

Long-Range Plan & Feasibility Study Ragged Mountain Recreation Area – Camden Snow Bowl Camden, Maine



# LONG-RANGE PLAN & FEASIBILITY STUDY FOR RAGGED MOUNTAIN RECREATION AREA – CAMDEN SNOW BOWL

**CAMDEN, MAINE** 

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By

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#### I. EXECUTIVE SUMMARY

# **Introduction**

The Town of Camden Parks and Recreation Department engaged Horizons Engineering, PLLC to undertake a Long-range Market and Economic Feasibility Study related to the Ragged Mountain Recreation Area (RMRA) and Camden Snow Bowl. Horizons assembled a team of professionals in the field of mountain tourism, recreation, and ski area planning to undertake this task. In addition to Horizons Engineering, the team is comprised of The Glen Group to undertake the market and programming aspects of the study and Michael Somma, CPA to undertake the financial modeling and feasibility aspects of the study.

# **Market Observations**

The primary market area for the Snow Bowl – Camden, Rockport and surrounding areas—is in a good position to support the continued operation of the Snow Bowl. Recent trends in population growth, job growth, and earnings are favorable for growth in visitation.

The continued support of the local community for summer and winter recreation is essential to the future of the Snow Bowl.

General marketing observations:

- There is a lack of local and regional awareness
- Lack of signage to direct visitors
- Lack of in-market promotional materials
- Not enough "partnerships" with local enterprises
- Shortage of internal resources- both monetary and human
- Need of summer promotional program/lodge rental
- Absence of children's nursery program in winter
- Absence of a bar limits the ability to attract certain events

#### **Existing Conditions**

- Terrain
  - o There are approximately 18 to 20 acres of skiable terrain; after upgrading this will be increased to 22 or more acres.
  - o The Snow Bowl has an excellent vertical drop (850') for a local ski area.
  - o Many of the existing trails are too narrow, particularly those on the north side.
  - There is a shortage of lift-accessed beginner and novice terrain. This is a significant issue given that a lot of the business at local ski areas is typically beginner and novice skiers and riders.
- Lifts
  - o Both of the existing T-bars are not user-friendly lifts, especially for snowboarders, who comprise over one-third of Snow Bowl visitors
  - o Having to make snow on the T-bar line in order to be able to use it is a waste of limited snowmaking resources
  - o The Double Chairlift does not go to the top of the mountain
  - o The lift layout does not provide good access to beginner and novice terrain
  - o The tubing hill should have a handle tow lift

- Snowmaking System
  - The weakest aspect of the existing snowmaking system is the reliance on airwater technology and the limited amount of compressed air capacity
  - o Water pumping capacity is marginally sufficient
  - o The system does not perform well in marginal temperatures, making early season opening difficult
  - Over the past 15 years there have been an average of 400 hours of snowmaking annually, using about 6 million gallons of water; this is an average of 250 gallons per minute (a very low figure)
- Base Lodge
  - o The lodge and pre-fab buildings combined have about 6,000 square feet of usable space. The lodge can seat about 100 people, but it should be able to seat around 200 to be in balance with current carrying capacity of the ski area.
  - o There are some issues with the current building, i.e. heating, electrical, septic disposal, and acoustics
  - o The lodge is underutilized in the summer
- Ski Area Carrying Capacity
  - o On the basis of terrain, the ski area has an approximate carrying capacity of 600 skiers/riders at one time
  - o Seasonal capacity is about 42,000 visits (70 days open X 600/day).
  - O At an average of 24,263 visitors per season, the ski area seasonal utilization is 58% (24,263  $\div$  42,000 X 100 = 58%). By industry norms, this is a fairly high utilization rate, undoubtedly this is a function of the fact that the Snow Bowl is not open seven days per week and the operating season is short.

#### **Historical Performance of the Snow Bowl**

• Estimates of the past 6 years skier visits are:

2000/01	35,000
2001/02	30,000
2002/03	32,000
2003/04	28,800
2004/05	26,277
2005/06	17,711

- This shows a declining trend, the average of the most recent three years is 24, 263 skier visits
- Financial results; 3 year average of the three primary revenue areas are:

O Ticket revenue per skier visit \$10.07 (includes season passes)

Ski school revenue per skier visit
 Rental shop revenue/skier visit
 Total revenue per skier visit
 \$13.40

- Using the 3 year average revenue for the Snow Bowl operation and last year's actual operating expenses, the Snow Bowl may be expected to roughly break even in an average year
- The tubing operation is a profitable component of the Snow Bowl operation

# **The Long Range Plan**

- The Long Range Plan focuses on the Snow Bowl winter operation due to its significant revenue expense aspects, its capital requirements, and the fact that the summer use of the facility is comprised of non-revenue generating Parks and Recreation/public activities and that summer business is comprised largely of stand-alone events
- Priorities/phases for upgrading the Snow Bowl operation are:
  - 1. Improve the marketing of the winter and summer venue
  - 2. Upgrade the snowmaking system
  - 3. Upgrade the tubing hill
  - 4. Expand the base lodge
  - 5. Replace the long T-bar with a chairlift and move the existing double chair to a location where it will better serve beginner and novice terrain
- Each of these priorities is considered as a phase of development, they do not need to proceed in this order, although we believe that this is the most logical approach
- Revenue Expense projections for the 5 phases are outlined below:
  - All projections are in constant 2006 dollars
  - No consideration has been given to debt repayment as it is our opinion that the Snow Bowl operation cannot sustain the debt load associated with the repayment of capital used for improvements. Operating profits from year to year, however, may be used for maintenance and normal upkeep of equipment
  - Phase 1 The primary focus is to upgrade marketing and awareness:
    - A Marketing Director has been hired
    - Skier visits are projected to increase 10% to 26,689
    - Tubing visits are projected to increase 10%
    - Projected net operating profit of \$18,000
  - Phase 2 The focus is on snowmaking system upgrades:
    - There are several technology options for upgrading
    - Earlier season opening and more efficient snow production per hour and per dollar are the goals
    - Both skier visits and tubing visits increase 10%
    - Operating costs increase due to additional labor and power for upgraded snowmaking system
    - Projected net operating profit of \$30,000
  - Phase 3 The focus is to upgrade the tubing hill
    - Add a new lift and another tubing lane
    - Tubing visits increase
    - Skier visits increase 5%
    - Operating costs increase due to additional labor and power for the expanded tubing hill operation
    - Projected net operating profit of \$44,000

- Phase 4 The focus is on lodge expansion:
  - Lodge rental revenues increase by 100%
  - Skier visits increase 32,000 (same level as 2003)
  - Kitchen lease revenue increases
  - Base lodge operating costs increase
  - Projected net operating profit of \$65,000
- Phase 5 The focus is on lift upgrades
  - Replace long T-bar with reconditioned chairlift
  - Relocate existing double chair
  - Snowmaking must be taken to the top of the hill
  - Trails on north side should be widened and at least one should have snowmaking on it
  - Skier visits increase to 35,000 (same as 2001, and perhaps the upper limit of the market area potential)
  - Operating costs for labor and power increase for lifts and for snowmaking
  - Projected net operating profit of \$62,500

# **Capital Cost Projections**

Phase – Item	Estimated Cost
Phase 1 No Phase 1 capital costs included in this model	0
Phase 2 Upgraded snowmaking system components Additional on-hill piping and wiring for fans Total Phase 2 costs	\$250,000 75,000 <b>\$325,000</b>
Phase 3 Reconditioned handle tow for tubing park site work for new tubing lane, include erosion control Total Phase 3 costs	\$25,000 25,000 <b>\$50,000</b>
Phase 4 Expand base lodge, add 2,800 SF @ \$175/SF Total Phase 4 costs	\$490,000 <b>\$490,000</b>
Phase 5 Replace long T-bar with re-conditioned chair Relocate existing double chairlift Expand snowmaking to top of hill and to trails on north Total Phase 5 costs	\$600,000 250,000 150,000 <b>\$1,000,000</b>

# **Observations, Conclusions and Recommendations**

As noted in the report, over the past fifteen to twenty-five years a number of small ski areas across the country have ceased to operate, many of them were community ski areas. In the opinion of the study team, the Camden Snow Bowl does not fall into this category; in our opinion the Camden Snow Bowl is a survivor. The following reasons are given to support this opinion:

- The high level of community support for the continuation of the winter operation is a huge attribute
- Demographic trends in the region are positive
- The facility itself is bigger and better than most small, community ski areas
- The Snow Bowl has in fact achieved visitation levels in several of the past six years that would support the assumptions in this report.

Nevertheless, the challenges facing the Snow Bowl are significant. One of the most difficult aspects of modern ski area operations is the weather. There are, of course, no guarantees that the weather will be favorable for the foreseeable future, but positive assumptions and commitments must be made to the recommendations outlined in this feasibility study for the Snow Bowl to have a good chance to survive.

The improvement program outlined in this report represents a conservative approach to capital expenditures that is intended to make the Snow Bowl better but not necessarily bigger. It is essential for the Snow Bowl to begin the upgrading program soon. The impact of delaying the program is that costs for maintenance will increase as equipment ages and revenues will decrease as the aging facility becomes less attractive in the market place.

The study team has weighed the risks associated with the weather, the consequences of delaying improvements, and the capital costs of the upgrading program against the opportunities and potential for the Snow Bowl to succeed. We believe that the recommendations contained herein will provide the best chance for the Snow Bowl to serve the next generation of residents and visitors.

The challenge now is for stakeholders and interested parties to determine the sources for the funding that is needed to implement the recommendations. Horizons Engineering, The Glen Group and Michael Somma are available to clarify any items in the report, answer questions, provide assistance, and otherwise help the Town and the community to achieve this plan.

### II. INTRODUCTION

The Town of Camden Parks and Recreation Department has engaged Horizons Engineering, PLLC to undertake a Long-range Market and Economic Feasibility Study related to the Ragged Mountain Recreation Area (RMRA) and Camden Snow Bowl. Horizons assembled a team of professionals in the field of mountain tourism, recreation, and ski area planning to undertake this task. In addition to Horizons Engineering, the team is comprised of The Glen Group to undertake the market and programming aspects of the study and Michael Somma, CPA to undertake the financial modeling and feasibility aspects of the study.

The study process involved numerous telephone and in-person interviews with a wide range of stakeholders, community leaders, and concerned citizens. A key stage in the study was a visit to the Camden area by representatives of Horizons Engineering and the Glen Group in early September. Through a number of interviews with individuals and stakeholder groups and a well attended public meeting, the consulting team gathered a significant amount of information regarding the strengths, weaknesses and opportunities surrounding the historical and future operation of the RMRA and the Snow Bowl.

As a result of the input received throughout the community it became apparent that although there are some detractors, for the most part individuals, groups and businesses believe that the facility provides a benefit to the area and that it is currently underutilized, especially in the summer and non-skiing months.

# A. The Purpose and Goal of the Long-Range Plan

The overall purpose of this Long Range Plan is to define growth opportunities and operating efficiencies for the year round operation of the Ragged Mountain Recreation Area and Camden Snow Bowl. The Long Range Plan will identify a framework for the implementation of a phased program to upgrade and enhance the physical facilities, onsite programs and activities, and the marketing of the area. The Long Range Plan will also assess the market and economic feasibility of the suggested upgrading program. The assumptions and conclusions derived from the feasibility assessment may be used in future years by management and public officials to evaluate the effectiveness of the improvements and to make adjustments to the improvement program as appropriate.

The goal of the Long Range Plan is to create a mission and a plan for the year-round use and enjoyment of the Ragged Mountain Recreation Area and the Snow Bowl.

In the opinion of the study team, the mission and plan may be summarized in the following statements:

Through a combination of improving public awareness of the area, delivering high quality, reliable snow conditions in winter, providing a pleasant leisure and recreation experience in the summer, and holding well organized activities and events, the ability to attract visitors to the area will grow.

Snow Bowl facilities should be upgraded with the goal to improve the basic components of the ski area, increase opportunities for year round use, and improve operating efficiencies. Sensitivity to the surrounding environment is an essential ingredient in preserving the value and the attraction of the area.

# **B.** Organization and Stakeholders

The Ragged Mountain Recreation Area and Snow Bowl are municipal facilities owned and operated by the Town of Camden, Maine. The operation of the facilities and programs is the responsibility of the Camden Parks and Recreation Department; the department has a full time director who also acts as the general manager of the Snow Bowl.

From its inception the facility has traditionally had a loyal following of committed volunteers and benefactors. In many years it was their support which made the difference to the continued existence of the Snow Bowl. It was made clear to the consulting team that there is still significant community support for the on-going operation of the facility.

There are a number of local stakeholder groups, businesses and individuals who have a strong interest in seeing the Recreation Area and the Snow Bowl continue to operate, including the Ragged Mountain Ski and Snowboard Club, the Ragged Mountain Recreation Area Foundation, the Coastal Mountains Land Trust, the local Chamber of Commerce, and numerous local business owners.

#### III. EXISTING CONDITIONS

#### A. The Market Area for the Snow Bowl

The primary market area for the Snow Bowl is the Camden – Rockport area. Most of the regular, loyal visitors to the ski area live in these two towns. The Snow Bowl also generates visits from residents of other towns in Lincoln, Knox, and Waldo Counties.

The immediate population in the Camden/Rockport area is in good financial shape. The Mid-Coast Maine region in general is in better shape than much of the State of Maine and has been enjoying a trend of economic growth both in terms of job creation and earnings.

A recent study released by the Brookings Institute points to the Mid-Coast Region of Maine as one of the areas that is outperforming the State and Nation in job creation. Add to this the growing population in the region, and it becomes apparent that the Snow Bowl has the potential to see measured growth in visitation with a proper marketing initiative and improvement plan. It is the opinion of the consultant team that the demographic and economic conditions in the market area will support moderate growth at the Snow Bowl.

With this influx of new residents to the region it is reasonable to expect that many regional residents are not aware of the Camden Snow Bowl and its offerings. Despite the close proximity to Route 1, the Snow Bowl has zero visibility along this major travel corridor. The absence of a focused marketing effort has resulted in a rather low awareness level throughout the region of the attributes of the Ragged Mountain Recreation Area and the Snow Bowl.

While many small community ski areas across the country have failed in the past fifteen to twenty-five years the Camden Snow Bowl has strong public support and is in a location close enough to its customer base that it should be able to find ways to prosper. The public's affinity for the Camden Snow Bowl, coupled with the State of Maine's renewed effort to maintain those assets that impact quality of life, should ensure that the Camden Snow Bowl has resources to tap into during times of capital need.

# **B.** General Marketing Observations

The Camden area and Mid-Coast Maine as a whole are primarily summer tourism focused. To break through the clutter and reach the vacationer, businesses have to commit a fair amount of resources to marketing initiatives or own prime locations to ensure that they capture the attention of drive by traffic. There is no shortage of publications, guides, media outlets, brochure racks or maps available to spend money on from an advertising point of view.

Wintertime marketing will be easier to get through the "noise", however there will also be a much smaller audience to go after. With that said the competitive set in the wintertime is also reduced, giving the Snow Bowl an advantage in terms of draw.

A list of current marketing observations and challenges include:

- Lack of local awareness beyond the loyal Snow Bowl followers
- Lack of regional awareness of the ski area and non-skiing recreational options
- Lack of signage to direct visitors
- Lack of in-market promotional materials
- Shortage of internal resources- both monetary and human
- How to use the view from the top in the marketing when the top of the mountain is so dependant on natural snow
- Need of improved brochure
- Need of summer brochure/lodge rental
- Absence of children's nursery program in winter (this is significant!)
- Absence of a bar limits the ability to attract certain events

### C. The Physical Facility

The Ragged Mountain Recreation Area consists of 290 acres of land that encompass the Snow Bowl, Hosmer Pond, tennis courts, playing fields, and open land.

1. Terrain – The ski terrain at the Snow Bowl has a vertical drop of about 850 feet with eleven ski trails and slopes facing to the northeast. With the exception of a few relatively steep but short drop-offs, the terrain is generally fairly gentle with slopes on the upper sections of the mountain ranging from 20% to 35% (short sections of up to 45%). The lower section of the mountain has open slopes ranging from 28% to 10% in the area of the handle tow.

The trails on the north side of the ski area are generally quite narrow. This is a result of the trail edges growing in over the years as well as the fact that they reflect an older style of narrow winding trail that has not been updated. Trail widths were measured during field observations; the upper sections of the trails on the north side vary in width from 38' to 55'. A more appropriate average width for these trails should be in the order of 70' to 80'.

We do not have accurate topographic mapping of the existing conditions at the ski area; however by using several different maps we have estimated the skiable acreage to be approximately 18 to 20 acres. This figure would likely increase to 22 or more acres following a program of trail widening.

Although the addition of the Handle Tow in recent years has helped to provide a place for ski school, first time skiers and riders and young children, there is a distinct shortage of lift-serviced beginner and novice terrain on the mountain.

The Snow Bowl also has a tubing hill with two tubing lanes. The tubing hill operates without a lift, i.e. customers must walk up the hill to access the top of the lanes. Also, the tubing hill is typically the last place at the ski area where snow is made, making it difficult to open the tubing hill early in the season.

2. Ski Lifts – The ski area currently has four lifts; the Little T-bar which serves the terrain park and race training area on the lower portion of the hill; the Double Chair which serves the middle portion of the hill from the base to about the 900' elevation, with a vertical drop of about 650'; the Beginner Handle Tow which serves the beginner slope at the base of the hill; and the Big T-Bar which serves the trails on the north side from the top of the hill at just over 1,000' of elevation for a vertical drop of over 750'.

The concerns with the existing lift system are summarized as follows:

- The chair lift does not go to the top of the hill. Also, at present the snowmaking system does not cover the terrain above the top of the chair.
- At over 4,100' long the Big T-Bar is not a user-friendly ride uphill. Additionally, the fact that the T-bar line must have snow on it to be used is a problem when time and money for snowmaking is much better served by making snow on the slopes and trails.

- Neither of the T-bars at the Snow Bowl are user-friendly lifts for snowboarders, which comprise more than one-third of Snow Bowl visitors.
- The lift layout does not provide access to adequate beginner or novice terrain to serve those skiers and riders who are ready to progress beyond the Handle Tow.
- 3. Snowmaking System The snowmaking system at the Snow Bowl is for the most part a traditional air-water system consisting of a new high pressure variable speed drive water pump, two older screw-type air compressors, a variety of airwater snow guns, and one airless fan machine. A number of new air and water pipes have recently been installed by a snowmaking system contractor on various sections of the mountain; pipe diameters on the new pipes have been sized with future expansion in mind. The piping network does not extend to the top of the mountain.

The new water pump is capable of providing up to 850 GPM (gallons per minute) on the lower sections of the mountain and 550 to 600 GPM on the upper sections. This is a reasonably good water pumping capacity. The mechanical system has been designed to accommodate another pump, although if another pump were added the pump house building would need to be enlarged.

The two air compressors are rated at 1,200 CFM (cubic feet per minute) each. They are quite old and probably not operating at their original design capacity. The Snow Bowl's reliance on traditional air-water snowmaking technology and in particular these old compressors is the weakest aspect of the snowmaking system and operation.

On average over the past 15 years there have been about 400 hours of annual snowmaking at the Snow Bowl at an average of 8.6 hours per day, with an average annual volume of 6 million gallons of water used. This translates to an average of 250 gallons per minute, a very low figure.

In general, the existing snowmaking system is not capable of producing a desirable amount of snow in an efficient and economic manner given today's climate and market demand for early season skiing and riding (especially given the Snow Bowl's location on the coast). The "windows" of snowmaking opportunity have become shorter and temperatures tend to be more marginal than in previous years.

Modern snowmaking systems must be designed and operated in a manner that will convert as much water to snow as possible in the shortest period of time. Twenty-eight degrees Fahrenheit is generally the threshold whereby snowmaking machines of any type will not produce snow that will actually stay on the ground as snow. In recent years there have been significant advances in snowmaking technology using fan machines and low energy towers. Most of the types of snowmaking technology and equipment that is available today can, in fact, produce snow at twenty-eight degrees, but modern fans and towers will produce the most snow for the least amount of energy consumption.

The capital costs for different types of systems are similar; therefore the overall goal is to install a system that is going to produce the maximum amount of snow for a given consumption of energy. At the same time, the snowmaking system should have the flexibility to maximize output by using different technologies on different sections of the mountain and in different weather conditions.

**4. Base Lodge and Related Facilities**— The existing base lodge is an A-frame structure with a footprint of approximately 2,400 square feet. Both floors have usable space; therefore the total square footage available in the lodge is about 4,800 square feet. Services in the building include seating, food service, restrooms, ski patrol, ticket sales, and a ski school desk. The Camden Parks and Recreation Department has offices on a mezzanine level above the main level. There are roughly 100 seats on the upper level of the lodge, and when the weather is good, there are another 50 seats on the outside deck.

The lodge was originally designed to have a second level for seating as well as two wings on the sides for additional seating and services. Although the existing building has some deficiencies in size and function (including the heating and electrical systems), it is in good condition and it has an attractive architectural style that reflects the historic nature of the Snow Bowl.

There is a double-wide style modular building at the base of the mountain that houses the ski rental and retail shops. The Ski and Snowboard Club has a small building that is used as a racer's warming hut and for storing race equipment. In regards to the ski area operation, the buildings are well situated for access from the parking lot and to access the base terminals of the lifts.

There have been discussions regarding opportunities to increase summer lodge rentals. The open, rural setting at the Snow Bowl would be excellent for a wide range of activities and events, especially weddings/receptions/parties, outdoor concerts, shows that can be held indoors and under tents, and almost any outdoor event.

5. Ski Area Carrying Capacity - There are approximately 20 acres of skiable terrain at the Snow Bowl. The ski industry applies a general rule of thumb to determine the ski area carrying capacity (often referred to as the comfortable carrying capacity or CCC) based on the carrying capacity of the terrain. The industry assumptions of the carrying capacity of the terrain recognize that not everyone is on the trails at any given time; some people are on the lifts, in the lift line, in the lodge, or just milling around the base of the ski area. The carrying capacity of the terrain is higher for easy trails than for the more difficult trails.

As a very general approach to estimating the existing ski area carrying capacity at the Snow Bowl we have used the figure of 30 skiers/riders per acre of terrain. This is a relatively low figure due to the fact that a number of the trails are quite narrow. If the trails were made wider this figure would be in the order of 40 skiers/riders per acre. Given the 20 acres of terrain, the current ski area carrying capacity is roughly 600 skiers/riders at one time (20 acres X 30 skiers per acre). This figure includes people who are on the trails, on the lifts, in the lift line, in the lodge, and milling around. Using the figure of 40 skiers/riders per acre and increased acreage to 22 acres, the ski area carrying capacity would be in the order of 880 skiers/riders at one time.

The ski area carrying capacity figure is used in a number ways. It is a measure of how many visitors the ski area could typically expect to handle comfortably and safely on a busy day. Theoretically, if on a very busy day substantially more people arrive at the ski area, they will see long lift lines and crowds in various locations, and they may decide not to visit the area at that time.

When using the terrain to determine the ski area carrying capacity, planners will determine the uphill capacity of the lifts in order to be in balance with the downhill capacity of the terrain. Also, the ski area carrying capacity is used to determine the appropriate size of the base lodge, the parking lot, the water and sewer requirements, etc. so that all elements of the facility are in balance.

From an economic viewpoint, the ski area carrying capacity figure is used to determine the business potential of the entity. One of the standards of measuring how well a ski area may be performing is utilization. Ski area utilization is the actual annual skier visits divided by the theoretical annual capacity. If the Snow Bowl were open 70 days per year with a ski area capacity of 600 skiers/riders at one time, the annual capacity would be 42,000 visits. At an average actual annual visitation of 24,263 skier visits, the utilization of the Snow Bowl is 58% (24,263  $\div$  42,000 X 100 = 58%). By industry norms, this utilization figure is fairly high. This is a reflection of the fact that the Snow Bowl is not open every day and that it is a fairly short season, resulting in a higher percentage of days being weekends or holidays when daily visits will be greater.

#### D. Historical Performance of the Snow Bowl

#### 1. Annual Skier Visits

Estimates of the past six year's annual skier visits as supplied by Snow Bowl management and the Ski Maine Association are as follows:

2000/01	35,000
2001/02	30,000
2002/03	32,000
2003/04	28,800
2004/05	26,277
2005/06	17,711

In an effort to create a baseline of historical performance at the Snow Bowl, we have taken several approaches to establishing a typical year's skier visits. Given the declining trend in the past three years at the Snow Bowl we have chosen to use the average of the past three years as the baseline skier visit figure. The average of the most recent three years is 24,263 skier visits.

The ski area typically operates 65 to 70 days per season. In most, but not all, years the area is at least partially open by the Christmas holiday period. This is a significant element in the feasibility of the operation as the Christmas Holiday is a benchmark for achieving visitation as well as the perception in the market place that snow conditions are reliable and the ski area is in fact prepared to be open for business.

#### 2. Financial Results

Horizons Engineering has been provided financial information in summary form covering the past several years and in detail for the 2005/2006 season. In an effort to establish a baseline to evaluate recent financial performance and to use as the basis for projecting future performance, we have used the average of the past three year's revenue and the actual expenses for the past year.

At the top of the Revenue Comparison spreadsheets on the next page, the three year averages are shown for the key revenue areas that will be impacted by changes to the winter operation; these figures are shown as revenue per skier visit. The key areas are ticket revenue (which includes season passes), ski school, rentals, and total revenue per skier visit.

# Revenue Comparison 2001 - 2006 Three Year Averages

	2001	2002	2003	2004	2005	2006	3-Year Average
Annual Skier Visits	35,000	30,000	32,000	28,800	26,277	17,711	24,263
Ticket Revenue per Skier							
Visit							\$10.07
Ski School Revenue							\$1.52
Rental Shop							\$1.81
Total Revenue per Skier Visit							\$13.40
Lodge Rental	6,935	5,416	7,166	10,880	8,095	9,510	\$9,495
Daily Tickets	190,814	48,071	136,087	89,313	153,309	65,554	\$108,296
Season Passes	105,617	147,667	142,254	134,575	126,188	143,421	\$134,728
Ski School	41,728	24,968	35,845	29,606	34,755	39,251	\$36,880
Racing Programs	7,011	6,153	7,780	9,285	9,051	11,835	\$10,057
Gift Cards	-	-	-		-	3,413	\$1,138
Summer Chairlift Rental	2,154	400	-	806	3,068	1,010	\$1,628
Kitchen Lease	6,149	1,783	4,000	4,500	5,000	4,500	\$4,667
Tubing Hill	16,100	6,473	17,306	12,596	15,005	6,645	\$11,415
Toboggan Chute	*	*	*	*	4,520	3,293	\$3,907
Rental Shop	73,455	35,581	60,328	43,548	59,630	29,281	\$43,916
Merchandise	42	-	54	6,553	6,057	200	\$4,270
Soda Machine	2,788	1,978	1,778	1,491	1,717	-	\$1,069
Misc	1,422	5,866	246	510	1,573	6,900	\$2,994
Tobogganfest	43,753	32,655	46,406	26,786	29,711	42,873	\$33,123
Scholarships	1,839	3,409	-	1,211	1,000	2,990	\$1,734
Town Match	25,000	25,000	25,000	25,000	25,000	25,000	\$25,000
Advertising	-	-	-	-	450	1,000	\$483
Total	524,807	345,420	484,250	396,660	512,411	416,393	\$434,800

<sup>\*</sup> Tubing and Toboggan combined these years

# Notes to Revenue Comparison and 3-Year Average

- The shaded sections of the chart represent years and revenue categories that were used to determine the three year averages.
- The ticket revenue per skier visit includes ticket sales and season pass sales.
- Tubing revenue is for the past two years only because prior to that the toboggan chute revenues were combined with tubing. Tubing revenue per visit is assumed to be \$5.00; resulting in 3001 tubing visits in year ending 2005, 1329 visits in year ending 2006, and an average of 2283 visits for the two years.
- Toboggan chute revenue was combined with tubing revenue for years prior to 2005.

# Revenue and Expense Model - Existing Conditions

Revenue		
Lodge Rental	9,495	
Daily Tickets	108,296	
Season Passes	134,728	
Ski School	36,880	
Racing Programs	10,057	
Gift Cards	1,138	
Summer Chairlift Rental	1,628	
Kitchen Lease	4,667	
Tubing Hill	11,415	
Toboggan Chute	2,604	
Rental Shop	43,916	
Merchandise	4,270	
Soda Machine	1,069	
Misc	2,994	
Tobogganfest	33,123	
Scholarships	1,734	
Town Match	25,000	
Advertising	483	
Total Revenue		434,800
Expense		
Administration	116,077	
Lodge	18,282	
Maintenance Shop	4,177	
Alpine	271,817	
Rental Shop	20,802	
Toboggan Chute	12,860	
Tube Slide	2,063	
Total Expense		436,078
Net Profit (Loss)		(1,278)

# Notes to Revenue and Expense Model – Existing Conditions

- The model uses the 3-year averages for revenue.
- The model uses the past year, 2005/2006 expenses, summarized by major category.
- The revenue categories Merchandise and Tobogganfest should be combined. For the purposes of using the existing breakdown for modeling purposes we have left them separate in the model above. They have been combined in the revenue-expense projections model below.
- This model does not include the electricity revenues or costs related to the arrangement with Coastal Communications, Inc. (approximately \$35,000 in year ending 6-30-06).
- Tube Slide expenses do not include the costs associated with making snow and grooming the tubing hill.

# **Observations Regarding Financial Performance – Existing Conditions**

- In general, the six year skier visit history appears to be trending downward.
- The ticket revenue per skier visit, \$10.07, is rather low when compared to the rack rate ticket prices, probably reflecting the fact that many annual skier visits are generated by season pass holders.
- The total revenue per skier visit, \$13.40, is also quite low by industry standards when compared to the rack rate ticket prices.
- Summer chairlift rental is low. Given the proximity to the high summer tourist traffic in Camden, this would appear to be an area for improvement.
- The tubing facility is very profitable which leads to the observation that this aspect of the operation should be upgraded.
- Considering the information shown in the model above, the Snow Bowl may be expected to roughly breakeven in an average year.

#### IV. THE LONG RANGE PLAN

#### A. The Mission and the Plan

Through a combination of improving public awareness of the area, delivering good, reliable snow conditions in winter, providing a pleasant rural experience in the summer, and holding well organized activities and events, the ability to attract visitors to the area year round will grow.

Facilities should be upgraded with the goal to improve the basic components of the ski area, to improve opportunities for year round use, and to improve operating efficiencies. Sensitivity to the surrounding environment is an essential ingredient in preserving the value and attraction of the area.

# B. Snow Bowl and Ragged Mountain Recreation Area Development Plan

The economic justification for the recommended upgrading plan for the Snow Bowl is discussed in the next section of this report. The following elements of the Long Range Development Plan are presented in order of our suggested priority. For the most part, the order of priorities is cumulative, in other words Priority 2 includes the elements of Priority 1, Priority 3 includes the elements of Priorities 1 and 2, etc. As noted in the Development Plan, Revenue – Expense Projections, the priorities have been put forward as phases of development, not years. The timing and order of phases may be adjusted and it will not alter the basic assumptions and conclusions related to the need for and benefits derived from implementing the various actions in each particular phase.

Although the majority of the discussion below addresses the development opportunities related to the winter operation, we want to emphasize that the summer and non-skiing aspects of the area are also very important. All stakeholders need to recognize that:

- a) Winter operations are distinct from summer operations given that the primary winter business is skiing and tubing, while summer operation consists of a vast range of almost unlimited opportunities for recreation, tourism, community activities, planned events, and family outings for locals and visitors.
- b) Most of the costs of the winter operation are fixed, not variable. In other words, it costs a certain amount of money simply to open the area each day whether or not one or one hundred people come to the area. Summer business, on the other hand, is geared more towards variable costs related to holding an event, renting the lodge, holding a concert, or specific activities where people have signed up in advance to participate. As such, in the ski business the goal is to achieve the breakeven point for winter operations as soon as possible in the season (hence the need for bona-fide early season opening), after that most of the revenue is profit. Summer business tends to focus more on the profit or loss of each event, and in theory the more events that are held, the greater the profit potential.
- c) The Snow Bowl ski operation should be self-supporting, while the summer operation has historically been considered a Town Parks and Recreation activity. In the summer access to the facility has been open to the public and fees for programs and activities have been free or highly subsidized. In other words, Parks and Recreation activities have not been expected to pay for themselves; this is particularly the case for the playing fields.

For these reasons, readers of this report will find that our recommendations are slanted towards ski related improvements. Our approach to summer business is to provide a guide as to how to better utilize the facilities that are in place while emphasizing the importance of summer marketing, awareness building, and creating partnerships with regional businesses, clubs, associations, Chambers of Commerce, organizations, tour groups, etc.

#### Priority 1 – Improve Marketing of the Winter and Summer Venue

The Ragged Mountain Recreation Area and Camden Snow Bowl have an opportunity to significantly increase visibility and market awareness through a number of low cost but high impact means. Paid advertising will play a role in this, but grassroots and cooperative efforts will have significant benefits in increasing year round use of the facility.

Of primary importance is the hiring of a staff person with marketing experience to promote the area on a year round basis. It is our understanding that a person has been hired for a part-time, seasonal position. We suggest considering that the position be eventually expanded to part-time year round. The person in this position will have direct responsibility to implement the following list of marketing initiatives.

- Strategic partnerships with area businesses
- Utilization of Chamber membership- work with them to tie into their wedding information packets and venue information requests
- Combined marketing efforts with the Camden Opera House
- Increase club and group bookings

- Improved ski and stay marketing with local lodging establishments (for example, sell blocks of tickets at discount to lodging partners, which they can then use to draw guests....two discount structures one, a 50% discount if they buy 100 tickets and own those tickets and there is no refund option; the second, a 30% discount and they can get credited back for the tickets they don't sell). This program may be ramped up in a phased approach with the hoteliers. This program may be applied to the tubing facility too.
- Utilization and development of an email marketing campaign, a weekly e-newsletter with updates on events, deals, conditions and news
- Targeted comp skiing initiative (give each of the people in that initial roundtable 5 free tickets to bring in folks who live in the area that don't ski at the Snow Bowl)
- Look at Chambers outside of Camden as inexpensive ways to get into other good markets
- Camden Snow Bowl stickers
- Improved summer trail signage
- Improved directional signage to the Snow Bowl
- 24-hour mountain bike race via partnership with local bike shop
- Spring and fall trail running series via partnership with local shop
- Improved photography assets via photo contest or donation by local photographer
- Local PR
- Regional PR
- Promotion of one or two inexpensive ski days- maybe a canned goods day (midweek) or a toy drive day
- Potential night racing league (the beer issue would need to be looked at)
- Improved Camden Snow Bowl logo wear
- Nature hike with a self guided component
- Summer events- do a couple of larger concerts (need to work with the neighbors along the pond and the road to get their buy in)
- Chairlift rides during summer and fall foliage
- Offer boxed lunches (outside vendor) for people to take for a hike to the summit and picnic via the self guided nature trail- sell sponsorships on the self guided tour map and mark up the boxed lunch- not a major money maker but good way to build awareness and get people up on the mountain
- Improved ski shop awareness in the mid-coast region. What are the skiing privileges for ski shops in the region? Do they post the snow report? Do they have a reason to send people there to ski? Can the local shops buy bulk tickets to tie into their ski demo program? Do the regional ski shops have corporate passes that can be used by employees?
- Business friendly ski area- good cell coverage and wireless let people know

It should be noted that the relationship with the Coastal Mountains Land Trust is one that should be nurtured with a long term view towards mutual benefits. The long term goal of the Trust is to establish conservation easements on thousands of acres of land in the vicinity of the Snow Bowl. The easements will be used to create a network of trails for hiking, cross-country skiing, snowshoeing, biking, etc. A trail head or gateway with parking and some services will be an integral part of the network. The land comprising the Snow Bowl, in fact, is already part of the overall land that has been designated by the Trust as easement land. The logical place to establish a "base camp" for access to the lands set aside by the Trust is the Snow Bowl.

# Priority 2 - Snowmaking System Upgrade

The basic premise is that without reliable snow conditions, there is no reliable winter business. Given the climate today and particularly the regional climate conditions at the Snow Bowl, the main objective in snowmaking operations is to make as much snow as possible in the available "windows" of good snowmaking weather with emphasis on early season (pre-Christmas) opening. The various components of the snowmaking system must be geared towards this objective, including adequate water pumping capacity and pressure, modern fan guns, cool, dry compressed air, low energy towers guns, and a variety of ground snow guns. The overall goal of the system design is to be able to take advantage of marginal temperatures as well as the times when the temperatures are low enough to maximize production and to use as little energy (i.e. utility and fuel costs) to produce the maximum amount of snow. Going forward there are many alternatives for improving the snowmaking capabilities at the Snow Bowl, our recommendations are set forth below.

The existing air compressors are certainly a weak link in the snowmaking system; they are old and inefficient, their capacity is too small to meet the objectives noted above, and they are not environmentally friendly. The compressors do, however, operate and it would be very expensive to replace them. Replacing them would represent a continued reliance on traditional air-water technology for the future of snowmaking at the Snow Bowl.

A better approach would be to continue to operate the existing system at certain times, but improve efficiency of snowmaking in marginal temperatures with a small fleet of modern fan snow guns and low energy towers. Fan technology today is much improved over the fan technology of five to ten years ago. Today, fans are more capable of producing a larger quantity of snow using less energy than traditional compressed airwater systems, especially in marginal temperatures. Increasing the use of fan guns will require the placement of a number of electric pedestals in areas of the hill where their use is anticipated.

The existing water pump is relatively new and the pumping capacity is adequate. We do not recommend any immediate upgrades to the water pumping capacity.

We recommend continuing with the snowmaking pipe upgrades that have been on-going for the past several years. In the fall of 2006 a new pipeline was put in place for the tubing hill – we agree with this decision. Piping should eventually be put in place to the top of the hill. This could happen any time but it will be most useful to do this when the trails on the north side are widened and it will be essential if a new lift is installed to the top of the hill.

# Priority 3 – Upgrade the Tubing Hill

The tubing hill operation is clearly an attractive and profitable part of the winter operation at the Snow Bowl. Improved snowmaking for an early season opening is important as well as a handle tow lift to take tubes and riders back to the top.

# Priority 4 – Expand the Base Lodge

Expanding the base lodge will have benefits to both the summer and the winter operations. Apparently, the original design for the existing building included both a second floor as well as an A-frame extension on each side of the central structure. We recommend that the town pursue this plan. It may be accomplished in stages or all at one time.

The existing A-frame building is approximately 4,800 square feet (the actual footprint is about 2,400 square feet and there are two floors). There are another 1,200 square feet in the pre-fab buildings for a total of 6,000 square feet of space related to skier services. The existing lodge has seating to accommodate about 100 people at one time. Assuming that the existing ski area comfortable carrying capacity is 600 skiers/riders at one time, to be in balance there should be at least 7,000 square feet of lodge space and seating for about 200 people. Under current conditions, i.e. before the ski area carrying capacity is increased, there is a shortage of approximately 1,000 square feet.

If the ski area were to expand to a CCC of 880 skiers/riders at one time, there should be roughly 10,000 square feet of total space, resulting in a shortage of about 4,000 square feet and about 250 seats (using industry standards that have been adjusted to reflect the Snow Bowl situation). In the winter the additional lodge space will provide better ambiance and more opportunities for sales of food and beverage (potentially a bar), a nursery area for pre-school children to attend while parents are skiing, and greater space for functions.

The architectural plans that were originally drawn for the base lodge show two A-frame extensions, one on each side of the main lodge. The combined square footage of these two "wings" is roughly 2,800 square feet. Although 2,800 additional square feet is less than the calculated shortfall of 4,000 square feet, the study team recommends that this design be considered for the lodge expansion. If in the future more space is needed for skier services, the pre-fab building could be replaced or expanded.

One critical element of the improvement plan is to add space for children's nursery. This could be provided in a separate modular building in the near term and then potentially integrated into the lodge expansion at a later date.

It is the opinion of the consultant team that there are many untapped opportunities for summer business at the Snow Bowl. Lodge expansion plans should include design features that open up opportunities for weddings, seminars, outings, events, children's camp activities, tourism activities, etc. Typically, when a base lodge is designed to handle peak winter/skiing visitors it is also large enough to accommodate non-skiing/summer needs.

# Priority 5 – Replace Long T-bar with a Chairlift

Replacing the long T-bar is necessary for several reasons:

- It is a long and difficult ride for many people, especially snowboarders
- In order to operate the T-bar it is necessary to make snow on the T-bar line. By today's standards this is not a good use of scarce time and energy for snowmaking; the resources would be better applied to making snow on the ski trails themselves.
- It will be beneficial to have a chairlift that goes to the top of the hill, for both winter and summer use.

We recommend a reconditioned double or triple fixed-grip chairlift to replace the long T-bar. A lift that was new in the 1980's or 90's with a variable speed drive will be appropriate. When a new lift is installed to the top of the hill, there must also be snowmaking pipe added to cover the highest sections of the trails.

# C. Financial Projections

# DEVELOPMENT PLAN REVENUE - EXPENSE PROJECTIONS

Annual Skier Visits	Base Year 24,263	<b>Phase 1</b> 26,689	Phase 2 29,358	<b>Phase 3</b> 30,693	Phase 4 32,000	Phase 5 35,000
Revenue						
Lodge Rental	9,495	9,495	9,495	9,495	18,990	23,737
Daily Tickets						
Season Passes	244,328	268,761	295,635	309,079	322,240	352,450
Ski School	36,879	40,568	44,624	46,653	48,640	53,200
Racing Programs	10,057	10,057	10,057	10,057	10,057	10,057
Gift Cards	1,138	1,138	1,138	1,138	1,138	1,138
Summer Chairlift Rental	1,628	1,628	1,628	1,628	1,628	5,000
Kitchen Lease	4,667	4,667	4,667	4,667	7,000	7,000
Tubing Hill	11,415	12,500	13,750	18,000	19,000	20,000
Toboggan Chute	2,604	2,604	2,604	2,604	2,604	2,604
Rental Shop	43,916	48,308	53,138	55,554	57,920	63,350
Soda Machine	1,069	1,069	1,069	1,069	1,069	1,069
Misc	2,994	2,994	2,994	2,994	2,994	2,994
Tobogganfest	37,393	37,393	37,393	37,393	37,393	37,393
Scholarships	1,734	1,734	1,734	1,734	1,734	1,734
Town Match	25,000	25,000	25,000	25,000	25,000	25,000
Advertising	483	483	483	483	483	483
Total Revenue	434,800	468,399	505,409	527,548	557,890	607,209
Expense						
Administration	116,077	130,077	130,077	130,077	130,077	130,077
Lodge	18,282	18,282	18,282	18,282	27,423	27,423
Maintenance Shop	4,177	4,177	4,177	4,177	4,177	4,177
Alpine	261,817	261,817	287,315	289,315	289,315	341,565
Rental Shop	20,802	20,802	20,802	20,802	20,802	20,802
Toboggan Chute	12,860	12,860	12,860	12,860	12,860	12,860
Tube Slide	2,063	2,063	2,063	7,823	7,823	7,823
Total Expense	436,078	450,078	475,576	483,336	492,477	544,727
Net Profit (Loss)	-1,278	18,321	29,833	44,212	65,413	62,482

### **Notes to Revenue – Expense Projection**

- The base year represents the average of the past 3 year's revenue and the actual expenses for the 2005/06 season (as shown on the previous spreadsheet, Revenue Expense Model Existing Conditions).
- All figures are in constant dollars, i.e. no consideration has been given to inflation, depreciation or the time value of money.
- Each phase represents a specific action of physical improvement. The phases do not necessarily refer to years and they do not need to be consecutive. It should be noted, however, that the order of the priorities reflects the opinion of the consultant team.
- The model does not include a provision for the costs of capital or debt related to constructing the elements of the long range plan. As explained later in this report, it is evident from the projected cash flow models that the Snow Bowl operation can not sustain debt load associated with capital improvements.
- The shaded cells on the spreadsheet indicate items that have changed from the previous phase, explanations for the changes are noted below.
- Skier visits have been increased from phase to phase based on incremental benefits of the various improvements associated with each phase.
- The main revenue areas that will be affected by an increase in skier visits are lift tickets and season pass sales (which are combined for the purpose of projecting ticket revenue per skier visit), ski school, and rental shop. The three year average revenue per skier visit in each of these keys revenue departments is:

Lift tickets/season passes	\$10.07
Ski School	1.52
Rentals	1.81
Total revenue/skier visit	\$13.40

• The highlights of each phase are noted as follows:

<u>Phase 1:</u> Improved marketing and awareness program.

New position created for winter marketing.

New snowmaking pipe line extended to tubing area.

10% increase in annual skier visits.

10% increase in tubing visits.

Additional administration costs are:

Base administration cost	116,077
New marketing position	10,000
Added marketing costs	4,200
Projected admin. cost	130,277

# <u>Phase 2</u> Snowmaking system upgrading is the primary goal of this phase. There are many options and variations of snowmaking systems that are possible for the Snow Bowl. Several options include:

- Replace the 2 existing compressors (a total of 2400 CFM) with 2 new compressors (4000 CFM). This option is essentially a continuation of the air-water system that the Snow Bowl currently has in place.
- Keep the existing compressors and re-direct system upgrading towards fan technology. This will require purchasing new fans (up to five or six) and installing electric wiring and pedestals on the hill.

• Purchase a number of low air consumption towers (potentially 30 or more).

Each alternative has its pros and cons, but given the climate, hill conditions and the fact that the Snow Bowl already has 2,400 CFM of compressed air, we believe that upgrading the system with modern fan technology and low energy towers will be the most appropriate direction. A detailed snowmaking system cost-benefit analysis should be undertaken as part of the system upgrade.

Assuming that some significant improvements are made to the snowmaking system, the following incremental benefits (and costs) should occur:

Annual skier visits will increase by 10% to almost 30,000 (same as year 2002).

Tubing visits will increase by 10% to reflect the benefit of marketing efforts and more snow made on the tubing hill earlier in the season.

Cost of electricity related to snowmaking to increase by 25%. Snowmaking labor costs will increase by \$10,000 (2 staff @ 400 hours each per season X \$10 per hour, plus 20% employee benefits).

261,815
15,500
10,000
287,315

# <u>Phase 3</u> Tubing Park is upgraded by adding handle lift and 1 additional tubing lane.

Tubing visits increase by 25%.

Annual skier visits increase by 5% to reflect benefit of marketing efforts.

Add \$2,000 for electrical costs to operate tubing lift:

Base "Alpine" costs	287,315
Additional electric cost	2,000
Projected "Alpine" cost	289,315

Add \$5,760 labor to operate tubing lift (2 operators X 30 days X 8 HRS/day X \$10/HR + 20% employee benefits = \$5,760):

Base Tube Slide cost	2,063
Additional labor	5,760
Projected Tube Slide cost	7,823

# Phase 4 Expand base lodge; add 2,800 square feet.

Revenue from base lodge rentals increases by 100%.

Skier visits increase to 32,000 (same as 2003).

Kitchen lease revenue increases by 50%.

Costs of base lodge services increase by 75% (electric, heating, maintenance labor, cleaning, trash removal, and security services):

Base lodge costs	18,282
Additional costs, 75%	9,141
Projected base lodge cost	27,423

# <u>Phase 5</u> Add chairlift (replace long T-bar).

Shorten and move existing Double Chair to better serve beginner terrain. Summer chairlift rides increase.

Snowmaking must go to top of hill and extend to at least one trail on the north side.

Skier visits increase to 35,000 (same as 2001 and, in our opinion, this is the upper end of the potential visitation to the Snow Bowl). Costs for electric for lift operation increases by 75% <sup>1</sup>:

Base "Alpine" costs	289,315
Additional electric cost	26,250
	315 565

Costs for snowmaking will increase to reflect additional 100 hours of snowmaking at \$260/HR (includes electric and labor costs); 100 HRS X \$260/HR = \$26,000:

Base "Alpine" costs	315,565
Additional Snowmaking	26,000
Projected "Alpine" cost	341,565

### **D.** Capital Cost Projections

The following capital cost projections are shown by phase. Some costs, such as the addition of a new marketing director and new marketing materials are operating costs and are included on the Revenue – Expense Projections model but are not included as capital costs.

These are order of magnitude costs and are intended to be indicative of costs that may be incurred if the work is done largely by outside contractors under turn-key conditions. The use of in-house services may reduce the costs in many instances.

One noteworthy area in the capital costs projections is in regard to snowmaking system costs. At this stage we are not certain what components of the system will be replaced or upgraded but, given the discussion of alternatives found earlier in this report, we assume that an expenditure of about \$325,000 will have the desired outcome.

<sup>&</sup>lt;sup>1</sup> Depending upon the continuation of agreements with Coastal Communications, the added costs for lift electricity may be less than the projected amount).

It should be noted that the Revenue – Expense Projections model above does not include consideration for purchase of these capital items nor does the model show any debt. Given the bottom line on the pro-forma projections, it is our opinion that the Snow Bowl operation cannot handle major capital purchases or debt load to cover the cost of capital improvements. The exceptions to this statement may be in regards to capital maintenance requirements such as a new set of tracks for a grooming vehicle, a new roof for the base lodge, a new cable for a lift, parking lot improvements, etc. In other words, as large assets or pieces of equipment normally breakdown or require replacement, the Snow Bowl's projected operating profits could cover those costs. As noted above, the order of magnitude of the suggested capital improvements will necessitate that capital funds be sourced some where and some how other than through ski area profits and year round operation of the Snow Bowl.

# **CAPITAL COST PROJECTIONS**

Phase – Item	Estimated Cost
Phase 1 No Phase 1 capital costs included in this model	0
Phase 2 Upgraded snowmaking system components Additional on-hill piping and wiring for fans Total Phase 2 costs	\$250,000 75,000 <b>\$325,000</b>
Phase 3 Reconditioned handle tow for tubing park site work for new tubing lane, include erosion control Total Phase 3 costs	\$25,000 25,000 <b>\$50,000</b>
Phase 4 Expand base lodge, add 2,800 SF @ \$175/SF Total Phase 4 costs	\$490,000 <b>\$490,000</b>
Phase 5 Replace long T-bar with re-conditioned chair <sup>2</sup> Relocate existing double chairlift <sup>3</sup> Expand snowmaking to top of hill and to trails on north <b>Total Phase 5 costs</b>	\$600,000 250,000 150,000 <b>\$1,000,000</b>

<sup>&</sup>lt;sup>2</sup> Capital Costs include engineering fees

<sup>&</sup>lt;sup>3</sup> Capital Costs include engineering fees