/10, 0/10, 1/10, 3/10, 1/10

Total: 16/140 11.4% 1.1/10

### Main Rational for Score:

The Resort will degrade the Jumbo Valley environment from additional and cumulative pollution, noise, and increased human activity.

There is a threat of secondary commercial development of the Jumbo Resort, which will worsen impacts.

An average increase of 1650 people a day in a narrow valley, means the noise, congestion, and pollution will be very high.

1600 to 2000 vehicles per day on Jumbo Road—over a billion pounds of carbon dioxide emissions annually, chemicals, sewage, other products of growth in an extremely fragile environment.

Complete and perpetual harm to the Jumbo environment.

In the West Kootenays, there will be an increase in human wildlife conflicts due to bears becoming accustomed to humans and garbage.

Noise pollution would be obvious from the bustle of vehicles, lift engines, snowcats etc.,

The Development will results in crowded conditions, especially on bad weather days and weekends.

Negative impact from the mere presence of the Resort in the area.

The Resort's environmental impacts have been accounted for in the BC Government environmental assessment process.

## E. Economic Impact

### Survey Results:

5. What is the overall economic impact of the Jumbo Glacier Resort at build-out on Pre-Resort Recreational Businesses?

### Scores:

0/10 10/10, 0/10, 4/10, 8/10, 0/10, 2/10, 0/10, 3/10 0/10, 5/10

Total: 32/110 29% 2.9/10

### Main Rational for Score:

Outfitters and trappers will cease to exist in the Jumbo Valley.

Tour groups should benefit.

All pre-resort commercial activities will be displaced or taken over by the Resort.

R-K Heliski will likely be displaced by the Resort.

Resort will displace pre-resort tour groups by competing directly with them.

The Resort will expand the area's range of services and recreation year round.

The Resort will generate international recognition of the area.

The Resort will bring no economic benefit to the West Kootenays.

### Overall Score for Resort Impact on Pre-Resort Tourists and Recreationalists:

9.6/50 19.2% 1.9/10



## Invermere and Surrounding Areas:

### F. Air Quality

#### Survey Results:

4. What is the overall impact of the Jumbo Glacier Resort at build-out on Invermere and surrounding areas from water quality issues stemming directly and indirectly from the Jumbo Resort?

#### Scores:

0/10, 1/10

#### Main Rational:

Glaciers, the source of ground water, are retreating; so there will be less water available to local residents

Sewage and other pollutants from Resort will affect negatively downstream water quality

Total: 1/20 5% .5/10

## G. Water Quality

### Survey Results:

2. What is the overall impact of the Jumbo Glacier Resort at build-out on Invermere and surrounding areas from noise, congestion, and pollution stemming from the Jumbo Resort?

### Scores:

4/10, 1/10, 0/10, 1/10, 0/10

Total: 6/50 12% 1.2/10

### Main Rational:

Increased traffic, congestion from the Jumbo tourists passing through Invermere and Althamere areas

## H. Economic Impact

### Survey Results:

1. What is the overall economic impact of the Jumbo Glacier Resort at build-out on Invermere and surrounding areas?

### Scores:

3/10, 3/10, 6/10

Total: 12/30 40% 4/10

### Main Rational:

Increased tourist dollars spent in Invermere

Panorama Resort could be negatively affected due to increased competition

Decreased quality of life overall in Invermere will have a negative impact on the local economy—less people will want to live, work in Invermere

Some service industry and managerial jobs at Resort will be offset by income spent at Resort and the drain on the Invermere infrastructure—roads, hospitals, policing etc.

## I. Noise, congestion, pollution Impact

Survey Results:

3. What is the overall impact of the Jumbo Glacier Resort at build-out on Invermere and surrounding areas from air pollution stemming directly and indirectly from the Jumbo Resort?

Scores:

3/10, 0/10, 4.5/10, 1/10, 3/10

Total: 11.5/50 23% 2.3/10

Main Rational:

High air pollution from travel to and from Resort

Thermal inversion in Jumbo/Toby Valleys, would filter air pollution to Invermere

Overall Resort Impact on Invermere and Surrounding Areas:

8/40 20% 2/10

## Determination of Overall Quality of Life Impact:

### Quality of life impact of the Main Population Groups:

Resort Recreationalist: Estimated population at Resort build-out—168,262. (This number is a 70% reduction of the Jumbo Developer's estimate resort capacity of 560,873. The reduction accounts for overestimation which is generally the norm for developers.)

Each recreationalist is given 100% value or 10 out of 10, or an overall score of 1,682,620 out 1,682,620

Pre-Resort Recreationalists: Estimated population is 4,756.

The overall impact on Pre-Resort recreationalists is 1.9 out of 10. Therefore, the Pre-Resort recreationalists receive a score of 47,560 times 19%, or 9025.

Invermere and Surrounding Areas: Estimated population is 3,842. The overall impact on Invermere and surrounding areas is 2 out of 10. Therefore, the Invermere and surrounding areas receive a score of 38,420 times 20%, or 7684.

Local First Nations, Shuswap Indian Band, failed to participate in this survey. The estimated population of the Band is 169. The overall impact of the Indian Band would likely be negative due to diminished air and water quality stemming from the Resort, increased noise, congestion, and overall pollution from the Resort (Resort recreationalists would travel in close proximity to the Indian Band to reach or leave the Resort), recreational access would likely be diminished (elimination of trapping and hunting) while due to promises from a developer, the Band stands to benefit significantly.

Regardless of the impact on the Indian Band, its low population number means the Band would have a very marginal impact on the Survey results. In other words, the non-inclusion of the Shuswap Indian Band in this Survey does not weaken the validity of the results.

Overall Quality of Life Impact of the Jumbo Resort:

Resort Recreationalists

1,682,620 out of 1,682,620

Pre-Resort Recreationalists

9,025 out of 47, 560

Invermere and Surrounding Areas

7,684 out of 38, 420

Total:

1, 699, 329 out of 1, 768, 600 or 96% or 9.6 out of 10.

## Modifications to the Survey Result due to further Quality of Life Impacts

Note, these additional impacts were identified in stages two and three of the survey, in which participants were given an opportunity to voice their views of the survey results and share additional information and perspective.

1. The Jumbo Resort will result in improved access to Jumbo Creek Valley. As a result of the improved access, the potential Pre-Resort recreationalists should increase. However, the area will be less desirable for Pre-Resort recreationalist to visit, as documented for in the Survey. Yet, more moderate recreationalists may enter the Valley. Though since it is documented that the grizzly bears in decline in the Jumbo Creek area (without even Jumbo Resort), it means that the Jumbo Resort with 168,000 plus recreationalists a year, will push the grizzly bear into further decline, which means that many trails and roads in the Jumbo Creek Valley and surrounding drainages will be closed (as stated in the Resort's Master Plan). Therefore, if anything, the Pre-Resort recreationalists will likely decline than increase. So the FDA determines that improved access will not result in any changes to the Survey results.

2. The increased stress on the Invermere infrastructure due to increased tourists travelling through Invermere to reach the Jumbo Resort, would decline quality of life of the public services available to Invermere and surrounding area residents.

The Survey has already accounted for the economic impact on infrastructure, but not on the overall quality of life of residents.

The overall survey score for Invermere and surrounding areas is at 20% or 2 out of 10. So the overall impact of additional stress and usage on the infrastructure would have to be less or more than 2 out of 10 to be of significance, and even then overall impact would be marginal.

Clearly, Invermere's infrastructure such hospitals, roads, police and force would be more stressed. However, the Survey has already accounted for economic impact, because the City would have to expand the infrastructure it provided, and thereby increase the taxes or cost of living of residents. As mentioned, this has already been accounted for. Therefore, no additional impact needs to be added to the Survey results.

3. Due to the declining Canadian and international ski market, the Jumbo Resort will likely threaten ski recreationalists at other local ski resorts such as Kimberley Ski Resort.

Yet, any decline in the quality of life of local ski recreationalists from the Kimberley, should be offset by an increase in quality of life of local ski recreationalists from the Invermere/Windermere area. Therefore, FDA concludes that the overall quality of life impact to local ski recreationalists would be negligible.

4. Should the Resort recreationalists receive 100% scores for quality of life?

The quality of life as documented in the Survey, will not be at 100%. With the Jumbo Creek Valley, already in a less than perfect condition due to a yearly influx of pre-recreationalists, and a history of logging and mining, the Valley will decline further from the Resort.

Resort recreationalists will face congestion, crime, pollution issues, water and air quality issues, visual impact issues, and potential economic issues if the Resort is not economically viable. Also, the Resort recreationalists will face likely trail and road closures.

On the flip side, the recreationalists will likely enjoy greater recreational opportunities, and the benefits of being in a wilderness type environment, and visual benefits.

The FDA thinks that to account for less than perfect quality of life impact that the quality of life impact on resort recreationalists should be at 80% or 8 out of 10. (The 20% reduction allows for the less than perfect quality of life experience, and yet at the same time the enhanced quality of life experience of the recreationalists)



5. Should the individuals of all the population group's and within the groups receive equal quality of life value? Should the Pre-Resort recreationalist and residents of Invermere and surrounding areas receive greater quality of life value than Resort-recreationalists, because they were first to use the Jumbo Creek Valley or live nearby it?

Canadian society is premised on every member of the society receiving equal rights.

Also, Canadian society is dynamic.

There is nothing in Canadian law that says some citizens should be awarded greater quality of life rights due to first use of an area or due to close proximity to an area.

Moreover, the Developer through BC Environmental Assessment has included many measures to reduce its impact on affected population groups.

Therefore, it is the conclusion of the FDA that the individuals in this Survey should receive equal quality of life value.

6. The quality of life values should differentiate between permanent residency and temporary residence, with the former receiving higher value.

Quality of life impact is on an individual and moment to moment basis. It is not within the FDA means to identify, reasonably, quality of life impacts for each individual, not to mention many of them are not known.

Consequently, the FDA has focused on impacts to population groups. The variance of impacts within groups is consistent with impacts on the groups overall.

7. What value of quality of life, if any, should be awarded to wildlife?  
Quality of life values for wildlife are reflective in the beliefs of the population groups. For example, the Pre-Resort recreationalists as a whole put high value on wilderness experience, and thereby indirectly high quality of life value for wildlife.

Modification of Survey Results:

\* Resort Recreationalists

168, 262 times 80%, or 134, 610

1,346,100 out of 1, 682, 620

Pre-Resort Recreationalists

9,025 out of 47, 560

Invermere and Surrounding Areas

7,684 out of 38, 420

Total:

1, 362, 809 out of 1, 768, 600 or 77% or 7.7 out of 10.

## Reliability of Survey Results

The Survey Results for Pre-Resort recreationalists is based on fourteen survey responses by Pre-Resort recreationalists. Though nearly all of these respondents are anti-Jumbo Resort, it is typical of Pre-Resort recreationalists who on the whole value wilderness experience.

Moreover, the respondents are diverse and extremely knowledgeable of the Jumbo Creek Valley and the surrounding drainages. For example, Nolan Radd has been hunting and trapping in the Jumbo Creek Valley for more than sixty years, and the Alpine Club of Canada represents many outdoors people who access Jumbo Creek Valley on an annual basis.

Therefore, the Survey Results for Pre-Resort recreationalists are very reliable, and give very good gauge of the quality of life impact of the Jumbo Resort on Pre-Resort recreationalists.

The Survey Results for Invermere and surrounding areas is limited by the small number of survey responses. However, the quality of the survey responses such as an Invermere city councilor and the MLA for Columbia-Revelestoke region helps compensate for the number of survey responses. Though the reliability of the results is less than for Pre-Resort recreationalists, they give a general idea of the Resort impact on Invermere and surrounding areas.

The Survey questions for both Pre-Resort recreationalists and Invermere and surrounding areas cover key quality of life areas.

## Analysis:

The population of the Resort recreationalists, even at a 70% reduction off the Developer's estimate, grossly out numbers a combination of Pre-Resort recreationalists and residents from Invermere and surrounding areas.

168, 262 to 8,598 (20 times greater).

The quality of life impacts were opposite between Resort recreationalists, and the Pre-Resort recreationalists and residents of Invermere and surrounding areas:

Resort recreationalists: 80% or 8 out of 10 impact versus Pre-Resort recreationalists, 19% or 1.9 out of 10 and Invermere and surrounding areas, 20% or 2 out of 10.

The Pre-Resort recreationalists and Invermere and surrounding areas were scored significant overall negative quality of life impacts, 19% and 20%. The scores were consistent across the quality of life categories for each group. Though in the economic section, Invermere and surrounding areas scored the highest and yet still negative impact, at 40%.

The Survey for Invermere and surrounding areas was limited to five or less participants, which weakens the results. Nevertheless, the results along with the rationale for them can be used to gauge the general quality of life impact on Invermere and surrounding areas.

The Survey for Pre-Resort recreationalists was composed primarily of anti-Jumbo Resort participants. However, the bias to anti-Jumbo Resort participants is consistent with Pre-Resort recreationalists who value generally wilderness experience.

## Conclusion:

The Jumbo Glacier Resort will have a 77% overall positive impact on quality of life in the Jumbo Creek Valley and surrounding drainages.

However, Pre-Resort recreationalists face a 19% overall negative impact from the Jumbo Resort on their quality of life in the Jumbo Creek Valley and surrounding drainages. The percentage of this negative impact will likely worsen due to unavoidable road and trail closures to help offset grizzly bear decline. The Grizzly bear population in the Purcell Mountains is already in decline; so with the addition of the Jumbo Resort in the area, it is expected by the FDA that the decline will only worsen, which will mean significant road and trail closures to protect them. (These closures are clearly stated in the Resort's Master Plan.) It is anticipated that Pre-Resort recreationalists will eventually reach a 0% overall negative impact due to the Jumbo Resort. Viz., the road and trail closures, and domination of the Jumbo Creek Valley by the Jumbo Resort and its thousands of recreationalists will destroy the quality of life experience of the Pre-Resort recreationalists.

Similarly, the City of Invermere and surrounding areas face a 20% overall negative impact from the Jumbo Resort on their quality of life. This impact may worsen as Invermere due to increased Resort-related crime, congestion, and pollution, becomes a less attractive recreational destination.

It should be noted that the Jumbo Resort will increase ski competition in the Kootenays, in an already declining industry, which may in turn cause for example the Kimberley ski hill to close. Even though such a closure would have significant quality of life implications, it is not factored into this Survey because the marketplace allows for competition, and the quality of life reduction in the Kimberley area by ski recreationalists and labour would be offset by an increase in the Invermere/Windermere area. As a final note, an issue this development process faces is the domination of the majority over the minority. The FDA thinks that the

BC Liberal government is acting negligent, reckless, and shortsighted by allowing a Resort to take over an area at the expense of Pre-Resort users of the area and adjacent population centers, not to mention the significant harm the Jumbo Resort poses to the Jumbo Creek environment.

Moreover, it is shameful of the BC government bureaucrats, particularly from the BC Ministries of Environment and Tourism to sidestep the issues of this proposed Resort, by basically calling for road and trail closures, which gives priority to the Resort at the expense of all the other users. In a world of increasing environmental harm, the BC Liberal government despite its rhetorical claim of adherence to sustainability is only adding to the harm.