

Environmental Assessment Report of the Garibaldi Ski Resort at Squamish

This is a short environmental assessment report for the new Garibaldi Ski Resort proposal at Squamish, British Columbia. The proposed project site is located 15 kilometers north of Squamish on Highway 99. As a Natural Resource Planner from the British Columbia Snowmobile Federation (BCSF), I would like to address some main concerns that arose during the Environment Assessment process of the project site. The whole purpose is to re-evaluate to what extent can the Ski Resort damage the environment, and whether there are enough economic, environmental and ethical evidences for the project to continue.

The environmental assessment process is done through a Geographic Information System Mapping of the project site. The main dataset used for this map is retrieved from the British Columbia Government's Resource Database. In order to show how the project site may potentially affect the local environment, data layers of protected environmental areas within the project boundary are listed as follow:

- Mule Deer and Mountain Goat Winter Habitat
- Old Growth Forest Management Area
- Endangered Ecosystems
 - Falsebox, Salal, Cladina, Kinnikinnick, Flat Moss, Deer Fern, Cat's-tail Moss
- Fishery Habitat/ Riparian Areas

All layers are clipped to the project boundary and are categorized by genre in different colours. This is to show each protected environment's distribution and their coverage within the project site. The area of land elevation lower than 600m is also calculated so determine whether there will be sufficient snowfall for the ski resort to operate. The analysed results of the percentage for each protected environmental area and the lower than 600m areas are listed as follow:

- Mule Deer and Mountain Goat Winter Habitat – **7.89%**
- Old Growth Forest Management Area – **6.78%**
- Endangered Ecosystems – **24.38%**
- Fishery Habitat/ Riparian Areas – **28.38%**
- Areas lower than 600m elevation – **31.79%**
- **Total Protected Environmental Areas within Project Site – 54.18%**

Based on the map produced and the results calculated above, there should be sufficient snowfall area for the operation of the ski resort. However, due to rapid climate change and global warming, the 600m elevation snow line may change in the near future. Other two major concerns of the ski resort impact are on the potential environmental degradation of Endangered Ecosystem and the Fishery Habitat. According to the results, 24.38% might not seem like a large number, but nearly all the endangered ecosystem are concentrated within the lower than 600m elevation area. Since the ski resort itself will mostly like be built in the lower land region, the building process of all the facilities, hotels, and basic infrastructures would be hard to completely without disturbing any protected areas. Same applies to the 28.38% coverage of fishery habitat created by the abundant stream tributaries in the local region.

The total protected environmental area within the project site is around 54.18% excluding overlapped areas of layers. Although there is a remaining of 45.82% of possible open space for the project development, it is crucial to keep in mind that most of the 54.18% of the protected area is scattered and concentrated in the 31.79% of lower than 600m elevation area. It would be extremely hard to avoid affecting the protected areas when building the resort and ski site, because it would require many extra infrastructures such as temporary roads and bridges for heavy equipment to move in. It is still possible to build the resort within that limited space; however it would require lots of extra environmental impact assessment and more detailed planning and design on how the resort is going to be built. The scale of the actual resort might have to be downgraded or fragmented into different sections so it would not require a large connected piece of land.

In British Columbia we are proud of our natural landscape and resources, but the environment is changing faster than what we can anticipate, hence it is more vulnerable than it seems. As BCSF, we would strongly recommend to pause the project planning and once again re-evaluate the proposal and bring in all the different stakeholders including the city government, the general public, the local indigenous groups and other environmental organizations in the province to conduct further research and discussion over the discourse.