BASICS OF SNOWMAKING-DECISION AND SELECTION

Jeffrey A. White, Group Delta, 714 *York Street, London, Ontario N5W 2S8*

The high cost of today's snowmaking systems, the high cost of money and, very often, inordinately high operating costs means a ski area can no longer afford to make the decision to go with snowmaking without sufficient input to generate all ramifications for the ski area-financial, technical, and environmental. Technical considerations must, therefore be interlocked with financial feedback.

The approach is to take the operation without snowmaking and generate financial terms, expressed as skier visits or revenues, using break-even analysis. This involves reliable input on the length of season and snow depths, developed by meteorological analysis, revenue per skier visit and the utilization of the ski area.

Technically, a snowmaking system can be systematically and efficiently designed when the engineer has carried out an indepth analysis of the meteorology (to establish natural snowpack, temperatures and number of available snowmaking hours), logistics (water and power supply, slope conditions, etc.) and is given management input concerning opening date, required trail coverage and desired depth of pack. Detailed costs, capital and operating, based on the designed system are then used to establish the changes that occur to the ski area's break-even model when snowmaking is introduced.

Snowmaking, while increasing the length of season and the possible number of skier visits, has a capital investment, operating and depreciation expense that will significantly change the break-even model. The economic feasibility of a snowmaking system then rests on establishing whether the required additional utilization expressed as skier visits, can be achieved at the area. This justification can be obtained through increased unit prices, an increase in skier visits (due to the longer ski season, improved skier experience, etc.) and possible increased density of skiers (per acre of trail).

The decision to proceed with a snowmaking system must be based on sound economic analysis showing that the increase in revenue will be greater than the total financial burden of the system.