

Global warming: ski resorts heading uphill

What does global warming mean for the ski industry? If a warming trend in our climate is more likely than a cooling trend, then skiing and ski resort developments need to be at higher elevations. This was one of the conclusions reached at the World Conference on Sport and the Environment sponsored by the United Nations Environmental Programme (UNEP) held in Turin, Italy, in December 2003.

Governments and industry are beginning to consider the effects of a warming trend, and are making expensive plans to deal with it, but little is understood in terms of the changes that it will produce to the tourism industry.

Many mountain resorts already struggle with snow conditions and have to rely on costly and water-intensive snowmaking to guarantee a winter season. This is not an ideal condition and it will be exacerbated by a warming trend, and other climate challenges, including energy and water conservation concerns.

According to a study presented by Dr. Rolf Bürki and colleagues of the University of Zurich, snow sports in the future will be concentrated in high-altitude areas that are snow-reliable, “the only areas with good prospects will be those with transport facilities that provide access to altitudes higher than 2,000 metres. The regions at higher altitudes may experience greater demand, prompting a further expansion in quantitative terms.”

It is inevitable that most mountain resorts, particularly those situated at lower elevations, will be changing priorities and will begin to consider the summer as an increasingly important season. The summer season may begin to compete with winter and ultimately replace it as the prime tourist season. To an extent this is already happening even in places such as Whistler Blackcomb.

Dr. Bürki, whose study was carried out in collaboration with Hans Elsasser, Professor of Economic Geography at the University of Zurich, and Dr. Bruno Abegg, a travel journalist,

notes that climate change is a driving reason for opening up high mountain regions to tourism, “The call for ski resorts with snow-reliability is the main argument for the current boom in concept studies.” The study notes, “In Switzerland more than 100 projects exist to extend ski sport infrastructure, a lot of them sponsored by subsidies. In the Alps as a whole, there are at least 300 projects, including, for example, new lifts, snow machines (including water reservoirs) and flattened slopes.”

Klaus Toepfer, UNEP’s Executive Director, said: “Winter sports and tourism are big business in many of the world’s mountain areas. They offer important sources of revenue and employment for sometimes remote communities as well as healthy, pleasurable recreation for millions. In many communities, downhill and cross-country skiing, tobogganing, snow boarding and other inter sports are also important cultural and family activities.”

In British Columbia, skiing is an important industry that generates significant revenue for Provincial coffers. If we wish to see a continuation of the sport and of the ski and snowboard industry, we will have to ask governments to start thinking about allowing skiing and resorts to be built where the snow is and will continue to be, that is, at higher elevations and in locations with an appropriate climate.

As is the case elsewhere, most of the high elevation mountain peaks in B.C. are located in remote areas, or what is known as the “backcountry”. The pattern of settlement in B.C. has favoured low-lying areas and consequently, for reasons of convenience, most of the existing ski resorts B.C. are located at low elevations and in inconsistent snow zones. There are no lifts providing access to one of the hundreds of 3,000 metre high mountain peaks in B.C. Whistler Blackcomb, for example, only reaches 2,200 metres in elevation.

Many of those high alpine peaks, however, are accessible to heli-skiers. Some have

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suggested that the status quo should be maintained, but to propose the helicopter as the only means of access to future ski areas is expensive and socially questionable.

Good planning would require land use policies that would encourage future ski resorts to be located where there is an abundance of natural snow in the foreseeable future, even with the advent of climate change. Thanks to its favourable geography, B.C. is a province that has the potential of becoming a centre for future ski holidays.

A policy that would advocate the building of new ski resorts at higher elevations could also prove to be helpful to existing heli-ski and backcountry operators by attracting new visitors and tourists to the mountains.

In B.C., only one resort has been planned to offer high alpine skiing, Jumbo Glacier Resort in the East Kootenay, which will reach an elevation of over 3,000 metres. This kind of project is promising to lead the way for sustainable ski resorts of the future on the continent.

Conservationists have raised the issue that new ski resorts should not intrude into the backcountry and should only be planned near

existing developments in the main valleys, and this seems to be a simple and logical solution to the land use issues.

But it is not necessarily true that limiting development to where it already is will help conservation objectives. Good planning should have the objective of containing development sprawl in the main valleys and proposing contained developments, so that the integrity and connectivity of the ecosystems be preserved or even expanded.

This would also work better for future ski resorts, which may be located in reliable snow zones, at appropriate elevations, and yet be designed to be environmentally sustainable. It makes little sense to limit the expansion of the downhill skiing product to the wrong locations.

It is important for those involved in the ski industry and policy development to be forward thinking. Dr. Bürki adds, “the extent to which countries, regions and communities can adapt will depend on how the costs and technology of snow making equipment develops, and the location of existing resorts.”

- *Grant Costello*