

Mount Agassiz Feasibility Study



Executive Summary

January 2012

Prepared for
Parks Canada

Prepared by





Parks
Canada

Parcs
Canada

January 23, 2012

Dear Reader,

The Parks Canada Agency is pleased with the excellent work the SE Group has done to prepare the Mount Agassiz Feasibility Study. Their international expertise and experience has provided an invaluable analysis and external perspective to assess the feasibility of the Mount Agassiz Ski Area.

Parks Canada has accepted the study and believes it reasonably reflects the essence and spirit of Parks Canada Agency policy, guidelines, regulations and processes. However, Parks Canada would advise all readers to consult with the Agency directly for further explanation or clarification of its policies, regulations, guidelines and processes.

Parks Canada thanks the SE Group for the preparation of this study and the individuals and groups who offered their knowledge and insight.

Sincerely,

Robert Sheldon
Superintendent
Riding Mountain National Park of Canada
Parks Canada Agency



EXECUTIVE SUMMARY

A. History and Background

Mount Agassiz Ski Area (MASA) has a long history of providing downhill skiing within the East Escarpment area of Riding Mountain National Park of Canada (RMNPC). The site was first utilized in the late 1950s by local skiers hiking up the McKinnon Creek drainage to access the vertical drop and snowfall that the area offered. In 1958, under the Canada National Parks Act (in subsection 36(1) of the current version of the Canada National Parks Act), approximately 142 hectares were leased to a private operator for the development of the ski area. In 1961, MASA opened with a few ski runs accompanied by the installation of a rope tow and the construction of a base lodge. During the 1970s, commensurate with the rapid growth of the ski industry, MASA added more ski trails, two T-Bar lifts, and snowmaking, and expanded the day lodge. The most significant expansion occurred in 1979 when the double chairlift and ski trails were developed on the north side of McKinnon Creek in preparation for hosting the Canada Winter Games in conjunction with the town of McCreary.

The ski facility operated successfully for many years, providing economic benefits to many small neighbouring communities in the area and especially the town of McCreary, with “Alpine Archie” standing as the community mascot. However, in the early 1990s the ski area began to witness an erosion of the market due to inattention to customer service and operational/safety concerns. This eventually resulted in the operator filing for bankruptcy in 1995 and again in 2000. Following the closure of the ski area in 2000, a local group (Agassiz Ski Hill Committee 2000) was formed to reestablish the ski area operation as a profitable business enterprise that would provide recreation and economic benefits to surrounding communities. Despite strong interest in reopening the ski area, the local group was unable to carry out its mission due to financing and legal issues.

Today, there is significant broad community interest in reopening the MASA ski area. This interest has also extended to municipal, provincial and federal politicians as the former ski area has been viewed as a significant economic driver to East Escarpment area communities. In 2007, the RMNP Management Plan introduced a new “Strategic Goal” and “Actions” for MASA which precluded the continuation of alpine skiing at the site and included the removal of the ski hill infrastructure as a first priority. While the plan was subsequently tabled by Parliament in November of 2007, the “no new lease” clause in the management plan garnered substantial negative reaction from community leaders and stakeholders. The strong reaction from interested parties and the emergence of new information regarding the potential operation of the site as a multi-season venture rather than simply a ski hill has prompted Parks Canada to re-examine this matter through the conduct of this feasibility study.

In January 2011 Parks Canada (PCA) issued a solicitation in the form of a Request for Proposal for qualified firms to submit credentials, scope-of-work and fee basis for completing the MASA Feasibility Study. In May of 2011, SE Group was retained by PCA to prepare the feasibility study.

As part of the feasibility analysis, SE Group spent a week in the MASA area visiting the site and meeting with various community groups and stakeholders. Participants of these meetings included representatives from the following groups:

- East Escarpment Advisory Board
- Travel Manitoba, Parkland Tourism and Tourism Secretariat
- Agassiz Ski Hill 2000
- Ebb and Flow First Nation
- Rolling River First Nation
- McCreary Economic Development, Village and Municipality
- McCreary Golf Course
- McCreary Business Community members
- Agassiz Mountain Development Group
- Asessippi Ski Area and Resort
- Ski Valley, Minnedosa

SE Group would like to thank all individuals who met with the planning team during the site visit. These meetings provided invaluable insight and information regarding the history of MASA as well as its potential future operation.

B. Purpose of the Study

The purpose of the feasibility study is to assist the RMNPC in making an informed decision regarding the potential reintroduction of lift served downhill skiing at MASA, as well as examining opportunities to provide multi-season recreational activities for purposes of achieving a sustainable business model. The results of this study are also aimed at supporting the East Escarpment Area Strategy development process and resulting strategy development regarding future opportunities for visitor experiences in the East Escarpment area. The decisions regarding future direction and actions impacting MASA may also be linked to other options in the East Escarpment area including, but not exclusive to, trail development and maintenance plans as well as outfitting activities and backcountry accommodation strategies. Additionally, decisions may provide for future partnering arrangements with neighbouring communities and stakeholders.

Within this context, the purpose of the feasibility study is to:

- Provide an impartial, expert business analysis of the opportunities, risks and viability of a ski hill venture both with and without multi-season activity at MASA;
- Provide an assessment of the competitive and economic environment that would affect and be affected by operations at MASA;
- Inform the East Escarpment Advisory Board and local and regional communities of the results of the assessment; and



- Provide analysis to support the determination of a policy decision regarding MASA and subsequent development of the East Escarpment Area Strategy that will advise the optimal role and function of MASA in relation to its surrounding park landscape and neighbouring region.

It is also important to emphasize that this study does not recommend a specific policy direction, but will provide data, information and analysis to allow PCA, the public and interested stakeholders to gain a deeper understanding of the issues related to a future operation at MASA.

Scenarios presented within this study are done so as a basis for assessing the feasibility of any potential future operation at MASA. It is important to note that they are not actual proposed development or use concepts endorsed by PCA, but rather are simply a mechanism by which to analyze the full range of opportunity for any possible future operation. The notional projects as described and analyzed are simply representative of project components that could be discussed as part of any potential future operating scenario. It is also important to note that given its location within a national park, there are several steps that would be required, and guidelines and assessments that must be followed, in the planning and development process related to establishing a recreation based operation at MASA.

C. Critical Factors for the Future Operation of MASA

There are a number of critical factors which must be satisfied when considering the potential future operation of MASA.

1. *The MASA facility must abide by the 2006 Ministerial Ski Area Management Guidelines of PCA, the Recreation Activities and Special Event Assessments Management Guidelines, and the Environmental Assessments for the area.*
2. *The operation at MASA must be financially sustainable.*
3. *The operation at MASA must foster regional economic vitality, and fit within the context/goals of the East Escarpment Area Strategy.*
4. *The MASA facility must be designed to meet today's ski industry criteria and standards, and be in compliance with current safety and building codes.*
5. *The MASA facility must include some presence from PCA.*
6. *The MASA operation must successfully compete in today's competitive marketplace.*

These critical factors will be referred to during the ensuing analysis and concept development for the future operation of MASA.

D. Future Planning Process

Given its location within RMNPC, there are several steps that would be required, and guidelines and assessments that must be followed, in the planning and development process related to establishing a recreation based operation at MASA. The following guidelines, assessments, process components and future steps are standard PCA protocol and administered for all such operations.

- Parks Canada Direction and Ski Area Management Guidelines
- Ski Area Planning and Development Process
- Site Guidelines
- Recreation Activities and Special Event Assessments.

The following steps would be undertaken by a future potential operator if a policy decision is made to consider the reintroduction of alpine skiing at MASA.

1. Amend Park Management Plan.
2. PC prepares preliminary site guidelines.
3. Select ski area operator. The process for selection of an operator has not yet been determined.
4. Negotiate final site guidelines and conduct strategic environmental assessment.
5. Following approval of site guidelines, the ski area prepares a long range plan (application of CEAA).
6. Specific project applications could be submitted upon approval of the Long Range Plan.
7. Project permitting.

E. Site Resources and Environmental Considerations

Numerous environmental factors will influence a ski area — topography, slope, aspect, wetlands, streams, erosion control, and other important design concerns. As per the Ski Area Management Guidelines, any new development at MASA within the existing Developed Area can be considered where potential ecological impacts can be mitigated, and development outside of the Developed Area can be considered if there is a Substantial Environmental Gain within or adjacent to the leasehold.

1. Topography and Elevation

With fairly consistent fall-line and favourable slope aspects, the terrain at MASA presents some favourable opportunities for skiing. The length of the ski trails is particularly noteworthy. With trails having lengths of up to 1,300 metres, the existing topography presents opportunities for long,



“cruiser” style ski trails. Since the vertical rise of MASA is around 140 metres, the length of the trails means that average grade of the terrain is lower than that found at other regional ski areas.

The existing base lodge at MASA is located in a significant drainage flow area that has three sources: the overflow flood area from McKinnon Creek, a spring at the base of the hill and the runoff from the hill. As a result the basement of the lodge was frequently flooded. This phenomenon should be considered during future potential building siting and detailed design.

In addition, due to the location of the lodge’s fuel tanks there was significant soil contamination as a result of this frequent flooding. The contaminated soil around the lodge has been cleaned up, but not the soil that remains beneath the building’s footprint. Future rehabilitation of the base lodge would have to include removal of this contaminated soil.

2. Slope Gradients

The existing topography at MASA provides excellent opportunities for a ski area that caters to Beginner and Intermediate level skiers and snowboarders. Opportunities also exist for limited Advanced level ski trails. Overall, however, the terrain is not well suited for development of Intermediate or higher level ski terrain, as it is generally not steep enough. Also note that the flat area at around the 530-metre elevation level is clearly visible on the Slope Analysis figure.

3. Slope Aspect

The terrain on the West side has East-facing slopes, which are good for morning sun exposure, but would likely not retain snow cover as long as North-facing slopes, due to increased duration of the sun exposure. The terrain on the East side faces mostly Northwest, and therefore should have excellent snow retention, and some opportunities for afternoon sun exposure.

4. Snowmaking Water Needs

As a result of the limitations in the potential for water withdrawal from McKinnon Creek it is assumed that snowmaking water storage would be required to meet snowmaking coverage needs. It must be noted that the calculations and assumptions used in the analysis of water withdrawal and requirement for snowmaking are very preliminary and approximate. A detailed water availability analysis and water management strategy would be required. The quantity of water available is low for the amount of snowmaking coverage required, and it should not be assumed that this preliminary assessment represents a statement that sufficient water is available for snowmaking. An investigation of the potential for the creek to supply sufficient water while protecting aquatic environments will be required.

Should it be determined that a successful snowmaking operation can be achieved, a stream monitoring program would be established to insure that the on-going operation does not result in any adverse impact on the water resource.

Since the original snowmaking system was used successfully for over 20 years without supplemental water sources, it can be assumed that sufficient water was available from McKinnon Creek. However, given the relatively low flow rates of the creek, simultaneous snowmaking production would have been relatively low, meaning that comparatively longer periods of favourable temperatures would be required

to create sufficient coverage. Additionally, there historically was a retention dam and diversion structure in McKinnon creek that was washed out in the recent flooding. The recent stream channel stabilization efforts have removed the dam remnants and no retention capacity currently remains in the stream.

Despite varying opinions on climate change, a general consensus within the industry is that snowmaking will continue to be an important aspect of ski area operations, as it increases an area's ability to respond to varying conditions. MASA's ability to make snow quickly would be restricted by the limitations of the McKinnon Creek water source. If future changes in climate or weather patterns result in fewer hours of favourable temperatures for snowmaking prior to critical holiday periods, this could place MASA at a competitive disadvantage over regional resorts with higher volume water sources.

5. Stream Channel Stabilization

McKinnon Creek crosses MASA at the base of the slope, flowing towards the northeast. When the ski hill was initially developed in the late 1950s, a corrugated steel culvert approximately 140 metres long and 4 metres in diameter was installed to contain and direct the flow of McKinnon Creek, enabling the creation of skiable terrain across the creek. In May and June of 2011, extreme rainfall events preceded by a winter of near record snowfalls resulted in flooding in RMNPC, as in many parts of Manitoba. In one extreme rain event in mid-June the culvert was inundated and high volumes of water at rapid velocity flowed over the culvert, washing away backfill material. The culvert was left largely exposed, a significant amount of sediment was deposited downstream and the site was in a dangerous and ecologically vulnerable condition.

Through July and August, 2011, a series of contracts were tendered and awarded and the culvert was removed and disposed of, the stream banks were sloped and stabilized, approximately 1000 cubic metres of fieldstone was placed in and along the channel, a series of riffles and pools were created to enable fish passage, and erosion and sedimentation controls were installed on the stream banks to facilitate quick establishment of vegetation and riparian habitat. The work was accomplished with resources from national emergency flood funding.

Although the majority of the McKinnon Creek stabilization work has been completed, additional follow up work needs to be done at the site.

6. Erosion Prevention and Sediment Control Opportunities

In addition to the restoration of McKinnon Creek described above, there are other opportunities for restoration at MASA. Most of the existing ski terrain is in good condition, in regards to erosion control. There are a few locations where erosion has occurred and restoration would be required. Mitigations would be put in place as part of any future development proposals.

7. Other Environmental Resource Considerations

Numerous other environmental resource considerations exist at MASA. Of particular note is the concern for nesting bird species and invasive plants. Prior to future operation at the site, studies would



be conducted on: aquatic habitat and species; wildlife habitat, migration corridors, and other considerations; vegetation types and location; as well as other environmental considerations. Base line data and monitoring requirements for environmental resources identified on the MASA site would be determined in any resulting agreement between RMNPC and a future operating entity.

8. Impact of Climate Change on Future Operations

Despite varying opinions, a general consensus within the industry is that snowmaking will continue to be an important aspect of ski area operations, as it increases an area's ability to respond to varying conditions. As the above predictions from the Province of Manitoba indicate, natural snowfall may become less reliable over time, with possible decreases to snowpack. Given the earlier discussion of water needs for snowmaking at MASA, the ski area's ability to make snow quickly would be restricted by the limitations of the McKinnon Creek water source. If future changes in climate or weather patterns result in fewer hours of favourable temperatures for snowmaking prior to critical holiday periods, this could place MASA at a competitive disadvantage over regional resorts with higher volume water sources.

F. Existing/Historic Ski Area Facilities

A thorough review and analysis of the existing conditions and historic operations of MASA is required to generate a baseline for analysis. Knowing the capacities of the various components of the ski area will allow for further analysis of any potential for future use and usage projections.

1. Lifts

The lifts are all over 30 years old, which means they are close to, or well past, the expected useful life of the equipment. Further, they have not been operated in 12 years, which indicates that a full design-level review should be completed on the lifts prior to any attempts to re-use the equipment. The cost of this is likely prohibitive, given that the lifts may not be worth the time and expense that would be required to determine if they could be operated again, and if they were made to operate, they would possibly only last a few more years before requiring replacement.

A further complication is that neither of the original manufacturers of the lifts remains in business, and no existing lift companies are currently manufacturing parts for either one. This means that it would be difficult to get replacement parts, with the possibility of requiring custom manufacturing, with high associated costs.

2. Terrain

In general the trails would ski fairly well. There are a few flat sections on both sides of the area, so that the skiing would not be continuous. In particular, the flat section on the East side at around the 530-metre elevation presents a significant barrier to continuous skiing. On the West side, there is also a flat section, at the 560-metre elevation. There is also a reverse slope and high point at this elevation, adjacent to the lift alignment. This feature would restrict some ski routes, in particular making it difficult to ski the lower third of the terrain, in the area that is under the lift line.

Prior to the washout in spring on 2011, a section of McKinnon Creek was culverted at the bottom of the trails on the T-Bar side. This enabled skiers to ski over the creek and return to the base of the T-Bars. Any future use of the ski terrain on the T-Bar side would require the construction of a skier bridge. It should be noted that a culvert solution will likely not meet the current environmental requirements at the site.

MASA had a significant surplus of Novice terrain, and no true Expert-level terrain. This is simply due to the available terrain in the region. Most of the terrain falls in the Novice and Low Intermediate categories, which is appealing to families and lower-level skiers. This is a desirable type of skiing, and one that is less common in the region, where ski trails tend to be steeper and shorter. However, the lack of significant Intermediate, Advanced, and Expert level terrain would likely alienate upper ability level skiers and make it more difficult to attract this level of skier.

3. Comfortable Carrying Capacity

The CCC of the lift and trail network at MASA is calculated at 1,200 guests per day. It is common for ski areas to experience peak days during which skier visitation exceeds the CCC by as much as 25%. Consistently exceeding the CCC is discouraged due to the resulting decrease in the quality of the recreational experience.

4. Guest Service Facilities

While a small chalet was built for the opening of the resort in 1964, the existing lodge building was constructed in 1977. An inspection report of the building was prepared by RCV Inspection Services of Winnipeg, in 2008, stating that: “...***In light of the damage and mold, repair costs for this building far exceed building value. Demolition is recommended and should proceed as this is an unsafe structure.***”

5. Parking and Access

The parking lot appears to be in good shape. It is gravel surface and does not seem to have any erosion or drainage problems.

It should also be noted that the access road is in excellent shape. Significant drainage work was done on the road, and the surface has held up well.

6. Infrastructure

Potable water that was used in past operations at MASA was provided by an on-site well. Records show that testing for potable water quality from this source showed repeated failures and high coliform counts. Any future operation at MASA would require a new well and water filtration system installation.

During past operations at MASA a septic field was utilized to dispose of on-site wastewater. This field would no longer be viable. Pending the new guidelines for waste disposal practices that are currently being developed, it can be assumed that any future operation at MASA would require wastewater to be partially handled by septic fields and partially by holding tanks with regular pumping for removal.



There is three-phase power available at MASA, suitable for future operation at the site.

G. Market Assessment

As a component of the feasibility study, the market assessment identified a number of significant factors related to industry trends, regional and local market demographic profiles, visitor information, and the competitive marketplace.

- Visits to the RMNPC area are largely generated by Manitobans (approximately 75%). Eighty-six to 88% of park visitors are repeat visitors. Current visitor estimates to RMNPC are about 298,000 annually. The majority of this visitation (250,000) occurs in the summer.
- Of the approximately 2.2 million Canadians who are active in downhill snowsports, very small percentages are residents of Manitoba and Saskatchewan. Estimates show that of the 18.1 million visits in the 2010/11 season, about 1.4% were attributable to residents of Manitoba and Saskatchewan. A total of approximately 95,000 to 100,000 residents of Manitoba and Saskatchewan are active downhill skiers/snowboarders.
- Visits to the seven operating ski areas in Manitoba were estimated at 130,000 in 2010/11. Total visits are anticipated to be stable in Manitoba over the next ten years.
- Patterns among Manitoba and Saskatchewan's skier/snowboarder population show a high likelihood to promote downhill snowsports to others, but also show a high dropout rate and a shorter history of participation compared to the overall Canadian snowsports population.
- Interviews were conducted with local and regional ski club leaders, ski retailers, and others regarding the potential for re-opening MASA. Reaction was generally neutral to negative, with some trepidation related to funding, the expense for the consumer, competition, and the overall level of demand.
- Competitive ski operations in Manitoba typically include a terrain park, lessons, rental facilities, night skiing, and summer recreation. Summer activities at other ski areas in the province vary by individual ski area, and include mountain biking, camping, horseback riding, hiking, festivals, weddings, and other activities.
- MASA's distance from the market could be a hurdle, particularly in the context of the specific location of MASA at the end of a dead-end road. In addition, overnight lodging in the immediate local community (McCreary) is limited to one hotel. Additional lodging is available in Neepawa and Dauphin, but these locations are not as conveniently close to MASA.

These findings provide valuable data to establish the realistic visitation potential for MASA, both as a winter ski area operation and as a summer attractions venue:

Winter: Assuming the daily capacity of 1,200 of the existing/historic ski area facilities, a 60 day season (4 days a week for 16 weeks), and a utilization rate of 30% (industry standards are typically 30%–45%), the winter visitation at MASA could be 21,600.¹ That said, given the low number of

¹ The low end of the industry standard range has been utilized to determine a conservative yet realistic winter visitation number for pro forma purposes.

skiers/snowboarders in Manitoba and Saskatchewan, the limited skier visits that are currently being generated within the province, and the highly competitive nature of the marketplace, this would not be easy to achieve.

Summer: RMNPC has an annual summer visitation of approximately 250,000 guests. In addition, RMNPC experiences a very high percentage of repeat visitation, indicating that park guests are familiar with the park and what it has to offer, and also are likely to be interested in “new” or “different” experiences during their visits. It also indicates that while something new would have initial appeal to the repeat visitor which would drive visitation, this appeal would lessen over time. There will be visiting friends and relatives that will come to stay with repeat RMNPC visitors, which may encourage some repeat trips to MASA. Even so, the high percentage of repeat visitors to RMNPC is not advantageous to generating a lot of throughput. For multi-season operations to be successful it is important that there is a significant flow of one time visitors rather than the same visitor over and over again. Given these factors, it is assumed that MASA could attract between 5 and 10% of the total visitation to the park, or between 12,500 and 25,000 visits, during the summer (spring/summer/fall) months.

H. Multi-Season Recreation Program

A number of these opportunities are not suitable for MASA due to site conditions, operational constraints and PCA national policies on new recreational activities. A park wide assessment of all new recreational activities, not currently offered in the park is required in order to determine which ones are suitable both in the park and at MASA. The following activities make up the notional multi-season recreation program for MASA, which provides the basis for the summer concept in the absence of this assessment.

Magnet Attractions

- Canopy Tour/Challenge Course/Aerial Exploration Park²
- Cross Country Mountain Biking

Support Attractions

- Euro-bungy/Trapeze/ Climbing Wall³
- Camping
- Scenic Lift Rides
- Snow Tubing (winter only)

² These are examples of base area activities, which could be part of “skills based” educational programming for similar activities that are offered as part of the RMNPC experience, subject to the result of a park wide assessment.

³ These are examples of base area activities, which could be part of “skills based” educational programming for similar activities that are offered as part of the RMNPC experience, subject to the result of a park wide assessment.



Sports

- Trail Connections to RMNPC (Nordic, hiking, cross country mountain biking, horseback riding)
- Guided Experiences

Events

- Mountain-oriented Athletic Events/Races⁴

Education

- RMNPC day camps
- Destination camps (single or multi-day)

I. Regional Multi-Season Recreation Development Strategy

A number of opportunities identified as part of the market assessment are not suitable for MASA due to site and/or operational constraints or PCA national policies on new recreational activities. These activities may be incorporated into the regional strategy for the East Escarpment area.

- *Outfitters*
- *Guided Experiences/Camps*
- *Mountain-oriented Athletic Events/Races*
- *Canopy Tour/Challenge Course*
- *Educational/Cultural*
- *Regional Tours*

J. Operational Models Assessment

As part of the analysis of determining the feasibility for the reintroduction of the MASA operation within RMNPC, SE Group has prepared three notional operating models that represent different levels of investment, visitation and organizational structure.

These three scenarios are presented as a basis for assessing the feasibility of any potential future operation at MASA. It is important to stress that these are not actual proposed development concepts endorsed by PCA, but rather are simply a mechanism by which to analyze the full range of opportunity for any possible future operation. The potential projects as described and analyzed are simply representative of project components that could be discussed as part of any potential future operating scenario.

⁴ Athletic Events/Races must reflect the principles defined in the Recreation Activities and Special Event Assessments.

Additionally, any existing facilities or equipment that is not used or replaced in the following scenarios would be removed, and PCA would undertake any related rehabilitation.

1. Community Ski Hill Option

The concept of the Community Ski Hill Option is to reopen and operate MASA in the most economical way possible. Essentially, MASA would be recreated as a small, local, community ski hill, and developed and operated for the local community. As such, it would not include many amenities that would attract distant guests. This scenario is envisioned as containing the following components:

- One T-Bar would be installed on the original side, in the same alignment as the existing T-Bars.
- The western side would not be re-opened, and vegetation would be allowed to grow back.
- Snowmaking would be installed, but would be limited to two top-to-bottom routes. The rest of the trails would be natural snow. Additional water sources would not be developed, only water easily available in McKinnon Creek would be used.
- Skier support facilities would be minimal and temporary in nature (yurts or similar structure). Food service would also be minimal, possibly with no cooking facilities onsite.

No other improvements would be completed to the facility, other than those necessary for this basic operation. The CCC on this concept would likely be around 400.

Other winter activities, such as Nordic skiing and snowshoeing, could be accommodated in this scenario, although no specific facilities are envisioned.

Summer activities from the multi-season recreation program would be limited to hiking and cross country mountain biking on existing trails. The lack of a chairlift would preclude many summer activities. No services would be provided, but the area would be open for summer use. Summer operations would not generate revenue.

It is envisioned that the operation of the facility in this scenario would be similar to the ski clubs and community ski hills that exist throughout Canada and the US. Due to capital requirements and limitations in visitation, the area would only survive by receiving financial support in the form of “free” capital (no debt service on invested capital) and ongoing operational subsidies. A portion of the services would need to be operated by a community ski club and volunteer time.

This option does not meet all of the goals established for the future operation of MASA. The Community Ski Hill option also does not address any of the shortcomings and deficiencies of the existing/historic ski hill: the skiing restriction of the surface lift, flat sections and poor terrain distribution. It also falls short in addressing current ski area design criteria as it doesn't provide chairlift accessible terrain, multiple winter-sport activities, or full service, comfortable base facilities.

For the Community Ski Hill Option, first year revenue is anticipated an approximately \$146,000 offset by roughly \$238,000 in operating expenses for a marginal operating loss of approximately \$95,000 or 65%. The addition of the previously mentioned capital maintenance reserve increases the annual loss to approximately \$99,000. The key observation for this option is that unless the facility is



capitalized/operated at a level which will allow it to compete within the regional skier market, there is simply not sufficient anticipated visitation from within the immediate surrounding communities to support a viable operation. Over the ten year period modeled, operation of the Community Ski Hill scenario would accrue a cumulative loss of approximately \$1.0M. Similar to the preceding discussion regarding Capital Origination, the model does not include any assumptions as to how this rolling deficit would be satisfied.

For this operation, approximately 10,650 annual winter visits (an increase of 4,650 above projected) would be necessary to achieve a breakeven position. Because this community orientated operation would only provide a single surface lift serving 11 hectares of skiing terrain, it is not anticipated that the draw within the surrounding communities (assumed to be confined to within a 65km radius, population $\pm 20,000$) would be sufficient to achieve these results. Secondly, with a comfortable daily capacity of approximately 400 skiers, the 37 day operating season would have a theoretical capacity of 14,800 visits. The necessary breakeven visitation of 10,650 would represent a utilization rate of 72%. This level of utilization is not observed at any ski area, including even the very largest destination resorts in North America.

2. Restoration Option

This option would restore MASA to its previous operational state. All facilities would be rebuilt or refurbished to re-create the operation as it existed prior to 2000. No upgrades would be made to the base area or the ski facilities. An exception would be that the two T-Bars could be replaced with a single high-capacity, high-speed retractable T-Bar.

- Installation of a single high-capacity, high-speed retractable T-Bar.
- The chairlift would be rebuilt, using any parts that can be reused if possible—possibly tower foundations and the chairs.
- The snowmaking system would be rebuilt, using modern technology but remaining a manual, low-end system. Snowmaking water storage would be developed, to respond to the recent changes to McKinnon Creek and the lack of an existing diversion structure. For this scenario, a storage facility of around 8 million gallons is envisioned.
- The base lodge would be rebuilt in place, possibly using some components of the foundation and salvageable structural elements. Prior to reconstruction the previous base lodge structure and the contaminated soil underneath the structure would be removed.
- Minimal grading on the runs would be proposed, to improve some of the flat areas where continuous skiing is challenging.

CCC on this concept would be restored to 1,200.

In terms of additional winter activities, no specific facilities are envisioned for this scenario. This would not preclude the use of the area in some manner by Nordic skiers and snowshoers.

All summer activities identified in the Multi-Season Recreation Program may be implemented as part of this scenario, subject to the result of park wide directions on new recreational activities.

Due to capital requirements and limitations in visitation, the area would only survive by receiving financial support in the form of “free” capital (no debt service on invested capital) and ongoing operational subsidies.

Similar to the Community Ski Hill option, this scenario would also attract only minimal regional visitation. Again, there are other operating ski areas in the region that offer better services and overall experience than was offered by the historic MASA operation prior to closing. It is reasonable to expect that there would be some regional visitation, based on the quality and extent of the terrain and the re-opening of the full facility. Interest in the facility could likely follow patterns of interest and visitation that were demonstrated prior to 2000.

This option does not meet all of the goals established for the future operation of MASA. The Restoration option also does not address any of the shortcomings and deficiencies of the existing/historic ski hill: the skiing restriction of the surface lift, flat sections and poor terrain distribution. It also falls short in addressing current ski area design criteria as it doesn't provide 100% chairlift accessible terrain or multiple winter-sport activities.

Under the Restoration Option, winter revenues are approximately \$568,000 matched by \$743,000 in operating expenses. With the capital maintenance reserve and debt service included, the option is anticipated to operate at a loss of roughly \$779,000 per year. The requisite maintenance capital and debt service combine to add a substantial burden to the financial performance of the option.

The summer activities provide similar results—yielding roughly \$248,000 in summer revenue and \$286,000 in operating expenses for a marginal operating loss of \$51,000. Similar to the winter operations, the additions of capital maintenance and debt service increase the loss of the summer operations to roughly \$142,000. Combined, the winter and summer operations result in a net loss of approximately \$921,000 per year.

Over the ten year period modeled, operation of the Restoration scenario would accrue cumulative winter and summer losses of approximately \$7.7M and \$1.2M, respectively with a combined total ten year loss of \$9.0M. Similar to the preceding discussion regarding Capital Origination, the model does not include any assumptions as to how this rolling deficit would be satisfied.

Under this development scenario, roughly 36,250 skier visits are required to attain breakeven performance in the winter season. This essentially requires more than a doubling of the visits which are realistically projected be achieved by the operation as well as a 50% increase in snow tubing visits.

In addition to the discussion on winter performance, the projected visitation to each of the summer amenities would need to almost double (increase of 96%) to allow the summer activities to achieve a breakeven level. This represents increasing the total summer visitors from approximately 6,200, as projected, to over 12,170.

3. Competitive Option

In this scenario, MASA is upgraded from its previous state to be a more attractive and competitive destination. The facilities would be upgraded from the historic operation, and would address identified



issues. Upgrades would be guided by the goal of creating an area that complies with current design criteria and provides a high-quality recreation experience.

As discussed in other sections of this study, the facilities and ideas presented below are notional in nature and would have to be reviewed to ensure consistency with the Ski Area Management Guidelines. It should be noted that facilities that are inconsistent would require a substantial environmental gain in order to be considered.

- Two new lifts would be installed, in the place of the existing chairlift and the T-Bars.
- The proposed aerial chairlift on the East side would allow for ski-under so that skiers would not have to ride a rope tow to the ski to the bottom of the lift.
- A new carpet lift would be installed for beginner teaching terrain.
- New ski trails would be built to provide additional skiing options and address the deficiency of intermediate and advanced level trails.
- Ski trail grading would improve the skiability of the existing trails.
- A more efficient, more productive snowmaking system would be installed to increase the quantity and quality of snow produced. The water delivery system would be developed and upgraded to provide enough water to guarantee opening dates and snow depths. Snowmaking water storage sized at around 16 million gallons is envisioned for this scenario.
- A new base lodge would be built, meeting all skier service requirements, and incorporating architectural elements of RMNPC, with a visitor and interpretive center. This lodge and the MASA area would become a new portal to the National Park, with year-round access and use.
- A new drop-off area would be built as well as a new connector road from the base lodge to the parking area. The parking area could ultimately be expanded to handle additional demand.

CCC in this concept would be maintained at 1,200 by limiting the hourly capacities of the chairlifts, however CCC could be increased to 1,800 by raising the hourly capacities up to full design capacity. The existing quantity of terrain could accommodate this increase without expansion.

A tubing facility would be constructed to meet the demand for non-skiing winter recreation, with a dedicated lift and five tubing lanes. Additionally, trails would be constructed and maintained to connect to the existing RMNPC network. These trails, including a multi-use trail, could be maintained in the winter specifically for Nordic skiing and snowshoeing.

All notional summer activities identified in the Multi-Season Recreation Program may be implemented as part of this scenario⁵.

With the exception of goal #2 – *The operation at MASA must be financially sustainable*, the Competitive option meets all of the goals established for the future operation of MASA. The

⁵ Specific new recreational activities for the park, would need to be assessed through a park-wide recreational assessment before determining whether or not they can be considered at MASA.

Competitive option also addresses the shortcomings and deficiencies of the existing/historic ski hill, and responds to current ski area design criteria.

Initially, the operating margin on the Competitive Option is the most promising in terms of potential viability—operating at a positive margin of approximately \$293,000 (+24%). However, the burden of capital maintenance and debt service pushes this operation to an annual loss of roughly \$791,000 for the winter operations. The summer activities provide similar results—yielding roughly \$248,000 in summer revenue and \$286,000 in operating expenses for a marginal operating loss of \$51,000. Similar to the winter operations, the additions of capital maintenance and debt service increase the operational net loss to roughly \$141,000. Combined, the winter and summer operations result in a net loss of approximately \$933,000 per year. Over the ten year period modeled, operation of the Competitive scenario would accrue cumulative winter and summer losses of approximately \$7.5M and \$1.2M, respectively with a combined total ten year loss of \$8.7M. Similar to the preceding discussion regarding Capital Origination, the model does not include any assumptions as to how this rolling deficit would be satisfied.

For the Competitive development concept, approximately 47,350 skier visits are required to obtain a breakeven level. This represents an increase of 77% over the realistic visitation projection. Additionally a 50% increase in snow tubing visits was included. Although this development scenario has been designed and evaluated as a regional competitor, it is not believed that a sufficient level of skiers and skier visits exist within the surrounding regional market to support visitation at this level. There are a number of well appointed regional competitors which satisfy the present skier market. Given the demographic constraints within the region, it is not considered possible to substantially grow the skier market. Therefore, visitation attracted to MASA will be primarily at the expense of the other surrounding resorts. Repositioning 47,350 skier visits within this market is not viewed as possible.

In addition to the discussion on winter performance, the projected visitation to each of the summer amenities would need to almost double (increase of 96%) to allow the summer activities to achieve a breakeven level. This represents increasing the total summer visitors from approximately 6,200, as projected, to over 12,170.

Combined, the winter and summer visitation levels necessary to support a financially viable operation are viewed as unacceptably unrealistic. RMNPC is a beautiful national park, but very remote from any large concentrations of people. The surrounding population cannot support the facility, either in summer or winter.

K. Case Study Examples

A total of four ski area case studies have been selected for evaluation in order to draw comparisons with a future operating scenario for MASA. These case studies (Mt. Sima, Yukon Territory; Big Rock Ski Area, Maine; Sleeping Giant, Wyoming and Poley Mountain, New Brunswick) represent different ownership structures and similar market composition (remote location and/or limited population base to draw from), with the exception of Poley Mountain which is located in a more populous market area. Specific information related to business formation, history and operations is noted below for each of the case studies.



1. Big Rock Ski Area, Mars Hill, Maine
2. Sleeping Giant, Wyoming
3. Poley Mountain, Sussex, New Brunswick
4. Mt. Sima, Whitehorse, Yukon Territory

The examination of the four case studies reveals that, with the exception of Poley Mountain, these small community focused ski areas are not sustainable operations without financial support in the form of “free” capital (no debt service on invested capital) and ongoing operational subsidies. While Mt. Sima and Sleeping Giant hope to attain a cash operating break-even point at some future date, this remains to be speculative at the present time. Certainly, when compared to potential summer operations at MASA, both Mt. Sima and Sleeping Giant are located in a more favourable market position due to large volumes of out of region tourists that visit during the summer months. As a privately owned ski facility, even Poley Mountain receives government assistance in the form of grants for planning studies and interest free loans. Beyond these case studies, there are many other examples of small community oriented ski areas that are subsidized by local governments in order to maintain a recreational outlet for the public as well as produce jobs and sponsor positive economic development.

In summary, it is evident from the precedent set by these case studies and many other examples that MASA would likely require a substantial amount of public capital investment and ongoing operational subsidies in order to maintain a sustainable business model.

L. Evolution of the Ski Industry

MASA opened in 1961, at a time when the ski industry throughout North America was growing at an exponential rate. During this rapid growth period that stretched across a decade or more, there were many hundreds of small ski areas built in close proximity to communities scattered across the Snowbelt. Evaluating the feasibility of a new ski area was simple –find a hill with good exposure and the ability to build a few trails, put in a simple tow and business was underway. As the industry matured and became more capital intensive and populations began to shift towards the urban centers, many of the small local ski areas were forced to close. Today, there are websites dedicated to many of the defunct or lost ski areas. In all, there are over 1,000 small ski areas that have closed across North America. In New England alone there are counts of 600 ski areas that have closed. In determining the feasibility of developing a contemporary ski area at the present time there are a variety of conditions that must be satisfied in order to create a commercially viable alpine ski facility through examining myriad of physical, market and financial parameters.

M. Economic impact of the MASA operation

Several key observations from the Market Assessment analysis (Section III.C) are germane to understanding the anticipated economic impacts of a potential reopening of MASA:

- The total volume of skier visits recorded at Manitoba and Saskatchewan's 11 operating Alpine ski areas is approximately 240,000 visits per season (130,000 in Manitoba). Total visits are anticipated to be stable in Manitoba and Saskatchewan over the next 10 years.
- Canadian Ski Council data indicates that skier visitation in Manitoba and Saskatchewan showed no growth between the 2009/10 season and the 2010/11 season. Overall, skier visitation in Canada grew at just 1.9% during the same period—with the preponderance of the growth occurring in British Columbia.
- The estimated number of Manitoba and Saskatchewan residents who are active downhill skiers/ snowboarders (participate in any given season) is 95,000 to 100,000 residents (50,000 to 55,000 in Manitoba). Manitoba and Saskatchewan residents travel to other provinces to participate in skiing and snowboarding. The estimated percentage of total ski days outside of the Province ("leakage") is 50 to 55%.

With the potential redevelopment of MASA, there is likely to be a surplus of ski facilities within the regional market area—as evidenced with the development of Asessippi Ski Area and Resort, when Holiday Mountain in La Riviere lost market share as a result of the development of a new ski area. The reintroduction of MASA will create greater hardships for existing ski area operators, as skier visits will be spread among more ski areas.

At the present time, it appears that the six ski areas which serve the southern Manitoba market are witnessing a situation whereby supply outweighs demand. This is evidenced by the fact that none of the ski areas have posted record skier visits or witnessed other growth phenomena. Factors that contribute to this situation include nominal growth in skier participation/incidence rates, continued upgrading/expansion of ski area infrastructure (i.e. chairlift at Minnedosa Ski Valley, addition of terrain parks, etc.), and participants travelling to other out-of-Province resorts. The excess supply situation has also been further aggravated by the development and expansion of Asessippi over the last decade. The result of these changes has contributed to lackluster performance for all of the existing ski areas whereby they are all competing for the same skier market – in a market which is not growing. Asessippi, the largest of the ski areas, has gained the most ground in terms of skier volume to the detriment of other ski areas such as La Riviere which lost market share when the new ski area opened.

Based upon current trends, and from a supply/demand perspective, the reintroduction of MASA will likely cause a redistribution of skier visits among the ski areas which serve the southern Manitoba and eastern Saskatchewan market, further diminishing performance at any of these ski areas. Additionally, to counteract this trend some of the existing ski areas may pursue further upgrading of facilities in order to more readily compete in the market. In other markets, with a surplus of facilities it has been shown that qualitative improvements would not likely generate more visits, but could improve top line revenue, or alternatively, cause a short-term redistribution of the same market share. This trend can be quantified by comparing the potential skier visits generated at MASA with the skier visits at other competing resorts within the market. Accordingly, under the Restoration and Competitive options, MASA would potentially generate approximately 14,000 – 27,000 skier visits, respectively. Assuming that 25 to 30 percent of the skier visits generated at MASA under the Restoration or Competitive options are "new" in the initial years of the operation, it would mean that the remaining 10,000 to 20,000 skier visits will be captured from within the market already shared by the other surrounding





regional ski areas. For a larger ski area such as Asessippi, (presently capturing 65,000 skier visits) the proportional decrease in skier visits would be smaller, representing a reduction of approximately 10%. By comparison, a smaller ski area such as Minnedosa Ski Valley (currently hosting 15,000 skier visits), could witness a 20 to 25% reduction in visits, especially from among the school programs. In summary, in the absence of a vibrant and growing market, the redistribution of skier visits over a greater number of ski areas will result in a negative impact on all of the competing facilities with the resurrection of MASA. In each case the potential for decreased utilization would likely result in reduced financial performance. As is the case throughout the industry, ski areas operate with significant fixed costs on very narrow margins. In some instances, even a modest decrease in revenue may eliminate the profit margin.